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**BEFORE THE ARIZONA CORPORATION COMMISSION**

8 IN THE MATTER OF THE  
9 APPLICATION OF RIO RICO  
10 UTILITIES, INC., AN ARIZONA  
11 CORPORATION, FOR A  
12 DETERMINATION OF THE FAIR  
13 VALUE OF ITS UTILITY PLANTS AND  
14 PROPERTY AND FOR INCREASES IN  
15 ITS WATER AND WASTEWATER  
16 RATES AND CHARGES FOR UTILITY  
17 SERVICE BASED THEREON.

DOCKET NO: WS-02676A-09-<sup>0257</sup>~~0957~~

**NOTICE OF FILING REBUTTAL  
TESTIMONY**

18 Rio Rico Utilities, Inc. ("RRUI" or "the Company") hereby submits this Notice of  
19 Filing Rebuttal Testimony in the above-referenced matter. Specifically filed herewith are  
20 the Company's Rebuttal Testimonies, which include the following testimonies, along with  
21 supporting schedules and/or attachments:

- 22 1. Rebuttal Testimony of Gregory S. Sorensen;
- 23 2. Rebuttal Testimony of Peter Eichler;
- 24 3. Rebuttal Testimony of Thomas J. Bourassa (Rate Base); and
- 25 4. Rebuttal Testimony of Thomas J. Bourassa (Cost of Capital).

Arizona Corporation Commission  
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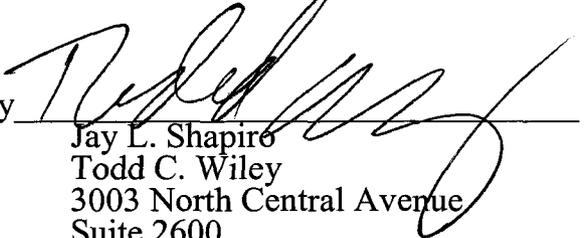
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DATED this 1st day of February, 2010.

FENNEMORE CRAIG, P.C.

By   
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**ORIGINAL** and thirteen (13) copies  
of the foregoing were filed  
this 1st day of February, 2010, with:

Docket Control  
Arizona Corporation Commission  
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Phoenix, AZ 85007

**COPY** of the foregoing hand-delivered  
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13 SERVICE BASED THEREON.

DOCKET NO: WS-02676A-09-0257

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15  
16 **REBUTTAL TESTIMONY OF**

17 **GREG SORENSEN**

18  
19 **February 1, 2010**  
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TABLE OF CONTENTS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
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19  
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22  
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24  
25  
26

I. INTRODUCTION AND PURPOSE OF TESTIMONY ..... 1  
II. UNACCOUNTED FOR WATER ..... 1  
III. HOOK UP FEE TARIFFS ..... 4  
IV. LOW INCOME TARIFF ..... 10

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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Greg Sorensen. My business address is 12725 W. Indian School Road,  
4 Suite D-101, Avondale, AZ 85392.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

6 A. On behalf of the Applicant Rio Rico Utilities, Inc. ("RRUI" or "Company").

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

8 A. I am employed by Algonquin Water Services ("AWS") dba Liberty Water, as  
9 Director of Operations for the Western Group. AWS and RRUI are both wholly  
10 owned subsidiaries of Liberty Water, Inc. (formerly Algonquin Water Resources of  
11 America).

12 **Q. DID YOU PREVIOUSLY PROVIDE TESTIMONY ON BEHALF OF THE**  
13 **COMPANY IN THIS CASE?**

14 A. Yes, my direct testimony was filed on May 21, 2009, with the Company's  
15 application.

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

17 A. To further support RRUI's application for rate relief by responding to testimony by  
18 the other parties on unaccounted for water, hook up fee tariffs and the proposed  
19 low income tariff.

20 **II. UNACCOUNTED FOR WATER**

21 **Q. WHAT IS UNACCOUNTED FOR WATER?**

22 A. In simple terms, it is water that we know we pumped but which we also know we  
23 did not sell or otherwise utilize. It is also often referred to as "lost" or "non-  
24 account" water. We prefer to avoid the label "lost" water because it implies that  
25 there is something wrong with the system, such as an unrepaired leak, or that we do  
26 not know why any of the water is unaccounted for.

1 **Q. WELL THEN, WHY IS THERE ANY UNACCOUNTED FOR WATER?**

2 A. Typical sources of non-account water include: Flushing of Fire Hydrants (either by  
3 Staff or Fire Department) for training or firefighting purposes, Flushing of Air  
4 Release Valves (necessary due to the varied elevation of the RRUI system), Main  
5 and Service leaks, testing of new mains, and non-functioning meters. Another less  
6 common source is theft of service.

7 **Q. WHAT DOES RRUI DO TO MINIMIZE UNACCOUNTED FOR WATER?**

8 A. RRUI works closely with the local Fire Departments in order to ensure any water  
9 used for firefighting or training is reported, other sources of non-account water are  
10 monitored and tracked closely, and repairs are scheduled as quickly as possible  
11 when a leak is discovered. When a non-functioning meter is found, it is changed  
12 out immediately. All staff are trained to report and record main and service leaks  
13 immediately, and commence the procedure for scheduling repairs, which include  
14 Blue Staking and obtaining necessary permits.

15 **Q. WHAT LEVEL OF UNACCOUNTED WATER DO YOU BELIEVE IS**  
16 **ACCEPTABLE?**

17 A. Due to the diverse and dynamic nature of water systems, it is difficult to create one  
18 standard that applies across the board. RRUI strives to keep its non-account water  
19 to a minimum and I think our water loss should be measured in the context of our  
20 system and with consideration of any factors that might impact the levels of non-  
21 account water.

22 **Q. MR. SORENSEN, ARE YOU AN ENGINEER OR OPERATOR?**

23 A. No, but I supervise the operations of 7 water and wastewater systems in Arizona.  
24 In my job, I work with and rely on our operators and engineers daily. My  
25 testimony on unaccounted for water is based on my experience and my  
26 consultation with our operators for RRUI.

1 **Q. WHAT IS THE LEVEL OF RRUI'S UNACCOUNTED FOR WATER?**

2 A. During the last 7 years since our last test year, RRUI's unaccounted for water has  
3 averaged 6.6 percent annually.<sup>1</sup> In 2009, the most current year, RRUI's water loss  
4 was 6.3 percent.

5 **Q. THEN WHY ARE YOU ADDRESSING THIS ISSUE IN YOUR REBUTTAL**  
6 **TESTIMONY?**

7 A. Because Staff's engineer has focused solely on the unaccounted for water for 2008,  
8 which was 10.22 percent, in making recommendations that will require us to  
9 undertake unnecessary monitoring and reporting.<sup>2</sup> This was the ONLY year since  
10 the last test year in which unaccounted for water was greater than 10 percent, and  
11 then it was only 10.22 percent.

12 **Q. WHY ARE THE STEPS RECOMMENDED BY STAFF "UNNECESSARY"?**

13 A. Because we do not have a water loss problem. One year out of seven barely above  
14 10 percent constitutes an anomaly, not a problem, and certainly not a basis for  
15 measures that will increase operating expenses. As I testified, it isn't like we are  
16 ignoring water loss. This is why I do not agree to a one-size fits all standard like  
17 Staff advocates. Some additional analysis should be undertaken before  
18 recommendations are made, especially when the one year Staff looked at was  
19 barely above Staff's 10 percent threshold.

20 **Q. DOES THE COMPANY HAVE AN EXPLANATION FOR WHY WATER**  
21 **LOSS WAS HIGHER IN 2008 THAN IN OTHER YEARS?**

22 A. Our belief is that the volume of water used for fire suppression and training by the  
23 Fire Departments, as well as the amount of water estimated for some large main  
24 breaks was understated.

25 <sup>1</sup> See Exhibit GS-RB1.

26 <sup>2</sup> Direct Testimony of Jian Liu ("Liu Dt."), Engineering Report for Water ("Water Report") at 5-6.

1 **III. HOOK UP FEE TARIFFS**

2 **Q. DID RRUI PROPOSE A HUF TARIFF IN ITS DIRECT FILING?**

3 A. Yes, and I testified in support of that tariff in my direct testimony.<sup>3</sup>

4 **Q. DOES STAFF SUPPORT THE PROPOSED HUF?**

5 A. No, according to Staff witnesses Liu and Becker, RRUI refused and failed to  
6 respond to data requests regarding the HUF, therefore Staff claims it could not  
7 make a determination of whether the HUF is reasonable.<sup>4</sup>

8 **Q. DID RRUI REFUSE TO RESPOND TO DATA REQUEST BY STAFF ON**  
9 **THE HUF TARIFF?**

10 A. No. Neither Staff witness provides any details about the alleged failure to answer  
11 data requests.

12 **Q. DID STAFF SEND DATA REQUESTS REGARDING THE HUF?**

13 A. Yes, and RRUI timely responded in accordance with the applicable procedural  
14 order. Unfortunately, we still do not know why Staff lacks the information it needs  
15 to evaluate the proposed HUF. Between our data request responses and my  
16 testimony, we have more than supported the proposed HUF.<sup>5</sup>

17 **Q. WHAT ABOUT THE OTHER PARTIES?**

18 A. RUCO does not take a position on the HUF tariff. Rio Rico Properties, Inc.  
19 (“Developer”) does.

20 **Q. WHAT IS THE DEVELOPER’S POSITION?**

21 A. That a HUF should not be approved until Staff gets the information it requested.<sup>6</sup>  
22 But as I testified, Staff was given the information it needed to evaluate the

23 <sup>3</sup> Direct Testimony of Greg Sorensen at 10-12; Application at Attachment 2.

24 <sup>4</sup> Liu Dt., Water Report at 8-9 and Engineering Report for Sewer at 6-7; Direct Testimony on rate design  
of Gerald Becker (“Becker Rate Design Dt.”) at 3, 6.

25 <sup>5</sup> See Company responses to Staff data requests 1.3, 1.11, and 1.14. (Copies of these responses have been  
provided to Staff and the intervenors who requested them.)

26 <sup>6</sup> Direct Testimony of Matthew J. Rowell (“Rowell Dt.”) at 4:1-3.

1 Company's request. I do not know why Staff did not evaluate the information we  
2 provided. It does appear though that Mr. Rowell relied exclusively on Staff's  
3 testimony rather than conducting an independent investigation of whether Staff's  
4 testimony was accurate. As I've testified, it is not correct.

5 **Q. ARE YOU FAMILIAR WITH MR. ROWELL?**

6 A. Yes, he was recently a witness for RUCO in LPSCO's pending rate case. In that  
7 rate case, he relied exclusively on his lay interpretation of my testimony to  
8 conclude that there were design and construction issues with LPSCO's wastewater  
9 treatment plant, and that was clearly not what I had testified to. We now know that  
10 Mr. Rowell is not an engineer, is not an operator, is not an accountant, is not a  
11 lawyer, and he has absolutely no experience running a water or wastewater utility.  
12 Mr. Rowell is an "economist" who appears to be testifying on a variety of different  
13 issues in rate cases for utilities, agencies and developers.

14 **Q. ARE YOU SUGGESTING THAT MR. ROWELL IS NOT QUALIFIED TO**  
15 **OFFER EXPERT TESTIMONY ON HUFs?**

16 A. That is not my decision. However, I am troubled by the notion that someone with  
17 virtually no experience in operating a utility can be called to testify to issues as  
18 important as those raised in Mr. Rowell's direct testimony and that his testimony  
19 could have such a detrimental impact on our operations.

20 **Q. OKAY, FAIR ENOUGH MR. SORENSEN. WHAT ISSUES IS**  
21 **MR. ROWELL RAISING THAT YOU'RE CONCERNED OVER?**

22 A. First, Mr. Rowell testifies that a HUF is not necessary where the utility has existing  
23 capacity or existing obligations to provide capacity.<sup>7</sup> We do not agree. We believe  
24 that a utility should work to balance its total capitalization, and that includes CIAC,  
25

26 <sup>7</sup> *Id.* at 3:7-8, 4:7-9.

1 which we would raise through the HUF. The presence of a HUF will assist the  
2 Company to ensure that “growth pays for growth.” Obviously, that means that the  
3 developer will be paying more, which is why I imagine RRPI and Mr. Rowell are  
4 opposing the HUF in this case.

5 However, we believe that approval of a HUF today will reduce customer  
6 rates in the future compared to what they would be otherwise without a HUF.  
7 Additionally, while one could argue that the utility could charge a developer under  
8 a main extension agreement (MXA) for central plant needed to provide service, we  
9 anticipate that many additional future customers may connect to the system without  
10 the need for line extension agreements due to their property’s location near existing  
11 mains. As such, we couldn’t collect funds from them under the MXA, but could  
12 under a HUF. While we may not have to acquire sewer treatment capacity  
13 immediately after this rate case, the funds received from a HUF would help offset  
14 the cost to provide service to those new customers by reducing future rate base in  
15 the context of the next rate case.

16 **Q. SHOULDN’T YOU WAIT UNTIL YOU HAVE SPECIFIC PROJECTS YOU**  
17 **NEED TO START CHARGING A HUF?**

18 A. No. By way of illustration, if we waited until we absolutely need to purchase  
19 capacity to get a HUF in place, then we wouldn’t have received funds to purchase  
20 such capacity. In other words, for backbone plant like treatment capacity or water  
21 supply, we need the funds in advance of purchase.

22 **Q. WHAT ABOUT MR. ROWELL’S CONCERN OVER “EXCESSIVE**  
23 **RELIANCE” ON HUFs?**

24 A. I agree that this is a theoretical concern with HUFs, but it is not a concern for  
25 RRUI. The HUF has been designed to ensure that the Company’s equity  
26 investment per customer remains approximately the same for new customers as it

1 was for historically connected customers. This means that the Company will  
2 continue to make investments, and not rely exclusively on HUFs to fund  
3 development because the Company agrees that over-reliance on HUF's/CIAC can  
4 create a weak utility.

5 **Q. WHO WOULD PAY FOR PLANT THAT RRPI DOES NOT WANT TO**  
6 **FUND?**

7 A. Presumably the shareholder, which would lead to higher rates for all customers,  
8 something we are trying to avoid. Implementation of a HUF would assist in this  
9 endeavor.

10 **Q. WHAT OTHER ISSUES DO YOU BELIEVE ARE RAISED BY**  
11 **MR. ROWELL'S DIRECT TESTIMONY?**

12 A. Mr. Rowell's recommendation that a HUF, if approved, be specified as the only  
13 source of developer funding for off site infrastructure is of great concern to us.<sup>8</sup>

14 **Q. WHY IS THAT, MR. SORENSEN?**

15 A. Because under this scenario, the utility would be forced to take unnecessary build  
16 out risk which is more appropriately borne by the developer. In a "normal"  
17 utility/developer situation, the parties enter into a line extension agreement far in  
18 advance of the development actually starting, let alone building out. At the time of  
19 such agreement, the developer would pay the HUF for say, 500 lots in his  
20 development. At that moment, the utility has the full obligation to provide service  
21 to all 500 lots, and the responsibility to be able to provide service to those 500  
22 customers whether they come online in 10 months or 10 years. I think we can all  
23 agree that the exact timing of a development build-out is uncertain at best.  
24  
25

26 <sup>8</sup> *Id.* at 5:10-14, 8:10-11.

1           However, the amount paid would only account for a portion of the total cost of  
2           central plant necessary to provide service to those 500 lots.

3           Since the HUF is designed to only cover a portion of total plant costs,  
4           Mr. Rowell would have the utility exposed for the difference of the total capacity  
5           cost less the HUF. We are not in the development business, do not want significant  
6           build-out risk, and certainly aren't compensated for accepting such risk by this  
7           Commission. Even the most utility-friendly regulatory environments do not grant  
8           ROE's commensurate with the business risk associated with the "development"  
9           business.

10   **Q.   DO YOU HAVE ANY RELEVANT EXAMPLES YOU CAN PROVIDE?**

11   A.   Yes, the recent Gold Canyon Sewer Company case, where the company  
12       constructed sewer treatment plant capacity for a bargain price in appropriate  
13       quantities to address the planned growth of the area for 5 years, based on all  
14       information available to it at the time. However, as we all know, growth slowed  
15       down after the capacity was constructed, and with the advantage of hindsight, the  
16       Commission deemed certain parts of that capacity as "excess," and reduced the  
17       utility's rate base by \$1 million. This is just another reason it is RRUI's and  
18       Liberty Water's position that the utility should be allowed to charge the developer  
19       for the full cost of central plant required to serve the development through a  
20       combination of HUFs and LXAs.

21   **Q.   BUT ISN'T RIO RICO PROPERTIES' CONCERN PREDICATED ON**  
22       **ALLEGED CONCERN OVER THE SCOPE OF THE TARIFF AND**  
23       **AMBIGUITY OVER WHAT ADDITIONAL PAYMENTS WILL BE**  
24       **REQUIRED?**

25  
26

1 A. That is what Mr. Rowell claims in his testimony, but he also declined to explain his  
2 position in full until a later date.<sup>9</sup> I certainly do not agree that the tariff is  
3 overbroad or ambiguous. In fact, Mr. Rowell's references to our data request  
4 responses<sup>10</sup> reflect that we have sought to explain these alleged ambiguities in our  
5 tariff.

6 **Q. WHAT ABOUT MR. ROWELL'S CLAIM THAT THE HUF WOULD**  
7 **APPLY TO EXISTING SUBDIVISIONS?**

8 A. I believe that most HUF tariffs I've seen apply to customers who don't require a  
9 line extension agreement (for example a single family dwelling adjacent to an  
10 existing line) and who hook-up after the effective date of the tariff, and to those  
11 developments requiring a line extension agreement, but entered into after the  
12 effective date of the HUF tariff. So, provided that the existing subdivision  
13 Mr. Rowell refers to in his testimony has an executed line extension agreement  
14 (approved by the Commission if required) prior to the effective date of the HUF  
15 Tariff, then that subdivision wouldn't apply to the HUF Tariff.

16 **Q. DO YOU AGREE THAT DEVELOPERS SHOULD GET CREDIT**  
17 **AGAINST THE HUF FOR ANY OFF-SITE FACILITIES THE**  
18 **DEVELOPER HAS CONTRIBUTED?**

19 A. I believe that absent some other requirement of the developer to put in certain  
20 offsite facilities, that if the developer constructs offsite facilities pursuant to an  
21 LXA entered into and subject to the HUF tariff, it would be reasonable to credit  
22 that HUF for developer constructed offsite facilities necessary for that development  
23 to receive service.

24  
25 <sup>9</sup> *Id.* at 5:2-4.

26 <sup>10</sup> *Id.* at 5:27.

1 **IV. LOW INCOME TARIFF**

2 **Q. HAS THE COMPANY PROPOSED A LOW INCOME TARIFF IN THIS**  
3 **RATE CASE?**

4 A. Yes.

5 **Q. WHAT POSITIONS HAVE THE OTHER PARTIES TAKEN REGARDING**  
6 **THE LOW INCOME TARIFF?**

7 A. RUCO and Rio Rico Properties are silent on the issue. Staff supports a low income  
8 tariff but wants to undertake “additional consideration” because low income tariffs  
9 are new and because the proposed tariff in this case is “different” from those  
10 recently proposed by other utilities.<sup>11</sup>

11 **Q. DOES STAFF EXPLAIN WHY IT BELIEVES THE LOW INCOME**  
12 **TARIFF PROPOSED BY RRUI IS “DIFFERENT” THAN THOSE**  
13 **RECENTLY PROPOSED BY OTHER UTILITIES?**

14 A. Not at all, which makes it very difficult for us to address their concerns.

15 **Q. IS THE LOW INCOME TARIFF DIFFERENT THAN OTHERS?**

16 A. The low income tariff proposed here is modeled after the one used in California by  
17 American States, and the one approved by the Commission last year for Chaparral  
18 City Water Company.<sup>12</sup> It is also similar to the low income tariffs we have  
19 proposed in our pending LPSCO and Bella Vista Water rate cases. The only  
20 material difference I am aware of is that we have raised the threshold for  
21 qualification in this case.

22 **Q. WHY IS THAT MR. SORENSEN?**

23 A. Because we do have certain pockets of lower income housing in our service areas  
24 and we felt it appropriate to raise the qualification limit to minimize the chance of

25 <sup>11</sup> Becker Rate Design Dt. at 7:9-11.

26 <sup>12</sup> Direct Testimony of Thomas J. Bourassa – Rate Base, Income Statement and Rate Design at 18-20.

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those that do not qualify being overburdened by paying for those that do. Still, the proposed qualification level is 100 percent of the federal poverty line.

**Q. WHAT IF STAFF RECOMMENDS AN ALTERNATIVE, AS MR. BECKER SUGGESTS STAFF MIGHT DO IN HIS DIRECT TESTIMONY?**

A. As long as the tariff remains revenue neutral, we welcome suggestions on ways to improve what we have proposed. Mr. Becker is correct that these tariffs are relatively new to the Commission, which is why we followed the model Mr. Bourassa successfully advocated for Chaparral City Water Company in its recently concluded rate case.

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

A. Yes.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**GREG SORENSEN**  
**REBUTTAL TESTIMONY**  
**February 1, 2010**

**Exhibit GS-RB1**

**RRUI Non-Account Water Percentage by Year**

	2003	2004	2005	2006	2007	2008	2009	Average
Unaccounted for Water %	3.59%	7.68%	6.21%	6.81%	4.87%	10.22%	6.31%	6.60%
ACC Guideline	10%	10%	10%	10%	10%	10%	10%	

**Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2003**

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft	MG's	Ac. Ft	MG's	Ac. Ft	MG's	Ac. Ft	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	47,436	145.58	47,907	147.02	10,850	33.30	37,057	113.72	1,751	5.37	49,658	152.39	-2,222	-6.82	-4.68
Feb	40,145	123.20	44,350	136.11	10,235	31.41	34,115	104.70	1,225	3.76	45,575	139.86	-5,430	-16.66	-13.53
Mar	48,674	149.38	36,112	110.82	8,850	27.16	27,262	83.66	1,153	3.54	37,265	114.36	11,409	35.01	23.44
Apr	53,235	163.37	47,980	147.25	10,160	31.18	37,820	116.07	0,543	1.67	48,523	148.91	4,712	14.46	8.85
May	71,954	220.82	59,959	184.01	11,006	33.78	48,953	150.23	2,126	6.52	62,085	190.53	9,869	30.29	13.72
June	78,945	242.27	71,209	218.53	16,071	49.32	55,138	169.21	1,817	5.58	73,026	224.11	5,919	18.16	7.50
July	62,357	191.37	74,040	227.22	15,795	48.47	58,245	178.75	2,405	7.38	76,445	234.60	-14,088	-43.23	-22.59
Aug	54,093	166.01	54,742	168.00	12,428	38.14	42,314	129.86	0,512	1.57	55,254	169.57	-1,161	-3.56	-2.15
Sept	59,595	182.89	51,105	156.84	11,943	36.65	39,162	120.18	0,620	1.90	51,725	158.74	7,870	24.15	13.21
Oct	58,822	180.52	53,616	164.54	13,331	40.91	40,285	123.63	0,513	1.57	54,129	166.12	4,693	14.40	7.98
Nov	53,390	163.85	53,386	163.84	14,306	43.90	39,080	119.93	1,608	4.93	54,994	168.77	-1,604	-4.92	-3.00
Dec	53,093	162.94	46,757	143.49	12,404	38.07	34,353	105.42	1,809	5.55	48,566	149.04	4,527	13.89	8.53
<b>Totals</b>	<b>681,739</b>	<b>2092.18</b>	<b>641,163</b>	<b>1967.66</b>	<b>147,379</b>	<b>452.29</b>	<b>493,784</b>	<b>1515.36</b>	<b>16,082</b>	<b>49.35</b>	<b>657,245</b>	<b>2017.01</b>	<b>24,494</b>	<b>75.17</b>	<b>3.59</b>

## Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2004

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft	MG's	Ac. Ft.	MG's	Ac. Ft	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	52.916	162.39	49.829	152.92	12.964	39.79	36.865	113.13	0.591	1.81	50.420	154.73	2.496	7.66	4.72
Feb	49.940	153.26	43.159	132.45	11.573	35.52	31.586	96.93	0.636	1.95	43.795	134.40	6.145	18.86	12.30
Mar	57.411	176.19	45.586	139.90	12.168	37.34	33.418	102.56	0.740	2.27	46.326	142.17	11.085	34.02	19.31
Apr	57.621	176.83	54.377	166.88	13.992	42.94	40.385	123.94	0.503	1.54	54.880	168.42	2.741	8.41	4.76
May	81.598	250.42	66.375	203.70	15.685	48.14	50.690	155.56	0.276	0.85	66.651	204.54	14.947	45.87	18.32
June	91.397	280.49	81.987	251.61	17.249	52.94	64.738	198.67	1.885	5.78	83.872	257.39	7.525	23.09	8.23
July	77.483	237.79	75.764	232.51	22.092	67.80	53.672	164.71	1.892	5.81	77.656	238.32	-0.173	-0.53	-0.22
Aug	65.483	200.96	61.687	189.31	15.433	47.36	46.254	141.95	1.360	4.17	63.047	193.48	2.436	7.48	3.72
Sept	74.265	227.91	66.932	205.41	17.784	54.58	49.148	150.83	0.832	2.55	67.764	207.96	6.501	19.95	8.75
Oct	63.410	194.60	62.375	191.42	14.130	43.36	48.245	148.06	0.595	1.83	62.970	193.25	0.440	1.35	0.69
Nov	53.819	165.16	49.666	152.42	11.188	34.33	38.478	118.08	0.766	2.35	50.432	154.77	3.387	10.39	6.29
Dec	51.252	157.29	48.539	148.96	12.046	36.97	36.493	111.99	0.624	1.91	49.163	150.88	2.089	6.41	4.08
<b>Totals</b>	<b>776.595</b>	<b>2383.28</b>	<b>706.276</b>	<b>2167.48</b>	<b>176.304</b>	<b>541.06</b>	<b>529.972</b>	<b>1626.42</b>	<b>10.700</b>	<b>32.84</b>	<b>716.976</b>	<b>2200.32</b>	<b>59.619</b>	<b>182.96</b>	<b>7.68</b>

## Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2005

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft	MG's	Ac. Ft.	MG's	Ac. Ft	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	47.688	146.35	59.855	183.69	11.189	34.34	48.666	149.35	0.414	1.27	60.269	184.96	-12.581	-38.61	-26.38
Feb	42.973	131.88	41.453	127.21	10.207	31.32	31.246	95.89	0.499	1.53	41.952	128.75	1.021	3.13	2.38
Mar	57.422	176.22	43.410	133.22	11.385	34.94	32.025	98.28	0.749	2.30	44.159	135.52	13.263	40.70	23.10
Apr	68.557	210.39	56.890	174.59	15.637	47.99	41.253	126.60	0.333	1.02	57.223	175.61	11.334	34.78	16.53
May	79.011	242.48	67.892	208.35	17.278	53.02	50.614	155.33	0.896	2.75	68.788	211.10	10.223	31.37	12.94
June	85.917	263.67	77.701	238.46	18.878	57.93	58.823	180.52	1.487	4.56	79.188	243.02	6.729	20.65	7.83
July	80.410	246.77	76.911	236.03	16.531	50.73	60.380	185.30	1.504	4.62	78.415	240.65	1.995	6.12	2.48
Aug	59.076	181.30	61.611	189.08	12.362	37.94	49.249	151.14	1.060	3.25	62.671	192.33	-3.595	-11.03	-6.09
Sept	69.910	214.55	57.235	175.65	12.833	39.38	44.402	136.26	1.412	4.33	58.647	179.98	11.263	34.56	16.11
Oct	66.224	203.23	58.853	180.61	12.225	37.52	46.628	143.10	0.320	0.98	59.173	181.60	7.051	21.64	10.65
Nov	60.926	186.98	61.336	188.23	13.321	40.88	48.015	147.35	0.425	1.30	61.761	189.54	-0.835	-2.56	-1.37
Dec	56.346	172.92	53.805	165.12	11.435	35.09	42.370	130.02	0.327	1.00	54.132	166.13	2.214	6.79	3.93
<b>Totals</b>	<b>774.460</b>	<b>2376.73</b>	<b>716.952</b>	<b>2200.24</b>	<b>163.281</b>	<b>501.09</b>	<b>553.671</b>	<b>1699.15</b>	<b>9.426</b>	<b>28.93</b>	<b>726.378</b>	<b>2229.17</b>	<b>48.082</b>	<b>147.56</b>	<b>6.21</b>

## Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2006

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	57.757	177.25	56.608	173.72	12.693	38.95	43.915	134.77	1.881	5.77	58.489	179.50	-0.732	-2.25	-1.27
Feb	54.557	167.43	49.015	150.42	12.089	37.10	36.926	113.32	0.444	1.36	49.459	151.78	5.098	15.65	9.34
Mar	58.133	178.40	52.533	161.22	12.581	38.61	39.952	122.61	1.265	3.88	53.798	165.10	4.335	13.30	7.46
Apr	69.352	212.83	57.798	177.38	13.283	40.76	44.515	136.61	1.711	5.25	59.509	182.63	9.843	30.21	14.19
May	89.198	273.74	74.200	227.71	17.208	52.81	52.809	162.06	2.288	7.02	76.488	234.73	12.710	39.01	14.25
June	87.037	267.11	80.304	246.44	17.492	53.68	62.812	192.76	0.494	1.52	80.798	247.96	6.239	19.15	7.17
July	72.643	222.93	78.705	241.54	17.037	52.28	61.668	189.25	0.971	2.98	79.676	244.52	-7.033	-21.58	-9.68
Aug	61.438	188.55	55.683	170.88	9.094	27.91	46.589	142.98	1.064	3.27	56.747	174.15	4.691	14.40	7.64
Sept	60.421	185.43	51.060	156.70	8.785	26.96	42.275	129.74	0.891	2.73	51.951	159.43	8.470	25.99	14.02
Oct	66.266	203.36	59.275	181.91	11.150	34.22	48.125	147.69	0.629	1.93	59.904	183.84	6.362	19.52	9.60
Nov	65.112	199.82	56.848	174.46	10.236	31.41	46.612	143.05	1.180	3.62	58.028	178.08	7.084	21.74	10.88
Dec	59.338	182.10	61.078	187.44	10.153	31.16	50.925	156.28	0.775	2.38	61.853	189.82	-2.515	-7.72	-4.24
<b>Totals</b>	<b>801.252</b>	<b>2458.95</b>	<b>733.107</b>	<b>2249.82</b>	<b>151.801</b>	<b>465.86</b>	<b>577.123</b>	<b>1771.13</b>	<b>13.593</b>	<b>41.72</b>	<b>746.700</b>	<b>2291.54</b>	<b>54.552</b>	<b>167.41</b>	<b>6.81</b>

## Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2007

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	55.748	171.08	60.021	184.20	11.144	34.20	48.877	150.00	0.800	2.46	60.821	186.65	-5.073	-15.57	-9.10
Feb	52.617	161.48	45.735	140.36	8.996	27.61	36.739	112.75	0.438	1.34	46.173	141.70	6.444	19.78	12.25
Mar	66.987	205.58	49.773	152.75	9.881	30.32	39.698	121.83	4.582	14.06	54.355	166.81	12.632	38.77	18.86
Apr	72.244	221.71	67.018	205.67	11.874	36.44	54.877	168.41	0.092	0.28	67.110	205.95	5.134	15.76	7.11
May	87.574	268.75	66.581	204.33	12.034	36.93	54.318	166.70	3.376	10.36	69.957	214.69	17.617	54.06	20.12
June	97.621	299.59	79.242	243.18	13.220	40.57	66.022	202.61	13.190	40.48	92.432	283.66	5.189	15.92	5.32
July	79.486	243.93	95.540	293.20	17.647	54.16	77.483	237.79	0.469	1.44	96.009	294.64	-16.523	-50.71	-20.79
Aug	69.418	213.04	57.659	176.95	8.928	27.40	48.731	149.55	1.869	5.74	59.528	182.68	9.890	30.35	14.25
Sept	72.306	221.90	61.425	188.51	8.816	27.06	52.609	161.45	1.850	5.68	63.275	194.18	9.031	27.72	12.49
Oct	67.858	208.25	58.228	178.70	8.347	25.62	49.881	153.08	5.286	16.22	63.514	194.92	4.344	13.33	6.40
Nov	64.050	196.56	55.743	171.07	8.338	25.59	47.405	145.48	8.151	25.01	63.894	196.08	0.156	0.48	0.24
Dec	56.789	174.28	62.525	191.88	8.001	24.55	54.524	167.33	2.032	6.24	64.557	198.12	-7.768	-23.84	-13.68
<b>Totals</b>	<b>842.698</b>	<b>2586.15</b>	<b>759.490</b>	<b>2330.79</b>	<b>127.226</b>	<b>390.44</b>	<b>631.164</b>	<b>1936.97</b>	<b>42.135</b>	<b>129.31</b>	<b>801.625</b>	<b>2460.10</b>	<b>41.073</b>	<b>126.05</b>	<b>4.87</b>

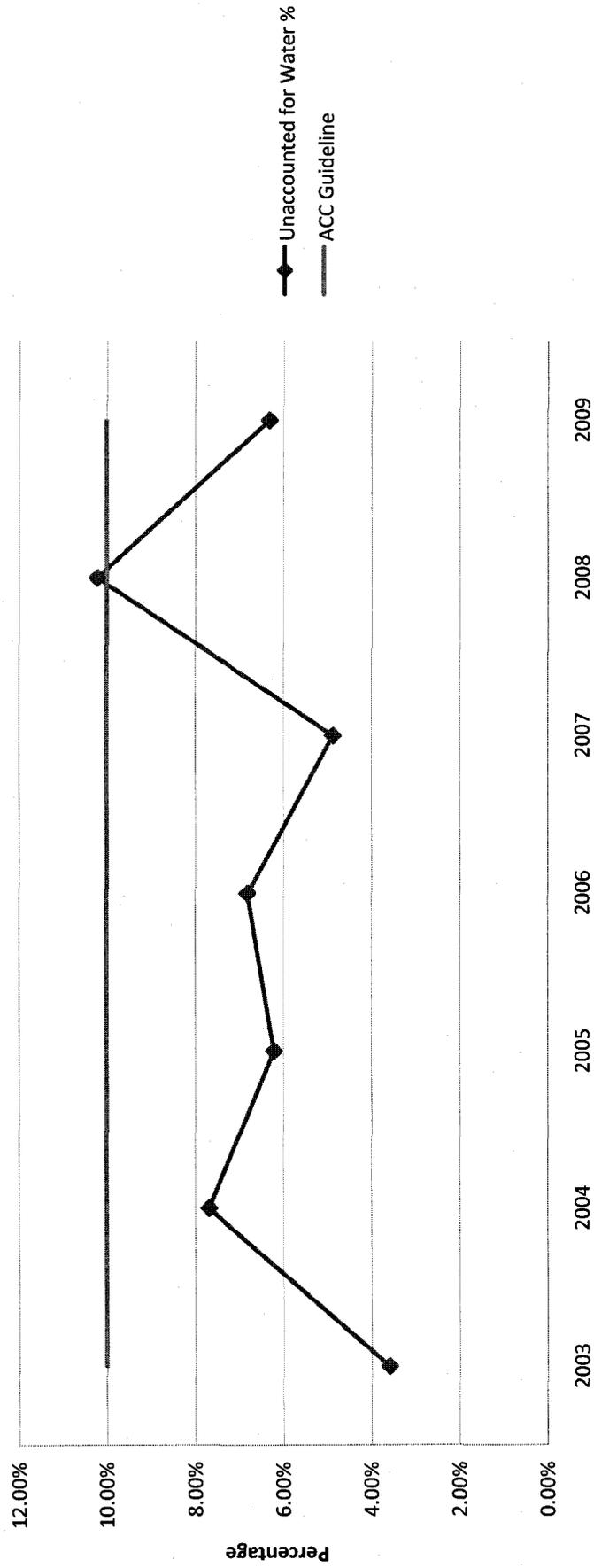
### Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2008

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	59.615	182.95	51.640	158.48	9.392	28.82	42.248	129.65	1.034	3.17	52.674	161.65	6.941	21.30	11.64
Feb	55.860	171.43	49.138	150.80	8.935	27.42	40.203	123.38	1.025	3.15	50.163	153.94	5.697	17.48	10.20
Mar	67.686	207.72	47.924	147.07	9.347	28.68	38.577	118.39	0.942	2.89	48.866	149.96	18.820	57.76	27.80
Apr	78.475	240.83	65.739	201.75	14.157	43.45	51.582	158.30	4.307	13.22	70.046	214.96	8.429	25.87	10.74
May	86.180	264.48	66.500	204.08	20.391	62.58	46.109	141.50	1.362	4.18	67.862	208.26	18.318	56.22	21.26
June	93.385	286.59	87.027	267.08	22.190	68.10	64.837	198.98	1.066	3.27	88.093	270.35	5.292	16.24	5.67
July	65.792	201.91	74.998	230.16	18.141	55.67	56.857	174.49	1.125	3.45	76.123	233.61	-10.331	-31.70	-15.70
Aug	72.031	221.06	59.955	184.00	20.468	62.81	39.487	121.18	2.393	7.34	62.348	191.34	9.683	29.72	13.44
Sept	73.199	224.64	57.964	177.88	12.631	38.76	45.333	139.12	2.353	7.22	60.317	185.11	12.882	39.53	17.60
Oct	73.549	225.71	58.038	178.11	13.391	41.10	44.647	137.02	5.291	16.24	63.329	194.35	10.220	31.36	13.90
Nov	68.563	210.41	64.345	197.47	15.630	47.97	48.715	149.50	5.844	17.93	70.189	215.40	-1.626	-4.99	-2.37
Dec	60.872	186.81	54.001	165.72	11.255	34.54	42.746	131.18	3.781	11.60	57.782	177.33	3.090	9.48	5.08
<b>Totals</b>	<b>855.207</b>	<b>2624.53</b>	<b>737.269</b>	<b>2262.60</b>	<b>175.928</b>	<b>539.90</b>	<b>561.341</b>	<b>1722.69</b>	<b>30.523</b>	<b>93.67</b>	<b>767.792</b>	<b>2356.27</b>	<b>87.415</b>	<b>268.27</b>	<b>10.22</b>

### Rio Rico Utilities Inc., Sold and Unaccounted for Water, 2009

Month	Total Pumped		Total Sold		Comm. Sold		Residential Sold		Company Use		Accounted For		Unaccounted For		Unacct. %
	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	MG	Ac. Ft.	MG's	Ac. Ft.	MG's	Ac. Ft.	
Jan	61.249	187.97	52.593	161.40	10.762	33.03	41.831	128.37	4.760	14.61	57.353	176.01	3.896	11.96	6.36
Feb	57.854	177.55	44.809	137.51	7.288	22.37	37.521	115.15	3.061	9.39	47.870	146.91	9.984	30.64	17.26
Mar	82.946	254.55	51.760	158.85	9.619	29.52	42.141	129.33	6.118	18.78	57.878	177.62	25.068	76.93	30.22
Apr	75.803	232.63	60.918	186.95	10.735	32.94	50.183	154.01	5.760	17.68	66.678	204.63	9.125	28.00	12.04
May	89.563	274.86	68.246	209.44	12.023	36.90	56.223	172.54	9.149	28.08	77.395	237.52	12.168	37.34	13.59
June	88.936	272.93	80.618	247.41	14.793	45.40	65.825	202.01	10.760	33.02	91.378	280.43	-2.442	-7.49	-2.75
July	79.091	242.72	70.680	216.91	11.722	35.97	58.985	181.02	16.293	50.00	86.973	266.91	-7.882	-24.19	-9.97
Aug	89.391	274.33	68.699	210.83	12.736	39.09	55.963	171.74	11.731	36.00	80.430	246.83	8.961	27.50	10.02
Sept	79.619	244.34	66.963	205.50	12.685	38.93	54.278	166.57	18.660	57.27	85.623	262.77	-6.004	-18.43	-7.54
Oct	76.218	233.90	63.813	195.83	10.617	32.58	53.196	163.25	14.962	45.92	78.775	241.75	-2.557	-7.85	-3.35
Nov	67.833	208.17	57.489	176.43	8.667	26.60	48.822	149.83	14.908	45.75	72.397	222.18	-4.564	-14.01	-6.73
Dec	62.763	192.61	45.254	138.88	7.628	23.41	37.626	115.47	5.800	17.80	51.054	156.68	11.709	35.93	18.66
<b>Totals</b>	<b>911.266</b>	<b>2796.57</b>	<b>731.842</b>	<b>2245.94</b>	<b>129.275</b>	<b>396.73</b>	<b>602.594</b>	<b>1849.29</b>	<b>121.962</b>	<b>374.29</b>	<b>853.804</b>	<b>2620.23</b>	<b>57.462</b>	<b>176.34</b>	<b>6.31</b>

# RRUI Non-Account Water



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5  
6 **BEFORE THE ARIZONA CORPORATION COMMISSION**

7  
8  
9 IN THE MATTER OF THE  
APPLICATION OF RIO RICO  
10 UTILITIES, INC., AN ARIZONA  
CORPORATION, FOR A  
11 DETERMINATION OF THE FAIR  
VALUE OF ITS UTILITY PLANTS AND  
PROPERTY AND FOR INCREASES IN  
12 ITS WATER AND WASTEWATER  
RATES AND CHARGES FOR UTILITY  
13 SERVICE BASED THEREON.

DOCKET NO: WS-02676A-09-0257

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15  
16 **REBUTTAL TESTIMONY OF**

17 **PETER EICHLER**

18  
19 **February 1, 2010**  
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TABLE OF CONTENTS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26

I. INTRODUCTION AND PURPOSE OF TESTIMONY ..... 1

II. SUMMARY OF TESTIMONY ..... 2

III. ALGONQUIN/LIBERTY WATER SHARED SERVICES MODEL AND  
AFFILIATE COST ALLOCATION METHODOLOGY ..... 3

IV. REBUTTAL TO STAFF AND RUCO ADJUSTMENTS TO CENTRAL  
COST ALLOCATIONS..... 19

    A. Rebuttal to Staff. .... 19

    B. Rebuttal to RUCO ..... 32

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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Peter Eichler. My business address is 2485 Bristol Circle, Oakville,  
4 Ontario L6A 7H7.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

6 A. I am providing this rebuttal testimony on behalf of Rio Rico Utilities, Inc. ("RRUI"  
7 or the "Company").

8 **Q. DID YOU PREVIOUSLY PROVIDE TESTIMONY ON BEHALF OF THE  
9 COMPANY IN THIS CASE?**

10 A. No.

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

12 A. Currently, I am employed by Liberty Water Canada as Manager of Financial  
13 Planning & Analysis.

14 **Q. PLEASE SUMMARIZE YOUR WORK RESPONSIBILITIES?**

15 A. I am in charge of financial planning for Liberty Water, including ensuring overall  
16 accountability for rate cases. I am also responsible for analyzing regulatory related  
17 accounting and finance issues and responding to related discovery issues.

18 **Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?**

19 A. I have been employed at Liberty Water for approximately 6 months. Prior to my  
20 employment at Liberty Water, I spent 4 years at regulated electrical utilities in  
21 Ontario, Canada, working in the areas of Corporate Finance, Ratemaking and  
22 Regulatory Affairs.

23 I am a designated accountant, having received the Certified Management  
24 Accountant (CMA) designation in Canada. That designation is similar to a  
25 Certified Public Accountant designation in the United States. In addition, I have  
26 completed a Masters of Business Administration degree from the University of

1 Windsor in Ontario, Canada, and have a Bachelor of Commerce degree with a  
2 specialization in Finance from Ryerson University, in Toronto, Canada.

3 **Q. DO YOU HAVE ANY SPECIALIZED TRAINING RELATED TO UTILITY**  
4 **RATEMAKING?**

5 A. In addition to my work experience, I have also completed NARUC's Utility School  
6 in November, 2009.

7 **II. SUMMARY OF TESTIMONY**

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

9 A. The purpose of my rebuttal testimony is to provide a detailed explanation of  
10 Liberty Water's affiliate cost allocation methodology in response to the direct  
11 testimonies of Mr. Gerald W. Becker on behalf of Commission Staff and  
12 Mr. Timothy J. Coley on behalf of RUCO relating to Liberty Water's affiliate cost  
13 allocations to RRUI.

14 Based on my review of Staff's and RUCO's testimony, it appears that Staff  
15 and RUCO do not fully understand our affiliate cost methodology and the benefits  
16 provided to RRUI and our other regulated utilities in Arizona through services  
17 provided by Algonquin Power Trust ("APT") and Algonquin Water Services d/b/a  
18 Liberty Water ("Liberty Water"). Both Staff and RUCO seem intent on opposing  
19 RRUI's affiliate cost allocations from APT, irrespective of the undisputed evidence  
20 that RRUI provides high quality utility service at a reasonable cost. In this rebuttal  
21 testimony, I provide a detailed explanation of the affiliate cost allocation  
22 methodology used by the regulated utility affiliates of Liberty Water Company,  
23 Inc. ("LWC") including RRUI, Litchfield Park Service Company, Black Mountain  
24 Sewer Company, Gold Canyon Sewer Company, Bella Vista Water Company,  
25 Northern Sunrise Water Company, and Southern Sunrise Water Company

26

1 (collectively the "Regulated Utilities"). The Regulated Utilities are wholly-owned  
2 subsidiaries of LWC, which is owned by Algonquin Power Income Fund ("APIF").

3 We have prepared a detailed paper entitled "Liberty Water Affiliate Cost  
4 Allocation Methodology," which is attached to my testimony as **Exhibit PE-RB1**.  
5 That paper explains in detail all of the affiliate cost allocations to the Regulated  
6 Utilities by Liberty Water and APT. That paper also demonstrates the substantial  
7 benefits that RRUI and its customers receive from the services provided by APT.  
8 This document was previously disclosed in this case in response to data request  
9 GWB 4.2.

10 **III. ALGONQUIN/LIBERTY WATER SHARED SERVICES MODEL AND**  
11 **AFFILIATE COST ALLOCATION METHODOLOGY**

12 **Q. PLEASE EXPLAIN APIF'S CORPORATE STRUCTURE AND BUSINESS**  
13 **MODEL.**

14 A. APIF's primary business is ownership of generating and infrastructure facilities  
15 through investments in securities of subsidiaries. APIF owns 46 electric facilities  
16 and 17 water distribution and wastewater treatment facilities in Canada and the  
17 United States. APIF also owns an electric facility that was not active during the  
18 test year and is not expected to be active in the foreseeable future. Finally, APIF  
19 has an operating interest in seven other facilities, but does not own them. As such,  
20 these facilities do not receive the same benefits as those both owned and operated  
21 by the APIF group of companies and are not therefore allocated APIF/APT costs in  
22 the same manner.

23 **Q. PLEASE SUMMARIZE THE SHARED SERVICES MODEL AND THE**  
24 **RELATIONSHIP BETWEEN RRUI, LIBERTY WATER, AND**  
25 **ALGONQUIN POWER TRUST (APT).**  
26

1 A. There are two main components to this shared services model. First, Liberty Water  
2 provides the day to day operating services and costs associated with the operations  
3 of all its utilities including our RRUI facility. You could call these direct costs.  
4 These costs include operations labor costs charged directly based on timesheets;  
5 customer service and finance wages allocated based on customer count; and other  
6 administration costs related to the day to day operations of the facility allocated  
7 based on a four-factor formula which uses revenue, cost, capital, and customer  
8 count as the four drivers of cost. RUCO and Staff generally do not have any  
9 objections to the cost allocations from Liberty Water.

10 Second, APT provides the corporate administration costs associated with the  
11 running of a company, including costs associated with being a publicly traded  
12 company, to support all of its power generation and infrastructure facilities  
13 (including utilities). These are indirect costs, including the rent for the central  
14 office where all the staffing works, strategic planning costs, audit, tax services, unit  
15 holder communication, trustee fees, and other costs. These costs are allocated to  
16 Liberty Water based on the relative number of utilities to total facilities and then  
17 further allocated by Liberty Water to each utility based on customer count.

18 **Q. IS THAT APPROACH CONSISTENT WITH THE NARUC GUIDELINES**  
19 **ON COST ALLOCATION?**

20 A. Yes. Staff and RUCO have criticized the APT allocations for not conforming to  
21 the NARUC guidelines because costs that can be directly charged should be  
22 directly charged. Our methodology does exactly that. APT costs are all indirect  
23 costs, whereas Liberty Water (AWS) costs are mostly direct costs. Therefore,  
24 where appropriate, costs have been directly charged.

25 **Q. ON PAGES 46-47 OF HIS TESTIMONY, RUCO WITNESS MR. COLEY**  
26 **ASSERTS THAT RRUI HAS FAILED TO REPORT THE APT**

1           **ALLOCATED COSTS AS DIRECT OR INDIRECT COSTS. IS THAT**  
2           **CRITICISM ACCURATE?**

3       A.    No. RRUI has complied with the terms and conditions set forth in the NARUC  
4           Guidelines for Cost Allocations and Affiliate Transactions. As noted above, RRUI  
5           has reported all of the APT costs as indirect costs. Under the NARUC Guidelines,  
6           “indirect costs” are defined as “costs that cannot be identified with a particular  
7           service or product. This includes, but is not limited to, overhead costs,  
8           administrative and general, and taxes.” Further, RUCO and Staff ignore the  
9           definition of “common costs” in the NARUC Guidelines, which provides (on page  
10          2) that common costs are “costs associated with services or products that are of  
11          joint benefit between regulated and non-regulated business units.” The Guidelines  
12          provide that “cost allocations” “can be based on the origin of the costs, as in the  
13          case of cost drivers; cost-causative linkage of an indirect nature; or one or more  
14          overall factors (also known as general allocators).” The cost allocation  
15          methodology used by APIF and Liberty Water for RRUI and the other Arizona  
16          subsidiaries follows these NARUC Guidelines.

17                 We also have allocated direct costs to RRUI “to the maximum extent  
18                 practicable.” The APT central office cost pool simply cannot be allocated directly  
19                 as a practical matter. In turn, the NARUC Guidelines provide that the “general  
20                 method of allocating indirect costs should be on a fully allocated basis.” We have  
21                 done exactly that by allocating direct costs from Liberty Water and indirect costs  
22                 from APT.

23       **Q.    WHY ARE STAFF AND RUCO CONCERNED WITH COMPLIANCE**  
24       **WITH A GUIDANCE DOCUMENT?**

25       A.    Staff’s and RUCO’s primary concern with our cost allocation model seems to be  
26           potential subsidization by RRUI’s ratepayers for business operations by

1 unregulated entities. As stated in the NARUC Guidelines, the “objective of the  
2 affiliate transactions’ guidelines is to lessen the possibility of subsidization in order  
3 to protect monopoly ratepayers...” Here, there is no evidence of subsidization by  
4 RRUI’s ratepayers. Rather, approximately 73% of the entire Central Office Cost  
5 pool is allocated to unregulated electric facilities. Only 27% of the cost pool is  
6 allocated to regulated utilities, such as RRUI. In fact, RRUI only gets 3.49% of the  
7 total APT cost. The APT costs are allocated to RRUI based on customer count,  
8 which is a reflection of RRUI’s use and need for those services provided by APT.

9 **Q. DO YOU HAVE ANY OTHER COMMENTS ON THE NARUC**  
10 **GUIDELINES?**

11 A. Yes. While the Company is in general conformance with the guidelines, I would  
12 like to note that the guidelines themselves state that: “These Guidelines are not  
13 intended to be rules or regulations prescribing how cost allocations and affiliate  
14 transactions are to be handled.” Further, the Guidelines go on to state that “The  
15 Guidelines acknowledge and reference the use of several different practices and  
16 methods. It is intended that there be latitude in the application of these guidelines,  
17 subject to regulatory oversight.” These statements clearly indicate that while the  
18 Company does subscribe to the Guidelines, they are and always were meant to be a  
19 set of *guiding* principles, and not a set of rules or laws prescribing allocation  
20 methodologies.

21 **Q. PLEASE CONTINUE.**

22 A. The NARUC Guidelines also make a very clear statement that “Too much  
23 flexibility will lead to subsidization, however, if the affiliate transaction pricing  
24 guidelines are too rigid, economic transactions may be discouraged.” Clearly,  
25 disallowing almost all of the indirect costs, as Staff and RUCO have done, heavily  
26 discourages APT, Liberty Water and RRUI to undertake what are otherwise

1 economic transactions and such prohibition by Staff/RUCO does not comply with  
2 the NARUC Guidelines.

3 **Q. DOES APIF'S BUSINESS MODEL PROVIDE BENEFITS TO**  
4 **REGULATED UTILITIES SUCH AS RRUI?**

5 A. Yes. APIF is publicly traded on the Toronto Stock Exchange. APIF's structure as  
6 a publicly traded income fund provides substantial benefits to its Regulated  
7 Utilities through access to capital markets, strategic management, professional  
8 administrative staff, strong corporate governance and financial controls. As APIF  
9 has a duty to its shareholders to act in accordance with laws and regulations in  
10 areas in which it operates, the very nature of APIF requires the utilities to be run  
11 prudently with a keen eye on cost control in order to ensure that costs are  
12 justifiable to regulators. Further, as I mention below, APIF's business model  
13 allows utilities such as RRUI to operate efficiently and with reduced operating  
14 costs. Essentially, APIF's business model allows RRUI and the other Arizona  
15 utilities to provide high quality utility service at low costs.

16 **Q. DOES APIF GENERATE REVENUES FROM THE COSTS INCURRED BY**  
17 **APT?**

18 A. The costs, absent the utilities and facilities owned by APIF, would not generate any  
19 revenues if incurred on a standalone basis. In other words, APIF has no business  
20 other than operating the utilities and facilities it owns.

21 **Q. WHO ARE APIF'S UNIT HOLDERS?**

22 A. The Shareholders are both institutional and retail investors. Approximately 20% of  
23 Algonquin's shares are held by institutions, and are included as part of various  
24 pension funds, mutual funds, and monthly dividend and income funds, all of which  
25 appeal to long term investors looking to invest for savings and retirement purposes.  
26 Approximately 80% of Algonquin's shares are held directly by retail investors

1 (individuals) who look for a stable, sustainable level of income in the form of  
2 dividend payments. Approximately 30% of Algonquin's shares are held by  
3 investors in the United States.

4 **Q. THANK YOU, MR. EICHLER. CONTINUING NOW WITH YOUR**  
5 **DISCUSSION OF THE SHARED SERVICES MODEL, WHAT SPECIFIC**  
6 **SERVICES ARE PROVIDED TO THE REGULATED UTILITIES BY**  
7 **LIBERTY WATER?**

8 A. RRUI and the other Regulated Utilities in Arizona do not operate as stand-alone  
9 utilities. As I testified above, RRUI is operated by Algonquin Water Services,  
10 which operates under the name Liberty Water, along with six other regulated  
11 Arizona water and sewer utilities, and eleven regulated water and sewer providers  
12 located in Texas, Missouri and Illinois. Liberty Water provides all of the day-to-  
13 day administration and operations personnel for these regulated utilities.

14 **Q. HOW ARE COSTS INCURRED BY LIBERTY WATER ALLOCATED TO**  
15 **RRUI?**

16 A. All operations and engineering labor is directly charged by Liberty Water to RRUI  
17 and the other separate Regulated Utilities operated by Liberty Water. Liberty  
18 Water charges those labor rates at cost, which is the dollar hourly rate per  
19 employee as recorded in Liberty Water's job costing system, grossed up by 35%  
20 for burdens such as payroll taxes, health benefits, 401k retirement plans, and other  
21 insurance provided to employees. Engineering technical labor, which is mostly  
22 capitalized, is charged on the same basis, plus an allocation of 10% for Liberty  
23 Water's overheads such as rent, materials/supplies, etc. Liberty Water has its own  
24 offices, separate from the offices where I work in Oakville, Ontario.

25 Other necessary services provided by Liberty Water for the Regulated  
26 Utilities cannot be directly charged to RRUI and the other Regulated Utilities.

1 Labor for health and safety, accounting, billing and customer service, human  
2 resources, and corporate finance cannot be directly allocated using timesheets due  
3 to the nature of the costs. It simply isn't practical to keep track of time for  
4 employees that serve multiple utilities in small time increments during the course  
5 of a work-day. A shared call center is the perfect example. A customer service  
6 representative at Liberty Water's call center will field calls from customers of  
7 RRUI, Black Mountain and Bella Vista in southern Arizona and the three other  
8 states. This work directly benefits all of the Regulated Utilities, so the costs need  
9 to be allocated to all of them. These costs are allocated based on the relative  
10 customer counts of all of the Regulated Utilities. Using customer counts allows  
11 Liberty Water to allocate those costs to an individual utility, such as RRUI, based  
12 on the relative burden of that utility relating to those services.

13 Overhead costs, like rent, insurance, administration costs, depreciation of  
14 office furniture and computers, also cannot be directly attributed to specific  
15 utilities. These costs are allocated to RRUI and its affiliates by use of a "four  
16 factor" methodology that considers relative size through four weighted factors –  
17 total plant, total customers, expenses and labor. I understand that this type of four-  
18 factor methodology has been utilized by other Arizona utilities, including  
19 Chaparral City Water Company and Global Water. All of the costs charged by  
20 Liberty Water and allocated to RRUI are based on actual costs, either directly  
21 charged or through the allocations described above.

22 **Q. ARE THE CHARGES FROM LIBERTY WATER INCURRED IN US**  
23 **DOLLARS?**

24 **A.** Almost all of the costs charged from Liberty Water are incurred in US dollars.  
25 This includes payroll for office and field staff in Arizona, benefits, etc. The few  
26 costs that are incurred in Canadian dollars are currency translated on a monthly

1 basis using the average exchange rate for that month, in accordance with Generally  
2 Accepted Accounting Principles.

3 **Q. HOW ARE OPERATIONS AND ENGINEERING LABOR COSTS**  
4 **ALLOCATED BY LIBERTY WATER?**

5 A. Those costs are billed directly to the Regulated Utility that required the labor, as  
6 documented by time sheets. Appendix 2 of **Exhibit PE-RB1** is an example time  
7 sheet used by Liberty Water. Those direct charges are principally direct labor,  
8 including operations and engineering. For example, the costs for a plant operator  
9 working solely for RRUI will be directly charged to RRUI without any further  
10 allocation necessary. Liberty Water directly charges RRUI at cost.

11 **Q. OKAY. WHAT ABOUT ACCOUNTING, BILLING AND CUSTOMER**  
12 **SERVICE LABOR COSTS INCURRED BY LIBERTY WATER?**

13 A. Liberty Water also incurs labor costs for accounting, billing, and customer service,  
14 human resources, health and safety, and corporate finance, which are necessary for  
15 RRUI to provide adequate and reliable water and wastewater service to customers.  
16 Those costs, however, cannot be allocated to each Regulated Utility using time  
17 sheets due to the nature of the costs. It is not practical to keep track of time for  
18 employees that serve multiple utilities during the course of a work day. For  
19 example, an accounting analyst may analyze the financial performance of all  
20 Regulated Utilities at the same time. Her accounting work benefits all such  
21 Regulated Utilities, so her services and costs would be allocated to all Regulated  
22 Utilities. Likewise, a customer service representative at Liberty Water's call center  
23 will field calls from customers of all Regulated Utilities during a work day. Again,  
24 his work directly benefits all such Utilities and his costs should be allocated to all  
25 Regulated Utilities. The key metric driver for this cost allocation was determined  
26

1 to be the customer count. Management believes that most of the customer service  
2 and finance functions are driven by the number of customers for each utility.

3 **Q. FINALLY, HOW DOES LIBERTY WATER ALLOCATE ITS OVERHEAD**  
4 **COSTS TO RRUI?**

5 A. Costs incurred by Liberty Water for rent, administrative costs, depreciation of  
6 office furniture, depreciation of computers, and other labor cannot be directly  
7 attributed to a specific Regulated Utility. As such, those overhead and  
8 administrative costs are allocated to the Regulated Utilities by use of the “four  
9 factor” methodology. Other costs in this category include insurance, janitorial  
10 services and other general non-payroll costs.

11 The “four factor” methodology allocates costs by relative size of the  
12 utilities. The methodology used by Liberty Water involves (1) Rate Base, (2) Total  
13 Customers, (3) Non-Labor Expenses and (4) Labor as allocating factors, with each  
14 factor assigned a specific weight. Liberty Water developed and utilized this  
15 methodology, including all 17 of its utilities, to better allocate costs, recognizing  
16 that larger utilities require more time and management attention and incur greater  
17 costs than smaller ones.

18 **Q. DOES RRUI AND ITS CUSTOMERS BENEFIT FROM THE SERVICES**  
19 **PROVIDED BY LIBERTY WATER?**

20 A. Yes, in several ways. To start, customers of Liberty Water receive significant  
21 benefits from this cost allocation model, including lower costs incurred by the  
22 Regulated Utilities for services that are essential and necessary to the provision of  
23 high quality water and wastewater utility service. The benefits of this type of  
24 shared service model include savings on labor costs by resource sharing. Since  
25 most Liberty Water employees are not dedicated to a specific utility, the utilities do  
26 not need to hire their own dedicated staff, thus resulting in significant cost savings.

1           Likewise, the four factor allocations allow for utilities to be charged by  
2 relative resources and management attention required to operate them. This means  
3 customers of smaller utilities do not subsidize costs of larger utilities. Essentially,  
4 this allocation methodology allows costs to be allocated based on the relative  
5 burdens and costs incurred by individual utilities. Further, because it's scalable,  
6 the shared services model allows for increased growth with less than proportional  
7 cost increases, meaning the Regulated Utilities can grow without incurring a  
8 proportionate or prohibitive increase in the cost of service.

9   **Q.   WHAT SERVICES ARE PROVIDED TO THE REGULATED UTILITIES**  
10 **BY APT?**

11   A.   APT is the affiliate that provides financial, strategic management, compliance,  
12 administrative and support services to the Regulated Utilities operated by Liberty  
13 Water. The costs incurred are corporate administrative costs; they are not labor  
14 costs. As such, these are indirect costs incurred by APT as necessary to run a  
15 company that is part of an Income Fund. APIF then allocates a share of the costs  
16 incurred by its operating arm APT in providing necessary and required services to  
17 the Regulated Utilities. The head office of APT is located in Oakville, Ontario,  
18 Canada and provides administrative, technical and management support, regulatory  
19 compliance, and oversight of strategic direction, including approvals of budgets  
20 and ensuring a strict level of corporate governance for RRUI and all of the utilities  
21 operated by Liberty Water. APT's executive management and administrative  
22 support includes accounting and finance, human resources, employee benefits,  
23 regulatory and information systems services.

24   **Q.   DOES APT CONDUCT ANY OTHER BUSINESS?**

25   A.   No. APT exists solely for the benefit of the utilities and other facilities APIF owns.  
26   APT does not have any business, other than to provide administrative services to

1 the utilities and the other facilities. If those utilities and other facilities did not  
2 exist, APT and all of these indirect corporate administrative costs would not exist.

3 **Q. BUT HOW DO THESE SERVICES PROVIDED BY APT BENEFIT RRUI**  
4 **AND THE OTHER REGULATED UTILITIES?**

5 A. First, the services provided by APT are necessary to allow RRUI and the other  
6 Regulated Utilities to have access to capital markets for capital projects and  
7 operations. In today's market place, the importance of ready access to capital can't  
8 be understated. Many stand alone Arizona utilities simply do not have the steady  
9 access to capital that is available to RRUI under the APIF corporate model. Far  
10 West Sewer & Water Company is a perfect example.<sup>1</sup> Absent consistent access to  
11 capital, RRUI would not be able to provide a high level of service.

12 One of the fatal flaws in Staff's and RUCO's comparisons of APIF's cost  
13 allocations to stand-alone utilities is the assumption that stand-alone utilities  
14 provide the same level and security of service as provided under APIF's business  
15 model. That simply isn't true as demonstrated by service and financial problems  
16 experienced by various stand-alone utilities including Far West and the McLain  
17 utilities.<sup>2</sup> In addition, RRUI receives benefits by having strategic direction,  
18 corporate governance, financial controls, and an audit done at the Income Fund  
19 level which reduces the audit requirements upon RRUI. All of these costs ensure  
20 that the Income Fund has a long term strategic direction and remains healthy. This  
21 definitely benefits RRUI's long term health for a fraction of the price. Many small  
22 privately run utilities may not have all of these costs, but history has demonstrated  
23 that without these strategic corporate administrative costs and costs associated with  
24

25 <sup>1</sup> See *Far West Water and Sewer Company*, Decision No. 71447 (December 23, 2009).

26 <sup>2</sup> See *id.*; *Northern Sunrise Water Company and Southern Sunrise Water Company*, Decision No. 68826  
(June 29, 2006), *et. seq.*

1 raising capital, the long term well being of the utility is compromised. We and the  
2 Commission know too well the real cost of under-capitalized, under-operated  
3 stand-alone utilities.

4 **Q. BUT MR. EICHLER, RRUI IS NOT PUBLICLY TRADED, SO WHY DOES**  
5 **IT NEED THESE SERVICES?**

6 A. For the reason I just mentioned. RRUI is a healthy utility when viewed on a stand-  
7 alone basis because it is part of the Algonquin/Liberty Water shared services  
8 model. The same is now true of Black Mountain, Gold Canyon, and we hope soon,  
9 the former McLain water companies. While none of these entities is publicly  
10 traded, they are part of a structure and model that includes a publicly traded entity  
11 at the top. This model works, ratepayers get the service they deserve and, at least  
12 in theory, the investors get a return.

13 I really can't understate how much we believe the Regulated Utilities  
14 benefit from strategic direction on long term capital and operational needs and  
15 requirements. This type of strategic planning allows for the parent to enable RRUI  
16 to plan for future long term capital needs. All of these costs relate to the promotion  
17 of long term health of the entire organization, and that is a definite benefit for  
18 RRUI and its ratepayers. Besides, whether RRUI is publicly traded or not, it  
19 should have proper corporate governance. Good business requires good  
20 governance, financial planning, strategic management, audits, tax services etc. It  
21 promotes a healthy company with long term objectives and easier access to capital.  
22 Even if RRUI was not part of a larger corporation, it should have a board of  
23 directors to oversee management with a long term strategic focus. Smaller utilities  
24 that are not part of a larger corporation usually do not have good corporate  
25 governance. Again, I refer back to the McLain and Far West systems. McLain in  
26 particular had poor corporate governance and lacked a long term strategy resulting

1 in inadequate treatment, storage and an unreliable distribution system. In other  
2 words, RRUI being part of a publicly traded company that shares these costs  
3 among many facilities reaps the benefits of these services but at a fraction of the  
4 price.

5 **Q. PLEASE PROVIDE FURTHER DETAIL ON COSTS INCURRED BY APT.**

6 A. As I testified above, there are no direct labor costs included in the corporate  
7 administration "Central Office Cost" allocation from APT. Instead, these costs  
8 include professional services like third-party legal services, accounting services,  
9 tax planning and filings, management and trustee (board of director) fees, and  
10 required auditing that are done for the benefit of all of the Liberty Water Regulated  
11 Utilities, including RRUI. Other corporate administrative costs include costs for  
12 licenses, fees and permits, information technology/systems, payroll, and HRIS  
13 maintenance contracts, as well as the rent and depreciation of office furniture and  
14 equipment and computers in the central office in Oakville, Ontario.

15 **Q. HOW ARE THE COSTS INCURRED BY APT ALLOCATED TO RRUI?**

16 A. Fees for these services are allocated to the Regulated Utilities using generally  
17 accepted allocation principles, which are accepted by the audit firm used by  
18 Algonquin. These services are routine and recurring in nature and performed on a  
19 regular basis in normal business for Liberty Water and its Regulated Utilities.

20 These indirect administration Central Office Costs are allocated to RRUI in  
21 two phases. The first phase involves allocating these costs to each of the facilities,  
22 both regulated and unregulated, owned by APIF. That initial allocation is made  
23 based on relative size. Specifically, APIF owns and operates 63 total entities, 17 of  
24 which are the Regulated Utilities operated by Liberty Water. In turn, 17 of 63 is  
25 26.98%, which means 26.98 percent of the total Central Office Costs are allocated  
26 to the Regulated Utilities operated by Liberty Water. The second phase is that

1 Liberty Water allocates the Central Office Costs between RRUI and the 16 other  
2 Regulated Utilities based on customer counts.

3 **Q. WHY WEREN'T OTHER ALLOCATION DRIVERS, SUCH AS REVENUE,**  
4 **PLANT, OR EXPENSES USED?**

5 A. We have analyzed these other drivers, and when weighted equally, the result is  
6 usually an allocation of 20-30%, as can be seen in attached **Exhibit PE-RB2**. For  
7 the purposes of simplicity, we decided to use facility count. Our allocation  
8 methodology complies with the NARUC Guidelines and results in a reasonable  
9 allocation of necessary costs to RRUI. Having said that, if the Commission feels  
10 that use of a blended allocation methodology, such as the one shown in **Exhibit**  
11 **PE-RB2**, is preferable, the Company would consider adopting the blended  
12 methodology.

13 **Q. WHY NOT JUST USE REVENUE AS THE SOLE ALLOCATION**  
14 **FACTOR?**

15 A. Because the purpose of the cost allocations is to appropriately apportion costs  
16 where they are incurred. Revenue is not directly comparable between the utilities  
17 and power generation businesses. For example, in 2008, the utilities division  
18 accounted for 29% of the total controllable operating costs of APIF while only  
19 producing 17% of the revenue. This indicates that greater levels of input  
20 (expenses) are required to drive revenues on the utilities side than the power  
21 generation side. Therefore, allocating based on revenue alone is not consistent  
22 with the purpose of the allocations.

23 **Q. PLEASE CONTINUE.**

24 A. In addition, revenues for the power generation side of the business are highly  
25 volatile and fluctuate greatly with economic conditions. As the economy improves  
26 the price of electricity generated increases, and vice versa. Due to the nature of the

1 commodity, it is too volatile from year to year to be a reasonable allocator on its  
2 own.

3 **Q. WHY DOESN'T LIBERTY WATER ALLOCATE THESE COSTS ON A**  
4 **DIRECT BASIS TO THE REGULATED UTILITIES?**

5 A. Because there is no specifically identifiable driver. For example, costs such as  
6 ERP system consultation, depreciation costs incurred on computer servers and  
7 office furniture, as well as the other costs charged from APT, benefit the whole  
8 family of companies and cannot be directly charged to each utility on any  
9 reasonable driver. These costs are procured collectively and incurred on behalf of  
10 all of the assets owned, and while there is a definite benefit to the Regulated  
11 Utilities and their customers, directly charging these types of costs to the 63  
12 separate operating assets would not be possible. Both Staff and RUCO incorrectly  
13 state that these costs could be directly billed by vendors and allocated to RRUI.  
14 That simply isn't true.

15 Further, the cost allocation methodology ensures that the costs are allocated  
16 as closely as possible to the originator of those costs. An entity such as RRUI with  
17 8,300 water and sewer customers benefits more from these costs than BMSC with  
18 only 2,000 wastewater ratepayers. RRUI's total of 8,379 customers is  
19 approximately 13% of Liberty Water's 17 Regulated Utilities' total of 68,783 water  
20 and wastewater customers, which means RRUI is allocated 13% (8,279/64,094) of  
21 the Central Office Cost pool. The fundamental principle of this methodology is  
22 that RRUI and the other Regulated Utilities should be charged for all costs incurred  
23 by affiliates—both Liberty Water and APT—so that the Regulated Utilities can  
24 provide a high level of safe and reliable water and wastewater utility service to  
25 customers at a very reasonable cost for such service. If Staff and RUCO continue  
26 to oppose the cost allocations from APT, then APT may cease providing those

1 services to RRUI and the other Arizona utilities, which may cause service quality  
2 to decline and operating costs to increase. It also doesn't seem to make sense for  
3 Staff and RUCO to encourage Arizona utilities to operate as stand-alone companies  
4 given the number of problems and failures that have occurred with stand-alone  
5 utilities. Rather, the Commission should be encouraging owners like APIF that  
6 will consolidate operations under a shared-services umbrella and who are able to  
7 invest capital in this state.

8 **Q. GIVEN ALL YOU HAVE DISCUSSED SO FAR IN THIS TESTIMONY,**  
9 **MR. EICHLER, IS IT SAFE TO SAY THAT YOU DISAGREE WITH**  
10 **BOTH STAFF AND RUCO THAT MOST, IF NOT ALL, OF THE**  
11 **SERVICES PROVIDED BY APT ARE FOR THE SOLE BENEFIT OF**  
12 **APIF'S UNIT-HOLDERS OR INVESTORS?**

13 **A.** I completely disagree. The utility industry is highly capital intensive. How can  
14 providing corporate strategic direction, and costs associated with access to capital  
15 markets not benefit RRUI? There is tremendous benefit, as seen from the success  
16 of our efforts in Arizona in the past decade. And it's immaterial that APIF does all  
17 this for a profit. So what? So does RRUI, Black Mountain, APS, Southwest Gas,  
18 Arizona American and Chaparral City, and all of their corporate parents. Instead,  
19 that APIF is in the business of making a profit provides additional incentive to  
20 tightly control these corporate costs, considering that approximately 73% are  
21 allocated to the non-regulated business. The bottom line, in our corporate  
22 structure, is a healthy "parent" means a healthy "child". Perhaps this is why  
23 neither Staff nor RUCO provide any persuasive evidence supporting their claims  
24 that RRUI does not benefit from the services provided by APT.

25 Both Mr. Becker and Mr. Coley generally claim that the services provided  
26 by APT are not attributable to RRUI and primarily benefit APIF's shareholders.

1 But neither explains the basis for this conclusion. In reality, the services provided  
2 by APT are part of the APIF corporate model, which allows RRUI to provide high  
3 quality, cost-effective service. The costs incurred by APT are generated solely and  
4 exclusively to provide services to RRUI and the other regulated utilities. The  
5 notion that APT would incur those costs without RRUI or the other regulated  
6 utilities is inaccurate.

7 **IV. REBUTTAL TO STAFF AND RUCO ADJUSTMENTS TO CENTRAL**  
8 **COST ALLOCATIONS.**

9 **A. Rebuttal to Staff.**

10 **Q. ON PAGE 28 OF HIS DIRECT TESTIMONY, MR. BECKER SAYS THAT**  
11 **“WHEN COSTS INCURRED PRIMARILY FOR THE BENEFIT OF AN**  
12 **UNREGULATED AFFILIATE’S BUSINESS ARE IDENTIFIED AND**  
13 **ALLOCATED AS OVERHEAD/COMMON COSTS, THEN THE COSTS OF**  
14 **THE UNREGULATED AFFILIATE ARE SHIFTED TO THE CAPTIVE**  
15 **CUSTOMERS OF THE REGULATED UTILITY. DO YOU AGREE WITH**  
16 **THAT STATEMENT?**

17 **A. No. As I’ve mentioned above, APIF would not incur these costs if not for all of the**  
18 **companies, including the utilities, it owned. APIF would not exist. It has no other**  
19 **business than to operate the facilities it owns. Simply put, the cost pool would be**  
20 **significantly lower if Algonquin did not own the utilities division. While the**  
21 **business structure of being a publicly traded company does drive a significant**  
22 **portion of the Central Office costs, these costs are still incurred to the benefit of the**  
23 **utilities it owns. Again, most of these costs are associated with good corporate**  
24 **governance. These costs are to ensure that the entire corporate family remains**  
25 **viable for the long run. Alternatively, if APIF owned only regulated utilities, these**  
26 **same types of corporate costs would be incurred.**

1           Again, in our view, this Commission should be encouraging larger  
2 companies to be acquiring smaller utilities and consolidating operations under  
3 shared services models like we have implemented in Arizona. However, Staff's  
4 and RUCO's repeated recommendations to deny such costs will have the opposite  
5 impact; keeping the water and wastewater industry in Arizona fractured. In  
6 addition to access to capital, something increasingly critical in down economies  
7 where the need for critical infrastructure remains constant, larger companies  
8 provide good corporate governance, reducing the risk of smaller utility financial  
9 problems. There are no McLain messes under a corporate structure like ours. But,  
10 this has a cost, as I have testified to above, and as our witnesses have tried to  
11 explain in their testimonies in this case and the recent BMSC and LPSCO rate  
12 cases. However, under our model, there is a shared cost/benefit.

13 **Q. ON PAGE 28 OF HIS TESTIMONY, MR. BECKER ALSO STATES THAT**  
14 **"THE COSTS OF A REGULATED UTILITY, SUCH AS RIO RICO,**  
15 **SHOULD ONLY INCLUDE THOSE COSTS THAT WOULD HAVE BEEN**  
16 **INCURRED ON A "STAND ALONE BASIS;" IN OTHER WORDS, ONLY**  
17 **THOSE COSTS THAT THE REGULATED UTILITY WOULD HAVE**  
18 **INCURRED BY ITSELF IN THE PROVISION OF SERVICE." HOW DO**  
19 **YOU RESPOND TO THAT TESTIMONY?**

20 **A.** As my earlier testimony illustrates, that statement is flawed in several respects. To  
21 start, Staff is using that stand-alone comparison as a requirement for cost  
22 allocation, even though there is no authority for any such standard. Even worse,  
23 Staff has not even applied or investigated its own standard. In other words, Staff  
24 has not evaluated how RRUI's operating costs (including Central Office Costs)  
25 compare to other Arizona stand-alone utilities. If Mr. Becker's suggestion is  
26 adopted, no utilities would be run under Shared Services models, which is contrary

1 to the Commission's endorsement of such models for other utility companies  
2 operating in the state.

3 **Q. HAVE YOU MADE SUCH A COMPARISON?**

4 A. Yes, attached as **Exhibit PE-RB3** are charts comparing RRUI's operating costs  
5 with the operating costs of various sized Arizona water utilities, some of which are  
6 directly comparable to RRUI. The Arizona Water Company divisions, Sunrise  
7 Water Company, Rio Verde Utilities, and H2O Inc. are stand-alone water utilities.  
8 The Arizona-American divisions, Global Water—Santa Cruz Water Company,  
9 Willow Valley Water Company and Chaparral City Water Company are part of  
10 affiliate holding company structures. These charts demonstrate that RRUI's  
11 operating costs compare very favorably to the operating costs of the 15 other  
12 Arizona utilities on a per customer basis. Therefore, Staff's contention that the  
13 APT cost allocations artificially inflate RRUI's rates above industry norms simply  
14 isn't true.<sup>3</sup> In fact, these charts show that RRUI's operating costs per customer for  
15 water are substantially below the other comparable utilities; and for wastewater are  
16 within the range of the comparable sewer companies. This is because the APIF  
17 corporate model allows RRUI to provide continuing access to capital and high  
18 quality services through the economies of scale provided by the services from  
19 APT. For water service, it also should be noted that RRUI's operating costs are  
20 lower than all of the stand-alone utilities in the comparison.

21 **Q. PLEASE CONTINUE.**

22 A. I also want to point out that the Central Costs cannot be picked on a one by one  
23 basis as Mr. Becker suggests. That is to say, they are not mutually exclusive. For  
24 example, one could not simply say that they do not like the Trustee Fees, because  
25

26 <sup>3</sup> Direct Testimony on revenue requirement of Gerald W. Becker at 28.

1 they are required as much for access to capital as Tax Services. The Commission  
2 should be looking at APIF's corporate model as a whole, which allows utilities  
3 such as RRUI to provide high quality utility service at reasonable costs. On the  
4 whole, RRUI's costs and costs per customer compare very favorably to other  
5 Arizona utilities, and given the added benefits provided by the APIF corporate  
6 model in terms of corporate governance, and access to capital and stability, APIF's  
7 corporate model should be approved in the provision of service.

8 **Q. SHOULD STAFF BE ENCOURAGING UTILITIES TO OPERATE AS**  
9 **STAND-ALONE ENTITIES?**

10 A. Absolutely not. Staff and RUCO should not force Arizona utilities to operate as  
11 stand-alone companies given the number of problems and failures that have  
12 occurred with stand-alone utilities. Rather, the Commission should be encouraging  
13 owners like APIF who are willing to invest capital in this state with an overriding  
14 corporate model of good governance. I can't stress enough that if Staff and RUCO  
15 continue to oppose the cost allocations from APT, then APT may cease providing  
16 those services to RRUI and the other Arizona utilities, which may cause service  
17 quality to decline and operating costs to increase. I do not see how the  
18 Commission can expect the Company to obtain these services and at the same time  
19 deny cost recovery. And I certainly hope that Staff and RUCO don't complain if  
20 their recommendations are adopted and the services cease and quality of service for  
21 customers declines.

22 **Q. ON PAGE 29-30 OF HIS DIRECT TESTIMONY, MR. BECKER GOES ON**  
23 **TO CONCLUDE THAT "BASED UPON A REVIEW OF THE ACTUAL**  
24 **SUPPORTING INVOICES PROVIDED BY THE COMPANY, STAFF**  
25 **CONCLUDED THAT ALMOST ALL OF THE COSTS WERE OBVIOUSLY**

26

1           **ATTRIBUTABLE TO THE OPERATIONS OF APIF OR ONE OF ITS**  
2           **AFFILIATES.” HOW DO YOU RESPOND TO THAT TESTIMONY?**

3           A.    He is missing the point.  If the costs are incurred by APIF or APT, they are  
4           attributable to ALL facilities, regulated and non-regulated, including RRUI.  The  
5           fact that the 3<sup>rd</sup> party vendor invoice does not list all 63 companies under the APIF  
6           umbrella does not in any way mean that the costs and related service do not benefit  
7           the customers of RRUI.  If Mr. Becker has a specific invoice he questions because  
8           it is for XYZ Hydro Facility in New York, he should ask the Company why what  
9           appears to be a cost incurred for a specific operating facility was included in the  
10          APT allocation pool.

11                    Again, the Central Office administration costs are incurred in order to  
12          prudently operate the facilities owned by the Fund.  These costs would not be  
13          incurred if no facilities were owned.  The utility ratepayers are the primary  
14          beneficiaries of the cost savings by paying reasonable rates for high quality service.  
15          In fact, since these are operating costs, they are flow-throughs in regulated utility  
16          ratemaking, which means that shareholders would not benefit in any way shape or  
17          form from higher costs.  In fact, since higher costs would increase regulatory risk  
18          and diminish RRUI’s relationship with its ratepayers, incurring these costs strictly  
19          to the benefit of shareholders would be contrary to their desire to earn a profit.  It is  
20          only to reduce overall costs to ratepayers that we operate this model.

21                    I also would note that Mr. Becker and Staff have arbitrarily assigned 90% of  
22          the costs to APIF and 10% of the costs to the regulated utilities.  Staff then  
23          allocates that 10% to the regulated utilities based on the number of facilities, using  
24          a total number of facilities owned by APIF as 70.  For RRUI, that translates to  
25          1.43% of the Central Costs.

26

1 **Q. DID YOU REVIEW THE MATERIALS AGAIN TO VERIFY THAT ALL**  
2 **THE INVOICES ARE APPROPRIATE FOR RIO RICO UTILITIES INC.?**

3 A. Yes. I reviewed the Company's response to data request GWB 4.2a. Upon my  
4 review, I concluded that almost all of the costs were necessary; however, I did find  
5 that due to the large volume of transactions, some invoices that could be directly  
6 charged to the non-regulated side of the business were erroneously included in the  
7 pool. I have removed those costs, totaling \$204,508 from the allocation pool and  
8 Mr. Bourassa has made a corresponding adjustment.<sup>4</sup> This reduced the amount  
9 requested for operating expenses by RRUI by \$4,625.

10 **Q. WHAT ARE THE OPERATIONS OF APIF THAT MR. BECKER**  
11 **ALLUDES TO IN THE PREVIOUS QUESTION?**

12 A. I am not really sure, mainly because Mr. Becker's statement is illogical. As I've  
13 testified, the parent company has no other business than owning these facilities  
14 through its subsidiaries. If the Income Fund did not own RRUI and for that matter  
15 did not own any facilities, the Income Fund would not have any of these corporate  
16 administration costs because the Income Fund would not exist. In short, there are  
17 no operations of APIF other than the ownership and management of the utilities  
18 and facilities it owns, so I am unsure what operations Mr. Becker is referring to. In  
19 response to RRUI DR 2.9, Mr. Becker responded that it is "conceivable" that APIF  
20 would require an audit if it were publicly traded prior to owning any facilities.<sup>5</sup>  
21 Mr. Becker does not substantiate that statement and I would challenge Mr. Becker  
22 to find a Company that has successfully raised capital without owning a single  
23 business, or having any operations. The notion that APIF would raise capital by  
24

25 <sup>4</sup> See Rebuttal Testimony of Thomas J. Bourassa – Rate Base, Income Statement and Rate Design at 24  
and 29.

26 <sup>5</sup> Staff's response to DR 2.9 is attached as **Exhibit PE-RB4**.

1 selling shares on the Toronto Stock Exchange before it owned any facilities is not  
2 accurate. Money simply does not get invested that way in the capital markets.

3 **Q. BUT HOW CAN COSTS INCURRED BY APT BENEFIT BOTH**  
4 **SHAREHOLDERS AND RATEPAYERS?**

5 A. Because a well run utility with access to capital can provide high quality service at  
6 a reasonable cost leaving the utility with a fair and reasonable return on its  
7 investment after the recovery of the costs needed to provide that level of service.  
8 Everyone wins. The fact that RRUI's operating costs compare very favorably to  
9 other Arizona utilities demonstrates that APIF's corporate model works for  
10 ratepayers. Further, the NARUC Guidelines recognize this joint benefit concept in  
11 its definition of "common costs," which provides that common costs are "costs  
12 associated with services or products that are of joint benefit between regulated and  
13 non-regulated business units."

14 **Q. OK, TURNING TO THE ALLOCATION METHODOLOGIES, STAFF HAS**  
15 **ALLOCATED COSTS TO RRUI BASED ON APIF'S OWNERSHIP OR**  
16 **OPERATING INTEREST IN 71 FACILITIES, EIGHT MORE FACILITIES**  
17 **THAN RRUI USED IN ITS FILING. PLEASE DESCRIBE APIF'S**  
18 **INTERESTS IN THOSE OTHER EIGHT UTILITIES?**

19 A. Algonquin owns the debt of 7 companies, and accounts for them separately from  
20 the Central Office costs. Those 7 facilities are simply operated by APIF and do not  
21 generate costs that are allocated to the APT cost pool. The remaining one facility  
22 is a land field gas facility that has not been operational for years.

23 **Q. ARE THERE ANY PROBLEMS WITH MR. BECKER'S ALLOCATION**  
24 **METHODOLOGY?**

25 A. Yes, several. To start, Mr. Becker uses a total number of facilities owned by APIF  
26 as 70. That simply isn't accurate. As noted above, APIF owns the debt of 7

1 facilities, but does not own them. APT is providing operations services to those 7  
2 facilities, but APT does not incur any central office costs or provide capital  
3 investment for those 7 facilities. We are essentially an operator/caretaker of those  
4 facilities. Thus, Staff is allocating Central Office Costs to 7 facilities that do not  
5 use those services, which artificially decreases the cost allocations to those entities  
6 actually using the services. Further, Staff has included one additional facility  
7 owned by APIF but which has not operated for several years, again meaning that  
8 such facility does not incur any APT costs. Also, Mr. Becker blandly assumes that  
9 RRUI does not benefit from the various services provided by APT. As I've  
10 testified, that is an incorrect assumption. RRUI would not have access to equity  
11 capital from APT and APIF if APT did not undertake the various third-party  
12 professional and other services, which costs are allocated to RRUI. Certainly no  
13 one can dispute that RRUI and its ratepayers benefit by continuing access to capital  
14 and strong corporate governance.

15 **Q. WHAT SERVICES AND COSTS ARE ALLOCATED TO RRUI BY APT?**

16 A. Appendix 3 to **Exhibit PE-RB1** provides a discussion of these costs. Generally,  
17 the services provided by and costs incurred by APT fall into four general  
18 categories: (1) Strategic Management, which includes management fees, general  
19 legal services and other professional services; (2) Capital Access, which includes  
20 licenses/fees/permits, unit holder communications and escrow fees; (3) Financial  
21 Controls, which include audit services, tax services and trustee fees; and  
22 (4) Administrative/Overhead Costs, which include rent, depreciation and office  
23 costs as I testified above. These costs are allocated down as I testified above.

24 **Q. WHAT ARE THE APT STRATEGIC MANAGEMENT COSTS?**

25 A. Strategic management decisions are critical for any public utility. The need for  
26 strategic management is even more pronounced for RRUI as a regulated utility that

1 depends on access to capital for ongoing operational and capital needs. APIF seeks  
2 to hire talented strategic managers that aid in running each facility owned by the  
3 fund, including RRUI, as efficiently and effectively as possible. This ensures the  
4 long term health of each utility and ensures that rates are kept as low as possible  
5 without compromising the level of service. It also facilitates each Regulated  
6 Utility's access to necessary capital funding at reduced costs.

7 Legal expenses incurred by APT for general legal matters pertaining to all  
8 facilities owned by APIF also are included. These legal services are required in  
9 order for APIF to provide capital funding to individual utilities, without which the  
10 utilities could not provide adequate service. These legal services involve matters  
11 not specific to a single facility, including review of audited financial statements,  
12 annual information filings, Sedar filings (mandatory filings for companies listed on  
13 the Toronto Stock Exchange), review of contracts with credit facilities,  
14 incorporation, tax issues, market compliance, and other similar legal costs.

15 **Q. WHAT ARE THE BENEFITS OF THESE LEGAL SERVICES?**

16 A. General legal costs are one of the foundations for proper corporate governance.  
17 They help ensure that APIF and the Regulated Utilities remain compliant in all  
18 aspects of operations and prevent those entities from being exposed to unnecessary  
19 risks. These legal services also allow utilities to have continued access to capital  
20 markets available to APIF. These legal expenses are critical to utility operations  
21 because they ensure APIF's status and viability as a publicly traded income fund  
22 and allow the utilities to provide service in a way to ensure continued access to  
23 strategic management and capital markets. Unfortunately, Staff has not even  
24 attempted to evaluate the benefits of such legal services to RRUI.

25  
26

1 **Q. PLEASE CONTINUE.**

2 A. The final item included in Strategic Management Costs are professional services,  
3 including strategic plan reviews, capital market advisory services, ERP System  
4 maintenance, benefits consulting, and other similar professional services. These  
5 professional services ensure that APIF's strategic plans and initiatives are  
6 completed with the highest degree of care and professionalism, which is necessary  
7 for the Regulated Utilities to receive debt and equity funding from capital markets.  
8 In no uncertain terms, these services allow the Regulated Utilities to have an  
9 available source of capital funding for plant and infrastructure in the provision of  
10 utility services. In the absence of these services, unit holders would not invest in  
11 utility operations of APIF because the utilities would not incur the necessary costs  
12 to ensure that the strategic plans are followed as a condition of such funding.  
13 Staff's failure to acknowledge the benefits to RRUI from access to equity capital  
14 under the APIF corporate model by denying the Central Office Costs associated  
15 with that financing may result in withdrawal of equity capital to RRUI, which  
16 ultimately could result in a highly leveraged utility. RRUI's only source of equity  
17 capital is from sale of units in APIF on the Toronto Stock Exchange.

18 **Q. YOU ALSO MENTION ALLOCATION OF COSTS RELATED TO**  
19 **ACCESS TO CAPITAL MARKET. PLEASE EXPLAIN THOSE COSTS.**

20 A. One of APT's primary functions is to ensure that APIF's facilities (including the  
21 Regulated Utilities) have access to quality capital. APIF is listed on the Toronto  
22 Stock Exchange, a leading financial market. In order to allow the Regulated  
23 Utilities to have continued access to those capital markets, APT incurs a variety of  
24 costs for the benefit of the Utilities. These services and costs are in line with the  
25 companies' corporate governance policies and are a prerequisite to communicate to  
26

1 all its stakeholders the health and well being of Algonquin and ensuring to the  
2 Regulated Utilities' continued access to those capital markets.

3 To start, APT incurs fees to ensure that APIF can participate in the Toronto  
4 Stock Exchange. Many of the services provided by APT and allocated to RRUI are  
5 required by the rules of the Toronto Stock Exchange. These licensing and permit  
6 fees are required in order to sell units on the Toronto Stock Exchange. The benefit  
7 of these costs is undisputed – the ratepayers and Regulated Utilities have access to  
8 capital only so long as APIF is able to access capital markets. These license fees  
9 allow APIF to sell units on the Toronto Stock Exchange and, in turn, provide  
10 funding for utility operations. These license fees incurred by APT are critical to  
11 ensure continuing access to capital.

12 **Q. IS THAT ALSO TRUE FOR ESCROW FEES INCURRED BY APT?**

13 A. Yes. Unit holders invest in APIF, and, in turn, provide capital funding to the  
14 Regulated Utilities by buying units. In making those investments, unit holders  
15 expect monthly distributions on the units they own. As such, APT incurs escrow  
16 fees in paying such monthly payments to unit holders. Escrow Fees are incurred in  
17 order to ensure that unit holders of APIF continue to maintain ownership, and that  
18 new shareholders are enticed to invest in the Fund. Those new shareholders are the  
19 ones truly investing money for new and future projects the utilities undertake.  
20 Without them, there is no money for APIF to invest in the utilities.

21 **Q. WHAT ABOUT COSTS FOR UNIT HOLDER COMMUNICATIONS?**

22 A. Similarly, unit holder communication costs are incurred to comply with the filing  
23 and regulatory requirements of the Toronto Stock Exchange and meet the  
24 expectations of shareholders. These costs include news releases, unit holder  
25 conference calls and other similar costs. Unit holder communications costs are  
26 incurred by APT for the benefit of the Regulated Utilities to ensure that unit

1 holders are fully informed of all operational and strategic decisions. These  
2 disclosures are required by law to ensure a level of integrity and rigor is applied to  
3 the management of the Regulated Utilities. It can't be stressed enough that in the  
4 absence of unit holder communication costs, investors would not invest in the units  
5 of APIF, and in turn, APIF would not have capital to invest in the utilities.

6 **Q. THE THIRD CATEGORY OF APT COSTS YOU IDENTIFIED RELATED**  
7 **TO FINANCIAL CONTROLS. WHAT ARE THOSE COSTS?**

8 A. Financial Control costs incurred by APT are another integrated piece of corporate  
9 governance. Lack of financial controls could lead to improper decision making or  
10 even fraud which could lead to bankruptcy. I understand that the owner of the  
11 McLain companies took all of his revenue from water sales and instead of paying  
12 things like property taxes, he invested in some failed telecom venture. Bankruptcy  
13 followed and we had to step in and bail out the Commission and the ratepayers.  
14 With proper financial controls, the McLain mess would not have happened.

15 **Q. DO THOSE FINANCIAL CONTROL COSTS INCLUDE TAX AND AUDIT**  
16 **SERVICES?**

17 A. Yes. Costs for tax services are incurred to ensure prudent tax filing, planning and  
18 management. Taxes are paid on behalf of the Regulated Utilities at the parent level  
19 as part of a consolidated United States tax return. Tax services are provided by  
20 third parties, including KPMG. The shared cost of such tax services also are lower  
21 than the costs of stand-alone tax services, which would otherwise be incurred by  
22 the Regulated Utilities. Audit services are likewise necessary to ensure that the  
23 Regulated Utilities are operated in a manner that meets audit standards and  
24 regulatory requirements have strong financial and operational controls, and that  
25 financial transactions are recorded accurately and prudently. Without these  
26

1 services, the Regulated Utilities would not have a readily available source of  
2 capital funding.

3 **Q. THE LAST CATEGORY OF APT AFFILIATED COSTS IS**  
4 **ADMINISTRATIVE AND OVERHEAD COSTS. PLEASE DESCRIBE**  
5 **THOSE COSTS.**

6 A. Administrative costs incurred by APT such as rent, depreciation of office furniture,  
7 depreciation of computers, and general office costs are required to house all of the  
8 services mentioned above. Without these costs, the employees of APT could not  
9 perform their work and provide the necessary services to the Regulated Utilities.

10 **Q. CAN YOU EXPLAIN HOW THOSE SERVICES PROVIDED BY APT**  
11 **BENEFIT RRUI AND ITS CUSTOMERS?**

12 A. The capital and funds obtained from the sale of units in the Income Fund are used  
13 by the Regulated Utilities for capital investments. That capital is made available  
14 by APT to the Regulated Utilities, including RRUI. Also, the services provided by  
15 APT provide strong corporate governance, which is essential to the health of any  
16 organization whether publicly traded or not. Any company that wishes to raise  
17 capital at a decent rate must prove proper corporate governance. Less governance  
18 means more risk and a higher cost of capital. Most of these indirect corporate costs  
19 from APT relate to proper corporate governance and thus ensuring long term  
20 access to the capital markets. Therefore, the services provided by APT are critical  
21 and necessary to the Regulated Utilities. Put another way, absent the services  
22 provided by APT, the Regulated Utilities would be forced to operate as stand-alone  
23 utilities with higher costs and operating expenses. In addition, the utilities would  
24 bear greater risk due to a potential inability to obtain capital on a stand-alone basis.  
25 Operating as a stand alone utility also raises the very real possibility of declining  
26 quality of service.

1 Q. DO YOU KNOW HOW THE ALLOCATION METHODOLOGY FOR APT  
2 COMPARES TO AFFILIATE COST ALLOCATION METHODOLOGIES  
3 USED BY OTHER ARIZONA UTILITIES, SUCH AS GLOBAL WATER?

4 A. The allocation methodologies are very similar. In our recent Black Mountain rate  
5 case, Staff analyst Crystal Brown mentioned that she had no objections to the  
6 methodology employed by Global Water. After comparing our methodologies, we  
7 have concluded that they are extremely similar.<sup>6</sup> Costs for certain items such as  
8 rent and central office costs are allocated almost exactly the same way. Similarly,  
9 Global and Algonquin allocate regional costs similarly, as mentioned above, and  
10 also allocate other administration costs in a similar manner to Algonquin.<sup>7</sup> We  
11 could not decipher major differences between the methodologies; however, we do  
12 agree that Global's presentation was a bit clearer than ours. This is precisely the  
13 reason that we have created **Exhibit PE-RB1** and why I am testifying in this case.

14 B. Rebuttal to RUCO

15 Q. LET'S SWITCH TO MR. COLEY'S TESTIMONY ON BEHALF OF RUCO.  
16 ON PAGE 45 OF HIS DIRECT TESTIMONY, MR. COLEY SUGGESTS  
17 THAT RRUI DOES NOT NEED THE MAJORITY OF SERVICES  
18 PROVIDED BY APT. HOW DO YOU RESPOND TO THAT  
19 STATEMENT?

20 A. Mr. Coley's "determination" is troubling. It is incomprehensible that RRUI would  
21 not need access to capital, would not need to incur audit costs, tax planning costs,  
22 strategic management costs, incur depreciation expense on office furniture and  
23 software, incur costs for consulting related to Human Resources, Health and

24  
25 <sup>6</sup> See Direct Testimony of Greg Barber (with attached Appendices 1-3), filed February 20, 2009 in Docket  
Nos. SW-03575A-09-0077 and SW-20445A-09-0077.

26 <sup>7</sup> *Id.*

1 Safety, ERP systems, etc. It appears that Mr. Coley simply does not understand the  
2 nature of the costs, and instead of asking further questions about it, he simply chose  
3 to disallow it under the guise of these costs being “unnecessary.” I would  
4 challenge Mr. Coley to try and operate a well managed utility on a stand alone  
5 basis with healthy access to capital, strong corporate governance, and strategic  
6 management expertise for similar or lower cost. It also appears that Mr. Coley’s  
7 testimony is not based on any tangible evidence. Rather, Mr. Coley simply  
8 “believes” that the APT services do not benefit RRUI.

9 If Mr. Coley, or Mr. Becker, needed more descriptions, explanations or  
10 other information regarding any of our shared services, he was free to ask during  
11 discovery. Or even now, as long as the case stays on the time-clock. They could  
12 have flown to Canada at our expense and seen the operation they are now making  
13 important and inaccurate judgments about in this rate case. There are hundreds of  
14 thousands of dollars at issue in this case and the others pending for Liberty Water  
15 utilities, and we will do whatever we need to do to provide RUCO and Staff the  
16 information they need to scrutinize our costs.

17 **Q. WHAT ABOUT MR. COLEY’S CLAIM THAT RRUI HASN’T COMPLIED**  
18 **WITH THE NARUC GUIDELINES?**

19 A. Mr. Coley is wrong for the reasons discussed above.

20 **Q. ARE THERE ANY OTHER ASPECTS OF MR. COLEY’S TESTIMONY**  
21 **THAT YOU’D LIKE TO ADDRESS?**

22 A. Yes. On page 48 of his testimony Mr. Coley does agree with our cost allocation  
23 methodology based on facility count. Unfortunately, like Staff, Mr. Coley uses a  
24 facility number of 70, which is incorrect for the reasons noted above.

25  
26

1 Q. DOES RRUI FOLLOW THE NARUC UNIFORM SYSTEM OF  
2 ACCOUNTS?

3 A. Yes, RRUI complies with the NARUC Uniform System of Accounts.

4 Q. MR. COLEY ALSO SUGGESTS (PAGE 46 OF HIS DIRECT TESTIMONY)  
5 THAT COSTS SHOULD BE DIRECTLY BILLED INSTEAD OF  
6 ALLOCATED. IS THAT FEASIBLE?

7 A. When feasible we agree with Mr. Coley. RRUI has done exactly that by directly  
8 charging AWS (direct costs) and allocating APT (indirect costs). However, not all  
9 costs are "direct."

10 Q. WITH RESPECT TO MANAGEMENT FEES ALLOCATED BY APT,  
11 MR. COLEY HAS DETERMINED THAT SUCH FEES DO NOT PROVIDE  
12 BENEFIT TO RRUI AND IN HIS TESTIMONY (PAGE 49), MR. COLEY  
13 CONCLUDES THAT ONLY A SMALL FRACTION OF THE COSTS  
14 ALLOCATED BY APT ARE ATTRIBUTABLE TO RRUI. HOW DO YOU  
15 RESPOND TO THAT?

16 A. I can only reiterate that strategic management decisions are critical for any public  
17 utility. The need for strategic management is even more pronounced for RRUI as a  
18 larger regulated utility that depends on access to capital for ongoing operational  
19 and capital needs. APIF seeks to hire talented strategic managers that aid in  
20 running each facility owned by the fund, including RRUI, as efficiently and  
21 effectively as possible. This ensures the long term health of each utility and  
22 ensures that rates are kept as low as possible without compromising the level of  
23 service. It also facilitates each utility's access to necessary capital funding at  
24 reduced costs.

25 The costs included in Strategic Management Costs fall into the following  
26 categories. The first category is Management Fees. Those fees incorporate

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management fees paid to Algonquin's management company for strategic management of all APIF facilities. These fees provide for the financial and capital funding services necessary for the Regulated Utilities, including RRUI, to fund utility operations and growth services. Management Fees are charged to APT as a monthly fee which is then allocated to the utilities division (26.98%), and then to each individual utility based on customer count, as I've explained in detail in my testimony.

**Q. HOW DO CUSTOMERS BENEFIT FROM THESE MANAGEMENT FEES?**

A. Ratepayers avoid the burdens of needing senior management staff at each utility by sharing of resources between all utilities, resulting in significant savings. These management services also allow Regulated Utilities to have an available source of capital funding for plant and infrastructure in the provision of utility services at a cost cheaper than what such utilities could obtain on their own.

APT management services are required in the provision of service by Regulated Utilities because the managers oversee utility operations, provide high level approvals for capital and operating budgets, and provide strategic planning services for the utilities. They also develop overall corporate strategies such as long term financial planning and capital needs, negotiate contracts, allocate capital among utilities and approve high level expenditures. These management services are required in order for APIF to provide capital funding to individual utilities, without which the utilities could not provide adequate service. RRUI receives the benefit of having its own highly functioning executive management team at a fraction of the cost of having its own executive management.

1 **Q. WHAT ABOUT MR. COLEY'S DENIAL OF COSTS RELATED TO**  
2 **SHAREHOLDER COMMUNICATIONS?**

3 A. I would ask Mr. Coley if he would purchase shares of RRUI if he received no  
4 communications from the company and was entirely deaf to the operations. I  
5 would hope his answer is "No." On that note, RRUI's ratepayers receive the  
6 benefits of not only access to capital, but also access to those communications as  
7 they are publicly available.

8 **Q. MR. COLEY ALSO DENIES TRUSTEE FEES. WHAT ARE YOUR**  
9 **THOUGHTS ON THAT?**

10 A. I would respond that whether publicly traded or not, RRUI would likely have a  
11 Board of Directors. The Board assures proper corporate governance and thus a  
12 level of financial rigor, provides high level operational and financial oversight, and  
13 strategic guidance for the long term viability of the company and hence RRUI.

14 **Q. MR. COLEY MAKES THE SAME CONCLUSION RELATING TO**  
15 **ESCROW FEES (PAGE 46). IS THERE A CONNECTION BETWEEN**  
16 **SUCH ESCROW FEES AND RRUI'S PROVISION OF UTILITY**  
17 **SERVICE?**

18 A. Yes. The escrow fees are a cost of the business model that RRUI operates in.  
19 Shareholders would not invest in the fund if they did not receive distributions. In  
20 turn, RRUI would not have capital available to it from its parent company.

21 **Q. HOW DOES RUCO TREAT COSTS INCURRED BY APT FOR RENT,**  
22 **DEPRECIATION AND OTHER OFFICE COSTS?**

23 A. The same way Mr. Coley has treated other costs, by denying them. I would also  
24 note that this being the 3<sup>rd</sup> pending Liberty Water rate case to go to hearing, I have  
25 seen 3 different positions taken by RUCO on these issues. In BMSC, RUCO  
26 supported these costs. In LPSCO, RUCO supported portions of these costs,

1 including rent. In this case, RUCO is disallowing rent and related expenses. I  
2 would also note that in the prior two rate cases for Liberty Water affiliates, BMSC  
3 and GCSC, RUCO did not oppose any of the Central Cost allocations. RUCO's  
4 approach seems to be without any discernable methodology as to what is and isn't  
5 acceptable to RUCO.

6 **Q. WHAT ARE THE POTENTIAL CONSEQUENCES TO RRUI AND OTHER**  
7 **REGULATED UTILITIES IN ARIZONA IF THE COMMISSION**  
8 **ULTIMATELY AGREES WITH STAFF AND/OR RUCO AND DENIES**  
9 **ALLOCATION OF AFFILIATE COSTS INCURRED BY APT?**

10 A. To be frank, Staff's and RUCO's treatment of APT's affiliate costs is nothing more  
11 than a rejection of one pillar of the APIF/APT/Liberty Water shared services  
12 model. If the Liberty Water's shared services model is not viewed as reasonable  
13 because of its costs, then Liberty Water will have to seriously consider operating  
14 differently. APIF isn't going to subsidize 90 percent of an over \$1 million  
15 allocation pool to the seven Arizona utilities. That's simple economics. But one  
16 can't help but wonder why Staff and RUCO would reject a shared services model  
17 that is designed to deliver high quality utility service at the lowest possible price  
18 given numerous failed utility operations in Arizona. The notion, as Staff and  
19 RUCO suggest, that these allocated costs from the parent do not benefit the  
20 ratepayers is undercut by the very high level of service RRUI is providing to  
21 customers in this system. It is further undercut by the fact that RRUI's operating  
22 costs compare very favorably to other Arizona utilities.

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

24 A. Yes.

25

26

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**PETER EICHLER**  
**REBUTTAL TESTIMONY**  
**February 1, 2010**

**Exhibit PE-RB1**

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

**LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY**

**I. GENERAL STATEMENT OF ALLOCATION METHODOLOGY**

The purpose of this paper is to provide a detailed explanation of the Affiliate Cost Allocation Methodology used by the regulated utility affiliates of Liberty Water Company ("LWC") including Litchfield Park Service Company ("LPSCO"), Black Mountain Sewer Company, Gold Canyon Sewer Company, Rio Rico Utilities, Bella Vista Water Company, Northern Sunrise Water Company, and Southern Sunrise Water Company (collectively the "Regulated Utilities"). The Regulated Utilities are wholly-owned subsidiaries of LWC, which is owned by Algonquin Power Income Fund ("APIF").

**A. The APIF Corporate Structure.**

APIF's primary business is ownership of generating and infrastructure facilities through investments in securities of subsidiaries. APIF owns a widely diversified portfolio of 46 electric facilities and 17 water distribution and wastewater treatment facilities in Canada and the United States. APIF also has an operating interest in 8 other facilities, but does not own them. APIF is publicly traded on the Toronto Stock Exchange. APIF's structure as a publicly traded income fund provides substantial benefits to its Regulated Utilities through access to capital markets and access to engineers, technicians, professional managers and administrative staff, including trained plant operators and field supervisors.

**B. Liberty Water Cost Allocations to LPSCO.**

LPSCO and the other Regulated Utilities in Arizona do not operate as stand-alone utilities. LPSCO is operated by Algonquin Water Services d/b/a Liberty Water ("Liberty Water"), along with six other regulated Arizona water and sewer utilities, and eleven regulated water and sewer providers located in Texas, Missouri and Illinois. Liberty Water provides all of the day-to-day administration and operations personnel for these regulated utilities. All operations and engineering labor is charged by Liberty Water directly to LPSCO and the other separate Regulated Utilities operated by Liberty Water. Liberty Water charges those labor rates at cost, which is the dollar hourly rate per employee as recorded in Liberty Water's payroll system, grossed up by 35% for burdens such as payroll taxes, health benefits, retirement plans, and other insurance provided to employees. Engineering technical labor, which is capitalized, is charged on the same basis, plus an allocation of 10% for Liberty Water's corporate overheads such as rent, materials/supplies, etc.

## ***LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY***

Other necessary services provided by Liberty Water for the Regulated Utilities cannot be directly charged to LPSCO and the other Regulated Utilities. Labor for accounting, billing and customer service, human resources, health and safety, and corporate finance cannot be directly allocated using timesheets due to the nature of the costs because it is not practical to keep track of time for employees that serve multiple utilities in small time increments during the course of a work-day. A shared call center is the perfect example. A customer service representative at Liberty Water's call center will field calls from customers of LPSCO, BMSC, Bella Vista Water Company in southern Arizona and the three other states. This work directly benefits all of the Regulated Utilities, so the costs need to be allocated to all of them. These costs are allocated based on the relative customer counts of all of the Regulated Utilities. Using customer counts allows Liberty Water to allocate those costs to an individual utility, such as LPSCO, based on the relative burden of that utility relating to those services.

Overhead costs, like rent, insurance, administration costs, depreciation of office furniture and computers, also cannot be directly attributed to specific utilities. These costs are allocated to LPSCO and its affiliates by use of a "four factor" methodology that considers relative size through four weighted factors – total plant, total customers, expenses and labor. This type of four-factor methodology has been utilized by other Arizona utilities, including Chaparral City Water Company and Global Water. All of the costs charged by Liberty Water and allocated to LPSCO are based on actual costs, either directly charged or through the allocations described above.

### ***B. Central Office Cost Allocations from Algonquin Power Trust.***

In addition to the operations and engineering direct costs, and the allocated overhead/administration costs charged by Liberty Water, LPSCO and the other utilities in this shared services model benefit from costs incurred by the Algonquin corporate parent. Specifically, APIF, the shareholder of Liberty Water, allocates a share of the costs incurred by its operating arm Algonquin Power Trust ("APT") in providing necessary and required services to the Regulated Utilities.

APT is the affiliate that provides financial, strategic management, compliance, administrative and support services to the Regulated Utilities operated by Liberty Water, as well as to the numerous unregulated utility assets owned by the corporate parent, APIF. APT does not allocate any labor related costs. The head office of APT is located in Oakville, Ontario, Canada and provides administrative, technical and management support, regulatory compliance, and

## **LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY**

oversight of strategic direction, including approvals of budgets and ensuring a strict level of corporate governance for LPSCO and all of the utilities operated by Liberty Water. APT's executive management and administrative support includes accounting and finance, human resources, employee benefits, regulatory and information systems services.

The services provided by APT are necessary to allow LPSCO and the other Regulated Utilities to have access to capital markets for capital projects and operations, and are necessary to allow LPSCO to provide a high level of service at the lowest cost. There are no direct labor costs included in the corporate administration Central Office Cost allocation from APT. Instead, these costs include professional services like third-party legal services, accounting services, tax planning and filings, and required auditing that are done for the benefit of all of the Liberty Water Regulated Utilities, including LPSCO.

These corporate headquarter administrative costs also include costs for licenses, fees and permits, information technology/systems, payroll, and HRIS maintenance contracts, as well as the rent and depreciation of office furniture and equipment and computers in the central office in Oakville, Ontario. Fees for these services are allocated to the Regulated Utilities using generally accepted allocation principles. These services are routine and recurring in nature and performed on a regular basis as part of normal business operations for Liberty Water and its Regulated Utilities.

These administration Central Office Costs are allocated to LPSCO in two phases. The first phase involves allocating these costs to each of the facilities, both regulated and unregulated, owned by APIF. That initial allocation is made based on relative size. Specifically, APIF owns and operates 63 total entities, 17 of which are the Regulated Utilities operated by Liberty Water. In turn, 17 of 63 is 26.98%, which means 26.98 percent of the total Central Office Costs are allocated to the Regulated Utilities operated by Liberty Water.<sup>1</sup>

From there, the second allocation phase is that Liberty Water allocates the Central Office Costs between LPSCO and the 16 other Regulated Utilities based on customer counts. These costs are incurred for the benefit of all of the Regulated Utilities and their customers, but are not capable of being directly charged to the 63 separate operating assets. This cost allocation methodology

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<sup>1</sup> For illustrative purposes, if the total Central Office Costs incurred by APT was \$4,000,000, then \$1,079,200 ( $4,000,000 \times .2698$ ) in Central Office Costs would be allocated to the 17 Regulated Utilities under Liberty Water. The remaining \$2,920,800 (73.02%) in Central Office Costs would be allocated to the remaining 46 electric facilities owned by APIF.

## ***LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY***

ensures that the costs are allocated as closely as possible to the originator of those costs. An entity such as LPSCO with 33,000 water and sewer customers benefits more from these costs than BMSC with only 2,000 wastewater ratepayers. Specifically, LPSCO has 16,037 water customers and 17,068 wastewater customers, for a total of 33,105 customers. In total, Liberty Water's 17 Regulated Utilities have 68,783 water and wastewater customers, which means LPSCO is allocated 48.13% (33,105/68,783) of the Central Office Cost pool.

The fundamental principle of this Cost Allocation Methodology is that LPSCO and the other Regulated Utilities should be charged for all costs incurred by affiliates—both Liberty Water and APT—so that the Regulated Utilities can provide a high level of safe and reliable water and wastewater utility service to customers.

### **II. DETAILED EXPLANATION OF THE SERVICES PROVIDED AND COSTS ALLOCATED TO THE REGULATED UTILITIES.**

The following is a detailed description of how these cost allocation methodologies are applied to the Regulated Utilities, the benefits of the services provided by Liberty Water and APT, the need for such services in the provision of utility services, and the necessity of allocating costs to the Regulated Utilities.

#### **A. Liberty Water Services Provided to LPSCO.**

Attached as Appendix 1 is an allocation summary of how costs incurred by Liberty Water are allocated to the Regulated Utilities, including LPSCO. Whenever possible, costs incurred by Liberty Water for a particular Regulated Utility are directly charged to that utility based on time sheets.

##### **1. Operations and Engineering Labor.**

These costs are billed directly to the Regulated Utility that required the labor, as documented by time sheets. Attached as Appendix 2 is an example time sheet used by Liberty Water. Those direct charges are principally direct labor, including operations and engineering. For example, the costs for a plant operator working solely for LPSCO will be directly allocated to LPSCO without any further allocation necessary. Liberty Water direct charges those services to the Regulated Utilities at cost.<sup>2</sup> The labor rate charged by Liberty Water is the dollar

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<sup>2</sup> It bears emphasis that the Liberty Water allocations reflect actual costs incurred. Liberty Water now charges based on actual payroll rates, not market based rates.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

hourly rate per employee as recorded in Liberty Water's payroll system, grossed up by roughly 35% for burdens such as payroll taxes, health benefits, retirement plans, and other insurance provided to employees. Engineering technical labor, which is capitalized, is charged on the same basis, plus a 10% allocation for corporate overheads incurred by Liberty Water, including rent, materials, supplies and other similar overhead costs.

**2. Accounting, Billing and Customer Service Labor Costs.**

Liberty Water also incurs additional labor costs for accounting, billing, and customer service, human resources, health and safety, and corporate finance which are necessary for the Regulated Utilities to provide adequate and reliable water and wastewater service to customers. Those costs, however, cannot be allocated to each Regulated Utility using time sheets due to the nature of the costs. It is not practical to keep track of time for employees that serve multiple utilities during the course of a work day. For example, an accounting analyst may analyze the financial performance of all Regulated Utilities at the same time. Her accounting work benefits all such Regulated Utilities, so her services and costs would be allocated to all Regulated Utilities. Likewise, a customer service representative at Liberty Water's call center will field calls from customers of all Regulated Utilities during a work day. Again, his work directly benefits all such Utilities and his costs should be allocated to all Regulated Utilities.

These labor costs incurred by Liberty Water are allocated to the Regulated Utilities based on customer count. The following simplified example demonstrates how a customer service representative's costs would be allocated to LPSCO:

Annual Salary	\$30,000
Burden (at 35%):	\$10,500
Total Labor Cost	\$40,500

Total Liberty Water Customers: 68,783  
LPSCO Water Customers: 16,037 (23.32% of total customers)  
LPSCO Wastewater Customers: 17,068 (24.81% of total customers)

Salary Costs allocated to LPSCO Water: \$9,444.60 (40,500 x .2332)

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Liberty Water made that change in early 2008, which means that rate cases pending before that change was made have been tried up and adjusted to reflect this actual cost methodology as if it had been adopted at the beginning of the respective test year.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

Salary Costs allocated to LPSCO Wastewater \$10,049.78 (40,500 x .2481)  
Salary Costs allocated to all other Regulated Utilities: \$21,005.62

**3. Liberty Water Overhead Costs.**

Costs incurred by Liberty Water for rent, administrative costs, depreciation of office furniture, depreciation of computers, and other labor cannot be directly attributed to a specific Regulated Utility. As such, those overhead and administrative Costs are allocated to the Regulated Utilities by use of the "four factor" methodology. Other costs in this category include insurance, janitorial services and other general non-payroll costs.

The "four factor" methodology allocates costs by relative size of the utilities. The methodology used by Liberty Water involves (1) Rate Base, (2) Total Customers, (3) Non-Labor Expenses and (3) Labor as allocating factors, with each factor assigned a specific weight. Liberty Water uses the following weights under this four factor methodology:

<b>UTILITY PLANT</b>	<b>50%</b>
<b>CUSTOMER COUNT</b>	<b>40%</b>
<b>LABOR</b>	<b>5%</b>
<b>EXPENSES</b>	<b>5%</b>
<b>TOTAL</b>	<b>100%</b>

The following simplified hypothetical example demonstrates how the four factor allocation methodology would be calculated based on ownership of *only* two hypothetical utilities (LPSCO and BMSC):

<b>FACTOR</b>	<b>LPSCO</b>	<b>BMSC</b>	<b>TOTAL ALL UTILITIES</b>	<b>LPSCO % OF TOTAL</b>	<b>FACTOR WEIGHT</b>	<b>LPSCO ALLOCATION</b>
<b>UTILITY PLANT</b>	727	371	1098	66%	50%	33%
<b>CUSTOMER COUNT</b>	6000	1000	7000	86%	40%	34%
<b>LABOR COSTS</b>	57	32	89	64%	5%	3%
<b>EXPENSES</b>	108	41	149	72%	5%	4%
<b>TOTAL ALLOCATION TO LPSCO</b>						74%

## ***LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY***

As can be seen from these hypothetical numbers, LPSCO would be allocated 74% of total Administrative/Overhead Costs incurred by Liberty Water, based on its relative size and application of the four factors in comparison to BMSC. BMSC would be allocated the remaining 26%. Liberty Water developed and utilized this methodology including all 17 of its utilities to better allocate costs, recognizing that larger utilities require more time and management attention and incur greater costs than smaller ones.

### ***4. Customer Benefits of Liberty Water Allocation Model.***

Customers of Liberty Water receive significant benefits from this cost allocation model, including significantly lower costs incurred by the Regulated Utilities for services that are essential and necessary to the provision of high quality water and wastewater utility service. The benefits of this type of shared service model include:

- Savings on labor costs by resource sharing – since most Liberty Water employees are not dedicated to a specific utility, the utilities do not need to hire their own dedicated staff, thus resulting in significant cost savings.
- Four factor allocations allow for utilities to be charged by relative resources and management attention required to operate them. This means customers of smaller utilities do not subsidize costs of larger utilities. Essentially, this allocation methodology allows costs to be allocated based on the relative burdens and costs incurred by individual utilities.
- Because it's scalable, the shared services model allows for increased growth with less than proportional cost increases, meaning the Regulated Utilities can grow without incurring a proportionate or prohibitive increase in the cost of service.

### ***B. APT Services Provided to LPSCO.***

Attached as Appendix 3 is an overview of the services and allocations for APT. As noted above, APT is a wholly-owned subsidiary of APIF. APT is integral to APIF's business structure as a publicly traded income fund on the Toronto Stock Exchange. APIF sells units to public investors in order to generate the funding and capital necessary for the Regulated Utilities to provide utility service. APT provides all of the administrative services for APIF and all of APIF's facilities, including strategic management services, access to capital

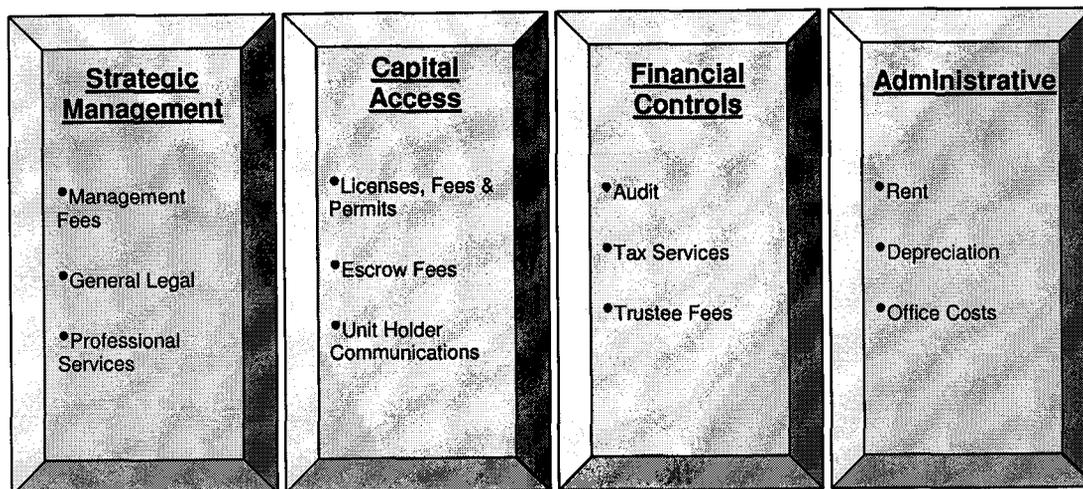
## ***LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY***

markets, corporate governance, and administration and management of the Regulated Utilities.

The capital and funds obtained from the sale of units in the Income Fund are used by the Regulated Utilities for capital investments. That capital is made available by APT to the Regulated Utilities. The services provided by APT are critical and necessary to the Regulated Utilities because without those services the Regulated Utilities would not have a readily available source of capital funding. Put another way, absent the services provided by APT, the Regulated Utilities would be forced to operate as stand alone utilities, with resulting higher costs and operating expenses incurred by customers. In addition, the utilities would bare much greater risk due to a potential inability to obtain capital on a standalone basis.

The services provided by APT optimize performance of the Regulated Utilities, keeping rates low for customers while ensuring access to capital is available. If the Regulated Utilities did not have access to the services provided by APT, then the Regulated Utilities would be forced to incur associated costs for financing, capital investment, audits, taxes and other similar services on a stand-alone basis, which would substantially increase such costs for each Regulated Utility. It bears emphasis that if the costs incurred by APT are not allocated to LPSCO and the other Regulated Utilities, then APT and APIF will have no choice but to cease providing the capital funding and other services to LPSCO and the other Arizona Regulated Utilities.

The services provided by and the costs incurred by APT for the Regulated Utilities fall into four general categories:



**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

All of these costs incurred by APT are calculated and totaled into the administration Central Office Cost Pool. As noted above, that administration Central Office Cost Pool is then allocated to APIF's electrical facilities and water/wastewater facilities based on the number of entities involved. In total, APIF owns 46 electric facilities and 17 water/wastewater utilities. Thus, the Central Office Cost Pools is allocated based on facility count with 73.02% (46/63) of the Pool allocated to the electric facilities and 26.98% (17/63) of the Pool allocated to the Regulated Utilities.

For example, if the total administration Central Office Cost Pool incurred by APT is \$4,000,000, then \$1,079,200 ( $4,000,000 \times .2698$ ) in administration Central Office Costs would be allocated to the 17 Regulated Utilities under Liberty Water. The remaining \$2,920,800 (73.02%) in administration Central Offices costs would be allocated to the remaining 46 electric facilities owned by APIF.

The allocated administration Central Office Cost Pool for the Regulated Utilities then is allocated to each individual utility by customer count. As noted in attached Appendix 3, LPSCO would be allocated 49% of those costs based on customer count. In our hypothetical example, LPSCO would be allocated \$518,016 in costs from APT. The following is a detailed description of each cost component within the Central Office Cost Pool, the necessity of allocating such costs to Regulated Utilities in providing services and the associated benefits to ratepayers.

**1. APT Strategic Management Costs**

Strategic management decisions are critical for any public utility. The need for strategic management is even more pronounced for APIF as a publicly traded income fund, which depends on access to capital funding through public sales of units in the fund. APIF seeks to hire talented strategic managers that aid in running each facility owned by the fund as efficiently and effectively as possible. This ensures the long term health of each utility and ensures that rates are kept as low as possible without compromising the level of service. It also facilitates each Regulated Utility's access to necessary capital funding at reduced costs. The costs included in Strategic Management Costs fall into the following categories.

**MANAGEMENT FEES**

Description	Fees which incorporate salaries of senior management staff for strategic management of all APIF facilities. The executives at APT provide the financial and capital funding services necessary for the
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**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

	Regulated Utilities to fund utility operations and growth services.
Allocation Method	Management Fees are charged by APT as a monthly fee which is allocated to the utilities division (26.98%), and then to each individual utility based on customer count.
Ratepayer Benefits	Rate payers avoid the burdens of senior management staff at each utility by sharing of resources between all utilities, resulting in significant savings. These management services also allow Regulated Utilities to have an available source of capital funding for plant and infrastructure in the provision of utility services at a cost cheaper than what such utilities could obtain on their own.
Need for Management Services	APT management services are required in the provision of service by Regulated Utilities because the APT managers oversee utility operations, provide high level approvals for capital and operating budgets, and provide strategic planning services for the utilities. They also develop overall corporate strategies, negotiate contracts, allocate capital among utilities and approve high level expenditures. These management services are required in order for APIF to provide capital funding to individual utilities, without which the utilities could not provide adequate service.

**GENERAL LEGAL SERVICES**

Description	Legal expenses incurred by APT for general legal matters pertaining to all facilities owned by APIF. These legal services are required in order for APIF to provide capital funding to individual utilities, without which the utilities could not provide adequate service.
Services Provided	These legal services involve legal matters not specific to any single facility, including review of audited financial statements, annual information filings, Sedar filings, review of contracts with credit facilities, incorporation, tax issues of a legal nature, market compliance, and other similar legal costs.
Ratepayer Benefits	General legal costs help ensure that the APIF and the Regulated Utilities remains compliant in all aspects of operations and prevents those entities from being exposed to unnecessary risks. These legal services also allow utilities to have continued access to capital markets available to APIF.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

Need for Legal Services	These legal expenses are critical to utility operations because they ensure APIF's status and viability as a publicly traded income fund and allow the utilities to provide service in a way to ensure continued access to strategic management and capital markets. These legal services also shelter APIF and its Regulated Utilities from operational risks.
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**PROFESSIONAL SERVICES**

Description	Professional Services including strategic plan reviews, capital market advisory services, ERP System maintenance, benefits consulting, and other similar professional services.
Ratepayer Benefits	These professional services ensure that APIF's strategic plans and initiatives are completed with the highest degree of care and professionalism, which is necessary for the Regulated Utilities to receive debt and equity funding from capital markets. These services allow the Regulated Utilities to have an available source of capital funding for plant and infrastructure in the provision of utility services.
Need for Services	These costs are required for the provision of service as the strategic plans are filtered down to the individual utility level. In the absence of strategic plans, the utilities would not be investing to ensure the highest level of service is provided, and would also not be able to strive for continued operational improvements to save ratepayers money in the long run. In the absence of these services, unit holders would not invest in utility operations of APIF because the utilities would not incur the necessary costs to ensure that the strategic plans are followed as a condition of such funding.

**2. Access to Capital Markets.**

One of APT's primary functions is to ensure APIF's facilities (i.e., the Regulated Utilities) have access to quality capital. APIF is listed on the Toronto Stock Exchange, a leading financial market. In order to allow the Regulated Utilities to have continued access to those capital markets, APT incurs the following Costs for the benefit of the Utilities. These services and costs are a prerequisite to the Regulated Utilities' continued access to those capital markets.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

**LICENSE FEES AND PERMITS**

Description	Fees incurred by APT to ensure that APIF can participate in the Toronto Stock Exchange. These licensing and permit fees are required in order to sell units on the Toronto Stock Exchange.
Examples	Sedar fees, annual filing fees, licensing fees, etc.
Ratepayer Benefits and Need for Services	The ratepayers and Regulated Utilities have access to capital so long as APIF is able to access capital markets. These license fees allow APIF to sell units on the Toronto Stock Exchange and, in turn, provide funding for utility operations. These license fees incurred by APT are critical to ensure continuing access to capital.

**ESCROW FEES**

Description	Escrow Fees for payment of dividends to Unit Holders.
Examples	Unit holders invest in APIF, and, in turn, provide capital funding to the Regulated Utilities by buying units. In making those investments, unit holders expect monthly distributions on the units they own. As such, APT incurs escrow fees in paying such monthly payments to unit holders.
Ratepayer Benefits	Escrow Fees are incurred in order to ensure that unit holders of APIF continue to maintain ownership, and that new shareholders are enticed to invest in the Fund. Those new shareholders are the ones truly investing money for new and future projects the utilities undertake. Without them, there is no money for APIF to invest in the utilities.
Need for Services	Escrow Fees are incurred to ensure continued access to capital and ensure continuing and ongoing investments by unit holders. Without such escrow fees, the Regulated Utilities would not have a readily available source of capital funding.

**UNIT HOLDER COMMUNICATIONS**

Description	Unit holder communication costs are incurred to comply with filing and regulatory requirements of the Toronto Stock Exchange and meet the expectations of shareholders.
Examples	News releases, unit holder conference calls, etc.
Ratepayer Benefits	Unit holder communications costs are incurred by APT for the benefit of the Regulated Utilities to ensure that unit holders are fully informed of all operational and strategic decisions. These disclosures are required by law to ensure a level of integrity and rigor is applied to the management of the Regulated Utilities.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

Need for Services	In the absence of unit holder communication costs, investors would not invest in the units of APIF, and in turn, APIF would not have capital to invest in the utilities. With such communications services, the Regulated Utilities would not have a readily available source of capital funding.
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**3. APT Financial Controls.**

Financial Control costs incurred by APT include costs for audit services, tax services, and trustee fees. These costs are necessary to ensure that the Regulated Utilities are operated in a manner that meets audit standards and regulatory requirements have strong financial and operational controls, and that financial transactions are recorded accurately and prudently. Without these services, the Regulated Utilities would not have a readily available source of capital funding.

**AUDIT FEES**

Description	Audits are done on a yearly basis and reviews are performed quarterly on all facilities owned by APIF on an aggregate level.
Examples	Audits are provided by KPMG.
Ratepayer Benefits	Audits benefit ratepayers by verifying and ensuring that all financial transactions are recorded prudently. Further, financial transactions are scrutinized to ensure that operations are run prudently. Audit fees also ensure that access to capital is available as it is a requirement of financial markets. The aggregate audit again benefits the Regulated Utilities by allowing continued access to capital markets and unit holders.
Need for Services	These corporate parent level audits reduce the cost of the standalone audits significantly for utilities such as LSPSCO which must perform its own separate audits. Where standalone audits are not required, rate payers receive benefits of additional financial rigor, as well as access to capital, and financial soundness checks by third parties. Finally, during rate cases, the existence of audits provides Staff and Intervenors additional reliance on the company records, thus reducing overall rate case costs. The aggregate audit is necessary for the Regulated Utilities to have continued access to capital markets and unit holders.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

**TAX SERVICES**

Description	Tax Services expenses are incurred to ensure prudent tax filing, planning and management.
Examples	Taxes are paid on behalf of the Regulated Utilities at the parent level as part of a consolidated United States tax return. Tax services are provided by third parties including KPMG for tax planning and filing.
Ratepayer Benefits	Tax services ensure that each utility maintains tax compliance as the parent maintains compliance on their behalf. The shared cost of such tax services also are lower than the costs of stand alone tax services, which would otherwise be incurred by the Regulated Utilities.
Need for Services	Tax services are required as each of the utilities would be required to pay taxes on a stand alone basis. Filing tax returns on a consolidated basis benefits each Regulated Utility by reducing the costs that otherwise would be incurred by such Utility in filing its own separate tax return.

**TRUSTEE FEES**

Description	Trustee Fees are paid to the Board of Trustees, which meets on a quarterly basis.
Ratepayer Benefits	Trustees act in the same manner as Boards of Directors. They have a duty to shareholders to ensure that they will act in their best interests. This means that they must act in a way that optimizes the operations of the utilities. Trustees also approve the strategic direction of the company, provide corporate governance, and oversee the strategic direction and health of the Income Fund, and in turn the Regulated Utilities owned by APIF in order to ensure long term sustainability. In summary, the trustees help to ensure financial rigor, significant controls, and ultimately keeps rates low.
Need for Services	Trustees are required to oversee the operations of the utilities collectively. They also ensure on going access to capital and are a fundamental requirement for a publicly traded company and its affiliates.

**4. APT Administrative Costs.**

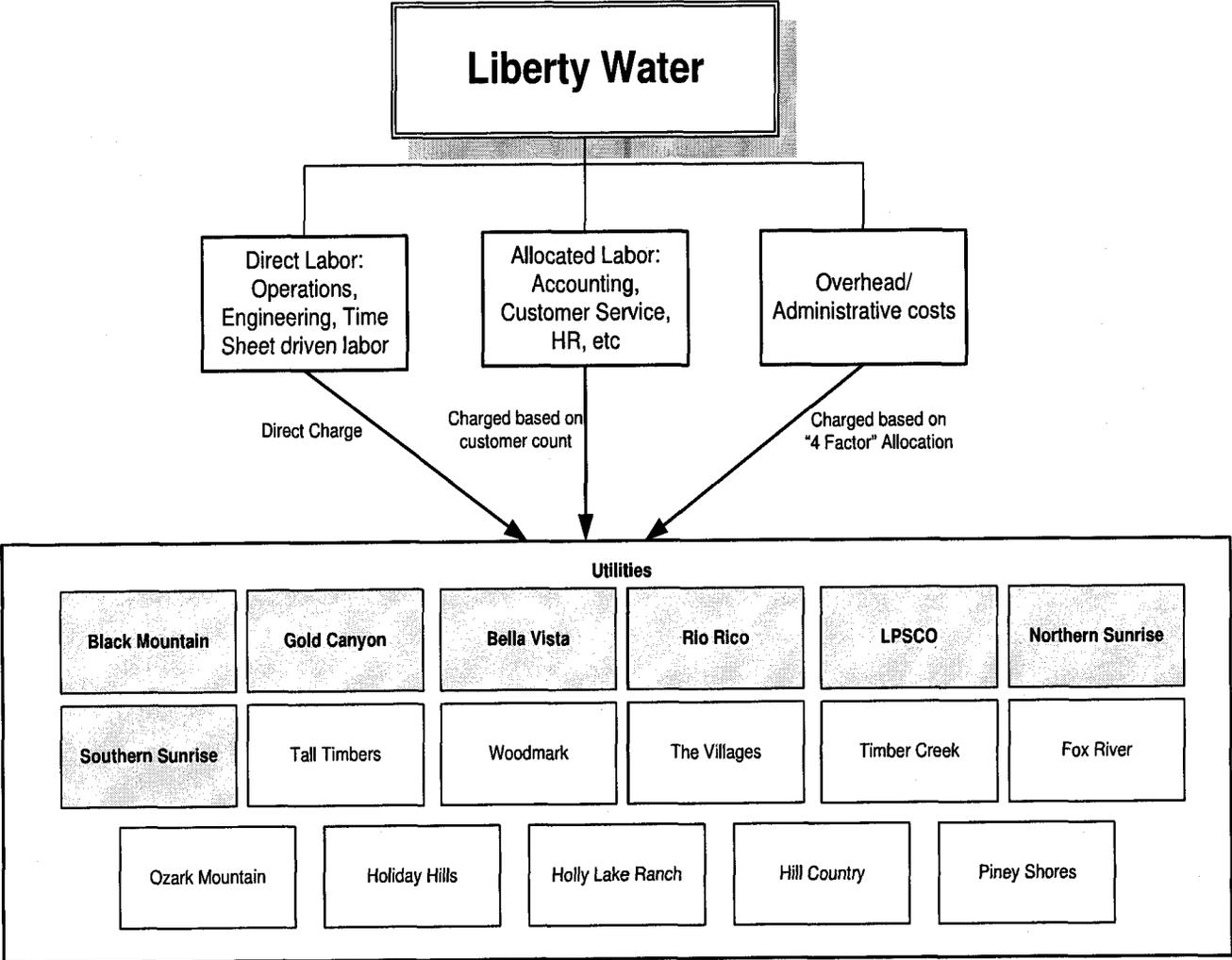
Finally, administrative costs incurred by APT such as rent, depreciation of office furniture, depreciation of computers, and general office costs are required to

***LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY***

house all the services mentioned above. Without these administrative costs, the employees of APT could not perform their work and provide the necessary services to the Regulated Utilities.

**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

Appendix 1: Overview of Liberty Water Allocation Methodology



Utilities located in Arizona

## LIBERTY WATER AFFILIATE COST ALLOCATION METHODOLOGY

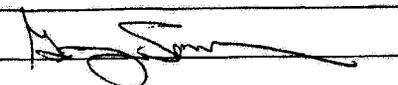
### Appendix 2: Sample Time Sheet of Liberty Water Employee

ALGONQUIN WATER SERVICES - WEEKLY TIME SHEET															
EMPLOYEE NAME: Martin Garlant										EMPLOYER No: 1092		Week Ending : November 7, 2009			
Day of Week	Date	Time from	Time to	Work Hours	Jury Duty	Stat	Sick	Vac	Site Hours	Call Out Day	Call Out Hours	Rate / Client #	OPS / FWO #	Labor Cost Code	Description
Sunday	11/1														
												Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
												Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
												N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
												S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
												Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
Monday	11/2	7:00 AM	12:00 PM	5					2			Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
		1:00PM	5:00PM	4					1			Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
									1			N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
									1			S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
									4			Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
Tuesday	11/3	7:00 AM	12:00 PM	5					2			Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
		1:00 PM	5:00 PM	4					2			Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
									1			N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
									1			S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
									3			Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
Wednesday	11/4	7:00 AM	12:00 PM	5					2			Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
		1:00PM	5:00 PM	4					2			Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
									0.5			N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
									0.5			S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
									4			Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
Thursday	11/5	7:00 AM	12:00 PM	5					5			Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
		1:00PM	6:00 PM	5					2			Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
									0.5			N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
									0.5			S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
									2			Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
Friday	11/6	7:00 AM	12:00 PM	5					3			Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
		1:00 PM	5:00 PM	4					2			Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
									0.5			N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
									0.5			S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
									2			Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
									1			Training	9999-0000-TRAIN	1-5020-0000-0001	
Saturday	11/7											Rio Rico	8134-0100-OPS1	1-5020-1000-0001	
												Rio Rico	8134-0200-OPS1	1-5020-2000-0001	
												N. Sunrise	8137-0100-OPS1	1-5020-1000-0001	
												S. Sunrise	8140-0100-OPS1	1-5020-1000-0001	
												Bella Vista	8500-0100-OPS1	1-5020-1000-0001	
												Training	9999-0000-TRAIN	1-5020-0000-0001	
				Regular Work Week Hours						ON CALL					
				Work	Jury Duty	Stat	Sick	Vac	Site	Days	Hours				
				48.00	0.00	0.00	0.00	0.00	48.00	0.00	0.00				

SIGNATURE



SUPERVISOR

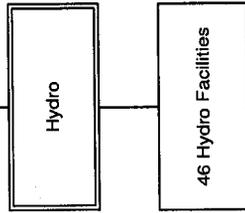


**LIBERTY WATER AFFILIATE  
COST ALLOCATION METHODOLOGY**

Appendix 3: Overview of APT Cost Allocations:

**Algonquin Power Trust**  
Strategic Management, Capital Access, Financial Controls, Administrative Costs

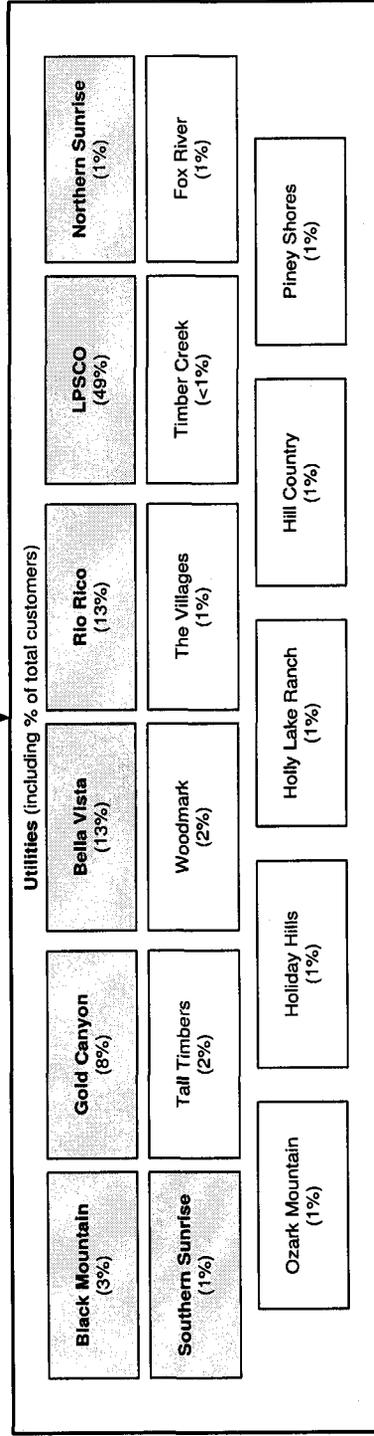
46/63 utilities = 73.02%  
of costs



17/63 = 26.98% of costs

**Utilities**

Charged Based on customer Count



Utilities in Arizona

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**PETER EICHLER**  
**REBUTTAL TESTIMONY**  
**February 1, 2010**

# **Exhibit PE-RB2**

Rio Rico Utilities Inc.  
Allocation Methodology Analysis  
(all numbers in \$ millions, except number of facilities)

Number of Facilities

Number of total utilities	17
Number of total facilities	63
Allocation based on number of facilities	<u>26.98%</u>

Revenues

Year	2008	2007
Revenues from Utilities	35.233	33.699
Gross Revenues from 63 facilities	206.99	161.889
Allocation based on revenues	<u>17.02%</u>	<u>20.82%</u>

Allocation based on Plant

Total APIF Plant Value excluding CIAC and AIAC	804.981
Add: Liberty Water CIAC	62.737
Total APIF Plant	867.718
Total Liberty Water - Plant Value - excluding CIAC and AIAC & Intangible	245.319
Future Income Tax Adjustment	12.770
Total Liberty Water Plant	258.088
Allocation based on Plant	<u>29.74%</u>

Operating Costs

Total APIF Operating costs	44.413
Utility operating costs	12.82318
Allocation based on Operating Costs	<u>28.87%</u>

Three Factor Calculation

<u>Factor</u>	<u>Allocation %</u>	<u>Weight</u>	<u>Total</u>
Operating Costs	28.87%	33%	9.53%
Revenue	17.02%	33%	5.62%
Plant in Service	29.74%	33%	9.82%
			<u>24.96%</u>
<u>Number of facilities</u>			<u>26.98%</u>

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**PETER EICHLER**  
**REBUTTAL TESTIMONY**  
**February 1, 2010**

**Exhibit PE-RB3**

**COMPARISON OF RIO RICO'S OPERATING COSTS TO OTHER ARIZONA WATER UTILITIES**

	Az-Ann (Paradise Valley)	Sunrise Water Co.	Arizona American (Anthem Water)	Rio Verde Utilities, Inc. (Water)	Arizona Water Co. (Oracle)	Arizona Water Co. (San Manuel)	Chaparral City Water Co.	Arizona Water Co. (Sedona)	H2O, Inc.	Global Water (Santa Cruz Water Co.)	Arizona Water Co. (Lakeside)	Arizona Water Co. (Coolidge)	Arizona Water Co. (Sierra Vista)	Willow Valley Water Co.	Rio Rico Water Division	Arizona Water Co. (Overgaard)
Test Year	12/31/2007	12/31/2007	12/31/2007	12/31/1999	12/31/2007	12/31/2007	12/31/2006	12/31/2007	12/31/2006	12/31/2008	12/31/2007	12/31/2007	12/31/2007	12/31/2008	12/31/2008	12/31/2007
Customers[1]	4,884	1,324	8,764	1,193	1,524	1,573	13,500	6,419	6,300	15,371	4,953	4,656	2,900	1,554	6,025	4,124
Total Revenue	\$7,846,732	\$1,304,363	\$9,357,346	\$953,199	\$1,115,109	\$812,359	\$7,446,700	\$3,521,124	\$3,383,145	\$9,110,720	\$2,588,943	\$2,214,952	\$1,461,897	\$473,327	\$1,847,256	\$1,686,342
Total Expenses	\$6,296,235	\$1,364,627	\$7,215,051	\$750,938	\$931,966	\$859,882	\$6,649,429	\$3,096,417	\$3,026,826	\$7,141,309	\$2,071,226	\$1,938,319	\$1,186,838	\$569,035	\$2,061,862	\$1,316,453
Salary/Wages	\$715,859	\$414,480	\$801,914	\$104,146			\$969,244		\$790,693	\$781,051				\$226,369		
Pension/Benefits				\$7,399						\$189,983				\$50,965		
Purchased Water			\$444,337	\$67,382		\$241,318	\$831,656	\$7,247	\$77,763		\$1,233	\$10,262	\$2,096			\$58
Purchased Power	\$693,068	\$169,673	\$965,412	\$156,637	\$149,736	\$38,338	\$602,982	\$518,834	\$253,894	\$554,361	\$181,940	\$192,581	\$220,661	\$33,562	\$441,501	\$71,171
Chemicals	\$236,982	\$14,099	\$90,637	\$1,007	\$15,542	\$40,816	\$127,457	\$319,722	\$4,229	\$40,139	\$28,463	\$33,911	\$22,454	\$18,050	\$9,347	\$14,733
Materials/Supp.	\$87,860	\$53,733	\$64,824	\$15,399			\$19,800		\$236,896	\$316,002				\$60,189	\$23,150	
Testing Serv.	\$2,635			\$9,137			\$43,458		\$12,289	\$36,113				\$5,401		
Cust. Accounting					\$100,428	\$104,642		\$323,108			\$275,893	\$267,290	\$134,508			\$207,198
Admin/General					\$151,590	\$140,854	\$266,544	\$641,077	\$72,107	\$67,911	\$506,659	\$378,361	\$152,251	\$12,787	\$805,032	\$279,673
Contr. Serv. Other	\$45,163			\$28,578												
Management Fees	\$923,778		\$1,132,699													
Rent	\$21,467	\$37,664	\$14,739						\$212,418	\$94,369				\$9,185	\$26,954	
Transportation		\$74,769		\$593,000			\$70,430		\$182,654	\$45,296				\$13,076	\$79,315	
Insurance-GL	\$184,827	\$11,141	\$240,221	\$7,539			(\$1,294)		\$46,695	\$53,083				\$5,119	\$37,699	
Insurance-Other	\$45,435	\$50,775	\$61,231						\$61,213	\$4,647				\$1,072		
Misc.	\$351,828	(\$21,980)	\$279,744	\$139,000			\$1,259,948		\$7,244	\$34,629				\$10,257	\$14,822	
Depreciation	\$1,615,824	\$395,853	\$1,979,583	\$162,599	\$181,393	\$106,134	\$1,608,019	\$731,033	\$343,659	\$3,507,185	\$416,943	\$426,056	\$186,533	\$185,781	\$463,297	\$214,780
Income Taxes	\$228,400		\$74,690	\$23,017	\$65,869	(\$77,597)	\$270,020	(\$153,125)	\$221,095	\$1,238,040	\$158,301	\$73,220	\$114,140	(\$72,987)	(\$134,909)	\$154,685
Property Taxes	\$268,996	\$64,714	\$414,503	\$53,921	\$68,170	\$295,813	\$295,813	\$125,837	\$201,549	\$1,238,040	\$116,684	\$151,656	\$80,115		\$130,373	\$65,159
Other Taxes	\$67,972		\$69,910	\$41,820	\$12,458	\$9,102	\$47,783	\$47,845	\$63,002	\$6,823	\$35,117	\$52,532	\$13,539	\$140		\$22,756
Cost/Customer[2]	\$1,289,716	\$1,030,669	\$933,26	\$629,45	\$611,53	\$546,65	\$492,75	\$482,38	\$480,45	\$64,60	\$418,18	\$416,31	\$409,25	\$366,17	\$342,22	\$319,22
Total Expenses Less Depr/Taxes	\$4,115,043	\$904,060	\$4,676,365	\$523,502	\$618,325	\$754,073	\$4,427,794	\$2,344,827	\$2,197,521	\$2,389,261	\$1,344,181	\$1,234,855	\$792,511	\$456,101	\$1,603,101	\$859,073
Cost/Customer Less Dep/Taxes[3]	\$842,36	\$682,82	\$533,59	\$438,81	\$405,73	\$479,39	\$327,98	\$365,29	\$368,81	\$155,44	\$271,39	\$265,22	\$273,28	\$293,50	\$266,07	\$208,31
Total Expenses - Tax/Dep/Pow/Chem	\$3,184,993	\$720,288	\$3,175,979	\$298,476	\$453,047	\$433,381	\$2,865,699	\$1,499,024	\$1,861,635	\$1,794,761	\$1,132,545	\$998,101	\$547,300	\$404,489	\$1,152,253	\$773,111
Cost/Cust. - Tax/Dep/Power/Chem[4]	\$652,13	\$544,02	\$362,39	\$250,19	\$297,27	\$275,64	\$212,27	\$233,53	\$295,50	\$116,76	\$228,66	\$214,37	\$188,72	\$280,29	\$191,25	\$187,47

[1] The customer numbers are based on each company's H-2 Schedule filed in each company's recent rate case.

[2] This row equals Total Operating Expenses divided by the total number of customers.

[3] This row equals Total Operating Expenses minus Taxes and Depreciation divided by the total number of customers.

[4] This row equals Total Operating Expenses minus Taxes, Depreciation, Purchased Power, Purchased Water and Chemicals divided by the total number of customers.

**COMPARISON OF RIO RICO'S OPERATING COSTS TO OTHER ARIZONA SEWER UTILITIES**

	Az-Am (Anthem-Agua Fria)	Rio Rico Wastewater	Az-Am (Anthem)	Az-Am (Mohave Wastewater)	Coronado Utilities	Global Water (Palo Verde)	Far West
Test Year	12/31/2008	12/31/2008	12/31/2007	12/31/2007	12/31/2008	12/31/2008	12/31/2007
<b>Customers[1]</b>	13,038	2,071	8,456	1,235	1,281	15,152	7,200
Total Revenue	\$8,637,123	\$1,829,976	\$6,395,183	\$796,161	\$883,530	\$6,521,201	\$2,139,964
Total Expenses	\$8,828,909	\$1,387,305	\$5,438,217	\$780,542	\$729,033	\$6,376,014	\$2,999,582
Salary/Wages (601)	\$1,335,278	--	\$439,668	\$108,996	\$52,500	\$924,853	\$870,122
Pension/Benefits (604)	--	--	--	--	--	\$215,792	--
Purchased Water (610)	\$3,368	--	--	--	--	--	--
Purchased Power (615)	\$278,664	\$65,431	\$352,338	\$73,650	\$54,218	\$595,128	\$257,542
Fuel for Power	--	--	--	--	--	--	--
Chemicals (618)	\$303,374	\$9,644	\$101,456	\$9,214	\$27,790	\$157,174	\$233,710
Materials/Supplies (620/620.08)	\$85,697	\$14,304	\$49,707	\$7,874	\$2,978	\$558,602	\$47,418
Contract Services-Testing (635)	--	--	--	--	\$3,676	\$99,923	\$158,510
Contract Services Other (636)	--	\$473,571	--	--	\$182,727	\$183,263	\$107,425
Rent (641)	\$84,483	--	\$18,363	\$1,613	--	\$93,111	\$199,706
Management Fees	\$1,528,005	--	\$890,005	\$123,665	--	--	--
Transportation (650)	--	\$26,817	--	--	\$209,00	\$35,559	\$63,570
Insurance-GL (657)	\$396,599	\$12,021	\$90,870	\$24,046	\$11,066	\$52,375	\$38,805
Insurance Other (659)	\$94,566	--	\$49,453	\$7,294	--	\$4,320	--
Misc. (675)	\$534,489	\$155,00	\$259,385	\$16,726	\$37,081	\$65,212	\$34,270
Depreciation (403)	\$3,830,808	\$252,672	\$1,988,462	\$248,398	\$186,095	\$3,157,285	\$1,550,751
Income Taxes	(\$1,020,813)	\$308,456	\$173,361	(\$76,894)	\$49,987	\$89,555	(\$1,312,313)
Property Taxes	\$296,804	\$91,705	\$512,237	\$37,922	\$57,733	0	\$179,467
Other Taxes	\$87,538	0	\$36,892	\$9,778	\$5,521	\$6,070	\$44,188
<b>Cost/Customer[2]</b>	\$677.17	\$669.87	\$643.12	\$632.02	\$569.11	\$420.80	\$416.61
Total Expenses - Taxes/Deprec.	\$5,634,572	\$734,472	\$2,727,265	\$561,338	\$429,697	\$3,123,104	\$2,537,489
	\$432.17	\$354.65	\$322.52	\$454.52	\$335.44	\$206.12	\$352.43
<b>Cost/Cust. Less- Taxes/Deprec.[3]</b>							
Total Expenses-Tax/Dep./Power/Chem.	\$5,052,534	\$659,397	\$2,273,471	\$478,474	\$347,689	\$2,370,802	\$2,046,237
Cost/Cust. Less Tax/Dep./Power/Chem[4]	\$387.52	\$318.40	\$268.86	\$387.43	\$271.42	\$156.47	\$284.20
Cost/Cust Less Tax/Dep/Power/Chem per month	\$32.29	\$26.53	\$22.40	\$32.29	\$22.62	\$13.04	\$23.68

[1] The customer numbers are based on each company's H-2 Schedule filed in each company's most recent rate case.

[2] This row equals Total Operating Expenses divided by the total number of customers.

[3] This row equals Total Operating Expenses minus Taxes and Depreciation divided by the total number of customers.

[4] This row equals Total Operating Expenses minus Taxes, Depreciation, Purchased Power, Purchased Water and Chemicals divided by the total number of customers.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**PETER EICHLER**  
**REBUTTAL TESTIMONY**  
**February 1, 2010**

**Exhibit PE-RB4**

UTILITIES DIVISION **REVISED** STAFF'S RESPONSES TO  
RIO RICO UTILITIES, INC'S SECOND SET OF DATA REQUESTS TO  
ARIZONA CORPORATION COMMISSION UTILITY DIVISION STAFF  
DOCKET NO. WS-2676A-09-0257  
JANUARY 26, 2010

- 2.9 Admit that Algonquin Power would not require audits if it did not own any facilities. If denied, please explain why.

**Response: Deny. It is conceivable that Algonquin Power's need to raise capital pre-dates the ownership of its first facility, and that this need to raise capital might have required audited financial statements.**

1 FENNEMORE CRAIG, P.C.  
Jay L. Shapiro (No. 014650)  
2 Todd C. Wiley (No. No. 015358)  
3003 N. Central Ave.  
3 Suite 2600  
Phoenix, Arizona 85012  
4 Attorneys for Rio Rico Utilities, Inc.

5 **BEFORE THE ARIZONA CORPORATION COMMISSION**

6  
7 IN THE MATTER OF THE  
8 APPLICATION OF RIO RICO  
9 UTILITIES, INC., AN ARIZONA  
CORPORATION, FOR A  
10 DETERMINATION OF THE FAIR  
VALUE OF ITS UTILITY PLANTS AND  
11 PROPERTY AND FOR INCREASES IN  
ITS WATER AND WASTEWATER  
12 RATES AND CHARGES FOR UTILITY  
SERVICE BASED THEREON.

DOCKET NO: WS-02676A-09-0957

13  
14  
15  
16  
17  
18 **REBUTTAL DIRECT TESTIMONY OF**  
19 **THOMAS J. BOURASSA**  
20 **(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**  
21

22 **February 1, 2010**  
23  
24  
25  
26

TABLE OF CONTENTS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26

I. INTRODUCTION AND QUALIFICATIONS ..... 1

II. SUMMARY OF RRUI'S REBUTTAL POSITION..... 1

III. RATE BASE ..... 4

    A. Water Division Rate Base ..... 4

        1. Plant-in-service ..... 4

        2. Advances-in-aid of Construction (AIAC) and Contributions-in-aid of Construction (CIAC) ..... 5

        3. Deferred Income Taxes (DIT) ..... 6

        4. Remaining Rate Bases Issues..... 19

    B. Wastewater Division Rate Base ..... 19

        1. Plant-in-Service and Accumulated Depreciation..... 20

        2. AIAC and CIAC ..... 20

        3. Deferred Income Taxes (DIT) ..... 20

        4. Remaining Rate Bases Issues..... 22

IV. INCOME STATEMENT ..... 22

    A. Water Division Revenue and Expenses ..... 22

        1. Remaining Revenue and Expense Issues ..... 25

    B. Wastewater Division Revenue and Expenses ..... 28

        1. Remaining Revenue and Expense Issues ..... 30

V. RATE DESIGN..... 31

    A. Water Division ..... 31

    B. Wastewater Division ..... 38

    C. Miscellaneous Issues..... 39

2280370

1 **I. INTRODUCTION AND QUALIFICATIONS**

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

3 A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,  
4 Phoenix, Arizona 85029.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

6 A. I am testifying in this proceeding on behalf of the applicant, Rio Rico Utilities, Inc.  
7 (“RRUI” or the “Company”).

8 **Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE**  
9 **INSTANT CASE?**

10 A. Yes, my direct testimony was submitted in support of the initial application in this  
11 docket. There were two volumes, one addressing rate base, income statement and  
12 rate design, and the other addressing cost of capital.

13 **Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

14 A. I will provide rebuttal testimony in response to the direct filings by Staff and  
15 RUCO. More specifically, this first volume of my rebuttal testimony relates to rate  
16 base, income statement and rate design for RRUI. In a second, separate volume of  
17 my rebuttal testimony, I will also present an update to the Company’s requested  
18 cost of capital as well as provide responses to Staff and RUCO on the cost of  
19 capital and rate of return applied to the fair value rate base, and the determination  
20 of operating income.

21 **II. SUMMARY OF RRUI’S REBUTTAL POSITION**

22 **Q. WHAT ARE THE REVENUE INCREASES FOR THE WATER AND**  
23 **WASTEWATER DIVISIONS THAT THE COMPANY IS PROPOSING IN**  
24 **THIS REBUTTAL TESTIMONY?**

25 A. For the water division the Company is proposing a total revenue requirement of  
26 \$3,647,859, which constitutes an increase in revenues of \$1,827,602, or 98.94%

1 over adjusted test year revenues. For the wastewater division, RRUI is proposing a  
2 total revenue requirement of \$1,696,840, which constitutes a decrease in revenues  
3 of \$133,135, or -7.28% over adjusted test year revenues.

4 **Q. HOW DO THESE COMPARE WITH THE COMPANY'S DIRECT**  
5 **FILING?**

6 A. They are both lower. In the direct filing for the water division, the Company  
7 requested a total revenue requirement of \$3,904,369, which required an increase in  
8 revenues of \$2,057,112, or 111.36%. In the direct filing for the wastewater  
9 division, the Company requested a total revenue requirement of \$1,740,918, which  
10 required a decrease in revenues of \$89,058, or -4.87%.

11 **Q. WHAT'S DIFFERENT?**

12 A. In its rebuttal filing, RRUI has adopted a number of adjustments recommended by  
13 Staff and/or RUCO, as well as proposed a number of adjustments of its own based  
14 on known and measurable changes to the test year.

15 For the water division, the net result of these adjustments is: (1) the  
16 Company's proposed operating expenses have decreased by \$27,534, from  
17 \$2,061,862 in the direct filing to \$2,034,328; and a net decrease of \$463,238 in rate  
18 base from the direct filing of \$8,455,517 to \$7,992,279.

19 For the wastewater division, the net result of these adjustments is: (1) the  
20 Company's proposed operating expenses have increased by \$20,086, from  
21 \$1,339,300 in the direct filing to \$1,359,386; and a net decrease of \$192,629 in rate  
22 base from the direct filing of \$3,516,078 to \$3,323,449.

23 In addition, the Company has reduced its recommended cost of equity from  
24 12.4% in its direct filing to 11.7% in its rebuttal filing. This has resulted in a lower  
25 requested weighted cost of capital from 12.40% in the Company's direct filing to  
26 11.7% in its rebuttal filing.

1 **Q. PLEASE SUMMARIZE THE REASON FOR THE DECREASE IN THE**  
2 **RATE BASES?**

3 A. For the water division, the primary reason for the reduction in rate base is that the  
4 Company is proposing a change to the water division's deferred income taxes  
5 (DIT) of \$463,238 based on a revision to its DIT computation. The net rate base  
6 impact of this adjustment is \$(463,238). The same is true for the wastewater  
7 division, where RRUI is proposing a change to the wastewater division's deferred  
8 income taxes (DIT) of \$192,629 based on a revision to its DIT computation. The  
9 net rate base impact of this adjustment is \$(196,629).

10 **Q. WHAT ARE THE PROPOSED REVENUE REQUIREMENTS AND RATE**  
11 **INCREASES FOR THE COMPANY, STAFF, AND RUCO AT THIS STAGE**  
12 **OF THE PROCEEDING?**

13 A. For the water division, the proposed revenue requirements and proposed rate  
14 increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>	
15				
16	Company-Direct	\$3,904,369	\$2,057,112	111.36%
17	Staff	\$2,899,496	\$1,052,240	56.96%
18	RUCO	\$2,810,229	\$ 936,172	49.95%
19	Company Rebuttal	\$3,674,859	\$1,827,602	98.94%

20 For the wastewater division, the proposed revenue requirements and  
21 proposed rate increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>	
22				
23	Company-Direct	\$1,740,918	\$ (89,058)	(4.87)%
24	Staff	\$1,465,673	\$ (364,303)	(19.91)%
25	RUCO	\$1,300,774	\$ (549,328)	(29.69)%
26	Company Rebuttal	\$1,696,840	\$ (133,135)	(7.28)%

1 **III. RATE BASE**

2 **A. Water Division Rate Base**

3 **Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE**  
4 **BASE RECOMMENDATIONS FOR THE WATER DIVISION?**

5 A. Yes, for the water division the rate bases proposed by the parties proposing a rate  
6 base in the case, the Company, Staff and RUCO, are as follows:

	<u>OCRB</u>	<u>FVRB</u>
7 Company-Direct	\$ 8,455,517	\$ 8,455,517
8 Staff	\$ 6,639,072	\$ 6,639,072
9 RUCO	\$ 7,045,555	\$ 7,045,555
10 Company Rebuttal	\$ 7,992,279	\$ 7,992,279

11 **1. Plant-in-service**

12  
13 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**  
14 **ORIGINAL COST RATE BASE FOR THE WATER DIVISION, AND**  
15 **IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF**  
16 **AND/OR RUCO?**

17 A. The Company's rebuttal rate base adjustments to the water division's OCRB are  
18 detailed on rebuttal schedules B-2, pages 3 through 6. Rebuttal Schedule B-2, page  
19 1 and 2, summarize the Company's proposed adjustments and the rebuttal OCRB.

20 Rebuttal B-2 adjustment 1, as summarized on Rebuttal Schedule B-2, page  
21 2, consists of one adjustment labeled as "A" on Rebuttal Schedule B-2, page 3.

22 Adjustment A reflects a reclassification of PIS. This is primarily a  
23 "housekeeping" adjustment. The Company has adopted Staff's proposal to  
24 reclassify amounts from account 320 to account 320.1 and from account 330 to  
25 account 330.1.<sup>1</sup> RUCO has not proposed a similar adjustment.

26 <sup>1</sup> See Direct Testimony on revenue requirement of Gerald W. Becker ("Becker Dt.") at 10.

1           Rebuttal B-2 adjustment 2, as summarized on Rebuttal Schedule B-2,  
2 page 2, and as detailed on Rebuttal Schedule B-2, page 4, is zero as there are no  
3 proposed changes to accumulated depreciation.

4           **2. Advances-in-aid of Construction (AIAC) and Contributions-in-**  
5           **aid of Construction (CIAC)**

6 **Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO AIAC AND**  
7 **CIAC.**

8 A. In rebuttal B-2 adjustment 3, as shown on Schedule B-2, page 2, the Company  
9 proposes a decrease to AIAC of \$48,724 and a decrease to CIAC of \$48,724. The  
10 net impact on rate base is zero. This reclassification of AIAC and CIAC is based  
11 upon information provided to the parties in the instant case concerning the  
12 reconciliation of AIAC and CIAC.<sup>2</sup> RUCO proposes a similar adjustment.<sup>3</sup> Staff  
13 has proposed an increase to AIAC for \$48,724, but has not proposed a  
14 corresponding decrease to CIAC.<sup>4</sup> Staff's adjustment is incomplete because it fails  
15 to also adjust CIAC. Rather than a net zero impact on rate base, Staff's adjustment  
16 results in net decrease in rate base of \$48,724.

17 **Q. DID STAFF ALSO PROPOSE AN INCREASE TO CIAC?**

18 A. Yes.<sup>5</sup> However, the Company disagrees with Staff's adjustment. Staff's assertion  
19 that there were unrecorded amounts of CIAC in 2006 and 2008 totaling \$1,087,409  
20 (\$797,060 for 2006 and \$290,349) is incorrect.<sup>6</sup> The CIAC balance has been  
21

22 \_\_\_\_\_  
23 <sup>2</sup> See Company response to Staff data request GB 2.3 (worksheet "RRUI AIAC Reconciliation.xls"). The  
24 data request responses referenced herein are not attached, but were previously provided to Staff and the  
25 intervenors who requested them.

26 <sup>3</sup> See Direct Testimony on revenue requirement of Timothy J. Coley ("Coley Dt.") at 32.

<sup>4</sup> Becker Dt. at 21.

<sup>5</sup> *Id.* at 11.

<sup>6</sup> *Id.*

1 reconciled to the end of the test year and the Company's rebuttal balances reflect  
2 the correct amount of CIAC.<sup>7</sup>

3 **Q. THEN WHY DOES STAFF INCREASE CIAC?**

4 A. It appears that Staff's proposal is based upon its review of the Company's book and  
5 tax values for its DIT computation. As I will discuss below, Staff has incorrectly  
6 concluded that the Company failed to record CIAC, and as a result of this error,  
7 Staff substantially understates rate base and the revenue requirement.

8 **3. Deferred Income Taxes (DIT)**

9 **Q. HAS THE COMPANY PROPOSED A REBUTTAL ADJUSTMENT TO**  
10 **DEFERRED INCOME TAXES FOR THE WATER DIVISION?**

11 A. Yes. In rebuttal B-2 adjustment 4, as shown on Schedule B-2, page 2, the  
12 Company's deferred income tax asset, an addition to rate base, is decreased by  
13 \$463,238 to \$314,965. The decrease reflects (1) the Company's rebuttal proposed  
14 changes to PIS, accumulated depreciation, AIAC and CIAC, and (2) recognition  
15 that some CIAC funded PIS in prior years was included in the tax basis of PIS.  
16 The details of the Company's rebuttal proposed DIT adjustment is shown on  
17 Schedule B-2, page 6 and 6.1.

18 **Q. WHAT CHANGES OR UPDATES HAVE YOU MADE TO THE**  
19 **COMPANY'S DIT COMPUTATION?**

20 A. There are three primary changes/updates to the DIT computation. First, in the  
21 direct filing, the DIT computation rolled forward the tax basis of PIS using the tax  
22 asset information from the 2007 tax returns and estimates of tax additions, tax  
23 depreciation, and special ("bonus") depreciation through the end of 2008. A roll-  
24

25 <sup>7</sup> See Company response to Staff data request GB 2.3 (worksheet "GB 2.3 RRUI AIAC  
26 Reconciliation.xls") and Company response to Staff data request GB 3.4 (worksheets "GB 3.4 and 3.12  
CIAC Schedule.xls" and "GB 3.4 and 3.12 RRUI AIAC Schedule.xls").

1 forward approach was done because the 2008 tax returns were not finalized at the  
2 time the DIT computation was prepared. The rebuttal DIT computation starts with  
3 the tax asset information contained in the 2008 tax returns that are now finalized.

4 The second change/update was made in response to issues raised by Staff in  
5 the recent Black Mountain Sewer Corporation (“BMSC”)<sup>8</sup> and Litchfield Park  
6 Service Company (“LPSCO”)<sup>9</sup> rate cases. To address those concerns, I conducted  
7 a review of the book and tax values from 1996 through the end of 2008 and  
8 prepared a reconciliation to identify differences between book and tax values.  
9 These differences were then accounted for in the Company’s rebuttal DIT  
10 computation. Finally, the Company’s rebuttal DIT computation reflects the impact  
11 of Company proposed rebuttal changes to PIS, accumulated depreciation, and  
12 AIAC and CIAC.

13 **Q. WHAT IS THE PRIMARY REASON FOR THE DECREASE IN THE**  
14 **DEFERRED INCOME TAX ASSET?**

15 A. Removal of CIAC funded plant-in-service (“PIS”) from the tax basis of PIS  
16 including associated tax depreciation. As you will find on Schedule B-2, page 6.1,  
17 which shows the details of the book and tax values from 1996 through the end of  
18 2008, the prior owners of RRUI, Avatar, included PIS funded with CIAC in the tax  
19 basis of PIS. Algonquin acquired RRUI at the end of 2005. Since then, the  
20 differences between book and tax have been due the timing differences between the  
21 time the PIS was recorded on the books and when the PIS was recorded for tax  
22 purposes.

23  
24  
25 <sup>8</sup> See Docket No. SW-02361A-08-0609.

26 <sup>9</sup> See Docket Nos. SW-01428A-09-0103, W-01427A-09-0104, W-01427A-09-0116, and W-01427A-09-0120 (consolidated).

1 **Q. IS THE REMOVAL OF THE CIAC FUNDED PIS FROM THE TAX BASIS**  
2 **THE PROPER WAY TO ACCOUNT FOR THESE DIFFERENCES?**

3 A. Yes, and Staff correctly removed the CIAC amounts it identified from the tax basis  
4 of plant.<sup>10</sup> However, I am not sure whether Staff included the prior tax  
5 depreciation as part of its adjustment because Staff is silent on this aspect of the  
6 adjustment.

7 **Q. DID STAFF IDENTIFY THE SAME DIFFERENCES IN THE TAX AND**  
8 **BOOK VALUES RELATED TO CIAC FOR THE YEARS 2000 TO 2005?**

9 A. No. Staff identified \$3,360,021 of CIAC,<sup>11</sup> and I identified \$3,887,046. As shown  
10 on Schedule B-2, page 5.1 the CIAC amounts for 2000 - 2005 are as follows:

11

<u>Year</u>	<u>Amount</u>
2000	\$ -
2001	\$ 12,147
2002	\$ 478,931
2003	\$ 460,666
2004	\$ 730,017
2005	\$ 2,205,285
Total	<u>\$ 3,887,046</u>

12  
13  
14  
15  
16

17  
18 **Q. ARE THERE OTHER DIFFERENCES IN THE TAX AND BOOK VALUES**  
19 **RELATED TO CIAC?**

20 A. Yes. For 1997 through 1999, I identified additional CIAC that was recognized for  
21 tax purposes totaling \$55,494. As can be found on Schedule B-2, page 5.1 the  
22 CIAC amounts for 2000 through 2005 are as follows:

23  
24  
25 

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<sup>10</sup> Becker Dt. at 16.

26 <sup>11</sup> *Id.*

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<u>Year</u>	<u>Amount</u>
1997	\$ 16,751
1998	\$ 33,903
1999	\$ 4,840
<b>Total</b>	<b>\$ 55,494</b>

**Q. HAVE YOU REMOVED THE \$3,887,046 AND THE \$55,494 FROM THE TAX BASIS OF THE COMPANY'S DIT COMPUTATION?**

A. Yes. The details of the amounts removed can be found in footnote 2 on Schedule B-2, page 5. The net adjustment to the tax basis of PIS is summarized as follows:

<u>Description</u>	<u>Reference</u>	<u>Amount</u>
Gross CIAC funded tax assets 1996 to 1999	Line 36, B-2 p. 5	\$ (55,494)
Gross CIAC funded tax assets 2000 to 2005	Line 36, B-2 p. 5	\$ (3,887,046)
Tax Depreciation on CIAC funded tax assets through 2007	Line 46, B-2 p. 5	\$ 616,408
Tax Depreciation for 2008	Line 57, B-2 p. 5	\$ 157,779
Net CIAC funded tax assets adjustment to tax value		<u>\$ (3,168,353)</u>

**Q. ARE THERE OTHER DIFFERENCES IN THE TAX AND BOOK VALUES RELATED TO CIAC THAT YOU IDENTIFIED?**

A. Yes. I identified a book and tax difference for 1996 and prior totaling \$2,576,335. However, since certain amounts of CIAC for 1996 and prior were treated as taxable income upon which the Company has paid income taxes, the Company has a legitimate tax basis in this plant. No adjustment to the tax basis in the DIT computation is required.

**Q. ARE THERE ANY OTHER DIFFERENCES BETWEEN STAFF AND THE COMPANY CONCERNING CIAC RELATED BOOK-TAX TIMING DIFFERENCES?**

A. Yes. Staff has erroneously assumed that the book and tax timing difference for 2006 and 2008 totaling \$1,087,409 are related to CIAC. Furthermore, Staff

1 assumed that the differences for these years were the result of the Company's  
2 failure to record CIAC on its books.<sup>12</sup>

3 **Q. HOW DO YOU RESPOND TO STAFF'S ASSERTION THAT CIAC**  
4 **TOTALING \$1,087,409 WAS NOT RECORDED ON THE BOOKS?**

5 A. Staff's assumption is severely flawed. As I stated earlier, the CIAC balance was  
6 reconciled to the end of the test year. Further, and more importantly, the timing  
7 difference in 2006 and 2008 was due to the recognition of plant costs for book  
8 purposes, but not for tax purposes. It was not the result of failure to record CIAC  
9 on its books. As is shown on Schedule B-2, page 5.1, the Company has identified  
10 \$797,709 of 2006 booked plant additions and \$809,876 of booked plant additions  
11 that were not reflected in the tax basis of plant for those years.

12 **Q. BUT THAT ADDS UP TO OVER \$1.6 MILLION – STAFF'S**  
13 **“UNRECORDED” CIAC WAS JUST OVER \$1 MILLION STAFF**  
14 **ALLEGEDLY IDENTIFIED. CAN YOU EXPLAIN?**

15 A. I can explain the roughly \$1.6 million timing difference I identified, but I cannot  
16 explain how Staff derived its roughly \$1 million.

17 **Q. HOW WERE YOU ABLE TO IDENTIFY THE ROUGHLY \$1.6 MILLION**  
18 **OF UNRECORDED TAX ADDITIONS?**

19 A. I compared the tax work papers<sup>13</sup> which contained both the book and tax additions  
20 for 2006 and 2008 and compared the total additions with the Company's B-2 plant  
21 additions schedules and discovered the differences. I then asked the Company to  
22 explain. Subsequently, I asked the Company to provide me the details which the  
23 Company was able to do.<sup>14</sup>

24 <sup>12</sup> *Id.* at 11.

25 <sup>13</sup> See Company response to Staff data requests GB 3.3 and 3.11 (worksheet “GB 3.3 and 3.11 Tax Value  
Build-up.xls”).

26 <sup>14</sup> See RRUI rebuttal work papers (worksheet “#3 Rio Rico Fixed Asset Schedule – Rec for Tom.xls”).

1 Q. WAIT A MINUTE, MR. BOURASSA. DOESN'T STAFF IDENTIFY THE  
2 CONTRIBUTOR OF THIS CIAC, THE ASSOCIATED NEW  
3 DEVELOPMENT AND RELATED UTILITY FACILITIES?

4 A. No. Mr. Becker has created CIAC out of thin air. All I can say at this point is that  
5 the timing difference is not the failure to record CIAC. Therefore, Staff lacks any  
6 legitimate basis to increase either the CIAC balance in its DIT computation and,  
7 just as important, increase the CIAC balance and thereby reduce rate base.

8 Q. THANK YOU. WOULD YOU PLEASE COMMENT ON STAFF'S  
9 RECOMMENDED DIT BALANCE?

10 A. Like the Company, Staff is recommending a net DIT asset for the water division.  
11 However, Staff's recommendation is \$73,648<sup>15</sup> for the water division compared to  
12 the Company's rebuttal recommendation of \$314,965 as shown on Schedule B-2,  
13 page 5.

14 Q. DOES STAFF ELIMINATE THE NET OPERATING LOSS COMPONENT  
15 FROM ITS COMPUTATION?

16 A. Yes.<sup>16</sup> Staff claims the inclusion of a net operating loss ("NOL") component (a  
17 DIT asset) would be unfair to ratepayers since the ratepayers would essentially be  
18 paying a carrying charge on the Company's expected future tax benefit and thus  
19 would be unfair to rate payers since they have already paid their fair share of  
20 income tax expense through rates.<sup>17</sup>

21 Q. HAVE YOU SEEN THIS ADJUSTMENT MADE BEFORE?

22 A. No, and I disagree with Staff assertions for several reasons. First, the NOL carry-  
23 forward represents the unused portion of the special depreciation allowance the

24 \_\_\_\_\_  
<sup>15</sup> Becker Dt. at 20.

25 <sup>16</sup> *Id.*

26 <sup>17</sup> *Id.* at 19.

1 Company elected to take during the test year. Ratepayers have not already paid  
2 income taxes related to the book and tax depreciation timing differences on this  
3 unused depreciation. Staff is just wrong. Nor has the Company offset any taxable  
4 income and paid lower income taxes related to the unused depreciation as of the  
5 end of the test year. The unused depreciation deduction will provide future tax  
6 benefits as an offset to future taxable income.

7 The second reason I disagree with Staff's assessment is that the NOL carry-  
8 forward is directly related to the book and tax depreciation timing difference from  
9 which deferred income taxes arise. These book and tax timing differences create  
10 net DIT liabilities or net DIT assets depending on the circumstances.  
11 Discriminating between DIT liabilities and DIT assets for the inclusion or the  
12 exclusion from the ratemaking process simply because one may reduce rate base  
13 while another may increase rate base, is inherently unfair. Consistent treatment  
14 will ultimately be fair to both the utility and to its ratepayers. But, just as  
15 important, recognizing portions of deferred income taxes while not recognizing  
16 others, particularly with respect to capital investments, would violate the tax  
17 normalization requirements of the Internal Revenue Code for ratemaking and  
18 financial reporting. Failure to follow the normalization as prescribed by the Code  
19 results in the possible loss of eligibility to utilize the tax benefits associated with  
20 accelerated depreciation and investment tax credits.

21 **Q. WHAT IS TAX NORMALIZATION?**

22 **A.** Tax normalization refers to the accounting and regulatory process that recognizes  
23 that there may be temporary tax timing differences in the amount of the tax paid in  
24 early years that will reverse themselves in later years. Normalization is similar to  
25 accrual accounting, which generally requires the effects on assets and liabilities to  
26 be shown on the books in the time period in which they occur rather than when

1 cash is received or paid. Accordingly, the difference between the allowed income  
2 taxes in rates and the actual income taxes paid is recognized in a company's  
3 accounts as deferred taxes.

4 **Q. HOW IS THE NOL CARRY-FORWARD DIRECTLY RELATED TO**  
5 **PLANT-IN-SERVICE?**

6 A. The NOL carry-forward is created due to a special depreciation allowance provided  
7 to businesses as part of the Economic Stimulus Act of 2008. Under the law, a  
8 taxpayer is entitled to depreciate 50 percent of the adjusted basis of certain  
9 qualified property during the year that the property is placed in service. This is  
10 similar to the special depreciation allowance that was previously available for  
11 certain property placed in service generally before Jan. 1, 2005, often referred to as  
12 "bonus depreciation."

13 **Q. PLEASE CONTINUE WITH YOUR REASONS FOR DISAGREEING**  
14 **WITH STAFF.**

15 A. The third reason I disagree with Staff's assessment is that the net DIT asset balance  
16 (and rate base) would have been higher had the Company not elected to take the  
17 special depreciation allowance. This would have increased rate base and ultimately  
18 led to higher rates.

19 **Q. WHY IS THAT?**

20 A. Because the tax basis of the Company's PIS would have been higher by amount of  
21 the foregone special depreciation allowance. The resulting higher tax basis of PIS  
22 would alter the difference between the book and tax basis values of PIS which  
23 would more than offset the net DIT asset that was otherwise created by the NOL  
24 carry-forward. To show this, I have included as **Exhibit TJB-RB1** a DIT  
25 computation that excludes the special depreciation allowance taken by the  
26 Company in 2008. Before discussing the result, I first wish to point out the net

1 DIT for both divisions (water and wastewater) as shown on Schedule B-2, page 5 is  
2 a net DIT asset of \$445,938. As shown on the DIT computation in my **Exhibit**  
3 **TJB-RB1**, the net DIT asset would have increased to \$555,422 had the Company  
4 not elected to take special depreciation allowance – an increase of over \$100,000.  
5 Ultimately, the rate base would also be higher by over \$100,000.

6 **Q. WHY DID THE COMPANY TAKE THE SPECIAL DEPRECIATION**  
7 **DEDUCTION IF IT COULD NOT TAKE FULL ADVANTAGE OF IT BY**  
8 **THE END OF 2008?**

9 A. Because according to the Law, the special depreciation allowance must be taken in  
10 the first year the plant is placed into service. If a business does not elect to take the  
11 special depreciation allowance, it is lost forever.<sup>18</sup>

12 **Q. PLEASE COMMENT ON RUCO'S RECOMMENDED DIT BALANCE?**

13 A. Unlike the Company and Staff, RUCO is recommending a DIT liability of  
14 \$501,057 for the water division.<sup>19</sup> RUCO's recommended DIT is based on an  
15 allocation of the Algonquin Power Income Fund's ("APIF") deferred income taxes  
16 as reported in its 2008 annual report. The allocation factor is based the 2005  
17 acquisition cost of RRUI relative to the total assets of APIF in 2008.<sup>20</sup> RUCO  
18 asserts that this complies with the Statement of Financial Accounting Standards  
19 No. 109 – Accounting for Income Taxes ("SFAS No. 109").<sup>21</sup>

20 **Q. DOES RUCO'S METHOD COMPLY WITH THE REQUIREMENTS OF**  
21 **SFAS NO. 109?**

22  
23  
24 <sup>18</sup> Possible exception is an amended return.

25 <sup>19</sup> Coley Dt. at 31.

26 <sup>20</sup> *Id.*

<sup>21</sup> *Id.*

1 A. No. I agree with RUCO that Section 40 of SFAS No. 109 requires that any method  
2 adopted for allocating deferred income taxes must be systematic, rationale and  
3 consistent with the broad principles of SFAS No. 109.<sup>22</sup> However, RUCO has  
4 ignored Section 40(b) of SFAS No. 109, which states that methods that are not  
5 consistent with SFAS No. 109 includes any method that allocates deferred income  
6 taxes to a member of the group that is fundamentally different from the asset and  
7 liability method described in the statement. RUCO's method is flawed because it  
8 allocates deferred income taxes based on the 2005 acquisition cost of RRUI which  
9 is fundamentally inconsistent with the asset and liability method as prescribed by  
10 the statement. The deferred tax amount for a group that files a consolidated  
11 income tax return must be the equal to sum of the individual companies' deferred  
12 income taxes based on the asset and liability method prescribed by SFAS No. 109.  
13 As a consequence, RUCO's recommended DIT should be rejected.

14 **Q. HAVE YOU SEEN THIS ALLOCATION METHOD BEFORE?**

15 A. Only once. The same method was advanced by RUCO in the most recently  
16 decided Black Mountain Sewer Company rate case.<sup>23</sup> The Commission rejected  
17 this method and correctly concluded:

18  
19 Whether other utilities normally report net deferred tax  
20 liabilities is not a controlling factor in determining whether  
21 BMSC should have a net asset or liability in this case.  
22 BMSC's ultimate parent, APIF, controls myriad companies  
(see, *e.g.* Ex. S-13) and the fact that its Annual Report reflects  
23 a net deferred tax liability is not necessarily indicative of  
24 whether its individual subsidiaries have a net liability or asset  
25 on their respective books.<sup>24</sup>

24 \_\_\_\_\_  
<sup>22</sup> *Id.* at 30.

25 <sup>23</sup> *Black Mountain Sewer Corporation*, Decision No. 69164 (December 5, 2006) at 6.

26 <sup>24</sup> *Id.* at 6.

1 In contrast, the method employed by BMSC in its rate case, the same as  
2 employed by RRUI in this case, is consistent with SFAS No. 109 because it is  
3 based on the amounts of assets and liabilities on the books of the Company that  
4 result in the deferred taxes of the Company's parent.

5 **Q. WEREN'T YOU THE WITNESS FOR BMSC IN THAT CASE?**

6 A. Yes, and I can personally testify to the fact that the method used by RRUI in the  
7 instant case is the same as the method used in the BMSC.

8 **Q. DOES THE FACT THE COMMISSION DID NOT AUTHORIZE A DIT**  
9 **BALANCE IN RRUI'S LAST RATE CASE HAVE ANY BEARING ON THE**  
10 **COMPANY'S REQUEST TO RECOGNIZE A DIT IN THE INSTANT**  
11 **CASE?**

12 A. No. Mr. Coley's mention of this is perplexing for several reasons.<sup>25</sup> First, it is  
13 unclear why Mr. Coley includes this testimony since he does not seem to make any  
14 point from it. Second, in the BMSC rate case mentioned earlier, BMSC had never  
15 been granted recognition of DIT in any prior rate case. If fact, when BMSC  
16 initially filed its rate case, it did not include a proposal to include DIT. It was  
17 RUCO who proposed a DIT for BMSC. The Company responded with its own  
18 proposal which was ultimately adopted by the Commission.<sup>26</sup>

19 **Q. PLEASE RESPOND TO MR. COLEY'S TESTIMONY ON PAGE 27 THAT**  
20 **THE BONUS DEPRECIATION CREATES A DEFERRED INCOME TAX**  
21 **LIABILITY?**

22 A. I agree with Mr. Coley that a DIT liability would be created for the plant for which  
23 a special depreciation allowance was taken but only to the extent of the special  
24 depreciation allowance that reduced the Company's 2008 taxable income to zero.

25 <sup>25</sup> Coley Dt. at 16.

26 <sup>26</sup> Decision No. 69164 at 6.

1 For that portion of the special depreciation allowance, the tax basis in plant is less  
2 than that for book thereby creating a DIT liability for this plant. Where Mr. Coley  
3 and I disagree is with respect to the portion of the special depreciation allowance  
4 that reduced the taxable income to below zero thereby creating a net operating loss  
5 (“NOL”). The NOL creates a DIT asset. As I stated earlier, the NOL creates a  
6 future tax benefit that can be used to offset future tax liabilities. Putting that aside,  
7 the recognition of the NOL as a DIT asset is not inconsistent with the 2008  
8 Prentice Hall publication tax book slide show presentation which Mr. Coley  
9 includes at RUCO Exhibit 4 in support of his claim that all of the special  
10 depreciation allowance creates a deferred income tax liability.<sup>27</sup>

11 **Q. PLEASE EXPLAIN.**

12 A. On page 1 of 2 the Prentice Hall presentation it correctly states that deferred tax  
13 liabilities occur when tax basis of assets are less than the book basis of assets (last  
14 bullet point on the page). On page 2 of 2, it also states that deferred tax assets  
15 occur when loss/credit carry-forwards exist (last bullet point on the page).

16 **Q. DOES THE QUOTE FROM MR. LARKIN’S TESTIMONY IN THE HOPE  
17 GAS CASE ON PAGE 28 OF MR. COLEY’S TESTIMONY CHANGE  
18 YOUR OPINION REGARDING THE SPECIAL DEPRECIATION  
19 ALLOWANCE?**

20 A. No. Frankly, I have no idea what factual circumstances were in that in that case or  
21 in what context Mr. Larkin concluded Hope Gas incorrectly increased deferred  
22 income taxes. Perhaps Hope Gas simply made an error. I do not know because  
23 Mr. Coley fails to provide such circumstances and context or even explain why this  
24 quote is meaningful.

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26 <sup>27</sup> Coley Dt. at 27.

1 **Q. PLEASE RESPOND TO MR. COLEY'S TESTIMONY ON PAGE 29 THAT**  
2 **THE INCLUSION OF AIAC AS A COMPONENT IN THE COMPANY'S**  
3 **DIT COMPUTATION IS ERRONEOUS.**

4 A. Mr. Coley asserts that for AIAC funded PIS the Company does not have a book  
5 basis nor a tax basis.<sup>28</sup> Mr. Coley is half correct. The Company does have a book  
6 basis in the AIAC funded PIS as depreciation is included in the cost of service.  
7 The Company does not have a tax basis in the AIAC funded PIS as no tax  
8 depreciation is allowed. As refunds are made, however, the Company will receive  
9 a tax basis in PIS to the extent of the refunds.

10 **Q. WHY IS A DIT ASSET CREATED FOR AIAC FUNDED PLANT-IN-**  
11 **SERVICE?**

12 A. Because a book-tax timing difference exists. Depreciation on AIAC funded PIS is  
13 recognized for book purposes (and rate making purposes), but not recognized for  
14 tax purposes. As a result, for book purposes (and ratemaking purposes), a lower  
15 taxable income is recognized in rates because of the depreciation expense on the  
16 AIAC funded PIS. But because the Company cannot recognize a depreciation  
17 deduction for tax purposes, it pays higher income taxes as a result. Thus, a book-  
18 tax timing difference and a resulting deferred tax asset. This book-tax timing  
19 difference will reverse itself in the future as refunds are made and the Company  
20 receives a tax basis and takes tax depreciation.

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<sup>28</sup> *Id.* at 29.

1                   **4. Remaining Rate Bases Issues**

2 **Q. PLEASE DISCUSS THE REMAINING RATE BASE ISSUES BETWEEN**  
3 **THE PARTIES.**

4 A. The Company does not agree with RUCO's proposed adjustments to accumulated  
5 depreciation. The reason for the disagreement is that RUCO's re-computation of  
6 accumulated depreciation contains errors. If these errors are corrected, RUCO and  
7 the Company should be in substantial agreement on the balance of accumulated  
8 depreciation.

9 **Q. WHAT ARE THOSE ERRORS?**

10 A. First, RUCO failed to properly account for retirements. Second, RUCO does not  
11 take half year depreciation on retirements. Finally, RUCO over-depreciated  
12 account 340.1 Computers and Software.

13 **Q. ARE THERE ANY OTHER RATE BASE ISSUES BETWEEN THE PARTIES**  
14 **FOR THE WATER DIVISION?**

15 A. No.

16 **B. Wastewater Division Rate Base**

17 **Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE**  
18 **BASE RECOMMENDATIONS FOR THE WASTEWATER DIVISION?**

19 A. Yes, for the wastewater division the rate bases proposed by the parties proposing a  
20 rate base in the case, the Company, Staff and RUCO, are as follows:

	<u>OCRB</u>	<u>FVRB</u>
21 Company-Direct	\$ 3,516,078	\$ 3,516,078
22 Staff	\$ 2,994,399	\$ 2,994,399
23 RUCO	\$ 2,937,595	\$ 2,937,595
24 Company Rebuttal	\$ 3,323,449	\$ 3,323,449

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**1. Plant-in-Service and Accumulated Depreciation**

**Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO PLANT-IN-SERVICE AND ACCUMULATED DEPRECIATION?**

A. The Company proposes no additional changes to plant-in-service or to accumulated depreciation. Rebuttal B-2 adjustments 1 and 2, as shown on Schedule B-2, page 2, show no changes to plant-in-service and accumulated depreciation.

**2. AIAC and CIAC**

**Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO AIAC AND CIAC.**

A. In rebuttal B-2 adjustment 3, as shown on Schedule B-2, page 2, the Company proposes a decrease to AIAC of \$238,783 and a decrease to CIAC of \$238,783. The net impact on rate base is zero. This reclassification of AIAC and CIAC is based upon information provided to the parties in the instant case concerning the reconciliation of AIAC and CIAC.<sup>29</sup> RUCO proposes a similar adjustment.<sup>30</sup> Staff has proposed an increase to AIAC for \$238,783, but has not proposed a corresponding decrease to CIAC.<sup>31</sup> Staff's adjustment is incomplete because it fails to also adjust CIAC. Rather than a net zero impact on rate base, Staff's adjustment results in net decrease in rate base of \$238,783.

**3. Deferred Income Taxes (DIT)**

**Q. HAS THE COMPANY PROPOSED A REBUTTAL ADJUSTMENT TO DEFERRED INCOME TAXES FOR THE WATER DIVISION?**

A. Yes. In rebuttal B-2 adjustment 4, as shown on Schedule B-2, page 2, the Company's deferred income tax asset is decreased by \$192,629 to \$130,973. The

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<sup>29</sup> See Company response to Staff data request GB 2.3 (worksheet "RRUI AIAC Reconciliation.xls").

<sup>30</sup> Coley Dt. at 32.

<sup>31</sup> Becker Dt. at 8.

1 increase reflects the Company's rebuttal proposed changes to PIS, accumulated  
2 depreciation, AIAC and CIAC as well as recognition that some CIAC funded PIS  
3 in prior years was included in the tax basis of PIS. The details of the Company's  
4 rebuttal proposed DIT adjustment is shown on Wastewater Schedule B-2, page 6.

5 **Q. ARE THE CHANGES OR UPDATES HAVE YOU MADE TO THE**  
6 **COMPANY'S DIT COMPUTATION THE SAME AS DISCUSSED**  
7 **PREVIOUSLY?**

8 A. Yes.

9 **Q. IS THE REASON FOR THE DECREASE IN THE DEFERRED INCOME**  
10 **TAX ASSET THE SAME AS YOU DISCUSSED PREVIOUSLY?**

11 A. Yes.

12 **Q. PLEASE COMMENT ON STAFF'S RECOMMENDED DIT BALANCE?**

13 A. Like the Company, Staff is recommending a net DIT asset for the wastewater  
14 division. However, Staff's recommendation is \$40,705<sup>32</sup> for the wastewater  
15 division compared to the Company's rebuttal recommendation of \$130,973 as  
16 shown on Wastewater Schedule B-2, page 6.

17 **Q. DO YOU HAVE THE SAME COMMENTS REGARDING STAFF'S**  
18 **APPROACH TO THE COMPUTATION OF ITS PROPOSED DIT**  
19 **BALANCE FOR THE WASTEWATER DIVISION AS YOU MADE**  
20 **PREVIOUSLY?**

21 A. Yes.

22 **Q. PLEASE COMMENT ON RUCO'S RECOMMENDED DIT BALANCE?**

23 A. Unlike the Company and Staff, RUCO is recommending a DIT liability of  
24 \$208,912 for the wastewater division.<sup>33</sup> As with the water division, RUCO's

25 <sup>32</sup> *Id.*

26 <sup>33</sup> Coley Dt. at 31.

1 recommended DIT for the wastewater division is based on an allocation of the  
2 Algonquin Power Income Fund's ("APIF") deferred income taxes as reported in its  
3 2008 annual report. Please refer to my previous comments in this area to why  
4 RUCO's method does not comply with SFAS No. 109 and should be rejected.

5 **4. Remaining Rate Bases Issues**

6 **Q. PLEASE DISCUSS THE REMAINING RATE BASE ISSUES BETWEEN**  
7 **THE PARTIES.**

8 A. Again, the Company does not agree with RUCO's proposed adjustments to  
9 accumulated depreciation because it contains errors. If RUCO corrects these errors,  
10 we should be in substantial agreement on the balance of accumulated depreciation.  
11 I have already discussed these errors above and they do not need to be repeated.

12 **Q. ARE THERE ANY OTHER RATE BASE ISSUES BETWEEN THE**  
13 **PARTIES FOR THE WASTEWATER DIVISION?**

14 A. No.

15 **IV. INCOME STATEMENT**

16 **A. Water Division Revenue and Expenses**

17 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**  
18 **ADJUSTMENTS TO REVENUES AND EXPENSES FOR THE WATER**  
19 **DIVISION AND IDENTIFY ANY ADJUSTMENTS YOU HAVE**  
20 **ACCEPTED FROM STAFF AND/OR RUCO?**

21 A. The Company rebuttal adjustments for the Water Division are detailed on Rebuttal  
22 Schedule C-2, pages 1-10. The rebuttal income statement with adjustments is  
23 summarized on Rebuttal Schedule C-1, page 1-2.

24 Rebuttal adjustment 1 increases depreciation expense. Depreciation expense  
25 is slightly higher, primarily due to the impacts of the Company's proposed rebuttal  
26 adjustments to plant-in-service. The Company and RUCO are in substantial

1 agreement on the computed level of depreciation expense. The difference appears  
2 to be related to a slight difference the amortization rate for CIAC. The difference  
3 in depreciation expense compared to Staff is due to a difference in the respective  
4 party's balance of CIAC and in the CIAC amortization rate. As discussed earlier,  
5 Staff's CIAC balance includes an upward adjustment of \$1,087,409, an adjustment  
6 RRUI strongly opposes. For the amortization rates, Staff uses a composite  
7 depreciation rate for all depreciable PIS where as the Company uses a composite  
8 depreciation rate for all PIS. The Company believes the composite rate should  
9 reflect all plant, not just depreciable plant. Non-depreciable assets, such as land,  
10 can be funded with CIAC, and so land costs should be included. Under the concept  
11 of using a composite rate for amortization of CIAC, a key assumption is that CIAC  
12 is used to fund all plant, not just depreciable plant.

13 **Q. PLEASE CONTINUE.**

14 A. Rebuttal adjustment number 2 increases property tax expense and reflects the  
15 rebuttal proposed revenues. Staff, RUCO, and the Company are in agreement on  
16 the method of computing property taxes. This method utilized the ADOR formula  
17 and inputs two years of adjusted revenues plus one year of proposed revenues. I  
18 computed the property taxes based on the Company's proposed revenues, and then  
19 used the property tax rate and assessment ratio that was used in the direct filing.

20 Rebuttal adjustment number 3 removes purchased power expense that is  
21 attributed to the wastewater division and was incorrectly reflected in the water  
22 division's purchased power expense. Staff, RUCO, and the Company are in  
23 agreement on this adjustment.

24 Rebuttal adjustment number 4 removes \$6,725 of unnecessary costs from  
25 transportation expense. Neither Staff nor RUCO propose this adjustment at this  
26 stage of the proceeding.

1           Rebuttal adjustment number 5 removes costs from outside services that were  
2 identified as out of period (test year) costs. This adjustment reflects the adoption  
3 of Staff's proposed adjustment for \$14,477.<sup>34</sup> RUCO has not proposed a similar  
4 adjustment at this stage of the proceeding.

5           Rebuttal adjustment 6 removes charitable contributions from miscellaneous  
6 expense. This adjustment reflect the adoption of RUCO propose adjustment to  
7 miscellaneous expense.<sup>35</sup>

8           Rebuttal adjustment 7 reduces bad debt expense reflecting a normalized  
9 level of bad debt expense proposed by RUCO.<sup>36</sup> The Company's acceptance of  
10 this adjustment is to help eliminate issues between the parties. Staff has not  
11 proposed a similar adjustment.

12           Rebuttal adjustment 8 reflects an increase to the allocated affiliate central  
13 office costs and reflects adjusted actual costs incurred by the central office for the  
14 test year of \$5,065,373.<sup>37</sup> The Company's adjustment is detailed on Rebuttal  
15 Schedule C-2, page 9. As shown, the central office cost allocated to and included in  
16 RRUI outside service expense is \$130,534.

17 **Q. DID THE COMPANY REMOVE UNNECESSARY COSTS FROM ITS**  
18 **CENTRAL OFFICE ALLOCATION POOL?**

19 **A.** Yes. The Company removed \$204,508 of costs identified as unnecessary to the  
20 provision of service.

21 **Q. PLEASE COMMENT ON STAFF'S RECOMMENDED FOR ALLOCATED**  
22 **CENTRAL OFFICE COSTS?**

23  
24 <sup>34</sup> Becker Dt. at 25; see Staff Schedule GWB-11, Adjustment #7.

25 <sup>35</sup> Coley Dt. at 44.

26 <sup>36</sup> *Id.* at 51.

<sup>37</sup> See Company response to Staff data request GWB 4.2a.

1 A. Staff is recommending an expense level of \$1,363 based on an adjusted central  
2 office allocation pool of \$190,931 and an allocation factor of 1.43 percent.<sup>38</sup>

3 **Q. PLEASE COMMENT ON RUCO'S RECOMMENDED LEVEL OF**  
4 **ALLOCATED CENTRAL OFFICE COSTS?**

5 A. RUCO is recommending an expense level of \$7,064 based on an adjusted central  
6 office allocation pool of \$319,061.<sup>39</sup>

7 **Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING STAFF'S**  
8 **OR RUCO'S TESTIMONY ON CENTRAL OFFICE COSTS?**

9 A. No, this issue is addressed in great detail in the rebuttal testimony of Peter Eichler.

10 **Q. PLEASE CONTINUE.**

11 A. Rebuttal adjustment 9 reflects income taxes at Company's proposed rates.

12 **1. Remaining Revenue and Expense Issues**

13 **Q. PLEASE IDENTIFY ANY REMAINING ISSUES IN DISPUTE WITH**  
14 **RUCO AND/OR STAFF.**

15 A. The Company disagrees with Staff's proposal to remove ACC assessment fee from  
16 outside services totaling \$45,010 (\$27,820 plus \$17,190).<sup>40</sup> The reason for the  
17 disagreement is that these amounts Staff identified are not related to ACC  
18 assessment fees, but rather cost related to accounting fees provided by Liberty  
19 Water. ACC assessment fees are not recorded to expense, they are directly  
20 reflected to accounts payable.

21 The Company also disagrees with Staff's foreign exchange adjustment for  
22 allocated costs from the central office.<sup>41</sup> All of the Company's expenses are

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24 <sup>38</sup> Becker Dt. at 31-32; *see* Staff Water Schedule GWB-20.

25 <sup>39</sup> Coley Dt. at 51; *see* RUCO Water Schedule TJC-14.

26 <sup>40</sup> Becker Dt. at 24; *see* Staff Water Schedule GWB-11 and Staff Water Schedule GWB-17.

<sup>41</sup> Becker Dt. at 25-26.

1 recorded in U.S. dollars and reported in U.S. Dollars. Therefore, this is an  
2 unnecessary and inappropriate adjustment.

3 The Company also disagrees with Staff's adjustment to regulatory  
4 commission expense for \$17,554.<sup>42</sup> Staff identifies these costs as residual rate case  
5 expenses.<sup>43</sup> However, the Company has reviewed these expenses and they do not  
6 relate to rate case expense at all.

7 **Q. WHAT DO THESE COSTS RELATE TO, MR. BOURASSA?**

8 A. These costs are related to ADEQ annual registration fees, ADOT registration fees,  
9 annual software license fees, right of way permit fees, and some membership dues  
10 to organizations like the American Water Works Association and the Arizona  
11 Water Pollution Control Association. These are typical and necessary expenses  
12 and should be allowed operating expenses.

13 **Q. ARE THERE ANY REMAINING REVENUE AND/OR EXPENSE ISSUES**  
14 **BETWEEN THE COMPANY AND RUCO?**

15 A. Yes. The Company disagrees with RUCO's proposed revenue annualization  
16 adjustment. RUCO's asserts that its revenue annualization adjustment is  
17 appropriate because it believes that the Company has a seasonal customer base,  
18 particularly for the 5/8 inch customer class.

19 **Q. ON WHAT BASIS DOES MR. COLEY TESTIFY THAT RRUI'S**  
20 **CUSTOMER BASE IS SEASONAL?**

21 A. No basis whatsoever. All we have is Mr. Coley's testimony. However, I have  
22 examined the test year data, including the level of reconnection fees that occurred  
23 during the test year, and there is no indication that RRUI customer base is seasonal  
24 in nature. The economic downturn that occurred in 2008 may explain why the

25 <sup>42</sup> *Id.* at 22.

26 <sup>43</sup> *Id.*

1 customer counts (billings) in the middle of 2008 were higher than that at the end of  
2 2008, which might explain some customer loss and return, but there is simply  
3 nothing in the record to justify RUCO's revenue annualization adjustment based on  
4 average number of customers. I find the typical annualization, which annualizes  
5 revenue to the year-end number of customers, is entirely appropriate.

6 **Q. PLEASE COMMENT ON DIFFERENCES BETWEEN THE PARTIES ON**  
7 **RATE CASE EXPENSE.**

8 A. At this stage of the proceeding Staff has not proposed any adjustments to the  
9 Company proposed rate case expense. RUCO is recommending a downward adjust  
10 of 25 percent to the Company's proposed level of rate case expense.<sup>44</sup>

11 **Q. WHAT LEVEL OF RATE CASE EXPENSE IS RRUI ESTIMATING AT**  
12 **THIS STAGE?**

13 A. Same as in direct because not enough has happened yet to alter our original  
14 estimate. The Company is proposing rate case expense for the water division of  
15 \$210,000 amortized over 3 years for an annual expense of \$70,000. As a result,  
16 RUCO's reduced rate case "estimate" would result in an annual expense of  
17 \$52,500.

18 **Q. WHAT IS RUCO'S BASIS FOR REDUCING RATE CASE EXPENSE?**

19 A. RUCO appears to base its 25 percent reduction on the fact that through October  
20 2009, the Company has only incurred about \$41,000 of rate case expense.<sup>45</sup> It is  
21 entirely premature to make any meaningful determinations about the ultimate level  
22 of rate case expense that will be incurred in the instant case. This is obviously true,  
23 given that at the time of Mr. Coley's testimony the Company had yet to incur the  
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25 <sup>44</sup> Coley Dt. at 43.

26 <sup>45</sup> *Id.*

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costs for the preparation of its rebuttal testimonies, rejoinder testimonies, any discovery, hearing preparation and hearings, post hearing briefs, and final decision.

In this light, RRUI continues to estimate rate case expense of \$210,000 for the water division. But this is still an estimate, which the Company will true-up at a later date when more of the costs are known, as needed.

**B. Wastewater Division Revenue and Expenses**

**Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S WASTEWATER DIVISION PROPOSED ADJUSTMENTS TO REVENUES AND EXPENSES AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF AND/OR RUCO?**

A. The Company rebuttal adjustments for the Wastewater Division are detailed on Rebuttal Schedule C-2, pages 1-8. The rebuttal income statement with adjustments is summarized on Rebuttal Schedule C-1, page 1-2.

Rebuttal adjustment 1 increases depreciation expense. Depreciation expense is slightly higher primarily due to the impacts of the Company proposed rebuttal adjustments to plant-in-service. The Company and RUCO are in substantial agreement on the computed level of depreciation expense. The difference appears to be related to a slight difference the amortization rate for CIAC. The difference in depreciation expense compared to Staff is primary due to a difference in the in the CIAC amortization rate, which I discussed immediately above for the water division.

**Q. PLEASE CONTINUE.**

A. Rebuttal adjustment number 2 increases property tax expense and reflects the rebuttal proposed revenues. As stated, Staff, RUCO, and the Company are in agreement on the method of computing property taxes.

1           Rebuttal adjustment number 3 removes purchased power expense that is  
2 attributed to the wastewater division and was incorrectly reflected in the water  
3 division's purchased power expense. Staff, RUCO, and the Company are in  
4 agreement on this adjustment.

5           Rebuttal adjustment number 4 removes \$2,242 unnecessary costs from  
6 transportation expense. This is also a new adjustment proposed by the Company at  
7 this rebuttal stage.

8           Rebuttal adjustment 5 reduces bad debt expense reflecting a normalized  
9 level of bad debt expense proposed by RUCO.<sup>46</sup> The Company's acceptance of  
10 this adjustment is to help eliminate issues between the parties. Staff has not  
11 proposed a similar adjustment.

12           Rebuttal adjustment 6 reflects an increase to the allocated affiliate central  
13 office costs and reflects adjusted actual costs incurred by the central office for the  
14 test year of \$5,065,373.<sup>47</sup> The Company's adjustment is detailed on Rebuttal  
15 Schedule C-2, page 7. As shown, the central office cost allocated to and included  
16 in RRUI outside service expense is \$43,056.

17 **Q. DID THE COMPANY REMOVE UNNECESSARY COSTS FROM ITS**  
18 **CENTRAL OFFICE ALLOCATION POOL?**

19 A. Yes. The Company removed \$204,508 of costs it identified as unnecessary to the  
20 provision of service.

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<sup>46</sup> *Id.* at 51.

26 <sup>47</sup> See Company response to Staff data request GWB 4.2a.

1 **Q. PLEASE COMMENT ON STAFF'S RECOMMENDED FOR ALLOCATED**  
2 **CENTRAL OFFICE COSTS?**

3 A. Staff is recommending an expense level of \$460 based on an adjusted central office  
4 allocation pool of \$190,931 and an allocation factor of 1.43 percent.<sup>48</sup>

5 **Q. PLEASE COMMENT ON RUCO'S RECOMMENDED LEVEL OF**  
6 **ALLOCATED CENTRAL OFFICE COSTS?**

7 A. RUCO is recommending an expense level of \$2,943 based on an adjusted central  
8 office allocation pool of \$319,061.<sup>49</sup>

9 **Q. PLEASE CONTINUE.**

10 A. Rebuttal adjustment 7 reflects income taxes at Company's proposed rates.

11 **1. Remaining Revenue and Expense Issues**

12 **Q. PLEASE IDENTIFY ANY REMAINING ISSUES IN DISPUTE WITH**  
13 **RUCO AND/OR STAFF.**

14 A. The Company also disagrees with Staff's foreign exchange adjustment for  
15 allocated costs from the central office.<sup>50</sup> I addressed the reasons for our  
16 disagreement above. I also discussed RUCO's proposed revenue annualization  
17 adjustment. The Company does not have a seasonal customer base, therefore  
18 RUCO's proposed modification of the annualization is groundless.

19 **Q. PLEASE COMMENT ON DIFFERENCES BETWEEN THE PARTIES ON**  
20 **RATE CASE EXPENSE.**

21 A. For the wastewater division, the Company is proposing rate case expense of  
22 \$125,000 amortized over 3 years for an annual expense of \$41,667. As discussed  
23 above, RUCO is recommending a downward adjust of 25 percent to the

24 \_\_\_\_\_  
<sup>48</sup> Becker Dt. at 31-32; see Staff Water Schedule GWB-20.

25 <sup>49</sup> Coley Dt. at 51; see RUCO Water Schedule TJC-14.

26 <sup>50</sup> Becker Dt. at 35.

1 Company's proposed level of rate case expense.<sup>51</sup> This translated to a reduction to  
2 total rate case expense of \$31,250, or a total rate case expense of \$93,750. For the  
3 reasons I identified above, RUCO's adjustment is premature, at best.

4 **V. RATE DESIGN**

5 **A. Water Division**

6 **Q. WHAT ARE THE COMPANY'S REBUTTAL PROPOSED RATES FOR**  
7 **WATER SERVICE?**

8 A. The Company's proposed rates are:

9 **MONTHLY SERVICE CHARGES**

10	5/8" x 3/4" meters	\$13.09
11	3/4" Meters	\$19.64
12	1" Meters	\$32.73
13	1 1/2" Meters	\$65.45
14	2" Meters	\$104.72
15	3" Meters	\$209.44
16	4" Meters	\$327.25
17	6" Meters	\$654.50
18	8" Meters	\$1047.20
19	10" Meters	\$1,505.35
20	12" Meters	\$1,963.50
21	Fire Lines up to 8 Inch	\$13.00
22	Fire Lines 10 Inch	\$15.00
23	Fire Lines 12 Inch	\$30.00

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<sup>51</sup> Coley Dt. at 43.

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COMMODITY RATES

5/8" X 3/4" Meters	1 to 4,000	\$ 2.78
	4,001 to 10,000	\$ 3.48
	Over 10,000	\$ 3.88
3/4" Meters	1 to 6,000	\$ 3.48
	Over 6,000	\$ 3.88
1" Meters	1 to 15,000	\$ 3.48
	Over 15,000	\$ 3.88
1 1/2" Meters	1 to 20,000	\$ 3.48
	Over 20,000	\$ 3.88
2" Meters	1 to 57,000	\$ 3.48
	Over 57,000	\$ 3.88
3" Meters	1 to 57,000	\$ 3.48
	Over 57,000	\$ 3.88
4" Meters	1 to 57,000	\$ 3.48
	Over 57,000	\$ 3.88
6" Meters	1 to 125,000	\$ 3.48
	Over 125,000	\$ 3.88
8" Meters	1 to 125,000	\$ 3.48
	Over 125,000	\$ 3.88
10" Meters	1 to 125,000	\$ 3.48
	Over 125,000	\$ 3.88
12" Meters	1 to 125,000	\$ 3.48
	Over 125,000	\$ 3.88

1 **Q. HAVE YOU MADE ANY CHANGES TO THE RATE DESIGN?**

2 A. Yes. I have scaled the break-over points for the 1 inch and larger meters based  
3 upon the 2nd tier of the 5/8 inch metered customers. The break-over points under  
4 the present rate design are not scaled. The 2 inch through 4 inch meter sizes, for  
5 example, all have a 57,000 gallon break-over point. The 6 inch through 12 inch  
6 meter sizes all have a 125,000 gallon break-over point. In its direct filing, the  
7 Company proposed no change to the break-over points and proposed to keep the  
8 same basic rate design as is. However, in response to Staff's rate design proposal,  
9 which increases the break-over points as the meter size increases, the Company is  
10 proposing these changes.

11 **Q. WHAT WILL BE THE AVERAGE 5/8 INCH RESIDENTIAL CUSTOMER**  
12 **AVERAGE MONTHLY BILL UNDER THE NEW RATES?**

13 A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates  
14 for a 5/8 inch residential customer using an average 8,548 gallons is \$40.04 – a  
15 \$20.10 increase over the present monthly bill or a 100.77 percent increase.

16 **Q. PLEASE COMMENT ON THE PROPOSED RATE DESIGN OF STAFF.**

17 A. Like the Company, Staff is proposing an inverted three tier design for the 5/8  
18 metered customers and an inverted two tier design for the 3/4 inch and larger  
19 metered customers.<sup>52</sup> Staff's break-over points increase with meter size, but Staff  
20 are different than the Company's. The first tier commodity rate for 1 inch and  
21 larger metered customers is the same as the second tier of the 5/8 inch metered  
22 customers. The second tier of the 3/4 inch and larger metered customers is the same  
23 as the third tier of the 5/8 inch metered customers.<sup>53</sup> Staff also proposes that the  
24

25 <sup>52</sup> See Staff Schedule GWB-1.

26 <sup>53</sup> *Id.*

1 fire line charges be equivalent to 2% of the average monthly bill for that meter size,  
2 but not less than \$10 per month.

3 **Q. WHAT CONCERNS DO YOU HAVE WITH STAFF'S PROPOSED RATE**  
4 **DESIGN?**

5 A. The first 3,000 gallons for the 5/8 inch metered customers are priced at \$1.50 per  
6 thousand gallons, which is the first major problem with Staff's rate design. The  
7 present commodity rate is \$1.44 per thousand. Thus, even though Staff is  
8 recommending an increase in water revenues of about 57%, the commodity rate in  
9 the first tier will be increased by only about 4%. The second 6,000 gallons for the  
10 5/8 inch metered customers are priced at \$2.75 per thousand. The present  
11 commodity rate is \$1.70 per thousand. The commodity rate in the second tier will  
12 be increased by about 62 percent. Finally, gallons in the third tier are priced at  
13 \$3.42 per thousand gallons. The present commodity rate is \$1.90 per thousand.  
14 The commodity rate in the third tier will be increased by about 80 percent.

15 **Q. SO WHAT'S WRONG WITH THAT, MR. BOURASSA?**

16 A. It's blatant revenue shifting. Staff is discounting water service and generating a  
17 subsidy (i.e., selling water below cost in the first rate block) for the 5/8 inch  
18 metered customers. As a result, customers that use large amounts of water for  
19 various residential and non-residential purposes will be required to pay more than  
20 the cost of service in order to subsidize the low use residential customers.

21 **Q. HAVE YOU PREPARED A SCHEDULE TO ILLUSTRATE THIS?**

22 A. Yes, **Exhibit TJB-RB2** is similar to the H-2 schedule contained in the Company's  
23 rebuttal filing. The H-2 shows the average bill at present and proposed rates. As I  
24 stated, Staff is recommending a revenue increase of 57 percent. But, as shown on  
25 the schedule, Staff is providing only a 49 percent increase on the average 5/8 inch  
26 residential metered customers. In fact, the 5/8 inch metered customer class

1 receives the lowest increase at the average of all the customer classes. Further, at  
2 the average usage, the larger metered commercial class receives increases well  
3 above the 57 percent revenue increase Staff recommends. In other words, Staff's  
4 rates provide less revenue recovery from the residential class relative to the total  
5 revenues under its proposed rates than under present rates. For example, the 5/8  
6 inch metered residential customer class provides approximately 78.3 percent of  
7 water revenues under present rates. Under Staff's proposed rates, the 5/8 inch  
8 meter customer provides approximately 77.0 percent of water revenues. The  
9 majority of the revenue shift is to larger commercial metered customers.

10 **Q. DOESN'T THE 5/8 INCH CUSTOMER CLASS COMPRISE THE BULK OF**  
11 **THE CUSTOMERS?**

12 A. Yes. The 5/8 inch residential customer class comprises nearly 95 percent of the  
13 customers and uses over 78 percent of the water.

14 **Q. DO YOU HAVE AN EXHIBIT SHOWING THE PERCENTAGES OF**  
15 **REVENUES DERIVED FROM EACH CUSTOMER CLASS UNDER**  
16 **PRESENT RATES AND STAFF PROPOSED RATES?**

17 A. Yes. **Exhibit TJB-RB3** is a revenue summary similar to the H-1 schedule  
18 contained the Company's rebuttal schedules which shows the revenues under  
19 present rates and Staff's proposed rates.

20 **Q. DOESN'T THE COMPANY'S RATE DESIGN SHIFT REVENUES AWAY**  
21 **FROM THE 5/8 INCH RESIDENTIAL CLASS?**

22 A. Only slightly, this reflects my effort to balance all of the factors that go into rate  
23 design. As you will find on Rebuttal Schedule H-1, the percent of revenues under  
24 the Company proposed rates is about 78.1 percent. Compare this to about 78.3  
25 percent under present rates.

26

1 **Q. YOU SAID THAT THERE ARE OTHER PROBLEMS WITH THE STAFF**  
2 **RATES. WHAT ARE THEY?**

3 A. Staff is also shifting revenue recovery away from the monthly minimums on to the  
4 commodity rates. Under present rates, approximately 29.6 percent of revenues are  
5 derived from the monthly minimums. However, under Staff's proposed rates, the  
6 percentage drops to 28.8 percent. This shift results in more revenue instability as  
7 less revenue from the monthly minimums exposes the Company to less revenues  
8 when water sales are affected by conservation.

9 **Q. HOW DOES THE COMPANY'S RATE DESIGN COMPARE?**

10 A. The Company proposed rate design continues to derive approximately 29.6 percent  
11 revenue recovery from the monthly minimums, the same as under present rates. I  
12 should note that based upon my experience, Staff typically recommends revenue  
13 recovery between 30 and 40 percent of the monthly minimums. So, RRUI's  
14 current rate design is already riskier than most that I have seen. Shifting revenue  
15 recovery further away from the monthly minimums will only increase revenue  
16 instability.

17 **Q. PLEASE CONTINUE.**

18 A. Staff's revenue shift can also be found by comparing the revenues from monthly  
19 minimum to the revenues from the first tier commodity rates. Under present rates,  
20 approximately 34.6 percent of revenues are recovered from these two components  
21 of metered revenues. Under Staff's rate design, this percentage drops to about 33.2  
22 percent.

23 **Q. HAVE YOU PREPARED SCHEDULES ILLUSTRATING THE REVENUE**  
24 **RECOVERY FROM THE MONTHLY MINIMUMS AND FROM EACH**  
25 **TIER?**

26

1 A. Yes. **Exhibit TJB-RB4** contains schedules showing the revenue breakdown by  
2 customer class under present rates, Company proposed rates and Staff proposed  
3 rates.

4 **Q. THANK YOU, CAN YOU PLEASE COMMENT ON RUCO'S RATE**  
5 **DESIGN?**

6 A. RUCO is proposing an inverted three tier design for the 5/8 inch metered  
7 residential and an inverted two tier design for the 3/4 inch and larger metered  
8 customers.<sup>54</sup> RUCO's break-over points are the same as under present rates.

9 Like the Company's rate design, RUCO's rate design spreads the rate  
10 increase more evenly than Staff's rate design, and while RUCO's rate design does  
11 shift revenue from the monthly minimums, it is less of a shift than Staff's rate  
12 design. However, when comparing the revenues from the monthly minimums plus  
13 the first tier commodity revenues, RUCO's proposed rate provide about the same  
14 level as under present rates.

15 **Q. HAVE YOU PREPARED A SCHEDULE TO ILLUSTRATE THE**  
16 **AVERAGE INCREASE BY CUSTOMER CLASS UNDER RUCO'S**  
17 **PROPOSED RATES?**

18 A. Yes. **Exhibit TJB-RB2** is similar to the H-2 schedule contained in the Company's  
19 rebuttal filing. The H-2 shows the average bill at present and proposed rates.  
20 RUCO is recommending a revenue increase of about 50 percent. As shown on the  
21 schedule, RUCO is providing only a 47.7 percent increase on the average 5/8 inch  
22 residential metered customers. The larger metered commercial customers on  
23 average will see a rate increase of 50 to 51 percent.

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<sup>54</sup> See RUCO Water Schedule TJC-RD1.

1 Q. DOES RUCO'S RATE DESIGN SHIFT REVENUE AWAY FROM THE 5/8  
2 INCH METERED RESIDENTIAL CLASS?

3 A. Yes. But, to a far less extent than does Staff's rate design.

4 Q. DO YOU HAVE AN EXHIBIT SHOWING THE PERCENTAGES OF  
5 REVENUES DERIVED FROM EACH CUSTOMER CLASS UNDER  
6 PRESENT RATES AND RUCO PROPOSED RATES?

7 A. Yes. Exhibit TJB-RB3 is a revenue summary similar to the H-1 schedule  
8 contained the Company's rebuttal schedules, which show the revenues under  
9 present rates and RUCO's proposed rates.

10 B. Wastewater Division

11 Q. WHAT ARE THE COMPANY'S REBUTTAL PROPOSED RATES FOR  
12 WASTEWATER SERVICE?

13 A. The Company's proposed rates are:

14 MONTHLY SERVICE CHARGES

15	5/8" x 3/4" meters	\$52.30
16	3/4" Meters	\$59.64
17	1" Meters	\$73.68
18	1 1/2" Meters	\$108.80
19	2" Meters	\$150.91
20	3" Meter	\$262.90
21	4" Meters	\$389.68
22	6" Meter	\$740.51
23	8" Meters	\$1,161.96
24	10" Meters	\$1,653.63
25	12" Meters	\$3,058.47

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COMMODITY RATES

Commercial and Multi-tenant only

0 to 7,000 gallons	\$0.00
Over 7,000 gallons	\$5.30

**Q. WHAT WILL BE THE AVERAGE 5/8 INCH RESIDENTIAL CUSTOMER MONTHLY BILL UNDER THE NEW RATES?**

A. As shown on Wastewater Schedule H-2, page 1, the monthly bill under proposed rates for a 5/8 inch residential customer is \$52.30 – a \$4.06 decrease from the present monthly bill or a 7.2 percent decrease.

**Q. PLEASE COMMENT ON THE PROPOSED RATE DESIGNS OF STAFF AND RUCO?**

A. All of the parties recommend similar rate designs for the wastewater division. Further, all of the parties spread their respective recommended revenue increases evenly across all classes.

**C. Miscellaneous Issues**

**Q. IS THERE ANY DISAGREEMENT BETWEEN THE COMPANY AND STAFF ON THE COMPANY’S PROPOSED METER AND SERVICE LINE INSTALLATION CHARGES?**

A. No. The Company and Staff are in agreement.<sup>55</sup>

**Q. IS THERE ANY DISAGREEMENT BETWEEN THE COMPANY AND STAFF ON THE COMPANY’S PROPOSED MISCELLANEOUS CHARGES?**

A. No. The Company and Staff are in agreement.<sup>56</sup>

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<sup>55</sup> Direct Testimony on rate design of Gerald W. Becker at 2.

<sup>56</sup> *Id.* at 2-3.

1 Q. DO YOU HAVE ANY RESPONSE TO STAFF'S RECOMMENDATIONS  
2 CONCERNING THE COMPANY PROPOSED HOOK-UP FEE?

3 A. No. Response to Staff's testimony can be found on the rebuttal testimony of Greg  
4 Sorensen.<sup>57</sup>

5 Q. DO YOU HAVE ANY RESPONSE TO STAFF'S AND/OR  
6 RECOMMENDATIONS CONCERNING THE COMPANY PROPOSED  
7 LOW INCOME TARIFF?

8 A. No. Response to Staff's testimony can be found on the rebuttal testimony of Greg  
9 Sorensen.<sup>58</sup>

10 Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?

11 A. Yes.

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25 <sup>57</sup> Rebuttal Testimony of Greg Sorensen at 4-9.

26 <sup>58</sup> *Id.* at 10-11.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**  
**February 1, 2010**

**Exhibit TJB-RB1**



**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**  
**February 1, 2010**

**Exhibit TJB-RB2**

Rio Rico Utilities, Inc. - Water Division - Staff Proposed Rates  
 Test Year Ended December 31, 2008  
 Customer Summary

Attachment

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Average Bill		Proposed Increase		
			Average Consumption	Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	5,745	8,548 \$	19.94 \$	29.76	9.82	49.22%
2	3/4 Inch Residential	8	3,558	15.70	24.78	9.09	57.88%
3	1 Inch Residential	36	11,326	36.35	56.15	19.79	54.44%
4	1.5 Inch Residential	4	20,116	68.92	105.40	36.48	52.93%
5	2 Inch Residential	4	19,938	87.89	134.83	46.93	53.40%
6	Subtotal	5,797					
7							
8	5/8 Inch Commercial	97	11,575 \$	25.40 \$	39.81	14.40	56.70%
9	1 Inch Commercial	43	17,804	47.93	75.84	27.91	58.24%
10	1.5 Inch Commercial	10	39,685	106.10	172.32	66.22	62.41%
11	2 Inch Commercial	33	154,509	336.17	570.23	234.06	69.63%
12	3 Inch Commercial	13	266,143	599.67	968.37	368.70	61.48%
13	4 Inch Commercial	5	292,262	717.40	1,147.70	430.30	59.98%
14	6 Inch Commercial	1	641,667	1,515.42	2,490.82	975.40	64.37%
15	Subtotal	202					
16							
17	5/8 Inch Multi-family	10	10,718 \$	23.77 \$	36.88	13.10	55.11%
18	1.5 Inch Multi-family	1	7,417	47.31	70.40	23.09	48.80%
19	Subtotal	11					
20							
21	Fire Lines up to 8 Inch	15	- \$	6.48 \$	10.00	3.52	54.32%
22							
23							
24	Total	6,025					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Rio Rico Utilities, Inc. - Water Division - RUCO Proposed Rates  
 Test Year Ended December 31, 2008  
 Customer Summary

Attachment

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Average Bill		Average Consumption	Proposed Increase	
			Present Rates	Proposed Rates		Dollar Amount	Percent Amount
1	5/8 Inch Residential	5,745	19.94 \$	29.33	8,548 \$	9.39	47.09%
2	3/4 Inch Residential	8	15.70	23.37	3,558	7.67	48.86%
3	1 Inch Residential	36	36.35	54.26	11,326	17.90	49.24%
4	1.5 Inch Residential	4	68.92	102.80	20,116	33.88	49.15%
5	2 Inch Residential	4	87.89	130.80	19,938	42.91	48.82%
6	Subtotal	5,797					
7							
8	5/8 Inch Commercial	97	25.40 \$	37.63	11,575 \$	12.23	48.15%
9	1 Inch Commercial	43	47.93	71.82	17,804	23.89	49.85%
10	1.5 Inch Commercial	10	106.10	159.74	39,685	53.64	50.56%
11	2 Inch Commercial	33	336.17	509.43	154,509	173.26	51.54%
12	3 Inch Commercial	13	599.67	910.22	266,143	310.54	51.79%
13	4 Inch Commercial	5	717.40	1,086.81	292,262	369.41	51.49%
14	6 Inch Commercial	1	1,515.42	2,298.02	641,667	782.60	51.64%
15	Subtotal	202					
16							
17	5/8 Inch Multi-family	10	23.77 \$	35.14	10,718 \$	11.37	47.80%
18	1.5 Inch Multi-family	1	47.31	70.25	7,417	22.94	48.49%
19	Subtotal	11					
20							
21	Fire Lines up to 8 Inch	15	6.48 \$	13.77	- \$	7.29	112.50%
22							
23							
24	Total	6,025					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**  
**February 1, 2010**

**Exhibit TJB-RB3**





Rio Rico Utilities, Inc. - Water Division - Staff Proposed Rates  
 Test Year Ended December 31, 2008  
 Revenue Summary

With Annualized Revenues to Year End Number of Customers

Line No.	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1						
2	\$ 1,808,782	\$ 2,856,874	\$ 1,048,092	57.94%	100.00%	100.00%
3						
4	(4,794)	(5,785)	(991)	20.67%	-0.27%	-0.20%
5	\$ 1,803,988	\$ 2,851,089	\$ 1,047,101	58.04%		
6						
7	\$ 44,672	\$ 44,672	-	0.00%	2.47%	1.56%
8	(1,404)		1,404	0.00%	-0.08%	0.00%
9	\$ 1,847,256	\$ 2,895,761	\$ 1,048,505	56.76%	0.00%	0.00%
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Rio Rico Utilities, Inc. - Water Division - RUCO Proposed Rates  
 Test Year Ended December 31, 2008  
 Revenue Summary

With Annualized Revenues to Year End Number of Customers

Line No.	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1						
2						
3	\$ 1,808,782	\$ 2,692,351	\$ 883,569	48.85%	100.00%	100.00%
4	22,007	33,141	11,135	50.60%	1.22%	1.23%
5	\$ 1,830,789	\$ 2,725,493	\$ 894,704	48.87%		
6						
7	\$ 44,672	\$ 44,672	-	0.00%	2.47%	1.66%
8	(1,404)		1,404	0.00%	-0.08%	0.00%
9	\$ 1,874,057	\$ 2,770,165	\$ 896,108	47.82%	0.00%	0.00%
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**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**  
**February 1, 2010**

**Exhibit TJB-RB4**

Rio Rico Utilities, Inc. - Water Division  
Revenue Breakdown Summary  
Present Rates

Attachment  
Page 1

		Current Monthly	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Total
		<u>Mins</u>				
5/8 Inch	Residential	\$ 435,994	\$ 61,861	\$ 310,052	\$ 579,443	\$ 1,387,350
3/4 Inch	Residential	\$ 926	\$ 536	\$ 48		\$ 1,511
1 Inch	Residential	\$ 10,260	\$ 6,950	\$ 5,048		\$ 22,257
1.5 Inch	Residential	\$ 3,331	\$ 2,125	\$ 1,548		\$ 7,005
2 Inch	Residential	\$ 3,240	\$ 1,707	\$ 355		\$ 5,302
Subtotal						
5/8 Inch	Commercial	\$ 8,978	\$ 2,389	\$ 4,922	\$ 20,633	\$ 36,923
1 Inch	Commercial	\$ 9,439	\$ 3,185	\$ 14,477		\$ 27,101
1.5 Inch	Commercial	\$ 4,164	\$ 488	\$ 8,230		\$ 12,882
2 Inch	Commercial	\$ 22,680	\$ 9,933	\$ 108,154		\$ 140,767
3 Inch	Commercial	\$ 15,178	\$ (729)	\$ 73,192		\$ 87,640
4 Inch	Commercial	\$ 12,492	\$ 1,622	\$ 38,034		\$ 52,148
6 Inch	Commercial	\$ 3,855	\$ -	\$ 14,330		\$ 18,185
Subtotal						
5/8 Inch	Multi-family	\$ 697	\$ 36	\$ 385	\$ 1,521	\$ 2,639
1.5 Inch	Multi-family	\$ 416	\$ 151	\$ -		\$ 568
Subtotal						
Fire Lines up to 8 Inch		\$ 1,711				\$ 1,711
<b>TOTALS</b>		<b>\$ 533,362</b>	<b>\$ 90,253</b>	<b>\$ 578,777</b>	<b>\$ 601,596</b>	<b>\$ 1,803,988</b>
Percent of Total		29.57%	5.00%	32.08%	33.35%	100.00%
Cummulative %		29.57%	34.57%	66.65%	100.00%	

Rio Rico Utilities, Inc. - Water Division  
 Revenue Breakdown Summary  
 Proposed Rates

Attachment  
 Page 2

			Proposed Monthly <u>Mins</u>		Commodity <u>First Tier</u>		Commodity <u>Second Tier</u>		Commodity <u>Third Tier</u>		<u>Total</u>
5/8 Inch	Residential	\$	884,832	\$	119,426	\$	615,274	\$	1,172,661	\$	2,792,192
3/4 Inch	Residential	\$	1,885	\$	1,097	\$	99			\$	3,081
1 Inch	Residential	\$	19,635	\$	14,226	\$	10,319			\$	44,180
1.5 Inch	Residential	\$	6,283	\$	4,350	\$	3,165			\$	13,798
2 Inch	Residential	\$	6,283	\$	3,105	\$	1,127			\$	10,515
Subtotal											
5/8 Inch	Commercial	\$	18,221	\$	4,612	\$	9,920	\$	41,902	\$	74,655
1 Inch	Commercial	\$	18,064	\$	6,520	\$	29,588			\$	54,172
1.5 Inch	Commercial	\$	7,854	\$	999	\$	16,820			\$	25,673
2 Inch	Commercial	\$	43,982	\$	17,790	\$	223,960			\$	285,732
3 Inch	Commercial	\$	30,159	\$	(5,640)	\$	152,173			\$	176,692
4 Inch	Commercial	\$	23,562	\$	12,949	\$	65,882			\$	102,393
6 Inch	Commercial	\$	7,854	\$	-	\$	28,676			\$	36,530
Subtotal											
5/8 Inch	Multi-family	\$	1,414	\$	70	\$	761	\$	3,075	\$	5,319
1.5 Inch	Multi-family	\$	785	\$	310	\$	-			\$	1,095
Subtotal											
Fire Lines up to 8 Inch		\$	3,432							\$	3,432
<b>TOTALS</b>		<b>\$</b>	<b>1,074,246</b>	<b>\$</b>	<b>179,812</b>	<b>\$</b>	<b>1,157,763</b>	<b>\$</b>	<b>1,217,637</b>	<b>\$</b>	<b>3,629,458</b>
Percent of Total			29.60%		4.95%		31.90%		33.55%		100.00%
Cummulative %			29.60%		34.55%		66.45%		100.00%		

Rio Rico Utilities, Inc. - Water Division - Staff Proposed  
Revenue Breakdown Summary  
Proposed Rates

Attachment  
Page 3

		Proposed Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Total
5/8 Inch	Residential	\$ 675,960	\$ 73,558	\$ 441,484	\$ 964,164	\$ 2,155,167
3/4 Inch	Residential	\$ 1,440	\$ 867	\$ 80		\$ 2,386
1 Inch	Residential	\$ 15,000	\$ 11,242	\$ 8,681		\$ 34,923
1.5 Inch	Residential	\$ 4,800	\$ 3,438	\$ 2,663		\$ 10,900
2 Inch	Residential	\$ 4,800	\$ 2,761	\$ 604		\$ 8,166
Subtotal						
5/8 Inch	Commercial	\$ 13,920	\$ 2,210	\$ 7,528	\$ 36,191	\$ 59,848
1 Inch	Commercial	\$ 13,800	\$ 5,152	\$ 25,180		\$ 44,132
1.5 Inch	Commercial	\$ 6,000	\$ 789	\$ 14,350		\$ 21,139
2 Inch	Commercial	\$ 33,600	\$ 16,068	\$ 192,185		\$ 241,854
3 Inch	Commercial	\$ 23,040	\$ (480)	\$ 127,606		\$ 150,166
4 Inch	Commercial	\$ 18,000	\$ 6,996	\$ 59,841		\$ 84,837
6 Inch	Commercial	\$ 6,000	\$ 1,612	\$ 22,310		\$ 29,923
Subtotal						
5/8 Inch	Multi-family	\$ 1,080	\$ 56	\$ 530	\$ 2,497	\$ 4,164
1.5 Inch	Multi-family	\$ 600	\$ 245	\$ -		\$ 845
Subtotal						
Fire Lines up to 8 Inch		\$ 2,640				\$ 2,640
<b>TOTALS</b>						
		<b>\$ 820,680</b>	<b>\$ 124,514</b>	<b>\$ 903,042</b>	<b>\$ 1,002,853</b>	<b>\$ 2,851,089</b>
Percent of Total		28.78%	4.37%	31.67%	35.17%	100.00%
Cummulative %		28.78%	33.15%	64.83%	100.00%	

Rio Rico Utilities, Inc. - Water Division - RUCO Proposed Rates  
Revenue Breakdown Summary  
Proposed Rates

Attachment  
Page 4

		Proposed Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Total
5/8 Inch Residential	\$	656,998	\$ 98,603	\$ 467,167	\$ 871,401	\$ 2,094,169
3/4 Inch Residential	\$	1,369	\$ 807	\$ 73		\$ 2,249
1 Inch Residential	\$	15,156	\$ 10,465	\$ 7,674		\$ 33,295
1.5 Inch Residential	\$	4,921	\$ 3,200	\$ 2,354		\$ 10,475
2 Inch Residential	\$	4,786	\$ 2,571	\$ 539		\$ 7,895
Subtotal						
5/8 Inch Commercial	\$	13,266	\$ 3,384	\$ 7,293	\$ 31,237	\$ 55,179
1 Inch Commercial	\$	13,944	\$ 4,796	\$ 22,049		\$ 40,789
1.5 Inch Commercial	\$	6,151	\$ 735	\$ 12,540		\$ 19,426
2 Inch Commercial	\$	33,499	\$ 14,958	\$ 165,295		\$ 213,752
3 Inch Commercial	\$	22,419	\$ (1,098)	\$ 111,940		\$ 133,261
4 Inch Commercial	\$	18,452	\$ 2,442	\$ 58,132		\$ 79,027
6 Inch Commercial	\$	5,694	\$ -	\$ 21,882		\$ 27,576
Subtotal						
5/8 Inch Multi-family	\$	1,029	\$ 51	\$ 559	\$ 2,282	\$ 3,921
1.5 Inch Multi-family	\$	615	\$ 228	\$ -		\$ 843
Subtotal						
Fire Lines up to 8 Inch	\$	3,635				\$ 3,635
<b>TOTALS</b>						
	\$	801,935	\$ 141,142	\$ 877,496	\$ 904,919	\$ 2,725,493
Percent of Total		29.42%	5.18%	32.20%	33.20%	100.00%
Cummulative %		29.42%	34.60%	66.80%	100.00%	

**Rio Rico Utilities, Inc.  
Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA  
REBUTTAL TESTIMONY  
(RATE BASE, INCOME STATEMENT AND RATE DESIGN)  
February 1, 2010**

# **SCHEDULES**

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Computation of Increase in Gross Revenue  
 Requirements As Adjusted

Exhibit  
 Rebuttal Schedule A-1  
 Page 1  
 Witness: Bourassa

Line No.							
1	Fair Value Rate Base			\$	7,992,279		
2							
3	Adjusted Operating Income				(187,072)		
4							
5	Current Rate of Return				-2.34%		
6							
7	Required Operating Income			\$	935,097		
8							
9	Required Rate of Return on Fair Value Rate Base				11.70%		
10							
11	Operating Income Deficiency			\$	1,122,168		
12							
13	Gross Revenue Conversion Factor				1.6286		
14							
15	Increase in Gross Revenue Revenue Requirement				1,827,602		
16							
17	Adjusted Test Year Revenues			\$	1,847,256		
18	Increase in Gross Revenue Revenue Requirement			\$	1,827,602		
19	Proposed Revenue Requirement			\$	3,674,859		
20	% Increase				98.94%		
21							
22	<b>Customer</b>		<b>Present</b>		<b>Proposed</b>	<b>Dollar</b>	
23	<b>Classification</b>		<b>Rates</b>		<b>Rates</b>	<b>Increase</b>	
24	5/8 Inch Residential	\$	1,416,089	\$	2,849,962	\$ 1,433,873	
25	3/4 Inch Residential		1,492		3,043	1,551	
26	1 Inch Residential		16,001		31,755	15,755	
27	1.5 Inch Residential		3,016		5,931	2,915	
28	2 Inch Residential		4,236		8,401	4,165	
29			-		-	-	
30	<b>Subtotal</b>	\$	1,440,833	\$	2,899,092	\$ 1,458,259	
31						101.21%	
32	5/8 Inch Commercial	\$	30,960	\$	62,631	\$ 31,672	
33	1 Inch Commercial		25,394		50,761	25,368	
34	1.5 Inch Commercial		13,279		26,462	13,183	
35	2 Inch Commercial		134,126		272,232	138,106	
36	3 Inch Commercial		97,545		196,157	98,612	
37	4 Inch Commercial		43,844		86,182	42,338	
38	6 Inch Commercial		18,185		36,530	18,345	
39			-		-	-	
40	<b>Subtotal</b>	\$	363,332	\$	730,955	\$ 367,623	
41						101.18%	
42						0.00%	
43	5/8 Inch Multi-family	\$	2,850	\$	5,745	2,895	
44	1.5 Inch Multi-family		568		1,095	527	
45	<b>Subtotal</b>	\$	3,418	\$	6,840	\$ 3,422	
46						100.13%	
47	Fire Lines up to 8 Inch	\$	1,199	\$	2,405	1,206	
48						100.62%	
49	<b>Subtotal Revenues before Annualization</b>	\$	1,808,782	\$	3,639,293	\$ 1,830,511	
50	<b>Revenue Annualization</b>		(4,794)		(9,834)	(5,041)	
51	Miscellaneous Revenues		44,672		44,672	-	
52	Reconciling Amount H-1 to C-1		(1,404)		728	2,132	
53	<b>Total of Water Revenues (a)</b>	\$	1,847,256	\$	3,674,858	\$ 1,827,602	
54						98.94%	
55	<b>SUPPORTING SCHEDULES:</b>						
56	Rebuttal B-1						
57	Rebuttal C-1						
58	Rebuttal C-3						
59	Rebuttal H-1						

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Summary of Rate Base

Exhibit  
 Rebuttal Schedule B-1  
 Page 1  
 Witness: Bourassa

Line No.		<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1			
2	Gross Utility Plant in Service	\$ 34,059,801	\$ 34,059,801
3	Less: Accumulated Depreciation	<u>12,472,661</u>	<u>12,472,661</u>
4			
5	Net Utility Plant in Service	\$ 21,587,140	\$ 21,587,140
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	122,372	122,372
10	Contributions in Aid of		
11	Construction	20,140,197	20,140,197
12			
13	Accumulated Amortization of CIAC	(6,628,197)	(6,628,197)
14			
15	Customer Meter Deposits	275,455	275,455
16	Deferred Income Taxes & Credits	(314,965)	(314,965)
17			
18			
19			
20	<u>Plus:</u>		
21	Unamortized Debt Issuance		
22	Costs	-	-
23	Deferred Reg. Assets	-	-
24	Working capital	-	-
25			
26			
27			
28			
29	Total Rate Base	<u>\$ 7,992,279</u>	<u>\$ 7,992,279</u>
30			
31			
32			
33	<u>SUPPORTING SCHEDULES:</u>		<u>RECAP SCHEDULES:</u>
34	Rebuttal B-2		Rebuttal A-1
35	Rebuttal B-3		
36	Rebuttal B-5		
37			
38			

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments

Exhibit  
 Rebuttal Schedule B-2  
 Page 1  
 Witness: Bourassa

Line No.		Actual at End of <u>Test Year</u>	Proforma Adjustment <u>Amount</u>	Adjusted at end of <u>Test Year</u>
1	Gross Utility			
2	Plant in Service	\$ 34,059,801	-	\$ 34,059,801
3				
4	<b>Less:</b>			
5	Accumulated			
6	Depreciation	12,472,661	-	12,472,661
7				
8				
9	Net Utility Plant			
10	in Service	\$ 21,587,140		\$ 21,587,140
11				
12	<b>Less:</b>			
13	Advances in Aid of			
14	Construction	73,648	48,724	122,372
15				
16	Contributions in Aid of			
17	Construction	20,188,921	(48,724)	20,140,197
18				
19	Accumulated Amort of CIAC	(6,628,197)	-	(6,628,197)
20				
21	Customer Meter Deposits	275,455	-	275,455
22	Deferred Income Taxes & Credits	(778,203)	463,238	(314,965)
23				
24				
25				
26	<b>Plus:</b>			
27	Unamortized Debt Issuance			
28	Costs	-		-
29	Deferred Reg. Assets	-	-	-
30	Working capital	-	-	-
31				
32				
33				
34				
35	Total	<u>\$ 8,455,517</u>		<u>\$ 7,992,279</u>

39 SUPPORTING SCHEDULES:  
 40 Rebuttal B-2, pages 2

RECAP SCHEDULES:  
 Rebuttal B-1

41  
 42  
 43  
 44  
 45  
 46  
 47  
 48

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments

Line No.	Description	Actual at End of Test Year	Proforma Adjustments			Adjusted at end of Test Year
			1	2	3	
			Plant-in-Service	Accumulated Depreciation	AIAC	DIT
1	Gross Utility Plant in Service	\$ 34,059,801	-			\$ 34,059,801
2						
3						
4	<b>Less:</b>					
5	Accumulated Depreciation	12,472,661				12,472,661
6						
7						
8						
9	Net Utility Plant in Service	\$ 21,587,140	\$ -	\$ -	\$ -	\$ 21,587,140
10						
11						
12	<b>Less:</b>					
13	Advances in Aid of Construction	73,648		48,724		122,372
14						
15						
16	Contributions in Aid of Construction (CIAC)	20,188,921		(48,724)		20,140,197
17						
18	Accumulated Amort of CIAC	(6,628,197)				(6,628,197)
19						
20	Customer Meter Deposits	275,455				275,455
21	Deferred Income Taxes & Credits	(778,203)			463,238	(314,965)
22						
23						
24						
25	<b>Plus:</b>					
26	Unamortized Finance Charges	-				-
27						
28	Allowance for Working Capital	-				-
29						
30						
31	Total	\$ 8,455,517	\$ -	\$ -	\$ (463,238)	\$ 7,992,279
32						
33						
34						

**SUPPORTING SCHEDULES:**  
 Rebuttal B-2, pages 3-6



Rio Rico - Water Division  
Plant Additions and Retirements

Exhibit  
Rebuttal Schedule B-2  
Page 3.1

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	Plant At 12/31/2002	2002 Accum. Depr.	2003 Plant Adjustments		2003 Salvage A/D Only	2003 Plant Balance	2003 Deprec.
						Additions	Retirements			
301	Organization Cost	0.00%	0.00%	5,785	-	-	-	-	5,785	-
302	Franchise Cost	0.00%	0.00%	417	-	-	-	-	417	-
303	Land and Land Rights	0.00%	0.00%	44,194	-	-	-	-	44,194	-
304	Structures and Improvements	1.99%	3.33%	435,181	104,047	253,614	-	-	688,795	11,184
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.50%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	3.33%	3.33%	272,063	78,656	-	-	-	272,063	9,005
308	Infiltration Galleries and Tunnels	6.67%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	1.66%	2.00%	29,881	(3,617)	249,272	-	-	279,153	2,565
310	Power Generation Equipment	3.96%	5.00%	52,635	19,077	134,736	-	-	187,371	4,752
311	Electric Pumping Equipment	3.96%	12.50%	1,504,459	508,421	151,098	-	-	1,655,557	62,568
320	Water Treatment Equipment	3.99%	3.33%	268,685	74,460	-	-	-	268,685	10,721
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	3.99%	2.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	353,111	106,812	50,494	-	-	403,605	7,567
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	1.66%	2.00%	19,116,148	5,899,199	134,818	(17,464)	-	19,233,502	318,447
333	Services	2.49%	3.33%	1,465,553	483,437	47,278	-	-	1,512,831	37,081
334	Meters	2.49%	8.33%	519,191	82,474	42,569	(12,864)	-	548,896	13,458
335	Hydrants	1.99%	2.00%	459,227	92,050	1,875	(1,352)	-	459,750	9,157
336	Backflow Prevention Devices	4.01%	6.67%	-	-	-	-	-	-	-
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	22,986	9,507	-	-	-	22,986	1,103
340	Office Furniture and Fixtures	4.80%	20.00%	69,494	18,780	-	-	-	69,494	3,336
340.1	Computers and Software	33.33%	20.00%	2,925	4,954	-	-	-	2,925	(2,029)
341	Transportation Equipment	4.00%	4.00%	-	-	-	-	-	-	-
342	Stores Equipment	4.00%	5.00%	15,035	5,054	-	-	-	15,035	601
343	Tools and Work Equipment	4.00%	10.00%	3,061	1,378	-	-	-	3,061	122
344	Laboratory Equipment	5.03%	5.00%	-	-	-	-	-	-	-
345	Power Operated Equipment	4.89%	10.00%	141,858	19,381	-	-	-	141,858	7,135
346	Communications Equipment	4.89%	10.00%	7,701	2,709	-	-	-	7,701	377
347	Miscellaneous Equipment	10.00%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant Rounding	10.00%	10.00%	-	-	-	-	-	-	-

Plant Held for Future Use  
TOTAL WATER PLANT

24,789,590 7,506,779 1,065,754 - 1,065,754 (31,680) - 25,823,664 497,151

Account No.	Description	Deprec.	Deprec.	2004		2004		2004		2004		2004 Plant Balance	2004 Plant Deprec.
		Rate Before Oct-04	Rate After Oct-04	Plant Additions	Plant Adjustments	Adjusted Plant Additions	Plant Retirements	Salvage/Adj. A/D Only	Plant Balance				
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	5,785	-	
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	417	-	
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	44,194	-	
304	Structures and Improvements	1.95%	3.33%	-	-	-	-	-	-	-	688,795	16,014	
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-	-	-	
306	Lake River and Other Intakes	3.31%	3.33%	128,294	-	128,294	-	-	-	-	400,357	11,145	
307	Wells and Springs	6.67%	6.67%	-	-	-	-	-	-	-	-	-	
308	Infiltration Galleries and Tunnels	1.66%	2.00%	-	-	-	-	-	-	-	279,153	4,871	
309	Supply Mains	3.96%	5.00%	-	-	-	-	-	-	-	187,371	7,907	
310	Power Generation Equipment	3.96%	12.50%	236,327	-	236,327	-	-	-	-	1,891,884	108,108	
311	Electric Pumping Equipment	3.99%	3.33%	65,200	-	65,200	-	-	-	-	333,885	11,524	
320	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-	-	
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-	-	
320.2	Chemical Solution Feeders	3.99%	2.00%	-	-	-	-	-	-	-	-	-	
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	37,838	-	37,838	-	-	-	-	441,443	8,663	
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-	-	-	
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-	-	-	
331	Transmission and Distribution Mains	1.66%	2.00%	431,726	-	431,726	-	-	-	-	19,665,227	339,391	
333	Services	2.49%	3.33%	54,211	-	54,211	-	-	-	-	1,567,042	41,578	
334	Meters	2.49%	8.33%	51,537	-	51,537	-	(20,725)	-	-	579,708	22,290	
335	Hydrants	1.99%	2.00%	15,453	-	15,453	-	-	-	-	475,203	9,314	
336	Backflow Prevention Devices	4.01%	6.67%	-	-	-	-	-	-	-	-	-	
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	-	-	-	-	-	-	-	22,986	1,211	
340	Office Furniture and Fixtures	4.80%	20.00%	1,320	-	1,320	-	-	-	-	70,814	6,033	
340.1	Computers and Software	33.33%	20.00%	-	-	-	-	-	-	-	2,925	-	
341	Transportation Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-	
342	Stores Equipment	4.00%	5.00%	-	-	-	-	-	-	-	15,035	639	
343	Tools and Work Equipment	4.00%	10.00%	-	-	-	-	-	-	-	3,061	168	
344	Laboratory Equipment	5.03%	5.00%	-	-	-	-	-	-	-	-	-	
345	Power Operated Equipment	4.89%	10.00%	-	-	-	-	-	-	-	141,858	8,898	
346	Communications Equipment	4.89%	10.00%	-	-	-	-	-	-	-	7,701	475	
347	Miscellaneous Equipment			-	-	-	-	-	-	-	-	-	
348	Other Tangible Plant			-	-	-	-	-	-	-	-	-	
	Rounding			-	-	-	-	-	-	-	-	-	
	Plant Held for Future Use					1,021,906					26,824,845	588,252	
	TOTAL WATER PLANT					1,021,906		(20,725)			26,824,845	588,252	

Account No.	Description	Deprec.	Deprec.	2005	2005	2005	2005	2005	2005	2005	2005	2005
		Rate Before Oct-04	Rate After Oct-04	Plant Additions	Plant Adjustments	Plant Adjustments	Plant Adjustments	Adjusted Plant Additions	Plant Retirements	Salvage A/D Only	Plant Balance	Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	5,785	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	417	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	44,194	-
304	Structures and Improvements	1.99%	3.33%	-	-	-	-	-	-	-	688,795	22,937
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.50%	2.50%	-	-	-	-	-	-	-	400,357	13,332
307	Wells and Springs	3.31%	3.33%	-	-	-	-	-	-	-	-	-
308	Infiltration Galleries and Tunnels	6.67%	6.67%	-	-	-	-	-	-	-	-	-
309	Supply Mains	1.66%	2.00%	-	-	-	-	-	-	-	279,153	5,583
310	Power Generation Equipment	3.96%	5.00%	-	-	-	-	-	-	-	187,371	9,369
311	Electric Pumping Equipment	3.96%	12.50%	507,953	-	-	-	507,953	(2,008)	-	2,397,829	288,107
320	Water Treatment Equipment	3.99%	3.33%	34,253	-	-	-	34,253	(749)	-	367,389	11,676
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	3.99%	20.00%	-	-	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	318,417	-	-	-	318,417	-	-	759,861	13,334
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	1.66%	2.00%	736,273	-	-	-	736,273	(44,284)	-	20,357,216	400,224
333	Services	2.49%	3.33%	153,500	-	-	-	153,500	-	-	1,720,542	54,738
334	Meters	2.49%	8.33%	82,087	-	-	-	82,087	(12,138)	-	649,657	51,203
335	Hydrants	1.99%	2.00%	20,516	-	-	-	20,516	(1,645)	-	494,074	9,693
336	Backflow Prevention Devices	4.01%	6.67%	-	-	-	-	-	-	-	-	-
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	-	-	-	-	-	-	-	22,986	1,533
340	Office Furniture and Fixtures	4.80%	20.00%	6,105	-	-	-	6,105	-	-	76,919	14,773
340.1	Computers and Software	4.80%	20.00%	-	-	-	-	-	-	-	2,925	-
341	Transportation Equipment	33.33%	20.00%	-	-	-	-	-	-	-	-	-
342	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-
343	Tools and Work Equipment	4.00%	5.00%	-	-	-	-	-	-	-	15,035	752
344	Laboratory Equipment	4.00%	10.00%	-	-	-	-	-	-	-	3,061	306
345	Power Operated Equipment	5.03%	5.00%	-	-	-	-	-	-	-	-	-
346	Communications Equipment	5.03%	10.00%	55,958	-	-	-	55,958	-	-	197,816	16,984
347	Miscellaneous Equipment	4.89%	10.00%	-	-	-	-	-	-	-	7,701	770
348	Other Tangible Plant	4.89%	10.00%	-	-	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-	-	-
	Plant Held for Future Use											
	TOTAL WATER PLANT			1,915,062	-	-	-	1,915,062	(60,824)	-	28,679,084	895,315

**Rio Rico - Water Division**  
**Plant Additions and Retirements**

Exhibit  
 Rebuttal Schedule B-2  
 Page 3.4

Account No.	Description	Deprec.	Deprec.	2006	2006	2006	2006	2006	2006	2006	2006	2006
		Rate Before Oct-04	Rate After Oct-04	Plant Additions	Plant Adjustments <sup>1</sup>	Adjusted Plant Additions	Plant Retirements	Salvage A/D Only	Plant Balance	Plant Balance	Deprec.	
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	5,785	-	-	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	417	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	44,194	-	-	-
304	Structures and Improvements	1.99%	3.33%	545,966	-	545,966	-	-	1,234,761	-	32,027	-
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-	-	-
306	Lake River and Other Intakes	3.31%	3.33%	53,611	(147)	53,464	-	-	453,821	-	14,222	-
307	Wells and Springs	1.66%	2.00%	-	-	-	-	-	-	-	-	-
308	Infiltration Galleries and Tunnels	3.96%	5.00%	-	-	-	-	-	279,153	-	5,583	-
309	Supply Mains	3.96%	5.00%	-	-	-	-	-	187,371	-	9,369	-
310	Power Generation Equipment	3.96%	12.50%	95,823	-	95,823	-	-	2,493,652	-	305,718	-
311	Electric Pumping Equipment	3.99%	3.33%	5,581	-	5,581	-	-	372,970	-	12,327	-
320	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-	-
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	2.00%	2.22%	-	-	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	-	-	-	-	-	759,861	-	16,869	-
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-	-	-
330.2	Pressure Tanks	1.66%	2.00%	741,193	(1,901)	739,292	-	-	21,096,508	-	414,537	-
331	Transmission and Distribution Mains	2.49%	3.33%	86,384	-	86,384	-	-	1,806,926	-	58,732	-
333	Services	2.49%	8.33%	60,552	-	60,552	-	-	710,209	-	56,638	-
334	Meters	1.99%	2.00%	-	-	-	-	-	494,074	-	9,881	-
335	Hydrants	4.01%	6.67%	-	-	-	-	-	-	-	-	-
336	Backflow Prevention Devices	4.80%	6.67%	-	-	-	-	-	-	-	-	-
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	-	-	-	-	-	22,986	-	1,533	-
340	Office Furniture and Fixtures	4.80%	20.00%	-	-	-	-	-	76,919	-	15,384	-
340.1	Computers and Software	33.33%	20.00%	-	-	-	-	-	2,925	-	-	-
341	Transportation Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-
342	Stores Equipment	4.00%	5.00%	-	-	-	-	-	15,035	-	752	-
343	Tools and Work Equipment	4.00%	10.00%	-	-	-	-	-	3,061	-	306	-
344	Laboratory Equipment	5.03%	5.00%	-	-	-	-	-	-	-	-	-
345	Power Operated Equipment	4.89%	10.00%	3,547	-	3,547	-	-	201,363	-	19,959	-
346	Communications Equipment	10.00%	10.00%	-	-	-	-	-	7,701	-	770	-
347	Miscellaneous Equipment	10.00%	10.00%	-	-	-	-	-	-	-	-	-
348	Other Tangible Plant	10.00%	10.00%	-	-	-	-	-	-	-	-	-
	Rounding											
	Plant Held for Future Use											
	TOTAL WATER PLANT			1,592,656	(2,048)	1,590,607	-	-	30,269,691	-	974,608	-

<sup>1</sup> Affiliate Profit

Rio Rico - Water Division  
Plant Additions and Retirements

Exhibit  
Rebuttal Schedule B-2  
Page 3.5

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	2007 Plant Additions	2007 Plant Adjustments <sup>1</sup>	2007 Adjusted Plant Additions	2007 Plant Retirements	2007 Salvage A/D Only	2007 Plant Balance	2007 Deprec.
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	5,785	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	417	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	44,194	-
304	Structures and Improvements	1.99%	3.33%	389,176	-	389,176	-	-	1,623,937	47,597
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.50%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	3.31%	3.33%	53,242	(1,830)	51,413	-	-	505,234	15,968
308	Infiltration Galleries and Tunnels	6.67%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	1.66%	2.00%	-	-	-	-	-	279,153	5,583
310	Power Generation Equipment	3.96%	5.00%	5,589	-	5,589	-	-	192,970	9,509
311	Electric Pumping Equipment	3.96%	12.50%	20,220	-	20,220	-	-	2,513,872	312,970
320	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	372,970	12,420
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	3.99%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	-	-	-	-	-	759,861	16,869
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	1.66%	2.00%	-	(2,010)	(2,010)	-	-	21,094,498	421,910
333	Services	2.49%	3.33%	100,765	-	100,765	-	-	1,907,691	61,848
334	Meters	2.49%	8.33%	129,225	-	129,225	-	-	839,434	64,543
335	Hydrants	1.99%	2.00%	56,833	-	56,833	-	-	550,907	10,450
336	Backflow Prevention Devices	4.01%	6.67%	3,848	-	3,848	-	-	3,848	128
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	12,160	(3,415)	8,745	-	-	8,745	292
340	Office Furniture and Fixtures	4.80%	6.67%	-	-	-	-	-	22,986	1,533
340.1	Computers and Software	33.33%	20.00%	-	-	-	-	-	76,919	15,384
341	Transportation Equipment	4.00%	20.00%	-	-	-	-	-	2,925	-
342	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-
343	Tools and Work Equipment	4.00%	5.00%	-	-	-	-	-	15,035	752
344	Laboratory Equipment	4.00%	10.00%	-	-	-	-	-	3,061	306
345	Power Operated Equipment	5.03%	5.00%	-	-	-	-	-	-	-
346	Communications Equipment	4.89%	10.00%	-	-	-	-	-	201,363	20,136
347	Miscellaneous Equipment		10.00%	-	-	-	-	-	7,701	770
348	Other Tangible Plant		10.00%	-	-	-	-	-	-	-
	Rounding			-	-	-	-	-	-	-
	Plant Held for Future Use									
	TOTAL WATER PLANT			771,069	(7,255)	763,814	-	-	31,033,505	1,018,968

<sup>1</sup> Affiliate Profit

**Rio Rico - Water Division**  
**Plant Additions and Retirements**

Exhibit  
 Rebuttal Schedule B-2  
 Page 3.6

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	2008 Plant Additions	2008 Plant Adjustments	2008 Plant Adjustments <sup>1</sup>	2008 Adjusted Plant Additions	2008 Plant Retirements	2008 Salvage A/D Only	2008 Plant Balance	2008 Deprec.																																																							
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	5,785	-																																																							
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	417	-																																																							
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	44,194	-																																																							
304	Structures and Improvements	1.99%	3.33%	839,316	269,580	1,108,896	1,108,896	-	-	2,732,833	72,540																																																							
305	Collecting and Impounding Res.	3.33%	2.50%	-	-	-	-	-	-	-	-																																																							
306	Lake River and Other Intakes	2.50%	3.33%	-	-	-	-	-	-	-	-																																																							
307	Wells and Springs	3.31%	3.33%	3,718	57,101	(2,542)	58,278	-	-	563,511	17,795																																																							
308	Infiltration Galleries and Tunnels	6.67%	6.67%	-	-	-	-	-	-	-	-																																																							
309	Supply Mains	1.66%	2.00%	-	-	-	-	-	-	279,153	5,583																																																							
310	Power Generation Equipment	3.96%	5.00%	4,150	-	4,150	4,150	-	-	197,120	9,752																																																							
311	Electric Pumping Equipment	3.96%	12.50%	65,771	12,498	(170)	78,098	-	-	2,591,970	319,115																																																							
320	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	372,970	12,420																																																							
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-	-																																																							
320.2	Chemical Solution Feeders	3.99%	20.00%	-	-	-	-	-	-	-	-																																																							
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	-	-	-	-	-	-	759,861	16,869																																																							
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-	-																																																							
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-	-																																																							
331	Transmission and Distribution Mains	1.66%	2.00%	980,746	17,464	(3,558)	994,652	-	-	22,089,150	431,836																																																							
333	Services	2.49%	3.33%	258,637	42,945	-	301,582	-	-	2,209,274	68,547																																																							
334	Meters	2.49%	8.33%	117,171	-	-	117,171	-	-	956,605	74,805																																																							
335	Hydrants	1.99%	2.00%	17,671	-	-	17,671	-	-	568,577	11,195																																																							
336	Backflow Prevention Devices	4.01%	6.67%	-	-	-	-	-	-	3,848	257																																																							
339	Other Plant and Miscellaneous Equipment	4.80%	6.67%	118,069	-	(4,971)	113,098	-	-	121,843	4,355																																																							
340	Office Furniture and Fixtures	4.80%	6.67%	-	-	-	-	-	-	22,966	1,533																																																							
340.1	Computers and Software	4.80%	20.00%	-	-	-	-	-	-	76,919	3,229																																																							
341	Transportation Equipment	33.33%	20.00%	108,010	108,010	-	216,020	-	-	218,945	22,187																																																							
342	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-																																																							
343	Tools and Work Equipment	4.00%	5.00%	-	-	-	-	-	-	15,035	752																																																							
344	Laboratory Equipment	4.00%	10.00%	-	-	-	-	-	-	3,061	306																																																							
345	Power Operated Equipment	5.03%	5.00%	-	-	-	-	-	-	-	-																																																							
346	Communications Equipment	4.89%	10.00%	16,678	-	16,678	16,678	-	-	218,040	20,970																																																							
347	Miscellaneous Equipment	4.89%	10.00%	-	-	-	-	-	-	7,701	770																																																							
348	Other Tangible Plant Rounding		10.00%	-	-	-	-	-	-	-	-																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">2,529,938</td> <td style="width:50%; text-align: left;">507,598</td> <td style="width:50%; text-align: right;">(11,241)</td> <td style="width:50%; text-align: left;">3,026,295</td> <td style="width:50%; text-align: right;">-</td> <td style="width:50%; text-align: left;">-</td> </tr> <tr> <td colspan="11" style="text-align: center;"><b>TOTAL WATER PLANT</b></td> </tr> <tr> <td colspan="11" style="text-align: center;">Plant Held for Future Use</td> </tr> <tr> <td colspan="11" style="text-align: center;"><b>34,059,801</b></td> </tr> <tr> <td colspan="11" style="text-align: center;"><b>1,094,817</b></td> </tr> </table>											2,529,938	507,598	(11,241)	3,026,295	-	-	-	-	-	-	-	-	<b>TOTAL WATER PLANT</b>											Plant Held for Future Use											<b>34,059,801</b>											<b>1,094,817</b>										
2,529,938	507,598	(11,241)	3,026,295	-	-	-	-	-	-	-	-																																																							
<b>TOTAL WATER PLANT</b>																																																																		
Plant Held for Future Use																																																																		
<b>34,059,801</b>																																																																		
<b>1,094,817</b>																																																																		

<sup>1</sup> Affiliate Profit

**Rio Rico - Water Division**  
Plant Additions and Retirements

Exhibit  
Rebuttal Schedule B-2  
Page 3.7

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	Year End Accumulated Depreciation by Account		Year End Accumulated Depreciation by Account		Year End Accumulated Depreciation by Account		
				2002	2003	2004	2005	2006	2007	2008
301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-
302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-
303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-
304	Structures and Improvements	1.99%	3.33%	104,047	115,231	131,245	154,182	186,209	233,806	306,347
305	Collecting and Impounding Res.	2.50%	2.50%	-	-	-	-	-	-	-
306	Lake River and Other Intakes	2.50%	2.50%	-	-	-	-	-	-	-
307	Wells and Springs	3.31%	3.33%	78,656	87,661	98,807	112,139	126,361	142,329	160,123
308	Infiltration Galleries and Tunnels	6.67%	6.67%	-	-	-	-	-	-	-
309	Supply Mains	1.66%	2.00%	(3,617)	(1,052)	3,819	9,402	14,985	20,568	26,151
310	Power Generation Equipment	3.96%	5.00%	19,077	23,829	31,736	41,105	50,473	59,982	69,734
311	Electric Pumping Equipment	3.96%	12.50%	508,421	570,989	679,098	945,197	1,250,914	1,563,884	1,882,999
320	Water Treatment Equipment	3.99%	3.33%	74,460	85,181	96,705	107,632	119,959	132,379	144,799
320.1	Water Treatment Equipment	3.99%	3.33%	-	-	-	-	-	-	-
320.2	Chemical Solution Feeders	3.99%	20.00%	-	-	-	-	-	-	-
330	Distribution Reservoirs & Standpipe	2.00%	2.22%	106,812	114,379	123,062	136,397	153,265	170,134	187,003
330.1	Storage tanks	2.00%	2.22%	-	-	-	-	-	-	-
330.2	Pressure Tanks	2.00%	5.00%	-	-	-	-	-	-	-
331	Transmission and Distribution Mains	1.66%	2.00%	5,899,199	6,200,182	6,539,573	6,895,514	7,310,051	7,731,961	8,163,798
333	Services	2.49%	3.33%	483,437	520,518	562,096	616,834	675,567	737,415	805,963
334	Meters	2.49%	8.33%	82,474	83,068	84,633	123,698	180,336	244,879	319,684
335	Hydrants	1.99%	2.00%	92,050	99,855	109,170	117,217	127,099	137,549	148,744
336	Backflow Prevention Devices	4.01%	6.67%	-	-	-	-	-	128	385
339	Other Plant and Miscellaneous Equipment	6.67%	6.67%	-	-	-	-	-	292	4,647
340	Office Furniture and Fixtures	4.80%	20.00%	9,507	10,610	11,821	13,354	14,887	16,421	17,954
340.1	Computers and Software	4.80%	20.00%	18,780	22,116	26,149	42,922	58,306	73,690	76,919
341	Transportation Equipment	33.33%	20.00%	4,954	2,925	2,925	2,925	2,925	2,925	25,112
342	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-
343	Tools and Work Equipment	4.00%	5.00%	5,054	5,655	6,294	7,046	7,798	8,550	9,301
344	Laboratory Equipment	4.00%	10.00%	1,378	1,500	1,669	1,975	2,281	2,587	2,893
345	Power Operated Equipment	5.03%	10.00%	19,381	26,516	35,415	52,398	72,357	92,493	113,464
346	Communications Equipment	4.89%	10.00%	2,709	3,086	3,561	4,331	5,101	5,871	6,641
347	Miscellaneous Equipment	4.89%	10.00%	-	-	-	-	-	-	-
348	Other Tangible Plant Rounding	10.00%	10.00%	-	-	-	-	-	-	-

Plant Held for Future Use  
TOTAL WATER PLANT

7,506,779	7,972,250	8,549,777	9,384,268	10,358,875	11,377,844	12,472,661
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**Rio Rico Utilities - Water Division**  
Test Year Ended December 31, 2008  
Original Cost Rate Base Proforma Adjustments  
Adjustment 1

Exhibit  
Rebuttal Schedule B-2  
Page 5  
Witness: Bourassa

Line

No.

1	<u>Reclassification of AIAC and CIAC</u>		
2			
3			
4	CIAC	\$	(48,724)
5			
6	AIAC	\$	48,724
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17	See Testimony		
18			
19	<u>SUPPORTING SCHEDULES</u>		
20			
21			
22			
23			
24			
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Rio Rico Utilities - Water Division  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments  
 Adjustment 4

Exhibit  
 Rebuttal Schedule B-2  
 Page 6  
 Witness: Bourassa

Line No.	<u>Deferred Income Tax as of December 31, 2008 (Water and Wastewater Divisions)</u>				Tax	Future Tax Asset		Future Tax Liability		
	Adjusted		Probability	Deductible TD						
	Book Value <sup>1</sup>	Tax Value <sup>2</sup>	of Realization	(Taxable TD)	Rate	Current	Non Current	Current	Non Current	
			of Future	Expected to						
			Tax Benefit	be Realized						
6	Plant-in-Service	\$ 45,888,844								
7	Accum. Deprec.	(17,582,689)								
8	CIAC	(16,705,616)								
9	Fixed Assets	\$ 11,600,539	\$ 11,648,936	100.0%	\$ 48,397		18,681		-	
10	AIAC		360,294	100.0%	\$ 360,294		\$ 139,073			
11	Tax Benefits from O.L. Carry Forward.			100.0%	\$ 746,589 <sup>3</sup>		\$ 288,183			
						\$ -	\$ 445,938	\$ -	\$ -	
				Net Asset (Liability)		\$ 445,938				
16	Water Division allocation factor (based on relative rate bases)					0.70630				
18	Allocated DIT Asset (Liability)					\$ 314,965				
20	DIT Asset (Liability) per books					\$ 778,203				
22	Adjustment to DIT					\$ 463,238				
24	<sup>1</sup> Adjusted Water and Wastewater - per Rebuttal B-2, page 2 (Water Division) and Rebuttal B-2, page 2 (Wastewater Division)									
25	<sup>2</sup> Computation of Net Tax Value at December 31, 2008 (Water and Wastewater)									
26	Based on 2008 Tax Depreciation report (December 31, 2008)									
27	Unadjusted Cost per 2008 Tax Depr. Report				\$ 25,520,835					
28	Reconciling Items not on tax report:									
29	Land costs not on tax, on books				51,739					
30	2008 Plant recorded on books not on tax,				809,876					
31	2006 Plant recorded on books not on tax,				779,709					
32	CIAC funded plant reflected in tax plant-in-service				(3,942,540)					
33	Reconciling difference				105,049					
34	Net Unadjusted Cost tax Basis						\$ 23,324,668			
35	Affiliate Profit									
36	Affiliate Profit removed				(24,780)					
37	Affiliate A/D at tax rates				1,011					
38	Net Reduction in tax basis due to affiliate profit						\$ (23,769)			
39	Basis Reduction									
40	Basis Reduction 2007 and Prior Years (from 2007 Tax Depr. Report)									
41	Accumulated Depreciation 2007 and prior (2007 Tax Depr Report)				(10,233,311)					
42	Tax Accum. Depr. from CIAC funded plant in tax plant-in-service to 2007				616,408					
43	Net Basis Reduction 2007 and Prior Years						(9,616,903)			
44	Bonus Depreciation Computation 2008									
45	Bonus Depr. for 12 months of 2008 per Tax Depr. Report				\$ 1,030,227					
46	Less: Bonus Depr. on CIAC funded plant				-					
47	Net 12 months of Bonus Depr for plant				\$ 1,030,227					
48	Factor				1.00					
49	Bonus Depreciation for 12 months 2008						(1,030,227)			
50	2008 Depreciation Computation 2008									
51	2008 Tax Depreciation (12 Months) per Tax Depr. Report									
52	Less: 2008 Depr on CIAC funded plant in tax plant				\$ 1,162,611					
53	Net 12 months of depr. for plant added Jan. to Dec. 2008				(157,779)					
54	Factor				\$ 1,004,832					
55	Tax Depreciation for 12 months of 2008				1.00					
56	Net 2008 Depreciation						(1,004,832)			
57	Net tax value of plant-in-service at December 31, 2008						\$ 11,648,936			
59	<sup>3</sup> Tax Benefits from bonus depreciation									
61	Net Income before tax									
62		\$ 1,004,175	(from E-2 for both Water and Wastewater)							
63	Add: Book Depreciation									
64		284,295	(from E-2 for both Water and Wastewater)							
65	Less: Bonus Depreciation									
66	Tax Depreciation									
67		(1,030,227)	(from above)							
68	Taxable Income/(loss)									
69		\$ (746,589)								



**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Computation of Working Capital

Exhibit  
 Rebuttal Schedule B-5  
 Page 1  
 Witness: Bourassa

Line  
No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	145,726
3	Pumping Power (1/24 of Pumping Power)		16,396
4	Purchased Water (1/24 of Purchased Water)		-
5	Materials and Supplies		-
6	Prepays		10,289
7			
8			
9	Total Working Capital Allowance	\$	<u>172,411</u>
10			
11			
12	Working Capital Requested	\$	<u>-</u>
13			

SUPPORTING SCHEDULES:

15 E-1

RECAP SCHEDULES:

Rebuttal B-1

17			
18			Adjusted
19	<u>Cash Working Capital Detail</u>		<u>Test Year Results</u>
20			
21	Total Operating Expense	\$	2,034,328
22	Less:		
23	Income Tax		(117,600)
24	Property Tax		126,733
25	Depreciation		465,889
26	Purchased Water		-
27	Pumping Power		393,496
28	Allowable Expenses	\$	<u>1,165,810</u>
29	1/8 of allowable expenses	\$	<u>145,726</u>
30			
31			

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Income Statement

Exhibit  
 Rebuttal Schedule C-1  
 Page 1  
 Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjustment	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	<b>Revenues</b>					
2	Metered Water Revenues	\$ 1,802,584	\$ -	\$ 1,802,584	\$ 1,827,602	\$ 3,630,187
3	Unmetered Water Revenues	-	-	-		-
4	Other Water Revenues	44,672	-	44,672		44,672
5		<u>\$ 1,847,256</u>	<u>\$ -</u>	<u>\$ 1,847,256</u>	<u>\$ 1,827,602</u>	<u>\$ 3,674,859</u>
6	<b>Operating Expenses</b>					
7	Salaries and Wages	\$ -	-	-		\$ -
8	Purchased Water	-	-	-		-
9	Purchased Power	441,501	(48,005)	393,496		393,496
10	Fuel for Power Production	-	-	-		-
11	Chemicals	9,347	-	9,347		9,347
12	Materials & Supplies	23,150	-	23,150		23,150
13	Outside Services	805,032	13,097	818,129		818,129
14	Outside Services- Other	76,859	-	76,859		76,859
15	Outside Services- Legal	487	-	487		487
16	Water Testing	-	-	-		-
17	Rents	26,954	-	26,954		26,954
18	Transportation Expenses	79,315	(6,725)	72,590		72,590
19	Insurance - General Liability	37,699	-	37,699		37,699
20	Insurance - Health and Life	-	-	-		-
21	Reg. Comm. Exp.	17,564	-	17,564		17,564
22	Reg. Comm. Exp. - Rate Case	70,000	-	70,000		70,000
23	Miscellaneous Expense	14,822	(1,363)	13,459		13,459
24	Bad Debt Expense	371	(799)	(428)		(428)
25	Depreciation Expense	463,297	2,592	465,889		465,889
26	Taxes Other Than Income	-	-	-		-
27	Property Taxes	130,373	(3,640)	126,733		126,733
28	Income Tax	(134,909)	17,309	(117,600)	705,434	587,834
29	<b>Total Operating Expenses</b>	<u>\$ 2,061,862</u>	<u>\$ (27,534)</u>	<u>\$ 2,034,328</u>	<u>\$ 705,434</u>	<u>\$ 2,739,762</u>
30	<b>Operating Income</b>	<u>\$ (214,606)</u>	<u>\$ 27,534</u>	<u>\$ (187,072)</u>	<u>\$ 1,122,168</u>	<u>\$ 935,097</u>
31	<b>Other Income (Expense)</b>					
32	Interest Income	-	-	-		-
33	Other income (loss)	-	-	-		-
34	Interest Expense	-	-	-		-
35	Other Expense	-	-	-		-
36		-	-	-		-
37	<b>Total Other Income (Expense)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
38	<b>Net Profit (Loss)</b>	<u><u>\$ (214,606)</u></u>	<u><u>\$ 27,534</u></u>	<u><u>\$ (187,072)</u></u>	<u><u>\$ 1,122,168</u></u>	<u><u>\$ 935,097</u></u>

40 **SUPPORTING SCHEDULES:**  
 41 Rebuttal C-1, page 2.1 and 2.2  
 42

**RECAP SCHEDULES:**  
 Rebuttal A-1

Rio Rico Utilities - Water Division  
 Test Year Ended December 31, 2008  
 Income Statement

Exhibit  
 Rebuttal Schedule C-1  
 Page 2  
 Witness: Bourassa

Line No.	1	2	3	4	5	6	7	8	9	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
	Test Year Adjusted Results	Property Taxes	Purchased Power	Transport. Expense	Out of Period Exp.	Misc. Expense	Bad Debt Exp.	Central Office Costs	Income Tax			
1	\$ 1,802,584									\$ 1,802,584	\$ 1,827,602	\$ 3,630,187
2	44,672									44,672		44,672
3	\$ 1,847,256									\$ 1,847,256	\$ 1,827,602	\$ 3,674,859
4												
5												
6												
7												
8												
9												
10	441,501		(48,005)							393,496		393,496
11	9,347									9,347		9,347
12	23,150									23,150		23,150
13	805,032				(14,477)			27,574		818,129		818,129
14	76,859									76,859		76,859
15	487									487		487
16												
17	26,954									26,954		26,954
18	79,315			(6,725)						72,590		72,590
19	37,699									37,699		37,699
20												
21	17,564									17,564		17,564
22	70,000									70,000		70,000
23	14,822					(1,363)				13,459		13,459
24	371						(799)			(428)		(428)
25	463,297	2,592								465,889		465,889
26												
27	130,373		(3,640)							126,733		126,733
28	(134,909)									(117,600)		587,834
29	\$ 2,061,862	\$ 2,592	\$ (3,640)	\$ (6,725)	\$ (14,477)	\$ (1,363)	\$ (799)	\$ 27,574	\$ 17,309	\$ 2,034,328	\$ 705,434	\$ 2,739,762
30	\$ (214,606)	\$ (2,592)	\$ 48,005	\$ 6,725	\$ 14,477	\$ 1,363	\$ 799	\$ (27,574)	\$ (17,309)	\$ (187,072)	\$ 1,122,168	\$ 935,097
31												
32												
33												
34												
35												
36												
37												
38	\$ (214,606)	\$ (2,592)	\$ 48,005	\$ 6,725	\$ 14,477	\$ 1,363	\$ 799	\$ (27,574)	\$ (17,309)	\$ (187,072)	\$ 1,122,168	\$ 935,097
39												
40												
41												
42												

RECAP SCHEDULES:  
 Rebuttal C-1

SUPPORTING SCHEDULES:  
 Rebuttal C-2



**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Adjustments to Revenues and Expenses  
 Adjustment Number 1

Exhibit  
 Rebuttal Schedule C-2  
 Page 2  
 Witness: Bourassa

Line No.	Acct.	Description	Adjusted Original Cost	Proposed Rates	Depreciation Expense
1	<u>Depreciation Expense</u>				
2					
3					
4					
5	301	Organization Cost	5,785	0.00%	-
6	302	Franchise Cost	417	0.00%	-
7	303	Land and Land Rights	44,194	0.00%	-
8	304	Structures and Improvements	2,732,833	3.33%	91,003
9	305	Collecting and Impounding Res.	-	2.50%	-
10	306	Lake River and Other Intakes	-	2.50%	-
11	307	Wells and Springs	563,511	3.33%	18,765
12	308	Infiltration Galleries and Tunnels	-	6.67%	-
13	309	Supply Mains	279,153	2.00%	5,583
14	310	Power Generation Equipment	197,120	5.00%	9,856
15	311	Electric Pumping Equipment	2,591,970	12.50%	323,996
16	320	Water Treatment Equipment	-	3.33%	-
17	320.1	Water Treatment Plant	372,970	3.33%	12,420
18	320.2	Chemical Solution Feeders	-	20.00%	-
19	330	Dist. Reservoirs & Standpipe	-	2.22%	-
20	330.1	Storage tanks	759,861	2.22%	16,869
21	330.2	Pressure Tanks	-	5.00%	-
22	331	Trans. and Dist. Mains	22,089,150	2.00%	441,783
23	333	Services	2,209,274	3.33%	73,569
24	334	Meters	956,605	8.33%	79,685
25	335	Hydrants	568,577	2.00%	11,372
26	336	Backflow Prevention Devices	3,848	6.67%	257
27	339	Other Plant and Misc. Equip.	121,843	6.67%	8,127
28	340	Office Furniture and Fixtures	22,986	6.67%	1,533
29	340.1	Computers and Software	76,919	20.00%	-
30	341	Transportation Equipment	218,945	20.00%	43,789
31	342	Stores Equipment	-	4.00%	-
32	343	Tools and Work Equipment	15,035	5.00%	752
33	344	Laboratory Equipment	3,061	10.00%	306
34	345	Power Operated Equipment	-	5.00%	-
35	346	Communications Equipment	218,040	10.00%	21,804
36	347	Miscellaneous Equipment	7,701	10.00%	770
37	348	Other Tangible Plant	-	10.00%	-
38					
39		TOTALS	<u>\$ 34,059,801</u>		<u>\$ 1,162,239</u>
40					
41					
42		Less: Amortization of Contributions	\$ 20,140,197	3.4575%	\$ (696,350)
43					
44					
45					
46		Total Depreciation Expense			<u>\$ 465,889</u>
47					
48		Adjusted Test Year Depreciation Expense			<u>463,297</u>
49					
50		Increase (decrease) in Depreciation Expense			<u>2,592</u>
51					
52		Adjustment to Revenues and/or Expenses			<u>\$ 2,592</u>
53					
54		<u>SUPPORTING SCHEDULE</u>			
55		Rebuttal B-2, page 3			
56					

\* Fully Depreciated

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Adjustment to Revenues and Expenses  
 Adjustment Number 2

Exhibit  
 Rebuttal Schedule C-2  
 Page 3  
 Witness: Bourassa

Line No.			
1	<b>Property Taxes:</b>		
2			
3	Adjusted Revenues in year ended 12/31/08	\$	1,847,256
4	Adjusted Revenues in year ended 12/31/08		1,847,256
5	Proposed Revenues		<u>3,674,859</u>
6	Average of three year's of revenue	\$	2,456,457
7	Average of three year's of revenue, times 2	\$	4,912,914
8	Add:		
9	Construction Work in Progress at 10%	\$	-
10	Deduct:		
11	Book Value of Transportation Equipment		<u>193,833</u>
12			
13	Full Cash Value	\$	4,719,081
14	Assessment Ratio		<u>21%</u>
15	Assessed Value		991,007
16	Property Tax Rate		11.3283%
17			
18	Property Tax		112,264
19	Plus: Tax on Parcels		14,470
20			
21	Total Property Tax at Proposed Rates	\$	<u>126,733</u>
22	Adjusted Property Taxes		<u>130,373</u>
23	Change in Property Taxes	\$	<u>(3,640)</u>
24			
25			
26	Adjustment to Revenues and/or Expenses	\$	<u>(3,640)</u>
27			
28			

**Rio Rico Utilities - Water Division**  
Test Year Ended December 31, 2008  
ADJUSTMENTS TO REVENUES AND/OR EXPENSES  
Adjustment Number 3

Exhibit  
Rebuttal Schedule C-2  
Page 4  
Witness: Bourassa

Line  
No.

1	<u>Purchased Power</u>	
2		
3	Reclassify purchased power expense to sewer division	\$ (48,005)
4		
5		
6		
7		
8		
9	Increase (decrease) in Purchased Power Expense	<u>\$ (48,005)</u>
10		
11	Adjustment to Revenue and/or Expense	<u>\$ (48,005)</u>
12		
13		
14		
15		
16		
17	<u>SUPPORTING SCHEDULE</u>	
18	Staff Schedule GWB-12	
19		
20		
21		
22		
23		
24		

**Rio Rico Utilities - Water Division**  
Test Year Ended December 31, 2008  
Adjustment to Revenues and Expenses  
Adjustment Number 4

Exhibit  
Rebuttal Schedule C-2  
Page 5  
Witness: Bourassa

Line			
<u>No.</u>			
1	<u>Transportation Expense</u>		
2			
3			
4	Remove Airlink costs	\$	(6,725)
5			
6			
7			
8	Increase (decrease) in Transportation Expense	<u>\$</u>	<u>(6,725)</u>
9			
10			
11	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>(6,725)</u>
12			
13			
14			
15			
16			
17			
18			
19			
20			

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Adjustment to Revenues and Expenses  
 Adjustment Number 5

Exhibit  
 Rebuttal Schedule C-2  
 Page 6  
 Witness: Bourassa

Line  
No.

1					
2	<u>Remove Out of Period Expense</u>				
3					
4	DEC 19 2007 - A	Rio Rico Properties	DEC 19 2007 - A	NOV 2006	\$ (7,671)
5	12.19.07 - A	Rio Rico Properties	12.19.07 - A	DEC 2006	(6,806)
6	Total				<u>\$ (14,477)</u>
7					
8					
9					
10	Increase (decrease) in Outside Services				<u>\$ (14,477)</u>
11					
12					
13	Adjustment to Revenue and/or Expense				<u><u>\$ (14,477)</u></u>
14					
15					
16					
17					
18					
19					
20					

Rio Rico Utilities - Water Division  
Test Year Ended December 31, 2008  
Adjustment to Revenues and Expenses  
Adjustment Number 6

Exhibit  
Rebuttal Schedule C-2  
Page 7  
Witness: Bourassa

Line  
No.

1	<u>Miscellaneous Expense</u>	
2		
3	Remove charitable contributions	\$ (1,363)
4		
5		
6	Increase (decrease) in Miscellaneous Expense	<u>\$ (1,363)</u>
7		
8		
9		
10	Adjustment to Revenue and/or Expense	<u>\$ (1,363)</u>
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

Rio Rico Utilities - Water Division  
Test Year Ended December 31, 2008  
Adjustment to Revenues and Expenses  
Adjustment Number 7

Exhibit  
Rebuttal Schedule C-2  
Page 8  
Witness: Bourassa

Line  
No.

1	<u>Bad Debt Expense</u>	
2		
3		
4	Normalize Bad Debt Expense	(799)
5		
6		
7	Increase (decrease) in Purchased Power	<u>\$ (799)</u>
8		
9	Adjustment to Revenue and/or Expense	<u>\$ (799)</u>
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Adjustment to Revenues and Expenses  
 Adjustment Number 8

Exhibit  
 Rebuttal Schedule C-2  
 Page 9  
 Witness: Bourassa

Line No.	2008 Actual Total	Adjustments	Rejoinder Total Cost Pool	Utility Infrastructure Group Allocation %	Utility Infrastructure Group Allocated Cost Pool	RRUI Water Allocation by Customer Count	Rejoinder LPSCo Allocation
9	Audit	\$ 1,021,609	\$ 1,021,609	26.98%	\$ 275,672	9.55%	26,327
10	Tax Services	322,446	322,446	26.98%	87,009	9.55%	8,309
11	Legal	767,451	(113,853)	26.98%	176,368	9.55%	16,843
12	Other Professional Services	565,649		26.98%	152,636	9.55%	14,577
13	Management Fee - Total	642,771		26.98%	173,446	9.55%	16,564
14	Unit Holder Communications	289,796		26.98%	78,199	9.55%	7,468
15	Trustee Fees	129,000		26.98%	34,810	9.55%	3,324
16	Escrow & Transfer Agent Fees	71,366		26.98%	19,258	9.55%	1,839
17	Rent	299,586		26.98%	80,841	9.55%	7,720
18	Licenses/Fees & Permits	140,852	(15,808)	26.98%	33,742	9.55%	3,222
19	Office Expenses	808,101	(74,847)	26.98%	197,862	9.55%	18,896
20	Depreciation	211,253		26.98%	57,005	9.55%	5,444
21							
22	<b>Total (US dollars USD)</b>	<b>\$ 5,269,882</b>	<b>\$ (204,509)</b>		<b>\$ 1,366,847</b>		<b>\$ 130,534</b>
23							
24							
25							
26	Infrastructure Cost Allocation per Direct (USD)						\$ 102,960
27							
28	Increase (decrease) in Infrastructure Allocated Costs (USD)						\$ 27,574
29							
30							
31	Adjustment to Revenues and/or Expenses						\$ 27,574
32							
33							
34							
35							

**Rio Rico Utilities - Water Division**  
**Test Year Ended December 31, 2008**  
**Adjustment to Revenues and/or Expenses**  
**Adjustment Number 9**

Exhibit  
Schedule C-2  
Page 10  
Witness: Bourassa

Line No.		<b>Test Year Book Results</b>	<b>Test Year Adjusted Results</b>	<b>Adjusted with Rate Increase</b>	
1	<u>Income Tax Computation</u>				
2					
3					
4					
5					
6					
7	Taxable Income	\$ (349,515)	\$ (304,671)	\$ 1,522,931	
8					
9	Taxable Income	<u>\$ (349,515)</u>	<u>\$ (304,671)</u>	<u>\$ 1,522,931</u>	
10					
11					
12					
13	Income Before Taxes			<u>\$ 1,522,931</u>	
14					
15	Arizona Income Before Taxes			\$ 1,522,931	
16					
17	Less Arizona Income Tax			<u>\$ 106,118</u>	
18	Rate =	6.97%			
19	Arizona Taxable Income			\$ 1,416,813	
20					
21	Arizona Income Taxes			\$ 106,118	
22					
23	Federal Income Before Taxes			\$ 1,522,931	
24					
25	Less Arizona Income Taxes			<u>\$ 106,118</u>	
26					
27	Federal Taxable Income			<u>\$ 1,416,813</u>	
28					
29					
30					
31	FEDERAL INCOME TAXES:				
32	15% BRACKET			\$ 7,500	
33	25% BRACKET			\$ 6,250	
34	34% BRACKET			\$ 8,500	Federal
35	39% BRACKET			\$ 91,650	Effective
36	34% BRACKET			\$ 367,816	Tax
37					Rate
38	Federal Income Taxes			<u>\$ 481,716</u>	31.63%
39					
40					
41	Total Income Tax			<u>\$ 587,834</u>	
42					
43	Overall Tax Rate			<u>38.60%</u>	
44					
45	Income Tax at Proposed Rates Effective Rate		<u>\$ (117,600)</u>		
46					

**Rio Rico Utilities - Water Division**  
 Test Year Ended December 31, 2008  
 Computation of Gross Revenue Conversion Factor

Exhibit  
 Rebuttal Schedule C-3  
 Page 1  
 Witness: Bourassa

Line No.	<u>Description</u>	Percentage of Incremental Gross <u>Revenues</u>
1	Federal Income Taxes	31.63%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	<u>0.00%</u>
6		
7		
8	Total Tax Percentage	38.60%
9		
10	Operating Income % = 100% - Tax Percentage	61.40%
11		
12		
13		
14		
15	<u>1</u> = Gross Revenue Conversion Factor	
16	<u>Operating Income %</u>	1.6286
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		





Rio Rico Utilities, Inc. - Water Division  
 Test Year Ended December 31, 2008  
 Revenue Summary

Exhibit  
 Rebuttal Schedule H-1  
 Page 3  
 Witness: Bourassa

With Annualized Revenues to Year End Number of Customers

Line No.	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
3	\$ 1,808,782	\$ 3,639,293	\$ 1,830,511	101.20%	100.00%	100.00%
4	(4,794)	(9,834)	(5,041)	105.15%	-0.27%	-0.27%
5	\$ 1,803,988	\$ 3,629,458	\$ 1,825,470	101.19%		
6						
7	\$ 44,672	\$ 44,672	-	0.00%	2.47%	1.23%
8	(1,404)	728	2,132	0.00%	-0.08%	0.02%
9	\$ 1,847,256	\$ 3,674,858	\$ 1,827,602	98.94%	0.00%	0.00%
10						
11						
12	<u>Revenue Reconciliation</u>					
13						
14	Revenue per bill count before revenue annualization	\$ 1,808,782				
15	Revenue per GL (metered water revenues)	\$ 1,807,378				
16	Difference	\$ 1,404				
17	Difference %	0.08%				
18	Tolerance %	0.50%				
19	Tolerance Amount + or -	\$ 9,037				
20						
21	Acceptable?					YES
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Average Consumption	Average Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	5,745	8,548 \$	19.94 \$	40.04	20.10	100.77%
2	3/4 Inch Residential	8	3,558	15.70	32.02	16.32	103.95%
3	1 Inch Residential	36	11,326	36.35	72.14	35.79	98.44%
4	1.5 Inch Residential	4	20,116	68.92	135.50	66.58	96.60%
5	2 Inch Residential	4	19,938	87.89	174.10	86.21	98.08%
6	Subtotal	5,797					
7							
8	5/8 Inch Commercial	97	11,575 \$	25.40 \$	51.20	25.80	101.56%
9	1 Inch Commercial	43	17,804	47.93	95.80	47.88	99.89%
10	1.5 Inch Commercial	10	39,685	106.10	211.43	105.33	99.27%
11	2 Inch Commercial	33	154,509	336.17	684.21	348.05	103.53%
12	3 Inch Commercial	13	266,143	599.67	1,178.07	578.40	96.45%
13	4 Inch Commercial	5	292,262	717.40	1,397.23	679.83	94.76%
14	6 Inch Commercial	1	641,667	1,515.42	3,044.17	1,528.75	100.88%
15	Subtotal	202					
16							
17	5/8 Inch Multi-family	10	10,718 \$	23.77 \$	47.88	24.10	101.38%
18	1.5 Inch Multi-family	1	7,417	47.31	91.26	43.95	92.90%
19	Subtotal	11					
20							
21	Fire Lines up to 8 Inch	15	- \$	6.48 \$	13.00	6.52	100.62%
22							
23							
24	Total	6,025					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Rio Rico Utilities, Inc. - Water Division  
 Test Year Ended December 31, 2008  
 Customer Summary

Exhibit  
 Rebuttal Schedule H-2  
 Page 2  
 Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Median Consumption	Median Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent
1	5/8 Inch Residential	5,745	7,000 \$	17.31 \$	34.65	17.34	100.17%
2	3/4 Inch Residential	8	3,000	14.75	30.08	15.33	103.90%
3	1 Inch Residential	36	7,000	29.00	57.09	28.09	96.84%
4	1.5 Inch Residential	4	20,000	68.70	135.05	66.35	96.58%
5	2 Inch Residential	4	16,500	82.05	162.14	80.09	97.61%
6	Subtotal	5,797					
7							
8	5/8 Inch Commercial	97	5,000 \$	13.91 \$	27.69	13.78	99.07%
9	1 Inch Commercial	43	8,000	30.70	60.57	29.87	97.28%
10	1.5 Inch Commercial	10	32,500	92.45	183.55	91.10	98.54%
11	2 Inch Commercial	33	30,000	105.00	209.12	104.12	99.16%
12	3 Inch Commercial	13	7,000	117.30	233.80	116.50	99.32%
13	4 Inch Commercial	5	210,000	561.10	1,078.05	516.95	92.13%
14	6 Inch Commercial	1	511,000	1,267.15	2,537.18	1,270.03	100.23%
15	Subtotal	202					
16							
17	5/8 Inch Multi-family	10	9,000 \$	20.71 \$	41.61	20.90	100.92%
18	1.5 Inch Multi-family	1	8,500	49.15	95.03	45.88	93.35%
19	Subtotal	11					
20							
21	Fire Lines up to 8 Inch	15	- \$	6.48 \$	13.00	6.52	100.62%
22							
23							
24	Total	6,025					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

**Rio Rico Utilities, Inc. - Water Division**  
 Test Year Ended December 31, 2008  
 Present and Proposed Rates

Exhibit  
 Rebuttal Schedule H-3  
 Page 1  
 Witness: Bourassa

Line No.	Monthly Usage Charge for: Meter Size (All Classes):	Present Rates	Proposed Rates	Change	Percent Change
1	5/8 Inch	\$ 6.45	\$ 13.09	\$ 6.64	102.95%
2	3/4 Inch	9.65	19.64	9.99	103.47%
3	1 Inch	17.10	32.73	15.63	91.37%
4	1 1/2 Inch	34.70	65.45	30.75	88.62%
5	2 Inch	54.00	104.72	50.72	93.93%
6	3 Inch	105.40	209.44	104.04	98.71%
7	4 Inch	173.50	327.25	153.75	88.62%
8	6 Inch	321.25	654.50	333.25	103.74%
9	8 Inch	514.00	1,047.20	533.20	103.74%
10	10 Inch	745.30	1,505.35	760.05	101.98%
11	12 Inch	1,395.00	1,963.50	568.50	40.75%
12					
13	Fire Lines up to 8 Inch	\$ 6.48	\$ 13.00	6.52	100.62%
14	Fire Lines 10 Inch	\$ 7.45	\$ 15.00	7.55	101.34%
15	Fire Lines 12 Inch	\$ 14.00	\$ 30.00	16.00	114.29%
16					
17					
18	<u>Gallons In Minimum (All Zones and Classes)</u>				
19					
20					
21	<u>Commodity Rates</u>				
22	<u>(All Classes)</u>				
23					
24	5/8 Inch				
25					
26					
27					
28					
29	3/4 Inch Meter				
30					
31					
32					
33					
34					
35					
36					
37	NT = No Tariff				
38					

Block	Present Rate	Proposed Rate
0 gallons to 4,000 gallons	\$ 1.44	\$ 2.78
4,001 gallons to 10,000 gallons	\$ 1.70	\$ 3.48
over 10,000 gallons	\$ 1.90	\$ 3.88
0 gallons to 6,000 gallons	\$ 1.70	\$ 3.48
over 6,000 gallons	\$ 1.90	\$ 3.88

**Rio Rico Utilities, Inc. - Water Division**  
 Test Year Ended December 31, 2008  
 Present and Proposed Rates

Exhibit  
 Rebuttal Schedule H-3  
 Page 2  
 Witness: Bourassa

Line No.	Commodity Rates (All Classes)	(Per 1,000 gallons)	
		Present Rate	Proposed Rate
1			
2			
3	<b>Block</b>		
4	0 gallons to 15,000 gallons	\$ 1.70 \$	\$ 3.48
5	over 15,000 gallons	\$ 1.90 \$	\$ 3.88
6			
7			
8	0 gallons to 20,000 gallons	\$ 1.70 \$	\$ 3.48
9	over 20,000 gallons	\$ 1.90 \$	\$ 3.88
10			
11			
12	0 gallons to 50,000 gallons	\$ 1.70 \$	\$ 3.48
13	over 50,000 gallons	\$ 1.90 \$	\$ 3.88
14			
15			
16	0 gallons to 80,000 gallons	\$ 1.70 \$	\$ 3.48
17	over 80,000 gallons	\$ 1.90 \$	\$ 3.88
18			
19			
20	0 gallons to 160,000 gallons	\$ 1.70 \$	\$ 3.48
21	over 160,000 gallons	\$ 1.90 \$	\$ 3.88
22			
23			
24	0 gallons to 250,000 gallons	\$ 1.70 \$	\$ 3.48
25	over 250,000 gallons	\$ 1.90 \$	\$ 3.88
26			
27			
28	0 gallons to 500,000 gallons	\$ 1.70 \$	\$ 3.48
29	over 500,000 gallons	\$ 1.90 \$	\$ 3.88
30			
31			
32	0 gallons to 800,000 gallons	\$ 1.70 \$	\$ 3.48
33	over 800,000 gallons	\$ 1.90 \$	\$ 3.88
34			
35			
36	0 gallons to 1,150,000 gallons	\$ 1.70 \$	\$ 3.48
37	over 1,150,000 gallons	\$ 1.90 \$	\$ 3.88
38			
39	NT = No Tariff		

**Rio Rico Utilities, Inc. - Water Division**  
 Changes in Representative Rate Schedules  
 Test Year Ended December 31, 2008

Exhibit  
 Rebuttal Schedule H-3  
 Page 3  
 Witness: Bourassa

Line No.	<u>Other Service Charges</u>	Present <u>Rates</u>	Proposed <u>Rates</u>
1	Establishment	\$ 15.00	\$ 15.00
2	Establishment (After Hours)	\$ 25.00	\$ 25.00
3	Reconnection (Delinquent)	\$ 15.00	\$ 15.00
4	Reconnection (Delinquent) - After Hours	\$ 25.00	\$ 25.00
5	Meter test (If Correct)	\$ 15.00	\$ 15.00
6	Deposit	*	*
7	Deposit Interest	**	**
8	Reestablishment (within 12 months)	***	***
9	NSF Check	\$ 15.00	\$ 15.00
10	Meter Reread (if Correct)	NT	\$ 20.00
11	Late Payment Penalty	NT	1.5% per month
12	Deferred Payment	NT	1.5% per month
13	Moving meter at customer request	NT	at Cost
14	Service Calls - Per Hour/After Hours(a)	NT	\$ 40.00
15			
16			
17			
18			
19			
20			
21	* Per Commission Rule A.A.C. R-14-2-403(B)		
22	** Per Commission Rule A.A.C. R-14-2-403(B)		
23	*** Per Commission Rule A.A.C. R14-2-403(D) - Months off the system times the monthly minimum.		
24			
25	(a) No charge for service calls during normal working hours.		
26			
27	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
28	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
29	TAX. PER COMMISSION RULE 14-2-409D(5).		
30			
31			
32			
33			
34			

**Rio Rico Utilities, Inc. - Water Division**  
 Test Year Ended December 31, 2008  
 Meter and Service Line Charges

Exhibit  
 Rebuttal Schedule H-3  
 Page 4  
 Witness: Bourassa

Line  
No.

1

2 **Refundable Meter and Service Line Charges**

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	Present Service Line <u>Charge</u>	Present Meter Install- ation <u>Charge</u>	Total Present <u>Charge</u>	Proposed Service Line <u>Charge</u>	Proposed Meter Install- ation <u>Charge</u>	Total Proposed <u>Charge</u>
9 5/8 x 3/4 Inch	\$ 370.00	\$ 130.00	\$ 500.00	At Cost	At Cost	At Cost
10 3/4 Inch	370.00	205.00	575.00	At Cost	At Cost	At Cost
11 1 Inch	420.00	240.00	660.00	At Cost	At Cost	At Cost
12 1 1/2 Inch	450.00	450.00	900.00	At Cost	At Cost	At Cost
13 2 Inch	580.00	1,640.00	2,220.00	At Cost	At Cost	At Cost
14 3 Inch	765.00	2,195.00	2,960.00	At Cost	At Cost	At Cost
15 4 Inch	1,120.00	3,145.00	4,265.00	At Cost	At Cost	At Cost
16 6 inch	1,630.00	6,120.00	7,750.00	At Cost	At Cost	At Cost
17 8 Inch			At Cost	At Cost	At Cost	At Cost
18 10 Inch			At Cost	At Cost	At Cost	At Cost
19 12 Inch			At Cost	At Cost	At Cost	At Cost

**Rio Rico Utilities, Inc. - Water Division**  
Test Year Ended December 31, 2008  
Hook-Up Fees

Exhibit  
Rebuttal Schedule H-3  
Page 5  
Witness: Bourassa

Line  
No.

1

2 **Off-site Facilities Hook-up Fee**

3

4

5

6 5/8 x 3/4 Inch

7 3/4 Inch

8 1 Inch

9 1 1/2 Inch

10 2 Inch

11 3 Inch

12 4 Inch

13 6 Inch or larger

14

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16

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29 NT = no tariff

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Present  
Charge

Proposed  
Charge

NT

\$ 1,800

NT

2,700

NT

4,500

NT

9,000

NT

14,400

NT

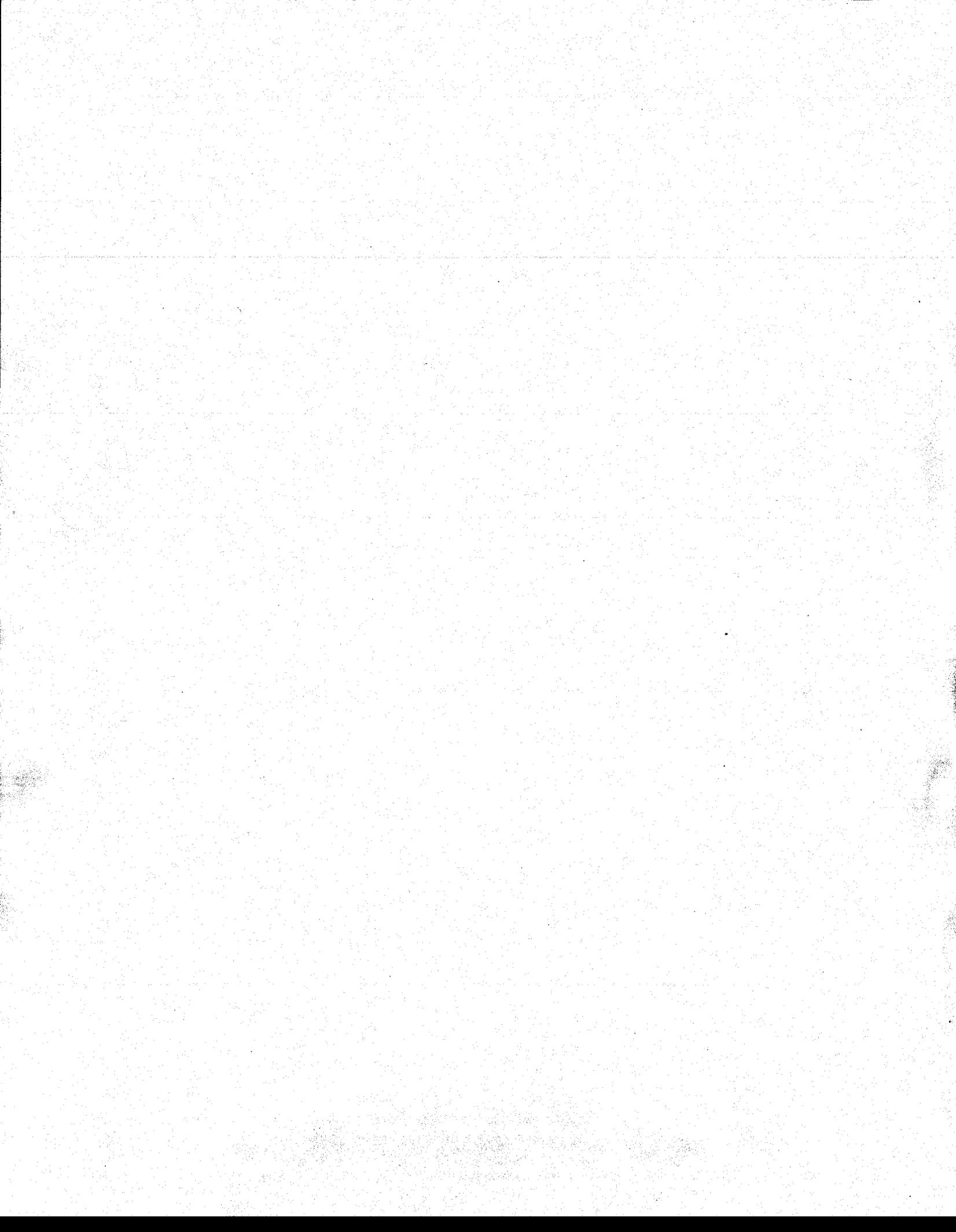
28,800

NT

45,000

NT

90,000



**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Computation of Increase in Gross Revenue  
 Requirements As Adjusted

Exhibit  
 Rebuttal Schedule A-1  
 Page 1  
 Witness: Bourassa

Line  
 No.

1	Fair Value Rate Base			\$	3,323,449	
2						
3	Adjusted Operating Income				470,590	
4						
5	Current Rate of Return				14.16%	
6						
7	Required Operating Income			\$	388,844	
8						
9	Required Rate of Return on Fair Value Rate Base				11.70%	
10						
11	Operating Income Deficiency			\$	(81,747)	
12						
13	Gross Revenue Conversion Factor				1.6286	
14						
15	Increase in Gross Revenue Revenue Requirement			\$	(133,135)	
16						
17	Adjusted Test Year Revenues			\$	1,829,976	
18	Increase in Gross Revenue Revenue Requirement			\$	(133,135)	
19	Proposed Revenue Requirement			\$	1,696,840	
20	% Increase				-7.28%	
21						
22	<b>Customer</b>		<b>Present</b>		<b>Proposed</b>	<b>Dollar</b>
23	<b>Classification</b>		<b>Rates</b>		<b>Rates</b>	<b>Increase</b>
24	5/8 Inch Residential	\$	1,287,713	\$	1,194,998	\$ (92,715)
25	3/4 Inch Residential		6,298		5,845	(453)
26	1 Inch Residential		8,258		7,663	(595)
27	1.5 Inch Residential		-		-	-
28	2 Inch Residential		1,951		1,811	(141)
29						
30	<b>Subtotal</b>	\$	1,304,221	\$	1,210,317	\$ (93,904)
31						-7.20%
32	5/8 Inch Commercial	\$	78,006	\$	72,390	\$ (5,616)
33	1 Inch Commercial		61,192		56,786	(4,406)
34	1.5 Inch Commercial		27,159		25,203	(1,955)
35	2 Inch Commercial		178,576		165,718	(12,857)
36	3 Inch Commercial		7,911		7,341	(570)
37	4 Inch Commercial		111,601		103,566	(8,035)
38	6 Inch Commercial		53,582		49,725	(3,858)
39						
40	<b>Subtotal</b>	\$	518,027	\$	480,729	\$ (37,298)
41						-7.20%
42						0.00%
43	5/8 Inch Multi-tenant	\$	9,384	\$	8,708	\$ (676)
44	1.5 Inch Multi-tenant		1,510		1,401	(109)
45			-		-	-
46	<b>Subtotal</b>	\$	10,893	\$	10,109	\$ (784)
47						-7.20%
48						0.00%
49	<b>Subtotal Revenues before Annualization</b>	\$	1,833,141	\$	1,701,155	\$ (131,986)
50	<b>Revenue Annualization</b>		(4,505)		(4,181)	324
51	Miscellaneous Revenues		250		250	-
52	Reconciling Amount H-1 to C-1		1,090		(383)	(1,473)
53	<b>Total of Water Revenues (a)</b>	\$	1,829,976	\$	1,696,841	\$ (133,135)
54						-7.28%

54  
 55 SUPPORTING SCHEDULES:  
 56 Rebuttal B-1  
 57 Rebuttal C-1  
 58 Rebuttal C-3  
 59 Rebuttal H-1  
 60

**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Summary of Rate Base

Exhibit  
 Rebuttal Schedule B-1  
 Page 1  
 Witness: Bourassa

Line No.		<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1			
2	Gross Utility Plant in Service	\$ 11,829,043	\$ 11,829,043
3	Less: Accumulated Depreciation	5,110,028	5,110,028
4			
5	Net Utility Plant in Service	\$ 6,719,014	\$ 6,719,014
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	237,922	237,922
10	Contributions in Aid of		
11	Construction	5,137,673	5,137,673
12	Accumulated Amortization of CIAC	(1,944,057)	(1,944,057)
13			
14	Refundable Service Line Chgs	95,000	95,000
15	Deferred Income Taxes & Credits	(130,973)	(130,973)
16		-	-
17			
18			
19	<u>Plus:</u>		
20	Unamortized Finance		
21	Charges	-	-
22			
23	Allowance for Working Capital	-	-
24			
25			
26	Total Rate Base	\$ 3,323,449	\$ 3,323,449

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30 SUPPORTING SCHEDULES:

31 Rebuttal B-2

32 Rebuttal B-3

33 Rebuttal B-5

34

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**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments

Exhibit  
 Rebuttal Schedule B-2  
 Page 1  
 Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustments Amount	Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	\$ 11,829,043	-	\$ 11,829,043
3				
4	<b>Less:</b>			
5	Accumulated			
6	Depreciation	5,110,028	-	5,110,028
7				
8				
9	Net Utility Plant			
10	in Service	\$ 6,719,014		\$ 6,719,014
11				
12	<b>Less:</b>			
13	Advances in Aid of			
14	Construction	(861)	238,783	237,922
15				
16	Contributions in Aid of			
17	Construction (CIAC)	5,376,456	(238,783)	5,137,673
18				
19	Accumulated Amortization of CIAC	(1,944,057)	-	(1,944,057)
20				
21	Refundable Service Line Chgs	95,000	-	95,000
22	Deferred Income Taxes	(323,602)	192,629	(130,973)
23				
24				
25	<b>Plus:</b>			
26	Unamortized Finance			
27	Charges	-	-	-
28				
29	Allowance for Working Capital	-	-	-
30				
31	Total	<u>\$ 3,516,078</u>		<u>\$ 3,323,449</u>

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SUPPORTING SCHEDULES:  
 Rebuttal B-2, page 2

RECAP SCHEDULES:  
 Rebuttal B-1

**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments

Exhibit  
 Rebuttal Schedule B-2  
 Page 2  
 Witness: Bourassa

Line No.	Description	<u>Proforma Adjustments</u>					Rebuttal Adjusted at end of Test Year
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
	Adjusted at End of Test Year	Plant-in-Service	Accumulated Depreciation	AIAC/CIAC	DIT	Intentionally Left Blank	
1	Gross Utility Plant in Service	\$ 11,829,043	-	-	-	-	\$ 11,829,043
4	Less:						
5	Accumulated Depreciation	5,110,028	-	-	-	-	5,110,028
9	Net Utility Plant in Service	\$ 6,719,014	\$ -	\$ -	\$ -	\$ -	\$ 6,719,014
12	Less:						
13	Advances in Aid of Construction	(861)		238,783			237,922
16	Contributions in Aid of Construction (CIAC)	5,376,456		(238,783)			5,137,673
19	Accumulated Amort of CIAC	(1,944,057)					(1,944,057)
21	Refundable Service Line Chgs	95,000					95,000
22	Deferred Income Taxes	(323,602)			192,629		(130,973)
26	Plus:						
27	Unamortized Finance Charges	-					-
29	Allowance for Working Capital	-					-
31	Total	\$ 3,516,078	\$ -	\$ -	\$ (192,629)	\$ -	\$ 3,323,449

SUPPORTING SCHEDULES:  
 Rebuttal B-2, pages 3-6

RECAP SCHEDULES:  
 Rebuttal B-1

Rio Rico Utilities - Wastewater Division  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments  
 Adjustment Number 1

Exhibit  
 Rebuttal Schedule B-2  
 Page 3  
 Witness: Bourassa

Line No.	Plant-in-Service	Acct. No.	Description	Adjusted Original Cost	Adjustments					Rebuttal Adjusted Original Cost
					A	B	C	D	E	
					Intentionally Left Blank					
1				5,785						5,785
2		351	Organization	417						417
3		352	Franchises	7,545						7,545
4		353	Land	28,548						28,548
5		354	Structures & Improvements	-						-
6		355	Power Generation	-						-
7		360	Collection Sewer Forced	636,023						636,023
8		361	Collection Sewers Gravity	5,945,962						5,945,962
9		362	Special Collecting Structures	-						-
10		363	Customer Services	1,145,530						1,145,530
11		364	Flow Measuring Devices	55,989						55,989
12		365	Flow Measuring Installation	-						-
13		366	Reuse Services	-						-
14		367	Reuse Meters And Installation	-						-
15		370	Receiving Wells	867,120						867,120
16		371	Pumping Equipment	1,504,181						1,504,181
17		374	Reuse Distribution Reservoirs	-						-
18		375	Reuse Trans. and Dist. System	-						-
19		380	Treatment & Disposal Equipment	1,006,848						1,006,848
20		381	Plant Sewers	-						-
21		382	Outfall Sewer Lines	-						-
22		389	Other Sewer Plant & Equipment	68,869						68,869
23		390	Office Furniture & Equipment	110,454						110,454
24		390.1	Computers and Software	4,025						4,025
25		391	Transportation Equipment	-						-
26		392	Stores Equipment	-						-
27		393	Tools, Shop And Garage Equip	4,897						4,897
28		394	Laboratory Equip	-						-
29		396	Communication Equip	5,936						5,936
30		398	Other Tangible Plant	3,913						3,913
31		398	Nogales Capacity	427,000						427,000
32			TOTALS	\$ 11,829,042	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,829,042
33			Adjusted Plant-in-Service per Direct							\$ 11,829,042
34			Increase (decrease) in Plant-in-Service							\$ -
35			Adjustment to Plant-in-Service							\$ -
36			SUPPORTING SCHEDULES							
37			Rebuttal B-2, pages 3.1-3.9							

Account No.	Description	Deprec.	Deprec.	Plant AI	2002	2003	2003	2003	2003	2003	2003						
		Rate Before Oct-04	Rate After Oct-04		Accum. Depr.							Plant Additions	Plant Adjustments	Adjusted Plant Additions	Plant Retirements	Salvage A/D Only	Plant Balance
351	Organization	0.00%	0.00%	5,785	-	-	-	-	-	-	5,785	-					
352	Franchises	0.00%	0.00%	417	-	-	-	-	-	-	417	-					
353	Land	0.00%	0.00%	7,545	-	-	-	-	-	-	7,545	-					
354	Structures & Improvements	5.15%	3.33%	28,548	20,590	-	-	-	-	-	28,548	1,470					
355	Power Generation	5.00%	5.00%	-	-	-	-	-	-	-	-	-					
360	Collection Sewer Forced	2.06%	2.00%	355,144	(99,427)	-	-	-	-	-	638,032	10,364					
361	Collection Sewers Gravity	2.03%	2.00%	4,387,284	1,584,087	5,247	-	(13,062)	(6,745)	-	4,385,786	89,115					
362	Special Collecting Structures	3.31%	2.00%	-	-	-	-	-	-	-	-	-					
363	Customer Services	3.04%	2.00%	1,085,957	441,720	7,742	-	-	-	-	1,093,699	33,131					
364	Flow Measuring Devices	5.03%	10.00%	36,057	10,881	-	-	-	-	-	36,057	1,814					
365	Flow Measuring Installation	5.03%	10.00%	-	-	-	-	-	-	-	-	-					
366	Reuse Services	5.03%	2.00%	-	-	-	-	-	-	-	-	-					
367	Reuse Meters And Installation	8.33%	8.33%	-	-	-	-	-	-	-	-	-					
370	Receiving Wells	3.96%	3.33%	992,546	48,548	-	-	-	-	-	992,546	39,305					
371	Pumping Equipment	5.27%	12.50%	1,593,905	309,912	-	-	-	-	-	1,593,905	83,999					
374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-					
375	Reuse Trans. and Dist. System	2.50%	2.50%	-	-	-	-	-	-	-	-	-					
380	Treatment & Disposal Equipment	5.26%	5.00%	972,166	367,586	-	-	-	-	-	972,166	51,136					
381	Plant Sewers	2.00%	5.00%	-	-	-	-	-	-	-	-	-					
382	Outfall Sewer Lines	1.66%	3.33%	-	-	-	-	-	-	-	-	-					
389	Other Sewer Plant & Equipment	5.30%	6.67%	71,243	38,620	-	-	-	-	-	71,243	3,776					
390	Office Furniture & Equipment	2.00%	6.67%	5,514	2,587	-	-	-	-	-	5,514	110					
390.1	Computers and Software	4.80%	20.00%	4,025	2,790	-	-	-	-	-	4,025	193					
391	Transportation Equipment	33.33%	20.00%	-	-	-	-	-	-	-	-	-					
392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-					
393	Tools, Shop And Garage Equip	4.76%	5.00%	4,015	2,771	-	-	-	-	-	4,015	191					
394	Laboratory Equip	2.56%	10.00%	-	-	-	-	-	-	-	-	-					
396	Communication Equip	5.03%	10.00%	5,936	4,224	-	-	-	-	-	5,936	299					
398	Other Tangible Plant	5.13%	4.00%	3,913	1,798	-	-	-	-	-	3,913	201					
398	Nogales WW Trmnt Capacity Rounding	5.00%	5.00%	-	1	-	-	-	-	-	-	(1)					
Plant Held for Future Use											-	-	-				
TOTAL WASTEWATER PLANT											9,560,000	2,736,688	308,939	308,939	(19,807)	9,849,132	315,102

Plant Held for Future Use

TOTAL WASTEWATER PLANT

Account No.	Description	Deprec.	2004	2004	2004	2004	2004	2004	2004	2004
		Rate Before Oct-04	Plant Additions	Plant Adjustments	Adjusted Plant Additions	Plant Retirements	Salvage/Adj. A/D Only	Plant Balance	Deprec.	
351	Organization	0.00%	-	-	-	-	-	5,785	-	-
352	Franchises	0.00%	-	-	-	-	-	417	-	-
353	Land	0.00%	-	-	-	-	-	7,545	-	-
354	Structures & Improvements	5.15%	-	-	-	-	-	28,548	1,340	-
355	Power Generation	5.00%	-	-	-	-	-	-	-	-
360	Collection Sewer Forced	2.06%	(4,971)	(4,971)	(4,971)	-	633,061	12,997	12,997	-
361	Collection Sewers Gravity	2.03%	100,106	100,106	100,106	-	4,485,892	89,715	89,715	-
362	Special Collecting Structures	3.31%	-	-	-	-	-	-	-	-
363	Customer Services	3.04%	20,057	20,057	20,057	-	1,113,756	30,684	30,684	-
364	Flow Measuring Devices	5.03%	-	-	-	-	-	-	-	-
365	Flow Measuring Installation	5.03%	-	-	-	-	-	2,262	2,262	-
366	Reuse Services	5.03%	-	-	-	-	-	36,057	-	-
367	Reuse Meters And Installation	8.33%	-	-	-	-	-	-	-	-
370	Receiving Wells	3.96%	(125,426)	(125,426)	(125,426)	-	867,120	35,357	35,357	-
371	Pumping Equipment	5.27%	(94,296)	(94,296)	(94,296)	-	1,499,609	109,472	109,472	-
374	Reuse Distribution Reservoirs	2.50%	-	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.50%	-	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	5.26%	-	-	-	-	-	-	-	-
381	Plant Sewers	2.00%	-	-	-	-	972,166	50,504	50,504	-
382	Outfall Sewer Lines	1.66%	-	-	-	-	-	-	-	-
389	Other Sewer Plant & Equipment	3.33%	-	-	-	-	-	-	-	-
390	Office Furniture & Equipment	5.30%	-	-	-	-	71,243	4,020	4,020	-
390.1	Computers and Software	2.00%	-	-	-	-	5,514	175	175	-
391	Transportation Equipment	4.80%	-	-	-	-	4,025	346	346	-
392	Stores Equipment	33.33%	-	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	4.00%	882	882	882	-	4,897	215	215	-
394	Laboratory Equip	4.76%	-	-	-	-	-	-	-	-
396	Communication Equip	2.56%	-	-	-	-	5,936	372	372	-
398	Other Tangible Plant	5.03%	-	-	-	-	3,913	190	190	-
398	Nogales WW Trmnt Capacity Rounding	5.13%	-	-	-	-	-	-	-	-
	Plant Held for Future Use									
	TOTAL WASTEWATER PLANT		(103,647)	-	(103,647)	-	9,745,484	337,648		

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	2005 Plant Additions	2005 Plant Adjustments <sup>1</sup>	2005 Adjusted Plant Additions	2005 Plant Retirements	2005 Salvage A/D Only	2005 Plant Balance	2005 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	5,785	-
352	Franchises	0.00%	0.00%	-	-	-	-	-	417	-
353	Land	0.00%	0.00%	-	-	-	-	-	7,545	-
354	Structures & Improvements	5.15%	3.33%	-	-	-	-	-	28,548	951
355	Power Generation	5.00%	5.00%	-	-	-	-	-	-	-
360	Collection Sewer Forced	2.06%	2.00%	-	-	-	-	-	633,061	12,661
361	Collection Sewers Gravity	2.03%	2.00%	1,331,572	-	1,331,572	-	-	5,817,464	103,034
362	Special Collecting Structures	3.31%	2.00%	-	-	-	-	-	-	-
363	Customer Services	3.04%	2.00%	2,293	-	2,293	-	-	1,116,049	22,298
364	Flow Measuring Devices	5.03%	10.00%	-	-	-	-	-	36,057	3,606
365	Flow Measuring Installation	5.03%	10.00%	-	-	-	-	-	-	-
366	Reuse Services	5.03%	2.00%	-	-	-	-	-	-	-
367	Reuse Meters And Installation	3.96%	8.33%	-	-	-	-	-	-	-
370	Receiving Wells	3.33%	3.33%	-	-	-	-	-	867,120	28,875
371	Pumping Equipment	5.27%	12.50%	27,078	-	27,078	(22,506)	-	1,504,181	187,737
374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	2.50%	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	5.26%	5.00%	-	-	-	-	-	972,166	48,608
381	Plant Sewers	2.00%	5.00%	-	-	-	-	-	-	-
382	Outfall Sewer Lines	1.66%	3.33%	-	-	-	-	-	-	-
389	Other Sewer Plant & Equipment	5.30%	6.67%	-	-	-	-	-	71,243	4,752
390	Office Furniture & Equipment	2.00%	6.67%	-	-	-	-	-	5,514	368
390.1	Computers and Software	4.80%	20.00%	-	-	-	-	-	4,025	696
391	Transportation Equipment	33.33%	20.00%	-	-	-	-	-	-	-
392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	4.76%	5.00%	-	-	-	-	-	4,897	245
394	Laboratory Equip	2.56%	10.00%	-	-	-	-	-	-	-
396	Communication Equip	5.03%	10.00%	-	-	-	-	-	5,936	594
398	Other Tangible Plant	5.13%	4.00%	-	-	-	-	-	3,913	157
398	Nogales WW Trmnt Capacity Rounding	5.00%	5.00%	-	-	-	-	-	-	-
Plant Held for Future Use										
TOTAL WASTEWATER PLANT										
				1,360,942	-	1,360,942	(22,506)	-	11,083,921	414,580

<sup>1</sup> Affiliate Profit

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	2006 Plant Additions	2006 Plant Adjustments <sup>1</sup>	2006 Adjusted Plant Additions	2006 Plant Retirements	2006 Salvage A/D Only	2006 Plant Balance	2006 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	5,785	-
352	Franchises	0.00%	0.00%	-	-	-	-	-	417	-
353	Land	0.00%	0.00%	-	-	-	-	-	7,545	-
354	Structures & Improvements	5.15%	3.33%	-	-	-	-	-	28,548	951
355	Power Generation	5.00%	5.00%	-	-	-	-	-	-	-
360	Collection Sewer Forced	2.06%	2.00%	1,147	-	1,147	-	-	634,208	12,673
361	Collection Sewers Gravity	2.03%	2.00%	100,371	-	100,371	-	-	5,917,835	117,353
362	Special Collecting Structures	3.31%	2.00%	-	-	-	-	-	-	-
363	Customer Services	3.04%	2.00%	-	-	-	-	-	-	-
364	Flow Measuring Devices	5.03%	10.00%	-	-	-	-	-	1,128,765	22,448
365	Flow Measuring Installation	5.03%	10.00%	-	-	12,716	-	-	36,057	3,606
366	Reuse Services	5.03%	2.00%	-	-	-	-	-	-	-
367	Reuse Meters And Installation	5.03%	2.00%	-	-	-	-	-	-	-
370	Receiving Wells	3.96%	8.33%	-	-	-	-	-	-	-
371	Pumping Equipment	5.27%	3.33%	-	-	-	-	-	867,120	28,875
374	Reuse Distribution Reservoirs	-	12.50%	-	-	-	-	-	1,504,181	188,023
375	Reuse Trans. and Dist. System	-	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	-	2.50%	-	-	-	-	-	-	-
381	Plant Sewers	5.26%	5.00%	-	-	-	-	-	972,166	48,608
382	Outfall Sewer Lines	2.00%	5.00%	-	-	-	-	-	-	-
389	Other Sewer Plant & Equipment	1.66%	3.33%	-	-	-	-	-	-	-
390	Office Furniture & Equipment	5.30%	6.67%	-	-	-	-	-	71,243	4,752
390.1	Computers and Software	2.00%	6.67%	864	-	864	-	-	6,378	397
391	Transportation Equipment	4.80%	20.00%	-	-	-	-	-	4,025	-
392	Stores Equipment	33.33%	20.00%	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	4.76%	4.00%	-	-	-	-	-	-	-
394	Laboratory Equip	5.00%	5.00%	-	-	-	-	-	4,897	245
396	Communication Equip	2.56%	10.00%	-	-	-	-	-	-	-
398	Other Tangible Plant	5.03%	10.00%	-	-	-	-	-	5,936	447
398	Nogales WW Trmnt Capacity Rounding	5.13%	4.00%	-	-	427,000	-	-	3,913	157
				427,000	-	427,000	-	-	427,000	10,675
	Plant Held for Future Use			-	-	-	-	-	-	-
	TOTAL WASTEWATER PLANT			542,099	-	542,099	-	-	11,626,019	439,209

<sup>1</sup> Affiliate Profit

Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	2007 Plant Additions	2007 Plant Adjustments <sup>1</sup>	2007 Adjusted Plant Additions	2007 Plant Retirements	2007 Salvage A/D Only	2007 Plant Balance	2007 Deprec.
351	Organization	0.00%	0.00%	-	-	-	-	-	5,785	-
352	Franchises	0.00%	0.00%	-	-	-	-	-	417	-
353	Land	0.00%	0.00%	-	-	-	-	-	7,545	-
354	Structures & Improvements	5.15%	3.33%	-	-	-	-	-	28,548	951
355	Power Generation	5.00%	5.00%	-	-	-	-	-	-	-
360	Collection Sewer Forced	2.06%	2.00%	1,815	-	1,815	-	-	636,023	12,702
361	Collection Sewers Gravity	2.03%	2.00%	-	-	-	-	-	5,917,835	118,357
362	Special Collecting Structures	3.31%	2.00%	-	-	-	-	-	-	-
363	Customer Services	3.04%	2.00%	12,881	(16)	12,865	-	-	1,141,630	22,704
364	Flow Measuring Devices	5.03%	10.00%	6,667	-	6,667	-	-	42,725	3,939
365	Flow Measuring Installation	5.03%	10.00%	-	-	-	-	-	-	-
366	Reuse Services	5.03%	2.00%	-	-	-	-	-	-	-
367	Reuse Meters And Installation	8.33%	2.00%	-	-	-	-	-	-	-
370	Receiving Wells	3.96%	3.33%	-	-	-	-	-	867,120	28,875
371	Pumping Equipment	5.27%	12.50%	-	-	-	-	-	1,504,181	188,023
374	Reuse Distribution Reservoirs	-	2.50%	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	-	2.50%	-	-	-	-	-	-	-
380	Treatment & Disposal Equipment	5.26%	5.00%	25,125	-	25,125	-	-	997,291	49,236
381	Plant Sewers	2.00%	5.00%	-	-	-	-	-	-	-
382	Outfall Sewer Lines	1.66%	3.33%	-	-	-	-	-	-	-
389	Other Sewer Plant & Equipment	5.30%	6.67%	-	(1,509)	(1,509)	-	-	69,734	4,702
390	Office Furniture & Equipment	2.00%	6.67%	938	-	938	-	-	7,315	457
390.1	Computers and Software	4.80%	20.00%	-	-	-	-	-	4,025	-
391	Transportation Equipment	33.33%	20.00%	-	-	-	-	-	-	-
392	Stores Equipment	-	4.00%	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	4.76%	5.00%	-	-	-	-	-	4,897	245
394	Laboratory Equip	2.56%	10.00%	-	-	-	-	-	-	-
396	Communication Equip	5.03%	10.00%	-	-	-	-	-	5,936	-
398	Other Tangible Plant	5.13%	4.00%	-	-	-	-	-	3,913	157
398	Nogales WW Trmnt Capacity	-	5.00%	-	-	-	-	-	427,000	21,350
398	Rounding	-	-	-	-	-	-	-	-	-
Plant Held for Future Use										
TOTAL WASTEWATER PLANT										
				47,426	(1,525)	45,901	-	-	11,671,920	451,696

<sup>1</sup> Affiliate Profit



Account No.	Description	Deprec. Rate Before Oct-04	Deprec. Rate After Oct-04	Year End Accumulated Depreciation by Account								
				2002	2003	2004	2005	2006	2007	2008		
351	Organization	0.00%	0.00%	-	-	-	-	-	-	-	-	-
352	Franchises	0.00%	0.00%	-	-	-	-	-	-	-	-	-
353	Land	0.00%	0.00%	-	-	-	-	-	-	-	-	-
354	Structures & Improvements	5.15%	3.33%	20,590	22,060	23,401	24,351	25,302	26,252	27,203	-	-
355	Power Generation	5.00%	5.00%	(99,427)	(102,125)	(89,128)	(76,467)	(63,794)	(51,092)	(38,371)	-	-
360	Collection Sewer Forced	2.06%	2.00%	1,584,087	1,666,457	1,756,172	1,859,206	1,976,559	2,094,915	2,213,553	-	-
361	Collection Sewers Gravity	2.03%	2.00%	-	-	-	-	-	-	-	-	-
362	Special Collecting Structures	3.31%	2.00%	-	-	-	-	-	-	-	-	-
363	Customer Services	3.04%	2.00%	441,720	474,851	505,534	527,832	550,281	572,985	595,856	-	-
364	Flow Measuring Devices	5.03%	10.00%	10,881	12,695	14,956	18,562	22,168	26,107	31,043	-	-
365	Flow Measuring Installation	5.03%	10.00%	-	-	-	-	-	-	-	-	-
366	Reuse Services	5.03%	2.00%	-	-	-	-	-	-	-	-	-
367	Reuse Meters And Installation	8.33%	2.00%	-	-	-	-	-	-	-	-	-
370	Receiving Wells	3.96%	3.33%	48,548	87,853	123,210	152,085	180,960	209,835	238,710	-	-
371	Pumping Equipment	5.27%	12.50%	309,912	393,911	503,383	668,613	856,636	1,044,658	1,232,681	-	-
374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-
375	Reuse Trans. and Dist. System	5.26%	5.00%	367,586	418,722	469,226	517,834	566,443	615,679	665,783	-	-
380	Treatment & Disposal Equipment	2.00%	5.00%	-	-	-	-	-	-	-	-	-
381	Plant Sewers	1.66%	5.00%	-	-	-	-	-	-	-	-	-
382	Outfall Sewer Lines	3.33%	3.33%	-	-	-	-	-	-	-	-	-
389	Other Sewer Plant & Equipment	5.30%	6.67%	38,620	42,396	46,416	51,168	55,920	60,621	65,244	-	-
390	Office Furniture & Equipment	2.00%	2.00%	2,587	2,697	2,872	3,240	3,636	4,093	4,625	-	-
390.1	Computers and Software	4.80%	20.00%	2,790	2,983	3,329	4,025	4,025	4,025	4,025	-	-
391	Transportation Equipment	33.33%	20.00%	-	-	-	-	-	-	-	-	-
392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-
393	Tools, Shop And Garage Equip	4.76%	5.00%	2,771	2,962	3,177	3,422	3,667	3,911	4,156	-	-
394	Laboratory Equip	2.56%	10.00%	-	-	-	-	-	-	-	-	-
396	Communication Equip	5.03%	10.00%	4,224	4,523	4,895	5,489	5,936	6,425	6,936	-	-
398	Other Tangible Plant	5.13%	4.00%	1,798	1,989	2,188	2,345	2,501	2,658	2,815	-	-
398	Nogales WW Trmnt Capacity Rounding	5.00%	5.00%	-	-	-	-	10,675	32,025	53,375	-	-
				2,736,688	3,031,963	3,369,631	3,761,705	4,200,913	4,652,610	5,110,028		

Plant Held for Future Use  
TOTAL WASTEWATER PLANT





**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Original Cost Rate Base Proforma Adjustments  
 Adjustment Number 2

Exhibit  
 Rebuttal Schedule B-2  
 Page 4  
 Witness: Bourassa

Line No.	Accumulated Depreciation	A		B		C		D		E	
		Adjusted Accum. Depr.	Intentionally Left Blank	Rebuttal Adjusted Accum. Depr.							
1	Organization	-	-	-	-	-	-	-	-	-	-
2	Franchises	-	-	-	-	-	-	-	-	-	-
3	Land	-	-	-	-	-	-	-	-	-	-
4	Structures & Improvements	27,203	-	-	-	-	-	-	-	-	27,203
5	Power Generation	-	-	-	-	-	-	-	-	-	-
6	Collection Sewer Forced	(38,371)	-	-	-	-	-	-	-	-	(38,371)
7	Collection Sewers Gravity	2,213,553	-	-	-	-	-	-	-	-	2,213,553
8	Special Collecting Structures	-	-	-	-	-	-	-	-	-	-
9	Customer Services	595,856	-	-	-	-	-	-	-	-	595,856
10	Flow Measuring Devices	31,043	-	-	-	-	-	-	-	-	31,043
11	Flow Measuring Installation	-	-	-	-	-	-	-	-	-	-
12	Reuse Services	-	-	-	-	-	-	-	-	-	-
13	Reuse Meters And Installation	-	-	-	-	-	-	-	-	-	-
14	Receiving Wells	238,710	-	-	-	-	-	-	-	-	238,710
15	Pumping Equipment	1,232,681	-	-	-	-	-	-	-	-	1,232,681
16	Reuse Distribution Reservoirs	-	-	-	-	-	-	-	-	-	-
17	Reuse Trans. and Dist. System	-	-	-	-	-	-	-	-	-	-
18	Treatment & Disposal Equipment	665,783	-	-	-	-	-	-	-	-	665,783
19	Plant Sewers	-	-	-	-	-	-	-	-	-	-
20	Outfall Sewer Lines	-	-	-	-	-	-	-	-	-	-
21	Other Sewer Plant & Equipment	65,244	-	-	-	-	-	-	-	-	65,244
22	Office Furniture & Equipment	8,021	-	-	-	-	-	-	-	-	8,021
23	Computers and Software	4,025	-	-	-	-	-	-	-	-	4,025
24	Transportation Equipment	-	-	-	-	-	-	-	-	-	-
25	Stores Equipment	-	-	-	-	-	-	-	-	-	-
26	Tools, Shop And Garage Equip	4,156	-	-	-	-	-	-	-	-	4,156
27	Laboratory Equip	-	-	-	-	-	-	-	-	-	-
28	Communication Equip	5,936	-	-	-	-	-	-	-	-	5,936
29	Other Tangible Plant	2,815	-	-	-	-	-	-	-	-	2,815
30	Nogales Capacity	53,375	-	-	-	-	-	-	-	-	53,375
31	TOTALS	\$ 5,110,028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,110,028
32	Adjusted Accumulated Depreciation per Direct										\$ 5,110,028
33	Increase (decrease) in Accumulated Depreciation										\$ -
34	Adjustment to Accumulated Depreciation										\$ -

Rio Rico Utilities - Wastewater Division  
Test Year Ended December 31, 2008  
Original Cost Rate Base Proforma Adjustments

Exhibit  
Rebuttal Schedule B-2  
Page 5  
Witness: Bourassa

Line

No.

1 Reclassification of AIAC and CIAC

2

3

4 CIAC

\$ (238,783)

5

6 AIAC

\$ 238,783

7

8

9

10

11

12

13

14

15

16

17 See Testimony

18

19 SUPPORTING SCHEDULES

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**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Computation of Working Capital

Exhibit  
 Rebuttal Schedule B-5  
 Page 1  
 Witness: Bourassa

Line  
No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	80,620
3	Pumping Power (1/24 of Pumping Power)		3,792
4	Purchased Water (1/24 of Purchased Water)		-
5	Prepays		3,430
6	Materials & Supplies		-
7			
8			
9	Total Working Capital Allowance	<u>\$</u>	<u>87,841</u>
10			
11			
12	Working Capital Requested	<u>\$</u>	<u>-</u>
13			

SUPPORTING SCHEDULES:

16 Rebuttal C-1  
 17 E-1

RECAP SCHEDULES:

Rebuttal B-1

18			Adjusted
19	<u>Cash Working Capital Detail</u>		<u>Test Year Results</u>
20			
21	Total Operating Expense	\$	1,359,386
22	Less:		
23	Income Tax		295,829
24	Property Tax		91,006
25	Depreciation		262,162
26	Purchased Water		-
27	Pumping Power		65,431
28	Allowable Expenses		<u>644,958</u>
29	1/8 of allowable expenses	<u>\$</u>	<u>80,620</u>
30			

**Rio Rico Utilities - Wastewater Division**  
**Test Year Ended December 31, 2008**  
**Income Statement**

Exhibit  
 Rebuttal Schedule C-1  
 Page 1  
 Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjustment	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	<b>Revenues</b>					
2	Flat Rate Revenues	\$ 1,829,726	\$ -	\$ 1,829,726	\$ (133,135)	\$ 1,696,590
3	Measured Revenues	-	-	-		-
4	Other Wastewater Revenues	250	-	250		250
5		<u>\$ 1,829,976</u>	<u>\$ -</u>	<u>\$ 1,829,976</u>	<u>\$ (133,135)</u>	<u>\$ 1,696,840</u>
6	<b>Operating Expenses</b>					
7	Salaries and Wages	\$ -	-	\$ -		\$ -
8	Purchased Water and WW Treatment	-	-	-		-
9	Sludge Removal Expense	-	-	-		-
10	Purchased Power	17,426	48,005	65,431		65,431
11	Fuel for Power Production	-	-	-		-
12	Chemicals	9,644	-	9,644		9,644
13	Materials and Supplies	14,304	-	14,304		14,304
14	Contractual Services	298,008	8,474	306,482		306,482
15	Contractual Services- Testing	-	-	-		-
16	Contractual Services - Other	175,196	-	175,196		175,196
17	Contractual Services - Legal	367	-	367		367
18	Equipment Rental	25,781	-	25,781		25,781
19	Rents - Building	-	-	-		-
20	Transportation Expenses	26,817	(2,242)	24,575		24,575
21	Insurance - General Liability	12,021	-	12,021		12,021
22	Insurance - Vehicle	-	-	-		-
23	Regulatory Commission Expense	994	-	994		994
24	Reg. Comm. Exp. - Rate Case	41,667	-	41,667		41,667
25	Miscellaneous Expense	155	-	155		155
26	Bad Debt Expense	64,087	(30,315)	33,772		33,772
27	Depreciation and Amortization	252,672	9,490	262,162		262,162
28	Taxes Other Than Income	-	-	-		-
29	Property Taxes	91,705	(699)	91,006		91,006
30	Income Tax	308,456	(12,627)	295,829	(51,389)	244,441
31		-	-	-		-
32	<b>Total Operating Expenses</b>	<u>\$ 1,339,300</u>	<u>\$ 20,086</u>	<u>\$ 1,359,386</u>	<u>\$ (51,389)</u>	<u>\$ 1,307,997</u>
33	<b>Operating Income</b>	<u>\$ 490,676</u>	<u>\$ (20,086)</u>	<u>\$ 470,590</u>	<u>\$ (81,747)</u>	<u>\$ 388,844</u>
34	<b>Other Income (Expense)</b>					
35	Interest Income	-	-	-		-
36	Other income	-	-	-		-
37	Interest Expense	-	8	-		-
38	Other Expense	-	-	-		-
39		-	-	-		-
40	<b>Total Other Income (Expense)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
41	<b>Net Profit (Loss)</b>	<u>\$ 490,676</u>	<u>\$ (20,086)</u>	<u>\$ 470,590</u>	<u>\$ (81,747)</u>	<u>\$ 388,844</u>

42  
 43 SUPPORTING SCHEDULES:  
 44 Rebuttal C-1, page 2  
 45  
 46

RECAP SCHEDULES:  
 Rebuttal A-1

Rio Rico Utilities - Wastewater Division  
 Test Year Ended December 31, 2008  
 Income Statement

Exhibit  
 Rebuttal Schedule C-1  
 Page 2  
 Witness: Bourassa

Line No.	1	2	3	4	5	6	7	Rebuttal Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
	Depreciation Expense	Property Taxes	Purchased Power	Transport Expense	Bad Debt	Central Office Costs	Income Tax			
1	Test Year Adjusted Results							\$ 1,829,976	\$ (133,135)	\$ 1,696,590
2	Flat Rate Revenues									
3	Measured Revenues							250		250
4	Other Wastewater Revenues									
5								\$ 1,829,976	\$ (133,135)	\$ 1,696,940
6	Operating Expenses									
7	Salaries and Wages									
8	Purchased Water and WW Treatment									
9	Sludge Removal Expense									
10	Purchased Power		48,005					65,431		65,431
11	Fuel for Power Production									
12	Chemicals							9,644		9,644
13	Materials and Supplies					8,474		14,304		14,304
14	Contractual Services							306,482		306,482
15	Contractual Services- Testing							175,196		175,196
16	Contractual Services - Other							367		367
17	Contractual Services - Legal							25,781		25,781
18	Equipment Rental									
19	Rentals - Building									
20	Transportation Expenses							24,575		24,575
21	Insurance - General Liability			(2,242)				12,021		12,021
22	Insurance - Vehicle									
23	Regulatory Commission Expense							994		994
24	Reg. Comm. Exp. - Rate Case							41,667		41,667
25	Miscellaneous Expense							155		155
26	Bad Debt Expense				(30,315)			33,772		33,772
27	Depreciation and Amortization	9,490						262,162		262,162
28	Taxes Other Than Income									
29	Property Taxes		(699)					91,006	(51,389)	39,617
30	Income Tax						(12,627)	295,829		283,202
31										
32	Total Operating Expenses	9,490	(699)	(2,242)		8,474	(12,627)	1,359,386	(51,389)	1,307,997
33	Operating Income	(9,490)	699	2,242		(8,474)	12,627	470,590	(81,747)	388,844
34	Other Income (Expense)									
35	Interest Income									
36	Other Income									
37	Interest Expense									
38	Other Expense									
39										
40	Total Other Income (Expense)									
41	Net Profit (Loss)	(9,490)	699	2,242	30,315	(8,474)	12,627	470,590	(81,747)	388,844

SUPPORTING SCHEDULES:  
 Rebuttal C-1, page 1

SUPPORTING SCHEDULES:  
 Rebuttal C-2



Rio Rico Utilities - Wastewater Division  
 Test Year Ended December 31, 2008  
 Adjustments to Revenues and Expenses  
 Adjustment Number 1

Exhibit  
 Rebuttal Schedule C-2  
 Page 2  
 Witness: Bourassa

Line

No.	Acct.	Description	Adjusted Original Cost	Proposed Rates	Depreciation Expense
1		<u>Depreciation Expense</u>			
2					
3					
4					
5	351	Organization	5,785	0.00%	-
6	352	Franchises	417	0.00%	-
7	353	Land	7,545	0.00%	-
8	354	Structures & Improvements	28,548	3.33%	951
9	355	Power Generation	-	5.00%	-
10	360	Collection Sewer Forced	636,023	2.00%	12,720
11	361	Collection Sewers Gravity	5,945,962	2.00%	118,919
12	362	Special Collecting Structures	-	2.00%	-
13	363	Customer Services	1,145,530	2.00%	22,911
14	364	Flow Measuring Devices	55,989	10.00%	5,599
15	365	Flow Measuring Installation	-	10.00%	-
16	366	Reuse Services	-	2.00%	-
17	367	Reuse Meters And Installation	-	8.33%	-
18	370	Receiving Wells	867,120	3.33%	28,875
19	371	Pumping Equipment	1,504,181	12.50%	188,023
20	374	Reuse Distribution Reservoirs	-	2.50%	-
21	375	Reuse Trans. and Dist. System	-	2.50%	-
22	380	Treatment & Disposal Equipment	1,006,848	5.00%	50,342
23	381	Plant Sewers	-	5.00%	-
24	382	Outfall Sewer Lines	-	3.33%	-
25	389	Other Sewer Plant & Equipment	68,869	6.67%	4,594
26	390	Office Furniture & Equipment	110,454	6.67%	7,367
27	390.1	Computers and Software	4,025	20.00%	805
28	391	Transportation Equipment	-	20.00%	-
29	392	Stores Equipment	-	4.00%	-
30	393	Tools, Shop And Garage Equip	4,897	5.00%	245
31	394	Laboratory Equip	-	10.00%	-
32	396	Communication Equip	5,936	10.00%	594
33	398	Other Tangible Plant	3,913	4.00%	157
34	398	Nogales Capacity	427,000	5.00%	21,350
35		TOTALS	<u>\$ 11,829,042</u>		<u>\$ 463,451</u>
36					
37		Less: Amortization of Contributions	\$ 5,137,673	3.92%	\$ (201,289)
38					
39					
40		Total Depreciation Expense			<u>\$ 262,162</u>
41					
42		Test Year Depreciation Expense			<u>252,672</u>
43					
44		Increase (decrease) in Depreciation Expense			<u>9,490</u>
45					
46		Adjustment to Revenues and/or Expenses			<u>\$ 9,490</u>
47					
48		<u>SUPPORTING SCHEDULE</u>			
49		Rebuttal B-2, page 3			

**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Adjustment to Revenues and/or Expenses  
 Adjustment Number 2

Exhibit  
 Rebuttal Schedule C-2  
 Page 3  
 Witness: Bourassa

Line No.			
1	<u>Adjust Property Taxes to Reflect Proposed Revenues:</u>		
2			
3	Adjusted Revenues in year ended 12/31/2008	\$	1,829,976
4	Adjusted Revenues in year ended 12/31/2008		1,829,976
5	Proposed Revenues		<u>1,696,840</u>
6	Average of three year's of revenue	\$	<u>1,785,597</u>
7	Average of three year's of revenue, times 2	\$	3,571,195
8	Add:		
9	Construction Work in Progress at 10%	\$	-
10	Deduct:		
11	Book Value of Transportation Equipment		<u>-</u>
12			
13	Full Cash Value	\$	3,571,195
14	Assessment Ratio		<u>21%</u>
15	Assessed Value		749,951
16	Property Tax Rate		11.3283%
17			
18	Property Tax		84,956
19	Plus: Tax on Parcels		6,050
20			
21	Total Property Tax at Proposed Rates	\$	<u>91,006</u>
22	Property Taxes recorded during the test year		<u>91,705</u>
23	Change in property taxes	\$	<u>(699)</u>
24			
25			
26	Adjustment to Revenues and/or Expenses	\$	<u>(699)</u>
27			
28			

**Rio Rico Utilities - Wastewater Division**  
Test Year Ended December 31, 2008  
Adjustment to Revenues and/or Expenses  
Adjustment Number 3

Exhibit  
Rebuttal Schedule C-2  
Page 4  
Witness: Bourassa

Line  
No.

1	<u>Purchased Power</u>		
2			
3	Reclassify purchased power expense from water division	\$	48,005
4			
5			
6			
7			
8			
9	Increase(decrease) Purchased Power Expense	<u>\$</u>	<u>48,005</u>
10			
11	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>48,005</u>
12			
13			
14			
15			
16			
17	<u>SUPPORTING SCHEDULE</u>		
18	Staff Schedule GWB-12		
19			
20			

**Rio Rico Utilities - Wastewater Division**  
Test Year Ended December 31, 2008  
Adjustment to Revenues and/or Expenses  
Adjustment Number 4

Exhibit  
Rebuttal Schedule C-2  
Page 5  
Witness: Bourassa

Line  
No.

1	<u>Transportation Expense</u>	
2		
3		
4	Remove Airlink costs	\$ (2,242)
5		
6		
7		
8	Increase (decrease) in Transportation Expense	<u>\$ (2,242)</u>
9		
10		
11	Adjustment to Revenue and/or Expense	<u>\$ (2,242)</u>
12		
13		
14		
15		
16		
17		
18		
19		
20		

**Rio Rico Utilities - Wastewater Division**  
Test Year Ended December 31, 2008  
Adjustment to Revenues and/or Expenses  
Adjustment Number 5

Exhibit  
Rebuttal Schedule C-2  
Page 6  
Witness: Bourassa

Line  
No.  
1  
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21  
22

Bad Debt Expense

Normalize Bad Debt Expense

(30,315)

Increase (decrease) in Purchased Power

\$ (30,315)

Adjustment to Revenue and/or Expense

\$ (30,315)

Line No.	Actual Total Cost Pool	Adjustments	Rejoinder Total Cost Pool	Utility Infrastructure Group Allocation %	Utility Infrastructure Group Allocated Cost Pool	RRUI Sewer Allocation by Customer Count	Rejoinder LPSCo Allocation
9	\$ 1,021,609		\$ 1,021,609	26.98%	\$ 275,672	3.15%	8,684
10	322,446		322,446	26.98%	87,009	3.15%	2,741
11	767,451	(113,853)	653,598	26.98%	176,368	3.15%	5,556
12	565,649		565,649	26.98%	152,636	3.15%	4,808
13	642,771		642,771	26.98%	173,446	3.15%	5,464
14	289,796		289,796	26.98%	78,199	3.15%	2,463
15	129,000		129,000	26.98%	34,810	3.15%	1,097
16	71,366		71,366	26.98%	19,258	3.15%	607
17	299,586		299,586	26.98%	80,841	3.15%	2,546
18	140,852	(15,808)	125,044	26.98%	33,742	3.15%	1,063
19	808,101	(74,847)	733,254	26.98%	197,862	3.15%	6,233
20	211,253		211,253	26.98%	57,005	3.15%	1,796
21							
22	\$ 5,269,882	\$ (204,509)	\$ 5,065,373		\$ 1,366,847		\$ 43,056
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							

Infrastructure Cost Allocation per Direct (USD)

Increase (decrease) in Infrastructure Allocated Costs (USD)

Adjustment to Revenues and/or Expenses

Rio Rico Utilities - Wastewater Division  
 Test Year Ended December 31, 2008  
 Adjustment to Revenues and/or Expenses  
 Adjustment Number 7

Exhibit  
 Rebuttal Schedule C-2  
 Page 8  
 Witness: Bourassa

Line

No.

1 Income Tax Computation

2	3	4	5	6
7	Test Year	Test Year	Test Year	Adjusted
8	Book	Adjusted	Adjusted	with Rate
9	Results	Results	Results	Increase
10				
11				
12				
13	Taxable Income before Scottsdale Operating	\$ 799,132	\$ 766,419	\$ 633,284
14	Plus: Scottsdale Operating Lease	-	-	-
15	Taxable Income	<u>\$ 799,132</u>	<u>\$ 766,419</u>	<u>\$ 633,284</u>
16				
17	Income Before Taxes			<u>\$ 633,284</u>
18	Arizona Income Before Taxes			\$ 633,284
19	Less Arizona Income Tax			<u>\$ 44,127</u>
20	Rate =	6.97%		
21	Arizona Taxable Income			\$ 589,157
22	Arizona Income Taxes			\$ 44,127
23	Federal Income Before Taxes			\$ 633,284
24	Less Arizona Income Taxes			<u>\$ 44,127</u>
25	Federal Taxable Income			<u>\$ 589,157</u>
26				
27	FEDERAL INCOME TAXES:			
28	15% BRACKET			\$ 7,500
29	25% BRACKET			\$ 6,250
30	34% BRACKET			\$ 8,500 Federal
31	39% BRACKET			\$ 91,650 Effective
32	34% BRACKET			\$ 86,413 Tax
33				Rate
34	Federal Income Taxes			<u>\$ 200,313</u> 31.63%
35				
36	Total Income Tax			<u>\$ 244,441</u>
37				
38	Overall Tax Rate			<u>38.60%</u>
39				
40	Income Tax at Proposed Rates Effective Rate		<u>\$ 295,829</u>	
41				
42				
43				
44				
45				
46				

**Rio Rico Utilities - Wastewater Division**  
 Test Year Ended December 31, 2008  
 Computation of Gross Revenue Conversion Factor

Exhibit  
 Rebuttal Schedule C-3  
 Page 1  
 Witness: Bourassa

Line		Percentage of Incremental Gross Revenues
<u>No.</u>	<u>Description</u>	
1	Federal Income Taxes	31.63%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	<u>0.00%</u>
6		
7		
8	Total Tax Percentage	38.60%
9		
10	Operating Income % = 100% - Tax Percentage	61.40%
11		
12		
13		
14		
15	<u>1</u> = Gross Revenue Conversion Factor	
16	<u>Operating Income %</u>	1.6286
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		





Rio Rico Utilities, Inc. - Wastewater Division  
 Test Year Ended December 31, 2008  
 Revenue Summary

Exhibit  
 Rebuttal Schedule H-1  
 Page 3  
 Witness: Bourassa

With Annualized Revenues to Year End Number of Customers

Line No.	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1						
2						
3	\$ 1,833,141	\$ 1,701,155	\$ (131,986)	-7.20%	100.00%	100.00%
4	(4,505)	(4,181)	324.38	-7.20%	-0.25%	-0.25%
5	\$ 1,828,636	\$ 1,696,974	\$ (131,662)	-7.20%		
6						
7	\$ 250	\$ 250	-	0.00%	0.01%	0.01%
8	1,090	(383)	(1,473)	-135.14%	0.06%	-0.02%
9	\$ 1,829,976	\$ 1,696,841	\$ (133,135)	-7.28%	0.00%	0.00%
10						
11						
12						
13						
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15						
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Rio Rico Utilities, Inc. - Wastewater Division  
 Test Year Ended December 31, 2008  
 Customer Summary

Exhibit  
 Rebuttal Schedule H-2  
 Page 1  
 Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Average Bill		Proposed Increase	
			Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	1,904	\$ 56.36	\$ 52.30	(4.06)	-7.20%
2	3/4 Inch Residential	8	64.27	59.64	(4.63)	-7.20%
3	1 Inch Residential	9	79.40	73.68	(5.72)	-7.20%
4	1.5 Inch Residential	-	117.24	108.80	(8.44)	-7.20%
5	2 Inch Residential	1	162.62	150.91	(11.71)	-7.20%
6	Subtotal	1,922				
7						
8	5/8 Inch Commercial	69	79.19	73.49	(5.70)	-7.20%
9	1 Inch Commercial	36	127.22	118.06	(9.16)	-7.20%
10	1.5 Inch Commercial	7	307.97	285.79	(22.17)	-7.20%
11	2 Inch Commercial	20	746.60	692.84	(53.76)	-7.20%
12	3 Inch Commercial	1	655.88	608.65	(47.22)	-7.20%
13	4 Inch Commercial	4	2,325.03	2,157.63	(167.40)	-7.20%
14	6 Inch Commercial	1	4,465.21	4,143.71	(321.49)	-7.20%
15	Subtotal	139				
16						
17	5/8 Inch Multi-tenant	9	76.42	70.92	(5.50)	-7.20%
18	1.5 Inch Multi-tenant	1	120.57	111.89	(8.68)	-7.20%
19	Subtotal	10				
20						
21						
22						
23						
24	Total	2,071				
25						

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Rio Rico Utilities, Inc. - Wastewater Division  
 Test Year Ended December 31, 2008  
 Customer Summary

Exhibit  
 Rebuttal Schedule H-2  
 Page 2  
 Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 12/31/2008	Median Consumption	Median Bill		Proposed Increase	
				Present Rates	Proposed Rates	Dollar Amount	Percent Amount
1	5/8 Inch Residential	1,904	-	\$ 56.36	\$ 52.30	(4.06)	-7.20%
2	3/4 Inch Residential	8	-	64.27	59.64	(4.63)	-7.20%
3	1 Inch Residential	9	-	79.40	73.68	(5.72)	-7.20%
4	1.5 Inch Residential	-	-	117.24	108.80	(8.44)	-7.20%
5	2 Inch Residential	1	-	162.62	150.91	(11.71)	-7.20%
6	Subtotal	1,922					
7							
8	5/8 Inch Commercial	69	6,000	\$ 56.36	\$ 52.30	(4.06)	-7.20%
9	1 Inch Commercial	36	7,000	79.40	73.68	(5.72)	-7.20%
10	1.5 Inch Commercial	7	29,000	242.86	225.37	(17.49)	-7.20%
11	2 Inch Commercial	20	29,000	288.24	267.49	(20.75)	-7.20%
12	3 Inch Commercial	1	71,500	651.60	604.68	(46.91)	-7.20%
13	4 Inch Commercial	4	295,000	2,064.39	1,915.75	(148.64)	-7.20%
14	6 Inch Commercial	1	511,000	3,675.80	3,411.14	(264.66)	-7.20%
15	Subtotal	139					
16							
17	5/8 Inch Multi-tenant	9	4,000	\$ 56.36	\$ 52.30	(4.06)	-7.20%
18	1.5 Inch Multi-tenant	1	8,500	125.81	116.75	(9.06)	-7.20%
19	Subtotal	10					
20							
21							
22							
23							
24	Total	2,071					

(a) Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.

Rio Rico Utilities, Inc. - Wastewater Division  
 Test Year Ended December 31, 2008  
 Present and Proposed Rates

Line No.	Monthly Minimum Charge for: Meter Size (All Classes):	Present Rates	Proposed Rates	Change	Percent Change
1	\$				
2	5/8 Inch	56.36	52.30	(4.06)	-7.20%
2	3/4 Inch	64.27	59.64	(4.63)	-7.20%
3	1 Inch	79.40	73.68	(5.72)	-7.20%
4	1 1/2 Inch	117.24	108.80	(8.44)	-7.20%
5	2 Inch	162.62	150.91	(11.71)	-7.20%
6	3 Inch	283.30	262.90	(20.40)	-7.20%
7	4 Inch	419.91	389.68	(30.23)	-7.20%
8	6 Inch	797.96	740.51	(57.45)	-7.20%
9	8 Inch	1,252.11	1,161.96	(90.15)	-7.20%
10	10 Inch	1,781.93	1,653.63	(128.30)	-7.20%
11	12 Inch	3,295.77	3,058.47	(237.30)	-7.20%
12					
13					
14					
15					
16					
17					
18					
19					
20					
21	Commodity Rates				
22	(Commercial and Multi-tenant Only)				
23	Block				
24	All Meter Sizes				
25	0 gallons to 7,000 gallons	\$	\$		
26	over 7,000 gallons	\$	5.71	\$	5.30
27					
28					
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31					
32					
33					
34					
35					
36					
37	NT = No Tariff				
38					

**Rio Rico Utilities, Inc. - Wastewater Division**  
 Changes in Representative Rate Schedules  
 Test Year Ended December 31, 2008

Exhibit  
 Rebuttal Schedule H-3  
 Page 2  
 Witness: Bourassa

Line No.	<u>Other Service Charges</u>	Present <u>Rates</u>	Proposed <u>Rates</u>
1	Establishment	\$ 15.00	\$ 15.00
2	Establishment (After Hours)	\$ 25.00	\$ 25.00
3	Reconnection (Delinquent)	\$ 15.00	\$ 15.00
4	Reconnection (Delinquent) - After Hours	\$ 25.00	\$ 25.00
5	Deposit	*	*
6	Deposit Interest	**	**
7	Reestablishment (within 12 months)	***	***
8	NSF Check	\$ 15.00	\$ 15.00
9	Late Payment Penalty	NT	1.5% per month
10	Deferred Payment	NT	1.5% per month
11	Service Calls - Per Hour/After Hours(a)	NT	\$ 40.00

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\* Per Commission Rule A.A.C. R-14-2-603(B)  
 \*\* Per Commission Rule A.A.C. R-14-2-603(B)  
 \*\*\* Per Commission Rule A.A.C. R14-2-603(D) - Months off the system times the monthly minimum.  
 (a) No charge for service calls during normal working hours.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-608D(5).

Rio Rico Utilities, Inc. - Wastewater Division  
Test Year Ended December 31, 2008  
Meter and Service Line Charges

Exhibit  
Rebuttal Schedule H-3  
Page 3  
Witness: Bourassa

Line  
No.

1

2 Service Line Installation Charges

3

4

5

6

7

8 Service Line Size

Present

Proposed

Charge

Charge

9 4 Inch

\$ 500.00

At Cost

10 6 Inch

650.00

At Cost

11 8 Inch

800.00

At Cost

12 10 Inch

1,000.00

At Cost

13 12 Inch

1,200.00

At Cost

14

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32 N/T = No Tariff

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**Rio Rico Utilities, Inc. - Wastewater Division**  
Test Year Ended December 31, 2008  
Hook-Up Fees

Exhibit  
Rebuttal Schedule H-3  
Page 4  
Witness: Bourassa

Line  
No.

1

**Off-site Facilities Hook-up Fee**

3

4

Present  
Charge

Proposed  
Charge

5

6

Equivalent Residential Unit<sup>1</sup>

NT

\$ 1,800

7

8

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10

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21 NT = No tariff

22

23

24 <sup>1</sup> Equivalent Residential Unit is based on 320 gallons per day (gpd)

25

26

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Jay L. Shapiro (No. 014650)  
2 Todd C. Wiley (No. 015358)  
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3 Suite 2600  
Phoenix, Arizona 85012  
4 Attorneys for Rio Rico Utilities, Inc.

5  
6 **BEFORE THE ARIZONA CORPORATION COMMISSION**

7  
8 IN THE MATTER OF THE  
APPLICATION OF RIO RICO  
9 UTILITIES, INC, AN ARIZONA  
CORPORATION, FOR A  
10 DETERMINATION OF THE FAIR  
VALUE OF ITS UTILITY PLANTS AND  
PROPERTY AND FOR INCREASES IN  
11 ITS WATER AND WASTEWATER  
RATES AND CHARGES FOR UTILITY  
12 SERVICE BASED THEREON.

DOCKET NO. WS-02676A-09-0257

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17 **REBUTTAL TESTIMONY OF**  
18 **THOMAS J. BOURASSA**  
19 **(COST OF CAPITAL)**

20 **February 1, 2010**  
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## TABLE OF CONTENTS

**Page**

I.	INTRODUCTION.....	1
II.	SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST OF CAPITAL FOR THE COMPANY .....	1
	A. Summary of Company's Rebuttal Recommendation .....	1
	B. Summary of the Recommendations of Staff and RUCO .....	4
III.	REBUTTAL TO STAFF'S COST OF CAPITAL ANALYSIS, TESTIMONY AND RECOMMENDATIONS .....	8
	A. Staff's Financial Risk Adjustment .....	8
	B. Firm Specific Risk .....	12
	C. Risks Associated with Advances and Contributions .....	20
	D. Rebuttal to Staff's Criticisms of Analysts' Estimates of Growth.....	21
	E. Rebuttal to Remaining Staff's Criticisms of RRUI DCF Analysis .....	30
IV.	REBUTTAL TO RUCO'S COST OF CAPITAL ANALYSIS, TESTIMONY AND RECOMMENDATIONS .....	31
	A. Proxies Used to Develop Cost of Equity .....	31
	B. Criticisms of RUCO's Implementation of the CAPM.....	36
	C. Criticisms of RUCO's Use of Hypothetical Capital Structure .....	43
	A. Criticisms of RUCO's Implementation of the DCF .....	48

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1 **I. INTRODUCTION**

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

3 A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,  
4 Phoenix, Arizona 85029.

5 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

6 A. On behalf of the applicant, Rio Rico Utilities, Inc. ("RRUI" or the "Company").

7 **Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT**  
8 **TESTIMONY IN THIS DOCKET?**

9 A. Yes, my direct testimony was presented in two volumes. My background  
10 information and qualifications are set forth in the rate base and revenue  
11 requirement volume of my direct testimony.

12 **Q. DID YOU ALSO PREPARE REBUTTAL TESTIMONY ON THOSE ISSUES**  
13 **IN THIS DOCKET?**

14 A. Yes, my rebuttal testimony on rate base, income statement, revenue requirement  
15 and rate design is being filed in a separate volume at the same time as this  
16 testimony.

17 **II. SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST**  
18 **OF CAPITAL FOR THE COMPANY**

19 **A. Summary of Company's Rebuttal Recommendation**

20 **Q. WHAT IS THE PURPOSE OF THIS VOLUME OF YOUR REBUTTAL**  
21 **TESTIMONY?**

22 A. I will provide updates of my cost of capital analysis and recommended rate of  
23 return using more recent financial data. I also will provide rebuttal as appropriate  
24 to the direct testimonies of Mr. Manrique on behalf of Staff and the direct  
25 testimony of Mr. Rigsby of RUCO.

26

1 **Q. HOW HAS THE INDICATED RETURN ON EQUITY CHANGED SINCE**  
2 **THE DIRECT FILING WAS MADE LAST MAY?**

3 A. The cost of equity has decreased, as indicated by the Discounted Cash Flow  
4 (“DCF”) model and the Capital Asset Pricing Model (“CAPM”). The table below  
5 summarizes the results of my updated analysis using those models:  
6

7 <u>Method</u>	<u>Low</u>	<u>High</u>	<u>Midpoint</u>
8 Range DCF Constant Growth Estimates	10.8%	12.2%	11.5%
9 Range of CAPM Estimates	<u>10.3%</u>	<u>15.6%</u>	<u>13.0%</u>
10 Average of DCF and CAPM midpoint			
11 estimates	<u>10.6%</u>	<u>13.9%</u>	<u>12.2%</u>
12 Financial Risk Adjustment	-1.0%	-1.0%	-1.0%
13 Specific Company Risk Premium	<u>0.5%</u>	<u>0.5%</u>	<u>0.5%</u>
14 <b>Indicated Cost of Equity</b>	<b>10.1%</b>	<b>13.4%</b>	<b>11.7%</b>

15 The schedules containing my updated cost of capital analysis are attached to this  
16 rebuttal testimony. Also attached are three exhibits, which are discussed below.

17 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED REBUTTAL COST OF**  
18 **DEBT AND EQUITY, AND YOUR RECOMMENDED REBUTTAL RATE**  
19 **OF RETURN ON RATE BASE.**

20 A. The Company’s recommended capital structure consists of 0 percent debt and 100  
21 percent common equity as shown on Rebuttal Schedule D-1. Based on my updated  
22 cost of capital analysis, I am recommending a cost of equity of 11.7 percent. Based  
23 on my 11.7 percent recommended cost of equity, the Company’s weighted cost of  
24 capital (“WACC”) is 11.7 percent, as shown on Rebuttal Schedule D-1.  
25  
26

1 **Q. WHY IS YOUR COST OF EQUITY RECOMMENDATION LOWER IN**  
2 **YOUR REBUTTAL THAN IN YOUR DIRECT TESTIMONY?**

3 A. When I prepared my direct testimony in April 2009, the economy was still in the  
4 midst of a severe recession and a crisis was occurring in the financial markets. The  
5 Dow Jones average had fallen by 38 percent and the S&P 500 dropped by 40  
6 percent in just a couple of months. During this period, there was a “flight to  
7 quality” that led to an increase in the traditional spread between required returns on  
8 Treasury securities and other assets as investors turned away from common stocks  
9 and corporate bonds in favor of treasuries. During the past eight months, both the  
10 economy and the financial markets have improved.

11 Economists now believe the recession ended in the summer of 2009. But  
12 the same economists also project a long, sluggish recovery. As Value Line stated  
13 in October 2009, “the evolving business upturn may be a checkered affair, with a  
14 succession of peaks and valleys along the way. ... Should [the] uneven recovery  
15 unfold, the stock market might remain quite volatile.”<sup>1</sup> Value Line continues to  
16 stress this theme as the slow recovery in employment and housing continue to put  
17 pressure on the recovery process, even in light of improvements in consumer  
18 confidence and modest gains in retail and manufacturing.<sup>2</sup>

19 **Q. WHAT HAS BEEN THE EFFECT OF THESE CONDITIONS ON YOUR**  
20 **RECOMMENDED COST OF EQUITY?**

21 A. As stated, my updated analysis indicates cost of equity is 11.7 percent, which is 70  
22 basis points lower than the 12.4 percent cost of equity I proposed for RRUI in my  
23 direct testimony. The primary reason for the reduction in the cost of equity is a  
24 reduction in the current market risk premium in the CAPM estimate. Previously,

25 <sup>1</sup> Value Line Selection and Opinion, October 16, 2009.

26 <sup>2</sup> Value Line Selection and Opinion, January 15, 2009.

1 my cost of equity estimates based on the DCF model and the CAPM ranged from  
2 9.7 percent to 15.1 percent with a mid-point of 12.4 percent after adjustments for  
3 financial risk and firm-specific risks.

4 **B. Summary of the Recommendations of Staff and RUCO.**

5 **Q. PLEASE SUMMARIZE THE RESPECTIVE RECOMMENDATIONS OF**  
6 **STAFF AND RUCO FOR THE RATE OF RETURN ON FAIR VALUE**  
7 **RATE BASE.**

8 A. Staff is recommending a capital structure consisting of 0 percent debt and 100  
9 percent equity.<sup>3</sup> Staff determined a cost of equity of 9.2 percent based on the  
10 average cost of equity produced by its DCF and CAPM models (10.5 percent) and  
11 a 130 basis point downward adjustment for RRUI's lower financial risk as  
12 compared to the publicly traded water utilities in Staff's sample group.<sup>4</sup> Based on  
13 its 100 percent equity capital structure, Staff determined the WACC for RRUI to be  
14 9.2 percent.<sup>5</sup>

15 RUCO also did not consider firm-specific risks other than financial risk.  
16 RUCO determined its recommended cost of equity of 9.0 percent based on the  
17 results of its DCF and CAPM methods.<sup>6</sup> But RUCO is also recommending a  
18 hypothetical capital structure of 40 percent debt and 60 percent equity.<sup>7</sup> This  
19 results in an effective overall return on equity of 6.9 percent when RUCO's  
20 fictitious income tax deduction is factored in to the Company's bottom line. This  
21 return is clearly inadequate and does not meet the fair and reasonable standard as  
22 set out in *Hope* and *Bluefield*.

23 <sup>3</sup> *Id.*

24 <sup>4</sup> See Direct Testimony of Juan C. Manrique ("Manrique Dt.") at 32-33.

25 <sup>5</sup> *Id.* at 34.

26 <sup>6</sup> See Direct Testimony of William A. Rigsby Dt. ("Rigsby Dt.") at 7.

<sup>7</sup> *Id.*

1 Q. PLEASE SUMMARIZE THE PARTIES' RESPECTIVE COST OF EQUITY  
2 ESTIMATES.

<u>Party</u>	<u>DCF</u>	<u>CAPM</u>	<u>Average</u>
RRUI	10.1%	13.4%	11.7%
Staff	9.9%	11.0%	10.5%
RUCO	9.71%	6.10%	7.90%

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8 As the foregoing shows, RUCO's estimate of the cost of equity, as summarized in  
9 Schedule WAR-1, page 3 of Mr. Rigsby's testimony, is significantly lower than  
10 either the Company or Staff. The primary difference, obviously, is RUCO's  
11 extraordinarily low CAPM estimate, which is lower than RUCO's hypothetical  
12 debt cost (which is itself too low for a small utility like RRUI). Obviously,  
13 something is wrong with the methods and inputs selected by Mr. Rigsby.

14 Q. BUT THE RECOMMENDATIONS OF STAFF AND RUCO DIFFER  
15 SIGNIFICANTLY FROM THE ESTIMATES PRODUCED BY THE DCF  
16 MODEL AND CAPM MODEL.

17 A. Yes. Although Staff has estimated that the average cost of equity for the six  
18 publicly traded water utilities in its sample group is 10.5 percent, Staff's  
19 recommended cost of equity for RRUI is only 9.2 percent. As stated, this disparity  
20 results from Staff's 130 basis point downward adjustment for financial risk based  
21 on the Hamada formula. As discussed below, Staff's financial risk adjustment was  
22 incorrectly calculated and unfairly depresses RRUI's equity return. Moreover,  
23 Staff ignored RRUI's other firm-specific risks. As a result, Staff's recommended  
24 equity return for RRUI is unreasonable and should be rejected.

25 RUCO, in contrast, proposes a cost of capital of 9.0 percent, even though  
26 RUCO's models produce a cost of equity of 7.9 percent. This would make sense if

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RUCO intends to recognize RRUI's smaller size, lack of liquidity and other firm-specific risks. However, no explanation is given by Mr. Rigsby for his higher recommendation.

**Q. HOWEVER, RUCO HAS PROPOSED A HYPOTHETICAL CAPITAL STRUCTURE FOR RRUI, AND THE RESULTING RATE OF RETURN, 7.9 PERCENT, MATCHES MR. RIGSBY'S COST OF EQUITY ESTIMATE.**

A. That is correct. The average of Mr. Rigsby's DCF and CAPM estimates, which are based on data for large, publicly traded utilities, is 7.9 percent. Mr. Rigsby's recommended WACC – the weighted average cost of his hypothetical debt, 6.26 percent, and his recommended cost of equity – also happens to be 7.9 percent. It is apparent that RUCO has manipulated the Company's capital structure in order to justify use of 7.9 percent as the rate of return. This sleight-of-hand should be seen by the Commission as an obvious manipulation of models, consistent with RUCO's "results-oriented" rate making methodologies as noted by this Commission in Decision No. 69164.<sup>8</sup>

**Q MR. BOURASSA, YOU AREN'T DISCOURAGING RUCO FROM SUGGESTING A HIGHER ROE THAN THEIR MODELS DICTATE, ARE YOU?**

A. Absolutely not, but it is hard to take comfort from RUCO making it seem like they are being generous by offering a higher ROE than their model indicates, when in fact they are simply being confiscatory and manipulating cost of capital theory. It is a "wolf in sheep's clothing" approach.

---

<sup>8</sup> *Black Mountain Sewer Corporation*, Decision No. 69164 (Dec. 5, 2006) at 19-20.

1 Mr. Rigsby should instead use reasonable comparators, apply the models as  
2 they are meant to be applied, and then make his upward adjustments for company  
3 specific risk as necessary.

4 **Q. HOW DO THE PARTIES' RECOMMENDATIONS COMPARE TO**  
5 **OTHER FORECASTS OF COMMON EQUITY RETURNS?**

6 A. Value Line, a reputable publication that has been used by all of the parties' cost of  
7 capital witnesses, publishes forecasts of returns on common equity for larger  
8 publicly traded companies, including the three water utilities in RUCO's sample  
9 group. These water utilities are included in my sample group and in Staff's sample  
10 group. Value Line (January 22, 2010) projects the following returns on equity for  
11 those utilities:

12	American States Water	12.0%
13	Aqua America	12.0%
14	California Water	<u>12.0%</u>
15	Average	12.0%

16 All of these utilities are significantly larger than RRUI. AUS Utility Reports  
17 (January 2010) reports the following information for these utilities (in millions of  
18 dollars):

19		<u>Net Plant</u>	<u>Revenue</u>
20	American States Water	\$959.8	\$358.9
21	Aqua America	\$2,695.6	\$662.5
22	California Water	<u>\$754.2</u>	<u>\$442.6</u>
23	Average	\$1,470 million	\$488 million

24 Moreover, these utilities operate in jurisdictions such as California and  
25 Pennsylvania that use projected or partially projected test years, and authorize  
26 surcharges and other cost recovery mechanisms which allow the recovery of

1 increases in costs outside a general rate case. Therefore, they are less risky than  
2 RRUI. These data provide an unbiased indication that the Staff and RUCO  
3 recommendations for RRUI are much too low and should not be adopted by the  
4 Commission.

5 **III. REBUTTAL TO STAFF'S COST OF CAPITAL ANALYSIS, TESTIMONY**  
6 **AND RECOMMENDATIONS**

7 **A. Staff's Financial Risk Adjustment**

8 **Q. PLEASE COMMENT ON STAFF'S RECOMMENDED FINANCIAL RISK**  
9 **ADJUSTMENT.**

10 A. Staff's financial risk adjustment is overstated for two reasons. First, the beta used  
11 in the Hamada formula is the average beta of Staff's sample publicly traded water  
12 utilities. Second, Staff's financial risk adjustment is overstated because Staff uses  
13 book values rather than conceptually correct market values for debt and equity in  
14 calculating the risk adjustment using the Hamada formula. This error overstates  
15 the adjustment.

16 **Q. WHY IS THE FIRST REASON PROBLEMATIC?**

17 A. Because the average beta of the sample water utilities does not reflect the riskiness  
18 of the Company. If RRUI had its own beta, it would have a higher beta than the  
19 sample water utility companies.<sup>9</sup>

20 **Q. WHY WOULD RRUI HAVE A HIGHER BETA?**

21 A. Beta measures the volatility, i.e., riskiness, of a security relative to the market as a  
22 whole. RRUI is a riskier investment than any of the sample utilities.  
23 Consequently, it would have a higher beta than the average of the sample group.

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26 <sup>9</sup> See Direct Testimony of Thomas J. Bourassa – Cost of Capital (“Bourassa COC Dt.”) at 32 and 36-37.

1 Q. SO IF WE HAD A BETA FOR RRUI AND IT WAS INDEED HIGHER,  
2 WHAT IMPACT WOULD THAT HAVE ON STAFF'S HAMADA  
3 CALCULATION?

4 A. A higher beta for RRUI would result in a much lower financial risk adjustment  
5 using the Hamada formula.

6 Q. HAVEN'T YOU ALSO PROPOSED A FINANCIAL RISK ADJUSTMENT?

7 A. Yes, and in calculating that adjustment, I was forced to use the average betas of the  
8 sample companies.<sup>10</sup> RRUI's stock is not publicly traded and it has no reported  
9 beta. Therefore, like Staff, I had to assume that the average beta of the sample  
10 utilities is RRUI's beta to perform the financial risk adjustment calculation. There  
11 is a significant difference, however – I also propose a company-specific risk  
12 premium, which, to some extent, offsets the potential overstatement of my financial  
13 risk adjustment.

14 Q. WHAT IS THE CONCERN WITH STAFF'S USE OF BOOK VALUES?

15 A. Staff used the wrong inputs in unlevering and relevering the average beta of the  
16 sample group. Specifically, Staff used the book values of the sample utilities'  
17 capital structures rather than market values. Professor Hamada developed his  
18 equation using market values, not recorded book costs.<sup>11</sup> This is logical given that  
19 the Hamada formula is an extension of the CAPM, which is a market-based model  
20 that does not consider book or accounting data.<sup>12</sup> The critical component, beta, is  
21 an estimate of a security's risk based on its volatility relative to the market as a  
22 whole. Mr. Manrique admitted this in his testimony.<sup>13</sup> Therefore, it would make

23 <sup>10</sup> *Id.* at 36.

24 <sup>11</sup> "Effects of the Firm's Capital Structure on Systematic Risk of Common Stock," *Journal of Finance*,  
Vol. 27 No. 2 (May 1972) 435-453.

25 <sup>12</sup> See Manrique Dt. at 33 (discussing the Hamada formula).

26 <sup>13</sup> *Id.* at 27-28.

1 no sense to unlever and relever the sample group's average beta to account for the  
2 effect of financial leverage using book equity, as Staff has done in this case.  
3 Furthermore, numerous authorities state that market values must be used in  
4 estimating the effect of leverage on a security's risk.<sup>14</sup>

5 In short, given that the CAPM's inputs are based on market data, it is  
6 improper to substitute book capital structures, particularly when market capital  
7 structures for the sample utilities can easily be determined based on current stock  
8 prices and the number of shares outstanding.

9 **Q. HAS STAFF PROVIDED ANY SUPPORT FOR USING A CAPITAL**  
10 **STRUCTURE BASED ON BOOK VALUES?**

11 A. No, and I have been unable to find any authority for using book values in the  
12 Hamada formula.

13 **Q. WHAT FINANCIAL RISK ADJUSTMENT HAVE YOU COMPUTED**  
14 **USING STAFF'S MODELS AND MARKET VALUES?**

15 A. I computed a downward financial risk adjustment of 90 basis points – 40 basis  
16 points lower than the 130 basis points recommended by Staff. I used the market  
17 value of equity for the publicly traded water utilities, which I computed using  
18 current market-to-book ratios. For debt, I used the book value of debt as the  
19 market value. According to Dr. Morin, this is an appropriate assumption.<sup>15</sup> To  
20 compute the market value of RRUI's equity, I used the market value of RRUI's  
21 equity using the average market-to-book ratio of the sample publicly traded utility  
22

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23 <sup>14</sup> See, e.g., Roger A. Morin, *New Regulatory Finance* 223-24 (Public Utility Reports, Inc. 2006)  
24 (“Morin”); Richard A. Brealey, Stewart C. Myers and Franklin Allen, *Principles of Corporate Finance*  
25 516-20 (McGraw Hill/Irwin 8th ed. 2006); Tim Koller, Marc Goedhart and David Wessels, *Valuation:*  
26 *Measuring and Managing the Value of Companies* 312-13 (John Wiley & Sons, Inc. 4th ed. 2005);  
Shannon, P. Pratt, *Cost of Capital – Estimations and Applications* 83-85 (John Wiley & Sons 2nd ed.  
2002).

<sup>15</sup> Morin, *supra* at 224.

1 companies. Using the correct financial risk adjustment of 90 basis points and  
2 Staff's unadjusted cost of equity of 10.5 percent, the result would be no less than  
3 9.6 percent – 40 basis points higher than the 9.2 percent Staff recommends.

4 **Q. WHAT DO YOU MEAN “NO LESS” THAN 9.6 PERCENT,**  
5 **MR. BOURASSA??**

6 A. We still have to account for the problem with using the average beta of the sample  
7 water utilities, which I discussed above. RRUI's small size compared to those  
8 sample companies taints the use of the average beta in the first place.

9 **Q. HOW SHOULD THIS SECOND CONCERN BE ADDRESSED?**

10 A. By taking into account the higher risk of RRUI due to its small size relative to the  
11 sample companies. If Staff is going to make a financial risk adjustment for  
12 differences in the capital structures between Staff's proxy group and RRUI, it  
13 should also consider a small firm risk premium to account for firm size  
14 differences.<sup>16</sup> It is simple economics that investors require higher returns on small  
15 company stocks like RRUI as compared to large company stocks like Aqua  
16 America and American States Water. Mr. Manrique admits that smaller firms are  
17 more risky than larger firms.<sup>17</sup> Thus, an additional risk premium should be  
18 authorized to ensure that RRUI's additional investment risk is taken into account.

19 **Q. HOW DID YOU ACCOUNT FOR ADDITIONAL RISK THIS IN YOUR**  
20 **ANALYSIS?**

21 A. As I stated earlier, my downward financial risk adjustment is offset by an upward  
22 small company risk adjustment. This compensates for the use of an overstated beta  
23 in estimating RRUI's equity cost. As a result, my net downward adjustment to the  
24

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25 <sup>16</sup> Bourassa COC Dt. at 37-38.

26 <sup>17</sup> Manrique Dt. at 42.

1 cost of equity is 50 basis points (a downward adjustment of 100 basis points for  
2 financial risk and an upward adjustment of 50 basis points for firm size).

3 I should emphasize that the small company risk premiums as reported by  
4 Morningstar are risk premiums not explained by the higher betas for small  
5 companies. Frankly, given RRUI's small size, limited customer base, lack of  
6 diversification, lack of liquidity and other factors, there should not be any  
7 downward adjustment for financial risk. So, my net downward adjustment of 50  
8 basis points is likely overstated. Clearly, the evidence doesn't support a downward  
9 adjustment to RRUI's cost of equity that is greater than 50 basis points.

10 **B. Firm Specific Risk**

11 **Q. IS MR. MANRIQUE CORRECT THAT PRIOR COMMISSION**  
12 **DECISIONS DID NOT FIND A FIRM SIZE PHENOMENON FOR**  
13 **REGULATED UTILITIES?**

14 **A.** Yes, Mr. Manrique is correct, although I do not believe the issue has come up in  
15 the context of the appropriateness of a downward adjustment for financial risk,  
16 where the failure to consider the impact of size on investment risk is exacerbated.  
17 Moreover, the Commission's failure to recognize that small firms are riskier than  
18 large firms, despite an abundance of empirical financial evidence indicating  
19 otherwise, is another reason why it is more risky for smaller utilities to do business  
20 in Arizona.

21 Putting that aside, there are many reasons why smaller utilities are more  
22 risky than larger utilities. I have discussed these reasons extensively in my direct  
23 testimony and will not repeat that testimony here.<sup>18</sup> The simple fact is that a  
24 rational investor is not going to view an equity investment in RRUI as having the  
25

26 <sup>18</sup> Bourassa COC Dt. at 15-21.

1 same risk as the purchase of publicly traded stock in a substantially larger utility  
2 such as Aqua America, American States Water or California Water Service.

3 However, I would add that an investment in the stock of a publicly traded  
4 utility is much more liquid than an investment in RRUI. If investors are unhappy  
5 with the return provided by a publicly traded stock they can sell the stock within  
6 minutes. On the contrary, an investment in RRUI does not provide the same level  
7 of liquidity. This lack of liquidity creates additional investment risk. The bottom  
8 line is that if the differences in risk between small utilities like RRUI and the large,  
9 publicly traded water utilities used to estimate the cost of equity are ignored,  
10 RRUI's equity cost will be understated and unreasonable.

11 **Q. DO INVESTORS CONSIDER SMALL FIRM RISKS AS WELL AS**  
12 **REGULATORY RISKS?**

13 A. Of course. Contrary to Mr. Manrique's assertions, the investment related to such  
14 factors as firm size and Arizona's regulatory environment are important to  
15 investors. These risks are not captured by the market data of the water utility proxy  
16 group Staff uses to estimate the cost of equity for RRUI. None of the utilities in  
17 Staff's water proxy group are of comparable size to RRUI.<sup>19</sup> In fact, RRUI is but a  
18 small fraction of the size of the water utilities in Staff's proxy group. And none of  
19 the water utilities in Staff's water proxy group operate exclusively in Arizona and  
20 are subject to this jurisdiction's regulatory requirements and policies.<sup>20</sup>

21 **Q. IS THERE A WAY TO PRECISELY QUANTIFY THE EFFECT OF THESE**  
22 **ADDITIONAL RISKS ON THE RETURN REQUIRED BY AN INVESTOR?**

23 A. No. But that does not justify ignoring the differences between the sample utilities  
24 and RRUI, as Staff proposes.

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25 <sup>19</sup> Bourassa COC Dt. at 16.

26 <sup>20</sup> *Id.* at 16-22.

1 Q. HOW DO YOU RESPOND TO MR. MANRIQUE'S ASSERTION THAT  
2 THE ARIZONA REGULATORY ENVIRONMENT IS NO LESS  
3 FAVORABLE THAN THE REGULATORY ENVIRONMENTS FACED BY  
4 THE SAMPLE UTILITIES?

5 A. I disagree with him. Mr. Manrique testifies that the regulatory environment in  
6 Arizona has many "attractive attributes," including the use of a fair value rate base  
7 ("FVRB"), the ability to seek accounting orders, the recognition of known and  
8 measurable changes, the wide use of hook-up fees, and regulatory responsiveness,  
9 such as the approval of arsenic recovery mechanisms and arsenic remedial  
10 surcharge mechanisms.<sup>21</sup> I will address each of the alleged "attractive attributes"  
11 Mr. Manrique has identified.

12 Q. PLEASE START WITH FAIR VALUE RATE BASE. DO INVESTORS  
13 CONSIDER ARIZONA'S USE OF FAIR VALUE RATE BASE AN  
14 ATTRACTIVE ATTRIBUTE OF INVESTING IN ARIZONA?

15 A. To my knowledge, investors do not. This is because the Commission does not  
16 recognize the increased value when the utility's FVRB is higher than the original  
17 cost rate base. This makes fair value meaningless. And while I appreciate that  
18 Mr. Manrique is very new to Arizona rate making, Staff should know the history  
19 better. I will provide some background.

20 In the past, when Arizona utilities filed rate cases with a FVRB that was  
21 higher than original cost, the Commission authorized an operating income that was  
22 equivalent to applying the weighted average cost of capital ("WACC") to original  
23 cost rate base. This became known as the "backing-in method" because the  
24 Commission simply took the operating income produced by applying the WACC to

25  
26 <sup>21</sup> *Id.*

1 the original cost rate base, divided it by the FVRB and came up with what it called  
2 the "fair value rate of return." In short, the backing-in method rendered the use of  
3 a FVRB meaningless because the return on rate base did not change whether fair  
4 value or original cost was used. Then, the backing-in method was challenged by  
5 Chaparral City Water Company and found by the Arizona Court of Appeals to be  
6 unconstitutional.<sup>22</sup>

7 **Q. DIDN'T THE COURT'S FINDING TURN THE USE OF FAIR VALUE**  
8 **INTO AN ATTRACTIVE ATTRIBUTE OF ARIZONA REGULATION FOR**  
9 **INVESTORS?**

10 A. No. On remand from the Court of Appeals the Commission set a new revenue  
11 requirement that produced operating income that was about \$7,400 higher than the  
12 original decision.<sup>23</sup> In other words, despite the fact that the FVRB in Chaparral  
13 City's rate case was \$3.3 million higher than its original cost rate base, the  
14 Commission granted a return of 0.22 percent on the additional value. No investor  
15 will view a regulatory body that authorizes a 0.22 percent return on more than  
16 \$3 million dollars of plant as "attractive."

17 **Q. HAVE THERE BEEN ANY SUBSEQUENT PROCEEDINGS IN THE**  
18 **CHAPARRAL CITY CASE?**

19 A. Yes. For one thing, the Commission's remand decision was appealed, in fact, it  
20 was argued before the Court of Appeals in January.<sup>24</sup> Also, in a more recent  
21 Chaparral City rate case,<sup>25</sup> the Commission provided approximately \$150,000 more  
22 operating income by use of a FVRB than would have been provided by applying

23  
24 <sup>22</sup> *Chaparral City Water Co. v. Ariz. Corp. Comm'n*, No. 1 CA-CC 05-002 (Feb. 13, 2007).

25 <sup>23</sup> *See Chaparral City Water Company*, Decision No. 70441 (July 28, 2008).

26 <sup>24</sup> *Chaparral City Water Co. v. Ariz. Corp. Comm'n*, No. 1 CA-CC 08-002 (argued January 12, 2010).

<sup>25</sup> *Chaparral City Water Company*, Decision No. 71308 (October 1, 2009).

1 the WACC to OCRB. As a result, despite the fact that FVRB was more than  
2 \$5.4 million higher than OCRB, the Company received a return of about  
3 2.8 percent on the additional value of its investment. This decision is also on  
4 appeal. Meanwhile, Arizona's use of fair value is not an attractive attribute of  
5 utility regulation in the state.

6 **Q. ARE ACCOUNTING ORDERS AN "ATTRACTIVE ATTRIBUTE" OF**  
7 **REGULATION IN ARIZONA?**

8 A. No. I am not aware that regulatory mechanisms similar to accounting orders are  
9 not available to any of the sample water utilities in the regulatory jurisdictions in  
10 which they operate. Therefore, accounting orders do not make Arizona attractive  
11 to investors relative to other investments. Besides, the nature of accounting orders  
12 limits their attractiveness.

13 **Q. WHAT DO YOU MEAN?**

14 A. In Arizona, accounting orders are narrowly tailored for specific circumstances and  
15 generally only allow utilities to track certain, specified costs. No rate recovery is  
16 authorized or assured. Rather, accounting orders issued by this Commission  
17 postpone consideration of any cost recovery until a future rate case. In fact, the  
18 uncertainty inherent in an accounting order is illustrated in the pending rate case  
19 for RRUI's affiliate, LPSCO, where Staff opposes recovery of costs incurred  
20 pursuant to a recent Commission-issued accounting order.<sup>26</sup>

21  
22  
23  
24 <sup>26</sup> See Direct Testimony of Jeffery M. Michlik (water division), filed November 4, 2009 in Docket Nos.  
25 W-01428A-09-0103, W-01427A-09-0104, W-01427A-09-0116 and W-01427A-09-0120 (consolidated), at  
26 12-14. Staff is recommending denial of recovery of costs related to the potential contamination of its  
water supply due to the proximity of a federally designated superfund site in the current rate case, although  
Staff has suggested consideration in a future rate case.

1 Q. WHAT ABOUT THE RECOGNITION OF “KNOWN AND  
2 MEASURABLE” CHANGES?

3 A. Again, this is not a regulatory attribute unique to Arizona. In fact, I am not aware  
4 of any jurisdictions that utilize an historic test year where adjustments based on  
5 known and measurable changes cannot be made to either the test year rate base or  
6 to test year revenue and expenses in order to make the test year a more “normal”  
7 representation of the costs of service during the period in which the rates will be in  
8 effect. Arguably, the failure to allow such changes would be unlawful.

9 In contrast, California, in which three of the six sample water companies  
10 (American States, California Water, and SJW Corp.) primarily operate, uses future  
11 test years in setting rates. Under that state’s rate making system, future expenses  
12 can be increased to reflect expected changes including projected inflation, revenues  
13 can be adjusted to reflect expected future erosion of revenues from water  
14 conservation, and future expected capital investment can be recognized in rate  
15 base. This regulatory approach is more attractive to investors than the recognition  
16 of known and measurable changes, which is common.

17 Moreover, California allows adjuster mechanisms that permit utilities to  
18 recover increases in purchased power and purchased water costs due to increases in  
19 rates charged by power and water providers. More recently, in connection with  
20 implementing conservation-oriented rate structures, California has authorized water  
21 revenue adjustment mechanisms to be implemented in order to offset revenue  
22 erosion due to conservation. In some cases, California allows utilities to file for  
23 adjustment mechanisms when unexpected significant capital investment has to be  
24 made. By allowing revenues to change between rate cases to match known  
25 increases in investment and operating expenses, utilities are given a reasonable  
26 chance to earn their authorized return.

1           In contrast, in Arizona, adjuster mechanisms for purchased water have been  
2 uniformly opposed by Staff and RUCO over the past decade, and they have been  
3 denied by the Commission.<sup>27</sup> And, I don't believe that I have ever seen a revenue  
4 conservation adjustment adopted by the Commission for an Arizona water utility  
5 with inverted-tier rates designed to encourage water conservation.

6 **Q. DIDN'T THE COMMISSION PROVIDE ARSENIC COST RECOVERY**  
7 **MECHANISMS IN THE PAST?**

8 A. To some extent. But generally, these mechanisms have only allowed for recovery  
9 of debt service costs not capital and depreciation. That was beneficial, particularly  
10 for utilities that could not provide cash flow for the debt service without this  
11 mechanism in place. However, these mechanisms did not include recovery of  
12 increases in operating and maintenance costs associated with the arsenic facilities.  
13 And the Commission has made it clear that such mechanisms were special cases  
14 intended to address extraordinary circumstances, and their approval did not  
15 establish a precedent for adjuster mechanisms in general. Thus, while approval of  
16 the ACRMs was certainly helpful to the water utilities that obtained them, they do  
17 not make Arizona's regulatory environment more attractive to investors than other  
18 jurisdictions, which routinely authorize cost recovery mechanisms.

19 **Q. ARE THERE ANY OTHER "ATTRACTIVE ATTRIBUTES" THAT MAKE**  
20 **OTHER JURISDICTIONS ATTRACTIVE RELATIVE TO ARIZONA?**

21 A. Yes. For instance, as I discussed in my direct testimony, in many states in which  
22 Aqua America operates, utilities are permitted to implement surcharges to recover  
23 additional depreciation and capital costs outside the context of a rate case.<sup>28</sup> Aqua  
24

25 <sup>27</sup> See, e.g. *Chaparral City Water Company*, Decision No. 68176 (September 30, 2005); *Arizona Water*  
*Company (Eastern Group)*, Decision No. 66849 (March 19, 2004).

26 <sup>28</sup> Bourassa COC Dt. at 21.

1 America also operates in jurisdictions that allow utilities to implement rates before  
2 a final decision in a rate case.<sup>29</sup> In addition, in certain states in which Aqua  
3 America operates, utilities are allowed surcharges to reflect changes in certain costs  
4 until such time as the costs are incorporated into base rates.<sup>30</sup> Pennsylvania allows  
5 water utilities to collect a distribution system improvement charge (“DISC”) for the  
6 replacement of mains, storage tanks and other distribution system infrastructure.  
7 Similarly, Middlesex operates utilities in Delaware, which also allows for the  
8 implementation of a DISC for the recovery of depreciation and capital costs outside  
9 the context of a rate case. Delaware also allows plant expected to be constructed  
10 within three years from the end of the test period to be included in rate base. These  
11 attributes are attractive to investors, and none of them are available in Arizona.

12 **Q. ARE YOU AWARE OF ANY STUDIES THAT SUPPORT YOUR**  
13 **TESTIMONY THAT ARIZONA IS NOT AN ATTRACTIVE**  
14 **REGULATORY ENVIRONMENT?**

15 A. Yes. Standard and Poor’s, for example, issued a report in November 2008 that  
16 ranked Arizona among the least credit supportive regulatory environments.<sup>31</sup>  
17 Investors do recognize the overall effect of the unfavorable regulatory environment  
18 here in Arizona. Again, this is why Liberty Water’s utilities in Arizona are having  
19 a hard time competing for capital with utilities in other states.

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24 <sup>29</sup> *Id.*

25 <sup>30</sup> *Id.*

26 <sup>31</sup> Assessing U.S. Utility Regulatory Environments, Rating Directs, Standard and Poor’s (November 7, 2008).

1 Q. BUT LIBERTY WATER WASN'T FORCED TO BUY RRUI AND THE  
2 OTHER UTILITIES IT OWNS IN ARIZONA, WAS IT?

3 A. No. But that isn't the point. We are attempting to develop a fair and reasonable  
4 return on invested capital and, ultimately, rate of return on rate base. The  
5 Commission has broad discretion, and may choose to use historic test years with  
6 limited out-of-period adjustments, refuse to approve adjuster mechanisms for water  
7 and wastewater utilities, and impose inverted-tier water rates without considering  
8 the impact on the utility's revenues. But if it chooses to adopt these policies, it  
9 cannot also ignore the impact on investment risk. The criteria established by the  
10 Supreme Court in decisions such as *Bluefield Water Works* apply in Arizona too.

11 C. Risks Associated with Advances and Contributions

12 Q. MR. MANRIQUE ALSO TESTIFIES THAT ADVANCES AND  
13 CONTRIBUTIONS REDUCE A UTILITY'S RISK. HOW DO YOU  
14 RESPOND TO THAT ASSERTION?

15 A. I agree with Mr. Manrique that plant financed with AIAC and CIAC can provide  
16 benefits through access to zero-cost capital. This may eliminate the need to go into  
17 the capital markets to raise additional capital. As I stated, this is why many smaller  
18 utilities have higher proportions of these zero-cost capital sources.<sup>32</sup> But this has  
19 nothing to do with an equity investor's risk. The investor is concerned about  
20 earning a fair return on the funds he has invested.

21 Moreover, there are disadvantages to AIAC and CIAC. For example, a high  
22 percentage of zero-cost capital in a utility's capital structure is detrimental to the  
23 long-term cash flows of the Company because (1) the utility is not allowed to earn  
24 a return on plant financed with AIAC and CIAC, and (2) the utility is not allowed  
25

26 <sup>32</sup> Bourassa COC Dt. at 18.

1 to recover depreciation on plant financed with CIAC. Keep in mind that plant  
2 financed with AIAC and CIAC must be maintained and eventually has to be  
3 replaced. Further, advances have to be refunded, diverting the utility's cash flow.  
4 Together, these factors place additional stress on earnings, which increases risk to  
5 the Company as the eventual plant replacements will require the Company to raise  
6 additional capital to fund the replacements.

7 **Q. BUT AREN'T THE COSTS TO MAINTAIN PLANT INCLUDED IN**  
8 **RATES, AS SUGGESTED BY MR. MANRIQUE?**

9 A. Not necessarily. Recovery of the level of expenses included in rates for  
10 maintenance and repair expenses is not guaranteed. Further, significant emergency  
11 repairs that are not contemplated in the level approved in a rate case are not  
12 recovered, and are often characterized as non-recurring. In addition, capitalized  
13 repairs are not recovered between rate cases.

14 **D. Rebuttal to Staff's Criticisms of Analysts' Estimates of Growth**

15 **Q. MR. MANRIQUE CRITICIZES YOU FOR GIVING MORE WEIGHT TO**  
16 **ANALYSTS' ESTIMATES THAN TO HISTORICAL GROWTH RATES.**  
17 **HOW DO YOU RESPOND?**

18 A. First, it is important to note that Mr. Manrique does not reject analyst estimates of  
19 growth; he just disagrees with the amount of weight I gave these estimates.<sup>33</sup> Staff  
20 gives 50 percent weight to analysts' estimates and 50 percent weight to historical  
21 growth data. So the dispute between Mr. Manrique and me comes down to  
22 something between 50 percent and my "greater" emphasis. In my direct testimony  
23 I explained why weight greater than 50 percent should be given to analysts'  
24 estimates.<sup>34</sup>

25 <sup>33</sup> Manrique Dt. at 35.

26 <sup>34</sup> Bourassa COC Dt. at 26-29.

1 Q. WHAT ABOUT MR. MANRIQUE'S ASSERTION THAT ANALYSTS'  
2 ESTIMATES ARE "OVERLY OPTIMISTIC"?

3 A. First, I refer back to my direct testimony at pages 28 to 29. Gordon, Gordon, and  
4 Gould conducted a study and found analyst forecasts of growth outperformed three  
5 measures of historical growth. They explain that this result should be expected  
6 because analysts would consider historical data in making future projections. Now,  
7 Mr. Manrique characterizes the study as merely an "article" that "describes more  
8 generally the methods exclusively using analysts' forecasts are 'popular and  
9 attractive models', but the article does not support the conclusion that these  
10 forecasts should be used alone."<sup>35</sup> The authors' own words undermine  
11 Mr. Manrique's characterization, as well demonstrating his lack of expertise and  
12 dependence on Staff's off-the-shelf methodologies. In their own formal study, the  
13 authors concluded:

14 We have compared the accuracy of four methods for  
15 estimating the growth component of the discounted cash flow  
16 yield on a share: past growth in earnings (KEGR), past  
17 growth in dividends (KDGR), past retention growth rate  
18 (KBRG), and forecasts of growth by security analysts  
(KFRG). ... For our sample of utility shares, KFRG  
performed well, with KBRG, KDGR, and KEGR following in  
that order, and with KEGR a distant fourth....

19 Before closing, we have three observations to make. First,  
20 the superior performance by KFRG should come as no  
21 surprise. All four estimates of growth rely upon past data, but  
22 in the case of KFRG a larger body of past data is used,  
23 filtered through a group of security analysts who adjust for  
24 abnormalities that are not considered relevant for future  
25 growth....<sup>36</sup>

26 As I have testified, to the extent that past results provide useful indications of  
future growth prospects, analysts' forecasts of growth would already incorporate

<sup>35</sup> Manrique Dt. at 37.

<sup>36</sup> David A. Gordon, Myron J. Gordon and Lawrence I. Gould, "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989) 50-55.

1 that information.<sup>37</sup> In addition, a stock's current price already reflects known  
2 historic information on that company, including its past dividend and earnings  
3 history.<sup>38</sup> If investors rely on analysts' growth rate forecasts, those are the relevant  
4 forecasts for determining equity costs.

5 In summary, Mr. Manrique offers no quantitative or conceptual argument to  
6 rebut Gordon, Gordon, and Gould, and offers no evidence that any of the measures  
7 of past growth he has used – historical EPS, historical DPS, historical sustainable  
8 growth – provides a better forecast of future growth for utilities than analysts'  
9 estimates of growth. Mr. Manrique is using Staff's inputs into the DCF model  
10 mechanically and without considering the reasons for using those inputs.  
11 Unfortunately, Staff's inputs gives less weight to the best estimate of future growth  
12 in order to drive down the cost of equity.

13 **Q. DOESN'T MR. MANRIQUE'S TESTIMONY ON PAGE 38 REFERENCING**  
14 **PROFESSOR GORDON'S REMARKS AT THE 30<sup>TH</sup> ANNUAL FORUM OF**  
15 **THE SOCIETY OF UTILITY AND REGULATORY FINANCIAL**  
16 **ANALYSTS CONTRADICT WHAT THE AUTHORS HAVE**  
17 **CONCLUDED?**

18 **A.** No. For starters, we don't know the context in which Professor Gordon made his  
19 remarks. Further, in the quoted remarks, Professor Gordon does not say anything  
20 about past growth rates. There is no guidance on which past growth rates (EPS,  
21 DPS, or book value) should be used, if any, or what weight past growth rates  
22 should be given when estimating the growth rate in the DCF model.<sup>39</sup> That is the  
23 issue. Mr. Manrique agrees that "Professor Gordon would temper the typically

24 <sup>37</sup> Bourassa COC Dt. at 28-29.

25 <sup>38</sup> *Id.*

26 <sup>39</sup> Staff has not provided Professor Gordon's complete remarks in their work papers.

1 higher analysts' growth rates with the typically lower GNP growth rate."<sup>40</sup> I am  
2 sure Mr. Manrique would also agree that I have tempered my estimate by  
3 considering past growth rates that are well below the long-term GNP (or GDP)  
4 growth rate.<sup>41</sup> So, having tempered the analysts' growth rates I employ with a  
5 lower historical growth rate,<sup>42</sup> my estimate is still significantly greater than Staff's.  
6 This is the result of Staff's models being heavily weighted on low historical growth  
7 rates, which drives down the cost of equity.

8 **Q. DOES MR. MANRIQUE STATE THAT INVESTORS RELY ON ANALYST**  
9 **ESTIMATES?**

10 A. Yes.<sup>43</sup> He also states that investors rely "to some extent on past growth as well."  
11 That is true, but he does not demonstrate the extent to which investors rely on past  
12 growth rates – he simply states that they are considered. Again, if analysts'  
13 estimates already consider past growth, then Staff vastly overstates the impact of  
14 past growth rates in its DCF model. It is, basically, a type of "double-counting"  
15 that produces extremely low results.

16 **Q. DO YOU HAVE FURTHER REBUTTAL TO MR. MANRIQUE'S**  
17 **"OVERLY OPTIMISTIC" TESTIMONY?**

18 A. Yes. For my second specific response to the assertion that analysts' estimates are  
19 "overly optimistic," I point to Value Line. Value Line is in the business of selling  
20 information to investors, and all of the parties have relied on Value Line in their  
21

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22 <sup>40</sup> Manrique Dt. at 38.

23 <sup>41</sup> See Rebuttal Schedule D.4-4, column 5. The average of historical growth rates is 5.89%. The long-term  
GDP growth rate is 6.7% as shown on Staff's Schedule JCM-9.

24 <sup>42</sup> See Rebuttal Schedule D.4-4, column 6, average of historical growth rates and analyst estimates is  
25 7.25%. The DCF result using the 7.25% produces an indicated cost of equity of 10.8% as shown on  
Staff Schedule JSM-3.

26 <sup>43</sup> Manrique at Dt. 39.

1 cost of equity estimates. Value Line has every incentive to provide accurate  
2 forecasts to encourage investors to continue to subscribe to its publications. Value  
3 Line does not sell stock and has no incentive to bias upward its buy/sell  
4 recommendations and estimates of future growth. Zacks and Morningstar provide  
5 similar investment services. Neither markets stock – they sell information, which  
6 won't be purchased if it is inaccurate or biased. Yahoo Finance is a free service,  
7 but it does not earn commissions from the sales of stock. In sum, Mr. Manrique's  
8 testimony is simply wrong. None of these services have any reason to provide  
9 inaccurate information to its users.

10 **Q. DO YOU HAVE ANY FURTHER COMMENTS ON THE TOPIC OF**  
11 **STAFF'S DCF GROWTH ESTIMATES, MR. BOURASSA?**

12 A. Yes. I am attaching a copy of a document filed with the public utilities  
13 commission in a 2005 California rate case to this volume of my rebuttal  
14 testimony.<sup>44</sup> This document was prepared by Mr. Gary Hayes, a witness for San  
15 Diego and Electric Company. It lists a number of sources that further contradict  
16 Mr. Manrique's claim that analysts typically make upwardly biased forecasts of  
17 growth.

18 Additionally, to further support the use of analyst forecasts of growth, Dr.  
19 Morin states:

20 Because of the dominance of institutional investors and their  
21 influence on individual investors, analysts' forecasts of long-  
22 run growth rates provide a sound basis for estimating required  
23 returns. Financial analysts exert a strong influence on the  
24 expectations of many investors who do not possess the  
25 resources to make their own forecasts, that is, they are a cause  
26 of g. *The accuracy of these forecasts in the sense of whether  
they turn out to be correct is not at issue here, as long as they  
reflect widely held expectations.* As long as the forecasts are  
typical and/or influential in that they are consistent with

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<sup>44</sup> Exhibit TJB-COC-RB1.

1 current stock price levels, they are relevant. The use of  
2 analysts' forecasts in the DCF model is sometimes denounced  
3 on the grounds that it is difficult to forecast earnings and  
4 dividends for only one year, let alone for longer time periods.  
5 *This objection is unfounded, however, because it is present  
6 investor expectations that are being priced; it is the consensus  
7 forecast that is embedded in price and therefore in required  
8 return, and not the future as it will turn out to be.*<sup>45</sup>

9 Myron Gordon, the "father" of the standard regulatory version of the DCF  
10 model utilized by Mr. Manrique and myself in the instant case, has also recognized  
11 the significance of analysts' forecasts of growth in EPS in a speech he gave in  
12 March 1990 before the Institute for Quantitative Research and Finance. He said:

13 We have seen that earnings and growth estimates by security  
14 analysts were found by Malkiel and Cragg to be superior to  
15 data obtained from financial statements for the explanation of  
16 variation in price among common stocks. ... Estimates by  
17 security analysts available from sources such as IBES are far  
18 superior to the data available to Malkiel and Cragg. Eq (7) is  
19 not as elegant as Eq (4), but it has a good deal more intuitive  
20 appeal. It says that investors buy earnings, but what they will  
21 pay for a dollar of earnings increases with the extent to which  
22 the earnings are reflected in the dividend or in appreciation  
23 through growth.<sup>46</sup>

24 Professor Gordon recognized that total return is largely affected by the terminal  
25 price, which is mostly affected by earnings (hence the common use of  
26 price/earnings multiples in evaluating stock prices).

As noted by Dr. Gordon, studies performed by Cragg and Malkiel demonstrate that analysts' forecasts are superior to historical growth rate extrapolations. These studies show that:

Efficient market hypotheses suggest that valuation should reflect the information available to investors. Insofar as analysts' forecasts are more precise than other types we should therefore expect their differences from other measures to be reflected in the market. It is therefore noteworthy that our regression results do support the hypothesis that analysts' forecasts are needed even when calculated

<sup>45</sup> Morin at 298 (emphasis added).

<sup>46</sup> Gordon, Myron J., "Pricing of Common Stocks", Seminar (March 27, 1990) at 12-13.

1 growth rates are available. As we noted when we described the data,  
2 security analysts do not use simple mechanical methods to obtain  
3 their evaluations of companies. The growth-rate figures we obtained  
4 were distilled from careful examination of all aspects of the  
5 companies' records, evaluation of contingencies to which they might  
6 be subject, and whatever information about their prospects the  
7 analysts could glean from the companies themselves or from other  
8 sources. It is therefore notable that the results of their efforts are  
9 found to be so much more relevant to the valuation than the various  
10 simpler and more "objective" alternatives that we tried.<sup>47</sup>

11 Vander Weide and Carleton further note:

12 [O]ur studies affirm the superiority of analyst's forecasts over simple  
13 historical growth extrapolations in the stock price formation process.  
14 Indirectly, this finding lends support to the use of valuation models  
15 whose input includes expected growth rates.<sup>48</sup>

16 **Q. THAT'S A LOT OF EXPERT COMMENTARY, BUT WHAT DOES IT ALL**  
17 **MEAN IN THIS CASE?**

18 **A.** It means that the level of accuracy of analysts' forecasts is an after-the-fact  
19 evaluation with little relevance to the issues at hand here. What really matters is  
20 that analysts' forecasts strongly influence investors and hence the market prices  
21 investors are willing to pay for stocks. Therefore, they should play a prominent  
22 role in a proper equity cost determination. Staff, however, has failed to give these  
23 forecasts sufficient weight in its analysis. Even Mr. Dreman, who Mr. Manrique  
24 relies on, admits that:

25 We have also seen that in spite of high error rates being  
26 recognized for decades, neither analysts nor investors who  
religiously depend on them have altered their methods in any  
way.<sup>49</sup>

27 <sup>47</sup> John G. Cragg and Burton G. Malkiel, "Expectations and the Structure of Share Prices" *National Bureau of Economic Research* (University of Chicago Press, 1982) Chapter 4.

28 <sup>48</sup> James H. Vander Weide and Willard T. Carleton, "Investor Growth Expectations: Analysts vs. History" (*The Journal of Portfolio Management*, Spring 1988) 78-82.

29 <sup>49</sup> David Dreman, *Contrarian Investment Strategies: The Next Generation* 115-116 (Simon & Schuster 1998).

1 This is my point. If investors rely on analysts' growth rate forecasts, those  
2 forecasts should be used to determine the cost of equity, proportionate to investor  
3 reliance, not in a manner that depresses the import of that reliance. Analysts'  
4 growth rates influence the prices investors will pay for stocks and thus impact the  
5 dividend yields. The dividend yields change until the sum of the dividend yield  
6 plus the growth rate equals investors' perceived cost of equity. Had the growth  
7 forecasts been lower – as Mr. Manrique suggests they should be – the stock prices  
8 would be lower and dividend yields would be higher, but there would not  
9 necessarily be any difference in the ultimate estimate of the cost of equity.

10 **Q. HOW DO YOU RESPOND TO MR. MANRIQUE'S REFERENCE TO**  
11 **PROFESSOR JEREMY SIEGEL?**

12 A. Mr. Manrique's reliance on the quote from Jeremy Siegel that "dividends and not  
13 earnings are meaningful" is puzzling.<sup>50</sup> The DCF model assumes, among other  
14 things, that a firm will have a stable dividend payout policy and a stable return on  
15 the book value of its stock. Thus, it is assumed that the stock's price, its book  
16 value, dividends paid, and earnings all grow at the same rate. While it is  
17 appropriate to make such assumptions for forecasting purposes, these assumptions  
18 are frequently violated when examining historical data. As it turns out, the  
19 historical growth in the stock price, book value, dividends, and earnings for the  
20 water utility industry has not been the same.<sup>51</sup> Estimates of long-term growth rates  
21 should take this into account. Furthermore, I have not used earnings in my DCF  
22 model; I used earnings growth as a proxy for growth. Earnings generate the funds  
23 used to pay dividends. Growth in earnings provides more cash flows from which  
24 dividends are paid. As a consequence, earnings growth is obviously extremely

25 <sup>50</sup> Manrique Dt. at 39.

26 <sup>51</sup> See Rebuttal Schedule D.4-3 and Rebuttal Schedule D.4-4.

1 important to investors, and is therefore an entirely appropriate proxy for growth in  
2 the DCF model.

3 Of course, I'd also note that I don't disagree with Professor Siegel that the  
4 price of a stock is always equal to the present value of all future cash flows. I am  
5 sure Professor Siegel would agree that future cash flows would not only include  
6 dividends but the future sales price of the stock. The Market Price version of the  
7 DCF model measures precisely that. I described the Market Price version of the  
8 DCF model in my direct and will not repeat that testimony here.<sup>52</sup> A 5-year Market  
9 Price DCF model for the sample publicly traded utility stocks would indicate a cost  
10 of equity of 11.7 percent.

11 **Q. HAVE YOU PREPARED AN EXHIBIT ILLUSTRATING THE MARKET**  
12 **PRICE DCF FOR THE WATER UTILITY SAMPLE?**

13 A. Yes.<sup>53</sup> I have included a Market Price DCF computation for the sample publicly  
14 traded water utilities using 5-year historical dividend growth and 5-year historical  
15 stock price growth. Again, the average result is 11.7 percent (11.8 percent  
16 median), which compares far more favorably to my cost of equity estimate of 11.7  
17 percent than to Staff's cost of equity estimate of 10.5 percent.

18 **Q. DO YOU HAVE ANY FURTHER RESPONSE TO MR. MANRIQUE**  
19 **REGARDING THE ISSUE OF USING ANALYSTS' FORECASTS AND**  
20 **THE APPROPRIATE WEIGHT THEY SHOULD BE GIVEN?**

21 A. Yes, I have one more comment. I find Mr. Manrique's reliance on a quotation  
22 from Dr. Burton G. Malkiel somewhat confusing. Dr. Malkiel is the Chemical  
23 Bank Chairman's Professor of Economics at Princeton University and author of the  
24 widely read national bestseller book on investing entitled, "A Random Walk Down

25 <sup>52</sup> Bourassa COC Dt. at 25-26.

26 <sup>53</sup> Exhibit TJB-COC-RB2.

1 Wall Street.” Mr. Manrique quotes Dr. Malkiel’s apparent criticism of analysts’  
2 estimates. Yet, in November 2002, Professor Malkiel affirmed his belief in the  
3 superiority of analysts’ earnings forecasts when he testified before the South  
4 Carolina PUC:

5 With all the publicity given to tainted analysts’ forecasts and  
6 investigations instituted by the New York Attorney General,  
7 the National Association of Securities Dealers, and the  
8 Securities & Exchange Commission, I believe the upward  
9 bias that existed in the late 1990s has indeed diminished. In  
summary, I believe that current analysts’ forecasts are more  
reliable than they were during the late 1990s. *Therefore,*  
*analysts’ forecasts remain the proper tool to use in*  
*performing a Gordon Model DCF analysis.*<sup>54</sup>

10 I believe that Dr. Malkiel’s testimony should eliminate any  
11 disagreement on this issue.

12 **E. Rebuttal to Remaining Staff’s Criticisms of RRUI DCF Analysis**

13 **Q. PLEASE RESPOND TO MR. MANRIQUE’S TESTIMONY ON PAGE 40**  
14 **REGARDING YOUR USE OF A 5-YEAR TIME PERIOD TO MEASURE**  
15 **HISTORICAL GROWTH RATES.**

16 **A.** Mr. Manrique criticizes my use of 5 years of historical data to estimate growth. I  
17 can provide similar criticism of Mr. Manrique’s decision to use 10 years of  
18 historical data. I believe a 5-year historical time period is more appropriate  
19 because it includes one recent period of economic expansion and one period of  
20 economic recession. A 10-year period includes one period of economic expansion  
21 and two periods of economic recession. In my opinion, a 10-year period biases the  
22 growth rate downward as a result. Regardless of the time period, past growth rates  
23 may be misleading because past growth rates may reflect changes in relevant  
24 variables that may not be expected to continue in the future. Value Line reports

25 \_\_\_\_\_  
26 <sup>54</sup> See Rebuttal Testimony of Dr. Burton G. Malkiel, filed November 12, 2002 in Docket No. 2002-223-E,  
at 16-17 (emphasis added).

1 both 5- and 10-year historical growth in earnings, dividends, book value, cash flow,  
2 and revenues. Long-term analysts' forecasts are reported for 5-year periods. This  
3 information would not be reported unless it represented value to investors, whether  
4 for informational, forecasting, or analytical purposes.

5 **IV. REBUTTAL TO RUCO'S COST OF CAPITAL ANALYSIS, TESTIMONY**  
6 **AND RECOMMENDATIONS**

7 **A. Proxies Used to Develop Cost of Equity**

8 **Q. IS MR. RIGSBY'S SAMPLE GROUP DIFFERENT THAN THE**  
9 **COMPANY'S AND STAFF'S SAMPLE?**

10 A. Yes. Mr. Rigsby uses four publicly traded water utilities. He used the three largest  
11 water utilities out of the six water utilities that I have used, the same ones Staff  
12 typically uses when performing its cost of capital analysis. Mr. Rigsby also uses a  
13 fourth water utility, Southwest Water in his water proxy group.

14 **Q. DO YOU HAVE ANY CONCERNS REGARDING MR. RIGSBY'S WATER**  
15 **PROXY GROUP?**

16 A. Yes. Southwest Water is not comparable to RRUI or the other water utilities in  
17 Mr. Rigsby's sample group. It derives less than 50 percent of its revenues from  
18 regulated utility services, while the other three utilities on average derive nearly 89  
19 percent of revenues from regulated activities.<sup>55</sup> Further, Southwest Water is a  
20 financially distressed utility. Its returns for the past several years have been very  
21 low. For example, the equity returns for the years 2004, 2005, 2006, 2007, and  
22 2008 have been 3.6%, 5.0%, 5.6%, 3.2%, and 0.8%, respectively. Also, Value  
23 Line<sup>56</sup> reports that the Company has been delinquent in filing its SEC reports  
24 because of errors made in reporting depreciation rates of assets gained through

25 <sup>55</sup> Based on information contained in AUS Utility Reports (January 2010).

26 <sup>56</sup> Value Line Ratings and Reports, October 23, 2009.

1 acquisitions and accounting issues for revenues and related costs for water and  
2 sewer taps. These mistakes have skewed year-over-year results. Value Line also  
3 reports that the Company's dividends have been reduced from \$0.24 to \$0.01  
4 which indicates severe cash flow problems. These problems are reflected in Value  
5 Line's financial strength rating of C++. The other three utilities in Mr. Rigsby's  
6 water proxy group have financial strength rating of B+. In short, Southwest Gas  
7 should not be used to estimate the cost of equity.

8 **Q. DID MR. RIGSBY INCLUDE SOUTHWEST WATER IN HIS WATER**  
9 **UTILITY SAMPLE IN ESTIMATING THE COST OF EQUITY IN**  
10 **ARIZONA WATER COMPANY'S PENDING RATE CASE?**

11 A. No. In that case, Mr. Rigsby testified that he excluded Southwest Water because  
12 Value Line has suspended all projections and estimates for that utility due to  
13 accounting and financial statement reporting errors.<sup>57</sup>

14 **Q. DOES MR. RIGSBY ALSO USE GAS DISTRIBUTION COMPANIES TO**  
15 **DEVELOP HIS ESTIMATE OF THE COST OF EQUITY?**

16 A. Yes, he uses 10 natural gas companies. However, the sample gas utilities are less  
17 risky and therefore not comparable to water utilities. His sample water companies,  
18 for example, have an average beta of 0.83, while his sample gas companies have an  
19 average beta of just 0.67.<sup>58</sup> That means that the equity cost for the water utility  
20 sample is greater than the gas utilities sample, based on their relative riskiness.  
21 Even though the water utility sample has more systematic risk than the gas utility  
22 sample, Mr. Rigsby assumes that the gas utilities and water utility have the same  
23 systematic risk and are directly comparable. They are not.

24  
25 <sup>57</sup> Direct Testimony on Cost of Capital of William A. Rigsby, filed June 12, 2009 in Docket No. W-  
01445A-08-0440, at 19.

26 <sup>58</sup> See RUCO Schedule WAR-7, page 1 of 2.

1 Q. CAN GAS UTILITIES BE USED TO ESTIMATE RRUI'S COST OF  
2 EQUITY?

3 A. Yes, but it is only fair and proper to use gas companies if the results produced by  
4 the DCF and CAPM models are adjusted upward to reflect the water utilities'  
5 additional risk. Mr. Rigsby made no such adjustment.

6 Q. HAS THIS ISSUE EVER COME UP BEFORE?

7 A. Yes. In several prior cases, water utilities presented evidence of the cost of equity  
8 using financial data for a similar group of publicly traded gas companies, which at  
9 that time had a higher average beta than the water utility sample. In rejecting this  
10 evidence, the Commission adopted Staff's argument that because the water utility  
11 sample had a lower average beta than the gas utility sample, the cost of equity for  
12 the water utility should be lower.<sup>59</sup>

13 For example, in Arizona Water Company's Eastern Group rate case, Staff  
14 determined, based on an analysis using the CAPM, that the cost of equity for the  
15 sample gas utility group was approximately 100 basis points higher than the water  
16 utility sample group based on the average betas for each industry proxy.<sup>60</sup> The  
17 water utility sample had an average beta of 0.59, while the gas utility sample had  
18 an average beta of 0.69. Therefore, Staff's cost of capital witness in that case,  
19 Mr. Joel Reiker, testified that its estimate of the gas utilities' cost of equity "would  
20 require a *significant downward adjustment*" to make the two industry groups  
21 comparable in terms of market risk.<sup>61</sup> Here, in contrast, a significant upward

22  
23 <sup>59</sup> Decision No. 66849 at 21; *see also Arizona-American Water Company*, Decision No. 67093 (June 30,  
2004) at 27.

24 <sup>60</sup> Staff estimated that the cost of equity for the gas utilities was 10.4% using the CAPM, while the cost of  
25 equity for the water utilities was 9.4% – a difference of 100 basis points. *See* Direct Testimony of Joel M.  
26 Reiker, filed July 8, 2003 in Docket No. W-01445A-02-0619 ("Reiker Dt."), at Schedule JMR-7 and JMR-  
18.

<sup>61</sup> Reiker Dt. at 26 (*italics original*). *See also* Decision No. 66849 at 21.

1 adjustment to the gas utility sample's average cost of equity is necessary to make  
2 the gas utility sample comparable to RUCO's water utility sample.

3 **Q. CAN YOU QUANTIFY THE ADJUSTMENT NEEDED IN THIS CASE TO**  
4 **MAKE THE GAS UTILITIES SAMPLE COMPARABLE TO THE WATER**  
5 **UTILITIES SAMPLE?**

6 A. Yes. By averaging the results of his equity cost estimate for the water utility  
7 sample with his equity cost estimate for the gas utility sample, Mr. Rigsby has  
8 depressed the cost of equity estimates. For example, the average of Mr. Rigsby's  
9 CAPM estimates for the water companies and gas companies are 6.51 percent and  
10 5.69 percent, respectively. This is an 82 basis point difference, which reflects the  
11 relative riskiness of the two sample groups.

12 **Q. HOW WOULD YOU FACTOR IN THE DIFFERENCE IN RISK**  
13 **INDICATED BY THE AVERAGE BETA OF EACH UTILITY GROUP IF**  
14 **YOU WERE TO USE THE GAS UTILITIES?**

15 A. By using the CAPM, as Staff did in the Arizona Water Company case. As I  
16 explained above, the difference between the results produced by Mr. Rigsby's  
17 CAPM model is 82 basis points. Because of the method used by Mr. Rigsby to  
18 implement the CAPM, however, 82 basis points understates the required  
19 adjustment to properly reflect the gas utilities' lower investment risk. If my  
20 method and inputs are used instead, similar to the method used in the  
21 aforementioned Arizona Water Eastern Group case, the risk differential is 120  
22 basis points, calculated as follows:

	<u>Rf</u>		<u>Beta</u>		<u>Rp</u>		<u>K</u>
24	Historic MRP	5.2%	+	0.67	X	6.5%	= 9.6%
25	Current MRP	5.2%	+	0.67	X	13.1%	= <u>14.0%</u>

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	<u>Rf</u>	<u>Beta</u>	<u>Rp</u>	<u>K</u>
Average Gas Utility Sample				<u>11.8%</u>
Average Water Utility Sample <sup>62</sup>				<u>13.0%</u>
<b>Difference/Risk Adjustment</b>				<b>1.2%</b>

Given this difference, it is clearly inappropriate to simply average the gas utilities' equity cost with the water utilities' equity cost, as Mr. Rigsby has done. This error assumes that an average gas utility has the same investment risk as an average water utility, which is simply not the case at the present time. As a result, Mr. Rigsby's use of gas utilities depresses the cost of equity for RRUI.

**Q. ARE THERE ANY OTHER INDICATIONS, BASED ON RUCO'S GAS UTILITY SAMPLE, THAT RRUI'S COST OF EQUITY IS CONSIDERABLY HIGHER THAN THE RECOMMENDATIONS OF RUCO AND STAFF?**

A. Yes. The Commission recently authorized a 10.0 percent return on equity for Southwest Gas Corporation.<sup>63</sup> Moreover, in August, Staff recommended a 10.0 percent return on equity in the pending rate case for UNS Gas.<sup>64</sup> That case went to hearing last August, and should be decided very shortly. The water utility sample group has significantly more market risk than the gas utility sample group, and therefore has a higher cost of equity. The indicated cost of equity for RRUI, based on the Commission's recent decision for Southwest Gas and Staff's recommendation in the UNS Gas rate case, is 11.2 percent (10% + 1.2%, as shown above). That equity cost is substantially higher than the cost on equity produced by

<sup>62</sup> See Rebuttal Schedule D-4.13.

<sup>63</sup> *Southwest Gas Corporation*, Decision No. 70665 (Dec. 24, 2008).

<sup>64</sup> Surrebuttal Testimony of David C. Parcell, filed July 29, 2009 in Docket No. G-04204A-08-0571.

1 Mr. Rigsby's models, 7.9 percent, or the 9.0 percent equity return he has  
2 recommended for RRUI. Again, it is apparent that something is wrong with the  
3 methods and inputs Mr. Rigsby has used in this case.

4 **B. Criticisms of RUCO's Implementation of the CAPM**

5 **Q. WHAT OTHER CONCERNS DO YOU HAVE WITH RESPECT TO**  
6 **MR. RIGBY'S CAPM ANALYSIS?**

7 A. I have five other concerns with respect to Mr. Rigsby's CAPM analysis. First,  
8 Mr. Rigsby employs a geometric average in calculating the market risk premium in  
9 his CAPM. His choice to use geometric average depresses his cost of equity  
10 estimate downward. As various finance experts have explained, an arithmetic  
11 average is the correct approach to use in estimating the cost of capital.<sup>65</sup> In fact,  
12 the CAPM was developed on the premise of expected returns being averages and  
13 risk being measured with the standard deviation. As Dr. Morin states:

14 Since the [standard deviation] is estimated around the  
15 arithmetic average, and not the geometric average, it is logical  
16 to stay with arithmetic averages to estimate the market risk  
17 premium. In fact, annual returns are uncorrelated over time,  
18 and the objective is to estimate the market risk premium for  
19 the next year, the arithmetic average is the best unbiased  
20 estimate of the premium.<sup>66</sup>

21 My **Exhibit TJB-COC-RB3** is an excerpt from Dr. Roger Morin's textbook on  
22 regulatory finance, which provides a detailed discussion of this issue.<sup>67</sup> Dr. Morin  
23 cites several academic studies that explain what the arithmetic average is and why  
24 it's the correct average to adopt when relying on past data. The conclusion of the

24 <sup>65</sup> Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance* 156-157 (7th ed. 2003);  
25 Morin, *supra* at 156-157; *Ibbotson SBBI 2009 Valuation Yearbook* 59-62.

25 <sup>66</sup> *Morin, supra*, at 157-157.

26 <sup>67</sup> *Morin* at 133-43.

1 financial experts is that while the geometric mean is useful in comparing what  
2 happened in the past, it should not be used to determine estimates of expected  
3 future returns, future growth rates, or market risk premiums.

4 **Q. WHAT IS YOUR SECOND CONCERN?**

5 A. Second, Mr. Rigsby incorrectly uses the U.S. Treasury total returns rather than  
6 income returns. As I explained in my direct testimony, the market risk premium is  
7 calculated by subtracting the risk-free rate from the market return.<sup>68</sup> As shown on  
8 Schedule WAR-7, at page 2, attached to Mr. Rigsby's direct testimony, the total  
9 return used to calculate the market risk premium was 5.6 percent. This was the  
10 average total return on an intermediate-term Treasury (1926-2008) as published in  
11 the *2009 Ibbotson SBBI Valuation Edition Yearbook* (Table 2-1). By contrast, the  
12 average income return for an intermediate-term Treasury security was 4.7 percent.

13 The reason that an average income return must be used, rather than the  
14 average total return, is very simple. The CAPM is a risk premium methodology  
15 that is based on the premise that an investor expects to earn a return equal to the  
16 return on a risk-free investment, plus a premium for assuming additional risk that is  
17 proportional to the security's market risk (i.e., its beta). U.S. Treasuries are  
18 commonly used as a proxy for the risk-free rate because they are backed by the  
19 United States government, effectively eliminating default risk. The income return  
20 is the portion of the total return that results from the bond's periodic cash flow, i.e.,  
21 the interest payments. The income return provides an unbiased estimate of the  
22 riskless rate of return because an investor can hold the Treasury security to  
23 maturity and receive fixed interest payments with no capital loss or capital gain. If  
24 the total return on a Treasury security is used instead, additional risk is injected

25  
26 <sup>68</sup> Bourassa COC Dt. at 29.

1 into the CAPM estimate, which is inconsistent with treating the security as a  
2 riskless asset.

3 As explained by *Ibbotson*:

4 Another point to keep in mind when calculating the equity  
5 risk premium is that the income return on the appropriate-  
6 horizon Treasury security, rather than the total return, is used  
7 in the calculation. The total return is comprised of three  
8 return components: the income return, the capital appreciation  
9 return, and the reinvestment return. The income return is  
10 defined as the portion of the total return that results from a  
11 periodic cash flow or, in this case, the bond coupon payment.  
12 The capital appreciation return results from the price change  
13 of a bond over a specific period. Bond prices generally  
14 change in reaction to unexpected fluctuations in yields.  
15 Reinvestment return is the return on a given month's  
16 investment income when reinvested into the same asset class  
17 in the subsequent months of the year. The income return is  
18 thus used in the estimation of the equity risk premium  
19 because it represents the truly riskless portion of the return.<sup>69</sup>

20 As a consequence of incorrectly using U.S. Treasury total returns as well as  
21 geometric average, RUCO's CAPM estimate dramatically understates the cost of  
22 equity for the water utility sample. If an intermediate-term Treasury security is  
23 used as the proxy for the risk-free rate of return, the market risk premium would  
24 increase from 6.1 percent to 6.9 percent using the conceptually correct arithmetic  
25 averages.

26 Third, Mr. Rigsby incorrectly uses a 5-year U.S. Treasury rate as his risk-  
free rate. This depresses Mr. Rigsby's CAPM cost of equity estimates. Use of a  
short-term treasury rate is conceptually incorrect. As Dr. Morin states:

At the conceptual level, because common stock is a long-term  
investment and because cash flows to investors in the form of  
dividends last indefinitely, the yield on very long-term  
government bonds, namely the 30-year Treasury bonds, is the  
best measure of the risk free rate for use in the CAPM and  
risk premium methods. The expected stock return is based

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<sup>69</sup> *Ibbotson* at 75-76.

1 upon long-term cash flows, regardless of an individual's  
2 holding period. Utility asset investments generally have long-  
3 term useful lives and should be correspondingly matched with  
4 longer-term maturity financing instruments. Moreover, short-  
term Treasury bill yields reflect the impact of factors different  
from those influencing the yields on longer term securities  
such as common stock.<sup>70</sup>

5 Currently, the difference in yields between a 5-year U.S. Treasury and a 30-year  
6 U.S. Treasury is over 100 basis points.

7 **Q. WHAT ARE THE FACTORS THAT MAKE USE OF SHORTER TERM**  
8 **RATES DIFFERENT?**

9 A. According to Dr. Morin, "short-term rates are volatile, fluctuate widely, and are  
10 subject to more random disturbances than long-term rates leading to volatile and  
11 unreliable equity returns."<sup>71</sup> He goes on to state that "on grounds of stability and  
12 consistency, the yields on long-term Treasury bonds match more closely with  
13 expected common stock returns."<sup>72</sup> For example, the Federal Reserve recently  
14 announced that it will continue to hold interest rates down to support economic  
15 recovery, resulting in extremely low short- and intermediate-term Treasury rates –  
16 precisely the type of manipulation that Dr. Morin warns of in his text on regulatory  
17 finance, quoted above.<sup>73</sup>

18 **Q. WHAT IS THE FOURTH PROBLEM WITH MR. RIGSBY'S CAPM**  
19 **ESTIMATES?**

20 A. Mr. Rigsby has ignored current market risk. This Commission has consistently  
21 approved the use of a current market risk premium in implementing the CAPM in  
22 water and wastewater utility rate cases. For example, in Chaparral City Water  
23

24 <sup>70</sup> Morin at 151-152.

25 <sup>71</sup> *Id.* at 152.

26 <sup>72</sup> *Id.*

<sup>73</sup> *See, e.g.*, "Federal Reserve holds rates steady," Yahoo Finance (January 27, 2010).

1 Company's 2005 rate case,<sup>74</sup> the Commission adopted Staff's recommended cost of  
2 equity, which used an historic market risk premium and a current market risk  
3 premium in implementing the CAPM.<sup>75</sup> In this case, Mr. Manrique has developed  
4 his CAPM estimate using a current market risk premium.<sup>76</sup> Ignoring current  
5 market risk, RUCO has relied exclusively on incorrectly calculated historic market  
6 risk premiums.

7 Changes in the current market risk premium have been a significant factor in  
8 the cost of equity authorized by the Commission for water and wastewater utilities.  
9 In Arizona Water Company's Eastern Group case, filed in 2002, Staff computed a  
10 current market risk premium of 13.1 percent in its CAPM estimate, and relied on  
11 that market risk premium in estimating a cost of equity of 9.2 percent, using the  
12 same six sample water utilities.<sup>77</sup> At that time, the country was in the midst of a  
13 recession, and, according to Staff, interest rates had fallen to the lowest levels since  
14 the 1950s.<sup>78</sup> Moreover, the average beta of Staff's water utility sample group was  
15 only 0.59 at that time, indicating that investment risk for the water utility industry  
16 was low relative to the market.<sup>79</sup>

17 Two years later, Arizona Water Company filed a rate case for its Western  
18 Group systems. Interest rates had increased from the levels in 2003, and the  
19 average beta of the Staff's sample utilities had increased as well, indicating greater  
20 investment risk. However, Staff's cost of equity estimate was virtually identical to  
21

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22 <sup>74</sup> Decision No. 68176.

23 <sup>75</sup> See Direct Testimony of Alejandro Ramirez, filed March 22, 2005 in Docket No. W-02113A-04-0616;  
Surrebuttal Testimony of Alejandro Ramirez, filed May 5, 2005 in Docket No. W-02113A-04-0616.

24 <sup>76</sup> Manrique Dt. at 29 and Schedule JMC-3.

25 <sup>77</sup> Decision No. 66849 at 21; see also Reiker Dt. at 24-25.

26 <sup>78</sup> See Reiker Dt. at 5.

<sup>79</sup> See *Id.* at 23; see also Decision No. 66849 at 20.

1 the Eastern Group case, 9.1 percent.<sup>80</sup> The primary reason was that Staff's current  
2 market risk premium had dropped from 13.1 percent to 7.8 percent.<sup>81</sup> The  
3 Commission, in adopting Staff's CAPM estimate, relied on this change, explaining  
4 that "while interest rates have gone up, the cost of equity for the market as a whole  
5 has decreased, while the cost of equity for utilities has remained relatively  
6 stable."<sup>82</sup>

7 Even more recently, in Black Mountain Sewer Corporation's rate case, the  
8 Commission relied on a further decline in the current market risk premium to  
9 support Staff's recommended 9.6 percent cost of equity.<sup>83</sup> In that case, interest  
10 rates and the average beta of the sample group were even higher than 2003 levels,  
11 and while the result produced by Staff's models was higher, the increase was not as  
12 large as would be expected.<sup>84</sup> The reason was that the current market risk premium  
13 had decreased to only 5.7 percent, reducing the result produced by the CAPM.  
14 Thus, while interest rates increased and the investment risk of the water utility  
15 sample had increased, Staff explained that those increases were offset by a decline  
16 in the current market risk premium, indicating that the overall risk of the market  
17 had declined.<sup>85</sup>

18 As these decisions show, not only has the Commission consistently  
19 considered the current market risk premium, but changes in the current market risk

20 <sup>80</sup> Surrebuttal Testimony of Alejandro Ramirez, filed May 25, 2005 in Docket No. W-01445A-04-0650, at  
Schedule AXR-8.

21 <sup>81</sup> *Id.*

22 <sup>82</sup> *Arizona Water Company (Western Group)*, Decision No. 68302 (Nov. 14, 2005).

23 <sup>83</sup> Decision No. 69164.

24 <sup>84</sup> In the Black Mountain case, the intermediate-term Treasury used by Staff in its CAPM was 4.8 percent,  
while the average beta of Staff's sample group was 0.74. Surrebuttal Testimony of Pedro M. Chaves, filed  
25 May 4, 2006 in Docket No. SW-02361A-05-0657 ("Chaves Sb."), at Schedule PMC-2. In Arizona  
Water's Eastern Group case, in contrast, the intermediate-term Treasury used by Staff in its CAPM was  
3.3 percent, while the average beta of Staff's sample group was 0.59. Reiker Dt. at Schedule JMR-7.

26 <sup>85</sup> Decision No. 69164 at 25-26.

1 premium have had a major impact on the cost of equity, offsetting changes in  
2 interest rates and water utility betas in recent cases. Even Mr. Rigsby  
3 acknowledged the importance of considering current market conditions in  
4 determining the cost of equity:

5 Consideration of the economic environment is necessary  
6 because trends in interest rates, present and projected levels  
7 of inflation, and the overall state of the U.S. economy  
8 determine the rate of return that investors earn on their  
9 invested funds. Each of these factors represent potential risks  
10 that must be weighed when estimating the cost of equity  
11 capital for a regulated utility and are, most often, the same  
12 factors considered by individuals who are also investing in  
13 non-regulated entities.<sup>86</sup>

14 In light of the current volatility in the financial markets, the failure to  
15 consider current market risk grossly distorts the CAPM result. As previously  
16 stated, Staff normally utilizes the current market risk premium in its CAPM  
17 estimate, and Mr. Manrique has done so again in this case. Consequently, RUCO's  
18 use of two historic market risk premiums (one of which is conceptually wrong for  
19 the reasons given previously) without considering the impact of current market risk  
20 on investor expectations invalidates RUCO's cost of equity estimate.

21 **Q. WHAT IS YOUR FIFTH CONCERN WITH MR. RIGSBY'S CAPM**  
22 **ANALYSIS?**

23 **A.** Fifth, and perhaps most importantly, three out of four of Mr. Rigsby's CAPM  
24 estimates (one for water and two for the gas utilities), as well as his overall CAPM  
25 result, are at or below the current cost of Baa investment grade bonds. The current  
26 cost of investment grade bonds in 6.2 percent.<sup>87</sup> The following are the results of  
Mr. Rigsby's CAPM as shown on WAR-1, page 3 of 3:

Geometric mean CAPM estimate - water companies 5.72%

<sup>86</sup> Rigsby Dt. at 38-39.

<sup>87</sup> Federal Reserve, January 15, 2010.

1	Arithmetic mean CAPM estimate - water companies	7.29%
2	Geometric mean CAPM estimate - gas companies	5.05%
3	Arithmetic mean CAPM estimate - gas companies	<u>6.32%</u>
4	Overall CAPM result	6.10%

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A simple reality check should have caused Mr. Rigsby to question his inputs to the CAPM. This further illustrates that RUCO's methods are not only biased downward, but should not be used.

**C. Criticisms of RUCO's Use of Hypothetical Capital Structure**

**Q. WHY DOES MR. RIGSBY RECOMMEND A HYPOTHETICAL CAPITAL STRUCTURE?**

A. Mr. Rigsby explains that his hypothetical capital structure is intended to account for RRUI's lower financial risk as compared to his sample of publicly traded water companies.<sup>88</sup> His sample water utilities had approximately 51.4 percent debt and 48.6 percent equity.<sup>89</sup> He advocates use of a 40 percent debt and 60 percent equity rather than a 51.4 percent debt and 48.6 percent equity because he believes that the higher level of equity in his hypothetical capital structure will compensate the Company's shareholder for any perceived higher levels of business risk.<sup>90</sup> In reality, Mr. Rigsby's hypothetical capital structure in and of itself increases the risk to investors, and no amount of manipulation of the percentages of debt and equity can compensate for that risk.

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<sup>88</sup> Rigsby Dt at 55.

<sup>89</sup> *Id.* at 54.

<sup>90</sup> *Id.* at 55.

1 **Q. PLEASE EXPLAIN WHAT YOU MEAN, MR. BOURASSA.**

2 A. Put bluntly, the use of a hypothetical capital structure is confiscatory. By  
3 recommending a capital structure that assumes a higher amount of debt for rate  
4 making than actually exists, Mr. Rigsby effectively turns the investor's equity  
5 investment into debt and then provides a return on that equity investment equal to  
6 only 6.26 percent, which is Mr. Rigsby's proposed hypothetical debt cost.

7 **Q. BUT DOESN'T MR. RIGSBY PROPOSE A HYPOTHETICAL CAPITAL**  
8 **STRUCTURE TO ACCOUNT FOR THE DIFFERENCE IN FINANCIAL**  
9 **RISK BETWEEN RRUI AND HIS WATER UTILITY SAMPLE GROUP?**

10 A. Yes. And Mr. Rigsby ultimately recommends a cost of equity of 9.0 percent, even  
11 though the average result produced by his models is 7.9 percent. By virtue of the  
12 hypothetical capital structure, however, Mr. Rigsby actually recommends an equity  
13 return of 7.90 percent – Mr. Rigsby's WACC. This implies a downward financial  
14 risk adjustment of 110 basis points (9.0% – 7.9%).

15 **Q. IS A FINANCIAL RISK ADJUSTMENT OF 110 BASIS POINTS**  
16 **JUSTIFIED BASED ON MR. RIGSBY'S METHODS?**

17 A. No. Had Mr. Rigsby performed a Hamada-type financial risk adjustment using his  
18 CAPM methods, his financial risk adjustment would have been about 60 basis  
19 points. Subtracting this from his overall recommended cost of equity of 9.0  
20 percent would have put his final estimate at 8.40 percent. This is 50 basis points  
21 higher than his WACC of 7.90 percent.

22 **Q. DOESN'T THE COMMISSION NORMALLY RELY ON THE HAMADA**  
23 **FORMULA TO ESTIMATE FINANCIAL RISK?**

24 A. Yes. As I previously discussed, Mr. Manrique did so in this case, although he  
25 erroneously used book values rather than market values in the formula.

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1 **Q. WHAT ELSE IS WRONG WITH RUCO'S HYPOTHETICAL CAPITAL**  
2 **STRUCTURE?**

3 A. Another RUCO witness, Mr. Coley, imputes hypothetical interest expense of  
4 nearly \$250,000 through interest synchronization to RRUI. This fictional interest  
5 expense artificially lowers the Company's income taxes and produces a lower  
6 revenue requirement. Thus, the lower return on equity capital combined with the  
7 lower revenue requirement resulting from lower income taxes produce a 6.9  
8 percent return on equity. So, the implied financial risk adjustment based on  
9 Mr. Rigby's recommendations is actually a negative equity risk premium of 210  
10 basis points. (9.0% - 6.9%). In contrast, the Hamada formula produces a  
11 downward adjustment of 60 basis points.

12 In short, it is no secret why RUCO proposes a hypothetical capital structure  
13 as opposed to computing a financial risk adjustment using the Hamada formula.  
14 RUCO obtains a dramatically larger, downward adjustment to the cost of equity  
15 than can be justified using more straightforward methods like the Hamada formula,  
16 which does not suffer from the creation of hypothetical debt, a hypothetical debt  
17 cost, and a hypothetical interest deduction for computing income taxes. For this  
18 reason, Mr. Rigsby's recommended cost of equity of 9.0 percent is simply fiction.

19 **Q. HAS FINANCIAL RISK BEEN ACCOUNTED FOR BY USING A**  
20 **HYPOTHETICAL CAPITAL STRUCTURE IN PRIOR WATER AND**  
21 **WASTEWATER RATE CASES?**

22 A. To my knowledge, only in Gold Canyon Sewer Company's rate case, which is on  
23 appeal. In the last Black Mountain Sewer rate case, the Commission rejected the  
24 exact position advanced by RUCO in this case as "results oriented."<sup>91</sup> Instead, the  
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26 <sup>91</sup> See Decision No. 69164 at 20.

1 “typical” method, as RUCO recognized in this case, is by a direct adjustment to the  
2 cost of equity calculated using the Hamada formula.

3 **Q. ARE DOWNWARD ADJUSTMENTS TO THE COST OF EQUITY FOR**  
4 **FINANCIAL RISK COMMON?**

5 A. No. Whether an adjustment is made often depends on whether a reasonable return  
6 on equity is afforded to the utility based on consideration of all of the evidence in  
7 the case. In some cases, even though the Hamada formula indicates a higher  
8 downward adjustment, the adjustment to the cost of equity is less than what may be  
9 indicated by the Hamada formula. In the Bella Vista Water Company case,<sup>92</sup> for  
10 example, the Hamada formula indicated an 89 basis point reduction to the cost of  
11 equity which would have resulted in an 8.4 percent return on equity. However,  
12 Staff did not recommend an 8.4 percent cost of equity, but rather recommended the  
13 low end of its cost of equity range of 9.1 percent to 9.5 percent.<sup>93</sup> The Commission  
14 ultimately adopted Staff’s recommended 9.1 percent equity return.<sup>94</sup> In the prior  
15 Black Mountain Sewer Company rate case,<sup>95</sup> Staff’s cost of equity analysis  
16 produced an indicated cost of equity of 9.60 percent (before adjusting for financial  
17 risk). Staff’s calculated financial risk adjustment using the Hamada formula was  
18 50 basis points, but Staff did not recommend a downward adjustment in that case.<sup>96</sup>  
19 Ultimately, the Commission adopted a 9.6 percent return on equity.<sup>97</sup>  
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22 <sup>92</sup> *Bella Vista Water Company*, Decision No. 65350 (November 1, 2002).

23 <sup>93</sup> See Direct Testimony of Joel M. Reiker, filed April 29, 2002 in Docket No. W-02465A-01-0776, at 26-  
27.

24 <sup>94</sup> See Decision No. 65350 at 23.

25 <sup>95</sup> See Decision No. 69164.

26 <sup>96</sup> See Chaves Sb. at Schedule PMC-2.

<sup>97</sup> Decision No. 69164 at 27.

1           The bottom line is that adjustments for financial risk must be used  
2 cautiously. Consideration must always be given to whether the result is fair and  
3 reasonable under the circumstances. One reason for this is that cost of capital  
4 analyses are based on financial data for large, publicly traded water companies,  
5 which are not directly comparable to relatively small water and sewer utilities in  
6 Arizona.<sup>98</sup> There are also considerations regarding the requirements set forth in the  
7 *Hope* and *Bluefield* cases.

8 **Q. PLEASE COMMENT ON MR. RIGSBY'S HYPOTHETICAL COST OF**  
9 **DEBT.**

10 A. As already mentioned, Mr. Rigsby's hypothetical cost of debt, applicable to 40  
11 percent of his hypothetical capital structure, is 6.26 percent. He bases this debt  
12 cost on the average weighted cost of debt for the large, publicly traded water  
13 utilities in his water proxy group. As I previously discussed, those water utilities  
14 have, on average, net plant of \$1.47 billion and revenue of \$488 million.  
15 Moreover, because of their size and the fact that they issue debt in the public  
16 markets, these utilities have published bond ratings. Mr. Rigsby assumes that  
17 RRUI could raise debt capital at the same cost as these entities. I seriously doubt  
18 that it could, and note that Mr. Rigsby has presented no evidence to support his  
19 assumption.

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24 <sup>98</sup> RRUI has more zero cost capital in its capitalization than the large publicly traded water utilities. All  
25 things being equal, this results in a lower capital cost per dollar of plant-in service. As previously  
26 discussed, the higher proportions of zero cost capital do not come without risk to the Company. CIAC  
funded plant receives no recovery of depreciation in rates. This plant will have to eventually be replaced.  
Further, earnings are lower which means a lower earnings cushion to pay debt holders, absorb increases in  
operating expenses as well as lower cash flows available to make plant replacements.

1           **A.    Criticisms of RUCO's Implementation of the DCF**

2           **Q.    DO YOU HAVE ANY CONCERNS REGARDING MR. RIGSBY'S DCF**  
3           **ESTIMATES?**

4           A.    Yes. RUCO's method of estimating his growth rates is subjective and cannot be  
5           verified or replicated, in contrast to the methods I use. In his DCF model,  
6           Mr. Rigsby relies on projected sustainable growth in order to estimate the dividend  
7           growth rate. The difference, however, is that the key inputs necessary to estimate  
8           the internal or retention growth rate are not disclosed by Mr. Rigsby.

9           **Q.    WHAT ARE THOSE INPUTS?**

10          A.    Internal or retention growth is the expected growth in dividends due to the  
11          retention of earnings. Retention growth is dependent on the percentage of earnings  
12          retained (the retention ratio) and the expected return on common equity that is  
13          applied to the retained earnings. Thus, the internal growth rate formula is:

14                         Retention growth rate =  $br$

15                         Where:  $b$  = the retention ratio (1-dividend payout ratio)

16                                  $r$  = the expected return on common equity

17          The problem with Mr. Rigsby's implementation of this formula is that he does not  
18          disclose the retention ratio or the expected return on common equity used to  
19          calculate the retention growth rate. As a result, it is impossible to verify the  
20          accuracy of his calculation of internal growth ( $br$ ).

21                         Mr. Rigsby lists various sources of data,<sup>99</sup> and he also attaches various  
22          materials to his direct testimony. But there is no explanation of how any of these  
23          materials were actually used. This approach effectively allows Mr. Rigsby to  
24          simply select a growth rate that falls somewhere within a broad range and cannot  
25          be verified.

26                         <sup>99</sup> Rigsby Dt. at 25-30.

1 **Q. DO YOU HAVE ANY FURTHER COMMENTS?**

2 A. Yes. Notably, Mr. Rigsby's WACC, which is based upon a 40/60 debt/equity  
3 capital structure, a cost of debt of 6.2 percent and a cost of equity of 9.0 percent, is  
4 7.90 percent. The average of his DCF and CAPM results also happens to be 7.90  
5 percent.<sup>100</sup> I don't think this is simply a remarkable coincidence. Instead, I believe  
6 that Mr. Rigsby's recommendations are contrived and results oriented. As I  
7 previously testified, the Commission should reject this transparent attempt to  
8 reduce RRUI's equity return through capital structure manipulation and fictitious  
9 interest expense.

10 **Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY ON COST OF**  
11 **CAPITAL?**

12 A. Yes.

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<sup>100</sup> See RUCO Schedule WAR-1, page 1 of 3 and Schedule WAR-1, page 3 of 3.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(COST OF CAPITAL)**  
**February 1, 2010**

**Exhibit TJB-COC-RB1**

Application No.: 07-05-007  
Exhibit No.: \_\_\_\_\_  
Witness: Gary H. Hayes  
Date: August 28, 2007

Exhibit <u>46</u>
CPUC Proceeding <u>A-07-05-003 ATAL</u>
Sponsor/Witness <u>SDGE-07 HAYES</u>
Date Ident. <u>7/12/07</u> Recd. <u>7/17/07</u>
Michael J. Galvin Administrative Law Judge

Application No. 07-05-007  
Exhibit No. SDGE-5

SAN DIEGO GAS & ELECTRIC COMPANY  
PREPARED REBUTTAL TESTIMONY OF  
GARY H. HAYES

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

August 28, 2007

## Appendix B

### Analyst Growth-Forecast Research

This survey, prepared at the request of SDG&E by Dr. James H. Vander Weide, Research Professor of Finance and Economics at Duke University, summarizes nine articles that address whether analysts' growth forecasts are overly optimistic. Seven of the nine articles reviewed find no evidence that analysts' growth forecasts are overly optimistic. Two find evidence of optimism, but also conclude that optimism has been declining significantly over time. Of these two studies, one finds that analysts' forecasts for the S&P 500 are pessimistic for the last four years of the study. The summaries are listed in chronological order.

Crichfield, T., Thomas Dyckman and Josef Lakonishok (1978). "An evaluation of security analysts' forecasts." *The Accounting Review* 53(3): 651-668.

The authors study the ability of security analyst to provide unbiased estimates of earnings per share and compare analysts' forecasts to forecasts made using simple statistical models based on historical EPS data. Their study is based on data during the period 1967 - 1976 from the *Earnings Forecaster* published by Standard & Poor's, and the final sample consists of 46 firms. The authors conclude that the analysts perform well in terms of forecast accuracy when compared to the forecasts produced by five statistical models. Their tests also support the hypothesis that analysts predict EPS changes without significant systematic bias.

Elton, E. J., Martin J. Gruber and Mustafa N. Gultekin (1984). "Professional expectations: accuracy and diagnosis of errors." *Journal of Financial and Quantitative Analysis* 19(4): 351-363.

The authors examine five questions regarding analysts' EPS forecasts: (1) what is the size and pattern of analysts' errors; (2) what is the source of errors; (3) are some firms more difficult to predict than others; and (4) is there an association between errors in forecasts and divergence of analysts' estimates. The authors use the I/B/E/S database of earnings forecasts for a sample of 414 firms for the three years 1976 through 1978, and they compare the I/B/E/S forecasts to actual earnings for each of the next two years. The authors conclude that analysts were accurate in estimating the average level of growth in

earnings for all stocks in the sample. However, analysts did have greater divergence of opinion for some industries, and the diversion in analysts' opinions is positively related to forecast error.

Givoly, D., and Josef Lakonishok (1984). "Properties of analysts' forecasts of earnings: a review and analysis of the research." *Journal of Accounting Literature* 3: 119-148.

Givoly and Lakonishok review the status of the research on security analysts' forecasts up to 1984, and they conclude that: (1) the performance of analysts' forecasts is in general superior to that of statistical models, a result that is consistent with a rational market for forecasting services, where the higher costs of financial analysts' forecasts is compensated with better performance; and (2) financial analysts' forecasts incorporate the past history of realizations and predictions in an unbiased manner.

Brown, L. D. (1997). "Analyst forecasting errors: additional evidence." *Financial Analysts Journal* November/December: 81-88.

Using data from I/B/E/S for the period 1985 - 1996, Brown studies whether: (1) analysts' forecasts are optimistic; (2) potential optimistic bias is constant over time; and (3) analysts' forecasting errors are smaller for S&P 500 firms, firms with large market capitalization, firms with greater analyst following, and firms in particular industries. For the entire period, Brown finds that model and median values of analysts' forecast errors are zero, but mean errors are negative. He finds that the negative mean forecast error results from a relatively small number of large forecast errors, indicating that these errors are associated with large accounting write-offs for a small number of firms in certain years. In addition, he finds that: (1) the mean analyst forecast error decreases significantly over the period of his study; and (2) optimistic bias of mean forecasts for S&P 500 firms is significantly less than optimistic bias for all firms, and, indeed, analysts for S&P 500 firms are, on average, pessimistic for the years 1993 - 1996; (3) optimistic bias is less for large firms than for small firms; and (4) optimistic bias is less for firms in certain industries compared to other industries, with the best forecasts for the following industries: food and related products, transportation equipment, communications, and electric, gas, sanitary services.

Keane, M. P., and David E. Runkle (1998). "Are financial analysts' forecasts of corporate profits rational." *The Journal of Political Economy* 106(4): 768-805.

Keane and Runkle demonstrate that previous inferences regarding analyst optimism are strongly affected by correlation in analyst forecast errors across forecasts and firms and by unexpected accounting write-offs and special charges. They develop a new estimator of bias that gives correct statistical inference when forecast errors are correlated, and they show that previous studies' failure to account for correlation led to a conclusion that analysts are optimistic. Using an I/B/E/S database over the period 1983 - 1991, they also demonstrate that a correct test for analyst optimism leads to the conclusion that analysts are unbiased.

In addition to problems caused by correlation in analysts' earnings forecasts, the authors also address the problems caused by unanticipated accounting accruals. Similar to Abarbanell (2003), they demonstrate that statistical tests of optimism are distorted by discretionary special accounting charges in the forecast period. Failure to adjust for discretionary special accounting charges in the company sample under study distorts statistical results in the direction of favoring the conclusion of biased analysts' forecasts. The authors conclude that the evidence in their paper strongly supports the view that professional stock market analysts make rational forecasts of earnings per share for the companies they follow.

Abarbanell, J., and Reuven Lehavy (2003). "Biased forecasts or biased earnings? The role of reported earnings in explaining apparent bias and over/underreaction in analysts' earnings forecasts." *Journal of Accounting & Economics* 36: 105-146.

Abarbanell and Lehavy investigate whether the apparent bias in analysts' earnings forecasts that appears in some research studies is explained by large accounting write-offs and special charges made by a small number of sample firms. The Abarbanell/Lehavy study is based on a large database of consensus earnings forecasts provided by Zacks for the period 1985 – 1998. When Abarbanell/Lehavy examine the distribution of analysts' forecast errors over this time period, they find that the only statistical indication that supports the argument for analyst optimism is a fairly large negative mean forecast error. In contrast, the median error is zero, suggesting unbiased forecasts, while the percentage of positive errors is significantly greater than the percentage of negative errors (48 percent versus 40 percent), suggesting apparent analyst pessimism. Similar to Brown (1997), Abarbanell/Lehavy explain this phenomenon by observing that the left tail (the optimistic tail of the distribution) contains significantly more extreme errors of greater magnitude than the right tail (the pessimistic tail) of the distribution. Abarbanell/Lehavy's conclusion is supported by a correlation study that examines the relationship between extreme negative forecast errors with extreme negative unexpected accruals. The correlation study indicates a direct connection between the extreme errors in the left tail of the error distribution and unexpected accounting accruals. Once the effect of accounting accruals is removed the study, Abarbanell/Lehavy find that the mean forecast error becomes zero, indicating that there is no tendency for analysts' forecasts to be optimistic.

Ciccone, S. J. (2005). "Trends in analyst earnings forecast properties." *International Review of Financial Analysis* 14: 1-22.

Ciccone examines trends in analysts forecast dispersion, error, and optimism using First Call 120,022 quarterly observations from 1990 – 2001. He finds that analyst optimism declined significantly over the period of his study and that analysts' forecasts for profitable firms became pessimistic in the last several years of his study period. He concludes that analyst optimism is no longer an issue and that, "[i]f anything, analysts have a new concern: earnings pessimism for profit firms."

Clarke, J., Stephen P. Ferris, Narayanan Jayaraman, and Jinsoo Lee (2006). "Are analyst recommendations biased? Evidence from corporate bankruptcies." *Journal of Financial and Quantitative Analysis* 41(1): 169-196.

The authors test whether a bias exists in analysts' recommendations for firms that filed for bankruptcy in the period 1995 – 2001. Their database consists of a final set of 289 firms that filed for bankruptcy during this period and that have I/B/E/S analysts' forecasts. As a comparison sample, the authors identify a matching group of firms with the same SIC code and that have a similar likelihood of bankruptcy as measured by the Altman z-score. The authors test for optimism by comparing the analysts' recommendations for the companies in the bankrupt group to the matched sample of companies in the non-bankrupt group in five categories—strong buy, buy, hold, under-perform, and sell. They find that, on average, analysts' recommendations are significantly lower for the companies that eventually go bankrupt than for the matched companies that do not file for bankruptcy. From this comparison, the authors conclude that the hypothesis that analysts' recommendations are optimistic should be rejected.

Yang, R., and Yaw M. Mensah (2006). "The effect of the SEC's regulation fair disclosure on analyst forecast attributes." *Journal of Financial Regulation and Compliance* 14(2): 192-209.

Regulation fair disclosure ("Reg. FD"), issued on October 23, 2000, prohibits selective disclosure of material non-public information to financial analysts, institutional investors, and others prior to making it available to the general public. Before the implementation of Reg. FD, most conference calls with analysts were accessible only to certain analysts and institutional investors. The authors examine whether Reg. FD has influenced analysts' earnings forecast accuracy and forecast dispersion for companies that routinely conduct conference calls as well as for companies that do not conduct conference calls. Using I/B/E/S forecast data for the period October 1998 through September 2002 and 12,806 firm-quarter observations in pre-Reg FD period and 13,104 firm-quarter observations in the post-Reg FD period, the authors examine the descriptive statistics of analysts' forecast errors in the pre-Reg. FD and post-Reg. FD environments. They conclude that Reg. FD had little influence on analysts' forecast errors: the mean forecast error was approximately zero in both the pre-and post-Reg. FD periods.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(COST OF CAPITAL)**  
**February 1, 2010**

**Exhibit TJB-COC-RB2**



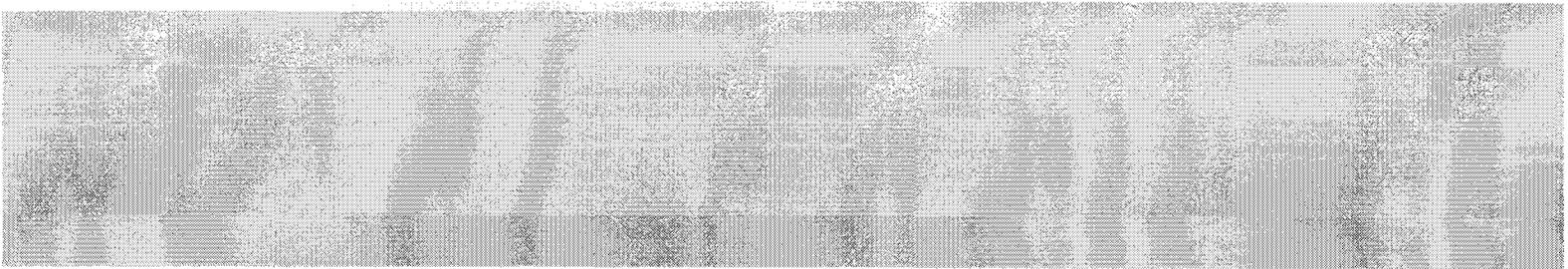
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**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(COST OF CAPITAL)**  
**February 1, 2010**

**Exhibit TJB-COC-RB3**

**NEW**  
**REGULATORY**  
**FINANCE**

**Roger A. Morin, PhD**



## **Appendix 4-A**

# **Arithmetic versus Geometric Means in Estimating the Cost of Capital**

The use of the arithmetic mean appears counter-intuitive at first glance, because we commonly use the geometric mean return to measure the average annual achieved return over some time period. For example, the long-term performance of a portfolio is frequently assessed using the geometric mean return.

But performance appraisal is one thing, and cost of capital estimation is another matter entirely. In estimating the cost of capital, the goal is to obtain the rate of return that investors expect, that is, a target rate of return. On average, investors expect to achieve their target return. This target expected return is in effect an arithmetic average. The achieved or retrospective return is the geometric average. In statistical parlance, the arithmetic average is the unbiased measure of the expected value of repeated observations of a random variable, not the geometric mean. This appendix formally illustrates that only arithmetic averages can be used as estimates of cost of capital, and that the geometric mean is not an appropriate measure of cost of capital.

The geometric mean answers the question of what constant return you would have had to achieve in each year to have your investment growth match the return achieved by the stock market. The arithmetic mean answers the question of what growth rate is the best estimate of the future amount of money that will be produced by continually reinvesting in the stock market. It is the rate of return which, compounded over multiple periods, gives the mean of the probability distribution of ending wealth.

While the geometric mean is the best estimate of performance over a long period of time, this does not contradict the statement that the arithmetic mean compounded over the number of years that an investment is held provides the best estimate of the ending wealth value of the investment. The reason is that an investment with uncertain returns will have a higher ending wealth value than an investment which simply earns (with certainty) its compound or geometric rate of return every year. In other words, more money, or terminal wealth, is gained by the occurrence of higher than expected returns than is lost by lower than expected returns.

In capital markets, where returns are a probability distribution, the answer that takes account of uncertainty, the arithmetic mean, is the correct one for estimating discount rates and the cost of capital.

While the geometric mean is appropriate when measuring performance over a long time period, it is incorrect when estimating a risk premium to compute the cost of capital.

**TABLE 4A-1**  
**GEOMETRIC VS. ARITHMETIC RETURNS**

	Stock A	Stock B
1996	50.0%	11.61%
1997	-54.7%	11.61%
1998	98.5%	11.61%
1999	42.2%	11.61%
2000	-32.3%	11.61%
2001	-39.2%	11.61%
2002	153.2%	11.61%
2003	-10.0%	11.61%
2004	38.9%	11.61%
2005	20.0%	11.61%
Standard Deviation	64.9%	0.0%
Arithmetic Mean	26.7%	11.6%
Geometric Mean	11.6%	11.6%

### Theory

The geometric mean measures the magnitude of the returns, as the investor starts with one portfolio and ends with another. It does not measure the variability of the journey, as does the arithmetic mean. The geometric mean is backward looking. There is no difference in the geometric mean of two stocks or portfolios, one of which is highly volatile and the other of which is absolutely stable. The arithmetic mean, on the other hand, is forward-looking in that it does impound the volatility of the stocks.

To illustrate, Table 4A-1 shows the historical returns of two stocks, the first one is highly volatile with a standard deviation of returns of 65% while the second one has a zero standard deviation. It makes no sense intuitively that the geometric mean is the correct measure of return, one that implies that both stocks are equally risky since they have the same geometric mean. No rational investor would consider the first stock equally as risky as the second stock. Every financial model to calculate the cost of capital recognizes that investors are risk-averse and avoid risk unless they are adequately compensated for undertaking it. It is more consistent to use the mean that fully impounds risk (arithmetic mean) than the one from which risk has been removed (geometric mean). In short, the arithmetic mean recognizes the uncertainty in the stock market while the geometric mean removes the uncertainty by smoothing over annual differences.

### Empirical Evidence

If both the geometric and arithmetic mean returns over the 1926–2004 data are regressed against the standard deviation of returns for the firms in the

deciles, the arithmetic mean outperforms the geometric mean in this statistical regression. Moreover, the constant of arithmetic mean regression matches the average Treasury bond rate and therefore makes economic sense while the constant for the geometric mean matches nothing in particular. This is simply because the geometric mean is stripped of volatility information and, as a result, does a poor job of forecasting returns based on volatility.

The following illustration is frequently invoked in defense of the geometric mean. Suppose that a stock's performance over a two-year period is representative of the probability distribution, doubling in one year ( $r_1 = 100\%$ ) and halving in the next ( $r_2 = -50\%$ ). The stock's price ends up exactly where it started, and the geometric average annual return over the two-year period,  $r_g$ , is zero:

$$\begin{aligned} 1 + r_g &= [(1 + r_1)(1 + r_2)]^{1/2} \\ &= [(1 + 1)(1 - .50)]^{1/2} = 1 \\ r_g &= 0 \end{aligned}$$

confirming that a zero year-by-year return would have replicated the total return earned on the stock. The expected annual future rate of return on the stock is not zero, however. It is the arithmetic average of 100% and -50%,  $(100 - 50)/2 = 25\%$ . There are two equally likely outcomes per dollar invested: either a gain of \$1 when  $r = 100\%$  or a loss of \$0.50 when  $r = -50\%$ . The expected profit is  $(\$1 - \$0.50)/2 = \$.25$  for a 25% expected rate of return. The profit in the good year more than offsets the loss in the bad year, despite the fact that the geometric return is zero. The arithmetic average return thus provides the best guide to expected future returns.

### What Academics Have to Say

Bodie, Kane, and Marcus (2005) cite:

Which is the superior measure of investment performance, the arithmetic average or the geometric average? The geometric average has considerable appeal because it represents the constant rate of return we would have needed to earn in each year to match actual performance over some past investment period. It is an excellent measure of *past* performance. However, if our focus is on future performance, then the arithmetic average is the statistic of interest because it is an unbiased estimate of the portfolio's expected future return (assuming, of course, that the expected return does not change over time). In contrast, because the geometric return over a sample period is always less than the arithmetic mean,

it constitutes a downward-biased estimator of the stock's expected return in any future year.

Again, the arithmetic average is the better guide to future performance.

Another way of stating the Bodie, Kane, Marcus argument in favor of the arithmetic mean is that it is the best estimate of the future value of the return distribution because it represents the expected value of the distribution. It is most useful for determining the central tendency of a distribution at a particular time, that is, for cross-sectional analysis. The geometric mean, on the other hand, is best suited for measuring an investment's compound rate of return over time, that is, for time-series analysis. This is the same argument made by Ibbotson Associates (2005) where it is shown, using probability theory, that future terminal wealth is given by compounding the arithmetic mean, and not the geometric mean. In other words, if we accept the past as prologue, the best estimate of a future year's return based on a random distribution of the prior years' returns is the arithmetic average. Statistically, it is our best guess for the holding-period return in a given year.

Brigham and Ehrhardt (2005) in their widely used corporate finance text point out that the arithmetic average is more consistent with CAPM theory, as one of its key underpinning assumptions is that investors are supposed to focus, in their portfolio decisions, upon returns in the next period and the standard deviation of this return. To the extent that this next period is one year, the preference for the arithmetic mean, which derives from a set of single one year period returns, follows. It is also noteworthy that one of the crucial assumptions inherent in the CAPM is that investors are single-period expected utility of terminal wealth maximizers who choose among alternative portfolios on the basis of each portfolio's expected return and standard deviation.

Brealey, Myers, and Allen (2006) in their leading graduate textbook in corporate finance opt strongly for the arithmetic mean. The authors illustrate the distinction between arithmetic and geometric averages and conclude that arithmetic averages are appropriate when estimating the cost of capital:

The proper uses of arithmetic and compound rates of return from past investments are often misunderstood. Therefore, we call a brief time-out for a clarifying example.

Suppose that the price of Big Oil's common stock is \$100. There is an equal chance that at the end of the year the stock will be worth \$90, \$110, or \$130. Therefore, the return could be -10 percent, +10 percent or +30 percent (we assume that Big Oil does not pay a dividend). The expected return is  $1/3(-10 + 10 + 30) = +10$  percent.

If we run the process in reverse and discount the expected cash flow by the expected rate of return, we obtain the value of Big Oil's stock:

$$PV = \frac{110}{1.10} = \$100$$

The expected return of 10 percent is therefore the correct rate at which to discount the expected cash flow from Big Oil's stock. It is also the opportunity cost of capital for investments which have the same degree of risk as Big Oil.

Now suppose that we observe the returns on Big Oil stock over a large number of years. If the odds are unchanged, the return will be  $-10$  percent in a third of the years,  $+10$  percent in a further third, and  $+30$  percent in the remaining years. The arithmetic average of these yearly returns is

$$\frac{-10 + 10 + 30}{3} = +10\%$$

Thus the arithmetic average of the returns correctly measures the opportunity cost of capital for investments of similar risk to Big Oil stock.

The average compound annual return on Big Oil stock would be

$$(.9 \times 1.1 \times 1.3)^{1/3} - 1 = .088, \text{ or } 8.8\%$$

less than the opportunity cost of capital. Investors would not be willing to invest in a project that offered an 8.8 percent expected return if they could get an expected return of 10 percent in the capital markets. The net present value of such a project would be

$$NPV = -100 + \frac{108.8}{1.1} = -1.1$$

Moral: If the cost of capital is estimated from historical returns or risk premiums, use arithmetic averages, not compound annual rates of return (geometric averages).

(Richard A. Brealey, Stewart C. Myers, and Paul Allen, *Principles of Corporate Finance*, 8th Edition, Irwin McGraw-Hill, 2006, page 156–7.)

The widely cited Ibbotson Associates publication also contains a detailed and rigorous discussion of the impropriety of using geometric averages in estimating the cost of capital.<sup>12</sup>

<sup>12</sup> Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition*, page 75.

The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

The argument for using the arithmetic average is quite straightforward. In looking at projected cash flows, the equity risk premium that should be employed is the equity risk premium that is expected to actually be incurred over the future time periods.

The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean) of its past values.

In their widely publicized research on the market risk premium, Dimson, Marsh and Staunton (2002) state

The arithmetic mean of a sequence of different returns is always larger than the geometric mean. To see this, consider equally likely returns of +25 and -20 percent. Their arithmetic mean is 2½ percent, since  $(25 - 20)/2 = 2½$ . Their geometric mean is zero, since  $(1 + 25/100) \times (1 - 20/100) - 1 = 0$ . But which mean is the right one for discounting risky expected future cash flows? For forward-looking decisions, the arithmetic mean is the appropriate measure.

To verify that the arithmetic mean is the correct choice, we can use the 2½ percent required return to value the investment we just described. A \$1 stake would offer equal probabilities of receiving back \$1.25 or \$0.80. To value this, we discount the cash flows at the arithmetic mean rate of 2½ percent. The present values are respectively  $\$1.25/1.015 = \$1.22$  and  $\$0.80/1.025 = \$0.78$ , each with equal probability, so the value is  $\$1.22 \times \frac{1}{2} + \$0.80 \times \frac{1}{2} = \$1.00$ . If there were a sequence of equally likely returns of +25 and -20 percent, the geometric mean return will eventually converge on zero. The 2½ percent forward-looking arithmetic mean is required to compensate for the year-to-year volatility of returns.

Lastly, on the practical side, Bruner, Eades, Harris, and Higgins (1998) found that 71% of the texts and tradebooks in their extensive survey of practice supported use of an arithmetic mean for estimation of the cost of equity.

## Mean Reversion Argument

Some academics have argued that if stock returns were expected to revert to a trend, this would suggest the use of a geometric mean since the geometric mean is, by definition, an estimate of a smoothed long-run trend increment. These same academics have argued that the historical estimate of the market risk premium (“MRP”) is upward-biased by the buoyant performance of the stock market prior to 2002, and because of the extraordinary and unusually high realized MRPs in those years, investors expect a return to lower MRPs in the future, bringing the average MPR to a more “normal” level.

The presence or absence of mean reversion is an empirical issue. The empirical findings are weak and highly contradictory; the empirical evidence is inconclusive and unconvincing, certainly not enough to support the “mean reversion” hypothesis. The weight of the empirical evidence on this issue is that the more sophisticated tests of mean reversion in the MRP demonstrate that the realized MRP over the last 75 years or so was almost perfectly free of mean reversion, and had no statistically identifiable time trend. It is also noteworthy that most of these studies were performed prior to the stock market’s debacle in 2000–2002, years of extraordinary and unusually low realized MRPs. The stock market’s dismal performance of 2000–2002 has certainly taken the wind out of the mean reversion school’s sails.

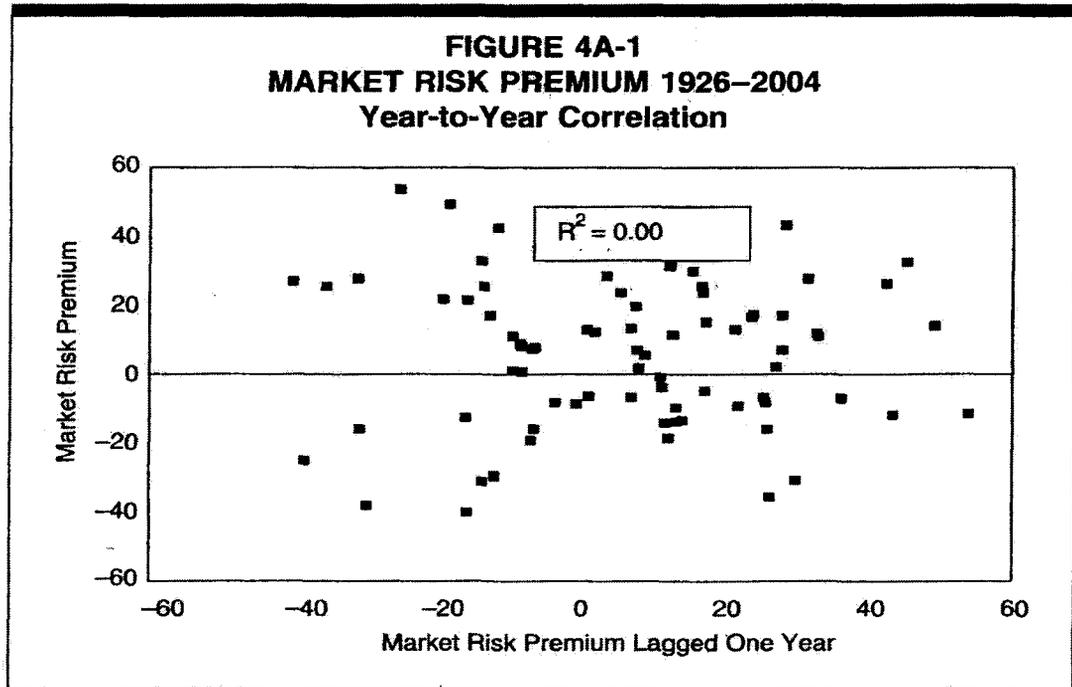
An examination of historical MRPs reveals that the MRP is random with no observable pattern. To the extent that the estimated historical equity risk premium follows what is known in statistics as a random walk, one should expect the equity risk premium to remain at its historical mean. Therefore, the best estimate of the future risk premium is the historical mean.

Ibbotson Associates (2005) find no evidence that the market price of risk or the amount of risk in common stocks has changed over time:

Our own empirical evidence suggests that the yearly difference between the stock market total return and the U.S. Treasury bond income return in any particular year is random . . . there is no discernable pattern in the realized equity risk premium. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook, Valuation Edition*, pages 74–75)

In statistical parlance, there is no significant serial correlation in successive annual market risk premiums, that is, no trend. Ibbotson Associates go on to state that it is reasonable to assume that these quantities will remain stable in the future (*Id.*):

The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean)



of its past values. (Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2004 Yearbook, Valuation Edition*, page 75)

Nowhere is it suggested by Ibbotson Associates that the market risk premium has declined over time.

Because there is little evidence that the MRP has changed over time, it is reasonable to assume that these quantities will remain stable in the future. Figure 4A-1 shows the relationship, or the lack of relationship, between year-to-year MRPs reported in the Ibbotson Associates Valuation Yearbook, 2005 edition, for the 1926–2004 period. The relationship is virtually absent, as indicated by the low  $R^2$  of zero between successive MRPs. In other words, there is no history in successive MRPs as indicated by the zero serial correlation coefficient.

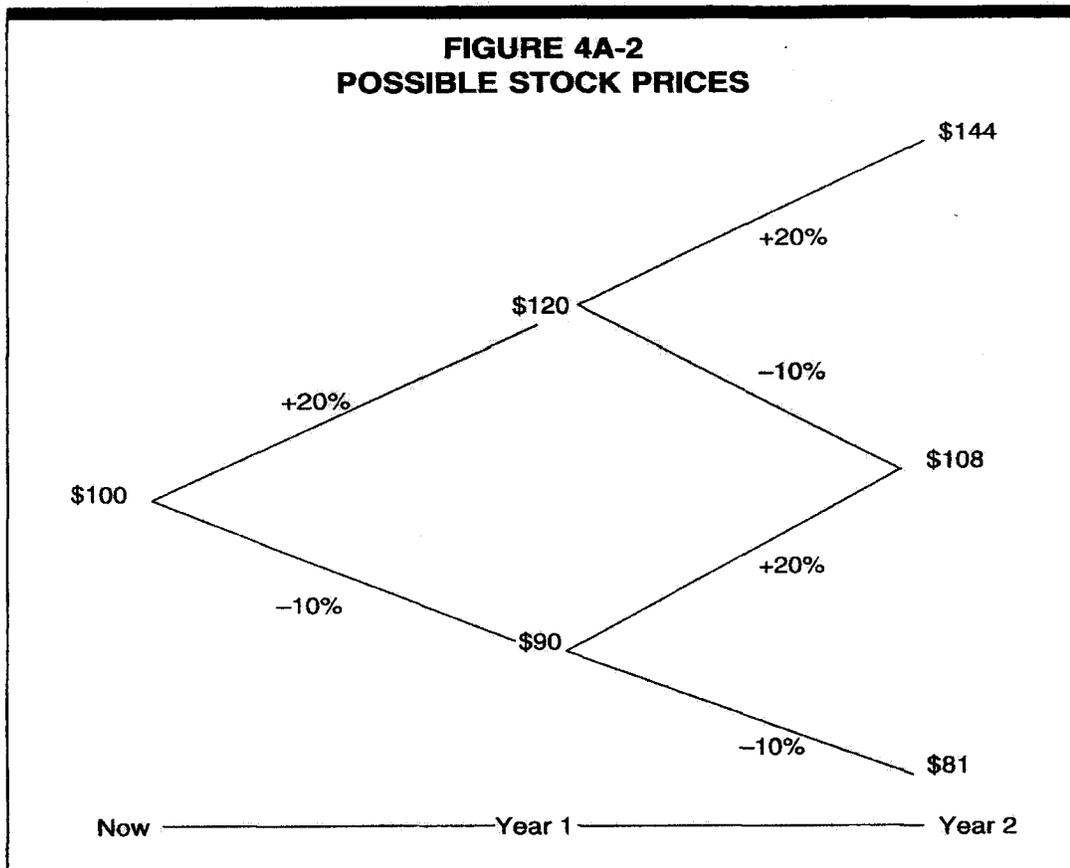
In short, the determination of the cost of capital with the CAPM requires an unbiased estimate of the expected annual return. The expected arithmetic return provides the appropriate measure for this purpose.

### Formal Demonstration

This section shows why arithmetic rather than geometric means should be used for forecasting, discounting, and estimating the cost of capital.<sup>13</sup> By

<sup>13</sup> This section is adapted from a similar treatments and demonstration in Brealey, Myers, and Allen (2006) and Ibbotson Associates (2005).

**FIGURE 4A-2  
POSSIBLE STOCK PRICES**



definition, the cost of equity capital is the annual discount rate that equates the discounted value of expected future cash flows (from dividends and the sale of the stock at the end of the investor's investment horizon) to the current market price of a share in the firm. The discount rate that equates the discounted value of future expected dividends and the end of period expected stock price to the current stock price is a prospective arithmetic, rather than a prospective geometric, mean rate of return. Since future dividends and stock prices cannot be predicted with certainty, the "expected" annual rate of return that investors require is an average "target" percentage rate around which the actual, year-by-year returns will vary. This target rate is, in effect, an arithmetic average.

A numerical illustration will clarify this important point. Consider a non-dividend paying stock trading for \$100 which has, in every year, an equal chance of appreciating by 20% or declining by 10%. Thus, after one year, there is an equal chance that the stock's price will be \$120 and an equal chance the price will be \$90. Figure 4A-2 presents all possible eventualities after two periods have elapsed (the rates of return are presented at the end of the lines in the diagram).

The possible stock prices are shown in the following table.

<b>TABLE 4A-2 STOCK PRICES AFTER TWO PERIODS</b>	
Price	Chance
\$144	1 chance in 4
\$108	2 chances in 4
\$ 81	1 chance in 4

The expected future stock price after two periods is then:

$$1/4 (\$144) + 2/4 (\$108) + 1/4 (\$81) = \$110.25$$

The cost of equity capital is calculated as the discount rate that equates the present value of the future expected cash flows to the current stock price. In the present simple example, the only cash flow is the gain from selling the stock after two periods have elapsed. Thus, using the expected stock price of \$110.25 calculated above, the expected rate of return is that  $r$ , which solves the following equation:

$$\text{Current Stock Price} = \frac{\text{Expected Stock Price}}{(1 + r)^2}$$

The factor  $(1 + r)^2$  discounts the expected stock price to the present. Substituting the numerical values, we have:

$$\begin{aligned} \$100 &= \frac{\$110.25}{(1+r)^2} \\ r &= 5\% \end{aligned}$$

Thus, the cost of equity capital is 5%. This 5% cost of equity capital is equal to the prospective arithmetic mean rate of return, which is the probability-weighted average single period rate of return on equity. Since in every period there is an equal chance that the stock's return will be 20% or -10%, the probability-weighted average is:

$$1/2 (20\%) + 1/2 (-10\%) = 5\%$$

However, the 5% cost of equity capital is not equal to the prospective geometric mean rate of return, which is a probability-weighted average of the possible compounded rates of return over the two periods. Now consider the prospective geometric mean rate of return. Table 4A-3 shows the possible compounded rates of return over two periods, and the probability of each.

Thus, the prospective geometric mean rate of return is:

$$1/4 (20\%) + 2/4 (3.92\%) + 1/4 (-10\%) = 4.46\%$$

**TABLE 4A-3**  
**STOCK PRICES AND RETURNS AFTER TWO PERIODS**

Price	Chance	Compounded Return
\$144	1 chance in 4	20.00%
\$108	2 chances in 4	3.92%
\$ 81	1 chance in 4	-10.00%

This return is not equal to the 5% cost of equity capital.

The example can easily be extended to include the case of a dividend-paying company and will reach the same conclusion: the implied discount rate calculated in the DCF model is an expected arithmetic rather than an expected geometric mean rate of return.

The foregoing analysis shows that it is erroneous to use a prospective multi-year geometric mean rate of return as a "target" rate of return for each year of the period. If, for example, investors currently require an expected future rate of return on an investment of 13% each year, then 13% is the appropriate annual rate of return on equity for ratemaking purposes. Consequently, in using a risk premium approach for the purposes of rate of return regulation, the single-year annual required rate of return should be estimated using arithmetic mean risk premiums.

It should be pointed out that the use of the arithmetic mean does not imply an investment holding period of one year. Rather, it is premised on the uncertainty with respect to each year's return during the holding period, however many years that may be. When computing the arithmetic average of historic annual returns in order to calculate the average return (expected value of the return), every achieved return outcome is one possible future outcome for each year the security will be held. Each historic return has an equal probability of occurring during each year of the holding period. The resulting expected value of the risk premium is the arithmetic average of all of the past premiums considered, regardless of the length of the expected holding period.

**Rio Rico Utilities, Inc.**  
**Docket No. WS-02676A-09-0957**

**THOMAS J. BOURASSA**  
**REBUTTAL TESTIMONY**  
**(COST OF CAPITAL)**  
**February 1, 2010**

# **SCHEDULES**

**Rio Rico Utilities**

Test Year Ended December 31, 2008  
Summary of Cost of Capital

Exhibit  
Rebuttal Schedule D-1  
Page 1  
Witness: Bourassa

Line No.	Item of Capital	End of Test Year				End of Projected Year			
		Dollar Amount	Percent of Total	(e) Cost Rate	Weighted Cost	Dollar Amount	Percent of Total	(e) Cost Rate	Weighted Cost
1	Long-Term Debt	-	0.00%	0.00%	0.00%	-	0.00%	0.00%	0.00%
3	Stockholder's Equity <sup>1</sup>	11,476,445	100.00%	11.70%	11.70%	12,800,386	100.00%	11.70%	11.70%
5	Totals	\$ 11,476,445	100.00%		11.70%	\$ 12,800,386	100.00%		11.70%

<sup>1</sup> Adjustments to equity

9	Accumm. depreciation adjustments (Water and Wastewater) per Direct	\$ (2,013,481)
10	CIAC adjustments (Water and Wastewater) per Direct	\$ (387,774)
11	Deferred Income Tax Adjustments (Water and Wastewater) per Direct	\$ 1,101,805
12	Deferred Income Tax Adjustments (Water and Wastewater) per Rebuttal	\$ (655,867)

SUPPORTING SCHEDULES:

- Rebuttal D-2
- Rebuttal D-3
- Rebuttal D-4

RECAP SCHEDULES:

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Rio Rico Utilities - Water Division  
 Test Year Ended December 31, 2008  
 Cost of Long Term Debt

Exhibit  
 Rebuttal Schedule D-2  
 Page 1  
 Witness: Bourassa

Line No.	Description of Debt	End of Test Year			End of Projected Year				
		Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost	Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost
1		-	-	0.00%	0.00%	-	-	0.00%	0.00%
2		-	-	0.00%	0.00%	-	-	0.00%	0.00%
3		-	-	0.00%	0.00%	-	-	0.00%	0.00%
4		-	-	0.00%	0.00%	-	-	0.00%	0.00%
5		-	-	0.00%	0.00%	-	-	0.00%	0.00%
6		-	-	0.00%	0.00%	-	-	0.00%	0.00%
7		-	-	0.00%	0.00%	-	-	0.00%	0.00%
8		-	-	0.00%	0.00%	-	-	0.00%	0.00%
9		-	-	0.00%	0.00%	-	-	0.00%	0.00%
10		-	-	0.00%	0.00%	-	-	0.00%	0.00%
11		-	-	0.00%	0.00%	-	-	0.00%	0.00%
12		-	-	0.00%	0.00%	-	-	0.00%	0.00%
13	Totals	\$ -	\$ -		0.00%	\$ -	-	0.00%	0.00%

SUPPORTING SCHEDULES:

14  
 15  
 16  
 17  
 18  
 19  
 20

**Rio Rico Utilities - Water Division**  
Test Year Ended December 31, 2008  
Cost of Preferred Stock

Exhibit  
Rebuttal Schedule D-3  
Page 1  
Witness: Bourassa

Line No.	Description of Issue	<u>End of Test Year</u>			<u>End of Projected Year</u>		
		<u>Shares Outstanding</u>	<u>Amount</u>	<u>Dividend Requirement</u>	<u>Shares Outstanding</u>	<u>Amount</u>	<u>Dividend Requirement</u>
1							
2							
3	NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING						
4							
5							
6							
7							
8							
9							
10							
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12							
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14							
15							
16							
17	<u>SUPPORTING SCHEDULES:</u>				<u>RECAP SCHEDULES:</u>		
18					Rebuttal D-1		
19							
20							

**Rio Rico Utilities - Water Division**  
Test Year Ended December 31, 2008  
Cost of Common Equity

Exhibit  
Rebuttal Schedule D-4  
Page 1  
Witness: Bourassa

Line

No.

- 1
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The Company is proposing a cost of common equity of 11.70% .

SUPPORTING SCHEDULES:

RECAP SCHEDULES:  
Rebuttal D-1

Rico Rio Utilities, Inc.  
Summary of Results

Exhibit  
Rebuttal Schedule D-4.1

Line No.	Method	Low	High	Midpoint
1				
2				
3				
4				
5				
6	Range DCF Constant Growth Estimates <sup>1</sup>	10.8%	12.2%	11.5%
7				
8	Range of CAPM Estimates <sup>2</sup>	10.3%	15.6%	13.0%
9				
10				
11	Average of DCF and CAPM midpoint estimates	10.6%	13.9%	12.2%
12				
13				
14	Financial Risk Adjustment <sup>3</sup>	-1.0%	-1.0%	-1.0%
15				
16	Specific Company Risk Premium <sup>4</sup>	0.5%	0.5%	0.5%
17				
18	Indicated Cost of Equity	10.1%	13.4%	11.7%
19				
20				
21				
22	Recommended Cost of Equity			11.7%
23				
24				
25				
26				
27				
28				
29				

<sup>1</sup> See Rebuttal Schedule D-4-8

<sup>2</sup> See Rebuttal Schedule D-4.12

<sup>3</sup> See Rebuttal Schedule D-4.17

<sup>4</sup> See testimony.

**Rico Rio Utilities, Inc.**  
**Selected Characteristics of Sample Group of Water Utilities**

**Exhibit**  
**Rebuttal Schedule D-4.2**

Line No.	Company <sup>1</sup>	% Water Revenues	Operating Revenues (millions)	Net Plant (millions)	S&P Bond Rating	Moody's Bond Rating
1	1. American States	75%	\$ 358.9	\$ 959.8	A	A2
2	2. Aqua America	93%	\$ 662.5	\$ 2,695.6	AA-	NR
3	3. California Water	98%	\$ 442.6	\$ 751.2	NR	NR
4	4. Connecticut Water	90%	\$ 68.1	\$ 368.4	AAA	NR
5	5. Middlesex	89%	\$ 90.7	\$ 328.6	NR	NR
6	6. SJW Corp.	95%	\$ 217.1	\$ 517.9	NR	NR
7	Average	90%	\$ 306.7	\$ 936.9		
8	Rico Rio Utilities, Inc.	50%	\$ 3.7	\$ 30.4	NR	NR
9	(as of December 31, 2008)					

<sup>1</sup>AUS Utility Reports (December 2009).

Rico Rio Utilities, Inc.  
Capital Structures

Exhibit  
Rebuttal Schedule D-4.3

No.	Company	Book Value <sup>1</sup>		Market Value <sup>1</sup>	
		Long-Term Debt	Common Equity	Long-Term Debt	Common Equity
1	1. American States	46.2%	53.8%	30.9%	69.1%
2	2. Aqua America	54.1%	45.9%	34.4%	65.6%
3	3. California Water	41.7%	58.3%	26.9%	73.1%
4	4. Connecticut Water	47.0%	53.0%	31.3%	68.7%
5	5. Middlesex	46.2%	53.8%	33.9%	66.1%
6	6. SJW Corp.	46.0%	54.0%	34.1%	65.9%
10	Average	46.9%	53.1%	31.9%	68.1%
13	Rico Rio Utilities, Inc. (as of December 31, 2008)	0.0%	100.0%	N/A	N/A

<sup>1</sup> Value Line Analyzer Data (January 15, 2010)

No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

**Exhibit  
Rebuttal Schedule D-4.4**

**Rico Rio Utilities, Inc.  
Comparisons of Past and Future Estimates of Growth**

Line No.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
1							
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28							

Five-year historical average annual changes

Company	Price <sup>1</sup>	Value <sup>2</sup>	EPS <sup>2</sup>	DPS <sup>2</sup>	Average Col.1-4	Average Future Growth <sup>3</sup>	Average of Future and Historical Growth Col.5-6
1. American States	7.35%	4.88%	15.71%	2.90%	7.71%	6.13%	6.92%
2. Aqua America	4.57%	7.33%	5.21%	8.29%	6.35%	8.78%	7.57%
3. California Water	11.74%	5.67%	10.22%	0.88%	7.13%	7.33%	7.23%
4. Connecticut Water	0.19%	3.07%	0.45%	1.18%	1.22%	11.00%	6.11%
5. Middlesex	Negative	5.76%	8.16%	1.51%	5.14%	8.50%	6.82%
6. SJW Corp.	12.49%	8.16%	4.37%	6.02%	7.76%	10.00%	8.88%
GROUP AVERAGE	7.27%	5.81%	7.36%	3.46%	5.89%	8.62%	7.25%
GROUP MEDIAN	7.35%	5.72%	6.69%	2.20%	6.74%	8.64%	7.07%

<sup>1</sup> Average of changes in year-end stock prices ending in 2008. Data from Yahoo Finance website.

<sup>2</sup> Data derived from Value Line Investment Survey and/or 10K Reports for period 2004 to 2008.

<sup>4</sup> See Rebuttal Schedule D-4.6.

**Rico Rio Utilities, Inc.**  
**Comparisons of Past and Future Estimates of Growth**

**Exhibit**  
**Rebuttal Schedule D-4.5**

Line No.	[1]	[2]	[3]	[4]	[5]	[6]	[7]
3	<b>Ten-year historical average annual changes</b>						
4	<u>Company</u>	<u>Book</u>	<u>EPS<sup>2</sup></u>	<u>DPS<sup>2</sup></u>	<u>Average Col 1-4</u>	<u>Average Future Growth<sup>3</sup></u>	<u>Average of Future and Historical Growth Col 5-6</u>
5	1. American States	<u>Price<sup>1</sup></u> 8.16%	<u>Value<sup>2</sup></u> 4.35%	<u>EPS<sup>2</sup></u> 5.93%	<u>DPS<sup>2</sup></u> 1.80%	<u>Average Col 1-4</u> 5.06%	<u>Average of Future and Historical Growth Col 5-6</u> 5.59%
6	2. Aqua America	6.43%	8.43%	6.29%	7.22%	7.09%	7.94%
7	3. California Water	7.01%	3.54%	4.38%	0.90%	3.96%	5.64%
8	4. Connecticut Water	4.94%	3.53%	1.45%	1.22%	2.78%	6.89%
9	5. Middlesex	6.18%	3.98%	3.85%	1.91%	3.98%	6.24%
10	6. SJW Corp.	9.47%	5.29%	5.40%	5.63%	6.44%	8.22%
11							
12							
13							
14							
15	GROUP AVERAGE	7.03%	4.85%	4.55%	3.11%	4.89%	6.75%
16	GROUP MEDIAN	6.72%	4.16%	4.89%	1.86%	4.52%	6.57%
17							
18							
19							
20							
21							
22							
23							
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26							
27							
28							

<sup>1</sup> Average of changes in year-end stock prices ending in 2008. Data from Yahoo Finance website.

<sup>2</sup> Data derived from Value Line Investment Survey and/or 10K Reports for period 1999 to 2008.

<sup>4</sup> See Rebuttal Schedule D-4.6.

**Rico Rio Utilities, Inc.**  
**Analysts Forecasts of Earnings Per Share Growth**

**Exhibit**  
**Rebuttal Schedule D-4.6**

Line No.	[1]	[2]	[3]	[4]	[5]
	<b>ESTIMATES OF EARNINGS GROWTH</b>				
	<u>Company</u>	<u>Zacks</u> <sup>1</sup>	<u>Morningstar</u> <sup>1</sup>	<u>Yahoo</u> <sup>1</sup>	<u>Value Line</u> <sup>1</sup>
1	American States	4.00%	7.00%	4.00%	9.50%
2	Aqua America	8.00%	8.80%	8.33%	10.00%
3	California Water	7.00%	7.30%	6.00%	9.00%
4	Connecticut Water	9.00%		15.00%	9.00%
5	Middlesex	9.00%	8.00%	8.00%	9.00%
6	SJW Corp.		10.00%	10.00%	10.00%
7					Average Growth (G) (Cols 1-4) <sup>2</sup>
8					6.13%
9					8.78%
10					7.33%
11					11.00%
12					8.50%
13					10.00%
14					
15					8.62%
16					8.64%
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					

<sup>1</sup> Data as of January 15, 2010

<sup>2</sup> Where no data available, average of other utilities assumed to estimate for utility.

**Rico Rio Utilities, Inc.**  
**Current Dividend Yields for Water Utility Sample Group**

**Exhibit**  
**Rebuttal Schedule D-4.7**

Line No.	Company	Current Stock Price (P <sub>0</sub> ) <sup>1</sup>	Current Dividend (D <sub>0</sub> ) <sup>1</sup>	Current Dividend Yield (D <sub>0</sub> /P <sub>0</sub> ) <sup>1</sup>	Average Annual Dividend Yield (D <sub>0</sub> /P <sub>0</sub> ) <sup>1,2</sup>
1	1. American States	\$ 34.49	\$ 1.02	2.96%	2.86%
2	2. Aqua America	\$ 17.59	\$ 0.54	3.07%	2.80%
3	3. California Water	\$ 37.70	\$ 1.18	3.13%	3.12%
4	4. Connecticut Water	\$ 23.78	\$ 0.89	3.74%	3.58%
5	5. Middlesex	\$ 17.18	\$ 0.71	4.14%	3.99%
6	6. SJW Corp.	\$ 22.96	\$ 0.69	3.00%	2.27%
7	Average			3.34%	3.10%
8	Median			3.10%	2.99%

<sup>1</sup> Value Line Analyzer Data. Stock prices as of January 15, 2010.

<sup>2</sup> Average Annual Dividend is dividends declared per share for a year divided by the average annual price of the stock in the same year, expressed as a percentage. For comparison purposes only.

Line No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

**Rico Rio Utilities, Inc.**  
**Discounted Cash Flow Analysis**  
**DCF Constant Growth**

**Exhibit**  
**Rebuttal Schedule D-4.8**

Line No.	[1] Average Spot Dividend Yield ( $D_0/P_0$ ) <sup>1</sup>	[2] Expected Dividend Yield ( $D_1/P_0$ ) <sup>2</sup>	[3] Growth (g)	[4] Indicated Cost of Equity k=Div Yld + g (Cols 2+3)
1				
2				
3				
4				
5				
6				
7				
8	DCF - Past and Future Growth	3.34%	7.25% <sup>3</sup>	10.8%
9				
10	DCF - Future Growth	3.34%	8.62% <sup>4</sup>	12.2%
11				
12				
13				
14				
15				
16				
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19				
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27				
28				

1 Spot Dividend Yield =  $D_0/P_0$ . See Rebuttal Schedule D-4.7.

2 Expected Dividend Yield =  $D_1/P_0 = D_0/P_0 * (1+g)$ .

3 Growth rate (g). Average of Past and Future Growth. See Rebuttal Schedule D-4.4, column 7

3 Growth rate (g). Average of Analyst Estimates Future Growth. See Rebuttal Schedule D-4.6.

**Rico Rio Utilities, Inc.  
Market Betas**

**Exhibit  
Rebuttal Schedule D-4.9**

Line No.	Company	Beta ( $\beta$ ) <sup>1</sup>
1	American States	0.80
2	Aqua America	0.65
3	California Water	0.75
4	Connecticut Water	0.80
5	Middlesex	0.80
6	SJW Corp.	0.95
7		
8		
9	Average	<b>0.79</b>
10		
11		
12		
13		
14		
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17		
18		
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20		

<sup>1</sup> Value Line Investment Analyzer data (January 15, 2010)

Note: Beta is a relative measure of the historical sensitivity of a stock's price to overall fluctuations in the New York Stock Exchange Composite Index. A Beta of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The "Beta coefficient" is derived from a regression analysis of the relationship between weekly percent-age changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are adjusted for their long-term tendency to converge toward 1.00.

**Rico Rio Utilities, Inc.**  
**Forecasts of Long-Term Interest Rates**  
**2011-2012**

**Exhibit**  
**Rebuttal Schedule D-4.10**

Line No.	Description	<u>2011</u>	<u>2012</u>	<u>Average</u>
1				
2				
3				
4				
5				
6	Blue Chip Consensus Forecasts <sup>1</sup>	5.1%	5.5%	5.3%
7				
8	Value Line <sup>2</sup>	5.0%	5.1%	5.1%
9				
10	Average			5.2%
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

<sup>1</sup> December 2009 Blue Chip Financial Forecasts consensus forecast of 30 Year U.S. Treasury

<sup>2</sup> Value Line Quarterly forecast, dated November 27, 2009 20 year U.S. Treasury

**Exhibit  
Rebuttal Schedule D-4.11**

**Rico Rio Utilities, Inc.  
Computation of Current Market Risk Premium**

Line No.	Dividend Yield ( $D_t/P_t$ ) <sup>1</sup>	Expected Dividend Yield ( $D_t/P_t$ ) <sup>2</sup>	Growth (g) <sup>3</sup>	Expected Market Return (k)	Monthly Average 30 Year Treasury Rate <sup>4</sup>	Market Risk Premium (MRP)
1	2.67%	2.67%	+ 15.19%	= 17.86%	= 4.33%	= 13.53%
2	2.74%	3.19%	+ 16.47%	= 19.66%	= 4.52%	= 15.14%
3	2.85%	3.35%	+ 17.64%	= 20.99%	= 4.39%	= 16.60%
4	2.69%	3.11%	+ 15.73%	= 18.84%	= 4.44%	= 14.40%
5	2.73%	3.15%	+ 15.51%	= 18.66%	= 4.60%	= 14.06%
6	3.13%	3.71%	+ 18.51%	= 22.22%	= 4.69%	= 17.53%
7	3.15%	3.74%	+ 18.61%	= 22.35%	= 4.57%	= 17.78%
8	3.06%	3.59%	+ 17.08%	= 20.67%	= 4.50%	= 16.17%
9	3.07%	3.66%	+ 19.30%	= 22.96%	= 4.27%	= 18.69%
10	4.31%	5.63%	+ 30.53%	= 36.16%	= 4.17%	= 31.99%
11	4.97%	6.71%	+ 35.02%	= 41.73%	= 4.00%	= 37.73%
12	4.44%	5.76%	+ 29.62%	= 35.38%	= 2.87%	= 32.51%
13	4.86%	6.32%	+ 30.02%	= 36.34%	= 3.13%	= 33.21%
14	5.50%	7.43%	+ 35.13%	= 42.56%	= 3.59%	= 38.97%
15	4.21%	5.36%	+ 27.33%	= 32.69%	= 3.64%	= 29.05%
16	3.66%	4.47%	+ 22.05%	= 26.52%	= 3.76%	= 22.76%
17	3.46%	4.14%	+ 19.67%	= 23.81%	= 4.23%	= 19.58%
18	3.25%	3.87%	+ 19.16%	= 23.03%	= 4.52%	= 18.51%
19	2.90%	3.37%	+ 16.31%	= 19.68%	= 4.41%	= 15.27%
20	2.82%	3.22%	+ 14.21%	= 17.43%	= 4.37%	= 13.06%
21	2.80%	3.20%	+ 14.32%	= 17.52%	= 4.19%	= 13.33%
22	2.75%	3.15%	+ 14.49%	= 17.64%	= 4.19%	= 13.45%
23	2.68%	3.05%	+ 13.88%	= 16.93%	= 4.31%	= 12.62%
24						
25						
26						
27						
28						13.13%
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44						
45						

<sup>1</sup> Average Current Dividend Yield ( $D_t/P_t$ ) of dividend paying stocks. Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

<sup>2</sup> Expected Dividend Yield ( $D_t/P_t$ ) equals average current dividend yield ( $D_t/P_t$ ) times one plus growth rate(g).

<sup>3</sup> Average 3-5 year price appreciation (annualized). Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

<sup>4</sup> Monthly average 30 year U.S. Treasury. Federal Reserve.

**Rico Rio Utilities, Inc.**  
**Capital Asset Pricing Model (CAPM)**

**Exhibit**  
**Rebuttal Schedule D-4.12**

Line No.	Rf <sup>1</sup>	+	beta <sup>3</sup>	x	Rp	=	k
3	5.2%	+	0.79	x	6.5%	=	10.3%
5	5.2%	+	0.79	x	13.1%	=	15.6%
7	Average						
8	13.0%						

<sup>1</sup> Forecasts of long-term treasury yields. See Rebuttal Schedule D-4.10.  
<sup>2</sup> Value Line Investment Analyzer data. See Rebuttal Schedule D.4.9.  
<sup>3</sup> Historical Market Risk Premium from (Rp) MorningStar SBBI 2009 Valuation Yearbook Table A-1 Long-Horizon ERP 1926-2008  
<sup>4</sup> Computed using DCF constant growth method to determine current market return on Value Line 1700 stocks and CAPM with beta of 1.0 to compute Current Market Risk Premium (Rp). See Rebuttal Schedule D-4.11.

Line No. 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
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Rico Rio Utilities, Inc.  
Financial Risk Computation

Exhibit  
Rebuttal Schedule D-4.13

Line No.									
1	<b>CAPM</b>								
2		Rf	+	$\beta$	x	(Rp)	=	k	
3	Historical Market Risk Premium	5.2%	1	0.79	2	6.5%	3	10.3%	
4	Current Market Risk Premium	5.2%	1	0.79	2	13.1%	4	15.6%	
5									
6	Average							13.0%	
7									
8									
9	<b>CAPM Relevered Beta</b>								
10		Rf	+	$\beta$	x	(Rp)	=	k	
11	Historical Market Risk Premium	5.2%	1	0.69	5	6.5%	3	9.7%	
12	Current Market Risk Premium	5.2%	1	0.69	5	13.1%	4	14.3%	
13									
14	Average							12.0%	
15									
16	Financial Risk Adjustment							<b>-1.0%</b>	
17									
18									
19									
20									
21									
22									
23									
24									
25									

<sup>1</sup> Forecast of long-term treasury yields. See Rebuttal Schedule D-4.10  
<sup>2</sup> Value Line Investment Analyzer data. See Rebuttal Schedule D-4.9  
<sup>3</sup> Historical Market Risk Premium from (Rp) MorningStar SBBT 2009 Valuation Yearbook Table A-1 Long-Horizon ERP 1926-2008  
<sup>4</sup> Computed using DCF constant growth method to determine current market return on Value Line 1700 stocks and CAPM with beta of 1.0 to compute Current Market Risk Premium (Rp). See Table 14.  
<sup>5</sup> Relevered beta found on Table 19.

Rico Rio Utilities, Inc.  
Financial Risk Computation  
Unlevered Beta

Exhibit  
Rebuttal Schedule D-4.14

Line No.	Company	VL Beta $\beta_L^1$	Raw Beta $\text{Raw } \beta_U^2$	Tax Rate $t^3$	MV Debt $\frac{D^4}{E^4}$	MV Equity $\frac{E^4}{E^4}$	Unlevered Raw Beta $\beta_{UL}^5$
1	American States	0.80	0.67	37.8%	30.9%	69.1%	0.52
2	Aqua America	0.65	0.45	39.7%	34.4%	65.6%	0.34
3	California Water	0.75	0.60	37.7%	26.9%	73.1%	0.49
4	Connecticut Water	0.80	0.67	27.2%	31.3%	68.7%	0.50
5	Middlesex	0.80	0.67	33.2%	33.9%	66.1%	0.50
6	SJW Corp.	0.95	0.90	38.1%	34.1%	65.9%	0.68
11							
12							
13	Sample Water Utilities	0.79	0.66	35.6%	31.9%	68.1%	0.51
14							
15							
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29							
30							

<sup>1</sup> Value Line Investment Analyzer data. See Rebuttal Schedule D-4.9.

<sup>2</sup> Value Line uses the historical data of the stock, but assumes that a security's beta moves toward the market average over time. The formula is as follows:

Adjusted beta = .35 + (.67) \* Raw beta

<sup>3</sup> Raw Beta = (VL beta - .33)/(.67)

<sup>4</sup> Effective tax rates for year ended December 31, 2008.

<sup>5</sup> See Rebuttal Schedule D-4.3.

<sup>6</sup> Raw  $\beta_U = \text{Raw } \beta_U / (1 + (1-t) * D/E)$

Rico Rio Utilities, Inc.  
Financial Risk Computation  
Relevered Beta

Exhibit  
Rebuttal Schedule D-4.15

Line No.	Unlevered Raw Beta $\beta_{UL}^1$	MV Book Debt $BD^2$	MV Equity Capital $EC^2$	Tax Rate $t^3$	Relevered Raw Beta $\beta_{RL} = \beta_U (1 + (1-t)BD/EC)$	Adjusted Relevered Beta $\beta_{RL}$
1	0.51	0.0%	100.0%	38.60%	0.51	0.69

Rico Rio Utilities, Inc.

<sup>1</sup> Unlevered Beta from Table 18.

<sup>2</sup> Capital Structure of Company (As of December 31, 2008)

	BV	MV	%
	(in Millions)	(in Millions)	
17	\$ -	\$ -	0.0%
18	-	-	0.0%
19	12,132	22,984	100.0%
20	\$ 12,132	\$ 22,984	100.0%

(a) Current market-to-book ratio of sample water utilities. See work papers.

<sup>3</sup> Current Tax rate based on test year ending 2008. See Rebuttal Schedule D-1.

21  
22  
23  
24  
25  
26

Rico Rio Utilities, Inc.  
Size Premium<sup>1</sup>

Exhibit  
Rebuttal Schedule D-4.16

Line No.	Beta(β)	Size Premium	Risk Premium for Small Water Utilities <sup>7</sup>
1			
2			
3			
4			
5			
6	1.12	0.90%	
7			
8	1.25	1.56%	
9			
10	1.50	2.83%	
11			
12	1.62	4.43%	1.81%
13			
14			
15			
16			
17			
18			
19			
20			
21			
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43			

Estimated Risk Premium for small water utilities<sup>6</sup>

Risk Premium for Small Water Utilities

0.99%

<sup>1</sup> Data from Table 7-11 of Morningstar, *Ibbotson S&P 500 2009 Valuation Yearbook*

<sup>2</sup> Mid-Cap companies includes companies with market capitalization between \$1,850 million and \$7,360 million.

<sup>3</sup> Low-Cap companies includes companies with market capitalization between \$454 million and \$1,849 million.

<sup>4</sup> Micro-Cap companies includes companies with market capitalization less than \$453 million.

<sup>5</sup> Decile 10 includes companies with market capitalization between \$1.6 million and \$219 million.

<sup>6</sup> From Table 2, Thomas M. Zepp, "Utility Stocks and the Size Effect Revisited," *The Quarterly Review of Economics and Finance*, 43 (2003), 578-582.

<sup>7</sup> Computed as the weighted differences between the Decile 10 risk premium and the indicated risk premiums for the sample water utilities as shown below. Excludes risk due to differences in beta.

Market Cap. (Millions)	Class	Size Premium	Difference to Decile 10	Weight	Weighted Size Premium
\$ 597	Low-Cap	1.56%	2.87%	0.1666667	0.48%
\$ 2,382	Mid-Cap	0.90%	3.53%	0.1666667	0.59%
\$ 780	Low-Cap	1.56%	2.87%	0.1666667	0.48%
\$ 202	Decile 10	4.43%	0.00%	0.1666667	0.00%
\$ 230	Decile 10	4.43%	0.00%	0.1666667	0.00%
\$ 418	Micro-Cap	2.83%	1.60%	0.1666667	0.27%
Weighted Size Premium for small companies					1.81%