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Case Nos.:

Phase In

Trippensee/Rebuttal

Public Counsel

WR-2000-281

Rebuttal

DIRECT TESTIMONY

OF

RUSSELL W. TRIPPENSEE

FILED

MAY 4 2000

Missouri Public
Service Commission

Submitted on Behalf of
the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

Case No. WR-2000-281

May 4, 2000

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

In the matter of Missouri-American Water)	
Company's tariff sheets designed to)	
Implement general rate increases for water)	Case No. WR-2000-281
And sewer service provided to customers)	
In the Missouri area of the company.)	

AFFIDAVIT OF RUSSELL W. TRIPPENSEE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Russell W. Trippensee, of lawful age and being first duly sworn, deposes and states:

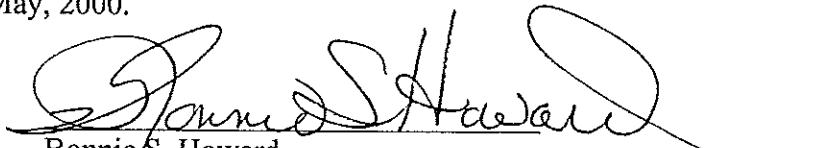
1. My name is Russell W. Trippensee. I am the Chief Public Utility Accountant for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony consisting of pages 1 through 13 and Schedule RW2 through RW6. I hereby swear and affirm that my statements contained in the attached statement are true and correct to the best of my knowledge and belief.



Russell W. Trippensee

Subscribed and sworn to me this 4th day of May, 2000.



Bonnie S. Howard
Notary Public

My commission expires May 3, 2001

REBUTTAL TESTIMONY

OF

RUSSELL W. TRIPPENSEE

**MISSOURI AMERICAN WATER COMPANY
CASE NO. WR-2000-281**

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. Russell W. Trippensee. I reside at 1020 Satinwood Court, Jefferson City, Missouri 65109, and my
3 business address is P.O. Box 7800, Jefferson City, Missouri 65102.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am the Chief Utility Accountant for the Missouri Office of the Public Counsel (OPC or Public
6 Counsel).

7 **Q. ARE YOU THE SAME RUSSELL W. TRIPPENSEE WHO HAS FILED DIRECT**
8 **TESTIMONY IN THIS CASE?**

9 A. Yes.

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 A. To respond to the direct testimony of Missouri Public Service Commission Staff (Staff) witness
12 Stephen M. Rackers regarding Staff's phase-in proposal. I will also present examples of OPC's
13 phase-in methodology as initially discussed in OPC witness James Busch's direct testimony in this
14 case and incorporating agreements between the parties on revenue requirement issues during the
15 prehearing held on April 17 - 21, 2000. OPC is recommending that the Missouri Public Service
16 Commission (MPSC or Commission) authorize a phase-in in order to avoid rate shock as a result of
17 increases in revenue requirement and as a result of the shift from single tariff pricing towards

1 district specific pricing. OPC witnesses Busch and Hong Hu have addressed the need for a phase-in
2 in both their direct and rebuttal testimony.

3 **Q. PLEASE OUTLINE YOUR CONCERNS WITH STAFF'S PHASE-IN PROPOSAL.**

4 A. OPC has two major concerns with Staff's proposal for a phase-in of any revenue change for
5 Missouri American Water Company (MAWC or Company). The first concern is that Staff
6 proposes district specific pricing but proposes a phase-in for only the St. Joseph district. OPC's
7 second major concern is that Staff's phase-in proposal, as structured, will result in excessive rates
8 (by approximately \$9,000,000) in St. Joseph in the year immediately following the end of Staff's
9 phase-in. I will also briefly address a conceptual difference between Staff's phase-in proposal and
10 Public Counsel's.

11 **Q. PLEASE EXPLAIN WHY PUBLIC COUNSEL BELIEVES THAT A PHASE-IN**
12 **SHOULD ALSO ADDRESS OTHER DISTRICTS.**

13 A. As outlined in the direct testimony of OPC witness Busch, Public Counsel believes that rate shock
14 warrants a limit on the revenue increase borne by any single district on a yearly basis. Public
15 Counsel recommends that any increase per district not exceed 15% on a yearly basis. This 15% cap
16 is premised on OPC's recommended total company revenue and district specific revenue
17 requirement. If the MPSC ultimately finds that a specific district should experience a rate increase
18 in excess of 50% as recommended by the Public Counsel, I would anticipate that the 15% cap
19 would have to be raised for that district. The reason the cap would need to be increased is to
20 maintain a reasonable number of years in the phase-in.

1 OPC's proposal represents a movement away from single tariff pricing but does not move
2 completely to a district specific pricing structure. Staff's proposal as contained in its direct
3 testimony would require increases well in excess of a reasonable annual increase limit of 15% for
4 Brunswick, Mexico, Parkville, and Warrensburg. Likewise, a proposal for single tariff pricing in
5 this case would also require increases in excess of 15%.

6 **Q. PLEASE EXPLAIN WHY STAFF'S PHASE-IN PROPOSAL WILL CAUSE THE**
7 **RATEPAYERS IN THE ST. JOSEPH DISTRICT TO PAY THE COMPANY OVER**
8 **\$9.0M IN EXCESSIVE REVENUES IN THE YEAR IMMEDIATELY FOLLOWING**
9 **THE END OF THE PHASE-IN.**

10 **A.** A phase-in requires the deferral of revenues that would be due the Company if rate shock was not a
11 major concern. A phase-in is based on the premise that these deferred revenues will be forgone in
12 the initial years and then be collected along with the associated carrying costs over a specified
13 period of time. In the direct testimony of Mr. Rackers, Staff proposed to recover these costs over a
14 five-year period. This recovery is accomplished by accumulating the deferrals and amortizing
15 those deferrals back to the overall cost-of-service over the specified period (five years in Staff's
16 proposal). Amortization of deferred revenues, like depreciation of plant investments, is referred to
17 as a "return of" the investors monies. At the end of the specified time frame, the amortization
18 expense related to the deferred revenues is zero and therefore no longer a component of the overall
19 cost-of-service. The overall cost-of-service decreases by an amount equal to the prior year's
20 amortization expense plus the associated income tax expense. These two expenses equated to
21 approximately \$9.0 M in year 5 of the Staff's phase-in proposal.

1 **Q. DOES PUBLIC COUNSEL'S PHASE-IN PROPOSAL HAVE THE SAME FAULT?**

2 A. No. Attached to my testimony as Schedules RWT-2, RWT-3, RWT-4, RWT-5, and RWT-6 are the
3 phase-in proposals for each respective district that OPC recommends receive an increase in excess
4 of 15% on a one-time basis absent a phase-in. The one-time increase is based on OPC's
5 recommended total company revenue requirement that will be discussed later in my rebuttal
6 testimony. As can be seen on line 28 of each schedule, rate decreases over the final two-year
7 period of each phase-in are necessary to terminate the phase-in properly. The final year's rate
8 decrease is equal to the prior years Phase-in Revenue Increase. This amount can be found on line 7
9 of each respective schedule under the column for the year prior to the end of the phase-in. Absent
10 this final year adjustment, the ratepayers would pay excessive rates by an amount equal to the final
11 Phase-in Revenue Increase found on line 7 of OPC's phase-in schedules (OPC's schedules are
12 based on OPC's revenue requirement recommendation and rate design). A corresponding amount
13 can be found on Staff workpapers supporting its phase-in proposal.

14 **Q. CAN YOU ELABORATE ON WHY IT IS NECESSARY TO MAKE THIS FINAL**
15 **YEAR ADJUSTMENT TO PROPERLY CONCLUDE A PHASE-IN?**

16 A. Yes, I can. A phase-in could be characterized as a loan from the Company to the ratepayers. Over
17 a period of time, the Company would be entitled to a "return of" their principle (the amortization
18 expense and associated income taxes) and a "return on" their principle. Once the funds have been
19 repaid, it is no longer appropriate to require the ratepayer to continue to pay a "return of" and a
20 "return on" monies that have already been repaid. Staff's phase-in proposal fails to recognize this
21 fundamental requirement regarding the proper implementation of a phase-in.

1 Q. ARE YOU FAMILIAR WITH THE HISTORY OF PHASE-IN PROPOSALS IN
2 THIS STATE?

3 A. Yes I am. The first phase-in proposal I am aware of occurred in the rate case associated with the
4 Callaway Nuclear Generating Facility.

5 Q. DID THE PHASE-IN APPROVED IN THAT CASE RECOGNIZE THE NEED TO
6 HAVE REDUCTIONS AT THE END OF THE PHASE-IN PERIOD?

7 A. Yes.

8 Q. CAN YOU UTILIZE YOUR SCHEDULES TO DEMONSTRATE HOW PUBLIC
9 COUNSEL HAS CORRECTLY CALCULATED THE APPROPRIATE ANNUAL
10 REVENUE REQUIREMENT UNDER A PHASE-IN PROPOSAL?

11 A. Yes. The "return of" component can be found on lines 5 and 6 of each respective Schedule RWT-2
12 through RWT-6. The Amortization of the deferred revenues (line 5) along with the associated
13 income taxes (line 6) are included in the Phase-In Revenue Increase found on line 7. This annual
14 amount is each year to the initial Revenue Requirement Responsibility found on line 8 under the
15 first year. The amortization (line 5) is a function of the revenues deferred (line 24) and the time
16 period for recovery (line 31). Likewise, the Current Income Taxes on Amortization (line 6) is a
17 function of the Income Tax Factor (line 32) and amortization on line 5. I would point out that the
18 total amortization expense found on line 5 is equal to the total revenue deferred found on line 23
19 and summarized on line 24.

1 The "return of" component of a phase-in proposal represents a shift in the timing of when the
2 Company receives the actual cash revenue but it does not result in any additional revenue. An
3 analogy would be the repayment of principle associated with a loan.

4 **Q. PLEASE CONTINUE YOUR EXPLANATION WITH RESPECT TO THE "RETURN**
5 **ON" COMPONENT ASSOCIATED WITH A PHASE-IN.**

6 A. The "return on" component of a phase-in is the only additional cost to the ratepayer over time in
7 absolute dollars paid to the Company. The deferred revenues are dollars the Company is entitled to
8 but has not yet received from the ratepayers. These deferred revenues, created by a MPSC report
9 and order, are often referred to as a regulatory asset. Public Counsel's phase-in proposal provides
10 for a "return on" this regulatory asset. OPC proposes to use the overall cost of capital rate
11 recommended by OPC witness Mark Burdette as the appropriate return. This return can be found
12 on line 2 of each respective phase-in schedule. The resulting Net Income Required is found on line
13 3 and the associated income taxes are calculated on line 4.

14 **Q. WHY IS IT NECESSARY TO CALCULATE INCOME TAXES IN ASSOCIATION**
15 **WITH THE NET INCOME REQUIRED?**

16 A. The Company will be required to pay income taxes on any revenues it receives. The Net Income
17 Required as shown on line 3 is calculated based on the assumption that taxes have already been
18 paid. Therefore in order to determine the total revenues the Company needs to receive from the
19 ratepayers, I must also calculate the associated income taxes and add those taxes to the Net Income
20 Required.

1 Q. HAVE YOU TESTED PUBLIC COUNSEL'S PHASE-IN PROPOSAL TO ENSURE
2 THAT IT COLLECTS THE APPROPRIATE AMOUNT OF REVENUES FROM THE
3 RATEPAYERS?

4 A. Yes, I have. This test can be seen on lines 33 through 38 of each respective schedule. The amount
5 found on line 35 represents the cost to the ratepayers of implementing this increase utilizing a
6 phase-in methodology. The Net Income Required on line 33 is the total of each amount found on
7 line 3. Likewise the Current Income Taxes on NOI found on line 34 is the total of each amount
8 found on line 4. This amount is tested by comparing the total Revenue Requirement Responsibility
9 found on line 36 to the total Revenues Received found on line 37. If the difference, as found on
10 line 38, does not equal line 35, the phase-in would either cause an under or over collection.

11 The following table summarizes the cost of the recommended phase-ins by district based on OPC's
12 recommendations:

13	Brunswick	\$ 24,131
14	Mexico	344,887
15	Parkville	324,097
16	St. Joseph	355,709
17	Warrensburg	<u>78,759</u>
18	TOTAL	<u>\$ 1,127,583</u>

19 These costs are the total cost by district of OPC's phase-in and are **not** annual amounts.

1 Q. OVER WHAT PERIOD OF TIME WILL THE RATEPAYERS BE REQUIRED TO
2 PAY THIS ADDITIONAL COST TO THE COMPANY?

3 A. Under OPC's recommendations, either four (4) or six (6) years is appropriate depending on which
4 district in which the ratepayer resides. Those districts having an amortization period of three (3)
5 years (found on line 31 of each schedule) will pay their cost over a four-year period. OPC proposes
6 a three-year amortization period for St. Joseph and Warrensburg. Those districts having a five (5)
7 year amortization period and therefore a payment period of six years include Brunswick, Mexico,
8 and Parkville. In each instance, the phase-in lasts an additional year in order to implement the
9 necessary rate reduction discussed previously. Therefore Public Counsel is proposing a five-year
10 phase-in for St. Joseph and Warrensburg and a seven-year phase-in for Brunswick, Mexico, and
11 Parkville.

12 Q. DOES STAFF PROVIDE ANY PROPOSALS THAT COULD AUTOMATICALLY
13 MITIGATE THE EXCESSIVE RATES TO BE PAID BY ST. JOSEPH
14 RATEPAYERS IN THE SIXTH YEAR (I.E. THE YEAR AFTER ITS FIVE-
15 YEAR PHASE-IN) ?

16 A. No. Staff witness Rackers requests the MPSC the Company to submit an annual Phase-In
17 Monitoring Report (Rackers direct testimony, page 13, lines 7 – 10). While this requirement could
18 alert Staff to the possible need for a rate reduction at the end of the five-year period, it provides the
19 ratepayer with no assurance that the rates would be changed in a timely manner.

20 In order for rates to be properly reduced in that situation, the Staff (or another party) would have to
21 file a complaint case asking the Commission to adjust the rates. A complaint case, unlike a rate

1 case filed by a utility, is not subject to any statutory time limits. A utility also has ample legal
2 means to delay a rate reduction ordered by this Commission, as Southwestern Bell and AmerenUE
3 have successfully demonstrated in the past. These concerns alone make it problematic at best that
4 the necessary rate reduction to properly end a phase-in would be implemented in a timely manner.

5 **Q. CAN THE NECESSARY RATE REDUCTION, WHICH WOULD PROPERLY**
6 **TERMINATE A PHASE-IN, BE DETERMINED AT THE TIME THE MPSC**
7 **ISSUES ITS REPORT AND ORDER IN THIS CURRENT RATE CASE?**

8 **A.** Yes, most definitely. Public Counsel's phase-in sets out how that can be done. An analysis of
9 Staff's workpapers supporting its phase-in proposal indicates a similar result could be achieved
10 utilizing Staff's phase-in methodology.

11 The basic method to accomplish this goal is to eliminate the "return on" and "return of"
12 components of the revenue requirement in the last year of the phase-in calculation. This results in
13 an additional year (normally two) being added to the length of the phase-in so that the necessary
14 rate decreases can be made. The annual revenues paid to the utility after the conclusion of the
15 phase-in should be the same as the revenues that would have been paid in year one absent a phase-
16 in. This can be illustrated by reviewing the Revenue Requirement Responsibilities found on line 8
17 of Schedules RWT-2 through RWT-6.

18 **Q. THE SCHEDULES ATTACHED TO YOUR TESTIMONY DEMONSTRATING PUBLIC**
19 **COUNSEL'S PHASE-IN PROPOSAL ARE BASED ON A ONE-TIME REVENUE**

1 REQUIREMENT CHANGE. PLEASE EXPLAIN HOW PUBLIC COUNSEL
2 DEVELOPED THIS REVENUE REQUIREMENT?

3 A. Public Counsel filed direct testimony addressing several areas of the overall cost of service
4 including cost-of-capital, the new water treatment facility at St. Joseph, Missouri, Accounting
5 Authority Orders, and rate case expense. Prior to and during the prehearing conference, OPC was
6 able to evaluate all the direct testimony of the respective parties in this case. During the prehearing
7 conference the parties were able to reach agreement on certain overall revenue requirement issues.
8 Staff incorporated these agreements into its revenue requirement program called the EMS program.
9 (Staff's direct case refers to the EMS program as the Accounting Schedules). This program was
10 provided to the other parties including OPC. I was able to insert adjustments into the EMS program
11 to reflect the areas of disagreement between Staff and OPC.

12 Staff also eliminated the effect of its phase-in proposal so that the EMS program would produce a
13 revenue requirement reflecting the total revenue change necessary prior to consideration of any
14 phase-in proposals.

15 It is also important to note that Staff modified its EMS program (with extensive help from the
16 Company) so as to incorporate the true-up estimate on an account by account basis instead of a
17 single number. This allowed the various parties the opportunity to develop more detailed rate
18 design recommendations. Public Counsel appreciated the cooperation of all the parties in what was
19 a very difficult endeavor. This will allow the parties to fully develop their rate design
20 recommendations.

1 Q. PLEASE OUTLINE WHAT OVERALL REVENUE REQUIREMENT ISSUES EXIST
2 BETWEEN STAFF AND PUBLIC COUNSEL.

3 A. Currently there are two issues on which these two parties differ. The primary issue relates to Public
4 Counsel's valuation of a water treatment plant necessary to serve St. Joseph, Missouri. I have
5 incorporated the necessary adjustments to reflect the difference in position in an OPC version of the
6 EMS program. I have also adjusted the OPC version of the EMS program to reflect OPC witness
7 Burdette's recommended return on equity.

8 Q. WHAT WERE THE RESULTS OF PUBLIC COUNSEL ADJUSTMENTS TO THE
9 EMS PROGRAM; IN OTHER WORDS, WHAT IS PUBLIC COUNSEL'S
10 RECOMMENDED CHANGE IN REVENUE REQUIREMENT?

11 A. Public Counsel recommends that on a total Company basis, MAWC receive a revenue increase (i.e.
12 revenue deficiency) of approximately \$5,667,738. This represents a overall increase of
13 approximately 18.5%. This represents a total revenue requirement of \$36,250,943.

14 Q. HAS PUBLIC COUNSEL DEVELOPED THE REVENUE REQUIREMENT
15 ASSOCIATED WITH EACH DISTRICT ON A DISTRICT SPECIFIC BASIS?

16 A. Yes. The EMS program was also utilized to develop district-specific overall revenue requirements
17 and the resulting revenue requirement deficiencies or excesses. OPC has evaluated Staff's
18 Accounting Schedules filed in its direct testimony and has adopted the allocation factors used by
19 Staff in developing district-specific revenue requirements.

OPC witnesses Busch and Hu have utilized the results of the EMS program to develop specific rate design proposals. OPC is not proposing the recommended deficiency/excess by district be implemented as shown below. The following table simply shows the current revenue by district along with the resulting revenue deficiency/excess and served at the starting point for Public Counsel's rate design and phase-in proposals.

	Current Revenues	Revenue Excess / Deficiency	Revenue Requirement	% Change
Brunswick	\$ 116,725	\$ 306,692	\$ 423,417	262.7%
Mexico	1,580,962	1,286,099	2,867,061	81.3%
Parkville	1,517,468	1,040,401	2,557,869	68.6%
Warrensburg	1,842,147	582,419	2,424,566	31.6%
St. Charles	7,964,148	376,005	8,340,153	4.7%
Joplin	7,581,907	(708,916)	6,872,991	(9.4%)
St. Joseph	9,979,848	2,785,038	12,764,886	27.9%
TOTAL	\$30,583,205	\$ 5,667,738	\$ 36,250,943	18.5%

Q. DO YOU HAVE ANY COMMENTS REGARDING THE REVENUE REQUIREMENTS SET OUT IN THE TABLE ABOVE?

A. The majority of the difference between Public Counsel's revenue requirement recommendation and the Staff's recommendation is attributable to how the parties value the water treatment facility serving St. Joseph. If the Commission adopts with modification either party's recommendation, there will be effects on the revenue requirements of the other districts. The revenue requirement changes result from the change in the plant assigned to the St. Joseph district effect on the allocation factors used to distribute common costs among the districts. If the Commission does

1 adopt with modification Public Counsel's position, the parties will need to provide the Commission
2 with a new EMS program generated revenue requirement in order to exact quantification.

3 **Q. PLEASE ADDRESS THE CONCEPTUAL DIFFERENCE BETWEEN STAFF'S AND**
4 **PUBLIC COUNSEL'S PHASE-IN PROPOSALS.**

5 A. Public Counsel's phase-in proposal is designed to address rate shock concerns caused by not only a
6 large revenue requirement increase but also the shifts in revenue requirement responsibility
7 between districts and customer-classes within the districts. Public Counsel's phase-in is based on
8 the total revenue requirement effect. In contrast, the Staff phase-in is based on a single overall cost-
9 of-service component, plant investment. In fact, the phase-in proposed in Staff's direct testimony is
10 based on only one specific plant, the new water treatment facility at St. Joseph.

11 Public Counsel believes the Commission should authorize a phase-in in order to address the rate
12 shock and equity concerns laid out in OPC's testimony. Public Counsel also believes a phase-in
13 should address the total revenue requirement and not simply one component such as plant.

14 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

15 A. Yes.

Office of the Public Counsel

Phase-In Calculation

Missouri American Water Company

WR-2000-281

BRUNSWICK

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	YEARS							
	One	Two	Three	Four	Five	Six	Seven	Eight
1 Rate Base	\$ 26,532	\$ 44,037	\$ 49,756	\$ 40,429	\$ 20,214	\$ -	\$ -	\$ -
2 Rate of Return	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
3 Net Income Required	2,189	3,633	4,105	3,335	1,668	-	-	-
4 Current Income Taxes on NOI	1,364	2,264	2,558	2,078	1,039	-	-	-
5 Amortization of Revenue Deferred	5,306	11,009	16,585	20,214	20,214	-	-	-
6 Current Income Taxes on Amortization	3,306	6,860	10,334	12,595	12,595	-	-	-
7 Phase-In Revenue Increase	12,165	23,766	33,582	38,223	35,516	-	-	-
8 Revenue Requirement Responsibility	\$ 175,090	\$ 187,255	\$ 198,856	\$ 208,672	\$ 213,313	\$ 210,606	\$ 175,090	\$ 175,090
9 Current Revenue - Previous Year	116,725	132,027	150,230	171,705	196,891	213,313	210,606	175,090
10 One-Time Increase	\$ 58,365	\$ 55,228	\$ 48,626	\$ 36,966	\$ 16,422	\$ (2,707)	\$ (35,516)	\$ -
11 One-Time Increase-percentage	50.00%	41.83%	32.37%	21.53%	8.34%	-1.27%	-16.86%	0.00%
12 Maximum Yearly Increase Percentage	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
13 Current Year Increase - Phase-in Maximum	\$ 17,509	\$ 19,804	\$ 22,534	\$ 25,756	\$ 16,422	\$ (2,707)	\$ (35,516)	\$ -
14 Class Shift Maximum Revenue	132,027	150,230	171,705	196,891	423,240	423,240	423,240	189,310
15 Current Revenue	116,725	132,027	150,230	171,705	196,891	213,313	210,606	175,090
16 Current Year Increase - Class Shift Maximum	15,302	18,203	21,476	25,186	226,349	209,927	212,634	14,220
17 Phase-in Options Deferral Amounts								
18 District Cap	\$ 40,856	\$ 35,424	\$ 26,092	\$ 11,210	\$ -	\$ -	\$ -	\$ -
19 Class Shift Cap	\$ 43,063	\$ 37,026	\$ 27,150	\$ 11,780	\$ -	\$ -	\$ -	\$ -
20 Revenue Increase Deferred	\$ 43,063	\$ 37,026	\$ 27,150	\$ 11,780	\$ -	\$ -	\$ -	\$ -
21 Income Tax Factor	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%
22 Income Tax Effect	16,531	14,214	10,423	4,522	-	-	-	-
23 Net Revenue Increase Deferred	\$ 26,532	\$ 22,812	\$ 16,728	\$ 7,258	\$ -	\$ -	\$ -	\$ -
ACCUMULATED DEFERRAL								
24 Deferred Revenue Increase	\$ 26,532	\$ 49,344	\$ 66,072	\$ 73,330	\$ 73,330	\$ 73,330	\$ 73,330	\$ 73,330
25 Accumulated Amortization of URD	-	5,306	16,316	32,901	53,115	73,330	73,330	73,330
26 Net URD Balance - Year End	\$ 26,532	\$ 44,037	\$ 49,756	\$ 40,429	\$ 20,214	\$ -	\$ -	\$ -
27 Revenue Increase - Annual Amount	\$ 15,302	\$ 18,203	\$ 21,476	\$ 25,186	\$ 16,422	\$ (2,707)	\$ (35,516)	\$ -
28 Revenue Increase - Annual Percentage	13.11%	13.79%	14.30%	14.67%	8.34%	-1.27%	-16.86%	0.00%
INPUTS								
29 Rate of Return (after tax)	8.25%							
30 Maximum Yearly Increase Percentage	15.00%							
31 Amortization Period	5							
32 Income Tax Factor	38.3886%							
Test of Revenues Received over Period								
33 Net Income Required	\$ 14,930							
34 Current Income Taxes on NOI	9,302							
35 Additional Revenues Required	\$ 24,232							
36 Revenue Requirement Responsibility	\$ 1,225,630							
37 Revenues Received	1,249,862							
38 Additional Revenues Received	\$ 24,232							

Office of the Public Counsel
Phase-In Calculation
Missouri American Water Company
WR-2000-281
MEXICO

Line #

		YEARS							
		One	Two	Three	Four	Five	Six	Seven	Eight
1	Rate Base	\$ 358,916	\$ 598,485	\$ 685,135	\$ 579,121	\$ 289,561	\$ -	\$ -	\$ -
2	Rate of Return	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
3	Net Income Required	29,611	49,375	56,524	47,777	23,889	-	-	-
4	Current Income Taxes on NOI	18,450	30,764	35,219	29,769	14,885	-	-	-
5	Amortization of Revenue Deferred	71,783	149,621	228,378	289,561	289,561	-	-	-
6	Current Income Taxes on Amortization	44,726	93,225	142,297	180,418	180,418	-	-	-
7	Phase-In Revenue Increase	164,570	322,986	462,418	547,525	508,752	-	-	-
8	Revenue Requirement Responsibility	\$ 2,371,518	\$ 2,536,088	\$ 2,694,504	\$ 2,833,936	\$ 2,919,043	\$ 2,880,270	\$ 2,371,518	\$ 2,371,518
9	Current Revenue - Previous Year	1,580,962	1,788,970	2,030,740	2,311,017	2,635,329	2,919,043	2,880,270	2,371,518
10	One-Time Increase	\$ 790,556	\$ 747,118	\$ 663,764	\$ 522,918	\$ 283,715	\$ (38,773)	\$ (508,752)	\$ -
11	One-Time Increase-percentage	50.00%	41.76%	32.69%	22.63%	10.77%	-1.33%	-17.66%	0.00%
12	Maximum Yearly Increase Percentage	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
13	Current Year Increase - Phase-in Maximum	\$ 237,144	\$ 268,345	\$ 304,611	\$ 346,653	\$ 283,715	\$ (38,773)	\$ (508,752)	\$ -
14	Class Shift Maximum Revenue	1,788,970	2,030,740	2,311,017	2,635,329	16,000,000	16,000,000	16,000,000	16,000,001
15	Current Revenue	1,580,962	1,788,970	2,030,740	2,311,017	2,635,329	2,919,043	2,880,270	2,371,518
16	Current Year Increase - Class Shift Maximum	208,008	241,770	280,277	324,311	13,364,671	13,080,957	13,119,730	13,628,483
17	Phase-in Options Deferral Amounts								
18	District Cap	\$ 553,412	\$ 478,773	\$ 359,153	\$ 176,266	\$ -	\$ -	\$ -	\$ -
19	Class Shift Cap	\$ 582,548	\$ 505,348	\$ 383,487	\$ 198,607	\$ -	\$ -	\$ -	\$ -
20	Revenue Increase Deferred	\$ 582,548	\$ 505,348	\$ 383,487	\$ 198,607	\$ -	\$ -	\$ -	\$ -
21	Income Tax Factor	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%
22	Income Tax Effect	223,632	193,996	147,215	76,242	-	-	-	-
23	Net Revenue Increase Deferred	\$ 358,916	\$ 311,352	\$ 236,271	\$ 122,364	\$ -	\$ -	\$ -	\$ -
ACCUMULATED DEFERAL									
24	Deferred Revenue Increase	\$ 358,916	\$ 670,268	\$ 906,540	\$ 1,028,904	\$ 1,028,904	\$ 1,028,904	\$ 1,028,904	\$ 1,028,904
25	Accumulated Amortization of URD	-	71,783	221,404	449,783	739,343	1,028,904	1,028,904	1,028,904
26	Net URD Balance - Year End	\$ 358,916	\$ 598,485	\$ 685,135	\$ 579,121	\$ 289,561	\$ -	\$ -	\$ -
27	Revenue Increase - Annual Amount	\$ 208,008	\$ 241,770	\$ 280,277	\$ 324,311	\$ 283,715	\$ (38,773)	\$ (508,752)	\$ -
28	Revenue Increase - Annual Percentage	13.16%	13.51%	13.80%	14.03%	10.77%	-1.33%	-17.66%	0.00%
INPUTS									
29	Rate of Return (after tax)	8.25%							
30	Maximum Yearly Increase Percentage	15.00%							
31	Amortization Period	5							
32	Income Tax Factor	38.3886%							
Test of Revenues Received over Period									
33	Net Income Required	\$ 207,175							
34	Current Income Taxes on NOI	129,086							
35	Additional Revenues Required	\$ 336,262							
36	Revenue Requirement Responsibility	\$ 16,600,626							
37	Revenues Received	16,936,888							
38	Additional Revenues Received	\$ 336,262							

Office of the Public Counsel

Phase-In Calculation

Missouri American Water Company

WR-2000-281

PARKVILLE

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e #	YEARS									
	One	Two	Three	Four	Five	Six	Seven	Eight		
1	Rate Base	\$ 345,692	\$ 579,620	\$ 671,320	\$ 584,658	\$ 292,329	\$ -	\$ -		
2	Rate of Return	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%		
3	Net Income Required	28,520	47,819	55,384	48,234	24,117	-	-		
4	Current Income Taxes on NOI	17,770	29,795	34,508	30,054	15,027	-	-		
5	Amortization of Revenue Deferred	69,138	144,905	223,773	292,329	292,329	-	-		
6	Current Income Taxes on Amortization	43,079	90,287	139,428	182,143	182,143	-	-		
7	Phase-In Revenue Increase	158,507	312,805	453,093	552,760	513,616	-	-		
8	Revenue Requirement Responsibility	\$ 2,276,211	\$ 2,434,718	\$ 2,589,016	\$ 2,729,304	\$ 2,828,971	\$ 2,789,827	\$ 2,276,211	\$ 2,276,211	
9	Current Revenue - Previous Year	1,517,468	1,715,126	1,942,818	2,204,989	2,506,762	2,828,971	2,789,827	2,276,211	
10	One-Time Increase	\$ 758,743	\$ 719,592	\$ 646,199	\$ 524,315	\$ 322,209	\$ (39,144)	\$ (513,616)	\$ -	
11	One-Time Increase-percentage	50.00%	41.96%	33.26%	23.78%	12.85%	-1.38%	-18.41%	0.00%	
12	Maximum Yearly Increase Percentage	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	
13	Current Year Increase - Phase-in Maximum	\$ 227,620	\$ 257,269	\$ 291,423	\$ 330,748	\$ 322,209	\$ (39,144)	\$ (513,616)	\$ -	
14	Class Shift Maximum Revenue	1,715,126	1,942,818	2,204,989	2,506,762	4,000,000	4,000,000	4,000,000	4,000,001	
15	Current Revenue	1,517,468	1,715,126	1,942,818	2,204,989	2,506,762	2,828,971	2,789,827	2,276,211	
16	Current Year Increase - Class Shift Maximum	197,658	227,692	262,172	301,773	1,493,238	1,171,029	1,210,173	1,723,790	
17	Phase-in Options Deferral Amounts									
18	District Cap	\$ 531,123	\$ 462,323	\$ 354,776	\$ 193,566	\$ -	\$ -	\$ -	\$ -	
19	Class Shift Cap	\$ 561,085	\$ 491,900	\$ 384,027	\$ 222,542	\$ -	\$ -	\$ -	\$ -	
20	Revenue Increase Deferred	\$ 561,085	\$ 491,900	\$ 384,027	\$ 222,542	\$ -	\$ -	\$ -	\$ -	
21	Income Tax Factor	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	
22	Income Tax Effect	215,393	188,834	147,423	85,431	-	-	-	-	
23	Net Revenue Increase Deferred	\$ 345,692	\$ 303,066	\$ 236,604	\$ 137,111	\$ -	\$ -	\$ -	\$ -	
ACCUMULATED DEFERRAL										
24	Deferred Revenue Increase	\$ 345,692	\$ 648,759	\$ 885,363	\$ 1,022,474	\$ 1,022,474	\$ 1,022,474	\$ 1,022,474	\$ 1,022,474	
25	Accumulated Amortization of URD	-	69,138	214,044	437,817	730,146	1,022,474	1,022,474	1,022,474	
26	Net URD Balance - Year End	\$ 345,692	\$ 579,620	\$ 671,320	\$ 584,658	\$ 292,329	\$ -	\$ -	\$ -	
27	Revenue Increase - Annual Amount	\$ 197,658	\$ 227,692	\$ 262,172	\$ 301,773	\$ 322,209	\$ (39,144)	\$ (513,616)	\$ -	
28	Revenue Increase - Annual Percentage	13.03%	13.28%	13.49%	13.69%	12.85%	-1.38%	-18.41%	0.00%	
INPUTS										
29	Rate of Return (after tax)	8.25%								
30	Maximum Yearly Increase Percentage	15.00%								
31	Amortization Period	5								
32	Income Tax Factor	38.3886%								
Test of Revenues Received over Period										
33	Net Income Required	\$ 204,074								
34	Current Income Taxes on NOI	127,153								
35	Additional Revenues Required	\$ 331,227								
36	Revenue Requirement Responsibility	\$ 15,933,477								
37	Revenues Received	16,264,704								
38	Additional Revenues Received	\$ 331,227								

Office of the Public Counsel
Phase-In Calculation
Missouri American Water Company
WR-2000-281
ST. JOSEPH

Line #

	YEARS							
	One	Two	Three	Four	Five	Six	Seven	Eight
1 Rate Base	\$ 996,425	\$ 1,240,235	\$ 620,118	\$ -	\$ -	\$ -	\$ -	\$ -
2 Rate of Return	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
3 Net Income Required	82,205	102,319	51,160	-	-	-	-	-
4 Current Income Taxes on NOI	51,220	63,753	31,876	-	-	-	-	-
5 Amortization of Revenue Deferred	332,142	620,118	620,118	-	-	-	-	-
6 Current Income Taxes on Amortization	206,950	386,381	386,381	-	-	-	-	-
7 Phase-In Revenue Increase	672,516	1,172,570	1,089,534	-	-	-	-	-
8 Revenue Requirement Responsibility	\$ 12,751,440	\$ 13,423,956	\$ 13,924,010	\$ 13,840,974	\$ 12,751,440	\$ 12,751,440	\$ 12,751,440	\$ 12,751,440
9 Current Revenue - Previous Year	9,979,848	11,134,166	12,489,143	13,924,010	13,840,974	12,751,440	12,751,440	12,751,440
10 One-Time Increase	\$ 2,771,592	\$ 2,289,790	\$ 1,434,867	\$ (83,036)	\$ (1,089,534)	\$ -	\$ -	\$ -
11 One-Time Increase-percentage	27.77%	20.57%	11.49%	-0.60%	-7.87%	0.00%	0.00%	0.00%
12 Maximum Yearly Increase Percentage	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
13 Current Year Increase - Phase-in Maximum	\$ 1,496,977	\$ 1,670,125	\$ 1,434,867	\$ (83,036)	\$ (1,089,534)	\$ -	\$ -	\$ -
14 Class Shift Maximum Revenue	11,134,166	12,489,143	14,069,542	15,904,979	16,000,000	16,000,000	16,000,001	16,000,002
15 Current Revenue	9,979,848	11,134,166	12,489,143	13,924,010	13,840,974	12,751,440	12,751,440	12,751,440
16 Current Year Increase - Class Shift Maximum	1,154,318	1,354,976	1,580,399	1,980,969	2,159,026	3,248,560	3,248,561	3,248,562
17 Phase-in Options Deferral Amounts								
18 District Cap	\$ 1,274,615	\$ 619,665	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19 Class Shift Cap	\$ 1,617,274	\$ 934,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 Revenue Increase Deferred	\$ 1,617,274	\$ 934,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21 Income Tax Factor	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%
22 Income Tax Effect	620,849	358,862	-	-	-	-	-	-
23 Net Revenue Increase Deferred	\$ 996,425	\$ 575,952	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ACCUMULATED DEFERRAL								
24 Deferred Revenue Increase	\$ 996,425	\$ 1,572,377	\$ 1,572,377	\$ 1,572,377	\$ 1,572,377	\$ 1,572,377	\$ 1,572,377	\$ 1,572,377
25 Accumulated Amortization of URD	-	332,142	952,259	1,572,377	1,572,377	1,572,377	1,572,377	1,572,377
26 Net URD Balance - Year End	\$ 996,425	\$ 1,240,235	\$ 620,118	\$ -	\$ -	\$ -	\$ -	\$ -
27 Revenue Increase - Annual Amount	\$ 1,154,318	\$ 1,354,976	\$ 1,434,867	\$ (83,036)	\$ (1,089,534)	\$ -	\$ -	\$ -
28 Revenue Increase - Annual Percentage	11.57%	12.17%	11.49%	-0.60%	-7.87%	0.00%	0.00%	0.00%
INPUTS								
29 Rate of Return (after tax)	8.25%							
30 Maximum Yearly Increase Percentage	15.00%							
31 Amortization Period	3							
32 Income Tax Factor	38.3886%							
Test of Revenues Received over Period								
33 Net Income Required	\$ 235,684							
34 Current Income Taxes on NOI	\$ 146,849							
35 Additional Revenues Required	\$ 382,533							
36 Revenue Requirement Responsibility	\$ 89,260,080							
37 Revenues Received	\$ 89,642,613							
38 Additional Revenues Received	\$ 382,533							

Office of the Public Counsel
Phase-In Calculation
Missouri American Water Company
WR-2000-281
WARRENSBURG

Line #

		YEARS							
		One	Two	Three	Four	Five	Six	Seven	Eight
1	Rate Base	\$ 209,813	\$ 266,386	\$ 133,193	\$ -	\$ -	\$ -	\$ -	\$ -
2	Rate of Return	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
3	Net Income Required	17,310	21,977	10,988	-	-	-	-	-
4	Current Income Taxes on NOI	10,785	13,693	6,847	-	-	-	-	-
5	Amortization of Revenue Deferred	69,938	133,193	133,193	-	-	-	-	-
6	Current Income Taxes on Amortization	43,577	82,989	82,989	-	-	-	-	-
7	Phase-In Revenue Increase	141,609	251,853	234,018	-	-	-	-	-
8	Revenue Requirement Responsibility	\$ 2,422,300	\$ 2,563,909	\$ 2,674,153	\$ 2,656,318	\$ 2,422,300	\$ 2,422,300	\$ 2,422,300	\$ 2,422,300
9	Current Revenue - Previous Year	1,842,147	2,081,757	2,358,572	2,674,153	2,656,318	2,422,300	2,422,300	2,422,300
10	One-Time Increase	\$ 580,153	\$ 482,152	\$ 315,580	\$ (17,835)	\$ (234,018)	\$ -	\$ -	\$ -
11	One-Time Increase-percentage	31.49%	23.16%	13.38%	-0.67%	-8.81%	0.00%	0.00%	0.00%
12	Maximum Yearly Increase Percentage	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
13	Current Year Increase - Phase-in Maximum	\$ 276,322	\$ 312,264	\$ 315,580	\$ (17,835)	\$ (234,018)	\$ -	\$ -	\$ -
14	Class Shift Maximum Revenue	2,081,757	2,358,572	2,677,848	2,677,848	2,700,000	2,700,000	2,700,000	2,700,001
15	Current Revenue	1,842,147	2,081,757	2,358,572	2,674,153	2,656,318	2,422,300	2,422,300	2,422,300
16	Current Year Increase - Class Shift Maximum	239,610	276,815	319,276	3,696	43,682	277,700	277,700	277,701
17	Phase-in Options Deferral Amounts								
18	District Cap	\$ 303,831	\$ 169,888	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Class Shift Cap	\$ 340,543	\$ 205,337	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	Revenue Increase Deferred	\$ 340,543	\$ 205,337	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	Income Tax Factor	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%	38.3886%
22	Income Tax Effect	130,730	78,826	-	-	-	-	-	-
23	Net Revenue Increase Deferred	\$ 209,813	\$ 126,511	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ACCUMULATED DEFERAL									
24	Deferred Revenue Increase	\$ 209,813	\$ 336,324	\$ 336,324	\$ 336,324	\$ 336,324	\$ 336,324	\$ 336,324	\$ 336,324
25	Accumulated Amortization of URD	-	69,938	203,131	336,324	336,324	336,324	336,324	336,324
26	Net URD Balance - Year End	\$ 209,813	\$ 266,386	\$ 133,193	\$ -	\$ -	\$ -	\$ -	\$ -
27	Revenue Increase - Annual Amount	\$ 239,610	\$ 276,815	\$ 315,580	\$ (17,835)	\$ (234,018)	\$ -	\$ -	\$ -
28	Revenue Increase - Annual Percentage	13.01%	13.30%	13.38%	-0.67%	-8.81%	0.00%	0.00%	0.00%
INPUTS									
29	Rate of Return (after tax)	8.25%							
30	Maximum Yearly Increase Percentage	15.00%							
31	Amortization Period	3							
32	Income Tax Factor	38.3886%							
Test of Revenues Received over Period									
33	Net Income Required	\$ 50,275							
34	Current Income Taxes on NOI	31,325							
35	Additional Revenues Required	\$ 81,600							
36	Revenue Requirement Responsibility	\$ 16,956,100							
37	Revenues Received	17,037,700							
38	Additional Revenues Received	\$ 81,600							