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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS.	DOCKET NO. W-01445A-04-0650 **Staff's Notice of Filing Surrebuttal Testimony**

The Utilities Division ("Staff") provides this notice that it has filed the surrebuttal testimony of Ronald E. Ludders and Alejandro Ramirez.

RESPECTFULLY SUBMITTED this 25th day of May 2005.

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Arizona Corporation Commission
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The original and thirteen (13) copies of the foregoing were filed this 25th day of May 2005 with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
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BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
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IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS	)	DOCKET NO. W-01445A-04-0650

SURREBUTTAL

TESTIMONY

OF

RONALD E. LUDDERS

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 25, 2005

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INTRODUCTION

Q. Please state you name, occupation, and business address.

A. My name is Ronald E. Ludders. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("ACC" or Commission") in the Utilities Division ("Division"). My business address is 1200 W. Washington Street, Phoenix, Arizona, 85007.

Q. Are you the same Ronald E. Ludders who filed direct testimony in this case?

A. Yes, I am.

Q. **What is the purpose of your surrebuttal testimony in this proceeding?**

A. The purpose of my surrebuttal testimony in this proceeding is to respond, on behalf of the Utilities Division Staff ("Staff"), to the rebuttal testimony of various Arizona Water Company ("Arizona Water" or "Company") witnesses in the areas of rate base, operating income, revenue requirement, and rate design.

Q. Did Staff attempt to address every issue raised by the Company in its rebuttal testimony?

A. No. Staff limited its discussion to certain issues as outlined below.

Q. Does that mean Staff concurs with the Company on any issue not discussed in your surrebuttal?

A. No, not at all. Where Staff fails to respond or comment on an issue or question in this surrebuttal testimony, it should not be considered to mean concurrence with the Company on that issue or question, rather Staff relies on its direct testimony and continues to support the Staff position.

SUMMARY OF COMPANY'S REBUTTAL TESTIMONY

Q. Please summarize the Company's rebuttal testimony.

A The Company indicated in its rebuttal testimony that it is in disagreement with Staff in the following issues;

1. Central Arizona Project ("CAP") cost recovery
2. Casa Grande condemnation
3. Working capital
4. Purchased power expenses
5. Purchased pumping power adjustor mechanism ("PPAM") and purchased water adjustor mechanism ("PWAM")
6. Rate case expense
7. Rate design

Q. Please explain how Staff organized its surrebuttal testimony.

A. Staff organized its surrebuttal testimony in the same order as reflected on the Company's major points of disagreement list above.

CENTRAL ARIZONA PROJECT ("CAP") COST RECOVERY

Q. Has Staff reviewed the Company's rebuttal testimony regarding the CAP cost recovery?

A. Yes it has.

Q. What is the current status of the differences in the Company's and Staff's position regarding the CAP cost recovery issue?

A. While both parties have differing positions, Staff and the Company have agreed to meet for a possible settlement agreement on this issue.

Q. When will Staff be ready to discuss this issue?

A. Staff hopes to be prepared to present an agreement, or state its position fully, by the time of the hearing scheduled in this proceeding.

CASA GRANDE CONDEMNATION

Q. The Company suggests that Staff only objects to the legal costs associated with the condemnation and not the sale of effluent. Would you please clarify Staff's position.

A. Yes. Staff objects not only to the condemnation costs but also objects to the sale of effluent issue. Therefore, the removal of the $824,374 by Staff is correct.

Q. Did the Company raise any concerns regarding the recovery of $824,374 in legal fees incurred by the Company and posted to the "Intangibles Miscellaneous" account?

A. Yes it did. The Company continues to insist that the legal fees should be recovered from ratepayers in a non-depreciable account earning a rate of return in perpetuity. Staff believes that the benefactors of the Company's legal efforts in this instance are the shareholders and as such should pay the legal fees. Staff does not believe ratepayers would be harmed if the condemnation was successful.

CASH WORKING CAPITAL

Q. Does Staff continue to recommend its use of a 37 day lag for Federal and State income tax payments in the cash working capital allowance?

A. Yes. As indicated in the summary below, Staff's recommended 37 day lag is developed using the ***required*** payment dates for such taxes. If the Company wishes to pay these taxes earlier than they are required, it can certainly do so. However, the negative cash flow consequences should not penalize ratepayers. We continue to support the ***required*** payment date methodology. The mid-point for determining the number of lead or lag days is June 30, the exact middle of the annual tax payment period.

Tax Payment Date	Percent of Annual Liability	(Lead) Lag Days	Weighted Days
April 15th	25.00	(77.5)	(19.38)
June 15th	25.00	(16.5)	(4.12)
September 15th	25.00	75.5	18.88
December 15th	25.00	166.5	41.62
	100.00		**37.00 days**

Staff continues to support its $293,804 negative adjustment to the cash working capital allowance. Staff has researched this matter and has determined that this is the correct treatment.[1]

[1] See Exhibit VI-12, "Public Utility Working Capital", Dabelstein, Carl.

PURCHASED POWER EXPENSES

Q. Did Staff make any adjustments in purchased power costs for the recent increase in Arizona Public Service ("APS") tariffs?

A. No, as is the case with the Company, the complex APS tariff went into effect before it could be evaluated and included in the rate case. The Company will present their requested increase for the APS purchased power increase in its rejoinder testimony. At that time Staff will review the request.

Q. Is Staff opposed to making an adjustment to purchased power costs to account for the recently approved APS rate increase?

A. No, as long as it is done properly.

PURCHASED POWER ADJUSTOR MECHANISM AND PURCHASED WATER ADJUSTOR MECHANISM

Q. Does Staff continue to believe the purchase power adjustor mechanism and purchased water adjustor mechanism should be eliminated?

A. Yes. Although Arizona Water is the only water provider that still uses these adjustors, it continues to believe it has a need for them. The Commission disagreed with that assumption in the Eastern Group rate case by eliminating these adjustors (Decision No. 66849, dated March 19, 2004).

Q. Mr. Kennedy suggests that there is a State law mandating purchased power and purchased water adjustment mechanisms.

A. Although Mr. Kennedy presents this argument, Staff's legal counsel indicated that this law is unconstitional. Staff's counsel will present this matter in Staff's legal brief.

Q. What is the historic standard used by Staff to determine if an adjustor mechanism is needed?

A. Adjustor mechanisms have been useful in gas and electric utilities where purchased gas or purchased power is generally the largest single expense and where the commodity is highly volatile. Purchased pumping power and purchased water costs for Arizona Water do not have these characteristics.

Q. Do you agree with Mr. Kennedy that the most relevant comparison to determine the significance of the purchased power and purchased water expense should be as a percentage of total operating income?

A. No. There are many factors to consider when evaluating whether an adjustor mechanism is appropriate. For example, a fixed cost that represents a significant percentage of operating costs is an inappropriate candidate for an adjustor mechanism. Likewise, a variable cost that is only marginally volatile is an inappropriate candidate as well. So there are several factors to consider when determining if an adjustor mechanism is proper.

Staff continues to support the elimination of the PPAM and PWAM for Arizona Water.

RATE CASE EXPENSES

Q. Does Staff agree with the Company's rate case expense position?

A. No. Staff's position regarding rate case expenses is that its recommendation represents a reasonable amount of expense. For example, in the Company's Eastern Group rate case (Decision No. 66849, dated March 19, 2004) the Commission approved rate case expenses of $250,000 for its 8 systems ($31,250 per system). Staff believes its recommended rate case expense of $225,000 ($45,000 per system) for this case is reasonable.

RATE DESIGN

Q. Has the company utilized the inverted three-tiered rate design?

A. No. The Company submitted a single rate commodity charge structure in its application and continues to support such rate design.

Q. What does Mr. Kennedy suggest be done with the rate design?

A. Mr. Kennedy, in his rebuttal response states, "The best solution would be to continue the Company's cost of service based rate design (single rate commodity charge) until Staff completes a tiered rate design model that specifically addresses price elasticity and revenue volatility to eliminate the remaining short-coming of its current proposed model."

Q. Does Mr. Kennedy demonstrate that the Company has, in fact, experienced price elasticity?

A. No. Mr. Kennedy believes the Company's Eastern Group has experienced a 7 percent reduction in per customer consumption as a result of the three-tier rate design currently in effect (See Kennedy at Rt. 18 and Exhibit RJK-R4). However, Mr. Kennedy's analysis is over simplified and flawed. His evaluation fails to take into account numerous other factors affecting the specific water use of the customers and the time period selected for his observations.

For example, during the twelve month period ending March 31, 2005, Arizona experienced an unusually high level of precipitation, especially from January 1, 2005 through March 31, 2005. Additionally, the gallonage per customer could also have been affected by customer growth.

Therefore, Mr. Kennedy has failed to demonstrate, that the Company's revenues are negatively impacted due to implementation of an inverted three-tier rate design.

Q. **Mr. Ludders, for the passed several years the Commission has consistently authorized three-tiered rates; to your knowledge has the Commission ever required Staff to perform price elasticity and/or revenue volatility studies before approving such rates?**

A. No.

Q. **Are there other reasons an elasticity adjustment should be rejected?**

A. Yes. First, any change to usage is not "known and measurable". Second, correcting for any future changes creates serious measuring problems. Many other variables also change in the future, such as customer growth.

Q. **Has the Commission ever requested a Company submitting a single commodity charge rate design to resubmit an inverted three-tier rate design?**

A. Yes, during a recent Arizona-American Water Company, Inc. ("Arizona-American") rate hearing Commissioner Mundell expressed his disappointment that Arizona-American did not submit an inverted three-tiered rate design and only provided one very late in the proceeding.

Q. **Did the Commission approve a three-tier rate design for Arizona-American?**

A. Yes.

Q. **Did the Commission require either Staff or Arizona-American to perform a price elasticity study or revenue elasticity study prior to their approval?**

A. No.

Q. Has the Arizona Water Company been asked by Staff to resubmit its single commodity rate schedule in favor of the inverted three-tiered rate design?

A. Yes, during the sufficiency period Staff requested the Company resubmit its application with an inverted three-tier rate design. Company witness, Mr. Kennedy declined, stating that he preferred that Staff use its expertise to design an inverted three-tier rate design for the Company. He also was offered Staff's assistance in helping the Company develop its own inverted three-tier rate design. Mr. Kennedy said he looked forward to working with Staff on this issue.

Q. Did the Company seek Staff's input or help in developing an alternative inverted three-tiered rate design?

A. Not at any time.

Q. Does Staff have anything else to add?

A. Yes. Staff has prepared surrebuttal Schedules to reflect the positions taken herein and certain other technical corrections.

Q. Does this conclude your surrebuttal testimony Mr. Ludders?

A. Yes it does.

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SCHEDULES

Only changed Direct Testimony Schedules Included.

CASA GRANDE – SYSTEM

STANFIELD – SYSTEM

WHITE TANK – SYSTEM

COOLIDGE – SYSTEM

AJO – SYSTEM

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-1
Surrebuttal

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION		[A] COMPANY ORIGINAL COST		[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$	21,996,652	$	17,352,671
2	Adjusted Operating Income (Loss)	$	1,180,181	$	1,541,858
3	Current Rate of Return (L2 / L1)		5.37%		8.89%
4	Required Rate of Return		10.5000%		8.9000%
5	Required Operating Income (L4 * L1)	$	2,309,648	$	1,544,388
6	Operating Income Deficiency (L5 - L2)	$	1,129,467	$	2,529
7	Gross Revenue Conversion Factor		1.63245		1.63246
8	Increase In Gross Revenue (L7 * L6)	$	1,843,799	$	4,129
9	Adjusted Test Year Revenue	$	7,921,381	$	7,921,381
10	Proposed Annual Revenue (L8 + L9) Note A	$	9,765,180	$	7,925,510
11	Require Increase in Revenue (%) (L8/L9)		23.28%		0.05%

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL- 2
Surrebuttal

GROSS REVENUE CONVERSION FACTOR

Line No.			
	Calculation of Gross Revenue Conversion Factor:		
1	Recommended Revenue Increase:		
2	Billings		1.000000
3	Combined Federal and State Income Tax Rate	38.59888%	
4	Uncollectible Rate After Income Taxes	0.14374%	
5	Total Tax Rate		38.74262%
6	Gross Revenue Conversion Factor		**1.632456**
	Calculation of Effective Income Tax Rate:		
7	Operating Income Before Taxes (Arizona Taxable Income)	100.00000%	
8	Arizona State Income Tax Rate	6.96800%	
9	Federal Taxable Income (L5 - L6)	93.03200%	
10	Applicable Federal Income Tax Rate (Line 32)	34.00000%	
11	Effective Federal Income Tax Rate (L7 x L8)	31.63088%	
12	Combined Federal and State Income Tax Rate (L6 +L9)	38.59888%	
	Calculation of Uncollectible Rate After Income Taxes:		
13	Uncollectible Rate		0.23410%
14	Combined Federal and State Income Tax Rate	38.59888%	
15	1 minus Combined Federal and State Income Tax Rate		61.40112%
16	Uncollectible Rate After Income Taxes		0.14374%
	Revenue Reconciliation:		
17	Recommended Increase in Revenue (from REL-1, L8)	$ 4,129	
18	Uncollectible Rate	0.234100%	
19	Required Increase in Revenue to Provide for Uncollectibles		$ 10
20	Recommended Increase in Revenue (from REL-1,L8)	$ 4,129	
21	Required Increase in Revenue to Provide for Uncollectibles	10	
22	Incremental Taxable Income	$ 4,119	
23	Combined Federal and State Income Tax Rate	38.59888%	
24	Required Increase in Revenue to Provide for Income Taxes		1,590
25	Required Operating Income	$ 1,544,388	
26	Adjusted Test Year Operating Income (Loss)	1,541,858	
27	Required Increase in Operating Income		2,529
28	Total Required Increase In Revenue		$ 4,129

Line No.	*Calculation of Income Tax:*	Test Year		STAFF Recommended	
29	Revenue	$ 7,921,381		$ 7,925,510	
30	Less: Operating Expenses Excluding Income Taxes	$ 5,650,243		$ 5,650,253	
31	Less: Synchronized Interest	$ 381,759		$ 381,759	
32	Arizona Taxable Income	$ 1,889,379		$ 1,893,498	
33	Arizona State Income Tax Rate	6.968%		6.968%	
34	Arizona Income Tax		$ 131,652		$ 131,939
35	Federal Taxable Income	$ 1,757,727		$ 1,761,559	
36	Federal Income Tax @ 34%		$ 597,627		$ 598,930
37	Combined Federal and State Income Tax		$ 729,279		$ 730,869
				$ 1,590	

Line No.	*Calculation of Interest Synchronization:*	
38	Rate Base	$ 17,352,671
39	Weighted Average Cost of Debt	2.200%
40	Synchronized Interest	$ 381,759

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-3
Surrebauttal

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED		(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED	
1	Plant in Service	$ 51,556,199		$ (4,350,177)	$ 47,206,022	
2	Less: Accumulated Depreciation	(12,072,217)		-	(12,072,217)	
3	Net Plant in Service	$ 39,483,982	x	$ (4,350,177)	$ 35,133,805	
	LESS:					
4	Advances in Aid of Construction (AIAC)	(8,891,444)		-	(8,891,444)	
5	Contributions in Aid of Construction (CIAC)	$ (7,754,812)		$ -	$ (7,754,812)	
6	Less: Accumulated Amortization	1,348,820		-	1,348,820	
7	Net CIAC	(6,405,992)		-	(6,405,992)	
8	Total Advances and Contributions	(15,297,436)		-	(15,297,436)	
9	Customer Deposits	-		-	-	
10	Meter Advances	-		-	-	
11	Deferred Income Tax Credits	(3,387,966)		-	(3,387,966)	
	ADD:					
12	Working Capital	250,254		(293,804)	(43,550)	x
13	Phoenix Office Allocation	930,536		-	930,536	
14	Meter Shop Allocation	17,282		-	17,282	
15		-		-	-	
16		-		-	-	
17		-		-	-	
18	**Total Rate Base**	$ 21,996,652		$ (4,643,981)	$ 17,352,671	

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-4
Surrebuttal

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ No.1	[C] ADJ No. 2	[D] ADJ No. 3	[E] STAFF ADJUSTED
	PLANT IN SERVICE:					
1	Organization	$ -	$ -	$ -	$ -	$ -
2	Franchises	3,018	-	-	-	3,018
3	Other Intangibles	824,374	(824,374)	-	-	-
4	Water Rights	67,192	-	-	-	67,192
5	Other Source of Supply Land	93,865	-	-	-	93,865
6	Wells	2,711,417	-	-	-	2,711,417
7	Pumping Plant Land	6,013	-	-	-	6,013
8	Pumping Plant Structures & Improvements	91,607	-	-	-	91,607
9	Electric Pumping Equipment	2,394,587	-	-	-	2,394,587
10	Gas Engine Equipment	-	-	-	-	-
11	Water Treatment Land	-	-	-	-	-
12	Water Treatment Structures & Improvmnts	70,538	-	-	-	70,538
13	Water Treatment Equipment	133,666	-	-	-	133,666
14	Transmission and Distribution Land	64,886	-	-	-	64,886
15	Storage Tanks	1,699,748	-	-	-	1,699,748
16	Transmission and Distribution Mains	25,581,627	-	-	-	25,581,627
17	Fire Sprinkler Taps	849,998	-	-	-	849,998
18	Services	8,672,173	-	-	-	8,672,173
19	Meters	1,205,217	-	-	-	1,205,217
20	Hydrants	2,390,623	-	-	-	2,390,623
21	General Plant Land	8,772	-	-	-	8,772
22	General Plant Structures	368,806	-	-	-	368,806
23	Leasehold Improvements	-	-	-	-	-
24	Office Furniture and Improvements	161,506	-	-	-	161,506
25	Warehouse Equipment	12,913	-	-	-	12,913
26	Tools, Shop and Garage Equipment	130,579	-	-	-	130,579
27	Laboratory Equipment	5,253	-	-	-	5,253
28	Power Operated Equipment	59,810	-	-	-	59,810
29	Communication Equipment	376,139	-	-	-	376,139
30	Miscellaneous Equipment	46,069	-	-	-	46,069
31	Total Plant in Service - Actual	48,030,396 x	(824,374)	-	-	47,206,022
32	CAP Pro-forma Adjustment - Post TY Plant	3,525,803	-	(3,525,803)	-	-
33	Accumulated Depreciation, Retired Plant	-		-		-
34	Total Plant in Service - Adjusted	$ 51,556,199 x	$ (824,374)	$ (3,525,803)	$ -	$ 47,206,022
35	Less: Accumulated Depreciation - Actual	$ (12,087,978) x	-	-	-	(12,087,978)
36	Less: Accumulated Depreciation - Post TY	15,761 x	-	-	-	15,761
37	Less: Accumulated Depreciation - 12 Mos TY	-	-	-		-
38	Less: Accumulated Depreciation - Retired Plant					-
39	Total Accumulated Depreciation - Adjusted	$ (12,072,217) x	$ -	$ -	$ -	$ (12,072,217)
40	Plus: Construction Work In Progress	-	-	-	-	-
41	Net Plant in Service	$ 39,483,982 x	$ (824,374)	$ (3,525,803)	$ -	$ 35,133,805
	LESS:					
42	Advances in Aid of Construction (AIAC)	$ (8,891,444) x	$ -	$ -	$ -	(8,891,444)
43	Contributions in Aid of Construction (CIAC)	(7,754,812) x	-	-	-	(7,754,812)
44	Less: Accumulated Amortization	1,348,820 x	-	-	-	1,348,820
45	Net CIAC (L25 - L26)	(6,405,992) x	-	-	-	(6,405,992)
46	Total Advances and Contributions	(15,297,436) x	-	-	-	(15,297,436)
47	Customer Deposits	-	-	-	-	-
48	Meter Advances	-	-	-	-	-
49	Deferred Income Tax Credits	(3,387,966) x	-	-	-	(3,387,966)
	ADD:					
50	Working Capital Allowance	250,254 x	-	-	(293,804)	(43,550)
51	Phoenix Office Allocation	930,536 x	-	-	-	930,536
52	Meter Shop Allocation	17,282 x	-	-	-	17,282
53	Projected Capital Expenditures	-	-	-	-	-
54	Deferred Debits	-	-	-	-	-
55	Other Additions	-	-	-	-	-
56	**Total Rate Base**	$ 21,996,652	$ (824,374)	$ (3,525,803)	$ (293,804)	$ 17,352,671

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-8
Surrebuttal

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:					
1	Total Operating Revenues	$ 7,921,381	$ -	$ 7,921,381	$ 4,129	$ 7,925,510
	EXPENSES:					
	Source of Supply Expenses:					
2	Purchased Water	$ 498,013	$ (159,449)	$ 338,564	$ -	$ 338,564
3	Other	45,935	-	45,935	-	45,935
	Pumping Expenses:	-	-	-	-	-
4	Purchased Power	810,343	1,467	811,810	-	811,810
5	Purchased Gas	-	-	-	-	-
6	Other	286,696	-	286,696	-	286,696
7	Water Treatment Expenses	187,995	-	187,995	-	187,995
8	Transmission and Distribution Expenses	786,616	-	786,616	-	786,616
9	Customer Account Expenses	604,959	-	604,959	10	604,969
10	Sales Expenses	2,962	-	2,962	-	2,962
11	Administrative and General Expenses	952,718	(20,495)	932,223	-	932,223
12	Total Operation and Maintenance	$ 4,176,237	(178,477)	3,997,760	10	3,997,770
13	Depreciation and Amortization	1,368,007	(352,580)	1,015,427	-	1,015,427
15	Ad Valorem (Property)	612,639	(52,334)	560,305	-	560,305
	Taxes:					
14	Federal & State Income Tax	507,566	221,713	729,279	1,590	730,869
16	Other	76,751	-	76,751	-	76,751
17	**Total Operating Expenses**	$ 6,741,200	$ (361,677)	$ 6,379,523	$ 1,600	$ 6,381,122
18	**Operating Income (Loss)**	$ 1,180,181	$ 361,677	$ 1,541,858	$ 2,529	$ 1,544,388

Arizona Water Company - Casa Grande
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-9
Surrebuttal

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[F] ADJ #5	[G] ADJ #6	[H] ADJ #7	[I] ADJ #8	[J] STAFF ADJUSTED
	REVENUES:										
1	**Total Operating Revenues**	$ 7,921,381	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,921,381
	EXPENSES:										
	Source of Supply Expenses:										
2	Purchased Water	$ 498,013	$(159,449)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 338,564
3	Other	45,935	-	-	-	-	-	-	-	-	45,935
	Pumping Expenses:										
4	Purchased Power	810,343	-	1,467	-	-	-	-	-	-	811,810
5	Purchased Gas	-	-	-	-	-	-	-	-	-	-
6	Other	286,696	-	-	-	-	-	-	-	-	286,696
7	Water Treatment Expenses	187,995	-	-	-	-	-	-	-	-	187,995
8	Transmission and Distribution Expenses	786,616	-	-	-	-	-	-	-	-	786,616
9	Customer Account Expenses	604,959	-	-	-	-	-	-	-	-	604,959
10	Sales Expenses	2,962	-	-	-	-	-	-	-	-	2,962
11	Administrative and General Expenses	952,718	-	-	(6,954)	(13,541)	-	-	-	-	932,223
12	Total Operation and Maintenance	4,176,237	(159,449)	1,467	(6,954)	(13,541)	-	-	-	-	3,997,760
13	Depreciation and Amortization	1,368,007	-	-		-	(352,580)	-	-	-	1,015,427
15	Ad Valorem (Property)	612,639	-	-	-			(52,334)		-	560,305
	Taxes:										-
14	Federal & State Income Tax	507,566	-	-	-			-	158,607	63,106	729,279
16	Other	76,751									76,751
17	**Total Operating Expenses**	$ 6,741,200	$(159,449)	$ 1,467	$ (6,954)	$ (13,541)	$ (352,580)	$ (52,334)	$ 158,607	$ 63,106	$ 6,379,523
18	**Operating Income (Loss)**	$ 1,180,181 x	$ 159,449	$ (1,467)	$ 6,954	$ 13,541	$ 352,580	$ 52,334	$ (158,607)	$ (63,106)	**$ 1,541,858**

Arizona Water Company - Casa Grande
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Schedule REL-14
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 10 - DEPRECIATION EXPENSE INCL. POST-TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF AS ADJUSTED
1	CAP Amortization	$ 1,368,007	$ (352,580)	$ 1,015,427
			-	-
		$ 1,368,007	$ (352,580)	$ 1,015,427

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Schedule REL- 14
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 5 - PROPERTY TAX EXPENSE

		(A)	(B)	(C)
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENT	STAFF AS ADJUSTMENT
1	2001 Annual Gross Revenues			$ 6,924,261
2	2002 Annual Gross Revenues			$ 7,620,542
3	2003 Annual Gross Revenues			$ 7,921,381
4	Plus Staff's Recommended Increase			$ 4,129
5	Subtotal (Lines 1 + 2 + 3 + 4)			$ 22,470,313
6	Three Year Average Calculation			3
7	Three Year Average (Line 5 / Line 6)			$ 7,490,104
8	Department of Revenue Multiplier			2
9	Revenue Base Value (Line 7 x Line 8)			$ 14,980,209
10	Plus: 10% of 2001 CWIP			14,715
11	Less: Net Book Vaule of Leased Vehicles (See Note A Below)			$ 201,384
12	Full Cash Value (Line 9 + Line 10 - Line 11)			$ 14,793,540
13	Assessment Ratio			0.25
14	Assessed Value (Line 12 x Line 13)			$ 3,698,385
15	Composite Property Tax Rate (See Note B Below)			0.1515
16	**Staff Proposed Property Tax Expense (Line 14 x Line 15)**	$ 612,639	$ (52,334)	$ 560,305

Note A: Net Book Value of Licensed Vehicles provided by Arizona Water.

Note B: Property tax rate provided by Arizona Dept. of Revenue.

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Schedule REL- 15
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 6 and 7 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTED
1	Federal Income Taxes	$ 439,020	$ 158,607	$ 597,627
2	State Income Taxes	68,546	63,106	131,652
3	Total Income Taxes	$ 507,566	$ 221,713	$ 729,279

RATE DESIGN

	Minimum Monthly Usage Charge		
	Present	---Proposed Rates---	
Monthly Usage Charge:	Rates	Company	Staff
5/8" x 3/4" Meter	$ 10.36	$ 13.03	$ 10.50
1" Meter	$ 24.86	$ 31.92	$ 25.00
2" Meter	$ 62.15	$ 91.21	$ 70.00
3" Meter	$ 103.58	$ 162.88	$ 125.00
4" Meter	$ 207.16	$ 293.18	$ 240.00
6" Meter	$ 362.53	$ 553.78	$ 375.00
8" Meter	$ 362.53	$ 749.23	$ 600.00
10" Meter	$ 673.27	$ 1,687.41	$ 837.19
Gallons Included In Minimum Charge:			
5/8" x 3/4" Meter	1,000	0	0
1" Meter	1,000	0	0
2" Meter	1,000	0	0
3" Meter	1,000	0	0
4" Meter	1,000	0	0
6" Meter	1,000	0	0
8" Meter	1,000	0	0
10" Meter	1,000	0	0
Fire Hydrants Used For Construction Water	1,000	0	0
Commodity Rates : 5/8 x 3/4 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 3,000 Gallons	$ 1.5590	$ 1.8250	$ 1.0000
Per 1,000 Gallons for 3,001 to 10,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 10,000	$ 1.5590	$ 1.8250	$ 2.0000
Commodity Rates : 1 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 30,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 30,000	$ 1.5590	$ 1.8250	$ 2.0000
Commodity Rates : 2 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 150,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 150,000	$ 1.5590	$ 1.8250	$ 2.0000
Commodity Rates : 3 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 300,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 300,000	$ 1.5590	$ 1.8250	$ 2.0000

RATE DESIGN
CONTINUED

	Present Rates	---Proposed Rates--- Company	Staff
Commodity Rates : 4 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 1,000,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 1,000,000	$ 1.5590	$ 1.8250	$ 2.0000
Commodity Rates : 6 and 8 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 1.5590	N/A	N/A
Per 1,000 Gallons for 0 to 2,000,000 Gallons	$ 1.5590	$ 1.8250	$ 1.1500
Per 1,000 Gallons for Gallons in Excess of 2,000,000	$ 1.5590	$ 1.8250	$ 2.0000
Service Line and Meter Installation Charge:			
5/8" x 3/4" Meter	(a)	(a)	(a)
1" Meter	(a)	(a)	(a)
2" Meter	(b)	(b)	(b)
3" Meter	(b)	(b)	(b)
4" Meter	(b)	(b)	(b)
6" Meter	(b)	(b)	(b)

(a) No charge for 5/8" and 1" if on existing pipelines. Full cost for 5/8" and 1" if if on new pipelines.
(b) Full cost for 2"and larger if on existing or new pipelines.

	Present Rates	Company	Staff
Service Charges:			
Establishment	$ 16.00	$ 16.00	$ 16.00
Guarantee Deposit	(c)	(c)	(c)
Reconnection for Delinquency (per disconnection)	$ 16.00	$ 16.00	$ 16.00
Re-establishement	(d)	(d)	(d)
Service Call Out (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Returned Check Charge	$ 10.00	$ 25.00	$ 25.00
Meter Re-read (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Meter Test	$ 50.00	$ 50.00	$ 50.00
Late Charge	N/A	(e)	(e)

(c) Per Commission Rule A.A.C. R14-2-403B
(d) Eight (8) times the customer's monthly minimum charge, or payment of the minimums since disconnection, whichever is less.
N/A No current tariff.
(e) 1.5 percent after 15 days

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Schedule REL-1
Surrebuttal

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION		[A] COMPANY ORIGINAL COST			[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$	314,131	x	$	310,269
2	Adjusted Operating Income (Loss)	$	25,878		$	24,125
3	Current Rate of Return (L2 / L1)		8.24%			7.78%
4	Required Rate of Return		10.5000%	x		8.9000%
5	Required Operating Income (L4 * L1)	$	32,984		$	27,614
6	Operating Income Deficiency (L5 - L2)	$	7,106		$	3,489
7	Gross Revenue Conversion Factor		1.63245	x		1.63246
8	Increase In Gross Revenue (L7 * L6)	$	11,600		$	5,696
9	Adjusted Test Year Revenue	$	131,003		$	131,003
10	Proposed Annual Revenue (L8 + L9) Note A	$	142,603		$	136,699
11	Require Increase in Revenue (%) (L8/L9)		8.85%			4.35%

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Schedule REL- 2
Surrebuttal

GROSS REVENUE CONVERSION FACTOR

Line No.							
	Calculation of Gross Revenue Conversion Factor:						
1	Recommended Revenue Increase:						
2	Billings		1.000000				
3	Combined Federal and State Income Tax Rate	38.59888%					
4	Uncollectible Rate After Income Taxes	0.14374%					
5	Total Tax Rate		38.74262%				
6	Gross Revenue Conversion Factor		1.632456				
	Calculation of Effective Income Tax Rate:						
7	Operating Income Before Taxes (Arizona Taxable Income)	100.00000%					
8	Arizona State Income Tax Rate	6.96800%					
9	Federal Taxable Income (L5 - L6)	93.03200%					
10	Applicable Federal Income Tax Rate (Line 32)	34.00000%					
11	Effective Federal Income Tax Rate (L7 x L8)	31.63088%					
12	Combined Federal and State Income Tax Rate (L6 +L9)	38.59888%					
	Calculation of Uncollectible Rate After Income Taxes:						
13	Uncollectible Rate		0.23410%				
14	Combined Federal and State Income Tax Rate	38.59888%					
15	1 minus Combined Federal and State Income Tax Rate		61.40112%				
16	Uncollectible Rate After Income Taxes		0.14374%				
	Revenue Reconciliation:						
17	Recommended Increase in Revenue (from REL-1, L8)	$ 5,696					
18	Uncollectible Rate	0.234100%					
19	Required Increase in Revenue to Provide for Uncollectibles		$ 13				
20	Recommended Increase in Revenue (from REL-1,L8)	$ 5,696					
21	Required Increase in Revenue to Provide for Uncollectibles	13					
22	Incremental Taxable Income	$ 5,682					
23	Combined Federal and State Income Tax Rate	38.59888%					
24	Required Increase in Revenue to Provide for Income Taxes		2,193				
25	Required Operating Income	$ 27,614					
26	Adjusted Test Year Operating Income (Loss)	24,125					
27	Required Increase in Operating Income		3,489				
28	Total Required Increase In Revenue		$ 5,696				

Line No.	*Calculation of Income Tax:*	Test Year		STAFF Recommended	
29	Revenue	$ 131,003		$ 136,699	
30	Less: Operating Expenses Excluding Income Taxes	$ 96,003		$ 96,017	
31	Less: Synchronized Interest	$ 6,826		$ 6,826	
32	Arizona Taxable Income	$ 28,174		$ 33,856	
33	Arizona State Income Tax Rate	6.968%		6.968%	
34	Arizona Income Tax		$ 1,963		$ 2,359
35	Federal Taxable Income	$ 26,211		$ 31,497	
36	Federal Income Tax @ 34%		$ 8,912		$ 10,709
37	Combined Federal and State Income Tax		$ 10,875		$ 13,068
				$ 2,193	

Line No.	*Calculation of Interest Synchronization:*	
38	Rate Base	$ 310,269
39	Weighted Average Cost of Debt	2.200%
40	Synchronized Interest	$ 6,826

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED		(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 602,560		$ -	$ 602,560
2	Less: Accumulated Depreciation	(195,716)		-	(195,716)
3	Net Plant in Service	$ 406,844	x	$ -	$ 406,844
	LESS:				
4	Advances in Aid of Construction (AIAC)	-		-	-
5	Contributions in Aid of Construction (CIAC)	$ (49,164)		$ -	$ (49,164)
6	Less: Accumulated Amortization	7,813		-	7,813
7	Net CIAC	(41,351)		-	(41,351)
8	Total Advances and Contributions	(41,351)		-	(41,351)
9	Customer Deposits	-		-	-
10	Meter Advances	-		-	-
11	Deferred Income Tax Credits	(62,528)	x	-	(62,528)
	ADD:				
12	Working Capital	(3,029)	x	(3,862)	(6,891)
13	Phoenix Office Allocation	13,936	x	-	13,936
14	Meter Shop Allocation	259	x	-	259
15		-		-	-
16		-		-	-
17		-		-	-
18	**Total Rate Base**	$ 314,131	x	$ (3,862)	$ 310,269

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Schedule REL-4
Surrebuttal

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] ADJ No.1	[C] STAFF ADJUSTED
	PLANT IN SERVICE:				
1	Organization	$ -		$ -	$ -
2	Franchises	-		-	-
3	Other Intangibles	-		-	-
4	Water Rights	1,128		-	1,128
5	Other Source of Supply Land	600		-	600
6	Wells	106,975		-	106,975
7	Pumping Plant Land	200		-	200
8	Pumping Plant Structures & Improvements	1,243		-	1,243
9	Electric Pumping Equipment	190,368		-	190,368
10	Gas Engine Equipment	-		-	-
11	Water Treatment Land	-		-	-
12	Water Treatment Structures & Improvmnts	6,778		-	6,778
13	Water Treatment Equipment	13,763		-	13,763
14	Transmission and Distribution Land	-		-	-
15	Storage Tanks	40,876		-	40,876
16	Transmission and Distribution Mains	99,139		-	99,139
17	Fire Sprinkler Taps	268		-	268
18	Services	35,888		-	35,888
19	Meters	17,035		-	17,035
20	Hydrants	9,243		-	9,243
21	General Plant Land	-		-	-
22	General Plant Structures	1,312		-	1,312
23	Leasehold Improvements	-		-	-
24	Office Furniture and Improvements	-		-	-
25	Warehouse Equipment	-		-	-
26	Tools, Shop and Garage Equipment	534		-	534
27	Laboratory Equipment	-		-	-
28	Power Operated Equipment	-		-	-
29	Communication Equipment	76,676		-	76,676
30	Miscellaneous Equipment	534		-	534
31	Total Plant in Service - Actual	602,560	x	-	602,560
32	Pro-forma Adjustment - Post TY Plant	-		-	-
33	Accumulated Depreciation, Retired Plant	-			-
34	Total Plant in Service - Adjusted	$ 602,560	x	$ -	$ 602,560
35	Less: Accumulated Depreciation - Actual	$ (195,716)	x	-	(195,716)
36	Less: Accumulated Depreciation - Post TY	-		-	-
37	Less: Accumulated Depreciation - 12 Mos TY	-		-	-
38	Less: Accumulated Depreciation - Retired Plant				-
39	Total Accumulated Depreciation - Adjusted	$ (195,716)	x	$ -	$ (195,716)
40	Plus: Construction Work In Progress	-		-	-
41	Net Plant in Service	$ 406,844	x	$ -	$ 406,844
	LESS:				
42	Advances in Aid of Construction (AIAC)	$ -	x	$ -	-
43	Contributions in Aid of Construction (CIAC)	(49,164)	x	-	(49,164)
44	Less: Accumulated Amortization	7,813	x	-	7,813
45	Net CIAC (L25 - L26)	(41,351)	x	-	(41,351)
46	Total Advances and Contributions	(41,351)	x	-	(41,351)
47	Customer Deposits	-		-	-
48	Meter Advances	-		-	-
49	Deferred Income Tax Credits	(62,528)	x	-	(62,528)
	ADD:				
50	Working Capital Allowance	(3,029)	x	(3,862)	(6,891)
51	Phoenix Office Allocation	13,936	x	-	13,936
52	Meter Shop Allocation	259	x	-	259
53	Projected Capital Expenditures	-		-	-
54	Deferred Debits	-		-	-
55	Other Additions	-		-	-
56	**Total Rate Base**	$ 314,131		$ (3,862)	$ 310,269

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Schedule REL-6
Surrebuttal

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:					
1	Total Operating Revenues	$ 131,003	$ -	$ 131,003	$ 5,696	$ 136,699
	EXPENSES:					
	Source of Supply Expenses:					
2	Purchased Water	$ -	$ -	$ -	$ -	$ -
3	Other	396	-	396	-	396
	Pumping Expenses:	-	-	-	-	-
4	Purchased Power	17,409	-	17,409	-	17,409
5	Purchased Gas	-	-	-	-	-
6	Other	4,120	-	4,120	-	4,120
7	Water Treatment Expenses	430	-	430	-	430
8	Transmission and Distribution Expenses	12,240	-	12,240	-	12,240
9	Customer Account Expenses	8,604	-	8,604	13	8,617
10	Sales Expenses	44	-	44	-	44
11	Administrative and General Expenses	14,451	(150)	14,301	-	14,301
12	Total Operation and Maintenance	$ 57,694	(150)	57,544	13	57,558
13	Depreciation and Amortization	24,713	-	24,713	-	24,713
15	Ad Valorem (Property)	13,290	(698)	12,592	-	12,592
	Taxes:					
14	Federal & State Income Tax	8,274	2,601	10,875	2,193	13,068
16	Other	1,154	-	1,154	-	1,154
17	**Total Operating Expenses**	$ 105,125	$ 1,753	$ 106,878	$ 2,207	$ 109,085
18	**Operating Income (Loss)**	$ 25,878	$ (1,753)	$ 24,125	$ 3,489	$ 27,614

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Schedule REL-7
Surrebuttal

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[F] ADJ #5	[G] STAFF ADJUSTED
	REVENUES:							
1	**Total Operating Revenues**	$ 131,003	$ -	$ -	$ -	$ -	$ -	$ 131,003
	EXPENSES:							
	Source of Supply Expenses:							
2	Purchased Water	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	Other	396	-	-	-	-	-	396
	Pumping Expenses:							
4	Purchased Power	17,409	-	-	-	-	-	17,409
5	Purchased Gas	-	-	-	-	-	-	-
6	Other	4,120	-	-	-	-	-	4,120
7	Water Treatment Expenses	430	-	-	-	-	-	430
8	Transmission and Distribution Expenses	12,240	-	-	-	-	-	12,240
9	Customer Account Expenses	8,604	-	-	-	-	-	8,604
10	Sales Expenses	44	-	-	-	-	-	44
11	Administrative and General Expenses	14,451	(104)	(46)	-	-	-	14,301
12	Total Operation and Maintenance	57,694	(104)	(46)	-	-	-	57,544
13	Depreciation and Amortization	24,713		-	-	-	-	24,713
15	Ad Valorem (Property)	13,290	-		(698)		-	12,592
	Taxes:							
14	Federal & State Income Tax	8,274	-		-	1,691	910	10,875
16	Other	1,154						1,154
17	**Total Operating Expenses**	$ 105,125 x	$ (104)	$ (46)	$ (698)	$ 1,691	$ 910	$ 106,878
18	**Operating Income (Loss)**	$ 25,878	$ 104	$ 46	$ 698	$ (1,691)	$ (910)	**$ 24,125**
			Rate Case	Charity	Prop Tax	Fed Tax	State Tax	

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Schedule REL- 10
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTMENT
1	2001 Annual Gross Revenues			$ 127,255
2	2002Annual Gross Revenues			$ 132,766
3	2003 Annual Gross Revenues			$ 131,003
4	Plus Staff's Recommended Increase			$ 5,696
5	Subtotal (Lines 1 + 2 + 3 + 4)			$ 396,720
6	Three Year Average Calculation			3
7	Three Year Average (Line 5 / Line 6)			$ 132,240
8	Department of Revenue Multiplier			2
9	Revenue Base Value (Line 7 x Line 8)			$ 264,480
10	Plus: 10% of 2001 CWIP			1,000
11	Less: Net Book Vaule of Leased Vehicles (See Note A Below)			$ 242
12	Full Cash Value (Line 9 + Line 10 - Line 11)			$ 265,238
13	Assessment Ratio			0.25
14	Assessed Value (Line 12 x Line 13)			$ 66,310
15	Composite Property Tax Rate (See Note B Below)			0.1899
16	**Staff Proposed Property Tax Expense (Line 14 x Line 15)**	$ 13,290	$ (698)	$ 12,592

Note A: Net Book Value of Licensed Vehicles provided by Arizona Water.

Note B: Property tax rate provided by Arizona Dept. of Revenue.

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Schedule REL- 11
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 4 and 5 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTED
1	Federal Income Taxes	$ 7,221	$ 1,691	$ 8,912
2	State Income Taxes	1,053	910	1,963
3	Total Income Taxes	$ 8,274	$ 2,601	$ 10,875

Arizona Water Company - Stanfield
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

RATE DESIGN

	Minimum Monthly Usage Charge		
	Present	---Proposed Rates---	
Monthly Usage Charge:	Rates	Company	Staff
5/8" x 3/4" Meter	$ 14.50	$ 15.95	$ 15.00
1" Meter	$ 36.25	$ 39.88	$ 43.00
2" Meter	$ 116.01	$ 127.60	$ 133.00
3" Meter	$ 155.37	$ 250.63	$ 220.51
4" Meter	$ 207.16	$ 384.36	$ 286.45
6" Meter	$ 492.01	$ 818.64	$ 335.79
8" Meter	$ 621.48	$ 1,203.00	$ 625.36
10" Meter	$ 673.27	$ 1,687.41	$ 837.19
Gallons Included In Minimum Charge:			
5/8" x 3/4" Meter	1,000	0	0
1" Meter	1,000	0	0
2" Meter	1,000	0	0
3" Meter	1,000	0	0
4" Meter	1,000	0	0
6" Meter	1,000	0	0
8" Meter	1,000	0	0
10" Meter	1,000	0	0
Fire Hydrants Used For Construction Water	1,000	0	0
Commodity Rates : 5/8 x 3/4 Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 3.0140	N/A	N/A
Per 1,000 Gallons for 0 to 3,000 Gallons	$ 3.0140	$ 3.0160	$ 2.0000
Per 1,000 Gallons for 3,001 to 10,000 Gallons	$ 3.0140	$ 3.0160	$ 2.8000
Per 1,000 Gallons for Gallons in Excess of 10,000	$ 3.0140	$ 3.0160	$ 3.6000
Commodity Rates : 1 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 3.0140	N/A	N/A
Per 1,000 Gallons for 0 to 30,000 Gallons	$ 3.0140	$ 3.0160	$ 2.8000
Per 1,000 Gallons for Gallons in Excess of 30,000	$ 3.0140	$ 3.0160	$ 3.6000
Commodity Rates : 2 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 3.0140	N/A	N/A
Per 1,000 Gallons for 0 to 50,000 Gallons	$ 3.0140	$ 3.0160	$ 2.8000
Per 1,000 Gallons for Gallons in Excess of 50,000	$ 3.0140	$ 3.0160	$ 3.6000
Service Line and Meter Installation Charge:			
5/8" x 3/4" Meter	(a)	(a)	(a)
1" Meter	(a)	(a)	(a)
2" Meter	(b)	(b)	(b)
3" Meter	(b)	(b)	(b)
4" Meter	(b)	(b)	(b)
6" Meter	(b)	(b)	(b)

(a) No charge for 5/8" and 1" if on existing pipelines. Full cost for 5/8" and 1" if if on new pipelines.

(b) Full cost for 2"and larger if on existing or new pipelines.

RATE DESIGN
CONTINUED

	Present	---Proposed Rates---	
Service Charges:	**Rates**	**Company**	**Staff**
Establishment	$ 16.00	$ 16.00	$ 16.00
Guarantee Deposit	**(c)**	**(c)**	**(c)**
Reconnection for Delinquency (per disconnection)	$ 16.00	$ 16.00	$ 16.00
Re-establishement	**(d)**	**(d)**	**(d)**
Service Call Out (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Returned Check Charge	$ 10.00	$ 25.00	$ 25.00
Meter Re-read (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Meter Test	$ 50.00	$ 50.00	$ 50.00
Late Charge	N/A	**(e)**	**(e)**

(c) Per Commission Rule A.A.C. R14-2-403B
(d) Eight (8) times the customer's monthly minimum charge,
or payment of the minimums since disconnection, whichever is less.
N/A No current tariff.
(e) 1.5 percent after 15 days

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-1
Surrebuttal

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION		[A] COMPANY ORIGINAL COST			[B] STAFF ORIGINAL COST	
1	Adjusted Rate Base	$	2,441,155	x	$	1,898,133	
2	Adjusted Operating Income (Loss)	$	121,440		$	171,198	
3	Current Rate of Return (L2 / L1)		4.97%			9.02%	
4	Required Rate of Return		10.5000%			8.9000%	8.6000
5	Required Operating Income (L4 * L1)	$	256,321		$	168,934	
6	Operating Income Deficiency (L5 - L2)	$	134,881		$	(2,264)	
7	Gross Revenue Conversion Factor		1.63245			1.63246	
8	Increase In Gross Revenue (L7 * L6)	$	220,187		$	(3,696)	
9	Adjusted Test Year Revenue	$	783,483		$	783,483	
10	Proposed Annual Revenue (L8 + L9) Note A	$	1,003,670		$	779,787	
11	Require Increase in Revenue (%) (L8/L9)		28.10%			-0.47%	

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL- 2
Surrebuttal

GROSS REVENUE CONVERSION FACTOR

Line No.							
	Calculation of Gross Revenue Conversion Factor:						
1	Recommended Revenue Increase:						
2	Billings		1.000000				
3	Combined Federal and State Income Tax Rate	38.59888%					
4	Uncollectible Rate After Income Taxes	0.14374%					
5	Total Tax Rate		38.74262%				
6	Gross Revenue Conversion Factor		**1.632456**				
	Calculation of Effective Income Tax Rate:						
7	Operating Income Before Taxes (Arizona Taxable Income)	100.00000%					
8	Arizona State Income Tax Rate	6.96800%					
9	Federal Taxable Income (L5 - L6)	93.03200%					
10	Applicable Federal Income Tax Rate (Line 32)	34.00000%					
11	Effective Federal Income Tax Rate (L7 x L8)	31.63088%					
12	Combined Federal and State Income Tax Rate (L6 +L9)	38.59888%					
	Calculation of Uncollectible Rate After Income Taxes:						
13	Uncollectible Rate		0.23410%				
14	Combined Federal and State Income Tax Rate	38.59888%					
15	1 minus Combined Federal and State Income Tax Rate		61.40112%				
16	Uncollectible Rate After Income Taxes		0.14374%				
	Revenue Reconciliation:						
17	Recommended Increase in Revenue (from REL-1, L8)	$ (3,696)					
18	Uncollectible Rate	0.234100%					
19	Required Increase in Revenue to Provide for Uncollectibles		$ (9)				
20	Recommended Increase in Revenue (from REL-1,L8)	$ (3,696)					
21	Required Increase in Revenue to Provide for Uncollectibles	(9)					
22	Incremental Taxable Income	$ (3,688)					
23	Combined Federal and State Income Tax Rate	38.59888%					
24	Required Increase in Revenue to Provide for Income Taxes		(1,423)				
25	Required Operating Income	$ 168,934					
26	Adjusted Test Year Operating Income (Loss)	171,198					
27	Required Increase in Operating Income		(2,264)				
28	Total Required Increase In Revenue		$ (3,696)				

		Test Year		STAFF Recommended	
	Calculation of Income Tax:				
29	Revenue	$ 783,483		$ 779,787	
30	Less: Operating Expenses Excluding Income Taxes	$ 530,915		$ 530,906	
31	Less: Synchronized Interest	$ 41,759		$ 41,759	
32	Arizona Taxable Income	$ 210,809		$ 207,121	
33	Arizona State Income Tax Rate	6.968%		6.968%	
34	Arizona Income Tax		$ 14,689		$ 14,432
35	Federal Taxable Income	$ 196,120		$ 192,689	
36	Federal Income Tax @ 34%		$ 66,681		$ 65,514
37	Combined Federal and State Income Tax		$ 81,370		$ 79,947
				$ (1,423)	

	Calculation of Interest Synchronization:	
38	Rate Base	$ 1,898,133
39	Weighted Average Cost of Debt	2.200%
40	Synchronized Interest	$ 41,759

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-3
Surrebuttal

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED		(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 6,086,788		$ (506,268)	$ 5,580,520
2	Less: Accumulated Depreciation	(1,088,906)		-	(1,088,906)
3	Net Plant in Service	$ 4,997,882	x	$ (506,268)	$ 4,491,614
	LESS:				
4	Advances in Aid of Construction (AIAC)	(1,887,880)		-	(1,887,880)
5	Contributions in Aid of Construction (CIAC)	$ (554,839)		$ -	$ (554,839)
6	Less: Accumulated Amortization	111,896		-	111,896
7	Net CIAC	(442,943)		-	(442,943)
8	Total Advances and Contributions	(2,330,823)		-	(2,330,823)
9	Customer Deposits	-		-	-
10	Meter Advances	-		-	-
11	Deferred Income Tax Credits	(352,670)		-	(352,670)
	ADD:				
12	Working Capital	36,105		(36,754)	(649)
13	Phoenix Office Allocation	89,008		-	89,008
14	Meter Shop Allocation	1,653		-	1,653
15		-		-	-
16		-		-	-
17		-		-	-
18	**Total Rate Base**	$ 2,441,155		$ (543,022)	$ 1,898,133

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-4
Surrebuttal

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] ADJ No.1	[C] ADJ No. 2	[D] STAFF ADJUSTED
	PLANT IN SERVICE:					
1	Organization	$ -		$ -	$ -	$ -
2	Franchises	-		-	-	-
3	Other Intangibles	-		-	-	-
4	Water Rights	5,379		-	-	5,379
5	Other Source of Supply Land	28,521		-	-	28,521
6	Wells	535,369		-	-	535,369
7	Pumping Plant Land	-		-	-	-
8	Pumping Plant Structures & Improvements	18,637		-	-	18,637
9	Electric Pumping Equipment	509,917		-	-	509,917
10	Gas Engine Equipment	-		-	-	-
11	Water Treatment Land	-		-	-	-
12	Water Treatment Structures & Improvmnts	79		-	-	79
13	Water Treatment Equipment	15,053		-	-	15,053
14	Transmission and Distribution Land	35,990		-	-	35,990
15	Storage Tanks	481,206		-	-	481,206
16	Transmission and Distribution Mains	2,979,570		-	-	2,979,570
17	Fire Sprinkler Taps	11,849		-	-	11,849
18	Services	554,285		-	-	554,285
19	Meters	90,488		-	-	90,488
20	Hydrants	218,331		-	-	218,331
21	General Plant Land	-		-	-	-
22	General Plant Structures	19,976		-	-	19,976
23	Leasehold Improvements	-		-	-	-
24	Office Furniture and Improvements	15,017		-	-	15,017
25	Warehouse Equipment	1,043		-	-	1,043
26	Tools, Shop and Garage Equipment	18,697		-	-	18,697
27	Laboratory Equipment	2,477		-	-	2,477
28	Power Operated Equipment	635		-	-	635
29	Communication Equipment	27,428		-	-	27,428
30	Miscellaneous Equipment	10,573		-	-	10,573
31	Total Plant in Service - Actual	5,580,520	x	-	-	5,580,520
32	CAP Pro-forma Adjustment - Post TY Plant	506,268	x	(506,268)	-	-
33	Accumulated Depreciation, Retired Plant	-			-	-
34	Total Plant in Service - Adjusted	$ 6,086,788	x	$ (506,268)	$ -	$ 5,580,520
35	Less: Accumulated Depreciation - Actual	$ (1,079,029)	x	-	-	(1,079,029)
36	Less: Accumulated Depreciation - Post TY	(9,877)		-	-	(9,877)
37	Less: Accumulated Depreciation - 12 Mos TY	-		-	-	-
38	Less: Accumulated Depreciation - Retired Plant					-
39	Total Accumulated Depreciation - Adjusted	$ (1,088,906)	x	$ -	$ -	$ (1,088,906)
40	Plus: Construction Work In Progress	-		-	-	-
41	Net Plant in Service	$ 4,997,882	x	$ (506,268)	$ -	$ 4,491,614
	LESS:					
42	Advances in Aid of Construction (AIAC)	$ (1,887,880)	x	$ -	$ -	(1,887,880)
43	Contributions in Aid of Construction (CIAC)	(554,839)	x	-	-	(554,839)
44	Less: Accumulated Amortization	111,896	x	-	-	111,896
45	Net CIAC (L25 - L26)	(442,943)	x	-	-	(442,943)
46	Total Advances and Contributions	(2,330,823)	x	-	-	(2,330,823)
47	Customer Deposits	-		-	-	-
48	Meter Advances	-		-	-	-
49	Deferred Income Tax Credits	(352,670)	x	-	-	(352,670)
	ADD:					
50	Working Capital Allowance	36,105	x	-	(36,754)	(649)
51	Phoenix Office Allocation	89,008	x	-	-	89,008
52	Meter Shop Allocation	1,653	x	-	-	1,653
53	Projected Capital Expenditures	-		-	-	-
54	Deferred Debits	-		-	-	-
55	Other Additions	-		-	-	-
56	**Total Rate Base**	$ 2,441,155	?	$ (506,268)	$ (36,754)	$ 1,898,133

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-7
Surrebuttal

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

		[A]	[B]	[C]	[D]	[E]
LINE NO.	DESCRIPTION	COMPANY TEST YEAR AS FILED	STAFF TEST YEAR ADJUSTMENTS	STAFF TEST YEAR AS ADJUSTED	STAFF PROPOSED CHANGES	STAFF RECOMMENDED
	REVENUES:					
1	Total Operating Revenues	$ 783,483	$ -	$ 783,483	$ (3,696)	$ 779,787
	EXPENSES:					
	Source of Supply Expenses:					
2	Purchased Water	$ 37,383	$ (27,104)	$ 10,279	$ -	$ 10,279
3	Other	2,880	-	2,880	-	2,880
	Pumping Expenses:	-	-	-	-	-
4	Purchased Power	78,404	456	78,860	-	78,860
5	Purchased Gas	-	-	-	-	-
6	Other	27,057	-	27,057	-	27,057
7	Water Treatment Expenses	9,655	-	9,655	-	9,655
8	Transmission and Distribution Expenses	79,261	-	79,261	-	79,261
9	Customer Account Expenses	54,850	-	54,850	(9)	54,841
10	Sales Expenses	263	-	263	-	263
11	Administrative and General Expenses	87,371	(960)	86,411	-	86,411
12	Total Operation and Maintenance	$ 377,124	(27,608)	349,516	(9)	349,507
13	Depreciation and Amortization	182,626	(50,627)	131,999	-	131,999
15	Ad Valorem (Property)	41,993	799	42,792	-	42,792
	Taxes:					
14	Federal & State Income Tax	53,692	27,678	81,370	(1,423)	79,947
16	Other	6,608	-	6,608	-	6,608
17	**Total Operating Expenses**	$ 662,043	$ (49,758)	$ 612,285	$ (1,432)	$ 610,853
18	**Operating Income (Loss)**	$ 121,440	$ 49,758	$ 171,198	$ (2,264)	$ 168,934

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-8
Surrebuttal

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[K] ADJ #10	[F] ADJ #5	[G] ADJ #6	[H] ADJ #7	[I] STAFF ADJUSTED
	REVENUES:										
1	**Total Operating Revenues**	$ 783,483	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 783,483
	EXPENSES:										
	Source of Supply Expenses:										
2	Purchased Water	$ 37,383	(27,104)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,279
3	Other	2,880	-	-	-	-	-	-	-	-	2,880
	Pumping Expenses:										
4	Purchased Power	78,404	-	456	-	-	-	-	-	-	78,860
5	Purchased Gas	-	-	-	-	-	-	-	-	-	-
6	Other	27,057	-	-	-	-	-	-	-	-	27,057
7	Water Treatment Expenses	9,655	-	-	-	-	-	-	-	-	9,655
8	Transmission and Distribution Expenses	79,261	-	-	-	-	-	-	-	-	79,261
9	Customer Account Expenses	54,850	-	-	-	-	-	-	-	-	54,850
10	Sales Expenses	263	-	-	-	-	-	-	-	-	263
11	Administrative and General Expenses	87,371	-	-	(665)	(295)	-	-	-	-	86,411
12	Total Operation and Maintenance	377,124	(27,104)	456	(665)	(295)	-	-	-	-	349,516
13	Depreciation and Amortization	182,626	-	-		-	(50,627)	-	-	-	131,999
15	Ad Valorem (Property)	41,993	-	-	-			799		-	42,792
	Taxes:										
14	Federal & State Income Tax	53,692	-	-	-			-	20,112	7,566	81,370
16	Other	6,608									6,608
17	**Total Operating Expenses**	$ 662,043 x	$ (27,104)	$ 456	$ (665)	$ (295)	$ (50,627)	$ 799	$ 20,112	$ 7,566	$ 612,285
18	**Operating Income (Loss)**	$ 121,440 x	$ 27,104	$ (456)	$ 665	$ 295	$ 50,627	$ (799)	$ (20,112)	$ (7,566)	**$ 171,198**

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL- 13
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 5 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTMENT
1	2001 Annual Gross Revenues			$ 653,896
2	2002 Annual Gross Revenues			$ 693,746
3	2003 Annual Gross Revenues			$ 783,483
4	Plus Staff's Recommended Increase			$ (3,696)
5	Subtotal (Lines 1 + 2 + 3 + 4)			$ 2,127,429
6	Three Year Average Calculation			3
7	Three Year Average (Line 5 / Line 6)			$ 709,143
8	Department of Revenue Multiplier			2
9	Revenue Base Value (Line 7 x Line 8)			$ 1,418,286
10	Plus: 10% of 2001 CWIP			10
11	Less: Net Book Vaule of Leased Vehicles (See Note A Below)			$ 38,463
12	Full Cash Value (Line 9 + Line 10 - Line 11)			$ 1,379,833
13	Assessment Ratio			0.25
14	Assessed Value (Line 12 x Line 13)			$ 344,958
15	Composite Property Tax Rate (See Note B Below)			0.12405
16	**Staff Proposed Property Tax Expense (Line 14 x Line 15)**	$ 41,993	$ 799	$ 42,792

Note A: Net Book Value of Licensed Vehicles provided by Arizona Water.

Note B: Property tax rate provided by Arizona Dept. of Revenue.

Arizona Water Company - White Tank
Docket No. W-01445A-02-0619
Test Year Ended December 31, 2001

Schedule REL- 14
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 6 and 7 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTED
1	Federal Income Taxes	$ 46,569	$ 20,112	$ 66,681
2	State Income Taxes	7,123	7,566	14,689
3	Total Income Taxes	$ 53,692	$ 27,678	$ 81,370

RATE DESIGN

	Minimum Monthly Usage Charge		
	Present	---Proposed Rates---	
Monthly Usage Charge:	Rates	Company	Staff
5/8" x 3/4" Meter	$ 16.50	$ 20.90	$ 17.50
1" Meter	$ 31.07	$ 46.40	$ 36.00
2" Meter	$ 82.86	$ 137.52	$ 90.00
3" Meter	$ 155.37	$ 257.91	$ 200.00
4" Meter	$ 207.16	$ 384.36	$ 286.45
6" Meter	$ 492.01	$ 818.64	$ 335.79
8" Meter	$ 621.48	$ 1,203.00	$ 625.36
10" Meter	$ 673.27	$ 1,687.41	$ 837.19
Gallons Included In Minimum Charge:			
5/8" x 3/4" Meter	1,000	0	0
1" Meter	1,000	0	0
2" Meter	1,000	0	0
3" Meter	1,000	0	0
4" Meter	1,000	0	0
6" Meter	1,000	0	0
8" Meter	1,000	0	0
10" Meter	1,000	0	0
Fire Hydrants Used For Construction Water	1,000	0	0
Commodity Rates : 5/8 x 3/4 Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.4240	N/A	N/A
Per 1,000 Gallons for 0 to 3,000 Gallons	$ 2.4240	$ 2.9210	$ 1.1500
Per 1,000 Gallons for 3,001 to 10,000 Gallons	$ 2.4240	$ 2.9210	$ 2.0000
Per 1,000 Gallons for Gallons in Excess of 10,000	$ 2.4240	$ 2.9210	$ 3.0000
Commodity Rates : 1 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.4240	N/A	N/A
Per 1,000 Gallons for 0 to 25,000 Gallons	$ 2.4240	$ 2.9210	$ 2.0000
Per 1,000 Gallons for Gallons in Excess of 25,000	$ 2.4240	$ 2.9210	$ 3.0000
Commodity Rates : 2 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.4240	N/A	N/A
Per 1,000 Gallons for 0 to 100,000 Gallons	$ 2.4240	$ 2.9210	$ 2.0000
Per 1,000 Gallons for Gallons in Excess of 100,000	$ 2.4240	$ 2.9210	$ 3.0000
Commodity Rates : 3 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.4240	N/A	N/A
Per 1,000 Gallons for 0 to 200,000 Gallons	$ 2.4240	$ 2.9210	$ 2.0000
Per 1,000 Gallons for Gallons in Excess of 200,000	$ 2.4240	$ 2.9210	$ 3.0000

RATE DESIGN
CONTINUED

	Present Rates	---Proposed Rates--- Company	Staff
Service Line and Meter Installation Charge:			
5/8" x 3/4" Meter	**(a)**	**(a)**	**(a)**
1" Meter	**(a)**	**(a)**	**(a)**
2" Meter	**(b)**	**(b)**	**(b)**
3" Meter	**(b)**	**(b)**	**(b)**
4" Meter	**(b)**	**(b)**	**(b)**
6" Meter	**(b)**	**(b)**	**(b)**

(a) No charge for 5/8" and 1" if on existing pipelines. Full cost for 5/8" and 1" if if on new pipelines.
(b) Full cost for 2"and larger if on existing or new pipelines.

	Present Rates	Company	Staff
Service Charges:			
Establishment	$ 16.00	$ 16.00	$ 16.00
Guarantee Deposit	**(c)**	**(c)**	**(c)**
Reconnection for Delinquency (per disconnection)	$ 16.00	$ 16.00	$ 16.00
Re-establishement	**(d)**	**(d)**	**(d)**
Service Call Out (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Returned Check Charge	$ 10.00	$ 25.00	$ 25.00
Meter Re-read (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Meter Test	$ 50.00	$ 50.00	$ 50.00
Late Charge	N/A	**(e)**	**(e)**

(c) Per Commission Rule A.A.C. R14-2-403B
(d) Eight (8) times the customer's monthly minimum charge, or payment of the minimums since disconnection, whichever is less.
N/A No current tariff.
(e) 1.5 percent after 15 days

Arizona Water Company - White Tank
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-17
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 10 - DEPRECIATION EXPENSE INCL. POST-TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENT	[C] STAFF AS ADJUSTED
1	CAP Amortization	$ 182,626	$ (50,627)	$ 131,999
			-	-
		$ 182,626	$ (50,627)	$ 131,999

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION		[A] COMPANY ORIGINAL COST		[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$	3,817,510	$	2,713,030
2	Adjusted Operating Income (Loss)	$	100,737	$	237,788
3	Current Rate of Return (L2 / L1)		2.64%		8.76%
4	Required Rate of Return		10.5000%		8.9000%
5	Required Operating Income (L4 * L1)	$	400,839	$	241,460
6	Operating Income Deficiency (L5 - L2)	$	300,102	$	3,672
7	Gross Revenue Conversion Factor		1.63245		1.63246
8	Increase In Gross Revenue (L7 * L6)	$	489,901	$	5,994
9	Adjusted Test Year Revenue	$	1,427,285	$	1,427,285
10	Proposed Annual Revenue (L8 + L9) Note A	$	1,917,186	$	1,433,279
11	Require Increase in Revenue (%) (L8/L9)		34.32%		0.42%

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

GROSS REVENUE CONVERSION FACTOR

Line No.					
	Calculation of Gross Revenue Conversion Factor:				
1	Recommended Revenue Increase:				
2	Billings		1.000000		
3	Combined Federal and State Income Tax Rate	38.59888%			
4	Uncollectible Rate After Income Taxes	0.14374%			
5	Total Tax Rate		38.74262%		
6	Gross Revenue Conversion Factor		**1.632456**		
	Calculation of Effective Income Tax Rate:				
7	Operating Income Before Taxes (Arizona Taxable Income)	100.00000%			
8	Arizona State Income Tax Rate	6.96800%			
9	Federal Taxable Income (L5 - L6)	93.03200%			
10	Applicable Federal Income Tax Rate (Line 32)	34.00000%			
11	Effective Federal Income Tax Rate (L7 x L8)	31.63088%			
12	Combined Federal and State Income Tax Rate (L6 +L9)	38.59888%			
	Calculation of Uncollectible Rate After Income Taxes:				
13	Uncollectible Rate		0.23410%		
14	Combined Federal and State Income Tax Rate	38.59888%			
15	1 minus Combined Federal and State Income Tax Rate		61.40112%		
16	Uncollectible Rate After Income Taxes		0.14374%		
	Revenue Reconciliation:				
17	Recommended Increase in Revenue (from REL-1, L8)	$ 5,994			
18	Uncollectible Rate	0.234100%			
19	Required Increase in Revenue to Provide for Uncollectibles		$ 14		
20	Recommended Increase in Revenue (from REL-1,L8)	$ 5,994			
21	Required Increase in Revenue to Provide for Uncollectibles	14			
22	Incremental Taxable Income	$ 5,980			
23	Combined Federal and State Income Tax Rate	38.59888%			
24	Required Increase in Revenue to Provide for Income Taxes		2,308		
25	Required Operating Income	$ 241,460			
26	Adjusted Test Year Operating Income (Loss)	237,788			
27	Required Increase in Operating Income		3,672		
28	Total Required Increase In Revenue		$ 5,994		
	Calculation of Income Tax:	Test Year		STAFF Recommended	
29	Revenue	$ 1,427,285		$ 1,433,279	
30	Less: Operating Expenses Excluding Income Taxes	$ 1,077,536		$ 1,077,550	
31	Less: Synchronized Interest	$ 59,687		$ 59,687	
32	Arizona Taxable Income	$ 290,062		$ 296,042	
33	Arizona State Income Tax Rate	6.968%		6.968%	
34	Arizona Income Tax		$ 20,212		$ 20,628
35	Federal Taxable Income	$ 269,850		$ 275,414	
36	Federal Income Tax @ 34%		$ 91,749		$ 93,641
37	Combined Federal and State Income Tax		$ 111,961		$ 114,269
				$ 2,308	
	Calculation of Interest Synchronization:				
38	Rate Base	$ 2,713,030			
39	Weighted Average Cost of Debt	2.200%			
40	Synchronized Interest	$ 59,687			

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED		(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED	
1	Plant in Service	$ 7,129,140		$ (1,046,011)	$ 6,083,129	
2	Less: Accumulated Depreciation	(2,271,697)		-	(2,271,697)	
3	Net Plant in Service	$ 4,857,443	x	$ (1,046,011)	$ 3,811,432	
	LESS:					
4	Advances in Aid of Construction (AIAC)	(406,644)	x	-	(406,644)	
5	Contributions in Aid of Construction (CIAC)	$ (437,102)		$ -	$ (437,102)	
6	Less: Accumulated Amortization	74,970		-	74,970	
7	Net CIAC	(362,132)	x	-	(362,132)	
8	Total Advances and Contributions	(768,776)		-	(768,776)	
9	Customer Deposits	-		-	-	
10	Meter Advances	-		-	-	
11	Deferred Income Tax Credits	(504,369)	x	-	(504,369)	
	ADD:					
12	Working Capital	32,202	x	(58,469)	(26,267)	x
13	Phoenix Office Allocation	197,345	x	-	197,345	
14	Meter Shop Allocation	3,665	x	-	3,665	
15		-		-	-	
16		-		-	-	
17		-			-	
18	**Total Rate Base**	$ 3,817,510		$ (1,104,480)	$ 2,713,030	

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-4

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] ADJ No.1	[C] ADJ No. 2	[D] STAFF ADJUSTED
	PLANT IN SERVICE:					
1	Organization	$ -		$ -	$ -	$ -
2	Franchises	8,740		-	-	8,740
3	Other Intangibles	-		-	-	-
4	Water Rights	13,508		-	-	13,508
5	Other Source of Supply Land	2,927		-	-	2,927
6	Wells	226,328		-	-	226,328
7	Pumping Plant Land	25,684		-	-	25,684
8	Pumping Plant Structures & Improvements	8,348		-	-	8,348
9	Electric Pumping Equipment	732,365		-	-	732,365
10	Gas Engine Equipment	20,026		-	-	20,026
11	Water Treatment Land	-		-	-	-
12	Water Treatment Structures & Improvmnts	1,847		-	-	1,847
13	Water Treatment Equipment	103,606		-	-	103,606
14	Transmission and Distribution Land	-		-	-	-
15	Storage Tanks	286,758		-	-	286,758
16	Transmission and Distribution Mains	2,721,370		-	-	2,721,370
17	Fire Sprinkler Taps	73,130		-	-	73,130
18	Services	1,151,206		-	-	1,151,206
19	Meters	209,735		-	-	209,735
20	Hydrants	218,296		-	-	218,296
21	General Plant Land	-		-	-	-
22	General Plant Structures	25,180		-	-	25,180
23	Leasehold Improvements	48,181		-	-	48,181
24	Office Furniture and Improvements	77,911		-	-	77,911
25	Warehouse Equipment	-		-	-	-
26	Tools, Shop and Garage Equipment	47,217		-	-	47,217
27	Laboratory Equipment	6,726		-	-	6,726
28	Power Operated Equipment	15,016		-	-	15,016
29	Communication Equipment	52,470		-	-	52,470
30	Miscellaneous Equipment	6,554		-	-	6,554
31	Total Plant in Service - Actual	6,083,129	x	-	-	6,083,129
32	Pro-forma Adjustment - Post TY Plant	1,046,011		(1,046,011)	-	-
33	Accumulated Depreciation, Retired Plant	-			-	-
34	Total Plant in Service - Adjusted	$ 7,129,140	x	$ (1,046,011)	$ -	$ 6,083,129
35	Less: Accumulated Depreciation - Actual	$ (2,249,826)	x	-	-	(2,249,826)
36	Less: Accumulated Depreciation - Post TY	(21,871)		-	-	(21,871)
37	Less: Accumulated Depreciation - 12 Mos TY	-		-	-	-
38	Less: Accumulated Depreciation - Retired Plant					-
39	Total Accumulated Depreciation - Adjusted	$ (2,271,697)		$ -	$ -	$ (2,271,697)
40	Plus: Construction Work In Progress	-		-	-	-
41	Net Plant in Service	$ 4,857,443	x	$ (1,046,011)	$ -	$ 3,811,432
	LESS:					
42	Advances in Aid of Construction (AIAC)	$ (406,644)	x	$ -	$ -	(406,644)
43	Contributions in Aid of Construction (CIAC)	(437,102)	x	-	-	(437,102)
44	Less: Accumulated Amortization	74,970	x	-	-	74,970
45	Net CIAC (L25 - L26)	(362,132)	x	-	-	(362,132)
46	Total Advances and Contributions	(768,776)	x	-	-	(768,776)
47	Customer Deposits	-		-	-	-
48	Meter Advances	-		-	-	-
49	Deferred Income Tax Credits	(504,369)	x	-	-	(504,369)
	ADD:					
50	Working Capital Allowance	32,202	x	-	(58,469)	(26,267)
51	Phoenix Office Allocation	197,345	x	-	-	197,345
52	Meter Shop Allocation	3,665	x	-	-	3,665
53	Projected Capital Expenditures	-		-	-	-
54	Deferred Debits	-		-	-	-
55	Other Additions	-		-	-	-
56	**Total Rate Base**	$ 3,817,510		$ (1,046,011)	$ (58,469)	$ 2,713,030

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-7

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:					
1	Total Operating Revenues	$ 1,427,285	$ -	$ 1,427,285	$ 5,994	$ 1,433,279
	EXPENSES:					
	Source of Supply Expenses:					
2	Purchased Water	$ 56,000	$ (56,000)	$ -	$ -	$ -
3	Other	7,914	-	7,914	-	7,914
	Pumping Expenses:	-	-	-	-	-
4	Purchased Power	97,408	283	97,691	-	97,691
5	Purchased Gas	603	-	603	-	603
6	Other	37,838	-	37,838	-	37,838
7	Water Treatment Expenses	13,267	-	13,267	-	13,267
8	Transmission and Distribution Expenses	196,681	-	196,681	-	196,681
9	Customer Account Expenses	191,070	-	191,070	14	191,084
10	Sales Expenses	259	-	259	-	259
11	Administrative and General Expenses	235,586	(1,967)	233,619	-	233,619
12	Total Operation and Maintenance	$ 836,626	(57,684)	778,942	14	778,956
13	Depreciation and Amortization	275,122	(104,601)	170,521	-	170,521
15	Ad Valorem (Property)	127,110	(23,614)	103,496	-	103,496
	Taxes:					
14	Federal & State Income Tax	63,113	48,848	111,961	2,308	114,269
16	Other	24,577	-	24,577	-	24,577
17	**Total Operating Expenses**	$ 1,326,548	$ (137,051)	$ 1,189,497	$ 2,322	$ 1,191,819
18	**Operating Income (Loss)**	$ 100,737	$ 137,051	$ 237,788	$ 3,672	$ 241,460

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-8

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #5	[F] ADJ #7	[G] ADJ #8	[H] ADJ #9	[I] STAFF ADJUSTED
	REVENUES:									
1	**Total Operating Revenues**	$ 1,427,285	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,427,285
	EXPENSES:									
	Source of Supply Expenses:									
2	Purchased Water	$ 56,000	$ (56,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	Other	7,914	-		-	-	-	-	-	7,914
	Pumping Expenses:									
4	Purchased Power	97,408	-	283	-	-	-	-	-	97,691
5	Purchased Gas	603	-	-	-	-	-	-	-	603
6	Other	37,838	-	-	-	-	-	-	-	37,838
7	Water Treatment Expenses	13,267	-	-	-	-	-	-	-	13,267
8	Transmission and Distribution Expenses	196,681	-	-	-	-	-	-	-	196,681
9	Customer Account Expenses	191,070	-	-	-	-	-	-	-	191,070
10	Sales Expenses	259	-	-	-	-	-	-	-	259
11	Administrative and General Expenses	235,586	-	-	(1,475)	(492)	-	-	-	233,619
12	Total Operation and Maintenance	836,626	(56,000)	283	(1,475)	(492)	-	-	-	778,942
13	Depreciation and Amortization	275,122	-	-	-	-	-	-	-	170,521
15	Ad Valorem (Property)	127,110	-	-		-	(23,614)	-	-	103,496
	Taxes:									
14	Federal & State Income Tax	63,113	-	-		-	-	36,160	12,688	111,961
16	Other	24,577								24,577
17	**Total Operating Expenses**	$ 1,326,548 x	$ (56,000)	$ 283	$ (1,475)	$ (492)	$ (23,614)	$ 36,160	$ 12,688	$ 1,189,497
18	**Operating Income (Loss)**	$ 100,737 x	$ 56,000	$ (283)	$ 1,475	$ 492	$ 23,614	$ (36,160)	$ (12,688)	**$ 237,788**

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-11
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 10 - DEPRECIATION EXPENSE INCL. POST-TEST YEAR PLANT

		[A]	[B]	[C]
LINE NO.	**DESCRIPTION**	**COMPANY AS FILED**	**STAFF ADJUSTMENT**	**STAFF AS ADJUSTED**
1	CAP Amortization	$ 275,122	$ (104,601)	$ 170,521
			-	-
		$ 275,122	$ (104,601)	$ 170,521

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL-13
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 5 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTMENT
1	2001 Annual Gross Revenues			$ 1,327,428
2	2002Annual Gross Revenues			$ 1,399,667
3	2003 Annual Gross Revenues			$ 1,427,285
4	Plus Staff's Recommended Increase			$ 5,994
5	Subtotal (Lines 1 + 2 + 3 + 4)			$ 4,160,374
6	Three Year Average Calculation			3
7	Three Year Average (Line 5 / Line 6)			$ 1,386,791
8	Department of Revenue Multiplier			2
9	Revenue Base Value (Line 7 x Line 8)			$ 2,773,583
10	Plus: 10% of 2001 CWIP			12,794.00
11	Less: Net Book Vaule of Leased Vehicles (See Note A Below)			$ 38,379
12	Full Cash Value (Line 9 + Line 10 - Line 11)			$ 2,747,998
13	Assessment Ratio			0.25
14	Assessed Value (Line 12 x Line 13)			$ 686,999
15	Composite Property Tax Rate (See Note B Below)			0.15065
16	**Staff Proposed Property Tax Expense (Line 14 x Line 15)**	$ 127,110	$ (23,614)	$ 103,496

Note A: Net Book Value of Licensed Vehicles provided by Arizona Water.

Note B: Property tax rate provided by Arizona Dept. of Revenue.

Arizona Water Company - Coolidge
Docket No. W-01445A-04-0650
Test Year Ended December 31, 2003

Schedule REL- 14

OPERATING INCOME ADJUSTMENT NOS. 6 and 7 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTED
1	Federal Income Taxes	$ 55,589	$ 36,160	$ 91,749
2	State Income Taxes	7,524	12,688	20,212
3	Total Income Taxes	$ 63,113	$ 48,848	$ 111,961

Arizona Water Company - Coolidge
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RATE DESIGN

	Minimum Monthly Usage Charge		
	Present	---Proposed Rates---	
Monthly Usage Charge:	Rates	Company	Staff
5/8" x 3/4" Meter	$ 10.88	$ 14.79	$ 10.00
1" Meter	$ 26.93	$ 36.83	$ 21.00
2" Meter	$ 88.04	$ 119.06	$ 79.00
3" Meter	$ 165.73	$ 223.62	$ 140.00
4" Meter	$ 274.49	$ 371.38	$ 220.00
6" Meter	$ 543.80	$ 739.35	$ 600.00
8" Meter	$ 621.48	$ 1,203.00	$ 625.36
10" Meter	$ 673.27	$ 1,687.41	$ 837.19
Gallons Included In Minimum Charge:			
5/8" x 3/4" Meter	1,000	0	0
1" Meter	1,000	0	0
2" Meter	1,000	0	0
3" Meter	1,000	0	0
4" Meter	1,000	0	0
6" Meter	1,000	0	0
8" Meter	1,000	0	0
10" Meter	1,000	0	0
Fire Hydrants Used For Construction Water	1,000	0	0
Commodity Rates : 5/8 x 3/4 Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.0920	N/A	N/A
Per 1,000 Gallons for 0 to 3,000 Gallons	$ 2.0920	$ 2.6340	$ 1.0000
Per 1,000 Gallons for 3,001 to 10,000 Gallons	$ 2.0920	$ 2.6340	$ 1.9000
Per 1,000 Gallons for Gallons in Excess of 10,000	$ 2.0920	$ 2.6340	$ 2.9000
Commodity Rates : 1 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.0920	N/A	N/A
Per 1,000 Gallons for 0 to 25,000 Gallons	$ 2.0920	$ 2.6340	$ 1.9000
Per 1,000 Gallons for Gallons in Excess of 25,000	$ 2.0920	$ 2.6340	$ 2.9000
Commodity Rates : 2 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.0920	N/A	N/A
Per 1,000 Gallons for 0 to 150,000 Gallons	$ 2.0920	$ 2.6340	$ 1.9000
Per 1,000 Gallons for Gallons in Excess of 150,000	$ 2.0920	$ 2.6340	$ 2.9000
Commodity Rates : 3 Inch Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.0920	N/A	N/A
Per 1,000 Gallons for 0 to 225,000 Gallons	$ 2.0920	$ 2.6340	$ 1.9000
Per 1,000 Gallons for Gallons in Excess of 225,000	$ 2.0920	$ 2.6340	$ 2.9000

RATE DESIGN
CONTINUED

	Present Rates	---Proposed Rates--- Company	Staff
Commodity Rates : 4 and 6 Inch Meters			
Per 1,000 Gallons (In Excess of Minimum)	$ 2.0920	N/A	N/A
Per 1,000 Gallons for 0 to 700,000 Gallons	$ 2.0920	$ 2.6340	$ 1.9000
Per 1,000 Gallons for Gallons in Excess of 700,000	$ 2.0920	$ 2.6340	$ 2.9000
Service Line and Meter Installation Charge:			
5/8" x 3/4" Meter	(a)	(a)	(a)
1" Meter	(a)	(a)	(a)
2" Meter	(b)	(b)	(b)
3" Meter	(b)	(b)	(b)
4" Meter	(b)	(b)	(b)
6" Meter	(b)	(b)	(b)

(a) No charge for 5/8" and 1" if on existing pipelines. Full cost for 5/8" and 1" if if on new pipelines.
(b) Full cost for 2"and larger if on existing or new pipelines.

Service Charges:			
Establishment	$ 16.00	$ 16.00	$ 16.00
Guarantee Deposit	(c)	(c)	(c)
Reconnection for Delinquency (per disconnection)	$ 16.00	$ 16.00	$ 16.00
Re-establishement	(d)	(d)	(d)
Service Call Out (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Returned Check Charge	$ 10.00	$ 25.00	$ 25.00
Meter Re-read (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Meter Test	$ 50.00	$ 50.00	$ 50.00
Late Charge	N/A	(e)	(e)

(c) Per Commission Rule A.A.C. R14-2-403B
(d) Eight (8) times the customer's monthly minimum charge, or payment of the minimums since disconnection, whichever is less.
N/A No current tariff.
(e) 1.5 percent after 15 days

Arizona Water Company - Ajo
Docket No. W-01445A-04-0650
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Schedule REL-1
Surrebuttal

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION		[A] COMPANY ORIGINAL COST			[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$	847,167	x	$	837,088
2	Adjusted Operating Income (Loss)	$	34,697		$	36,504
3	Current Rate of Return (L2 / L1)		4.10%			4.36%
4	Required Rate of Return		10.5000%			8.9000%
5	Required Operating Income (L4 * L1)	$	88,953		$	74,501
6	Operating Income Deficiency (L5 - L2)	$	54,256		$	37,997
7	Gross Revenue Conversion Factor		1.63245			1.63246
8	Increase In Gross Revenue (L7 * L6)	$	88,569		$	62,029
9	Adjusted Test Year Revenue	$	412,203		$	412,203
10	Proposed Annual Revenue (L8 + L9) Note A	$	500,772		$	474,232
11	Require Increase in Revenue (%) (L8/L9)		21.49%			15.05%

GROSS REVENUE CONVERSION FACTOR

Line No.			
	Calculation of Gross Revenue Conversion Factor:		
1	Recommended Revenue Increase:		
2	Billings		1.000000
3	Combined Federal and State Income Tax Rate	38.59888%	
4	Uncollectible Rate After Income Taxes	0.14374%	
5	Total Tax Rate		38.74262%
6	Gross Revenue Conversion Factor		1.632456
	Calculation of Effective Income Tax Rate:		
7	Operating Income Before Taxes (Arizona Taxable Income)	100.00000%	
8	Arizona State Income Tax Rate	6.96800%	
9	Federal Taxable Income (L5 - L6)	93.03200%	
10	Applicable Federal Income Tax Rate (Line 32)	34.00000%	
11	Effective Federal Income Tax Rate (L7 x L8)	31.63088%	
12	Combined Federal and State Income Tax Rate (L6 +L9)	38.59888%	
	Calculation of Uncollectible Rate After Income Taxes:		
13	Uncollectible Rate		0.23410%
14	Combined Federal and State Income Tax Rate	38.59888%	
15	1 minus Combined Federal and State Income Tax Rate		61.40112%
16	Uncollectible Rate After Income Taxes		0.14374%
	Revenue Reconciliation:		
17	Recommended Increase in Revenue (from REL-1, L8)	$ 62,029	
18	Uncollectible Rate	0.234100%	
19	Required Increase in Revenue to Provide for Uncollectibles		$ 145
20	Recommended Increase in Revenue (from REL-1,L8)	$ 62,029	
21	Required Increase in Revenue to Provide for Uncollectibles	145	
22	Incremental Taxable Income	$ 61,884	
23	Combined Federal and State Income Tax Rate	38.59888%	
24	Required Increase in Revenue to Provide for Income Taxes		23,886
25	Required Operating Income	$ 74,501	
26	Adjusted Test Year Operating Income (Loss)	36,504	
27	Required Increase in Operating Income		37,997
28	Total Required Increase In Revenue		$ 62,029

Line No.	*Calculation of Income Tax:*	Test Year		STAFF Recommended	
29	Revenue	$ 412,203		$ 474,232	
30	Less: Operating Expenses Excluding Income Taxes	$ 364,329		$ 364,474	
31	Less: Synchronized Interest	$ 18,416		$ 18,416	
32	Arizona Taxable Income	$ 29,458		$ 91,342	
33	Arizona State Income Tax Rate	6.968%		6.968%	
34	Arizona Income Tax		$ 2,053		$ 6,365
35	Federal Taxable Income	$ 27,406		$ 84,977	
36	Federal Income Tax @ 34%		$ 9,318		$ 28,892
37	Combined Federal and State Income Tax		$ 11,371		$ 35,257
				$ 23,886	

Line No.		
	Calculation of Interest Synchronization:	
38	Rate Base	$ 837,088
39	Weighted Average Cost of Debt	2.200%
40	Synchronized Interest	$ 18,416

Arizona Water Company - Ajo
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Test Year Ended December 31, 2003

Schedule REL-3
Surrebuttal

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED		(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 1,656,478		$ -	$ 1,656,478
2	Less: Accumulated Depreciation	(624,244)		-	(624,244)
3	Net Plant in Service	$ 1,032,234	x	$ -	$ 1,032,234
	LESS:				
4	Advances in Aid of Construction (AIAC)	(36,395)	x	-	(36,395)
5	Contributions in Aid of Construction (CIAC)	$ (41,263)		$ -	$ (41,263)
6	Less: Accumulated Amortization	10,797		-	10,797
7	Net CIAC	(30,466)	x	-	(30,466)
8	Total Advances and Contributions	(66,861)		-	(66,861)
9	Customer Deposits	-		-	-
10	Meter Advances	-		-	-
11	Deferred Income Tax Credits	(157,495)		-	(157,495)
	ADD:				
12	Working Capital	(4,209)		(10,079)	(14,288)
13	Phoenix Office Allocation	42,706		-	42,706
14	Meter Shop Allocation	792		-	792
15		-		-	-
16		-		-	-
17		-		-	-
18	**Total Rate Base**	$ 847,167		$ (10,079)	$ 837,088

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Schedule REL-4
Surrebuttal

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED		[B] ADJ No.1	[C] STAFF ADJUSTED
	PLANT IN SERVICE:				
1	Organization	$ -		$ -	$ -
2	Franchises	-		-	-
3	Other Intangibles	-		-	-
4	Water Rights	2,916		-	2,916
5	Other Source of Supply Land	-		-	-
6	Wells	-		-	-
7	Pumping Plant Land	3,208		-	3,208
8	Pumping Plant Structures & Improvements	3,015		-	3,015
9	Electric Pumping Equipment	74,000		-	74,000
10	Gas Engine Equipment	-		-	-
11	Water Treatment Land	-		-	-
12	Water Treatment Structures & Improvmnts	-		-	-
13	Water Treatment Equipment	-		-	-
14	Transmission and Distribution Land	6,065		-	6,065
15	Storage Tanks	160,356		-	160,356
16	Transmission and Distribution Mains	984,946		-	984,946
17	Fire Sprinkler Taps	104		-	104
18	Services	244,045		-	244,045
19	Meters	49,367		-	49,367
20	Hydrants	41,536		-	41,536
21	General Plant Land	-		-	-
22	General Plant Structures	46,411		-	46,411
23	Leasehold Improvements	-		-	-
24	Office Furniture and Improvements	9,381		-	9,381
25	Warehouse Equipment	193		-	193
26	Tools, Shop and Garage Equipment	8,362		-	8,362
27	Laboratory Equipment	2,103		-	2,103
28	Power Operated Equipment	3,234		-	3,234
29	Communication Equipment	16,468		-	16,468
30	Miscellaneous Equipment	768		-	768
31	Total Plant in Service - Actual	1,656,478	x	-	1,656,478
32	Pro-forma Adjustment - Post TY Plant	-		-	-
33	Accumulated Depreciation, Retired Plant	-			-
34	Total Plant in Service - Adjusted	$ 1,656,478		$ -	$ 1,656,478
35	Less: Accumulated Depreciation - Actual	$ (627,369)	x	-	(627,369)
36	Less: Accumulated Depreciation - Post TY	3,125		-	3,125
37	Less: Accumulated Depreciation - 12 Mos TY	-		-	-
38	Less: Accumulated Depreciation - Retired Plant				-
39	Total Accumulated Depreciation - Adjusted	$ (624,244)	x	$ -	$ (624,244)
40	Plus: Construction Work In Progress	-		-	-
41	Net Plant in Service	$ 1,032,234	x	$ -	$ 1,032,234
	LESS:				
42	Advances in Aid of Construction (AIAC)	$ (36,395)	x	$ -	(36,395)
43	Contributions in Aid of Construction (CIAC)	(41,263)	x	-	(41,263)
44	Less: Accumulated Amortization	10,797	x	-	10,797
45	Net CIAC (L25 - L26)	(30,466)	x	-	(30,466)
46	Total Advances and Contributions	(66,861)	x	-	(66,861)
47	Customer Deposits	-		-	-
48	Meter Advances	-		-	-
49	Deferred Income Tax Credits	(157,495)	x	-	(157,495)
	ADD:				
50	Working Capital Allowance	(4,209)	x	(10,079)	(14,288)
51	Phoenix Office Allocation	42,706	x	-	42,706
52	Meter Shop Allocation	792	x	-	792
53	Projected Capital Expenditures	-		-	-
54	Deferred Debits	-		-	-
55	Other Additions	-		-	-
56	**Total Rate Base**	$ 847,167		$ (10,079)	$ 837,088

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Schedule REL-6
Surrebuttal

OPERATING INCOME - TEST YEAR AND STAFF PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:					
1	Total Operating Revenues	$ 412,203	$ -	$ 412,203	$ 62,029	$ 474,232
	EXPENSES:					
	Source of Supply Expenses:					
2	Purchased Water	$ 162,114	$ -	$ 162,114	$ -	$ 162,114
3	Other	316	-	316	-	316
	Pumping Expenses:	-	-	-	-	-
4	Purchased Power	2,976	-	2,976	-	2,976
5	Purchased Gas	-	-	-	-	-
6	Other	14,594	-	14,594	-	14,594
7	Water Treatment Expenses	3,443	-	3,443	-	3,443
8	Transmission and Distribution Expenses	38,687	-	38,687	-	38,687
9	Customer Account Expenses	27,613	-	27,613	145	27,758
10	Sales Expenses	142	-	142	-	142
11	Administrative and General Expenses	45,617	(465)	45,152	-	45,152
12	Total Operation and Maintenance	$ 295,502	(465)	295,037	145	295,182
13	Depreciation and Amortization	39,981	-	39,981	-	39,981
15	Ad Valorem (Property)	27,099	(1,547)	25,552	-	25,552
	Taxes:					
14	Federal & State Income Tax	11,165	206	11,371	23,886	35,257
16	Other	3,759	-	3,759	-	3,759
17	**Total Operating Expenses**	$ 377,506	$ (1,807)	$ 375,699	$ 24,032	$ 399,731
18	**Operating Income (Loss)**	$ 34,697	$ 1,807	$ 36,504	$ 37,997	$ 74,501

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Schedule REL-7
Surrebuttal

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[F] ADJ #5	[G] ADJ #6	[H] STAFF ADJUSTED
	REVENUES:								
1	**Total Operating Revenues**	$ 412,203 x	$ -	$ -	$ -	$ -	$ -	$ -	$ 412,203
	EXPENSES:								
	Source of Supply Expenses:								
2	Purchased Water	$ 162,114	$ -	$ -	$ -	$ -	$ -	$ -	$ 162,114
3	Other	316	-	-	-	-	-	-	316
	Pumping Expenses:								
4	Purchased Power	2,976	-	-	-	-	-	-	2,976
5	Purchased Gas	-	-	-	-	-	-	-	-
6	Other	14,594	-	-	-	-	-	-	14,594
7	Water Treatment Expenses	3,443	-	-	-	-	-	-	3,443
8	Transmission and Distribution Expenses	38,687	-	-	-	-	-	-	38,687
9	Customer Account Expenses	27,613	-	-	-	-	-	-	27,613
10	Sales Expenses	142	-	-	-	-	-	-	142
11	Administrative and General Expenses	45,617	(319)	(146)	-	-	-	-	45,152
12	Total Operation and Maintenance	295,502 x	(319)	(146)	-	-	-	-	295,037
13	Depreciation and Amortization	39,981		-	-	-	-	-	39,981
15	Ad Valorem (Property)	27,099	-		(1,547)		-		25,552
	Taxes:								
14	Federal & State Income Tax	11,165	-		-	(438)	644	-	11,371
16	Other	3,759							3,759
17	**Total Operating Expenses**	$ 377,506 x	$ (319)	$ (146)	$ (1,547)	$ (438)	$ 644	$ -	$ 375,699
18	**Operating Income (Loss)**	$ 34,697 x	$ 319	$ 146	$ 1,547	$ 438	$ (644)	$ -	**$ 36,504**

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Schedule REL- 10
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTMENT
1	2001 Annual Gross Revenues			$ 414,383
2	2002 Annual Gross Revenues			$ 435,154
3	2003 Annual Gross Revenues			$ 412,203
4	Plus Staff's Recommended Increase			$ 62,029
5	Subtotal (Lines 1 + 2 + 3 + 4)			$ 1,323,769
6	Three Year Average Calculation			3
7	Three Year Average (Line 5 / Line 6)			$ 441,256
8	Department of Revenue Multiplier			2
9	Revenue Base Value (Line 7 x Line 8)			$ 882,513
10	Plus: 10% of 2001 CWIP			3
11	Less: Net Book Vaule of Leased Vehicles (See Note A Below)			$ 664
12	Full Cash Value (Line 9 + Line 10 - Line 11)			$ 881,852
13	Assessment Ratio			0.25
14	Assessed Value (Line 12 x Line 13)			$ 220,463
15	Composite Property Tax Rate (See Note B Below)			0.1159
16	**Staff Proposed Property Tax Expense (Line 14 x Line 15)**	$ 27,099	$ (1,547)	$ 25,552

Note A: Net Book Value of Licensed Vehicles provided by Arizona Water.

Note B: Property tax rate provided by Arizona Dept. of Revenue.

Arizona Water Company - Ajo
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Schedule REL- 11
Surrebuttal

OPERATING INCOME ADJUSTMENT NO. 4 and 5 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENT	(C) STAFF AS ADJUSTED
1	Federal Income Taxes	$ 9,756	$ (438)	$ 9,318
2	State Income Taxes	1,409	644	2,053
3	Total Income Taxes	$ 11,165	$ 206	$ 11,371

Arizona Water Company - Ajo
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Test Year Ended December 31, 2003

RATE DESIGN

	Minimum Monthly Usage Charge		
	Present	---Proposed Rates---	
Monthly Usage Charge:	Rates	Company	Staff
5/8" x 3/4" Meter	$ 18.02	$ 21.90	$ 21.00
1" Meter	$ 46.61	$ 55.63	$ 52.00
2" Meter	$ 140.87	$ 173.20	$ 170.00
3" Meter	$ 155.37	$ 250.63	$ 220.51
4" Meter	$ 207.16	$ 384.36	$ 286.45
6" Meter	$ 492.01	$ 818.64	$ 335.79
8" Meter	$ 621.48	$ 1,203.00	$ 625.36
10" Meter	$ 673.27	$ 1,687.41	$ 837.19
Gallons Included In Minimum Charge:			
5/8" x 3/4" Meter	1,000	0	0
1" Meter	1,000	0	0
2" Meter	1,000	0	0
3" Meter	1,000	0	0
4" Meter	1,000	0	0
6" Meter	1,000	0	0
8" Meter	1,000	0	0
10" Meter	1,000	0	0
Fire Hydrants Used For Construction Water	1,000	0	0
Commodity Rates : 5/8 x 3/4 Meter			
Per 1,000 Gallons (In Excess of Minimum)	$ 5.4560	N/A	N/A
Per 1,000 Gallons for 0 to 3,000 Gallons	$ 5.4560	$ 5.7450	$ 4.5000
Per 1,000 Gallons for 3,001 to 10,000 Gallons	$ 5.4560	$ 5.7450	$ 5.5000
Per 1,000 Gallons for Gallons in Excess of 10,000	$ 5.4560	$ 5.7450	$ 6.5000
Commodity Rates for 1 Inch and 2 Inch Meters			
Per 1,000 Gallons (In Excess of Minimum)	$ 5.4560	N/A	N/A
Per 1,000 Gallons for 0 to 25,000 Gallons	$ 5.4560	$ 5.7450	$ 5.5000
Per 1,000 Gallons for Gallons in Excess of 25,000	$ 5.4560	$ 5.7450	$ 6.5000
Service Line and Meter Installation Charge:			
5/8" x 3/4" Meter	(a)	(a)	(a)
1" Meter	(a)	(a)	(a)
2" Meter	(b)	(b)	(b)
3" Meter	(b)	(b)	(b)
4" Meter	(b)	(b)	(b)
6" Meter	(b)	(b)	(b)

(a) No charge for 5/8" and 1" if on existing pipelines. Full cost for 5/8" and 1" if if on new pipelines.

(b) Full cost for 2"and larger if on existing or new pipelines.

RATE DESIGN
CONTINUED

	Present	---Proposed Rates---	
Service Charges:	**Rates**	**Company**	**Staff**
Establishment	$ 16.00	$ 16.00	$ 16.00
Guarantee Deposit	**(c)**	**(c)**	**(c)**
Reconnection for Delinquency (per disconnection)	$ 16.00	$ 16.00	$ 16.00
Re-establishement	**(d)**	**(d)**	**(d)**
Service Call Out (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Returned Check Charge	$ 10.00	$ 25.00	$ 25.00
Meter Re-read (After Regular Working Hours Only)	$ 35.00	$ 35.00	$ 35.00
Meter Test	$ 50.00	$ 50.00	$ 50.00
Late Charge	N/A	**(e)**	**(e)**

(c) Per Commission Rule A.A.C. R14-2-403B
(d) Eight (8) times the customer's monthly minimum charge,
or payment of the minimums since disconnection, whichever is less.
N/A No current tariff.
(e) 1.5 percent after 15 days

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS	DOCKET NO. W-01445A-04-0650

SURREBUTTAL

TESTIMONY

OF

ALEJANDRO RAMIREZ

PUBLIC UTILITIES ANALYST III

UTILITIES DIVISION

ARIZONA CORPORATION COMMMISSION

MAY 25, 2005

EXECUTIVE SUMMARY
OF THE SURREBUTTAL TESTIMONY
OF STAFF WITNESS
ALEJANDRO RAMIREZ
ARIZONA WATER COMPANY
DOCKET NO. W-01445A-04-0650

The surrebuttal testimony of Staff witness Alejandro Ramirez addresses the following issues:

Capital Structure – Staff recommends the Commission adopt a capital structure consisting of 26.6 percent long-term debt and 73.4 percent equity for this proceeding.

Cost of Debt – Staff recommends the Commission adopt an 8.4 percent cost of long-term debt.

Cost of Equity – Staff recommends the Commission adopt a 9.1 percent return on equity ("ROE"). Staff bases its ROE recommendation on its discounted cash flow ("DCF") and capital asset pricing model ("CAPM") analyses. Staff's recommended ROE range is 8.8 percent to 9.3 percent.

Overall Rate of Return – Staff recommends the Commission adopt an overall rate of return ("ROR") of 8.9 percent.

Response to the rebuttal testimony of Company witness Thomas M. Zepp – Staff responds to the rebuttal testimony of Thomas M. Zepp:

Dr. Zepp's exclusive reliance on analysts' forecasts in his restatement of Staff's discounted cash flow ("DCF") analysis is inappropriate because it assumes that investors ignore other information such as past growth.

The Commission should *not* rely on Dr. Zepp's restatement of Staff's constant growth DCF estimate because Dr. Zepp relies solely on analysts' forecast which obviously causes inflated growth, thus, inflated cost of equity estimates.

The Commission should *not* rely on Dr. Zepp's restatement of Staff's multi-stage DCF estimate because Dr. Zepp misapplies Staff's br growth projections, and his assumptions are speculative.

The Commission should *not* rely on interest rate "projections" made by professional analysts because "the direction of interest rates cannot be predicted any better than by a flip of a coin." Analysts who project interest rates do not have any more information than what is already reflected in the current rate.

The Commission should *not* rely on Dr. Zepp's restatement of Staff's CAPM estimate because Dr. Zepp incorrectly uses the forecast of long-term treasury bond as his risk-free rate which results on upwardly biased estimates.

The “risk premium” analysis presented by Dr. Zepp should be rejected because (1) it relies on analysts’ forecasts of future interest rates, and (2) it relies on past accounting returns on equity and past authorized returns on equity which cannot be meaningfully compared to the cost of equity.

Dr. Zepp’s proposal for additional basis points due to unique risk should be rejected because it is (1) inconsistent with financial theory, and (2) Dr. Zepp has not demonstrated that these risks affect the cost of equity for Arizona Water.

Dr. Zepp’s assumption that the spread between the cost of Arizona Water’s last bond issue and A-rated/AA-rated bonds is due to business risk is unreasonable. The likely cause of this spread is default risk or liquidity risk, neither of which increase Arizona Water‘s cost of equity.

Staff also responds to the rebuttal testimony of Company witness Ralph J. Kennedy.

TABLE OF CONTENTS

SCHEDULES

INTRODUCTION

Q. Please state your name and business address.

A. My name is Alejandro Ramirez. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Alejandro Ramirez who previously filed direct testimony in this proceeding for the Utilities Division Staff ("Staff")?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to update Staff's cost of equity analysis and present Staff's recommendations. This surrebuttal also responds to criticisms of Staff's direct testimony contained in the rebuttal testimonies of Ralph J. Kennedy and Thomas M. Zepp.

I. RATE OF RETURN RECOMMENDATION

Q. Have you updated Staff's cost of equity analysis for Arizona Water?

A. Yes, I have.

Q. Based on this updated analysis, what is Staff's recommendation in regard to the cost of equity for Arizona Water?

A. Staff is still recommending a 9.1 percent cost of equity (Direct testimony recommended 9.1 percent) for Arizona Water in this proceeding. Staff's ROE recommendation is based on its updated estimate of the cost of equity to the sample water companies (9.1 percent). In Staff's original recommendation, Staff adjusted for financial risk. Although it is Staff's position that financial risk should be taken into account when estimating the cost of equity, Staff is still supporting its original recommendation of 9.1 percent ROE for Arizona Water's cost of equity. Schedules AXR-1 through AXR-8 support Staff's updated cost of equity recommendation. The results are also shown in the following table:

Table 1: Sample Water Companies

Model	Average Estimate
Discounted Cash Flow	9.0%
Capital Asset Pricing Model	9.2%
Average	9.1%

Staff updated its DCF and CAPM estimates of the cost of equity to the sample water companies and with current information from *Value Line* and market data of May 11, 2005. As shown in the above tables, the average estimate of the cost of equity to the sample water companies has decreased by 20 basis points.

Q. Did any factors affect Staff's updated cost of equity estimate other than use of more current *Value Line* market data?

A. Yes. Staff used Dr. Zepp's information for the year ended 2004. In addition, Staff also adjusted its br growth to recognize that *Value Line's* reported ROEs are based on the year-end equity.

Q. Is Staff updating its Rate of Return ("ROR") recommendation?

A. Staff's ROR recommendation remains 8.9 percent, as stated in Staff's direct testimony. Staff's ROR recommendation is shown in Schedule AXR-1. Staff's ROR recommendation is also shown below:

Table 2

	Weight	Cost	Weighted Cost
Long-term Debt	26.6%	8.4%	2.2%
Common Equity	73.4%	9.1%	6.7%
Cost of Capital/ROR			**8.9%**

II. RESPONSE TO THE REBUTTAL TESTIMONY OF RALPH J. KENNEDY.

Q. Do you have any general comments in regard to Mr. Kennedy's rebuttal testimony?

A. Yes. Although Mr. Kennedy states that forecasted interest rates indicate that interest rates will increase over the next year, as I have previously stated in my direct testimony (Ramirez Direct, Pages 49 – 51), forecasted interest rates are no better predictors of actual future interest rates than spot interest rates. The Commission should give no weight to forecasted interest rates when calculating the cost of equity.

Q. On pages 8 – 10, Mr. Kennedy argues that unique risk is priced by investors and it should be taken into account. Does Staff agree with Mr. Kennedy's statement?

A No. As I stated in Staff's direct testimony (Ramirez Direct, Pages 10, 11), and in this rebuttal testimony (Pages 14 & 15), unique risk does not affect the cost of equity. Market risk (systematic risk) is the only relevant risk when estimating the cost of equity.

Q. On Pages 8 and 9, Mr. Kennedy provides two examples that according to him, show that unique risk should not be ignored when estimating the cost of equity. Does Staff agree with Mr. Kennedy?

A. No. Mr. Kennedy's examples simply show that prices adjust quickly to reflect new public information. However, Mr. Kenney's examples by no means show that unique risks affect the cost of equity. Conceptually speaking:

> "If we view only the stock price decline associated with the increased firm-specific risk, as some analysts do, then we will draw the ***incorrect conclusion*** that the required return is increased—as manifested by a higher dividend yield. Careful analysis ***shows this conclusion to be in error***. The stock price declines in response to the increased risk because the firm's ability to generate cash flow is hampered. But this necessarily means that the firm's ability to produce long-term dividend growth is also compromised. The two impacts tend to offset each other, leaving the required return essentially unchanged relative to what it was before the increase in the firm-specific risk [Emphasis Added]".[1]

The price of the stock does not determine the cost of equity. It is the cost of equity which determines the price of the stock. Mr. Kennedy's conclusion that unique risks should not be ignored is misleading and ultimately flawed.

Q. Does Staff have any additional comments on Mr. Kennedy's rebuttal testimony?

A. Yes. On page 11, of his rebuttal testimony, Mr. Kennedy compares the book return on equity and the authorized return on equity of the sample water companies to the recommendations presented by Staff and RUCO. As Staff has explained in its direct testimony, Staff is concerned with Mr. Kennedy's assumption that the cost of equity is equal to the accounting returns on equity.

III. RESPONSE TO THE REBUTTAL TESTIMONY OF THOMAS M. ZEPP

On Dr. Zepp's Comments Regarding Staff's Recommended ROE.

Q. Dr. Zepp criticizes Staff's recommended cost of equity for Arizona Water arguing that it is less than the current authorized returns on equity for the water utilities sample used. Do you have any comments?

A. Yes. Dr. Zepp is following the same flawed reasoning that I referred to in my direct testimony by comparing authorized ROEs to the cost of equity. As previously stated in

[1] Kihm, Steven G. "How Improper Risk Assessment Leads to Overstatement of Required Returns for Utility Stocks." *National Regulatory Research Institute Journal of Applied Regulation*. Vol. 1, June 2003. pp. 88.

my direct testimony (Ramirez Direct, Page 52 & 53), the cost of equity is determined by the capital markets, not the commissions. The Commission has no way of knowing how these other cases were resolved and what incentives or disincentives, if any, were put into place by other states that affected the final decision on which authorized ROE should be granted.

Dr. Zepp's statement that "ROEs agreed to in settlements of water utility cases are the result of parties agreeing to a lower ROE in exchange for the water utility prevailing on an issue...(Zepp Rebuttal, Page 8, Lines 20-22)" is misleading. While ROEs agreed to in settlements may be lower than what the utility is requesting in that specific proceeding, this does not necessarily mean that this agreed ROE is lower than the cost of equity. Dr. Zepp is assuming that what the utility requests as a proper return on equity is actually the best estimate of cost of equity. His flawed logic in this issue leads him to believe that "to the extent that the reported ROEs... are the result of settlements, they probably understate the cost of equity (Zepp Rebuttal, Page 8, Lines 23-24)." The Commission should give no weight to Dr. Zepp's comparison of authorized ROEs to the cost of equity for Arizona Water.

Moreover, while Dr. Zepp supports the risk premium model used by the California Office of Ratepayer Advocate Staff ("ORA") to determine estimates of the cost of equity for water utilities (Zepp Surrebuttal, Page 35 & 36), he is not recognizing that ORA has rejected the use of authorized ROEs as an accurate measure of what is expected by investors.[2]

[2] CPUC Staff Cost of Capital Report, A.03-07-036, January 2004.

Q. On pages 8 and 9 of his rebuttal testimony, Dr. Zepp compares Staff's recommended cost of equity estimate for Arizona Water to the ROEs earned by the water utilities used in the sample. Is this comparison useful?

A. No. As discussed in my direct testimony, Staff is concerned with Dr. Zepp's assumption that accounting returns on equity equal the cost of equity. On page 52, my direct testimony provides a quote by Professor Laurence Booth in a *NRRI Quarterly Bulletin* article that "theoretically, there is no question whatsoever that a market-to-book ratio of 1.50 indicates that the [cost of equity] is less than the [allowed ROE]." The average market-to-book ratio for the sample water utilities is higher than 1.0 (Schedule AXR-5 shows that the average market-to-book ratio for the sample water utilities in 2.5); therefore, Dr. Zepp's comparison between the cost of equity and the book accounting return on equity to criticize Staff's recommendation is of no relevance

Q. Dr. Zepp further criticizes Staff's recommended ROE by comparing it to past Commission Decisions. Does Staff have any comments?

A. Yes. Dr. Zepp presents a table (Zepp Surrebuttal, Table 2) with authorized ROEs by the Commission prior to 2001. Then he calculates his *"risk premium"* by subtracting the average annual 10-year Treasury Rate to these past authorized ROEs. As stated in Staff testimony, Dr. Zepp's argument presents no solid financial basis for two reasons. First, he is assuming that water and gas utilities have the same market risk. Second, the use of authorized ROEs to estimate the cost of equity is flawed as mentioned earlier.

Q. Does Staff have any comments on Dr. Zepp's critique that Staff's recommendation for Arizona Water is lower than Staff's previous recommended ROE of 9.2 percent in 2003 for Arizona-American?

A. Yes. Dr. Zepp refers to the Arizona-American Water Company rate case (Docket No. WS-01303A-02-0867), where Staff in its direct testimony, found a cost of equity estimate of 9.2 percent for the sample water utilities. It is my understanding that Staff's recommendation in the direct testimony for that case was mainly influenced by a current market risk premium of 13.1 percent.

However, Dr. Zepp neglected to include Staff's updated cost of equity estimate presented in Staff's surrebuttal in Docket No. WS-01303A-02-0867. Staff's surrebuttal testimony for the Arizona-American Water Company rate case found an updated cost of equity estimate for the sample water utilities of 8.5 percent which is markedly below Staff's updated cost of equity estimate of 9.1 percent in this proceeding.

Dr. Zepp openly states that the methods implemented by Staff are intended to depress the cost of equity. Staff disagrees with this point. Staff's method used to estimate the cost of equity is based on widely known financial theory. Staff's goal is to estimate the cost of equity using the best procedures available and to provide appropriate recommendations to the Commission.

Q. Dr. Zepp criticizes Staff for recommending an ROE for Arizona Water that is lower than the ROE determined with the FERC DCF approach. Does Staff have any comments?

A. Yes. Staff's direct testimony (Ramirez Direct, Pages 41 – 48) identifies the following two problems with the FERC DCF methods used to estimate the cost of equity: (1)

miscalculation of dividend yields and (2) the forecasted growth problem. Staff has shown in its direct testimony that these two problems will lead to an upwardly biased cost of equity estimate.

Comments Regarding Dr. Zepp's Restatement of Staff's Constant Growth DCF.

Q. Does Staff have any general comments on Dr. Zepp's restatement of Staff's constant growth DCF?

A. Yes. Staff has updated the historical growth rates for EPS and DPS with the data provided in Dr. Zepp's workpapers with data ending in 2004 instead of 2003. In doing this, Staff has also corrected the unusually high estimate of EPS growth for American States that Dr. Zepp refers to in his rebuttal testimony (Zepp Rebuttal, Page 18). In addition, Staff has used the FERC method to adjust historical and projected "br" growth given that Value Line uses year-end equity. Schedule AXR-3 and AXR-4 present updated DPS, EPS, and intrinsic growth.

Q. Does Staff have any comments on Dr. Zepp's "updated" historical growth rates for DPS and EPS presented in Dr. Zepp's Rebuttal Table 7?

A. Yes. Dr. Zepp not only updates historical DPS and EPS for the year 2004, he also calculates the arithmetic average growth rather than the geometric growth. By doing this, Dr. Zepp overstates the historical EPS growth.

Q. Does Staff agree with the adjustment implemented by Dr. Zepp based on arithmetic growth?

A. No. By using the arithmetic average, Dr. Zepp overstates the historical EPS growth for the sample water utilities. I will explain this with the following example:

Suppose there is a company that in Year 1, its EPS is 10; in Year 2, its EPS is 5 and in Year 3, the EPS is 10. What was the historic EPS growth rate between Year 1 and 3? If we use Dr. Zepps average arithmetic mean, the average growth in EPS would be:

EPS Growth (Arithmetic Mean): (((5-10)/10) + ((10-5)/5))/2

EPS Growth (Arithmetic Mean): 25.0%

According to Dr. Zepp, the average growth in EPS for the period 1-3 is 25.0 percent. By contrast, using geometric mean, the growth in historical EPS for the company in the example would be given by:

EPS Growth (Geometric Mean): ((10/10) ^ (1/2))-1

EPS Growth (Geometric Mean): 0.0 percent.

By using the geometric average as Staff has done, the historical EPS growth in this example would be 0.0 percent. This makes sense since in Year 1, the company's EPS was 10 and in Year 3 the company's EPS was 10 as well. Dr. Zepp biased the historical EPS growth upwards in his Rebuttal Table 7, and the Commission should give no weight to his procedure.

Q. Does Staff have any comments on Dr. Zepp's restatement of Staff's constant growth DCF?

A. Yes. Dr. Zepp took into account only forecasted dividends per share ("DPS"), EPS and intrinsic growth to come up with the growth term (g) in the constant growth DCF. As I stated in my direct testimony (Ramirez Direct, Pages 43 – 48), Staff disagrees with Dr. Zepp's sole reliance on analyst forecasts because it provides inflated cost of equity estimates.

Q. Has the Commission ruled on the use of DPS and past EPS growth to estimating the cost of capital?

A. Yes. The Commission, in Decision No. 66849, dated March 19, 2004, found the following:

> "We also agree with Staff's witness that the Company's exclusive reliance on analyst forecasts ***erroneously*** assumes that investors rely only on near-term earnings and sustainable growth without considering past earnings. Reliance solely on analyst projections tends to result in inflated growth projections without considering DPS and past EPS growth, information that even Dr. Zepp has acknowledged should be considered in determining estimated growth [Emphasis added] (Decision No. 66849, Page 22, Lines 14 – 18)".

Comments Regarding Dr. Zepp's Restatement of Staff's Multi-Stage DCF.

Q. How does Dr. Zepp modify Staff's multi-stage DCF analysis?

A. On page 17 of his rebuttal testimony, Dr. Zepp modifies Staff's multi-stage DCF analysis by introducing a supernormal growth stage between the first and second stages of growth. He assumes that investors expect this supernormal growth to occur during years 2008 – 2017.

Q. Are his modifications appropriate?

A. No. His modifications are not appropriate for two reasons. First, Dr. Zepp takes Staff's projected BR growth rate for 2007 – 2009 and misapplies it to years 2008 – 2017. Dr. Zepp's perpetual growth rate does not begin until the year 2018. Therefore, inserting Staff's projected BR growth rate for the years 2007 – 2009 into years 2008 – 2017, before starting the perpetual growth rate in 2018, is speculative.

Second, Staff disagrees with Dr. Zepp's GDP growth. Dr. Zepp used the arithmetic average when calculating historical GDP growth. The arithmetic mean represents typical performance over *single periods* while the geometric average is typically concerned with long-term performance. Staff has correctly used the geometric average when calculating the GDP growth.

Comments Regarding Dr. Zepp's Restatement of Staff's CAPM.

Q. Does Staff have any comments on Dr. Zepp's selection of the long-term Treasury rate forecast as the measure of the risk-free rate ("RF") in his restatement of Staff's CAPM?

A. Yes. Staff has two concerns with Dr. Zepp's selection of long-term treasury forecast as the measure of RF. First, the CAPM is a holding period model (unlike the DCF). The use of a long-term U.S. Treasury bond for the RF implies a long-term holding period. This is not reasonable when, as stated in my direct testimony, "The use of intermediate-term securities is based on the theoretical specification that the time to maturity approximates the investor's holding period, and assumes that most investors consider the intermediate time frame (5-10 years) a more appropriate investment horizon (Ramirez Direct, Page 27, Footnote 8)".

Moreover, one of the assumptions of the Capital Market Theory ("CMT") (upon which the CAPM is based) is that "All investors have the same one-period time horizon... A difference in the time horizon would require investors to derive risk measures and risk-free assets that are consistent with their investment horizons".[3] The CMT clearly states that the horizon is the investors holding period, not the life of the asset.

[3] See Reilly, Frank K., and Keith C. Brown. Investment Analysis and Portfolio Management. 2003. South-Western. Mason, OH. p. 239.

Second, long-term treasury yields contain a liquidity risk premium (or what Ibbotson calls horizon premium). Before using the long-term Treasury bond as the RF in the CAPM, one should subtract the liquidity risk premium. Brealey and Myer's book, *Principles of Corporate Finance*, states the following, "The risk-free rate could be defined as a long-term Treasury bond yield. If you do this, however, you should subtract the risk premium of Treasury bonds over bills... [This figure] should be used in the CAPM..."[4] Dr. Zepp did not take into account this basic concept; therefore, his estimates of the RF rate are biased upward because they contain such a liquidity premium.

Third, Staff is concerned with Dr. Zepp's reliance on interest forecasts. As explained in my direct testimony, the Commission should not rely on forecasts of interest rates. The analysts who forecast future rates do not have any more information about the future than what is already reflected in the current rate (Ramirez Direct, Page 47-49).

Q. Can Staff provide any evidence that forecasted interest rates are not reliable, and therefore, should not be taken into account to estimate the cost of equity?

A. Yes. Let's take a simple example. Let's refer to Dr. Zepp's Direct testimony, Table 21, filed for Arizona-American Water Company, Docket No. WS-01303A-02-0867 (See Exhibit 1). In this Table he presented the range of consensus forecasts reported by *Blue Chip* for the Baa corporate bond rates, June 2002 for the period 2003 to 2004. According to this table, the forecasts of Baa corporate bond rates for the period 2003 to 2004 were between 8.10 percent and 8.20 percent. The average actual yield for Baa corporate bonds for the period 2003 to 2004 was 6.58 percent. This means that the *Blue Chip* forecasts *overstated* the Baa corporate bond rate by *152 – 162* basis points.

[4] Richard A. Brealey and Stewart C. Myers, *Principles of Corporate finance*. Mcgraw-Hill, 200. p. 233.

As stated in my direct testimony, the best forecast of tomorrow's yield is simply today's yield. "Professional forecasts of financial variables are notoriously unreliable and appear to be getting worse, not better, over time." "The direction of interest rates [bond yields] cannot be predicted any better than by the flip of a coin."[5]

Q. Is Dr. Zepp's restatement of Staff's CAPM using an historical risk premium correct?

A. No. For the reasons provided above, the Commission should give no weight to Dr. Zepp's restatement.

Q. Does Staff have any comments on Dr. Zepp's estimate of the current market risk premium?

A. Yes. Dr. Zepp used the *Value Line* Industrial Composite to estimate the current market risk premium. Dr. Zepp also stated that the *Value Line* Industrial Composite is based on a wide cross-section of companies. Dr. Zepp forgot to mention that the Industrial Composite consists of 637 industrial, retail and transportation companies (excluding the financial services and the utilities sectors) whereas Staff's calculation is based on Value Line projections for 1,700 stocks.

Comments Regarding Dr. Zepp's "Above-average Risks" Faced by Arizona Water.

Q. Does Staff have any response to Dr. Zepp's comments in regard to the "unique risks" he claims affect the Applicant's cost of equity?

A. Yes, as I have explained at length in my direct testimony, non-market risk (unique risks) does not affect the cost of equity. Non-market risk (unique risk) is uncorrelated across firms in the economy. Unique risk is related to the risk of an individual project or firm;

[5] Kihm, Steven G. "The Superiority of Spot Yields in Estimating Cost of Capital." *Public Utilities Fortnightly*. February 1, 1996. pp. 42-45.

therefore, it can be eliminated through diversification. Investors can eliminate unique risk by holding a diversified portfolio. Unique risk is not measured by beta, nor does it affect the cost of equity because these firm-specific risks can be eliminated through shareholder diversification.

Dr. Zepp states in his direct testimony that he would expect that these unique risks (historical test year, water supply risk, inverted tier rates and purchased power and purchased water adjusters) would increase the Applicant's beta. However, he has failed to show that these "above-average" unique risks mentioned affect the cost of equity. Richard Brealey and Stewart Myers noted:

> But in everyday usage *risk* simply equals "bad outcome." People think of the risks of a project as a list of things that can go wrong. For example,
>
> - A geologist looking for oil worries about the risk of a dry hole.
> - A pharmaceutical manufacturer worries about the risk that a new drug which cures baldness may not be approved by the Food and Drug Administration.
>
> Managers often add fudge factors to discount rates [the investors' required return] to offset worries such as these.[6]

Then they add:

> This sort of adjustment makes us nervous. First, the bad outcomes we cited appear to reflect unique (i.e., diversifiable) risk which would not affect the expected rate of return demanded by investors.[7]

Dr. Zepp does not provide any evidence of how these "above-average" (unique) risks affect the systematic risk which is the only relevant risk that affects the cost of equity.

[6] Richard A. Brealey and Stewart C. Myers, *Principles of Corporate finance*. Mcgraw-Hill, 200. p. 238.
[7] Richard A. Brealey and Stewart C. Myers. P. 238.

Q. Does Staff have any additional comments in regard to Dr. Zepp "above-average" risks?

A. Yes. Steven G. Kihm (senior financial analyst with the Wisconsin Public Service Commission) addressed the issue of including unique risks in a cost of equity analysis, in his award-winning article "How Improper Risk Assessment Leads to Overstatement of Required Returns for Utility Stocks".

> "Risk and return are important issues on regulatory proceedings. Understanding how risks affect stock prices leads to better estimates of the market's required return on utility stocks. Risks that are specific to the utility affect expectations about future utility cash flows, but they have little bearing on the investors' required return. Regulators should therefore ignore testimony suggesting that firm-specific risks influence the required return"[8]

Dr. Zepp attempts to justify his proposed high returns on equity for Arizona Water by adding irrelevant factors (unique risk) to the cost of equity.

[8] Kihm, Steven G. "How Improper Risk Assessment Leads to Overstatement of Required Returns for Utility Stocks." *National Regulatory Research Institute Journal of Applied Regulation*. Vol. 1, June 2003. pp. 101.

Dr. Zepp's Methods Employed to Estimate the Cost of Equity for Arizona Water.

Q. Does Staff have any comments in regard to Dr. Zepp's statement that Staff has not provided any evidence that the methods to estimate the cost of equity used by the FERC and the California Public Utilities Commission ("CPUC") are flawed?

A. Yes. Staff strongly disagrees with this statement from Dr. Zepp. Staff has demonstrated why the methods employed by the FERC and the CPUC are inferior to Staff's. Staff has consistently sought better methods to estimate the cost of equity based on sound financial theory. Staff has clearly provided evidence in its direct testimony that calculation of dividend yields based on historical prices is inappropriate and inconsistent with the efficient market hypothesis (a key principle of modern corporate finance) (Ramirez Direct, Pages 41 - 42). Moreover, Staff also provided evidence that sole reliance on analysts' forecasts would result in inflated cost of equity estimates (Ramirez Direct, Pages 43 - 46).

In addition, Staff provided evidence that forecasted interest should not be relied upon to estimate the cost of equity, and that the best forecast of tomorrow's yield is simply today's yield. Staff has also provided evidence in this surrebuttal testimony that supports Staff's position in this issue (Refer to Pages 11 – 12). Staff has also provided evidence that authorized ROEs or accounting returns on equity are not equal to the cost of equity (Ramirez Direct, Pages 50 & 51). This renders useless Dr. Zepp's (CPUC) risk premium methods used in his direct testimony.

Dr. Zepp goes further and states that he demonstrated that the approaches presented by him in this proceeding are superior to Staff's just because they are consistent with equity cost determinations made in other states and the Commission Decisions prior to 2001.

This statement lacks financial basis and does not recognize that the cost of equity changes over time. The Commission should rely on sound methods to estimate the cost of equity.

Q. On page 26 of his rebuttal testimony, Dr. Zepp finds puzzling your reference to David Dreman's book, *Contrarian Investment Strategies: The Next Generation* given that Mr. Dreman says that investors rely on analysts' forecasts. How puzzling and inconsistent is Staff's reference to Mr. Dreman?

A. Staff's reference to Mr. Dreman is neither puzzling nor inconsistent. Staff is simply showing evidence regarding the degree of optimism present in analysts' forecasts of future earnings. Staff is not contending that investors rely on forecasts of EPS. Staff contests the assumption that investors will rely solely on analysts' forecasts (Ramirez Direct, Pages 41–46).

Q. On page 33, Dr. Zepp criticizes Staff's position that DPS growth should be taken into account when applying the DCF model given that it is earnings growth that permits DPS to occur. Does Staff have any comments?

A. Yes. Dr. Zepp's rebuttal testimony in this issue does not bring anything new to the table. The fact that the DCF is predicated on DPS is undeniable (the current market price of a stock is equal to the present value of all expected future dividends, not future earnings). As presented in Staff's direct testimony, Professor Jeremy Siegel from the Wharton School of Finance stated:

> Note that the price of the stock is always equal to the present value of all future *dividends* and not the present value of future earnings. Earnings not paid to investors can have value only if they are paid as dividends or other cash disbursements at a later date. Valuing stock as the present discounted value of future earnings is manifestly wrong and greatly overstates the value of the firm.[9]

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[9] See Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York P. 93.

Q. Dr. Zepp criticizes Staff's quotations of his 1999 testimony that implies he used forecasted DPS to estimate the cost of equity. Does Staff have any comments?

A. Yes. By citing Dr. Zepp's 1999 testimony, Staff did not mean in any way to imply that he used forecasted DPS to estimate the cost of equity. Staff has cited this testimony because Dr. Zepp stated that he would look at both, DPS and EPS growth when estimating the cost of equity. It is Staff's understanding that in his 1999 testimony, Dr. Zepp stated that both DPS and EPS should be taken into account. Dr. Zepp is misinterpreting Staff's quotation from his 1999 direct testimony. However, Dr. Zepp has not given a sound explanation as to why DPS growth should not now be taken into account when estimating the cost of equity when he has stated in the past (Dr. Zepp 1999 testimony) that he would also look at DPS growth.

Comments Regarding Dr. Zepp's critiques on financial risk

Q. Do you have any comments on Dr. Zepp's statement that "a negative ROE adjustment for Arizona Water should have never been considered (Zepp Rebuttal, Page 27, Lines 4 – 5)"?

A. Yes. As explained in my direct testimony, financial risk is closely related to how a firm finances its assets. "A greater percentage of debt in a capital structure results in higher level of financial risk, which in turns affects the cost of equity (Ramirez Direct, Page 11, Lines 20 & 21)". There is no magic in this: Higher leverage translates into higher financial risk which in turns increases the cost of equity. Lower leverage translates into lower financial risk which in turns decreases the cost of equity. Dr. Zepp completely disregards the fact Arizona Water is less leveraged than the sample water utilities which translates into lower financial risk for Arizona Water than the water sample utilities.

Q. Dr. Zepp relies on Arizona Water's Series K bonds to support a risk premium adjustment for the Applicant's cost of equity. Does Staff have any comments?

A. Yes. Dr. Zepp erroneously states that Arizona Water issued its Series K bonds at a cost that exceeded the cost of bonds for the water utilities sample; therefore, there is evidence that "supports a risk premium of no less than 37 to 49 basis points (Zepp Rebuttal, Page 27, Lines 24 & 25)".

Q. Can Staff explain why Dr. Zepp's statement that Arizona Water requires a risk premium of no less than 37 to 49 basis points is erroneous and misleading?

A. Yes. Dr. Zepp disregards the fact that corporate bonds contain some default risk which is diversifiable. Different companies have different perceived levels of default risk. Given that some default risk is diversifiable (unsystematic), it is irrelevant to the cost of equity.

Q. On page 27, of his rebuttal testimony, Dr. Zepp asserts that known market information indicates that Arizona Water has a beta that is closer to 1.0. Does Staff agree with this Statement?

A. No. The "known market information" that Dr. Zepp refers to is that the Applicant's Series K bonds were issued "at a cost that was 37 basis point higher than the cost of A-rated bonds at the time the Series K bonds were issued and 49 basis points higher than the cost of AA-rated bonds at the time of the issue (Zepp Rebuttal, Page 27, Lines 11 – 13)". This information does not imply that Arizona Water has a beta closer to 1.0. The most obvious cause of the yield spread would be the possibility of default.

In addition, Professor Frank Reilly of the University of Notre Dame and Professor Keith Brown of the University of Texas explain why a private placement may have a higher cost than a public offering in their 2003 financial text Investment Analysis & Portfolio Management:

> "Rather than a public sale using one of these arrangements, primary offerings can be sold privately. In such an arrangement, referred to as a *private placement*, the firm designs an issue with the assistance of an investment banker and sells it to a small group of institutions. The firm enjoys lower issuing costs because it does not need to prepare the extensive registration statement required for a public offering. *The institution that buys the issue typically benefits because the issuing firm passes some of these cost savings on to the investor as a higher return.* In fact, the institution should require a higher return because of the absence of any secondary market for these securities, which implies higher liquidity risk.[10] (latter emphasis added.)"

Therefore, the yield spread between corporate bonds and privately placed bonds would likely be related to the risk of the institution being able to resell the placement in a secondary market, and *not* higher business risk (which affects the cost of equity).

Q. Has Dr. Zepp accounted for financial risk?

A. Yes. Dr. Zepp acknowledges this financial concept in pre-filed testimony in Docket No. WS-01303A-02-0867 et seq. (Arizona-American Water Company, Inc.) in which he adjusts his recommended ROE for increased financial risk. However, he does not adjust his recommended ROE for *decreased* financial risk in this docket.

[10] Reilly, Frank K., Keith C. Brown. Investment Analysis & Portfolio Management. 2003. Thomson South-Western. Mason, OH. p. 111.

Q. On page 28, of his rebuttal testimony, Dr. Zepp states that there is information that supports a positive risk premium for Arizona Water even though it is less leveraged than the water utilities sample, specifically due to the size of the Applicant. Does Staff have any comments?

A. Yes. Dr. Zepp has consistently tried to add the "size premium" before the Commission in previous proceedings. Staff agrees with the Commission finding that the firm size phenomenon does not exist for regulated utilities. Moreover, on page 94 of Intermediate Financial Management Brigham and Daves state:

> "Several of these studies suggest that the size effect is no longer having an effect on stock returns, that there never was a size effect (the previous results were caused by peculiarities in the data sources), or that the size effect doesn't apply to most companies".

Q. Has the Commission previously ruled on the issue of firm size with regard to the ROE?

A. Yes. In Arizona Water's previous rate case the Commission said the following in Decision No. 64282:

> We do not agree with the Company's proposal to assign a risk premium to Arizona Water based on its size relative to the other publicly traded water utilities…

Additionally, in Decision No. 64727 (Black Mountain Gas Company), dated April 17, 2002, the Commission agreed with Staff's position that "the 'firm size phenomenon' does not exist for regulated utilities, and that therefore there is no need to adjust for risk for small firm size in utility rate regulation."

CONCLUSION

Q. Please summarize Staff's recommendations.

A. Staff recommends the Commission adopt Staff's updated 9.1 percent ROE, an 8.4 percent cost of long-term debt, and an 8.9 percent rate of return. Staff recommends the Commission give little weight to the testimony of the Company's witness, Dr. Thomas Zepp. Staff disagrees with his methods and his estimates are not representative of current costs of equity.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Arizona Water Company -Western Group-
Staff's Recommended
Capital Structure
And Weighted Cost of Capital

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Long-term Debt	26.6%	8.4%	2.20%
Common Equity	73.4%	9.1%	6.70%
Weighted Average Cost of Capital/ROR			**8.9%**

Supporting Schedules: Schedule AXR-2, Schedule AXR-8

Arizona Water Company -Western Group-
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Long-Term Debt	Common Equity	Total
American States Water	49.2%	50.8%	100.0%
California Water	49.7%	50.3%	100.0%
Aqua America	53.0%	47.0%	100.0%
Connecticut Water	43.1%	56.9%	100.0%
Middlesex Water	55.4%	44.6%	100.0%
SJW Corp	46.8%	53.2%	100.0%
Average Sample Water Utilities	**49.5%**	**50.5%**	**100.0%**
Arizona Water Company -Western Grou	**26.6%**	**73.4%**	**100.0%**

Source: Value Line, Arizona Water's application

Arizona Water Company -Western Group-
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 1994 to 2004 DPS	Dividends Per Share Projected DPS	Earnings Per Share 1994 to 2004 EPS	Earnings Per Share Projected EPS
American States Water	1.1%	1.9%	2.2%	14.1%
California Water	1.3%	1.1%	1.8%	8.2%
Aqua America	5.8%	7.3%	9.3%	9.0%
Connecticut Water	1.4%	No Projection	2.5%	No Projection
Middlesex Water	2.3%	No Projection	0.9%	No Projection
SJW Corp	3.8%	No Projection	7.8%	No Projection
Average Sample Water Utilities	**2.6%**	**3.4%**	**4.1%**	**10.4%**

Source: Value Line, Zepp work papers

Arizona Water Company -Western Group-
Intrinsic Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth 1994 to 2003 br	Retention Growth Projected br	Stock Financing Growth vs	Intrinsic Growth 1994 to 2003 br + vs	Intrinsic Growth Projected br + vs
American States Water	2.6%	5.6%	1.2%	3.8%	6.8%
California Water	2.4%	4.6%	1.7%	4.1%	6.3%
Aqua America	3.7%	6.1%	7.3%	11.0%	13.4%
Connecticut Water	2.9%	No Projection	0.5%	3.5%	No Projection
Middlesex Water	1.6%	No Projection	3.5%	5.1%	No Projection
SJW Corp	5.0%	No Projection	0.0%	5.0%	No Projection
Average Sample Water Utilities	**3.1%**	**5.4%**	**2.4%**	**5.4%**	**8.8%**

Source: Value Line, MSN Money

Arizona Water Company -Western Group-
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
					Value Line	Raw
		Spot Price	Book Value	Mkt To	Beta	Beta
Company	Symbol	5/11/05	5/11/05	Book	β	β *raw*
American States Water	AWR	27.18	14.90	1.8	0.70	0.52
California Water	CWT	35.75	15.51	2.3	0.75	0.60
Aqua America	WTR	27.84	7.40	3.8	0.75	0.60
Connecticut Water	CTWS	24.2	10.89	2.2	0.65	0.45
Middlesex Water	MSEX	18.97	7.74	2.5	0.65	0.45
SJW Corp	SJW	40.48	18.47	2.2	0.55	0.30
Average				**2.5**	**0.68**	**0.49**

Source: Msn Money, Value Line

Arizona Water Company -Western Group-
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical	2.6%
DPS Growth - Projected	3.4%
EPS Growth - Historical	4.1%
EPS Growth - Projected	10.4%
Intrinsic Growth - Historical	5.4%
Intrinsic Growth - Projected	8.8%
Average	**5.8%**

Supporting Schedules: Schedule AXR-3 and Schedule AXR-4

Arizona Water Company -Western Group-
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]
Company	Current Mkt. Price (P_o)	Projected Dividends[1] (stage 1 growth) (D_t)				Stage 2 growth[2] (g_n)	Equity Cost Estimate (K)
		d_1	d_2	d_3	d_4		
American States Water	27.2	0.90	0.92	0.94	0.96	6.5%	9.4%
California Water	35.8	1.14	1.15	1.17	1.18	6.5%	9.2%
Aqua America	27.8	0.52	0.56	0.60	0.65	6.5%	8.4%
Connecticut Water	24.2	0.86	0.90	0.93	0.96	6.5%	9.8%
Middlesex Water	19.0	0.68	0.71	0.73	0.76	6.5%	9.8%
SJW Corp	40.5	1.08	1.12	1.16	1.20	6.5%	9.0%

Average **9.3%**

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non − constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

1 d_1 = "Est'd Div'd next 12 mos." 05/13/2005, *Value Line* Summary & Index.

2 Average annual growth in GDP 1929 - 2004 in current dollars. http://www.bea.doc.gov/

Arizona Water Company -Western Group-
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0	+	g	=	k
Constant Growth DCF Estimate			3.0%	+	5.8%	=	8.8%
Multi-Stage DCF Estimate						=	9.3%
Average of DCF Estimates							**9.0%**
CAPM Method	Rf	+	β	x	(Rp)	=	k
Historical Market Risk Premium	4.0%	+	0.68	x	7.6%	=	9.1%
Current Market Risk Premium	4.0%	+	0.68	x	7.8%	=	9.3%
Average of CAPM Estimates							**9.2%**
					Average		**9.1%**

Source: The Wall Street Journal, Value Line, Ibbotson Associates SBBI 2004 Yearbook

Supporting Schedules: Schedule AXR-7

Exhibit 1.

Arizona-American Water Company

Table 21

Risk Premiums Computed from Past ROEs Earned by Water Utilities
and Forecasted Cost of Equity Range for Water Utilities

Panel A:

	Baa Corporate Bond Rates-[b/]	Average Baa Bond Rate	Realized ROEs for Water Utilities-[a/]	Average ROE	Risk Premium-[c/]	Average Risk Premium
1991-1995						
1991	9.80%		12.00%		2.60%	
1992	8.98%		10.51%		1.93%	
1993	7.93%		11.60%		4.07%	
1994	8.63%		10.71%		2.48%	
1995	8.20%	8.71%	11.13%	11.19%	3.33%	2.88%
1996-2000						
1996	8.05%		11.60%		3.95%	
1997	7.87%		11.57%		4.10%	
1998	7.22%		10.91%		4.09%	
1999	7.88%		10.56%		3.08%	
2000	8.37%	7.88%	9.81%	10.89%	1.84%	3.41%
Differences in Averages:		-0.83%		-0.30%		0.53%
Relative Change		-100		-36		64

Panel B:

Forecasts of Baa Corporate Bond Rate-[d/]	Estimated Risk Premium-[c/]	Forecasted Equity Cost
8.10%	3.27%	11.4%
8.20%	3.21%	11.4%

Notes and Sources:

_a/ Source: Tables 2-4 of CPUC WNGB Report, dated March 2002, in A. 01-10-028.
_b/ Past Baa rates reported by the Federal Reserve.
_c/ Based on evidence reported by C. A. Turner Utility Reports at year-end for the last ten years, the average cost of equity was more than 40 basis points higher than an average of realized ROEs. See Table 11.
_d/ Range of consensus forecasts reported by *Blue Chip*, June 2002 for the period 2003 to 2004.

8/06/02