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BEFORE THE ARIZONA CORPORATION COMMISSION

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COMMISSIONERS

GARY PIERCE - Chairman
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS

IN THE MATTER OF THE APPLICATION OF
RAY WATER COMPANY, INC. FOR A RATE
INCREASE.

DOCKET NO. W-01380A-12-0254

**STAFF'S NOTICE OF FILING
DIRECT TESTIMONY**

The Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission") hereby provides notice of filing the Direct Testimony of Staff witnesses Crystal S. Brown and Dorothy M. Hains in the above-referenced matter. As discussed in Staff's Request for Extension filed on November 21, 2012, the Direct Testimony of Staff witness John Cassidy (relating to cost of capital) will be filed on December 19, 2012, unless otherwise ordered by the Administrative Law Judge.

RESPECTFULLY SUBMITTED this 26th day of November, 2012.

Arizona Corporation Commission

DOCKETED

NOV 26 2012

DOCKETED BY *IM*

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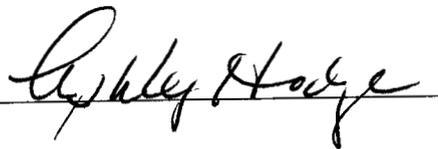
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BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF)
RAY WATER COMPANY, INC. FOR)
APPROVAL OF A PERMANENT RATE)
INCREASE.)
_____)

DOCKET NO. W-01380A-12-0254

DIRECT
TESTIMONY
OF
CRYSTAL S. BROWN
PUBLIC UTILITIES ANALYST V
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

NOVEMBER 26, 2012

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**EXECUTIVE SUMMARY
RAY WATER COMPANY, INC.
DOCKET NO. W-01380A-12-0254**

Ray Water Company ("Ray Water" or "Company") is an Arizona public service corporation engaged in providing water utility services to over 1,500 customers within an area southeast of Tucson in Pima County, Arizona. Ray Water's current rates were approved in Decision No. 61610, dated April 1, 1999.

The Company proposes a \$373,970, or 64.90 percent revenue increase from \$576,266 to \$950,236. The proposed revenue increase would produce an operating income of \$113,394 for a 10.57 percent rate of return on an original cost rate base ("OCRB") of \$1,073,266. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 6,467 gallons from \$21.17 to \$26.55, for an increase of \$5.38 or 25.40 percent.

Staff recommends a \$168,332 or 28.98 percent revenue increase from a Staff adjusted \$580,814 to \$749,146. Staff's recommended revenue increase would produce an operating income of \$53,150 for an 8.70 percent rate of return on a Staff adjusted OCRB of \$610,922 as shown on Schedule CSB-1. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 6,467 gallons from \$21.17 to \$21.58, for an increase of \$0.41 or 1.90 percent.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona
4 Corporation Commission (“Commission”) in the Utilities Division (“Staff”). My business
5 address is 1200 West Washington Street, Phoenix, Arizona 85007.

6
7 **Q. Briefly describe your responsibilities as a Public Utilities Analyst V.**

8 A. I am responsible for the examination and verification of financial and statistical
9 information included in utility rate applications. In addition, I develop revenue
10 requirements, prepare written reports, testimonies, and schedules that include Staff
11 recommendations to the Commission. I am also responsible for testifying at formal
12 hearings on these matters.

13
14 **Q. Please describe your educational background and professional experience.**

15 A. I received a Bachelor of Science Degree in Business Administration from the University
16 of Arizona and a Bachelor of Science Degree in Accounting from Arizona State
17 University.

18
19 Since joining the Commission in August 1996, I have participated in numerous rate cases
20 and other regulatory proceedings involving electric, gas, water, and wastewater utilities. I
21 have testified on matters involving regulatory accounting and auditing. Additionally, I
22 have attended utility-related seminars sponsored by the National Association of
23 Regulatory Utility Commissioners (“NARUC”) on ratemaking and accounting designed to
24 provide continuing and updated education in these areas.

25
26

1 **Q. What is the scope of your testimony in this case?**

2 A. I am presenting Staff's analysis and recommendations in the areas of rate base and
3 operating revenues, expenses, and rate design regarding the Ray Water Company, Inc.'s
4 ("Ray Water" or "Company") application for a permanent rate increase. Staff witness,
5 John Cassidy, is presenting Staff's cost of capital recommendations. Staff witness,
6 Dorothy Hains, is presenting Staff's engineering analysis and recommendations.

7
8 **Q. What is the basis of your recommendations?**

9 A. I performed a regulatory audit of the Company's application to determine whether
10 sufficient, relevant, and reliable evidence exists to support the Company's requested rate
11 increase. The regulatory audit consisted of examining and testing the financial
12 information, accounting records, and other supporting documentation and verifying that
13 the accounting principles applied were in accordance with the Commission-adopted
14 NARUC Uniform System of Accounts ("USOA").

15

16 **BACKGROUND**

17 **Q. Please provide a brief description of Ray Water and the service it provides.**

18 A. Ray Water is an Arizona public service corporation, serving approximately 1,511
19 customers in Pima County, Arizona. Ray Water's current rates were approved in Decision
20 No. 61610, dated April 1, 1999.

21

22 **Q. What are the primary reasons for Ray Water's requested permanent rate increase?**

23 A. According to Ray Water, the primary reason is to recover its operating expenses and to
24 earn a just and reasonable rate of return.

25

26

1 **CONSUMER SERVICE**

2 **Q. Please provide a brief history of customer complaints received by the Commission**
3 **regarding Ray Water.**

4 A. Staff reviewed the Commission's records and found that, for the year 2010, there were
5 two complaints regarding quality of service and the inability of a customer to contact the
6 Company; for the year 2011, there were two complaints regarding billing and disconnect
7 and/or termination; and for the year 2012, there was one billing complaint. All complaints
8 have been resolved and closed. No opinions have been filed opposing the rate case.

9
10 **COMPLIANCE**

11 **Q. Please provide a summary of the compliance status of Ray Water.**

12 A. A check of the Compliance database indicates that there are currently no delinquencies for
13 Ray Water.

14
15 **SUMMARY OF PROPOSED REVENUES**

16 **Q. Please summarize the Company's filing.**

17 A. The Company proposes a \$373,970, or 64.90 percent, revenue increase from \$576,266 to
18 \$950,236. The proposed revenue increase would produce an operating income of
19 \$113,394 for a 10.57 percent rate of return on an original cost rate base ("OCRB") of
20 \$1,073,266. The Company's proposed rates would increase the typical residential 5/8 x
21 3/4-inch meter bill with a median usage of 6,467 gallons from \$21.17 to \$26.55, for an
22 increase of \$5.38 or 25.40 percent.

23
24 **Q. Please summarize Staff's recommended revenue.**

25 A. Staff recommends a \$168,332 or 28.98 percent, revenue increase from a Staff adjusted
26 \$580,814 to \$749,146. Staff's recommended revenue increase would produce an

1 operating income of \$53,150 for an 8.70 percent rate of return on a Staff adjusted OCRB
2 of \$610,922 as shown on Schedule CSB-1. Staff's recommended rates would increase the
3 typical residential 5/8 x 3/4-inch meter bill with a median usage of 6,467 gallons from
4 \$21.17 to \$21.58, for an increase of \$0.41 or 1.90 percent.

5
6 **Q. What test year did Ray Water utilize in this filing?**

7 A. Ray Water's test year is based on the twelve months ended December 31, 2011.

8
9 **Q. Please summarize Staff's rate base and operating income adjustments for Ray**
10 **Water.**

11 A. My testimony discusses the following adjustments:

12
13 **Rate Base Adjustments**

14 Excess Capacity Costs – This adjustment decreases plant in service by \$459,450 to
15 remove plant that Staff has identified as being excess capacity.

16
17 Not Used and Useful Plant – This adjustment decreases plant in service by \$33,853 to
18 remove plant that Staff has identified as being not used and useful.

19
20 Pressure Tank Reclassification – This adjustment reclassifies a \$1,032 tank from Account
21 No. 330, Distribution Reservoirs and Tanks to Account No. 330.2, Pressure Tanks, in
22 order to ensure that the cost will be depreciated using the correct depreciation rate.

23
24 Allocated Vehicle Cost – This adjustment reduces transportation equipment by \$30,083 to
25 reflect costs that should be allocated to the owners and affiliates.

26

1 Accumulated Depreciation – This adjustment decreases accumulated depreciation by
2 \$42,314 and reflects Staff’s calculation of accumulated depreciation based on Staff’s
3 adjustments to plant.

4
5 Advances In Aid of Construction (“AIAC”) – This adjustment decreases AIAC by
6 \$158,487 to reflect Staff’s reclassification of the portion of the AIAC balance that was not
7 fully refunded after ten years to the CIAC account.

8
9 Contributions In Aid of Construction (“CIAC”) – This adjustment increased CIAC by
10 \$158,487 as the result of transferring the portion of AIAC that was not fully refunded after
11 ten years to the CIAC account.

12
13 Amortization of CIAC – This adjustment increases accumulated amortization of CIAC by
14 \$127,537 to reflect the amortization of CIAC on the Staff-recommended CIAC additions.

15
16 Customer Deposits – This adjustment decreases rate base by \$105,405 to reflect an
17 average test year customer deposits balance.

18
19 Working Capital, Prepayments – This adjustment decreases rate base by \$3,404 to
20 eliminate the Company’s selective recognition of a working capital component that only
21 increases rate base.

22
23 **Operating Income Adjustments**

24 Other Revenue – This adjustment increases other revenue by \$4,548 to reflect revenue
25 derived from the sale of water usage data and other services to Pima County that were
26 incorrectly classified as non-utility income.

1 Salary and Wages – This adjustment decreases salaries and wages expense by \$30,259 to
2 reflect Staff's allocation of a portion of this expense to affiliate business; to reflect Staff's
3 estimation of the number of hours needed to perform certain job duties; and to reflect
4 Staff's normalization of a salary that is not paid every year.

5
6 Employee Pensions and Benefits – The adjustment decreases employee pensions and
7 benefits expense by \$4,520 to reflect Staff's normalization of a cost that was not paid in
8 the test year.

9
10 Purchased Power Expense – This adjustment decreases purchased power expense by
11 \$24,863 to remove the Company's pro forma adjustment to include the purchased power
12 expense for a well that Staff determined is excess capacity plant.

13
14 Contractual Services, Water Testing – This adjustment increases operating expenses by
15 \$964 to reflect Staff's recommended annual water testing costs.

16
17 Rents Expense – This adjustment decreases rents expense by \$2,200 to reflect Staff's
18 allocation of a portion of this expense to an affiliate.

19
20 Transportation Expense – This adjustment decreases transportation expense by \$4,110 to
21 reflect Staff's allocation of costs related to the personal use of a Company vehicle for one
22 of the owners.

23
24 Depreciation Expense – This adjustment decreases depreciation expense by \$19,586 to
25 reflect Staff's calculation of depreciation expense using Staff's recommended depreciation
26 rates and Staff's recommended plant and CIAC balances.

1 Taxes Other Than Income Expense – This adjustment decreases taxes other than income
2 expense by \$1,533 to reflect a decrease in payroll taxes consistent with Staff’s adjustment
3 to decrease Salaries and Wages expense.

4
5 Property Tax Expense – This adjustment decreases property tax expense by \$6,670 to
6 reflect Staff’s calculation of the Company’s property tax expense.

7
8 Income Tax Expense – This adjustment increases income tax expenses by \$42,435 to
9 reflect the income tax obligation on Staff’s adjusted test year taxable income.

10
11 **RATE BASE**

12 **Fair Value Rate Base**

13 **Q. Did the Company prepare schedules showing the elements of Reconstruction Cost**
14 **New Rate Base?**

15 A. No, the Company did not. The Company’s filing treats the OCRB as the fair value rate
16 base.

17
18 **Rate Base Summary**

19 **Q. Please summarize Staff’s adjustments to Ray Water’s rate base shown on Schedules**
20 **CSB-3 and CSB-4.**

21 A. Staff’s adjustments to Ray Water’s rate base resulted in a net decrease of \$462,344, from
22 \$1,073,266 to \$610,922. This decrease was primarily due to Staff’s removal of the excess
23 capacity plant, and not used and useful plant.

24
25

1 **Rate Base Adjustment No. 1 – Excess Capacity Plant**

2 **Q. During the course of the audit, did Staff identify plant that was in excess of the**
3 **capacity needed for the water system?**

4 A. Yes. Staff identified that Well No. 8 and its related land and pumps were excess capacity
5 plant, as discussed in greater detail by Staff witness, Dorothy Hains.

6

7 **Q. Is excess capacity plant used and useful?**

8 A. No, it is not.

9

10 **Q. What is the cost of the excess capacity plant?**

11 A. The total cost is \$459,450 as shown on Schedule CSB-5. The amount is composed of
12 \$36,000 for land and land rights; \$268,821 for wells; and \$154,629 for pumping
13 equipment.

14

15 **Q. What is Staff recommending?**

16 A. Staff recommends decreasing plant in service by \$459,450 to remove the cost of excess
17 capacity plant as shown on Schedules CSB-4 and CSB-5.

18

19 **Rate Base Adjustment No. 2 – Not Used and Useful Plant**

20 **Q. Did the Company include in rate base plant that was not used and useful?**

21 A. Yes, Staff identified \$33,853 in plant that was not used and useful as shown on Schedules
22 CSB-4 and CSB-6.

23

24 **Q. What was the basis of Staff's determination?**

25 A. Dorothy Hains, Staff's Engineer, inspected the entire system and identified certain
26 individual plant items that were not serving customers during the test year.

1 **Q. What is Staff recommending?**

2 A. Staff recommends decreasing plant in service by \$33,853 to remove all plant from rate
3 base that was not used and useful as shown on Schedules CSB-4 and CSB-6.

4

5 **Rate Base Adjustment No. 3 – Pressure Tank Reclassification**

6 **Q. Did Staff identify any plant that was incorrectly classified?**

7 A. Yes, Staff identified a pressure tank costing \$1,032 that was incorrectly included in the
8 distribution tank plant account. Staff reclassified the tank from account no. 330,
9 distribution reservoirs and tanks, to account no. 330.2, pressure tanks, as shown on
10 Schedules CSB-4 and CSB-7.

11

12 **Q. Why is the correct classification needed?**

13 A. Correct classification is needed because Staff is recommending different depreciation rates
14 for pressure tanks and distribution tanks. Reclassification will help to ensure that the
15 depreciation expense will be calculated correctly.

16

17 **Q. What is the net effect of Staff's reclassification on plant?**

18 A. There is no change to plant as shown on Schedules CSB-4 and CSB-7.

19

20 **Rate Base Adjustment No. 4 – Allocated Vehicle Cost**

21 **Q. How many vehicles and employees does the Company have?**

22 A. The Company has three vehicles and four employees.

23

24 **Q. Please describe the vehicles that the Company owns and who primarily uses them.**

25 A. According to the Company's response to data request CSB 2-33, the Company owns a
26 2006 Lexus SUV; a 2005 Toyota Tundra; and a 2004 Ford truck. During the on-site audit,

1 Staff determined that Mrs. Rosenbaum primarily uses the Lexus; Mr. Rosenbaum
2 primarily uses the Toyota, and Mr. Rader primarily uses the Ford.

3
4 **Q. Does Staff have any concerns about the 2004 Ford truck that is primarily used by**
5 **Mr. Rader?**

6 A. No. Mr. Rader is the Company's field technician (CSB 2-24). He is responsible for
7 inspecting and maintaining all utility plant; purchases supplies needed to repair and
8 maintain utility plant; takes water quality samples; locates mains; marks blue-stakes; turns
9 on and turns off customer services; and performs all other duties necessary to operate a
10 water system. A 2004 Ford truck is reasonable given the number of duties performed
11 outside of the office and the frequency at which they are performed for the Company.

12
13 **Q. Does Staff have any concerns about the 2005 Toyota Tundra?**

14 A. No, not at this time. Staff determined that this vehicle is used to go out in the field for
15 repair and maintenance work. It is also used to pick up materials that the Ford truck
16 cannot as the Ford truck has a large tool box in the bed of the truck. Also, Mr.
17 Rosenbaum has a different vehicle for his personal use.

18
19 **Q. Does Staff have any concerns about the 2006 Lexus SUV?**

20 A. Yes. Staff is concerned because the travel duties performed by Mrs. Rosenbaum and the
21 frequency at which they are performed do not require a level of travel needed to justify the
22 full cost of this vehicle in rates.

23
24 **Q. Does the Company maintain a travel log showing who used the vehicles and for what**
25 **purpose?**

26 A. No, it does not.

1 **Q. Is the Lexus SUV used for meter reading, billing, or making bank deposits?**

2 A. No, it is not. Ray Water contracts with Southwest Utility Management to perform its
3 meter reading, billing and making bank deposits.
4

5 **Q. Is the Lexus used for the affiliate business, the employee's personal commute back
6 and forth to work, and for the employee's personal use?**

7 A. Yes, according to the Company's response to data request CSB 5-13, the vehicle is used
8 for R&M Real Estate Limited Partnership ("R&M Real Estate") and also for the
9 employee's personal commute back and forth to work. During the on-site audit, Staff
10 determined that Mrs. Rosenbaum does not have a separate personal vehicle and that she
11 uses the Company's vehicle for her personal use.
12

13 **Q. Based on Staff's audit, what percentage should be allocated to the owner and to Ray
14 Water?**

15 A. Based upon Staff's audit, 75 percent should be allocated to the owner and 25 percent
16 should be allocated to Ray Water. Staff's allocation recognizes that travel is needed from
17 time to time to purchase office supplies, visit job sites, or other such activities while
18 conducting business on behalf of Ray Water.
19

20 Further, Staff's analysis recognizes that the vehicle is not used for meter reading, billing,
21 or making bank deposits. Moreover, Mrs. Rosenbaum's job duties provided by the
22 Company do not necessitate a high amount of travel; personal commute costs of the owner
23 should not be borne by the ratepayers; and there is a real estate business that conducts
24 business out of Ray Water Company's office and no travel log is maintained.
25
26

1 **Q. What is Staff recommending concerning the Company's vehicles?**

2 A. Staff recommends decreasing the transportation account by \$30,083 to reflect Staff's
3 allocation of costs related to an owner's personal use of the Lexus SUV as shown on
4 Schedules CSB-4 and CSB-8.

5

6 **Q. Does Staff have any recommendation for the future recovery of Ray Water vehicles
7 that are used for both Company and personal use?**

8 A. Yes. Staff further recommends that the Company maintain mileage logs in order to
9 recover transportation costs in any future rate case.

10

11 **Rate Base Adjustment No. 5 – Accumulated Depreciation**

12 **Q. What did Ray Water propose for Accumulated Depreciation?**

13 A. Ray Water proposed \$1,835,897.

14

15 **Q. Did Staff recalculate the Accumulated Depreciation balance using Staff's
16 recommended plant balances?**

17 A. Yes. Staff recalculated the accumulated depreciation balance using the plant in service
18 balances that were adjusted by the following: the removal of excess capacity plant costs,
19 the removal of not used and useful plant costs and the removal of transportation plant
20 costs that were allocated to the owner.

21

22 **Q. What is Staff recommending?**

23 A. Staff recommends decreasing accumulated depreciation by \$42,314 as shown on
24 Schedules CSB-4 and CSB-9.

25

26

1 **Rate Base Adjustment No. 6 – AIAC**

2 **Q. Did Staff identify AIAC that had not been fully refunded after ten years?**

3 A. Yes. Based on the Company's response to data request CSB 2-11, Staff determined that
4 the Company's 1997 ending AIAC balance of \$185,833 should have been transferred to
5 CIAC as it was more than ten years old. Further, Staff identified \$97,860 in net AIAC (i.e.
6 additions less repayments) added during the years 1998 through 2001 that should have
7 converted to CIAC as the AIAC additions were also more than ten years old. The total
8 unrefunded AIAC ten or more years old was \$283,693.

9
10 **Q. How did Staff calculate the amount of AIAC to be removed and reclassified as**
11 **CIAC?**

12 A. The Company reported that it had transferred \$125,206 of AIAC to CIAC in its response
13 to CSB 2-11. Staff's analysis showed that an additional \$158,487 (i.e. \$283,693 -
14 \$125,206) needed to be transferred to reflect the portion of unrefunded AIAC that was ten
15 or more years old.

16
17 **Q. What is Staff recommending?**

18 A. Staff recommends decreasing AIAC by \$158,487 as shown on Schedules CSB-4 and
19 CSB-10.

20
21 **Rate Base Adjustment No. 7 – Contributions In Aid of Construction ("CIAC")**

22 **Q. What did the Company propose for CIAC?**

23 A. The Company proposed \$982,352 for CIAC.
24

1 **Q. Did Staff identify AIAC that had not been fully refunded after ten years?**

2 A. Yes. As previously discussed in Rate Base Adjustment No. 6, "AIAC," Staff identified
3 \$158,487 in AIAC that should be transferred to CIAC.

4
5 **Q. What is Staff's recommending?**

6 A. Staff recommends increasing CIAC by \$158,487 to reflect the AIAC that should be
7 transferred to CIAC as shown on Schedules CSB-4 and CSB-11.

8
9 **Rate Base Adjustment No. 8 – Amortization of CIAC**

10 **Q. Did Staff make any adjustments to the Amortization of CIAC account?**

11 A. Yes.

12
13 **Q. What was the adjustment?**

14 A. Staff reflected the amortization of CIAC on the Staff recommended CIAC additions.

15
16 **Q. What is Staff recommending?**

17 A. Staff recommends increasing the amortization of CIAC by \$127,537, as shown on
18 Schedules CSB-4 and CSB-12.

19
20 **Rate Base Adjustment No. 9 – Customer Deposits**

21 **Q. Is Ray Water proposing to include customer deposits in the rate base calculation?**

22 A. No, it is not.

23
24 **Q. Are customer deposits normally treated as a reduction to rate base?**

25 A. Yes. Customer deposits are a reduction in the calculation of rate base.

26

1 **Q. Why are customer deposits normally a reduction to rate base?**

2 A. Customer deposits are a reduction to rate base in order to recognize customer-provided
3 capital.

4
5 **Q. What was the Company's average customer deposit balance during the test year?**

6 A. The Company's average customer deposit balance was \$105,405 during the test year.

7
8 **Q. What is Staff recommending?**

9 A. Staff recommends increasing customer deposits by \$105,405 to reflect the average
10 customer deposit balance in rate base as shown on Schedules CSB-4 and CSB-13.

11

12 **Rate Base Adjustment No. 10 – Working Capital, Prepayments**

13 **Q. What are the components of working capital?**

14 A. The components of working capital as prescribed by the Arizona Administrative Code are
15 cash working capital, materials and supplies, and prepaid expenses.

16

17 **Q. Can total working capital be a negative amount that is deducted from rate base?**

18 A. Yes, this can happen when cash working capital ("CWC") is negative and is larger than
19 the sum of the materials, supplies, and prepayments.

20

21 **Q. Does the Company's proposal to include prepayments in working capital represent
22 an inequitable adjustment to increase rate base?**

23 A. Yes. The Company chose not to conduct a lead-lag study, and accordingly, failed to
24 reflect any customer-provided capital in its working capital requirement.

25

1 It is inequitable for a utility the size of Ray Water to calculate working capital by using a
2 method that ignores customer-provided capital while guaranteeing a positive working
3 capital result for Ray Water. Had a lead-lag study been conducted, it might have shown
4 that working capital is a negative component of rate base.

5
6 **Q. Has the Commission recently adopted Staff's recommendation to remove the**
7 **working capital from a Class C water company's rate base because it had not**
8 **performed a lead-lag study?**

9 A. Yes, the Commission in Decision No. 72429 dated June 24, 2011, (page 7, beginning at
10 line 16), adopted Staff's recommendation to remove Southland Utilities Company's
11 working capital because it had not performed a lead-lag study.

12
13 **Q. What is Staff's recommendation?**

14 A. Staff recommends removing \$3,404 from working capital, as shown on Schedules CSB-4
15 and CSB-14.

16
17 **Operating Income**

18 **Operating Income Summary**

19 **Q. What are the results of Staff's analysis of test year revenues, expenses and operating**
20 **income?**

21 A. As shown on Schedules CSB-15 and CSB-16, Staff's analysis resulted in test year
22 revenues of \$580,814, expenses of \$651,764 and operating loss of \$70,950.

1 **Operating Income Adjustment No. 1 – Other Revenue**

2 **Q. During the course of the audit did Staff identify revenue that the Company had**
3 **incorrectly classified as non-utility revenue?**

4 A. Yes.

5
6 **Q. What was the source of the revenue?**

7 A. According to the Company's response to data request CSB 2-36, Pima County asked Ray
8 Water to conduct a water usage study of Ray Water customers to assist Pima County in
9 establishing sewer rates for those customers.

10
11 **Q. What is Staff's recommendation?**

12 A. Staff recommends increasing other revenue by \$4,548 to reflect revenues received from
13 Pima County for a water usage study of Ray Water customers as shown on Schedules
14 CSB-4 and CSB-17.

15
16 **Operating Income Adjustment No. 2 – Salaries and Wages**

17 **Q. What is the Company proposing for employee salary and wages expense?**

18 A. The Company is proposing \$226,744. The amount is composed of \$180,000 for the office
19 employees and \$46,744 for the field employee¹ as shown in Table A below. The three
20 office employees are Mrs. Rhonda Rosenbaum, Mr. Joseph Rosenbaum, and Mrs. Dorleen
21 Mallis.

22
23 **Q. Are the three office employees also owners of Ray Water?**

24 A. Yes.

25

¹ The job duties of the field technician are discussed in Rate Base Adjustment No. 4, Allocated Vehicle Cost.

1 **Q. Has there been a change in employees from 2010 to the test year (i.e. 2011)?**

2 A. Yes, as compared to 2010, the Company eliminated three employees/positions and added
3 one to the payroll as follows:

4

Employee Name	Title/Duties	2010 Salary	Change	2011 Salary	
Rhonda Rosenbaum	Vice President	\$ 60,000	\$ 20,000	\$ 80,000	2011 Salary Increase
Joseph Rosenbaum	Vice President	\$ 60,000	\$ 20,000	\$ 80,000	2011 Salary Increase
Redacted	Field Technician	\$ 47,498	\$ (754)	\$ 46,744	2011 Salary Decrease
Redacted	Office Staff	\$ 31,564	\$ (31,564)	\$ -	Position eliminated
Redacted	Office Staff	\$ 19,110	\$ (19,110)	\$ -	Position eliminated
Redacted	Meter Reading	\$ 8,450	\$ (8,450)	\$ -	Position eliminated
Dorleen Mallis	President	\$ -	\$ 20,000	\$ 20,000	Position added to Payroll
		\$ 226,622	\$ 122	\$ 226,744	

5

6 **Q. How did the change in employees affect the owners?**

7 A. As shown in Table A above, Mr. and Mrs. Rosenbaum, the Company's vice presidents,
8 each received a \$20,000 salary increase during the test year. A \$20,000 salaried position
9 was added to the payroll for Dorleen Mallis, the Company's president, during the test
10 year.

11

12 **Q. Have some of the duties previously performed by Ray Water employees in 2010 been
13 outsourced in 2011 (test year)?**

14 A. Yes, the Company has outsourced its meter reading, billing, and collections functions to
15 Southwest Utility Management. Therefore, the Ray Water office employees did less work
16 in the test year, 2011, than they did in the year prior, 2010, because they did not have to
17 supervise nor review the work of the three employees whose positions were terminated.

18

1 **Q. Has Staff reviewed the office employees' annual salaries and number of hours**
2 **worked for reasonableness and appropriateness?**

3 A. Yes. Staff will discuss each employee separately.
4

5 Mrs. Rosenbaum

6 **Q. What is Mrs. Rosenbaum's title, annual salary, and work status?**

7 A. According to the Company's response to data request CSB 2-24, Mrs. Rosenbaum is the
8 Vice President and certified operator. She is paid \$80,000 per year and is classified as a
9 full time employee.
10

11 **Q. What did Staff find during its on-site audit at the Ray Water office?**

12 A. Staff found that Mrs. Rosenbaum served effectively as the general manager. She was the
13 management personnel primarily responsible for ensuring that the Company is properly
14 managed and operated. She was also the individual with the most knowledge about the
15 Company's financial operations and was the Company's contact person for questions
16 regarding every aspect of the Company.
17

18 **Q. Based upon Staff's review and on-site audit, does Staff have any concerns about Mrs.**
19 **Rosenbaum's annual salary of \$80,000?**

20 A. Yes. Staff is concerned because Mrs. Rosenbaum spends some of her time working for an
21 unregulated affiliate, R&M Real Estate, and no time sheets are kept to account for the
22 time.
23

24 **Q. Is Mrs. Rosenbaum part owner of R&M Real Estate?**

25 A. Yes.
26

1 **Q. Does R&M Real Estate lease the downtown office building to Ray Water?**

2 A. Yes.

3

4 **Q. Does Mrs. Rosenbaum perform work for R&M Real Estate while she is at the Ray**
5 **Water office?**

6 A. Yes.

7

8 **Q. Did Staff ask the Company, through a formal data request, for the amount of time**
9 **that Mrs. Rosenbaum spent on R&M Real Estate work?**

10 A. Yes, the Company stated that the amount of work she performed was de minimus.

11

12 **Q. At the on-site audit, what percentage of time did Mrs. Rosenbaum estimate that she**
13 **spent working on R&M Real Estate business?**

14 A. During the on-site audit, Mrs. Rosenbaum indicated that she spent somewhere between
15 five and ten percent of her time on R&M Real Estate business.

16

17 **Q. What type of work is done for R&M Real Estate in Ray Water's building?**

18 A. Since the building is approximately 55 years old (CSB 5-9), the building must be properly
19 repaired and maintained. Such repair and maintenance would include painting, plumbing,
20 roofing, air conditioning, heating, and any needed remodeling. The financing for any
21 large repair and maintenance costs must be obtained. The bookkeeping, such as but not
22 limited to, the payment of electric, gas, water, income taxes, property taxes, and insurance
23 bills must be made. Also, the R&M Real Estate financial information must be input in an
24 accounting system and/or electronic spreadsheets. Information must be collected and
25 summarized for tax purposes. Also, the annual lease must be prepared and signed and the

1 revenue deposited in the bank. Bank statements must be reviewed and reconciled and files
2 for the important papers related to R&M Real Estate must be maintained.

3
4 **Q. Did R&M Real Estate issue a loan to Ray Water?**

5 A. Yes, the loan was approved in Decision No. 71691, dated May 3, 2010.

6
7 **Q. What type of bookkeeping work is performed for the loan?**

8 A. Billing, collections, the recording of the information in an accounting system and/or
9 electronic spread sheets and the review and reconciliation of bank statements to the
10 accounting system must be made for the loan. Further, the proper recording of principal
11 and interest on the loan payments must be made for tax purposes.

12
13 **Q. To Staff's knowledge who performs these duties?**

14 A. To Staff's knowledge, Mrs. Rosenbaum performs these duties.

15
16 **Q. For ratemaking purposes, what percentage of time did Staff estimate that Mrs.
17 Rosenbaum spent working on R&M Real Estate business?**

18 A. Staff estimates approximately ten percent. Staff estimates that Mrs. Rosenbaum spends,
19 on average, approximately 17 hours per month working on R&M Real Estate (i.e.
20 bookkeeping for office building rental to Ray Water and bookkeeping for loan to Ray
21 Water and other related miscellaneous items). Seventeen hours per month on a
22 normalized basis² is approximately equal to 9.8 percent of the \$80,000. However, without

² Staff recognizes that there may be more bookkeeping, repairs, maintenance and other miscellaneous items for the office building rental in some years than in other years. Staff also recognizes that all three family members (i.e., Mr. and Mrs. Rosenbaum and Mrs. Mallis) consult on all important financial decisions made for the R&M Real Estate building. Nonetheless, Staff removed the amount only from Mrs. Rosenbaum's salary as she does most of the bookkeeping.

1 time sheets, there is no way to precisely and accurately differentiate the 9.8 percent from
2 10 percent. Therefore, Staff rounded the amount to 10 percent.

3

4 **Q. What amount is Staff recommending for Mrs. Rosenbaum's salary?**

5 A. Staff is recommending reducing Mrs. Rosenbaum's salary by \$8,000 from \$80,000 per
6 year to \$72,000 per year as shown on Schedule CSB-18.

7

8 Joseph Rosenbaum

9 **Q. What is Joseph Rosenbaum's title, annual salary, and work status?**

10 A. According to the Company's response to data requests CSB 2-24 and 5-7, Joseph
11 Rosenbaum is the Vice President of Ray Water. He is paid \$80,000 per year and is
12 classified as a full time employee.

13

14 **Q. Does Mr. Rosenbaum maintain a time sheet showing the number of hours per day
15 spent working for Ray Water and the unregulated affiliate business operated out of
16 the Ray Water office?**

17 A. No. Mr. Rosenbaum does not maintain time sheets that document the amount of time he
18 spends each day working for Ray Water and the unregulated affiliate business.

19

20 **Q. Did the Company provide a time study and the underlying documentation to support
21 the \$80,000?**

22 A. No, it did not.

23

24 **Q. What did Staff find during the on-site audit at the Ray Water office?**

25 A. Staff found that none of Mr. Rosenbaum's job duties are required to be performed on a
26 daily basis.

1 **Q. Based upon Staff's review, is Mr. Rosenbaum's classification as a full time employee**
2 **reasonable and appropriate?**

3 A. No, it is not because the job duties and the frequency at which they were performed did
4 not require 40 hours per week.

5
6 **Q. Did Staff develop the number of hours needed to perform the job duties discussed in**
7 **the Company's response to CSB 2-24?**

8 A. Yes. Staff based the estimates on discussions with the Company and a review of the work
9 products produced.

10
11 **Q. What amount is Staff recommending for Mr. Rosenbaum's salary?**

12 A. Staff is recommending that Mr. Rosenbaum's salary be reduced by \$8,926, from \$80,000
13 to \$71,074 as shown on Schedule CSB-18. The amount is calculated by taking the hourly
14 rate of \$38.46 (i.e., \$80,000 / 2,080 hrs) multiplied by 1,848 hrs per year (\$38.46 hrs x
15 1,848 hrs per year = \$71,074).

16
17 Dorleen Mallis

18 **Q. What is Dorleen Mallis' title, annual salary, and work status?**

19 A. According to the Company's response to data requests CSB 2-24 and 5-7, Dorleen Mallis
20 is the President of Ray Water. She is paid \$20,000 per year and is classified as a part-time
21 employee.

22
23 **Q. How long has Dorleen Mallis served as president for the Company?**

24 A. According to the Company's response to data request CSB 2-24, Ms. Mallis has served in
25 this capacity for 30 years.

26

1 **Q. Was Dorleen Mallis' \$20,000 salary included in Ray Water's payroll in the year**
2 **before (i.e 2010) or the year after (i.e. 2012) the test year?**

3 A. No, it was not.
4

5 **Q. Did the Company provide time sheets or a time study and the underlying**
6 **documentation to support the \$20,000 paid during the test year?**

7 A. No, it did not.
8

9 **Q. Based upon Staff's review, is Mrs. Mallis' annual salary of \$20,000 reasonable and**
10 **appropriate?**

11 A. No, it is not because the salary is not paid every year and there are no time sheets to
12 substantiate the number of hours worked.
13

14 **Q. What amount is Staff recommending for Mrs. Mallis' salary?**

15 A. Staff is recommending \$6,667. The amount is calculated by averaging the amounts paid
16 to Mrs. Mallis' for the years 2010, 2011, and 2012 as shown on Schedule CSB-18.
17

18 **Q. What is Staff's total recommendation for Salaries and Wages?**

19 A. Staff recommends decreasing salary and wages expense by \$30,259 as shown on
20 Schedules CSB-16 and CSB-18.
21

22 **Operating Income Adjustment No. 3 – Employee Pensions and Benefits**

23 **Q. What did the Company propose for Employee Pensions and Benefits?**

24 A. The Company proposed \$9,070 for employee pensions and benefits expense. The amount
25 is composed of \$0 for actual test year expense and a \$9,070 pro forma adjustment.
26

1 **Q. What were the Employee Pensions and Benefits costs for the years 2009, 2010, and**
2 **2011?**

3 A. The employee pensions and benefits costs for the years 2009, 2010, and 2011 were
4 \$4,585, \$9,064, and \$0, respectively.

5
6 **Q. What adjustment did Staff make?**

7 A. Staff normalized the cost as it varies widely from year to year as shown on Schedule CSB-
8 19.

9
10 **Q. What is Staff's recommendation?**

11 A. Staff recommends decreasing employee pensions and benefits expense by \$4,520 as
12 shown on Schedules CSB-16 and CSB-19.

13
14 **Operating Income Adjustment No. 4 – Purchased Power Expense**

15 **Q. What did the Company propose for purchased power expense?**

16 A. The Company proposed \$106,874 for purchased power expense. The amount is composed
17 of \$82,011 in actual test year costs and a \$24,863 pro forma adjustment to include
18 purchased power expense for a well that was placed in service in the test year.

19
20 **Q. What adjustment did Staff make?**

21 A. Staff removed the \$24,863 purchased power expense pro forma adjustment consistent with
22 Staff's recommendation to remove the well that the expense relates to as discussed in Rate
23 Base Adjustment No. 1, Excess Capacity.

24

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends decreasing purchased power expense by \$24,863 as shown on
3 Schedules CSB-16 and CSB-20.
4

5 **Operating Income Adjustment No. 5 – Contractual Services, Water Testing**

6 **Q. What did the Company propose for water testing expense?**

7 A. The Company proposed \$5,650 for water testing expense.
8

9 **Q. What adjustment did Staff make?**

10 A. Staff adjusted annual water testing costs to reflect Staff's recommended \$6,615 water
11 testing expense as discussed in greater detail by Staff witness Dorothy Hains.
12

13 **Q. What is Staff's recommendation?**

14 A. Staff recommends increasing water testing expense by \$965 as shown on Schedules CSB-
15 16 and CSB-21.
16

17 **Operating Income Adjustment No. 6 – Rents Expense**

18 **Q. What did the Company propose for rents expense?**

19 A. The Company proposed \$22,000 for rents expense. The amount is for the downtown
20 Tucson office building located at 414 N. Court Avenue that Ray Water rents from R&M
21 Real Estate.
22

23 **Q. Is the Ray Water Company office shared with affiliate businesses?**

24 A. Yes, according to the Company's response to data request CSB 5-7, R&M Real Estate is
25 operated out of the Ray Water Company office. R&M Real Estate is owned by Rhonda
26 Rosenbaum and Dorleen Mallis. Rhonda Rosenbaum and Dorleen Mallis are both

1 employees and owners of Ray Water Company. Further, H&D Enterprises also conducts
2 business at the location.

3

4 **Q. What did a search of the internet reveal?**

5 A. In addition to the real estate businesses operated out of the Ray Water office located at
6 414 North Court Avenue, a search of the internet revealed that the Ray Water office
7 address had been used in a legal matter (i.e., Games West Inc. – AZ vs. R&M Real Estate
8 Limited Partnership, LLP; Et Al.) Further, Mr. Joseph M. Rosenbaum was listed under
9 Wrongful Death Attorneys and also Personal Injury Attorneys in Tucson and the address
10 listed was the Ray Water office.

11

12 Moreover, a commercial permit was issued to Joseph and Rhonda Rosenbaum in 2012
13 from the City of Tucson to upgrade the electric service on a property located at 3240 N.
14 Treat Circle, Tucson, AZ. from 60 amps to 100 amps. The name of the business located at
15 3240 N. Treat Circle is Cycling Developers. The owners of the building are Mr. and Mrs.
16 Rosenbaum and the address of the applicant of the permit was the Ray Water Office (i.e.
17 414 North Court Avenue).

18

19 **Q. Should a portion of the \$22,000 in rents expense be allocated to the affiliates?**

20 A. Yes, as affiliates conduct business from the office building and the address is used by
21 affiliates and the owners in conducting unregulated affiliate business.

22

23 **Q. What percentage of rents expense did Staff allocate to the affiliates?**

24 A. Staff allocated ten percent of the annual rents cost to the affiliates, as shown on Schedule
25 CSB-22.

26

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends decreasing rents expense by \$2,200, as shown on Schedules CSB-16
3 and CSB-22.

4

5 **Operating Income Adjustment No. 7 – Transportation Expense**

6 **Q. What did the Company propose for transportation expense?**

7 A. The Company proposed \$13,316 for transportation expense.

8

9 **Q. What adjustments did Staff make?**

10 A. Staff allocated 75 percent of the gas cost for the Lexus SUV to the owner consistent with
11 Staff recommendation for Rate Base Adjustment No.4, Allocated Vehicle costs. Staff also
12 normalized the cost of tires, brake pads, and a radiator using three years as these costs are
13 expected to be incurred about once every three years.

14

15 **Q. What is Staff's recommendation?**

16 A. Staff recommends decreasing transportation expense by \$4,110, as shown on Schedules
17 CSB-16 and CSB-23.

18

19 **Operating Income Adjustment No. 8 – Depreciation Expense**

20 **Q. What is Ray Water proposing for depreciation expense?**

21 A. Ray Water is proposing depreciation expense of \$180,559.

22

23 **Q. What adjustment did Staff make to depreciation expense?**

24 A. Staff adjusted depreciation expense to reflect Staff's calculation of depreciation expense
25 using Staff's recommended depreciation rates, plant balances, and CIAC balances. Staff's
26 calculation is shown on Schedule CSB-24.

1 **Q. What is Staff recommending?**

2 A. Staff recommends decreasing depreciation expense by \$19,586, as shown on Schedules
3 CSB-16 and CSB-24.

4

5 **Operating Income Adjustment No. 11 – Taxes Other Than Income**

6 **Q. What is Ray Water proposing for taxes other than income?**

7 A. Ray Water is proposing \$18,646 for taxes other than income (i.e. payroll taxes).

8

9 **Q. Did Staff make any adjustment to taxes other than income?**

10 A. Yes, Staff decreased taxes other than income consistent with Staff's recommendation to
11 decrease salaries and wages (Operating Expense Adjustment No. 2. Salaries and Wages).
12 Staff's calculation is shown on Schedule CSB-25.

13

14 **Q. What is Staff's recommendation?**

15 A. Staff recommends decreasing taxes other than income by \$1,533 as shown on Schedules
16 CSB-14 and CSB-25.

17

18 **Operating Income Adjustment No. 10 – Property Taxes**

19 **Q. What is Ray Water proposing for property taxes?**

20 A. Ray Water is proposing \$30,589 for property taxes.

21

22 **Q. Did Staff make any adjustment to the property taxes?**

23 A. Yes. Staff's adjustment reflects Staff's calculation of the property tax expense using the
24 modified Arizona Department of Revenue Methodology applied to Staff's recommended
25 revenues, as shown on Schedule CSB-26.

26

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends decreasing property tax expense by \$6,670 as shown on Schedules
3 CSB-14 and CSB-26.

4

5 **Operating Income Adjustment No. 11 – Income Taxes**

6 **Q. What is Ray Water proposing for test year income tax expense?**

7 A. Ray Water is proposing a negative \$69,820 for income taxes.

8

9 **Q. Did Staff make any adjustments to test year income tax expense?**

10 A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon
11 Staff's adjusted test year taxable income.

12

13 **Q. What is Staff's recommendation?**

14 A. Staff recommends increasing income tax expense by \$42,435 as shown on Schedules
15 CSB-16 and CSB-27.

16

17 **RATE DESIGN**

18 **Q. Has Staff prepared a schedule summarizing the present, Company proposed, and
19 Staff recommended rates and service charges?**

20 A. Yes. Schedule CSB-28 provides a summary of the Company's present, Company's
21 proposed, and Staff's recommended rates.

22

23 **Q. Please summarize the present rate design.**

24 A. Customer class is distinguished by meter size. The monthly minimum charges vary by
25 meter size and include no gallons. One commodity rate applies to all usage.

26

1 **Q. Please summarize the Company's proposed rate design.**

2 A. Customer class is distinguished by meter size. The monthly minimum charges vary by
3 meter size and include no gallons. The commodity rates are based on an inverted four-
4 tier rate design. The Company's proposed rates would increase the typical residential 5/8
5 x 3/4-inch meter bill with a median usage of 6,467 gallons from \$21.17 to \$26.55, for an
6 increase of \$5.38 or 25.40 percent, as shown on Schedule CSB-29.

7
8 **Q. Please summarize Staff's recommended rate design.**

9 A. Customer class is distinguished by meter size. The monthly minimum charges vary by
10 meter size and include no gallons. The commodity rates are based on an inverted four-
11 tier rate design. Staff's recommended revenue increase would produce an operating
12 income of \$53,150 for an 8.70 percent rate of return on a Staff adjusted OCRB of
13 \$610,922 as shown on Schedule CSB-1. Staff's recommended rates would increase the
14 typical residential 5/8 x 3/4-inch meter bill with a median usage of 6,467 gallons from
15 \$21.17 to \$21.58, for an increase of \$0.41 or 1.90 percent, as shown on Schedule CSB-29.

16
17 **Q. Did the Company propose any changes to its Meter and Service Line Charges?**

18 A. Yes, and Staff recommends approval. Both the Company-proposed and the Staff-
19 recommended changes are shown on Schedule CSB-28 and are discussed in greater detail
20 in the testimony of Staff witness, Dorothy Hains.

21
22 **Service Charges**

23 **Q. Did the Company propose any changes to the service charges?**

24 A. Yes. The Company proposes to increase the Establishment charge from \$25 to \$30;
25 discontinue the Establishment (After Hours) charge; increase the Reconnection
26 (Delinquent) charge from \$25 to \$35; increase the Meter Test (If correct) charge from \$30

1 to \$35; increase the Non-Sufficient Funds Check charge from \$15 to \$25; increase the
2 Meter Re-Read charge from \$15 to \$30; increase the Late Payment Fee (Per Month) from
3 1.5 percent to 2 percent and to add an After Hours Charge of \$25.
4

5 **Q. Does Staff agree with the Company-proposed Establishment, Reconnection**
6 **(Delinquent), and NSF Check Charges?**

7 **A.** Yes.
8

9 **Q. Does Staff agree with the Company's proposal to discontinue the \$37.50**
10 **Establishment (After Hours) Charge and to add a \$25 After Hours Charge?**

11 **A.** Yes, Staff agrees that the Establishment (After-Hours) Charge should be discontinued and
12 that an After-Hours charge should be added. Staff agrees that an additional fee for service
13 provided after normal business hours is appropriate when such service is at the customer's
14 request. Such a tariff compensates the utility for additional expenses incurred from
15 providing after-hours service.
16

17 Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in
18 addition to the charge for any utility service provided after hours at the customer's request.
19 For example, under Staff's proposal, a customer would be subject to a \$30 Establishment
20 fee if it is done during normal business hours, but would pay an additional \$25 after-hours
21 fee if the customer requested that the establishment be done after normal business hours.
22

1 **Q. Does Staff agree with the Company-proposed Meter Test (If Correct) charge?**

2 **A.** No, Staff does not. The Company is proposing to increase the Meter Test (If Correct)
3 charge from \$30.00 to \$35.00. The current \$30 charge is within the range of established
4 charges. Also, the Consumer Services' Phoenix office will test 5/8 or 3/4 inch meters at
5 no charge to the Company or customer. Therefore, Staff recommends no change to the
6 current charge.

7
8 **Q. Does Staff agree with the Company-proposed Meter Re-Read (If Correct) charge?**

9 **A.** No, Staff does not. The Company is proposing to increase the Meter Re-read (If Correct)
10 charge from \$15.00 to \$30.00. Staff does not agree with such an increase based on what
11 is being charged by a similar company. Staff recommends a \$5 increase and recommends
12 a \$20 Meter Re-read (If Correct) charge.

13
14 **Q. Does Staff agree with the Company-proposed Late Payment Fee (Per Month)
15 charge?**

16 **A.** No, Staff does not. The Company is proposing to increase the Late Payment Fee (Per
17 Month) from 1.5 percent to 2 percent. Staff recommends a late fee of 1.5% per month of
18 the unpaid balance in order to remain consistent with other similar utility companies.

19
20 **Q. What is the additional revenue that would be generated from Staff's recommended
21 service charge increases?**

22 **A.** The additional service charge revenue would be \$3,750, as shown in Table B below:

23

Table B - Calculation of Additional Service Charge Revenue						
	Description	Number of Charges in TY		Amount of Increase	=	Total Additional Rev
24	CSB 2-39	Establishment	294	x	\$ 5	\$1,470
25	CSB 2-39	Reconnection (Delinquent)	209	x	\$10	\$2,090
	CSB 2-39	NSF Check	19	x	\$10	\$ 190
						\$3,750

1 **Q. Did Staff reflect the additional service charge revenue in its rate design?**

2 **A.** Yes. Staff allocated \$3,750 of its total \$168,332 revenue increase to other revenue and the
3 remainder to metered revenue as shown on Schedule CSB-15.
4

5 **Tariff for Sharing Customer Information**

6 **Q. During the audit, did Staff find that Ray Water was sharing information with Pima**
7 **County?**

8 **A.** Yes. In response to data request CSB 2-36, the Company stated that Ray Water shares
9 customer water usage data with Pima County. Pima County uses the information to
10 develop sewer rates for the Ray Water customers who receive sewer services from Pima
11 County.
12

13 **Q. Did Ray Water turn sewer service connections on and off?**

14 **A.** Initially, the Company stated that it did turn sewer connections on and off (CSB 2-36).
15 Later, the Company clarified its prior response³ and indicated that it did not dig up sewer
16 connections to turn them on and off nor did it turn water service off if customers were
17 delinquent on their time Pima County sewer bills.
18

19 **Q. Does the Company have a written agreement setting forth the terms and conditions**
20 **of the water usage data sharing?**

21 **A.** Staff has requested the information⁴ but the Company has not yet provided the entire
22 contract.
23

³ Electronic mail dated Sunday 11/4/2012.

⁴ Via electronic mail dated Friday 11/2/2012

1 **Q. Did Staff recommend the addition of a tariff that would allow the Company to share**
2 **customers' water usage information?**

3 A. Yes, it is attached as Exhibit A.

4

5 **Q. Does this conclude Staff's direct testimony?**

6 A. Yes, it does.

7

1 **Exhibit A**

2
3
4 **TARIFF**

5
6 **CUSTOMER WATER CONSUMPTION INFORMATION SHARING WITH PIMA COUNTY,**
7 **WASTEWATER PROVIDER**

8
9 Ray Water Company, Inc. (“Ray Water” or “Company”) is authorized to share water
10 consumption information of individual customers with Pima County (“the County”), a county
11 provider of wastewater service for common customers purchasing water from Ray Water and
12 wastewater from the County. The purpose of this Tariff, and the authorized provision of customer
13 water consumption information, is to assist the County in billing for wastewater utility service.
14 The County agrees that it is only authorized to use such water consumption information for
15 purposes of wastewater services billing and is not authorized to disclose such information to any
16 other party except as may be required by law.

17
18 Ray Water entered into an Agreement with the County for providing individual water
19 consumption data, in a form materially similar to the standard form agreement. The Agreement
20 was subject to Arizona Corporation Commission (“Commission”) review as set forth in Section 5
21 of the agreement.

22
23 Ray Water shall notify all water utility customers affected by the Agreement between the
24 Company and the County pursuant to this Tariff, by means of a billing insert during the first
25 billing cycle immediately after said tariff is approved and notify new affected customers of this
26 tariff at the time of service establishment.

27

REVENUE REQUIREMENT

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY ORIGINAL COST</u>	<u>[B] STAFF ORIGINAL COST</u>
1	Adjusted Rate Base	\$ 1,073,266	\$ 610,922
2	Adjusted Operating Income (Loss)	\$ (125,840)	\$ (70,950)
3	Current Rate of Return (L2 / L1)	-11.72%	-11.61%
4	Required Rate of Return	10.57%	8.70%
5	Required Operating Income (L4 * L1)	\$ 113,393	\$ 53,150
6	Operating Income Deficiency (L5 - L2)	\$ 239,233	\$ 124,100
7	Gross Revenue Conversion Factor	1.56320	1.35642
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 373,969	\$ 168,332
9	Adjusted Test Year Revenue	\$ 576,266	\$ 580,814
10	Proposed Annual Revenue (L8 + L9)	\$ 950,235	\$ 749,146
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	64.90%	28.98%

References:

Column [A]: Company Schedules A-1

Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<i>Calculation of Gross Revenue Conversion Factor:</i>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	26.2764%			
5	Subtotal (L3 - L4)	73.7236%			
6	Revenue Conversion Factor (L1 / L5)	1.356418			
<i>Calculation of Uncollectible Factor:</i>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	25.2503%			
9	One Minus Combined Income Tax Rate (L7 - L8)	74.7497%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<i>Calculation of Effective Tax Rate:</i>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	19.6516%			
16	Effective Federal Income Tax Rate (L14 x L15)	18.2823%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		25.2503%		
<i>Calculation of Effective Property Tax Factor</i>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	25.2503%			
20	One Minus Combined Income Tax Rate (L18-L19)	74.7497%			
21	Property Tax Factor	1.3727%			
22	Effective Property Tax Factor (L20*L21)		1.0261%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			26.2764%	
24	Required Operating Income	\$ 53,150			
25	Adjusted Test Year Operating Income (Loss)	(70,950)			
26	Required Increase in Operating Income (L24 - L25)		\$ 124,100		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 14,535			
28	Income Taxes on Test Year Revenue (Col. [A], L52)	(27,385)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		41,921		
30	Recommended Revenue Requirement	\$ 749,146			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue	\$ 26,230			
36	Property Tax on Test Year Revenue	23,919			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		2,311		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 168,332		
<i>Calculation of Income Tax:</i>					
39	Revenue	\$ 580,814	\$ 168,332	\$ 749,146	
40	Operating Expenses Excluding Income Taxes	\$ 679,149	\$ 2,311	\$ 681,460	
41	Synchronized Interest (L56)	\$ 3,055		\$ 3,055	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (101,390)		\$ 64,631	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (7,065)		\$ 4,503	
45	Federal Taxable Income (L42 - L44)	\$ (94,325)		\$ 60,127	
46	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (7,500)		\$ 7,500	
47	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ (6,250)		\$ 2,532	
48	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ (6,571)		\$ -	
49	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -		\$ -	
50	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -		\$ -	
51	Total Federal Income Tax	\$ (20,321)		\$ 10,032	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (27,385)		\$ 14,535	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			19.6516%	
<i>Calculation of Interest Synchronization:</i>					
54	Rate Base	\$ 610,922			
55	Weighted Average Cost of Debt	0.5000%			
56	Synchronized Interest (L45 X L46)	\$ 3,055			

RATE BASE - ORIGINAL COST

LINE NO.	(A)	(B)	ADJ NO.	(C)
	COMPANY AS FILED	STAFF ADJUSTMENTS		STAFF AS ADJUSTED
1	\$ 5,261,065	\$ (523,386)	1, 2, 3, 4	\$ 4,737,679
2	1,835,897	(42,314)	5	1,793,583
3	<u>\$ 3,425,168</u>	<u>\$ (481,072)</u>		<u>\$ 2,944,096</u>
<i>LESS:</i>				
4	\$ 1,633,387	\$ (158,487)	6	\$ 1,474,900
5	\$ -	\$ -		\$ -
6	\$ 982,352	\$ 158,487	7	\$ 1,140,839
7	260,433	127,537	8	387,970
8	<u>\$ 721,919</u>	<u>30,950</u>		<u>\$ 752,869</u>
9	\$ 2,355,306	\$ (127,537)		\$ 2,227,769
10	\$ -	\$ 105,405	9	\$ 105,405
11	\$ -	\$ -		\$ -
<i>ADD: Working Capital</i>				
12	\$ 3,404	\$ (3,404)	10	\$ -
13	\$ -	\$ -		\$ -
14	<u>\$ 1,073,266</u>	<u>\$ (462,344)</u>		<u>\$ 610,922</u>

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Ray Water Company
 Docket No. W-01380A-12-0254
 Test Year Ended December 31, 2011

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	Acct. No. - Plant Description	PLANT IN SERVICE	(A) COMPANY AS FILED	(B) Adj. No. 1 Capacity Excess	(C) Adj. No. 2 Not Used and Useful Plant	(D) Adj. No. 3 Pressure Tank Reclassification	(E) Adj. No. 4 Allocated Vehicle Cost	(F) Adj. No. 5 Accumulated Depreciation	(G) Adj. No. 6 AIAC	(H) Adj. No. 7 CIAC	(I) Adj. No. 8 Amortization of CIAC	(J) Adj. No. 9 Customer Deposits	(K) Adj. No. 10 Working Capital Prepayments	STAFF AS ADJUSTED
1	302 Franchises		700											700
2	303 Land and Land Rights		62,540	(36,000)	(1,021)									25,519
3	304 Structures and Improvements		22,078											22,078
4	307 Wells and Springs		1,674,835	(268,821)	(17,028)									1,388,986
5	309 Supply Mains		-											-
6	310 Power Generation Equipment		873,230	(154,629)	(15,804)									702,797
7	311 Pumping Equipment													
8	320 Water Treatment Equipment					(1,032)								622,302
9	330 Distribution Reservoirs and Standpipes		623,334			1,032								1,032
10	330.2 Pressure Tanks													
11	331 Transmission and Distribution Mains		1,160,777											1,160,777
12	333 Services		526,754											526,754
13	334 Meters and Meter Installations		113,643											113,643
14	335 Hydrants		105,490											105,490
15	336 Backflow Prevention Devices													
16	339 Other Plant and Miscellaneous Equipment		2,902											2,902
17	340 Office Furniture and Equipment		8,901											8,901
18	340.1 Computers and Software		8,967											8,967
19	341 Transportation Equipment		72,235			(30,083)								42,152
20	343 Tools, Shop, and Garage Equipment		1,932											1,932
21	344 Laboratory Equipment													
22	345 Power Operated Equipment													
23	346 Communication Equipment		1,494											1,494
24	347 Miscellaneous Equipment													
25	348 Other Tangible Equipment		1,253											1,253
26	Rounding													
27	Total Plant in Service		\$ 5,261,065	\$ (459,450)	\$ (33,853)	\$ -	\$ (30,083)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,737,679
28	Less: Accumulated Depreciation		\$ 1,835,897	\$ -	\$ -	\$ -	\$ (42,314)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,793,583
29	Net Plant in Service		\$ 3,425,168	\$ (459,450)	\$ (33,853)	\$ -	\$ (30,083)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,944,096
30	LESS:													
31	Advances in Aid of Construction (AIAC)		\$ 1,633,387	\$ -	\$ -	\$ -	\$ -	\$ (158,487)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,474,900
32	Meter Deposits - Service Line & Meter Advances													
33	Contributions in Aid of Construction (CIAC)		\$ 982,352	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 158,487	\$ -	\$ -	\$ -	\$ -	\$ 1,140,839
34	Less: Accumulated Amortization of CIAC		\$ 280,433	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127,537	\$ -	\$ -	\$ -	\$ 987,970
35	Net CIAC		\$ 721,919	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 158,487	\$ (127,537)	\$ -	\$ -	\$ -	\$ 752,869
36	Total Advances and Net Contributions		\$ 2,355,306	\$ -	\$ -	\$ -	\$ -	\$ (158,487)	\$ 158,487	\$ (127,537)	\$ -	\$ -	\$ -	\$ 2,227,769
37	Customer Deposits											105,405		\$ 105,405
38	Accumulated Deferred Taxes													
39	ADD: Working Capital													
40	Prepayments		\$ 3,404	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,404)	\$ -
41	Total Rate Base		\$ 1,073,266	\$ (459,450)	\$ (33,853)	\$ -	\$ (30,083)	\$ 42,314	\$ 158,487	\$ (158,487)	\$ 127,537	\$ (105,405)	\$ (3,404)	\$ 610,922

RATE BASE ADJUSTMENT NO. 1 - EXCESS CAPACITY PLANT COSTS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Acct. No. 303 -Land and Land Rights	\$ 62,540	\$ (36,000)	\$ 26,540
2	Acct. No. 307 -Wells and Springs	\$ 1,674,835	\$ (268,821)	\$ 1,406,014
3	Acct. No. 311 - Pumping Equipment	\$ 873,230	\$ (154,629)	\$ 718,601
4	Total Acct. No. 380 -Treatment & Disposal Equip	<u>\$ 2,610,605</u>	<u>\$ (459,450)</u>	<u>\$ 2,151,155</u>
5				
6				
7		Year		
8		Added	Account No.	Account Description
9		2010	303	Land & Land Rights (Well No. 8)
10		2011	307	Wells & Springs (Well No. 8)
11		2011	311	Pumping Equipment (Well No. 8)
12				Total
				\$ 459,450

References:

- Column [A]: Company Schedule B-2
- Column [B]: Testimony, CSB
- Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - NOT USED AND USEFUL PLANT COSTS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Acct No. 303 - Land & Land Rights	\$ 62,540	\$ (1,021)	\$ 61,519
2	Acct No. 307 - Wells & Springs	\$ 1,674,835	\$ (17,028)	\$ 1,657,807
3	Acct No. 311 - Pumping Equipment	\$ 873,230	\$ (15,804)	\$ 857,426
4	Total	\$ 2,610,605	\$ (33,853)	\$ 2,576,752

5
6
7
8

9
10

Year Added	Account No.	Account Description	Amount
2005	303	Land & Land Rights (Well No.1)	\$ 1,021
2005	307	Wells & Springs (Well No. 1)	\$ 950
2005	307	Wells & Springs (Well No. 1)	\$ 850
2005	307	Wells & Springs (Well No. 2C)	\$ 350
2005	307	Wells & Springs (Well No. 2C)	\$ 600
2005	307	Wells & Springs (Well No. 2C)	\$ 1,032
2005	307	Wells & Springs (Well No. 2C)	\$ 4,750
2005	307	Wells & Springs (Well No. 2C)	\$ 4,178
2005	307	Wells & Springs (Well No. 2C)	\$ 3,593
2005	307	Wells & Springs (Well No. 2C)	\$ 725
2005	311	Pumping Equip (Well No. 2C)	\$ 13,324
2005	311	Pumping Equip (Well No. 2C)	\$ 2,480
			<u>\$ 33,853</u>

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References:

- Column A: Company Schedule B-2
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 3 - PRESSURE TANK RECLASSIFICATION

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Acct No. 307 - Wells & Springs	\$ 1,674,835	(1,032)	1,673,803
2	Acct No. 330.2 - Pressure Tanks.	-	1,032	1,032
3	Plant Total	\$ 1,674,835	\$ -	\$ 1,674,835

References:

Column A: Company Schedule B-2

Column B: Testimony, CSB

Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 4 - ALLOCATED VEHICLE COST

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Acct No. 341 - Transportation Equipment	\$ 72,235	(30,083)	42,152
2				
3				
4				
5		Cost of Lexus SUV	\$ 40,110	
6		Percentage Allocated to Owners/Affiliates	75%	
7		Staff's Adjustment	<u>30,083</u>	

References:

Column A: Company Schedule B-2

Column B: Testimony, CSB

Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 5 - ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Accumulated Depreciation	\$ 1,633,387	\$ -	\$ 1,633,387
2	Excess Capacity Plant	\$ -	\$ (10,586)	\$ (10,586)
3	Not Used & Useful Plant	\$ -	\$ (10,670)	\$ (10,670)
4	Allocated Vehicle Costs	\$ -	\$ (21,058)	\$ (21,058)
5		\$ 1,633,387	\$ (42,314)	\$ 1,591,073

ACCUMULATED DEPRECIATION RELATED TO EXCESS CAPACITY PLANT COSTS

Reference Schedule	Year Placed In Service	Acct No.	Description	Plant Cost	Number of Interim Years	Depreciation Rate	Accumulated Depreciation
12	CSB-5	2011	307	Wells & Springs (Well No. 8)	\$ 268,821	0.5	5.00% \$6,720.53
13	CSB-5	2011	311	Pumping Equipment (Well No. 8)	\$ 154,629	0.5	5.00% \$3,865.73
				\$ 423,450			\$10,586.25

ACCUMULATED DEPRECIATION RELATED TO NOT USED AND USEFUL PLANT

Reference Schedule	Year Placed In Service	Acct No.	Description	Plant Cost	Number of Interim Years	Depreciation Rate	Accumulated Depreciation
20	CSB-6	2005	307	Wells & Springs (Well No. 1)	\$ 950	6.5	5.00% \$308.75
21	CSB-6	2005	307	Wells & Springs (Well No. 1)	\$ 850	6.5	5.00% \$276.25
22	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 350	6.5	5.00% \$113.75
23	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 600	6.5	5.00% \$195.00
24	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 1,032	6.5	5.00% \$335.39
25	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 4,750	6.5	5.00% \$1,543.75
26	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 4,178	6.5	5.00% \$1,357.85
27	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 3,593	6.5	5.00% \$1,167.65
28	CSB-6	2005	307	Wells & Springs (Well No. 2C)	\$ 725	6.5	5.00% \$235.63
29	CSB-6	2005	311	Pumping Equip (Well No. 2C)	\$ 13,324	6.5	5.00% \$4,330.38
30	CSB-6	2005	311	Pumping Equip (Well No. 2C)	\$ 2,480	6.5	5.00% \$806.00
				\$ 32,832			\$10,670.40

ACCUMULATED DEPRECIATION RELATED TO VEHICLE ALLOCATION

Reference Schedule	Year Placed In Service	Acct No.	Description	Plant Cost	Number of Interim Years	Depreciation Rate	Accumulated Depreciation
36	CSB-7	2008	341	Transportation Equipment	\$ 30,083	3.5	20.00% \$21,057.75

References:

- Column A: Company Schedule C-1
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 7 -CONTRIBUTIONS IN AID OF CONSTRUCTION ("CIAC")

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Gross CIAC	\$ 982,352	\$ 158,487	\$ 1,140,839

References:

Column A: Company Schedule B-2

Column B: Testimony, CSB; Data Request Response CSB 2-11 and Sch CSB-10

Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 8 - AMORTIZATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION ("CIAC")

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Amortization of CIAC	\$ 260,433	\$127,537	\$ 387,970
2				
3				
4				

CALCULATION OF AMORTIZATION OF CIAC							
Reference			Year Transferred	Number of	Depreciation	Amortization of	
Schedule		AIAC	To CIAC	Interim Years	Rate	CIAC	
8	CSB-5 12/31/1997 Ending AIAC Balance	\$ 185,833	2007	10	5.00%	\$92,916.50	
9	CSB-5 1998 Net CIAC Additions	\$ 22,360	2008	9	5.00%	\$10,062.00	
10	CSB-5 1999 Net CIAC Additions	\$ (284)	2009	8	5.00%	(\$113.60)	
11	CSB-5 2000 Net CIAC Additions	\$ 38,729	2010	7	5.00%	\$13,555.15	
12	CSB-5 2000 Net CIAC Additions	\$ 37,055	2011	6	5.00%	\$11,116.50	
13		\$ 283,693				\$127,536.55	

References:

- Column A: Company Schedule C-1
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 9 - CUSTOMER DEPOSITS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Customer Deposits	\$ -	\$ 105,405	\$ 105,405
2				
3				Test Year
4				Customer Deposits
5				\$ 100,696
6				\$ 103,158
7				\$ 105,443
8				\$ 108,028
9				\$ 108,636
10				\$ 106,615
11				\$ 107,823
12				\$ 108,938
13				\$ 109,474
14				\$ 109,849
15				\$ 110,119
16				\$ 86,080
17				\$ 1,264,859
18			Divided by	12 Months
19				\$ 105,404.92

References:

Column A: Company Schedule B-2

Column B: Testimony, CSB; Data Request Response CSB 2-12

Column C: Column [A] + Column [B]

Ray Water Company
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Test Year Ended December 31, 2011

Schedule CSB-14

RATE BASE ADJUSTMENT NO. 10 - WORKING CAPITAL, PREPAYMENTS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		PER COMPANY	ADJUSTMENT	PER STAFF
1	Prepayments	\$ 3,404	\$ (3,404)	\$ -

References:

- Column A: Company Schedule B-2
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:							
1	Metered Water Sales	\$ 558,323			\$ 558,323	\$ 164,582	\$ 722,905
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	17,943	4,548	1	22,491	3,750	26,241
4	Total Revenues	\$ 576,266	\$ 4,548		\$ 580,814	\$ 168,332	\$ 749,146
EXPENSES:							
7	Salaries and Wages	\$ 226,744	\$ (30,259)	2	\$ 196,485	\$ -	\$ 196,485
8	Employee Pensions & Benefits	9,070	\$ (4,520)	3	4,550	-	4,550
9	Purchased Power	106,874	\$ (24,863)	4	82,011	-	82,011
10	Fuel for Power Production	-	\$ -		-	-	-
11	Chemicals	-	\$ -		-	-	-
12	Materials & Supplies	2,347	\$ -		2,347	-	2,347
13	Office Supplies & Expense	22,190	\$ -		22,190	-	22,190
14	Contractual Services - Billing	69,767	\$ -		69,767	-	69,767
15	Contractual Services - Professional	17,001	\$ -		17,001	-	17,001
16	Contractual Services - Testing	5,650	\$ 965	5	6,615	-	6,615
17	Contractual Services - Other	10,913	\$ -		10,913	-	10,913
18	Equipment Rental	-	\$ -		-	-	-
19	Rents	22,000	\$ (2,200)	6	19,800	-	19,800
20	Transportation Expenses	13,316	\$ (4,110)	7	9,206	-	9,206
21	Insurance - General Liability	10,590	\$ -		10,590	-	10,590
22	Insurance - Health and Life	-	\$ -		-	-	-
23	Reg. Comm. Exp.	-	\$ -		-	-	-
24	Reg. Comm. Exp. - Rate Case	10,000	\$ -		10,000	-	10,000
25	Miscellaneous Expense	9,662	\$ -		9,662	-	9,662
26	Bad Debt Expense	295	\$ -		295	-	295
27	Depreciation Expense	180,559	\$ (19,586)	8	160,973	-	160,973
28	Taxes Other Than Income	18,646	\$ (1,533)	9	17,113	-	17,113
29	Property Taxes	30,589	\$ (6,670)	10	23,919	2,311	26,230
30	Income Taxes	(69,820)	\$ 42,435	11	(27,385)	41,921	14,535
31	Interest Expense - Customer Deposits	5,713	\$ -		5,713	-	5,713
32	Total Operating Expenses	\$ 702,106	\$ (50,342)		\$ 651,764	\$ 44,232	\$ 695,996
33							
34	Operating Income (Loss)	\$ (125,840)	\$ 54,890		\$ (70,950)	\$ 120,350	\$ 53,150

References:

- Column (A): Company Schedule C-1
- Column (B): Schedule CSB-16
- Column (C): Column (A) + Column (B)
- Column (D): Schedules CSB-1 and CSB-2
- Column (E): Column (C) + Column (D)

Ray Water Company
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Test Year Ended December 31, 2011

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Operating Revenues Ref. Sch CSB-17	[C] ADJ #2 Salaries and Wages Ref. Sch CSB-18	[D] ADJ #3 Employee Pensions & Benefits Ref. Sch CSB-19	[E] ADJ #4 Purchased Power Ref. Sch CSB-20	[F] ADJ #5 Contractual Services Water Testing Ref. Sch CSB-21	[G] ADJ #6 Rents Expense Ref. Sch CSB-22	[H] Subtotal
1	REVENUES:								
2	Metered Water Sales	\$ 558,323	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 558,323
3	Water Sales - Unmetered								
4	Other Operating Revenues	17,943	4,548	-	-	-	-	-	22,491
5	Total Revenues	\$ 576,266	\$ 4,548	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 580,814
6	OPERATING EXPENSES:								
7	Salaries and Wages	\$ 226,744	-	(30,259)	-	-	-	-	\$ 196,485
8	Employee Pensions & Benefits	9,070	-	(4,520)	-	-	-	-	4,550
9	Purchased Power	106,874	-	-	(24,863)	-	-	-	82,011
10	Fuel for Power Production								
11	Chemicals								
12	Materials & Supplies	2,347	-	-	-	-	-	-	2,347
13	Office Supplies & Expense	22,190	-	-	-	-	-	-	22,190
14	Contractual Services - Billing	69,767	-	-	-	-	-	-	69,767
15	Contractual Services - Professional	17,001	-	-	-	-	-	-	17,001
16	Contractual Services - Testing	5,650	-	-	-	-	965	-	6,615
17	Contractual Services - Other	10,913	-	-	-	-	-	-	10,913
18	Equipment Rental								
19	Rents	22,000	-	-	-	-	(2,200)	-	19,800
20	Transportation Expenses	13,316	-	-	-	-	-	-	13,316
21	Insurance - General Liability	10,590	-	-	-	-	-	-	10,590
22	Insurance - Health and Life								
23	Reg. Comm. Exp.								
24	Reg. Comm. Exp. - Rate Case	10,000	-	-	-	-	-	-	10,000
25	Miscellaneous Expense	9,662	-	-	-	-	-	-	9,662
26	Bad Debt Expense	295	-	-	-	-	-	-	295
27	Depreciation Expense	180,559	-	-	-	-	-	-	180,559
28	Taxes Other Than Income	18,646	-	-	-	-	-	-	18,646
29	Property Taxes	30,589	-	-	-	-	-	-	30,589
30	Income Taxes	(69,820)	-	-	-	-	-	-	(69,820)
31	Interest Expense - Customer Deposits	5,713	-	-	-	-	-	-	5,713
32	Total Operating Expenses	\$ 702,106	\$ -	\$ (30,259)	\$ (4,520)	\$ (24,863)	\$ 965	\$ (2,200)	\$ 641,228
33	Operating Income (Loss)	\$ (125,840)	\$ 4,548	\$ 30,259	\$ 4,520	\$ 24,863	\$ (965)	\$ 2,200	\$ (60,414)

Ray Water Company
Docket No. W-01380A-12-0254
Test Year Ended December 31, 2011

Schedule CSB-17

OPERATING INCOME ADJUSTMENT NO. 1 - OTHER OPERATING REVENUE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Other Revenue	\$ 17,943	\$ 4,548	\$ 22,491

References:

- Column A: Company Schedule C-2
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - SALARIES AND WAGES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Rhonda Rosenbaum, Vice President	\$ 80,000	\$ (8,000)	\$ 72,000
2	Joseph Rosenbaum, Vice President	\$ 80,000	\$ (8,926)	\$ 71,074
3	Doreen Mallis, Company President	\$ 20,000	\$ (13,333)	\$ 6,667
4	Dave Rader, Operations Manager	\$ 46,744	\$ -	\$ 46,744
5		\$ 226,744	\$ (30,259)	\$ 196,485

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14				
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20				
21				
22				
23				

Rhonda Rosenbaum, Vice President
2011 Salary \$ 80,000
Percentage Allocated to Affiliate Business 10%
Staff's Adjustment 8,000

24				
25				
26				
27				
28				
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53				
54				

Joseph Rosenbaum, Vice President
- Not Broken Out Separately
- Not Broken Out Separately
- Not Broken Out Separately
Total 120 Avg Hours Per Month
x 12 Months
Subtotal 1,440 Avg Hours Per Year

24				
25				
26				
27				
28				
29				
30				
31				
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52				
53				
54				

Oversight of Professional Accountants and Attorneys - Not Broken Out Separately
Banking and Financing - Not Broken Out Separately
Regulatory Compliance - Not Broken Out Separately
Tax Matters - Not Broken Out Separately
Correspondence With Customers and The Business Community - Not Broken Out Separately
Corporate Matters - Not Broken Out Separately
Subtotal 288 Avg Hours Per Year

32				
33				
34				
35				
36				
37				
38				
39				
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41				
42				
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44				
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51				
52				
53				
54				

Land Use and Rights of Way - Not Broken Out Separately
Line Extension Agreements - Not Broken Out Separately
CAGR Compliance - Not Broken Out Separately
Subtotal 120 Avg Hours Per Year

37				
38				
39				
40				
41				
42				
43				
44				
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51				
52				
53				
54				

TOTAL 1,848 Avg Hours Per Year
x \$38.46 (\$80,000 / 2,080)
\$ 71,074 Salary - Per Staff
\$ 80,000 Salary - Per Company
\$ (8,926) Staff's Adjustment

45				
46				
47				
48				
49				
50				
51				
52				
53				
54				

Doreen Mallis President
2010 \$ - Company Sch E-2
2011 \$ 20,000 Company Sch E-2
2012 \$ - Company Sch E-2
\$ 20,000
Divided by 3 3 Years
\$ 6,667 Salary - Per Staff
\$ 20,000 Salary - Per Company
\$ (13,333) Staff's Adjustment

References:
Column A: Company Schedule C-2
Column B: Testimony, CSB,
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - EMPLOYEE PENSIONS AND BENEFITS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Employee Pensions & Benefits	\$ 9,070	\$ (4,520)	\$ 4,550
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Employee Pensions & Benefits	
2009	\$ 4,585 Company Sch E-2
2010	\$ 9,064 Company Sch E-2
2011	\$ - Company Sch E-2
	\$ 13,649
Divided by 3	3 Years
	\$ 4,550

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB; Company Data Request Responses to CSB 2-26

Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - PURCHASED POWER

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	2011 Actual Purchased Power Expense	\$ 82,011	\$ -	\$ 82,011
2	Company Pro forma Adjustment	24,863	(24,863)	-
3	Total Purchased Power Expense	\$ 106,874	\$ (24,863)	\$ 82,011
4				
5				
6				

References:

- Column A: Company Schedule C-2
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

Ray Water Company
Docket No. W-01380A-12-0254
Test Year Ended December 31, 2011

Schedule CSB-21

OPERATING INCOME ADJUSTMENT NO. 5 - CONTRACT SRVCS., WATER TESTING EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Contractual Services - Testing	\$ 5,650	\$ 965	\$ 6,615

References:

- Column A: Company Schedule C-1
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - RENTS EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Rents Expense	\$ 22,000	\$ (2,200)	\$ 19,800

Rents Expense		
2011 Rents Expense	\$ 22,000	CSB 2-16
Percentage Allocated to Affiliate Business	10%	CSB 2-16
Staff's Adjustment	2,200	

References:

- Column A: Company Schedule C-1 & E-2
- Column B: Testimony, CSB; Data Request CSB 2-16
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 7 - TRANSPORTATION EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Transportation Expense	\$ 5,777	\$ -	\$ 5,777
2	Gasoline Expenses - Shell	3,543	(1,329)	2,214
3	Repair and Maintenance Expenses	3,996	(2,781)	1,215
		<u>\$ 13,316</u>	<u>\$ (4,110)</u>	<u>\$ 9,206</u>

Shell Gasoline Purchases		
1/14/2011	\$ 346.09	CSB 2-33
2/18/2011	\$ 227.51	CSB 2-33
3/18/2011	\$ 270.06	CSB 2-33
4/14/2011	\$ 198.02	CSB 2-33
5/18/2011	\$ 336.25	CSB 2-33
6/14/2011	\$ 226.66	CSB 2-33
7/16/2011	\$ 295.35	CSB 2-33
8/22/2011	\$ 97.00	CSB 2-33
9/17/2011	\$ 436.93	CSB 2-33
10/24/2011	\$ 370.97	CSB 2-33
11/15/2011	\$ 418.48	CSB 2-33
12/19/2011	\$ 319.79	CSB 2-33
	<u>\$ 3,543</u>	Total Shell Gas Purchases
Divided by 2	<u>2</u>	Vehicles (Toyota & Lexus)
	\$ 1,772	
	x 75%	Allocated to Owner/Affiliates
	<u>\$ 1,329</u>	Amount Disallowed
	\$ 3,543	Total Shell Gas Purchases
	<u>\$ (1,329)</u>	Amount Disallowed
	\$ 2,214	Staff as Adjusted

Date	Description	Repair & Maint Expenses	
4/4/2011	Lexus SUV - 1 Tire	\$ 138	CSB 2-33
5/16/2011	4 Tires - Ford F250	\$ 893	CSB 2-33
7/5/2011	Lexus SUV Brake Pads/Maint	\$ 820	CSB 2-33
11/18/2011	Lexus SUV - Radiator	\$ 1,124	CSB 2-33
12/30/2011	Lexus SUV - 3 Tire	\$ 807	CSB 2-33
		<u>\$ 3,644</u>	
	Divided by 3	<u>3</u>	Years
		<u>\$ 1,215</u>	Normalized Costs

References:

- Column A: Company Schedule C-1
- Column B: Testimony, CSB;
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 8 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	302 Franchises	\$ 700	\$ (700)	\$ -	0.00%	\$ -
2	303 Land and Land Rights	25,519	(26,540)	(1,021)	0.00%	-
3	304 Structures and Improvements	22,078	-	22,078	3.33%	735
4	306 Lake, River, and Other Intakes	-	-	-	2.50%	-
5	307 Wells and Springs	1,388,986	-	1,388,986	3.33%	46,253
6	309 Supply Mains	-	-	-	2.00%	-
7	310 Power Generation Equipment	-	-	-	5.00%	-
8	311 Pumping Equipment	702,797	-	702,797	12.50%	87,850
9	320 Water Treatment Equipment	-	-	-	3.33%	-
10	330 Distribution Reservoirs and Standpipes	622,302	-	622,302	2.22%	13,815
11	330.2 Pressure Tanks	1,032	-	1,032	5.00%	52
12	331 Transmission and Distribution Mains	1,160,777	-	1,160,777	2.00%	23,216
13	333 Services	526,754	-	526,754	3.33%	17,541
14	334 Meters and Meter Installations	113,643	-	113,643	8.33%	9,466
15	335 Hydrants	105,490	-	105,490	2.00%	2,110
16	336 Backflow Prevention Devices	-	-	-	6.67%	-
17	339 Other Plant and Miscellaneous Equipment	2,902	-	2,902	6.67%	194
18	340 Office Furniture and Equipment	8,901	-	8,901	6.67%	594
19	341 Transportation Equipment	42,152	-	42,152	20.00%	8,430
20	340.1 Computers and Software	8,967	-	8,967	20.00%	1,793
21	343 Tools, Shop, and Garage Equipment	1,932	-	1,932	5.00%	97
22	344 Laboratory Equipment	-	-	-	10.00%	-
23	345 Power Operated Equipment	-	-	-	5.00%	-
24	346 Communication Equipment	1,494	-	1,494	10.00%	149
25	347 Miscellaneous Equipment	-	-	-	10.00%	-
26	348 Other Tangible Equipment	1,253	-	1,253	10.00%	125
27	Total Plant	\$ 4,737,679	\$ (27,240)	\$ 4,710,439		\$ 212,420

28						
29						
30						
31	Composite Depreciation Rate (Depr Exp / Depreciable Plant):	4.51%				
32	CIAC:	\$ 1,140,839				
33	Amortization of CIAC (Line 31 x Line 32):	\$ 51,447				
34						
35	Depreciation Expense Before Amortization of CIAC:	\$ 212,420				
36	Less Amortization of CIAC:	\$ 51,447				
37	Test Year Depreciation Expense - Staff:	\$ 160,973				
38	Depreciation Expense - Company:	180,559				
39	Staff's Total Adjustment:	\$ (19,586)				

References:

Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT NO. 9 - TAXES OTHER THAN INCOME

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Taxes Other Than Income	\$ 18,646	\$ (1,533)	\$ 17,113
2				
3				
4				
5				
6				
7	2011 Taxes Other Than Income		\$ 18,646	
8	Percentage Allocated to Affiliate Business/Owners		8.22%	(\$226,744 / \$18,646)
9	Staff's Adjustment		1,533	

Taxes Other Than Income

References:

- Column A: Company Schedule C-1
- Column B: Testimony, CSB
- Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 10 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 580,814	\$ 580,814
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	1,161,628	\$ 1,161,628
4	Staff Recommended Revenue, Per Schedule CSB-1	580,814	\$ 749,146
5	Subtotal (Line 4 + Line 5)	1,742,442	1,910,774
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	580,814	\$ 636,925
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	1,161,628	\$ 1,273,849
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	\$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	1,161,628	\$ 1,273,849
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	243,942	\$ 267,508
15	Composite Property Tax Rate	9.8053%	9.8053%
			\$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 23,919	
17	Company Proposed Property Tax	30,589	
18	Staff Test Year Adjustment (Line 16-Line 17)	<u>\$ (6,670)</u>	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 26,230
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 23,919
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		<u>\$ 2,311</u>
22	Increase to Property Tax Expense		\$ 2,311
23	Increase in Revenue Requirement		168,332
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		1.372742%

OPERATING INCOME ADJUSTMENT NO. 11 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	(A)	(B)
	<u>Calculation of Income Tax:</u>		
		<u>Test Year</u>	
1	Revenue	\$ 580,814	
2	Less: Operating Expenses - Excluding Income Taxes	\$ 679,149	
3	Less: Synchronized Interest (L17)	\$ 3,055	
4	Arizona Taxable Income (L1- L2 - L3)	\$ (101,390)	
5	Arizona State Income Tax Rate	6.968%	
6	Arizona Income Tax (L4 x L5)		\$ (7,065)
7	Federal Taxable Income (L4 - L6)	\$ (94,325)	
8	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (7,500)	
9	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ (6,250)	
10	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ (6,571)	
11	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -	
12	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -	
13	Total Federal Income Tax		\$ (20,321)
14	Combined Federal and State Income Tax (L6 + L13)		<u>\$ (27,385)</u>
	<u>Calculation of Interest Synchronization:</u>		
15	Rate Base	\$ 610,922	
16	Weighted Average Cost of Debt	0.50%	
17	Synchronized Interest (L16 x L17)	<u>\$ 3,055</u>	
18		Income Tax - Per Staff \$ (27,385)	
19		Income Tax - Per Company \$ (69,820)	
20		Staff Adjustment \$ 42,435	

Monthly Minimum Charge

Meter Size (All Classes):

	Present	Company Proposed	Staff Recommended
5/8 Inch x 3/4 Inch	\$ 11.15	\$ 15.00	\$ 15.00
3/4 Inch	25.00	25.00	26.00
1 Inch	39.00	39.00	40.00
1 1/2 Inch	62.00	75.00	62.00
2 Inch	110.00	120.00	110.00
3 Inch	125.00	240.00	125.00
4 Inch	165.00	375.00	165.00
6 Inch	330.00	750.00	330.00

Gallons Included In Monthly Minimum Charge 0 0 0

Commodity Charge - Per One Thousand Gallons

All Meter Sizes

1 gallon to 3,000 gallons	\$ 1.55	\$ 0.85	N/A
3,001 gallons to 7,000 gallons	\$ 1.55	\$ 2.25	N/A
7,001 gallons to 25,000 gallons	\$ 1.55	\$ 3.35	N/A
over 25,000 gallons	\$ 1.55	\$ 4.64	N/A
1 gallon to 2,000 gallons	\$ 1.55	N/A	\$ 0.50
2,001 gallons to 7,000 gallons	\$ 1.55	N/A	\$ 1.25
7,001 gallons to 25,000 gallons	\$ 1.55	N/A	\$ 2.00
over 25,000 gallons	\$ 1.55	N/A	\$ 3.46
Standpipe per 1,000 gallons	\$ 1.55	\$ 4.64	\$ 3.46

Miscellaneous Charges

	Present	Company Proposed	Staff Recommended
Establishment	\$ 25.00	\$ 30.00	\$ 30.00
Establishment (After Hours)	37.50	Discontinue	Discontinue
Reconnection (Delinquent)	25.00	35.00	35.00
Meter Test (If Correct)	30.00	35.00	30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Reestablishment (Within 12 Months)	**	**	**
NSF Check	15.00	25.00	25.00
Deferred Payment, Per Month	***	***	1.50%
Meter Re-read (If Correct)	15.00	30.00	20.00
Late Payment Fee (Per Month)	***	2.00%	1.50%
After hours service charge (At the Customer's Request)	NT	25.00	25.00

* Per A. A. C. R-14-2-403 (B)

** Number of months off the system times the monthly minimum.

*** 1.50 percent per month of unpaid balance

NT = No Tariff

Service and Meter Installation Charges

	Total Present Charge	Company Proposed Service Line Charge	Company Proposed Meter Installation Charge*	Total Company Proposed Charge
5/8 x 3/4 Inch	\$ 550	\$ 445	\$ 155	\$ 600
3/4 Inch	\$ 550	\$ 445	\$ 255	\$ 700
1 Inch	\$ 650	\$ 495	\$ 315	\$ 810
1 1/2 Inch	\$ 875	\$ 550	\$ 525	\$ 1,075
2 Inch / Turbine	\$ 1,400	\$ 830	\$ 1,045	\$ 1,875
2 Inch / Compound	N/A	\$ 830	\$ 1,890	\$ 2,720
3 Inch / Turbine	\$ 1,900	\$ 1,045	\$ 1,670	\$ 2,715
3 Inch / Compound	N/A	\$ 1,165	\$ 2,545	\$ 3,710
4 Inch / Turbine	\$ 3,200	\$ 1,490	\$ 2,670	\$ 4,160
4 Inch / Compound	N/A	\$ 1,670	\$ 3,645	\$ 5,315
6 Inch / Turbine	\$ 5,800	\$ 2,210	\$ 5,025	\$ 7,235
6 Inch / Compound	N/A	\$ 2,330	\$ 6,920	\$ 9,250
Over 6-Inch	N/A	N/A	Actual Cost	Actual Cost

	Total Present Charge	Staff Recommended Service Line Charge	Staff Recommended Meter Installation Charge	Total Staff Recommended Charge
5/8 x 3/4 Inch	\$ 550	\$ 445	\$ 155	\$ 600
3/4 Inch	\$ 550	\$ 445	\$ 255	\$ 700
1 Inch	\$ 650	\$ 495	\$ 315	\$ 810
1 1/2 Inch	\$ 875	\$ 550	\$ 525	\$ 1,075
2 Inch / Turbine	\$ 1,400	\$ 830	\$ 1,045	\$ 1,875
2 Inch / Compound	N/A	\$ 830	\$ 1,890	\$ 2,720
3 Inch / Turbine	\$ 1,900	\$ 1,045	\$ 1,670	\$ 2,715
3 Inch / Compound	N/A	\$ 1,165	\$ 2,545	\$ 3,710
4 Inch / Turbine	\$ 3,200	\$ 1,490	\$ 2,670	\$ 4,160
4 Inch / Compound	N/A	\$ 1,670	\$ 3,645	\$ 5,315
6 Inch / Turbine	\$ 5,800	\$ 2,210	\$ 5,025	\$ 7,235
6 Inch / Compound	N/A	\$ 2,330	\$ 6,920	\$ 9,250
Over 6-Inch	N/A	Actual Cost	Actual Cost	Actual Cost

TYPICAL BILL ANALYSIS
General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 1,453

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	7,832	\$23.29	\$29.34	\$6.05	26.0%
Median Usage	6,467	\$21.17	\$26.55	\$5.38	25.4%
<u>Staff Proposed</u>					
Average Usage	7,832	\$23.29	\$23.91	\$0.62	2.7%
Median Usage	6,467	\$21.17	\$21.58	\$0.41	1.9%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$11.15	\$15.00	34.5%	\$15.00	34.5%
1,000	12.70	15.85	24.8%	15.50	22.0%
2,000	14.25	16.70	17.2%	16.00	12.3%
3,000	15.80	17.55	11.1%	17.25	9.2%
4,000	17.35	19.80	14.1%	18.50	6.6%
5,000	18.90	22.05	16.7%	19.75	4.5%
6,000	20.45	24.30	18.8%	21.00	2.7%
7,000	22.00	26.55	20.7%	22.25	1.1%
8,000	23.55	29.90	27.0%	24.25	3.0%
9,000	25.10	33.25	32.5%	26.25	4.6%
10,000	26.65	36.60	37.3%	28.25	6.0%
15,000	34.40	53.35	55.1%	38.25	11.2%
20,000	42.15	70.10	66.3%	48.25	14.5%
25,000	49.90	86.85	74.0%	58.25	16.7%
50,000	88.65	202.85	128.8%	144.50	63.0%
75,000	127.40	318.85	150.3%	230.75	81.1%
100,000	166.15	434.85	161.7%	317.00	90.8%
125,000	204.90	550.85	168.8%	403.25	96.8%
150,000	243.65	666.85	173.7%	489.50	100.9%
175,000	282.40	782.85	177.2%	575.75	103.9%
200,000	321.15	898.85	179.9%	662.00	106.1%



BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman

BOB STUMP
Commissioner

SANDRA D. KENNEDY
Commissioner

PAUL NEWMAN
Commissioner

BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF)
RAY WATER COMPANY, INC. FOR)
APPROVAL OF A PERMANENT RATE)
INCREASE.)
_____)

DOCKET NO. W-01380A-12-0254

DIRECT TESTIMONY

OF

DOROTHY HAINS, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

NOVEMBER 26, 2012

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1 **INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Dorothy Hains. My business address is 1200 West Washington Street,
4 Phoenix, Arizona 85007.

5
6 **Q. By whom and in what position are you employed?**

7 A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a
8 Utilities Engineer - Water/Wastewater in the Utilities Division.

9
10 **Q. How long have you been employed by the Commission?**

11 A. I have been employed by the Commission since January 1998.

12
13 **Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?**

14 A. My main responsibilities are to inspect, investigate and evaluate water and wastewater
15 systems. This includes obtaining data, preparing reconstruction cost new and/or original
16 cost studies, investigative reports, interpreting rules and regulations, and to suggest
17 corrective action and provide technical recommendations on water and wastewater system
18 deficiencies. I also provide written and oral testimony in rate cases and other cases before
19 the Commission.

20
21 **Q. How many companies have you analyzed for the Utilities Division?**

22 A. I have analyzed more than 90 companies fulfilling these various responsibilities for
23 Commission Utilities Division Staff ("Staff").

24
25 **Q. Have you previously testified before this Commission?**

26 A. Yes, I have testified on numerous occasions before this Commission.

1 **Q. What is your educational background?**

2 A. I graduated from the University of Alabama in Birmingham in 1987 with a Bachelor of
3 Science degree in Civil Engineering.

4
5 **Q. Briefly describe your pertinent work experience.**

6 A. Before my employment with the Commission, I was an Environmental Engineer for the
7 Arizona Department of Environmental Quality (“ADEQ”) for ten years. Prior to that time,
8 I was an Engineering Technician with C. F. Hains, Hydrology in Northport, Alabama for
9 approximately five years.

10

11 **Q. Please state your professional membership, registrations, and licenses.**

12 A. I have been a registered Civil Engineer in Arizona since 1990. I am a member of the
13 American Society of Civil Engineering, American Water Works Association and Arizona
14 Water & Pollution Control Association.

15

16 **PURPOSE OF TESTIMONY**

17 **Q. What was your assignment in this rate proceeding?**

18 A. My assignment was to provide Staff’s engineering evaluation for the subject Ray Water
19 Company (“Company” or “Ray”) rate and financing proceeding. The Company filed a
20 rate application on June 14, 2012.

21

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

23 A. The purpose is to present the findings of Staff’s engineering evaluation of the operations
24 for the Company’s water system. The findings are contained in this pre-filed testimony
25 and in the Engineering Reports as Exhibit DMH-1 that I have prepared.

1 **ENGINEERING REPORT**

2 **Q. Would you briefly describe what was involved in preparing your Engineering Report**
3 **for this rate proceeding?**

4 A. After reviewing the application, I physically inspected the Company's water system. I
5 evaluated its operation and determined if any plant items were not used and useful. I
6 contacted the ADEQ to determine if the water system was in compliance with the Safe
7 Drinking Water Act water quality requirements. After I obtained information from the
8 Company regarding plant improvements, chemical testing expenses, water usage data and
9 sewage discharge data, I analyzed that information. I also contacted the Arizona
10 Department of Water Resources ("ADWR") to determine if the Company was in
11 compliance with the ADWR's requirements governing water providers and/or community
12 water systems. Based on all the above, I prepared the attached Engineering Report.

13
14 **Q. Please describe the information contained in your Engineering Reports.**

15 A. The Reports are divided into three general sections: 1) *Executive Summary*;
16 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibits*. The *Discussions*
17 section can be further divided into twelve subsections: A) Purpose of Report, B) Location
18 of the Company; C) Description of the System; D) Water Usage; E) Growth Projection; F)
19 ADEQ Compliance; G) Arizona Department of Water Resources ("ADWR") Compliance;
20 H) ACC Compliance; I) Water Testing Expenses; J) Depreciation Rates; K) Other Issues.

21
22 **RECOMMENDATIONS AND CONCLUSIONS**

23 **Q. What are Staff's conclusions and recommendations regarding the Company's**
24 **operations?**

25 A. Staff's conclusions and recommendations regarding the Company's operations are listed
26 below.

1 **Recommendations:**

2 I. Staff recommends annual water testing costs of \$6,615 be used for the Company's water
3 system for purposes of this proceeding.

4
5 II. Staff recommends the depreciation rates by individual National Association of Regulatory
6 Utility Commissioners category, as delineated in Exhibit 6 in Report DMH-1.

7
8 III. Staff recommends approval of the meter and service line installation charges listed under
9 the columns labeled "Staff Recommendation" in Table 5 in Report DMH-1.

10
11 IV. Staff recommends that all expenses and capital improvement costs related to Well No. 1
12 after 2005 not be considered used and useful to the Company's provision of service.

13
14 V. Staff recommends that all expenses and capital improvement costs including a pressure
15 tank related to Well No. 2C after 2007 not be considered used and useful to the
16 Company's provision of service.

17
18 VI. Based on Staff's calculations the Ray water system has adequate production and storage
19 capacity to serve its existing customer base and reasonable growth without Well No. 8.
20 Therefore, Staff recommends that Well No. 8 be considered excess capacity for purposes
21 of this rate case; this includes the Well No. 8 capital improvement expenses and land
22 purchased for Well No. 8.

23
24 VII. Staff recommends that the Company closely monitor and record its water usage. Staff
25 further recommends that the Company be required to coordinate the reading of its well
26 meters and individual customer meters on a monthly basis and report this data in its future

1 Annual Reports beginning with 2013 Annual Report filed in 2014. Staff further
2 recommends that the Company monitor the water system closely and take action to ensure
3 that annual water loss is less than 10% by December 2013. If the reported annual water
4 loss is greater than 10 percent, the Company shall prepare a report containing a detailed
5 analysis and a plan to reduce annual water loss to 10 percent or less. If the Company
6 believes it is not cost effective to reduce the water loss to less than 10 percent, it should
7 submit a detailed cost benefit analysis to support its opinion. In no case shall the
8 Company allow annual water loss to be greater than 15 percent. The water loss reduction
9 report or the detailed analysis, whichever is submitted, shall be docketed as a compliance
10 item within twenty four months of the effective date of the order issued in this proceeding.
11

12 VIII. Staff recommends approval of the five BMP Tariffs, BMPs 1.1, 3.6, 3.7, 5.2 and 5.5,
13 presented in Exhibit 7. Staff further recommends that Ray file with Docket Control, as a
14 compliance item in the docket, the five BMP Tariffs listed above within 30 days of the
15 effective date of the Commission's Decision in this proceeding for Staff's review and
16 authorization.
17

18 IX. Staff recommends that prior to filing its next rate application the Company undertake a
19 formal study to demonstrate that adding multiple variable frequency drive motors is more
20 cost efficient than adding additional hydropneumatic tank capacity or, whether a more cost
21 efficient alternative might exist.

1 **Conclusions:**

2 I. In a Compliance Status Report dated April 2, 2012, ADEQ reported that Ray water system
3 PWS No. 10-112 had no major deficiencies and was delivering water that met water
4 quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter
5 4.

6
7 II. Ray is in the ADWR Tucson Active Management Area. Staff received a Compliance
8 Status Report from ADWR for Ray on July 27, 2012. In its report ADWR stated that the
9 Company is compliant with departmental requirements governing water providers and/or
10 community water systems.

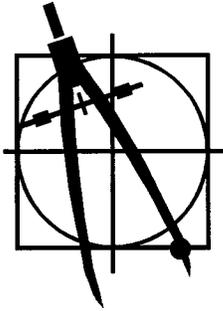
11
12 III. Ray has approved cross connection and curtailment tariffs.

13
14 IV. Ray has adequate production and storage capacities to support their existing customer
15 bases without well No. 8.

16
17 V. A check of the Commission's Compliance Section database dated June 21, 2012, indicated
18 that Ray had no ACC delinquent compliance items.

19
20 **Q. Does this conclude your Direct Testimony?**

21 A. Yes, it does.



**Engineering Report
Ray Water Company
Prepared By
Dorothy Hains, P. E.
Docket Nos. W-01380A-12-0254 (Rates)**

November 26, 2012

EXECUTIVE SUMMARY

Recommendations:

1. Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Staff”) recommends estimated annual water testing costs of \$6,615 for Ray Water Company (“the Company” or “Ray”). (See §I and Table 4 for discussion and details.)
2. Staff recommends the depreciation rates by individual National Association of Regulatory Utility Commissioners category, as delineated in Exhibit 5. (See §J and Exhibit 6 for a discussion and a tabulation of the recommended rates.)
3. Staff recommends approval of the meter and service line installation charges listed under the columns labeled “Staff Recommendation” in Table 4. (See §K of report for discussion and details.)
4. All expenses and capital improvement costs related to Well No. 1 after 2005 should not be considered used and useful to the Company’s provision of service.(See §K for discussion and details.)
5. All expenses and capital improvement costs including a pressure tank related to Well No. 2C after 2007 should not be considered used and useful to the Company’s provision of service. (See §K for discussion and details.)
6. Staff recommends that Well No. 8 be considered excess capacity for purposes of this rate case (this includes the Well No. 8 capital improvement expenses and land purchased for Well No. 8). (See §K for discussion and details.)
7. Staff recommends approval of the five BMP Tariffs, BMPs 1.1, 3.6, 3.7, 5.2 and 5.5, presented in Exhibit 6. Staff further recommends that Ray file with Docket Control, as a compliance item in the docket, the five BMP Tariffs listed above within 30 days of the effective date of the Commission’s Decision in this proceeding for Staff’s review and authorization. (See §K of report for discussion and details.)

8. Staff recommends that the Company closely monitor and record its water usage. Staff further recommends that the Company be required to coordinate the reading of its well meters and individual customer meters on a monthly basis and report this data in its future Annual Reports beginning with 2013 Annual Report filed in 2014. Staff further recommends that the Company monitor the water system closely and take action to ensure that annual water loss is less than 10% by December 2013. If the reported water loss is greater than 10 percent, the Company shall prepare a report containing a detailed analysis and a plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow annual water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within twenty four months of the effective date of the order issued in this proceeding. (See §D of report for discussion and details.)
9. Staff recommends that prior to filing its next rate application the Company undertake a formal study to demonstrate that adding multiple variable frequency drive motors is more cost efficient than adding additional hydropneumatic tank capacity or, whether a more cost efficient alternative might exist.

Conclusions:

1. A check of the Commission's Compliance Section database dated June 21, 2012, indicated that Ray had no ACC delinquent compliance items. (See §H of report for discussion and details.)
2. Ray is in the Arizona Department of Water Resources ("ADWR") Tucson Active Management Area. Staff received a Compliance Status Report from ADWR for Ray on July 27, 2012. In its report ADWR stated that the Company is compliant with departmental requirements governing water providers and/or community water systems. (See §G of report for discussion and details.)
3. In a Compliance Status Report dated April 2, 2012, Arizona Department of Environmental Quality ("ADEQ") reported that Ray water system, PWS No. 10-112, had no major deficiencies and was delivering water that met water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4. (See §F of report for discussion and details.)
4. Ray has approved cross connection and curtailment tariffs. (See §K of report for discussion and details.)
5. Ray has adequate production and storage capacities to support its existing customer base without Well No. 8. (See §C of report for discussion and details.)

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ENGINEERING REPORT

A. PURPOSE OF REPORT

This report was prepared in response to the application filed by Ray Water Company ("Ray" or "Company") with the Arizona Corporation Commission ("ACC" or "the Commission") to increase its water rates. The ACC Utilities Division Staff ("Utilities Staff" or "Staff") engineering review and analysis of the subject application is presented in this report.

An inspection of the Company's water system was conducted by Dorothy Hains, Staff Engineer, accompanied by Company Representative, Rhonda Rosenbaum (Vice President) and David Rader (Field Technician) on August 8, 2012.

B. LOCATION OF THE COMPANY

The Company is located near the Tucson Municipal Airport, along the old Benson Highway near Interstate Highway 10 and Alvernon Way in the City of Tucson ("City") in Pima County. Attached Exhibits 1 and 2 detail the location of the service area in relation to other Commission regulated companies in Pima County and in the immediate area. The Company serves an area approximately two and a half square miles in size that includes a portion of Sections 3, 4, 9 and 10 of Township 15 South, Range 14 East.

C. DESCRIPTION OF SYSTEM

I. *System Description*

Ray owns and operates a water system that consists of seven active well sites and a distribution system. The Company has an emergency interconnection with the City which can supply needed drinking water via a City owned, pressure relief valve ("PRV") station to the Company water system.¹ The Company serves approximately 1,520 metered connections; which includes a mixture of residential and commercial customers. Exhibits 3A, 3B and 3C are schematic drawings of the water system.

A detailed listing of the Company's water system plant follows:

¹ The PRV station is located at 5897 S Alvernon Way.

Table 1 Plant Data in Ray (in PWS #10-095)

Active Drinking Water Wells

ADWR No.	Well #	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
55-214966	2D	2007	14	615	4	75	400	5710 S Rex, Tucson
55-609464	3	1969	12	458	4	40	185	5710 S Herpa, Tucson
55-609465	4	1973	12	425	4	15	125	4410 & 4412 E Rex Tucson
55-609466	5	1963	12	331	4	15	75	6100 S Columbus, Tucson
55-505023	6			612	4	60	325	4450 E Rex, Tucson
55-212103	7	2007	14	600	4	60	325	4310 E Rex
55-219154	8	2010	12	600	4	75	370	Market St./ Belvedere Blvd

Active Storage, Pumping

Location	Structure or equipment	Capacity
Well #5 Site (6100 S Columbus)	Pressure tank	One 5,000 gal
Well #4 Site (4410 & 4412 E Rex)	Pressure tank	One 5,000 gal
	Storage Tank	One 250,000 gal Tank (12' height) Two 50,000 gal Tanks (16' height)
	Booster pump station	One 30-HP One 25-HP One 20-HP
Well #3 Site (5710 S Herpa)	Pressure tank	One 5,000 gal tank
	Booster pump station	Two 15-HP
	Storage tank	One 50,000 gal (16' height) tank
Well #2D Site (5710 S Rex)	Pressure tank	One 50 gal bladder pressure tank
	Booster pump station	Four 30-HP One 15-HP
	Storage tank	One 285,000 gal (16' height) tank One 90,000 gal (16' height) tank

Distribution Mains in Ray CC&N Area

Diameter (inches)	Material	Length (feet)
3	asbestos cement ("AC")	9,730
4	AC	29,900
6	AC	25,773
8	AC	4,410
4	Poly vinyl chloride ("PVC")	735
6	PVC	17,549
8	PVC	21,739
12	PVC	240
6	Ductile Iron Pipe ("DIP")	28
12	DIP	615

Meters in Ray CC&N Area

Size (inches)	Quantity
5/8 x 3/4	1,509
3/4	N/A
1	30
1 1/2	3
2	12
3 (comp)	1
3 (Turbo)	1
4 (comp)	3
4 (Turbo)	1
6 (comp)	1
6 (Turbo)	N/A

Inactive (or demolished or capped) Wells

ADWR No.	Well #	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
55-609462	1		10		6	30	175	3549 E Frankfort, Tucson
N/A	2A	1959					150	5710 S Rex
N/A	2B	1992					550	5710 S Rex
N/A	2C	2004					100	5710 S Rex

Inactive Storage, Pumping

Location	Structure or equipment	Capacity
Well #1 Site (3549 E Frankfort, Tucson)	Pressure tank	One 6,000 gal
Well #2 Site (5710 S Rex)	Pressure tank	One 5,000 gal tank

II. System Analysis

a. Storage and Production

The Ray water system has adequate production and storage capacity without Well No. 8 to support the existing customer base and reasonable growth. Further discussion can be found in Section K.

b. Hydropneumatic Tank

The Ray water system uses hydropneumatic tanks to maintain adequate water pressure through the distribution system. Correct sizing of the hydropneumatic tanks is important because the size of the tank directly determines the frequency of pump cycling (more on-off cycling of the pump may shorten the life of the pump). The Ray water system does not have adequately sized pressure tanks. In lieu of installing additional pressure tank capacity Ray has installed multiple variable frequency drive (“VFD”) motors to address the issue. The installation of multiple pumps operating in rotation extends pump life and reduces the need for more frequent pump repairs. Staff recommends that prior to filing its next rate application the Company undertake a formal study to demonstrate that adding multiple VFD motors is more cost efficient than adding additional hydropneumatic tank capacity or, whether a more cost efficient alternative might exist.

D. WATER USAGE

Table 2 summarizes water usage in the Company’s CC&N area. Exhibit 4 is a graph that shows water consumption data in gallons per day per connection for the Ray water system for the period of January 2011 through December 2011.

Table 2 Water Usage in Ray Water CC&N Area

Month	Number of Customers	Water Sold (in gallons)	Water used for flushing wells and mains (in gallons)	Water pumped (in gallons)	Water purchased (in gallons)	Monthly water loss (in gal)	Daily Average (in gpd/customer)
Jan 11	1,519	13,404,000	50,000	13,940,000	0	486,000	285
Feb 11	1,522	12,819,000		14,455,000	0	1,636,000	301
Mar 11	1,526	14,067,000		18,774,000	0	4,707,000	297
Apr 11	1,528	17,402,000		20,770,000	0	3,368,000	380
May 11	1,523	19,770,000		22,814,000	0	3,044,000	419
Jun 11	1,523	19,810,000		29,346,000	0	9,406,000	434
Jul 11	1,534	27,303,000	130,000	24,079,000	0	-3,224,000	574
Aug 11	1,524	22,235,000		33,363,000	0	11,099,000	471
Sep 11	1,518	19,288,000	29,000	15,311,000	0	-4,027,000	434
Oct 11	1,517	12,437,000	50,000	17,769,000	0	5,247,000	264
Nov 11	1,516	13,404,000	85,000	15,906,000	0	429,000	295
Dec 11	1,519	15,067,000	2,073,000	9,124,000	0	-8,360,000	321
total		207,006,000	2,417,000	235,651,000	0	23,811,000	
Average							372

I Water Sold

Based on information provided by the Company, the calculated highest use is 574 gallons per day ("GPD") per customer in June and the lowest is 264 GPD per customer in October. The average water usage was 372 GPD per customer per year.

II. Non-account Water

Non-account water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft and flushing. Non-account water should be 10 percent or less and never more than 15 percent. The calculated water loss in Ray water system was 10.1 percent during the test year. However, the water use data reported by the Company is suspect with more water sold than pumped in several months. In addition, the Company's adjustments for system flushing seem excessive; for example, in December non-billable water was over two million gallons.

Staff recommends that the Company closely monitor and record water used for system flushing and be prepared to provide records that support the amount of water used for this purpose. Staff further recommends that the Company be required to coordinate the reading of its well meters and individual customer meters on a monthly basis and report this data in its future Annual Reports beginning with 2013 Annual Report filed in 2014. Staff further recommends that the Company monitor the water system closely and take action to ensure that annual water loss is less than 10% by December 2013. If the reported water loss is greater than 10 percent, the Company shall prepare a report containing a detailed analysis and a plan to reduce water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow annual water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within twenty four months of the effective date of the order issued in this proceeding.

E. GROWTH PROJECTION

For the past five years, this Company has experienced a very flat growth rate of about one customer per year. Prior to the economic downturn the Company had an average growth rate of eighty eight customers per year. Future growth is hard to predict since it will depend on what happens with the economy. The Company is expecting little or no growth in the near term.

F. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”) COMPLIANCE

In a Compliance Status Report dated April 2, 2012, ADEQ reported that Ray water system PWS No. 10-112 had no major deficiencies and was delivering water that met water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.

G. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

Ray is in the ADWR Tucson Active Management Area. Staff received a Compliance Status Report from ADWR for Ray on July 27, 2012. In its report ADWR reported that Ray is compliant with departmental requirements governing water providers and/or community water systems.

H. ACC COMPLIANCE

A check of the Commission’s Compliance Section database dated June 21, 2012, indicated that Ray had no ACC delinquent compliance items.

I. WATER TESTING EXPENSES

Ray is subject to mandatory participation in the ADEQ Monitoring Assistance Program (“MAP”). Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, bacteria, and disinfection by-products.
2. The estimated water testing expenses represent a minimum cost based on no “hits” other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented on an annualized basis.
3. MAP fees were calculated from the ADEQ MAP invoice for calendar year 2011.
4. All monitoring expenses are based on Staff’s best knowledge of lab costs and methodology and one point of entry.

Table 3 shows the estimated annual monitoring expense, based on participation in the MAP program.

Table 3 Water Testing Cost (Ray)

Monitoring – 4 POE (7 wells) (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	\$20	252	\$5,040	\$1,680
Inorganics – Priority Pollutants	\$300	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	\$60	MAP	MAP	MAP
Phase II and V:				
IOC's, SOC's, VOC's	\$2,805	MAP	MAP	MAP
Nitrites	\$25	MAP	MAP	MAP
Nitrates – annual	\$25	MAP	MAP	MAP
Asbestos – per 9 years	\$180	2½	MAP	MAP
Lead & Copper – annual*	\$33	60	\$1,980	\$660
TTHM/HHAs	\$360	0	\$0	\$0
Maximum chlorine residual levels	\$10	0	\$0	\$0
MAP fees (annual)				\$4,274.62
Total				\$6,614.62

Water testing expenses should be adjusted to the annual expense amount shown in Table 3 which totals **\$6,615** (rounded).

J. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within the range of anticipated equipment life. These rates are presented in Exhibit 6, and should be used to calculate the annual depreciation expense for the Company. Staff recommends the depreciation rates by individual National Association of Regulatory Utility Commissioners (“NARUC”) category, as delineated in Exhibit 6.

K. OTHER ISSUES

I. Service Line and Meter Installation Charges

The Company is proposing to revise its meter and service line installation charges. These charges are refundable advances and the Company’s proposed charges are within Staff’s experience of what are reasonable and customary charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff using the combined charge proposed by the Company. Staff recommends

approval of the meter and service line installation charges listed under the columns labeled “Staff Recommendation” in Table 4.

Table 4 Service Line and Meter Installation Charges

Meter Size	Current Meter & Service Line Installation Charges	Proposed Service Line installation Charge	Proposed Meter installation Charge	Proposed Total Cost	Staff Recommendation (Service Line installation charge)	Staff Recommendation (Meter installation charge)	Staff Recommended total charges
5/8 x 3/4-inch	\$550	\$445	\$155	\$600	\$445	\$155	\$600
3/4-inch	\$550	\$445	\$255	\$700	\$445	\$255	\$700
1-inch	\$650	\$495	\$315	\$810	\$495	\$315	\$810
1½-inch	\$875	\$550	\$525	\$1,075	\$550	\$525	\$1,075
2-inch (Turbine)	\$1,400	\$830	\$1,045	\$1,875	\$830	\$1,045	\$1,875
2-inch (Compound)	N/A	\$830	\$1,890	\$2,720	\$830	\$1,890	\$2,720
3-inch (Turbine)	\$1,900	\$1,045	\$1,670	\$2,715	\$1,045	\$1,670	\$2,715
3-inch (Compound)	N/A	\$1,165	\$2,545	\$3,710	\$1,165	\$2,545	\$3,710
4-inch (Turbine)	\$3,200	\$1,490	\$2,670	\$4,160	\$1,490	\$2,670	\$4,160
4-inch (Compound)	N/A	\$1,670	\$3,645	\$5,315	\$1,670	\$3,645	\$5,315
6-inch (Turbine)	\$5,800	\$2,210	\$5,025	\$7,235	\$2,210	\$5,025	\$7,235
6-inch (Compound)	N/A	\$2,330	\$6,920	\$9,250	\$2,330	\$6,920	\$9,250
Over 6-inch	N/A	N/A	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

II. Field Inspection Findings

a. Not Used And Useful Plant Items at Well No. 1 & Well No. 2C

Well No. 1

Well No. 1 has been disconnected from the water system and unused since 2005. In addition to Well No. 1, an existing 5,000 gallon pressure tank, control panel and well turbine pump, are not used and useful. All expenses and capital improvement costs related to Well No. 1 after 2005 should not be considered used and useful to the Company’s provision of service.

Well No. 2C

Well No. 2C was installed in 2004 and disconnected from the water system in 2007. All expenses and capital improvement costs including a pressure tank related to Well No. 2C after 2007 should not be considered used and useful to the Company's provision of service.

b. Excess Capacity Well No. 8

Based on Staff's calculations the Ray water system has adequate production and storage capacity to serve its existing customer base and reasonable growth without Well No. 8. The Company has adequate production capacity to accommodate over 550 new connections even without this well. Therefore, Staff recommends that Well No. 8 be considered excess capacity for purposes of this rate case; this includes the Well No. 8 capital improvement expenses and land purchased for Well No. 8.

III. *Curtailment Tariff*

The Company has an approved Curtailment Tariff.

IV. *Cross Connection or Backflow Prevention Tariff*

The Company has an approved Cross Connection & Backflow Tariff.

VI. *Best Management Practices ("BMPs") Tariff*

On October 4, 2012, Ray submitted a response to Staff's Data Request No. DMH-6.1, in which Ray selected five BMP Tariff Nos. 1.1, 3.6, 3.7, 5.2 and 5.5. Copies of these BMPs are presented in Exhibit 7.

Staff concludes that the BMP Tariffs proposed are relevant to the Ray's service area characteristics. The BMP Tariffs selected by Ray conform to the templates developed by Staff.

Staff recommends approval of the five BMP Tariffs, BMPs 1.1, 3.6, 3.7, 5.2 and 5.5, presented in Exhibit 7. Staff further recommends that Ray file with Docket Control, as a compliance item in the docket, the five BMP Tariffs listed above within 30 days of the effective date of the Commission's Decision in this proceeding.

EXHIBIT 2.

LOCATION OF RAY WATER SERVICE AREA

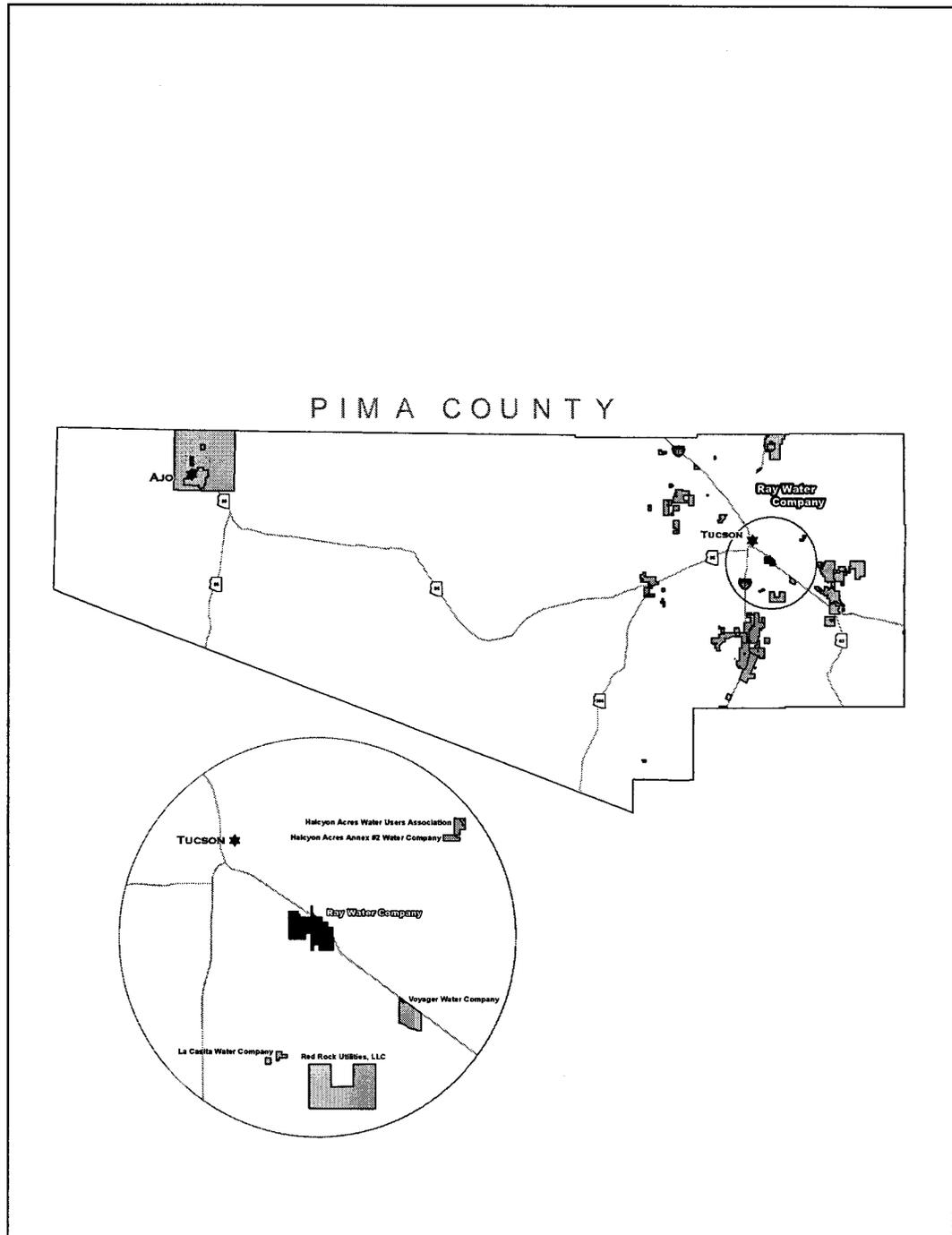


EXHIBIT 3B
SYSTEMATIC DRAWING

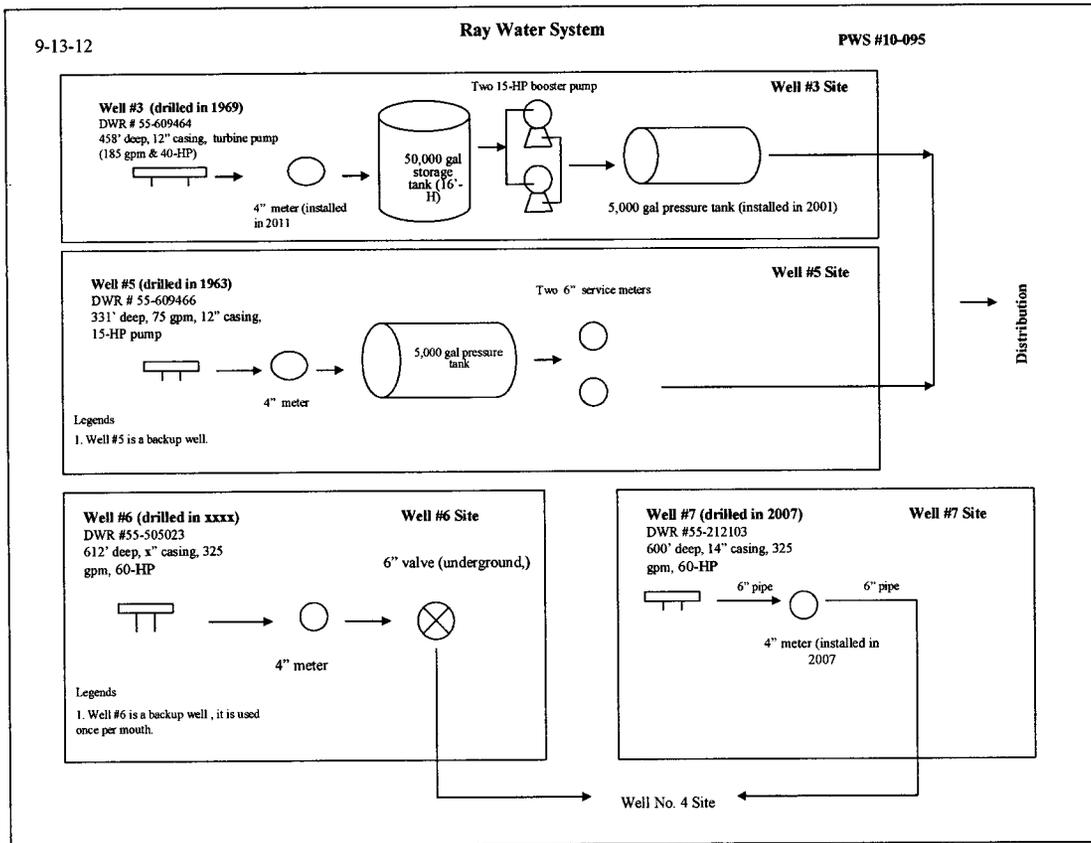


EXHIBIT 3C
SYSTEMATIC DRAWING

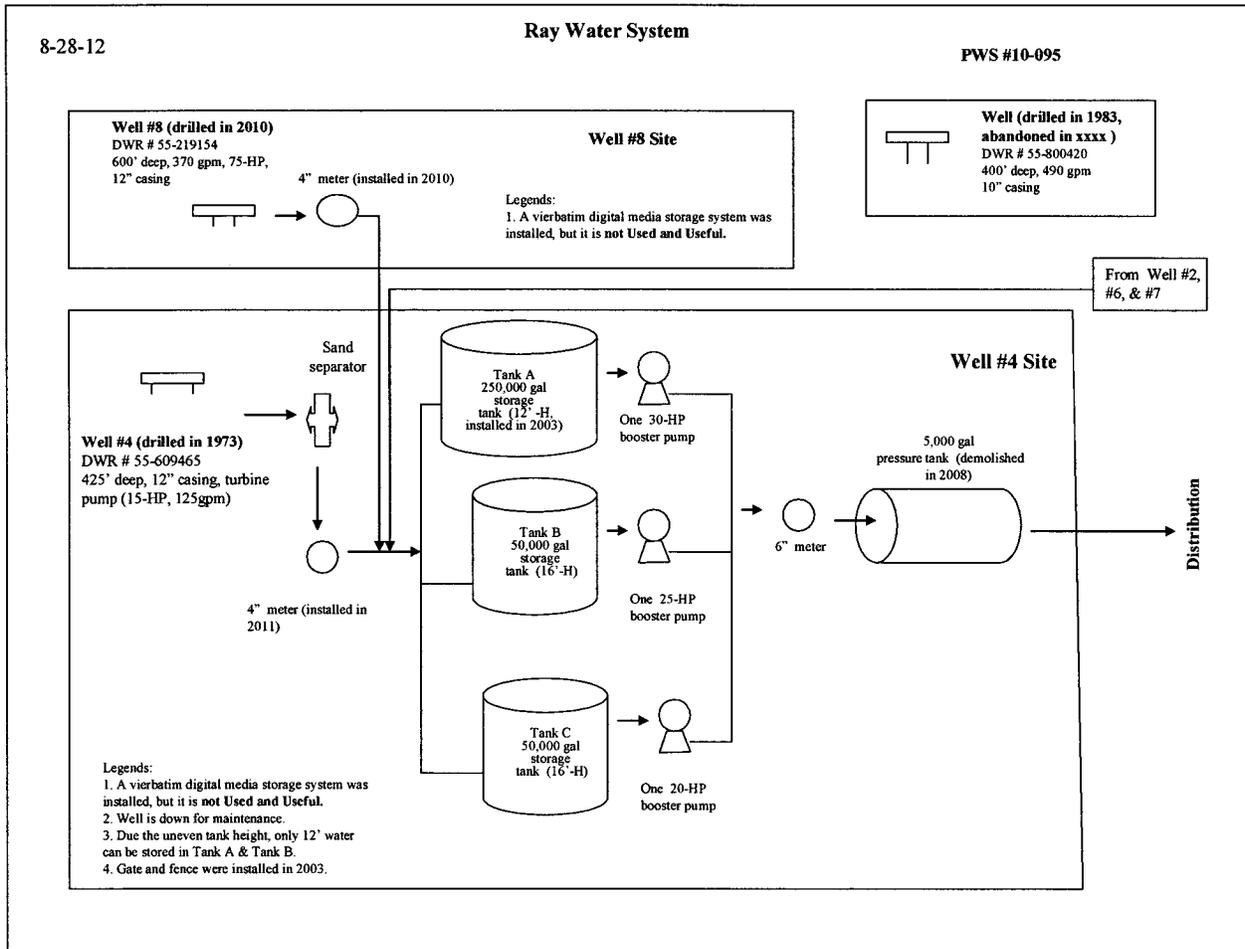


EXHIBIT 4

WATER USAGE IN RAY WATER SERVICE AREA

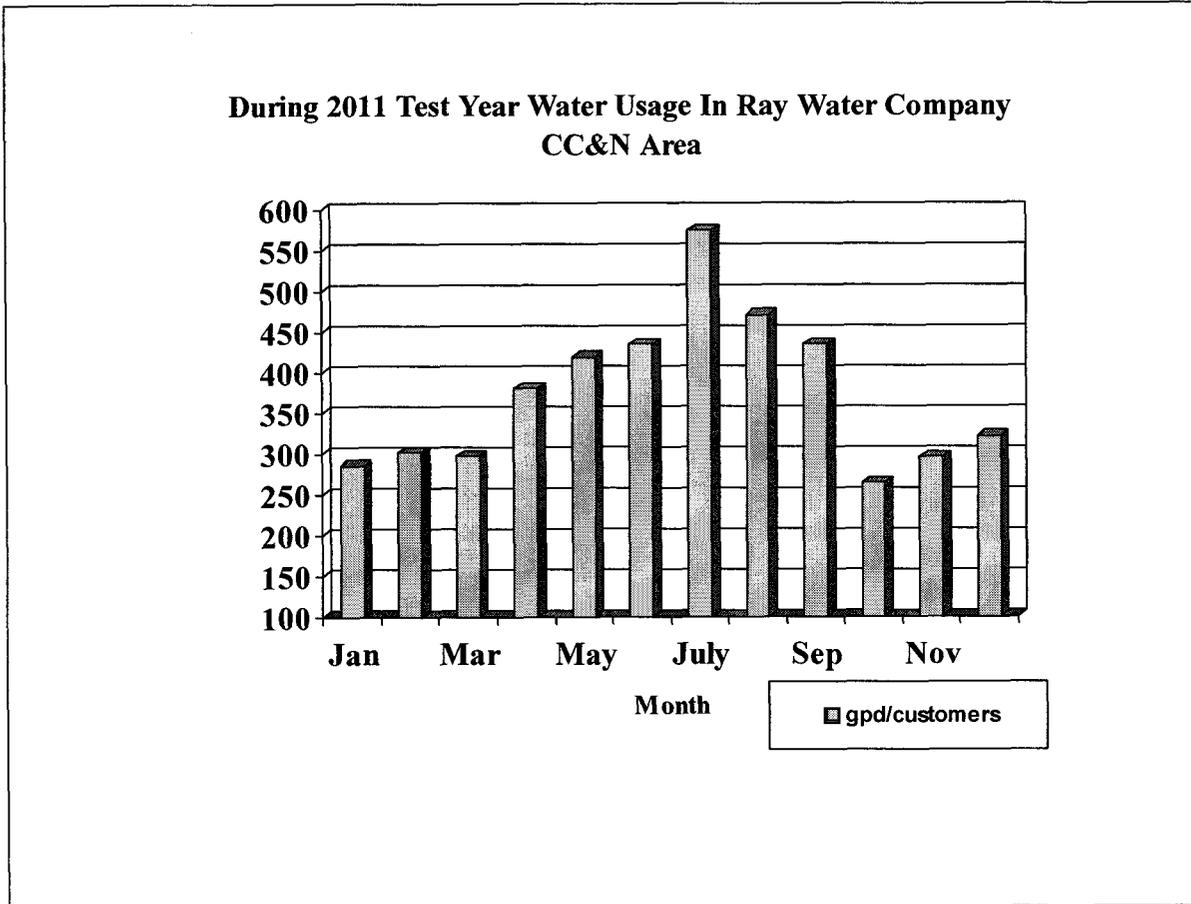


EXHIBIT 5

DEPRECIATION RATES (RAY WATER)

Acct. No.	Depreciable Plant	Approved Rate (%) (Decision # 61610)	Proposed Rate (%)	Staff Recommended Rate (%)
301	Intangibles	5	0.00	0
303	Land & Land Rights	5	0.00	0
304	Structures & Improvements	5	3.33	3.33
305	Collecting & Impounding Reservoirs	5	N/A	2.50
306	Lake, River, Canal Intakes	5	N/A	2.50
307	Wells & Springs	5	3.33	3.33
308	Infiltration Galleries	5	N/A	6.67
309	Raw Water Supply Mains	5	N/A	2.00
310	Power Generation Equipment	5	N/A	5.00
311	Pumping Equipment	5	12.50	12.5
320	Water Treatment Equipment	5	20.00	
320.1	Water Treatment Plants	5	3.33	3.33
320.2	Solution Chemical Feeders	5	20.00	20.0
330	Distribution Reservoirs & Standpipes	5	2.22	
330.1	Storage Tanks	5	2.22	2.22
330.2	Pressure Tanks	5	5.00	5.00
331	Transmission & Distribution Mains	5	2.00	2.00
333	Services	5	3.33	3.33
334	Meters	5	8.33	8.33
335	Hydrants	5	2.00	2.00
336	Backflow Prevention Devices	5	N/A	6.67
339	Other Plant & Misc Equipment	5	6.67	6.67
340	Office Furniture & Equipment	5	6.67	6.67
340.1	Computers & Software	5	20.00	20.00
341	Transportation Equipment	5	20.00	20.00
342	Stores Equipment	5	N/A	4.00
343	Tools, Shop & Garage Equipment	5	5.00	5.00
344	Laboratory Equipment	5	N/A	10.00
345	Power Operated Equipment	5	N/A	5.00
346	Communication Equipment	5	5.00	10.00
347	Miscellaneous Equipment	5	N/A	10.00
348	Other Tangible Plant	5	5.00	----

Exhibit 6 Proposed Best Management Practice Tariffs for Ray Water

Customer High Water Use Inquiry Resolution Tariff – BMP 3.6

PURPOSE

A program for the Company to assist its customers with their high water-use inquiries and complaints (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.6: Customer High Water Use Inquiry Resolution).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall handle high water use inquiries as calls are received.
2. Calls shall be taken by a customer service representative who has been trained on typical causes of high water consumption as well as leak detection procedures that customers can perform themselves.
3. Upon request by the customer or when the Company determines it is warranted, a trained Field Technician shall be sent to the customer's residence to conduct a leak detection inspection and provide the customer with water conservation measures. The leak detection inspection may consist of a meter read check for flow verification. If the on-site inspection is requested by the customer, the Commission approved meter re-read tariff fee shall apply.
4. The Company shall follow up in some way on every customer inquiry or complaint and keep a record of inquiries and follow-up activities.

Local and/or Regional Messaging Program Tariff – BMP 1.1

PURPOSE

A program for the Company to actively participate in a water conservation campaign with local or regional advertizing (Modified Non-Per Capita Conservation Program BMP Category 1: Public Awareness/Public Relations 1.1: Local and/or Regional Messaging Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

5. The Company or designated representative shall actively participate in water conservation campaign with local and/or regional advertising.
6. The campaign shall promote ways for customers to save water.
7. The Company shall facilitate the campaign through one or more of the following avenues (not an all inclusive list):
 - a. Television commercials
 - b. Radio commercials
 - c. Websites
 - d. Promotional materials
 - e. Vehicle signs
 - f. Bookmarks
 - g. Magnets
8. The Company shall keep a record of the following information and make it available to the Commission upon request.
 - a. A description of the messaging program implemented and program dates.
 - b. The number of customers reached (or an estimate).
 - c. Costs of Program implementation.

Customer High Water Use Notification Tariff – BMP 3.7

PURPOSE

A program for the Company to monitor and notify customers when water use seems to be abnormally high and provide information that could benefit those customers and promote water conservation (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services Program 3.7: Customer High Water Use Notification).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

9. The Company shall track water usage for each customer and notify the customer if water use seems excessive for that particular billing for that time of the year.
10. The Company shall identify customers with high consumption and investigate each instance to determine the possible cause.
11. The Company shall contact the high water use customers via telephone, email, by mail or in person. The Company shall contact the customer as soon as practical in order to minimize the possible loss of water. The customer will not be required to do anything to receive this notification.
12. In the notification the Company shall explain some of the most common water usage problems and common solutions and points of contact for dealing with the issues.
13. In the notification, the customer will be reminded of at least the following water-saving precautions:
 - a. Check for leaks, running toilets, or valves or flappers that need to be replaced.
 - b. Check landscape watering system valves periodically for leaks and keep sprinkler heads in good shape.
 - c. Adjust sprinklers so only the vegetation is watered and not the house, sidewalk, or street, etc.
 - d. Continue water conservation efforts with any pools such as installing covers on pools and spas and checking for leaks around pumps.
14. In the notification, the customer will also be reminded of at least the following ordinary life events that can cause a spike in water usage:
 - a. More people in the home than usual taking baths and showers.
 - b. Doing more loads of laundry than usual.
 - c. Doing a landscape project or starting a new lawn.
 - d. Washing vehicles more often than usual.
7. The Company shall provide water conservation information that could benefit the customer, such as, but not limited to, audit programs, publications, and rebate programs.
8. The Company shall assist the customer in a self-water audit and assist the customer in determining what might be causing the high water usage as well as supply customer with information regarding water conservation and landscape watering

guidelines. As part of the water audit the Company shall confirm the accuracy of the customer meter if requested to do so by the customer (applicable meter testing fees shall apply).

9. The type of notification, the timing of the notification (i.e., how long after high water use was discovered by the Company), and the criteria used for determining which customers are notified shall be recorded and made available to the Commission upon request.

WATER SYSTEM TAMPERING TARIFF – BMP 5.2

PURPOSE

The purpose of this tariff is to promote the conservation of groundwater by enabling the Company to bring an action for damages or to enjoin any activity against a person who tampers with the water system.

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically Arizona Administrative Code ("AAC") R14-2-410 and the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. In support of the Company's water conservation goals, the Company may bring an action for damages or to enjoin any activity against a person who: (1) makes a connection or reconnection with property owned or used by the Company to provide utility service without the Company's authorization or consent; (2) prevents a Company meter or other device used to determine the charge for utility services from accurately performing its measuring function; (3) tampers with property owned or used by the Company; or (4) uses or receives the Company's services without the authorization or consent of the Company and knows or has reason to know of the unlawful diversion, tampering or connection. If the Company's action is successful, the Company may recover as damages three times the amount of actual damages.
2. Compliance with the provisions of this tariff will be a condition of service.
3. The Company shall provide to all its customers, upon request, a complete copy of this tariff and AAC R14-2-410. The customers shall follow and abide by this tariff.
4. If a customer is connected to the Company water system and the Company discovers that the customer has taken any of the actions listed in No. 1 above, the Company may terminate service per AAC R14-2-410.
5. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Low Water Use Landscaping Requirements Tariff for Model Homes in New Residential Developments – BMP 5.5

PURPOSE

A program for the Company to reduce water use within its service area and/or increase water use efficiency by limiting or reducing water used for specific purposes (Modified Non-Per Capita Conservation Program BMP Category 5: Ordinances/Conditions of Service/Tariffs 5.5: Low Water Use Landscaping Requirements Tariff for Model Homes in New Residential Developments).

REQUIREMENTS:

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission, specifically A.A.C. R14-2-403 and R14-2-410 and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall provide to the customer/developer/builder distinct guidelines for landscape planning and design for model homes.
2. The following landscape restrictions will be required in order for a customer/developer/builder to receive water service to its model homes from the Company on or after the effective date of this tariff:

Restrictions Applicable to All New Model Home Landscaping -

- a. Model home landscaping will involve strategic planning and design. Landscaped areas will be divided into zones based on water requirements. Each model will have efficient irrigation systems, properly designed and maintained.
- b. All models will be placed on a drip irrigation system with a timer for shrubs and trees to apply water directly to the roots where it is needed. Watering schedules will be adjusted each month to match seasonal weather conditions and landscape requirements.
- c. All front yards shall be landscaped with xeriscape (low water use) materials. A list of low water use landscaping materials is available from the Company upon request. No turf of any kind that requires watering shall be allowed in front yards.
- d. Turf in back yards shall be limited to no more than fifty percent (50%) of the total backyard area.
- e. No model home shall be equipped with a swimming pool, jacuzzi, or other water-use intensive feature (e.g., fountain, fish pond, etc.).
- f. Model home landscapes will require minimal but appropriate maintenance. Landscape maintenance may include pruning, removing trash that has blown into

the landscape, occasional weeding and pest management, checking that the irrigation system is functioning properly, and adjusting automatic irrigation systems as the seasons change.

3. Subject to the provisions of this tariff, the installation of the landscape restrictions will be a condition of service.
4. The Company shall provide to customer/developer/builder a complete copy of this tariff and all attachments upon request for service. The customer/developer/builder shall follow and abide by these landscape restrictions.
5. If after a customer has been connected to the Company water system, the Company discovers that the customer has installed turf or water-use intensive features contrary to the above requirements, the Company shall notify (in writing) the customer of such violation and provide the customer with the appropriate educational materials informing the customer of some possibilities of how to correct the problem. The customer shall be allowed thirty (30) days to come into compliance with the above requirements. If after thirty (30) days the customer is not in compliance with the above requirements, the customer's service may be terminated per Arizona Administrative Code R14-2-410C, R14-2-410D and R14-2-410E.
6. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.