

ORIGINAL

NEW APPLICATION



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Arizona Corporation Commission

DOCKETED

NOV 15 2016

Attorneys for Pima Utility Company

DOCKETED BY *R.A.*

BEFORE THE ARIZONA CORPORATION COMMISSION

W-02199A-16-0421

9 IN THE MATTER OF THE APPLICATION
10 OF PIMA UTILITY COMPANY, AN
11 ARIZONA CORPORATION, FOR A
12 DETERMINATION OF THE FAIR VALUE
13 OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-02199A-16-_____

APPLICATION

14 Pima Utility Company, an Arizona public service corporation ("Pima" or
15 "Company"), hereby applies for an order establishing the fair value of its plant and
16 property used for the provision of public water utility service and, based on such finding,
17 approving permanent rates and charges for utility service designed to produce a fair return
18 thereon. In support thereof, Pima states as follows:

19 1. Pima is an Arizona public service corporation engaged in providing water
20 utility service in portions of Maricopa County, Arizona, pursuant to certificates of
21 convenience and necessity granted by the Arizona Corporation Commission. During the
22 Test Year, Pima served approximately 10,250 water service connections.

23 2. Pima's business office is located at 9532 E. Riggs Road, Sun Lakes,
24 Arizona 85240, and its telephone number is (480) 895-4200. The Company's primary
25 management contact is Steven Soriano. Mr. Soriano is employed by Pima as its Vice
26 President and General Manager.

1 3. The person responsible for overseeing and directing the conduct of this rate
2 application is Mr. Soriano. Mr. Soriano was assisted by Pima's rate case consultant,
3 Thomas Bourassa, Ray Jones, the Company's engineering consultant, and undersigned
4 legal counsel. Mr. Soriano's mailing address is 9532 E. Riggs Road, Sun Lakes, Arizona
5 85248; his telephone number is (480) 895-4200; and his e-mail address is
6 Steve.Soriano@Robson.com. Mr. Bourassa's mailing address is 139 W. Wood Drive,
7 Phoenix, Arizona 85029; his telephone number is (602) 246-7150; and his e-mail address
8 is tjb114@cox.net. Mr. Jones' mailing address is 18835 N. Thompson Peak Parkway,
9 Suite 215, Scottsdale, Arizona 85255; his telephone number is (623) 341-4771; and his e-
10 mail address is Ray.Jones@aricor.com. **All discovery, data requests and other requests**
11 **for information concerning this Application should be directed to Mr. Soriano,**
12 **Mr. Bourassa, and Mr. Jones by e-mail, with a copy to undersigned counsel at**
13 **jay@shapslawaz.com and whitney@shapslawaz.com.**

14 4. Pima's present rates and charges for utility service were approved by the
15 Commission in Decision No. 73573 (November 21, 2012), as modified by Decision No.
16 73993 (July 16, 2013), using a test year ending February 29, 2012. There have been no
17 other changes to Pima's rates since the current rates went into effect on or after July 16,
18 2013.

19 5. Pima's revenues from its utility operations are presently inadequate to
20 provide a fair rate of return on the fair value of its utility plant and property devoted to
21 public service. Operating expenses have caused the revenues produced by the current
22 rates and charges for service to become inadequate to meet operating expenses and
23 provide a reasonable rate of return. Therefore, Pima requests that the Commission
24 approve certain adjustments to its rates and charges for utility service so that Pima may
25 recover its operating expenses and be given an opportunity to earn a just and reasonable
26 rate of return on the fair value of its property. The Company agrees to use its original cost

1 rate base as its fair value rate base in this proceeding to minimize disputes and reduce rate
2 case expense.

3 6. Filed concurrently herewith are the schedules required pursuant to A.A.C.
4 R14-2-103 for rate applications by Class "B" utilities. The test year utilized by Pima in
5 connection with the preparation of such schedules is the 12-month period that ended
6 December 31, 2015. Pima requests that the Commission utilize such test year in
7 connection with this Application, with appropriate adjustments to obtain a normal or more
8 realistic relationship between revenues, rate base and expenses during the period in which
9 the rates established in this proceeding are in effect.

10 7. During the test year, Pima's adjusted gross revenues were \$2,423,950 from
11 water utility service. The adjusted operating income from the water division was
12 \$411,711, leading to an operating income deficiency of \$250,033. The adjusted fair value
13 rate base was \$7,806,162. Thus, the rate of return on water operations during the test year
14 was 5.27 percent.

15 8. Pima submits that these rates of return are inadequate to allow it to obtain
16 debt, pay a reasonable dividend to its stockholder, maintain a sound credit rating, and/or
17 enable the Company to attract additional capital on reasonable and acceptable terms in
18 order to continue the investment in utility plant necessary to adequately serve customers.

19 9. Pima is seeking an increase in water utility revenues equal to \$337,024, an
20 increase in revenues of 13.90 percent. The adjustments to the Company's rates and
21 charges that are proposed herein, when fully implemented, will produce a rate of return on
22 the fair value rate base equal to 8.48 percent from water operations.

23 10. Filed concurrently in support of this Application is the Direct Testimony of
24 Steven Soriano, providing an overview of Pima's application for new rates.

25 11. Pima also submits the Direct Testimony of Ray L. Jones, P.E., providing an
26 overview of the Company's water system and operations and support for plant additions,

1 and discussing the B-2 Schedules and depreciation rates.

2 12. Finally, Pima submits the Direct Testimony of Thomas J. Bourassa, in two
3 separate volumes that collectively provide an overview of Pima's rate filing, discussion of
4 the revenue requirement, including the "A" through "F" schedules, development of the
5 rate base and income statement adjustments, cost of equity capital and related issues,
6 proposed rates, including the "H" schedules, discussion of the effects of the proposed
7 rates on customers' bills, and addressing the Company's request for (1) a Purchased
8 Power Adjustment Mechanism ("PPAM"), and (2) a Property Tax Adjustment
9 Mechanism ("PTAM"). The Company's "D" Schedules, which concern the cost of
10 capital, are attached to the volume of Mr. Bourassa's testimony addressing cost of capital.
11 The remaining schedules for the water division are separately bound and filed
12 concurrently with the Application.

13 13. Attached hereto as **Attachment 1** are water plant descriptions and a
14 completed water use data sheet for the 2015 calendar year.

15 14. Attached hereto as **Attachment 2** is Pima's proposed PPAM.

16 15. Attached hereto as **Attachment 3** is Pima's proposed PTAM.

17 WHEREFORE, Pima requests the following relief:

18 A. That the Commission, upon proper notice and at the earliest possible time,
19 conduct a hearing in accordance with A.R.S. § 40-251 and determine the fair value of
20 Pima's utility plant and property devoted to providing water utility service;

21 B. Based upon such determination, that the Commission approve permanent
22 adjustments to the rates and charges for water utility service provided by Pima, as
23 proposed herein, or approve such other rates and charges as will produce a just and
24 reasonable rate of return on the fair value of Pima's utility plant and property;

25 C. That the Commission approve Pima's request for a PPAM and PTAM; and
26

1 D. That the Commission authorize such other and further relief as may be
2 appropriate to ensure that Pima has an opportunity to earn a just and reasonable return on
3 the fair value of its utility plant and property and as may otherwise be required under
4 Arizona law.

5 RESPECTFULLY SUBMITTED this 15th day of November, 2016.

6 SHAPIRO LAW FIRM, P.C.

7
8 By: _____

Jay L. Shapiro
1819 E. Morten Avenue, Suite 280
Phoenix, AZ 85020
jay@shapslawaz.com

Attorneys for Pima Utility Company

9
10 ORIGINAL and fifteen (15) copies of the foregoing,
11 together with the direct testimonies
12 and schedules supporting this application
13 were delivered this 15th day of November, 2016, to:

14
15 Docket Control
16 Arizona Corporation Commission
17 1200 W. Washington Street
Phoenix, AZ 85007

18 By: Whitney Bink
19
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ATTACHMENT 1

COMPANY NAME Pima Water Company	
Name of System:	ADEQ Public Water System Number:

WATER COMPANY PLANT DESCRIPTION

WELLS

ADWR ID Number*	Pump Horsepower	Pump Yield (gpm)	Casing Depth (Feet)	Casing Diameter (Inches)	Meter Size (inches)	Year Drilled
See Attached						

* Arizona Department of Water Resources Identification Number

OTHER WATER SOURCES

Name or Description	Capacity (gpm)	Gallons Purchased or Obtained (in thousands)
N/A		

BOOSTER PUMPS		FIRE HYDRANTS	
Horsepower	Quantity	Quantity Standard	Quantity Other
75	4	709	
40	2		
25	8		

STORAGE TANKS		PRESSURE TANKS	
Capacity	Quantity	Capacity	Quantity
400,000	1	5,000	1
600,000	1	15,000	1
750,000	2		

Note: If you are filing for more than one system, please provide separate sheets for each system.

Pima Utility Company - Water Division
 Water Company Plant Descriptions
 December 31, 2014

Wells:

ADWR ID No.	Pump Horsepower	Pump Yield (gpm)	Casing Depth (feet)	Casing Diameter (inches)	Meter Size (inches)	Year Drilled	Well #	POE	Arsenic Levels (mg/l)
55-520891	150	1,600	900	20/16	10/8/10	1988	27	3	0.0048
55-625796	200	1,700	600	20	12	1952	29	Irrig	
55-806730	200	1,200	861	16	12	rehab 1994	29A	3	0.0048
55-566937	200	1,500	910	20	12	1999	29B	3	0.0048
55-625798	125	1,100	820	20	10	1947	31	1	0.0087
55-625799	250	2,200	750	16	10	1950	32	Irrig	
55-625800	150	1,600	502	14	8	1955	33	2	0.0065
55-514527	150	1,500	874	20/16	8	1986	34	2	0.0065

COMPANY NAME Pima Water Company
Name of System: _____ ADEQ Public Water System Number: _____

WATER COMPANY PLANT DESCRIPTION (CONTINUED)

MAINS

Size (in inches)	Material	Length (in feet)
2	PVC	221
3		
4	PVC	7,031
5		
6	PVC	306,747
8	PVC	96,682
10	PVC	43,488
12	PVC	13,527

CUSTOMER METERS

Size (in inches)	Quantity
5/8 X 3/4	9,798
3/4	4
1	280
1 1/2	11
2	94
Comp. 3	
Turbo 3	
Comp. 4	
Turbo 4	
Comp. 6	
Turbo 6	

For the following three items, list the utility owned assets in each category for each system.

TREATMENT EQUIPMENT:

Chlorinators (4)

STRUCTURES:

Pump Houses (2)

OTHER:

Note: If you are filing for more than one system, please provide separate sheets for each system.

COMPANY NAME: Pima Water Company	
Name of System:	ADEQ Public Water System Number:

WATER USE DATA SHEET BY MONTH FOR CALENDAR YEAR 2014

MONTH	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED (Thousands)	GALLONS PURCHASED (Thousands)
JANUARY	10,184	95,541	97,775	0
FEBRUARY	10,187	98,052	119,994	0
MARCH	10,188	109,520	125,438	0
APRIL	10,189	163,587	173,204	0
MAY	10,191	210,168	223,778	0
JUNE	10,188	221,940	238,847	0
JULY	10,187	189,934	204,356	0
AUGUST	10,186	174,179	193,289	0
SEPTEMBER	10,184	135,885	143,420	0
OCTOBER	10,186	156,550	168,806	0
NOVEMBER	10,189	136,402	149,642	0
DECEMBER	10,187	78,160	88,464	0
TOTALS →		1,769,918	1,927,013	0

What is the level of arsenic for each well on your system? See Attached mg/l
(If more than one well, please list each separately.)

If system has fire hydrants, what is the fire flow requirement? 1,000 GPM for 2 hrs

If system has chlorination treatment, does this treatment system chlorinate continuously?
 Yes No

Is the Water Utility located in an ADWR Active Management Area (AMA)?
 Yes No

Does the Company have an ADWR Gallons Per Capita Per Day (GPCPD) requirement?
 Yes No

If yes, provide the GPCPD amount: 462

Note: If you are filing for more than one system, please provide separate data sheets for each system.

ATTACHMENT 2

PIMA UTILITY COMPANY

PROPOSED PLAN OF ADMINISTRATION FOR PURCHASED POWER ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration ("POA") for the Purchased Power Adjustment Mechanism ("PPAM") for Pima Utility Company ("Pima" or "Company") approved by the Arizona Corporation Commission ("Commission") in Decision No. _____ on _____. The PPAM allows Pima to pass through to its customers the increase or decrease in purchased power costs that result from a rate change for any Commission-regulated electric service provider supplying retail electric service to the Company.

II. PPAM RELATED FILINGS.

A. Within 60 days of the effective date of a Commission Decision authorizing a rate change in the approved tariffs for any Commission-regulated electric service provider supplying retail electric service to the Company, the Company shall file with Docket Control an analysis of the actual impact on the energy portion of the Company's electric service costs.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company's purchased power expenses were calculated in the time period prior to a change in the rate that the Company must pay for purchased power. These calculations will include basic service charges and rate and volume figures. That is, the Company will break down its total purchased power bill into the amount due to fixed fees, volume of electricity used, and the rates paid per unit of electricity. For the period following the rate change, the Company will provide the same information, then compare the two periods, isolating any change in purchased power cost that is due exclusively to a rate change. The specific intent is to show exactly how much of any increase or decrease is due to changes in rates beyond the Company's control and how much is due to a change in the amount of power that the Company consumes. The Company will only recover increases or refund decreases that are due to changes in rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PPAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company's calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company's purchased power costs and any conservation or power-shifting measures employed by the Company.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

III. APPLICATION TO WATER AND SEWER CUSTOMERS.

A. The increase or decrease in purchased power costs that are due to changes in rates at the Company's water and sewer facilities will be allocated on a per capita basis.

B. See the following example:

Test Year			Current Year	
Purchased Power Rate		\$0.0800	Purchased Power Rate	\$0.1000
Kilowatt Hours Used	1,250,000		Kilowatt Hours Used	1,250,000
Purchased Power Expense	\$100,000		Purchased Power Expense	\$125,000

Pass Through Calculation	
Current Year Purchased Power Expense	\$125,000
Test Year Purchased Power Expense	\$100,000
Increase in Purchased Power Expense Due to Rate Increase	\$25,000

PPAM Charge on Sample Customer Bill	
Increase in Purchased Power Expense Due to Rate Increase	\$25,000
Number of Water/Sewer Customers	20,000
PPAM Charge on Sample Customer Bill	\$1.25

ATTACHMENT 3

PIMA UTILITY COMPANY

PROPOSED PLAN OF ADMINISTRATION FOR PROPERTY TAX ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration (“POA”) for the Property Tax Adjustment Mechanism (“PTAM”) for Pima Utility Company (“Pima” or “Company”) approved by the Arizona Corporation Commission (“Commission”) in Decision No. _____ on _____. The PTAM allows Pima to pass through to its customers the increase or decrease in property taxes that results from a change in the applicable assessment ratio and/or property tax rates.

II. PTAM RELATED FILINGS.

A. Within 60 days of the effective date of a change in the assessment ratio and/or property tax rates applicable to the Company, the Company shall file with Docket Control an analysis of the actual impact on the Company’s property tax expenses.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company’s property tax expenses were calculated in the time period prior to a change in the assessment ratio and/or property tax rate that affects the Company’s property tax expenses. These calculations will include the assessment ratio, the property tax rates, and the value of the property that was taxed. For the period following the change(s), the Company will provide the same information, then compare the two periods, isolating any change in property tax expense that is due exclusively to changes in the assessment ratio and/or property tax rates. The specific intent is to show exactly how much of any increase or decrease in property tax expense is due to changes in the assessment ratio and tax rates beyond the Company’s control and how much is due to changes in the value of the property the Company owns. The Company will only recover increases or refund decreases that are due to changes in the assessment ratio and tax rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PTAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company’s calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company’s property tax expenses.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

III. APPLICATION TO WATER AND SEWER CUSTOMERS.

A. The increase or decrease in property tax expenses that are due to changes in the assessment ratio and/or property tax rates at the Company's water and sewer facilities will be allocated on a per capita basis.

B. See the examples on the next page:

Change in Assessment Ratio Example

Test Year		➔	Current Year	
Assessment Ratio	20.00%		Assessment Ratio	21.00%
Property Full Cash Value	\$10,000,000		Property Full Cash Value	\$10,000,000
Assessed Valuation	\$2,000,000		Assessed Valuation	\$2,100,000

Change in Assessed Valuation	
Current Year Assessed Valuation	\$2,100,000
Test Year Assessed Valuation	\$2,000,000
Increase in Assessed Valuation Due to Increase in Assessment Ratio	\$100,000

Test Year		Current Year	
Total Property Tax Rate	10.00%	Total Property Tax Rate	10.00%
Assessed Valuation	\$2,000,000	Assessed Valuation	\$2,100,000
Property Tax Expense	\$200,000	Property Tax Expense	\$210,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Increase in Assessment Ratio	\$10,000
Number of Water/Sewer Customers	20,000
PTAM Charge on Sample Customer Bill	\$0.50

Change in Total Property Tax Rate Example

Test Year		➔	Current Year	
Total Property Tax Rate	10.00%		Total Property Tax Rate	11.00%
Assessed Valuation	\$2,000,000		Assessed Valuation	\$2,000,000
Property Tax Expense	\$200,000		Property Tax Expense	\$220,000

Pass Through Calculation	
Current Year Property Tax Expense	\$220,000
Test Year Property Tax Expense	\$200,000
Increase in Property Tax Expense Due to Rate Increase	\$20,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Rate Increase	\$20,000
Number of Water/Sewer Customers	20,000
PTAM Charge on Sample Customer Bill	\$1.00

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BEFORE THE ARIZONA CORPORATION COMMISSION

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ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
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DOCKET NO: W-02199A-16-

**DIRECT TESTIMONY OF
STEVEN SORIANO**

November 15, 2016

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I. INTRODUCTION 1
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1 **I. INTRODUCTION**

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

3 A. My name is Steven Soriano. My business address is 9532 E. Riggs Road, Sun
4 Lakes, Arizona 85012.

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

6 A. On behalf of the Applicant, Pima Utility Company ("Pima" or "Company").

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

8 A. I am employed as a Vice-President for Robson Communities, Inc. I also hold the
9 titles of Vice-President and Assistant Secretary for Pima, and function as Pima's
10 General Manager. I am also the VP and GM for all of the other Robson affiliated
11 utilities.

12 **Q. WHAT IS THE RELATIONSHIP BETWEEN ROBSON COMMUNITIES,
13 INC. AND PIMA?**

14 A. Robson Communities, Inc. provides accounting and administrative services to a
15 group of affiliated companies collectively referred to as "Robson." Pima provides
16 water and wastewater utility services to the Sun Lakes community (developed by
17 Robson) and two additional small subdivisions adjacent to Sun Lakes.

18 **Q. IS ROBSON THE PARENT OF PIMA?**

19 A. No. Robson and Pima would be better described as affiliates.

20 **Q. YOU MENTIONED OTHER ROBSON AFFILIATED UTILITIES?**

21 A. Yes, in addition to Pima, the Robson family includes the following water and
22 wastewater utilities:

23 Lago Del Oro Water Company
24 Ridgeview Utility Company
25 SaddleBrooke Utility Company
26 Quail Creek Water Company, Inc.
Picacho Water Company
Picacho Sewer Company

1 Mountain Pass Utility Company
2 Santa Rosa Water Company
3 Santa Rosa Utility Company

3 **Q. WHAT ARE YOUR RESPONSIBILITIES FOR PIMA?**

4 A. I oversee the operations and business management functions for the Company.
5 As such, I am responsible for the daily operations and administration of the utility,
6 for the financial and operating results, for capital and operating cost budgeting, for
7 rate case planning and regulatory oversight, and rate setting policies and
8 procedures.

9 **Q. WHAT WAS YOUR EDUCATIONAL AND EMPLOYMENT**
10 **BACKGROUND BEFORE GOING TO WORK WITH ROBSON?**

11 A. Before joining Robson in 1995, I was employed as an auditor and a CPA with
12 Kenneth Leventhal/Ernst and Young in Phoenix. In 1991, I received my degree in
13 business administration and accounting from State University of New York at
14 Buffalo.

15 **Q. WHAT OTHER POSITIONS HAVE YOU HELD WITH ROBSON?**

16 A. During my employment with Robson I have, at times, managed the various
17 companies' construction, engineering, marketing, finance and mortgage
18 operations. Additionally, the people operating the independent living and assisted
19 living multifamily projects report to me.

20 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

21 A. Yes. I was a witness in Pima's 2011 rate case (consolidated Docket Nos. W-
22 02199A-11-0329 and SW-02199A-11-0330). I was also a witness testimony in
23 Lago Del Oro Water Company's 2013 rate case (Docket No. W-01944A-13-
24 0215), and in Quail Creek Water Company's 2014 rate case (Docket No. W-
25 02514A-14-0343).

26

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**
2 **DOCKET?**

3 A. To support Pima's application for a determination of fair value and the setting of
4 new rates. Specifically, I will introduce the Company's application and explain
5 why Pima is filing for new rates at this time. I will also address Pima's
6 compliance status.

7 **II. OVERVIEW OF PIMA'S APPLICATION FOR NEW RATES**

8 **Q. WHAT REVENUE INCREASE IS THE COMPANY SEEKING IN THIS**
9 **CASE?**

10 A. Pima seeks a revenue increase of \$337,024 or 13.90 percent for water utility
11 service and an increase of \$369,273 or 10.82 percent for wastewater utility service.
12 Mr. Bourassa provides all the details on the revenue requirement, including rate
13 base, operating expenses, rate design and cost of capital in his direct testimony.

14 **Q. WHEN WAS PIMA'S LAST RATE CASE?**

15 A. The Company's last rate case was filed based on a test year ending December 31,
16 2010, with rates being approved in Decision No. 73573 (November 21, 2012) and
17 becoming effective November 1, 2012. Decision No. 73573 was later modified by
18 Decision No. 73993 in July of 2013 to allow the Company to recover income taxes.
19 Decision No. 73993 also required the Company to file a full rate case for both its
20 water and wastewater divisions by no later than June 30, 2017, using a 2016
21 calendar year test year.¹

22 **Q. WHY IS PIMA FILING FOR NEW RATES AT THIS TIME?**

23 A. Pima has made significant plant investment for both its water and wastewater
24 divisions since its last rate case. With these significant investments sitting outside
25

26 ¹ Decision No. 73993 (July 16, 2013) at 6:6-7.

1 of rate base, revenues from water and utility services are no longer adequate to
2 provide a recovery of operating expenses and provide an opportunity to earn our
3 authorized rate of return on investment. Given this, the Company decided to file
4 now using a 2015 calendar test year, rather than waiting another year so.

5 **Q. WILL THE RATE CASE EXPENSE SURCHARGE APPROVED IN**
6 **DECISION NO. 73573 CEASE BEFORE NEW RATES APPROVED IN**
7 **THIS CASE GO INTO EFFECT?**

8 A. It should. The surcharge will cease December 1, 2017, which is about the time a
9 decision is due in this rate case under the Commission's time clock.

10 **Q. YOU MENTIONED SIGNIFICANT PLANT INVESTMENT SINCE THE**
11 **LAST RATE CASE?**

12 A. Yes. Mr. Jones discusses all of the water and wastewater system improvements
13 since the last rate case in his direct testimony.²

14 **III. MISCELLANEOUS ISSUES**

15 **Q. WHAT IS THE COMPANY'S COMPLIANCE STATUS?**

16 A. To the best of my knowledge, Pima is currently in compliance with the rules and
17 regulations of Pima County, ADEQ, ADWR, and the Commission.

18 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

19 A. Yes.

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26 ² Direct Testimony of Ray L. Jones at 6-7.

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Attorneys for Pima Utility Company

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DOCKET NO: W-02199A-16-

**DIRECT TESTIMONY OF
RAY L. JONES, P.E.**

November 15, 2016

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

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

3 A. My name is Ray L. Jones, P.E. My business address is 18835 North Thompson
4 Peak Parkway, Suite 215, Scottsdale, Arizona 85255.

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

6 A. On behalf of the Applicant Pima Utility Company (“Pima” or “Company”).

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

8 A. I am the owner and principal of ARICOR Water Solutions LC (“ARICOR”). I am
9 also Executive Director of the Water Utilities Association of Arizona (“WUAA”).
10 Founded in 1961, WUAA is a non-profit association representing Arizona’s
11 private, regulated water and wastewater utilities.

12 **Q. WHAT WAS YOUR EDUCATIONAL AND EMPLOYMENT
13 BACKGROUND BEFORE GOING TO WORK FOR ARICOR?**

14 A. I began my working career with Citizens Utilities Company (“Citizens”) in 1985 as
15 a Staff Engineer for the Maricopa County water and wastewater division. I was
16 employed at Citizens for 17 years, ascending to Vice President and General
17 Manager for the Arizona water and wastewater operations. In 2002, American
18 Water (“American”) purchased the water and wastewater assets of Citizens and I
19 joined American as the President of Arizona-American Company. I left American
20 in 2004 to start ARICOR.

21 I received a Bachelor of Science in Civil Engineering in 1985 from the
22 University of Kansas, and a Master of Business Administration in 1991 from
23 Arizona State University. I am a Registered Professional Engineer in Arizona and
24 California and a Grade 3 Certified Operator in Arizona for all four water and
25 wastewater classifications. I specialize in water resource issues, regulatory
26 strategies, rate case filings and water and wastewater utility management and

1 operations. My resume is attached as **Exhibit RLJ-DT1**.

2 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

3 A. In my time with Citizens and American, I prepared or assisted in the preparation of
4 multiple filings before the Arizona Corporation Commission (“Commission”),
5 including rate applications and CC&N filings. Since starting ARICOR, I have
6 prepared several filings and assisted in the preparation of several more filings
7 before the Commission, including rate applications and CC&N filings. I have also
8 provided testimony in all of these cases. A summary of my regulatory work
9 experience is included in my resume attached as **Exhibit RLJ-DT1**.

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

11 A. To support Pima’s application for rate relief. Specifically, I will give an overview
12 of Pima’s water system and operations, provide support for plant additions, and
13 discuss the B-2 schedules.

14 **II. PIMA’S WATER AND WASTEWATER SYSTEM AND OPERATIONS**

15 **A. General Overview**

16 **Q. WHAT IS YOUR RELATIONSHIP TO PIMA?**

17 A. I provide consulting services to the water and wastewater companies affiliated with
18 Robson, including Pima. Specifically, I assist and advise Pima on a variety of
19 matters related to the ownership and operation of their water and wastewater
20 system. In my capacity as a consultant to Pima, I have become familiar with their
21 facilities and operations.

22 **Q. WHO IS ROBSON?**

23 A. Robson refers to a group of affiliated companies that developed most of the
24 residential neighborhoods served by Pima. Pima is one of several water and
25 wastewater utilities regulated by the Commission that is affiliated with Robson.¹

26 ¹ Direct Testimony of Steven Soriano at 1-2.

1 **Q. WOULD YOU DESCRIBE PIMA'S WATER AND WASTEWATER**
2 **SYSTEM?**

3 A. Pima's water and wastewater system is an integrated system serving the
4 unincorporated master planned community of Sun Lakes and two subdivisions
5 immediately adjacent to Sun Lakes. Pima's customer base is approximately 96%
6 residential, with only a small number of commercial and irrigation customers.

7 The Pima water system consists of three water plant sites consisting of water
8 storage tanks and booster pumps. The water plants are interconnected by a looped
9 distribution system to provide system reliability. In addition, the water plants are
10 designed to provide reliable service through the use of diesel driven booster pumps
11 and backup generators. The system is designed to provide a 1,000-gallon per
12 minute fire flow.

13 The water plant sites are fed by six potable wells, each with chlorination
14 facilities. Four of the potable wells are used exclusively for the potable water
15 system, and two of the wells can be pumped either to the potable water system or
16 directly to irrigation customers. Two additional wells are dedicated irrigation
17 wells. The combination of dedicated irrigation wells, dedicated potable wells and
18 dual use wells provides water supply reliability by allowing operational flexibility
19 to meet customer demands.

20 The Pima wastewater treatment system consists of a single 2.4 million
21 gallon per day wastewater reclamation facility ("WRF"). The WRF is a sequential
22 batch reactor facility that includes aerobic digesters, sand filtration and ultra-violet
23 disinfection. The collection system consists of a gravity collection system with
24 sixteen lift stations located at various points in the collection system.

25 Effluent from the WRF is recycled by direct delivery of reclaimed water to
26 the Oakwood Golf Course. The effluent reuse system includes five recharge and

1 recovery wells. The recharge and recovery wells are used to deliver recovered
2 effluent to the Oakwood Golf Course and to the Phase III HOA for landscape
3 watering. All remaining effluent is recharged into the groundwater aquifer directly
4 beneath the Pima service area, providing a renewable source of groundwater.

5 **Q. WHAT IS YOUR OPINION OF PIMA'S WATER AND WASTEWATER**
6 **FACILITIES AND OPERATIONS?**

7 A. My observations indicate that Pima's water and wastewater facilities are well
8 designed, well maintained and provide reliable service to the community. Pima's
9 operations staff is highly knowledgeable regarding water and wastewater system
10 operations and operate the systems in an effective and efficient manner.

11 **Q. WHAT IS THE SIGNIFICANCE OF HAVING AN INTEGRATED WATER**
12 **AND WASTEWATER SYSTEM?**

13 A. Historically, Arizona has relied on groundwater supplies to serve water demands.
14 This reliance resulted in significant over-drafting of groundwater supplies. In
15 1980, Arizona adopted the Groundwater Code of 1980 ("Code"). The Code
16 implemented stringent regulation of groundwater supplies by promoting water
17 conservation and requiring the use of renewable supplies.

18 As an integrated water and wastewater provider, Pima is well positioned to
19 utilize renewable effluent supplies to meet water demands and replenish the
20 groundwater aquifer below its service area. Pima recognizes that groundwater is a
21 scarce resource, and through the use of reclaimed (recycled) water for turf facilities
22 and recharge of the aquifer, Pima is helping to ensure the long-term sustainable
23 provision of utility services to its customers.

24 **Q. WOULD YOU SUMMARIZE PIMA'S WATER CONSERVATION**
25 **PROGRAM?**

26 A. Pima is enrolled as a regulated tier II municipal provider in ADWR's Modified

1 Non-Per Capita Conservation Program (“NPCCP”). As a part of the program,
2 Pima reviewed its water and wastewater system and proposed Best Management
3 Practices (“BMPs”) for implementation in the Pima service area. On August 24,
4 2009 ADWR approved the following BMPs for Pima:

- 5 • Customer High Water Use Inquiry Resolution
- 6 • Customer High Water Use Notification
- 7 • Water Waste Investigations and Information
- 8 • Leak Detection Program
- 9 • Meter Repair and/or Replacement Program

10 In addition to the BMPs, Pima has implemented a Public Education Program
11 as required by the NPCCP.

12 **Q. WHAT ARE THE COMPONENTS OF PIMA’S PUBLIC EDUCATION**
13 **PROGRAM?**

14 A. Pima provides water conservation education through two primary communication
15 channels. First, Pima provides water wise tips to each of its customers through a
16 note on the water bill during most months. Second, Pima makes AWWA
17 conservation brochures available in all of the country clubs (4) and at its Sun Lakes
18 offices. In addition, articles written by Pima are placed in the Sun Lakes
19 community newspaper.

20 **Q. DOES PIMA HAVE A PROGRAM TO ADDRESS WATER LOSSES?**

21 A. Yes. All water providers in the Phoenix Active Management Area are required to
22 track and report water losses to ADWR. Pima closely monitors this data and
23 implements corrective action as warranted. Pima also has a meter replacement
24 program.

1 Q. WHAT IS PIMA'S LOST AND UNACCOUNTED FOR WATER
2 PERCENTAGE FOR THE TEST YEAR?

3 A. 7.3%.

4 B. Plant Additions Since Last Rate Case

5 Q. WHAT IS PIMA'S MOST RECENT TEST YEAR USED FOR
6 RATEMAKING?

7 A. The Company's last water and wastewater rate cases were filed based on a 2010
8 test year.

9 Q. PLEASE DESCRIBE THE MAJOR WATER PLANT ADDITIONS ADDED
10 SINCE THE LAST TEST YEAR.

11 A. Plant additions for water facilities have been primarily for replacement and
12 upgrading of aging water facilities necessary to maintain safe and reliable service
13 to Pima's customers. The most significant projects were replacement of aging
14 services and meters at a combined cost of \$1.2 million. The Company expended in
15 excess of \$300,000 for the replacement and updating of the aging electrical system
16 at Water Plant No. 1 and the rehabilitation of Well 29B. Other significant projects,
17 totaling approximately \$250,000, include the pump and valve replacements and
18 tank rehabilitation at Water Plant No. 3, pump, valve and meter replacements at
19 Water Plant No. 2 and valve replacements at Well 27.

20 Q. PLEASE DESCRIBE THE MAJOR WASTEWATER PLANT ADDITIONS
21 ADDED SINCE THE LAST WASTEWATER TEST YEAR.

22 A. A project to improve the reliability of the wastewater collection system, known as
23 the Hunt Highway Sewer Force Main Project, included the addition of Lift Station
24 16 and a new force main to allow for the redirection of sewage flows from over-
25 loaded lift stations and gravity mains to this new lift station, significantly
26 improving the reliability of the collection system. As part of the project, Lift

1 Station No. 6 was rehabilitated and pumps were replaced at Lift Station No. 2.
2 This project was constructed at a cost of \$2.3 million.

3 Another significant project was the routine replacement and upgrading of
4 facilities at the Company's Wastewater Treatment Plant for a cost of \$1.4 million.
5 Other significant wastewater collection projects, totaling over \$200,000, included
6 rehabilitation of Lift Station No. 12, rebuilding Lift Station No. 9, upgrading
7 electrical equipment and replacing pumps at Lift Station No. 2, and replacing
8 pumps at Lift Station No. 4. In addition, significant improvements and
9 replacements were made at all of the Company's recharge and recovery wells.

10 **III. B-2 PLANT SCHEDULES**

11 **Q. DID YOU ASSIST WITH PREPARATION OF THE B-2 SCHEDULES FOR**
12 **THIS FILING?**

13 A. Yes, I conducted a review of Pima's fixed asset transactions since that last case and
14 prepared portions of the B-2 Schedules for this filing.

15 **Q. PLEASE DESCRIBE THE SCOPE OF YOUR REVIEW OF PIMA'S FIXED**
16 **ASSET RECORDS.**

17 A. Pima provided me with a comprehensive listing of their fixed assets. I reviewed
18 the entries to determine if the plant balances at year-end 2010 were in agreement
19 with the plant balances approved in Decision No. 73573. With respect to the fixed
20 asset transactions since the last rate case, working with Pima management and
21 operations personnel, individual ledger entries were reviewed to determine the
22 following:

- 23 • Is the asset entry an appropriate plant entry per the
- 24 NARUC system of accounts?
- 25 • Is the asset entry charged to the correct utility service?
- 26 • Is the asset entry charged to the correct NARUC plant

1 **Q. WHAT CONCLUSIONS DID YOU REACH AFTER YOUR FIXED ASSET**
2 **RECORD REVIEW?**

3 A. I found Pima's records to be in very good order and in compliance with the
4 NARUC system of accounts. The asset entries included appropriate retirement of
5 replaced assets and provided detailed descriptions and good backup documentation.
6 After examining the records, I recommended minor adjustments to plant increasing
7 the overall water plant balance by \$34,644 and the wastewater plant balance by
8 \$38,470. The adjustments are primarily related to conforming year-end 2010 plant
9 balances to Decision No. 73573. Overall, the adjustments are small (a 0.22%
10 adjustment to Pima's water plant balance and a 0.15% adjustment to Pima's
11 wastewater plant balance), confirming my assessment that Pima's plant records are
12 in very good order.

13 **Q. CAN YOU SUMMARIZE THE ADJUSTMENTS TO THE WATER PLANT**
14 **BALANCES?**

15 A. Five adjustments were needed to the water plant balances. First, the plant balances
16 were increased by a net of \$42,638 to reconcile and conform the plant balances to
17 those approved in Decision No. 73573. Second, the plant balances were decreased
18 by \$5,817 to remove an asset belonging to Robson's Picacho Water utility and by
19 \$890 to remove an asset that was inadvertently recorded twice. Third, plant was
20 reduced by \$1,097 to reflect an asset transferred to Pima's sewer division. Finally,
21 in addition to adjusting plant balances as described above, four assets were
22 reclassified to more appropriate NARUC plant accounts, and one retirement was
23 reclassified to a more appropriate NARUC plant account.

24 **Q. CAN YOU SUMMARIZE THE ADJUSTMENTS TO THE WASTEWATER**
25 **PLANT BALANCES?**

26 A. Yes. Five adjustments were needed to wastewater plant balances. First, plant

1 balances were decreased by a net of \$16,562 to conform the plant balances to the
2 balances approved in Decision No. 73573. Second, in a related adjustment, plant
3 balances were increased by \$35,330 to remove the retirement of assets not allowed
4 in the plant balance approved in Decision No. 73573. Third, plant balances were
5 increased by \$18,605 to properly record funds received from a developer as CIAC
6 instead of as a credit to plant. Fourth, plant was increased by \$1,097 to reflect an
7 asset transferred from Pima's water division. Finally, in addition to adjusting plant
8 balances as described above, several assets were reclassified to more appropriate
9 NARUC plant accounts, and two retirements were reclassified to more appropriate
10 NARUC plant accounts.

11 **Q. WHAT DID YOU DO NEXT?**

12 A. The updated asset entries were used to prepare B-2 Schedule, pages 3.6 to 3.11, for
13 the water division and pages 3.7 to 3.12 for the sewer division. The updated entries
14 were also the basis for the adjustments shown on Schedule B-2, page 3 for each
15 division.

16 The B-2 Schedules (pages 3.6 to 3.11 for the water division and pages 3.7 to
17 3.12 for the sewer division) were constructed as follows:

- 18 • The book balances for plant and accumulated depreciation
19 at the end of the last test year were reconciled to the
balances indicated in Decision No. 73573.
- 20 • From these reconciled beginning balances, plant additions,
21 adjustments, retirements, depreciation, accumulated
22 depreciation and net plant were calculated and brought
forward for each year from the previous test year to year
end 2015.
- 23 ▪ Depreciation was calculated using rates approved in
24 appropriate previous decisions through October 2012 and
using depreciation rates approved in Decision No. 73573
25 from November 2012 forward.

1 **Q. WHAT IS THE END RESULT OF YOUR REVIEW AND CONSTRUCTION**
2 **OF THE B-2 DETAIL SCHEDULES?**

3 A. The result is calculated plant in service balances and accumulated depreciation
4 balances for year-end 2015 that are consistent with the NARUC system of accounts
5 and the previous rate orders. These balances are the appropriate balances to use in
6 determining Pima's rate base and depreciation expense.

7 **IV. DEPRECIATION RATES**

8 **Q. DID YOU REVIEW DEPRECIATION RATES AS PART OF YOUR WORK**
9 **ON THIS FILING?**

10 A. Yes. As part of my preparation of B-2 schedules, I reviewed the net plant balances
11 of each NARUC plant account on a year-by-year basis to determine if approved
12 depreciation rates were reflective of actual plant lives experienced by Pima.

13 **Q. WHAT WERE THE FINDINGS OF YOUR REVIEW?**

14 A. My review indicated that on average Pima was experiencing plant lives for
15 pumping equipment that are in excess of the 8-year life indicated by the 12.5%
16 depreciation rate approved in Decision No. 73573. Specifically, my review of
17 retired plant indicates that Pima's pumping equipment typically has a useful life of
18 between eleven and fifteen years, depending upon the particular subaccount of
19 pumping equipment. I also noted that certain general plant accounts, such as
20 computers and software, transportation equipment and laboratory equipment,
21 tended to show longer plant lives than would be indicated by the approved
22 depreciation rate.

23 **Q. WHAT ARE YOUR RECOMMENDATIONS BASED ON YOUR REVIEW?**

24 A. I am recommending that the pumping equipment depreciation rate be lowered from
25 12.5% (8-years) to 8.33% (12-years) for water and 6.67% (15 years) for
26 wastewater. I am not recommending any changes to the general plant accounts

1 because the plant balances are typically small and changing rates would not have a
2 material impact on the Company's overall depreciation expense or rate base.

3 **Q. WHY ARE YOU RECOMMENDING DIFFERENT RATES FOR**
4 **DEPRECIATION OF WATER PUMPING EQUIPMENT AND**
5 **WASTEWATER PUMPING EQUIPMENT?**

6 A. The difference in my recommendation reflects the current level of accumulated
7 depreciation for the pumping equipment accounts. For wastewater, accumulated
8 depreciation is currently at 91.2% of plant in service, indicating that the account
9 has become over-depreciated relative to actual expected remaining plant life. For
10 water, accumulated depreciation is only at 44.34% of plant in service, indicating
11 that the account is more appropriately depreciated relative to expected remaining
12 plant life. Accordingly, I have recommended a pumping equipment depreciation
13 rate at the high end of the expected pumping equipment life for wastewater
14 pumping equipment (15-year life – 6.67% depreciation rate), and a pumping
15 equipment depreciation rate near the low end of the expected pumping equipment
16 life for water pumping equipment (12-year life – 8.33% depreciation rate)..

17 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

18 A. Yes.

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EXHIBIT RLJ-DT1

ARICOR

Water Solutions

Ray L. Jones P.E.
Principal

18835 North Thompson Peak Parkway, Suite 215
Scottsdale, Arizona 85255

EXPERTISE

Mr. Jones founded ARICOR Water Solutions in 2004. Through ARICOR Water Solutions, Mr. Jones offers a wide range of engineering and financial analysis services to the private and public sectors. Projects include development of regulatory strategies and preparing rate cases, including preparation of rate studies, cost of service studies, financial schedules and testimony for filings before the Arizona Corporation Commission. Services also include consultation on water and wastewater utility formation, management and operations, and valuation, including due diligence analysis, water resources strategy development and water rights valuation. ARICOR Water Solutions provides water, wastewater and water resource master planning, water and wastewater facilities design, and owner representation; including value engineering, program management and construction oversight. Lastly, ARICOR Water Solutions supports water solutions with contract operations and expert witness testimony and litigation support.

EMPLOYMENT HISTORY

- 2002 to 2004 **Arizona-American Water Company**
President
Responsible for leadership of the Arizona business activities of Arizona-American Water Company. Key responsibilities include developing and evaluation new business opportunities, developing strategic plans, establishing effective government and community relations, insuring compliance with all regulatory requirements, and providing management and guidance to key operations and support personnel.
- 1998 to 2002 **Citizens Water Resources, Arizona Operations**
Vice President and General Manager
Responsible for leadership of the Arizona regulated and unregulated business activities of Citizens Water Resources. Key responsibilities included developing and evaluation new business opportunities, developing strategic plans, establishing effective government and community relations, insuring compliance with all regulatory requirements, and providing management and guidance to key operations and support personnel.
- 1990 to 1998 **Citizens Water Resources, Arizona Operations**
Engineering and Development Services Manager
Responsible for management of a diverse group of business growth related activities. Responsibilities include: marketing of operation and maintenance services (unregulated business growth), management of new development activity (regulated business growth), management of engineering functions (infrastructure planning and construction), management of water resources planning and compliance, management of growth-related regulatory functions (CC&N's and Franchises), and management of capital budgeting functions and capital accounting functions.
- 1985 to 1990 **Citizens Water Resources, Arizona Operations**
Civil Engineer
Responsible for the planning, coordination and supervision of capital expansion and major maintenance and rehabilitation projects as assigned. Responsible for development of capital program for Maricopa County Operations.

EDUCATION

Arizona State University – Master of Business Administration (1991)
University of Kansas – Bachelor of Science in Civil Engineering (1985)

PROFESSIONAL CERTIFICATION

Registered Professional Engineer – Civil Engineering – Arizona
 Professional Engineer – Civil Engineering – California
 Certified Operator – Wastewater Treatment, Wastewater Collection, Water Treatment, Water Distribution – Arizona

PROFESSIONAL AFFILIATIONS

- Executive Director – Water Utilities Association of Arizona
- Member - American Society of Professional Engineers
- Member – American Society of Civil Engineers
- Member - American Water Works Association
- Member - Arizona Water Association
- Member - Water Environment Federation

CIVIC AND COMMUNITY INVOLVEMENT

- Member – Arizona Water Banking Authority
- Board of Directors – Greater Maricopa Foreign Trade Zone (2009 – Present)
- Advisory Member - Water Resources Development Commission (2010 – 2012)
- Chairman WESTMARC (2008)
- Director and Member of the Executive Committee- WESTMARC (1998 – 2010)
- Co-Chairman, WESTMARC Water Committee (2006 – 2007)
- Chairman-Elect WESTMARC (2007)
- Member – Corporate Contributions Committee, West Valley Fine Arts Council Diamond Ball (Chairman 2005)
- Member – Technical Advisory Committee – Governor’s Water Management Commission (2001)
- Board Member, Manager & Past Chairman – North Valley Little League Softball

REGULATORY EXPERIENCE

Testimony has been provided before the Arizona Corporation Commission in the dockets listed below. Unless otherwise indicated testimony was provided on behalf of the utility.

Filing Year	Utility(ies)	Filing Type(s)	Docket(s)
1992	Sun City West Utilities Company	CC&N Extension (Expansion of Sun City West)	U-2334-92-244
1993	Sun City Water Company Sun City Sewer Company	CC&N Extension (Addition of Coyote Lakes)	U-1656-93-060 U-2276-93-060
1993	Tubac Valley Water Co., Inc.	CC&N Extension (Various Subdivisions on western border)	U-1595-93-241
1993	Sun City West Utilities Company	CC&N Extension (Expansion of Sun City West)	U-2334-93-293
1995	Citizens Utilities Company Sun City Water Company Sun City Sewer Company Sun City West Utilities Company Tubac Valley Water Company	Rate-making	E-1032-95-417 U-1656-95-417 U-2276-95-417 U-2334-95-417 U-1595-95-417
1996	City Water Company Sun City Sewer Company	CC&N Extension (Acquisition of Youngtown)	U-1656-96-282 U-2276-96-282
1996	Citizens Utilities Company	CC&N Extension and Deletion (Realignment of Surprise Bdry.)	E-1032-96-518

Filing Year	Utility(ies)	Filing Type(s)	Docket(s)
1998	Sun City Water Company Sun City West Utilities Company	CAP Water Plan and Accounting Order (Sun Cities CAP plan)	W-01656A-98-0577 SW-02334A-98-0577
2000	Citizens Water Resources Company of Arizona Citizens Water Services Company of Arizona	CC&N Extension and Accounting Order (Anthen Jacka Property and Phoenix Treatment Agreement)	SW-3455-00-1022 SW-3454-00-1022
2000	Citizens Communications Company Citizens Water Services Company of Arizona	CC&N Extension and Approval of Hook-Up Fee (Verrado)	W-0132B-00-1043 SW-0354A-00-1043
2002	Arizona-American Water Company	Ratemaking	WS-01303A-02-0867 WS-01303A-02-0868 WS-01303A-02-0869 WS-01303A-02-0870 WS-01303A-02-0908
2004	Arizona-American Water Company Rancho Cabrillo Water Company Rancho Cabrillo Sewer Company	CC&N Transfer	WS-01303A-04-0089 W-01303A-04-0089 SW-03898A-04-0089
2004	Johnson Utilities Company, LLC (Representing Pulte Home Corporation)	CC&N Extension	WS-02987A-04-0288
2005	Perkins Mountain Utility Company Perkins Mountain Water Company	New CC&N & Initial Rates	WS-20379A-05-0489 W-20380A-05-0490
2005	West End Water Company	CC&N Extension	W-01157A-05-706
2005	Arizona-American Water Company	Approvals Associated with Construction of Surface Water Treatment Facility	W-01303A-05-0718
2006	Arizona-American Water Company	Ratemaking	WS-01303A-06-0403
2008	Sunrise Water Company	Ratemaking	W-02069A-08-0406
2009	Baca Float Water Company	Ratemaking	WS-01678A-09-0376
2009	Aubrey Water Company	Lost Water Evaluation (Rate Case Compliance)	W-03476A-06-0425
2009	White Horse Ranch Owner's Assn.	Ratemaking	W-04161A-09-0471
2010	Litchfield Park Service Company	Ratemaking	W-01427A-09-0104
2010	Chino Meadows II Water Company	Ratemaking	W-02370A-10-0519
2011	Pima Utility Company	Ratemaking	W-021999A-11-0329 WS-02199A-11-0330
2011	Tusayan Water Development Association, Inc. (Representing the Town of Tusayan)	Ratemaking	W-02350A-10-0163

Filing Year	Utility(ies)	Filing Type(s)	Docket(s)
2012	Valley Utilities Water Company, Inc.	Ratemaking	W-01412A-12-0195
2012	Far West Water & Sewer, Inc.	Ratemaking	WS-03478A-12-0307
2012	Sahuarita Water Company, LLC	Amend Off-Site Facilities Hook-Up Fee	W-03718A-09-0359
2012	New River Utility Company	Ratemaking	W-01737A-12-0478
2013	Far West Water & Sewer, Inc.	New Off-Site Facilities Hook-Up Fees	WS-03478A-13-0200
2012	Adman Mutual Water Company	Ratemaking	W-01997A-12-0501
2013	Far West Water & Sewer, Inc.	CC&N Extension	WS-03478A-13-0250
2013	Lago Del Oro Water Company	Ratemaking	W-01944A-13-0215
2013	Lago Del Oro Water Company	Financing	W-01944A-13-0242
2012	Sunrise Water Company	Financing	W-02069A-12-0261
2010	Far West Water & Sewer, Inc.	CC&N Extension	WS-03478A-10-0523
2014	Granite Mountain Water Co., Inc.	Ratemaking	W-02467A-14-0230
2014	Chino Meadows II Water Co., Inc.	Ratemaking	W-02370A-14-0231
2014	Quail Creek Water Company	Ratemaking	W-02514A-14-0343
2015	Cordes Lakes Water Company	Ratemaking	W-02060A-15-0245
2015	BN Leasing Corporation d.b.a. Aubrey Water Company	Ratemaking	W-03476A-15-0286
2016	Rio Verde Utilities, Inc.	Ratemaking	WS-02156A-16-0201

November, 2016

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Phoenix, Arizona 85020
3 Telephone (602) 559-9575
jay@shapslawaz.com

4 Attorneys for Pima Utility Company
5

6 **BEFORE THE ARIZONA CORPORATION COMMISSION**
7

8
9 IN THE MATTER OF THE APPLICATION
OF PIMA UTILITY COMPANY, AN
10 ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
11 OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
12 WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-02199A-16-

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16 **DIRECT TESTIMONY OF**
17 **THOMAS J. BOURASSA**

18
19 **RATE BASE, INCOME STATEMENT AND RATE DESIGN**
20

21 **November 15, 2016**
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V. PURCHASED POWER ADJUSTMENT MECHANISM AND PROPERTY TAX ADJUSTMENT MECHANISM 20

1 **I. INTRODUCTION**

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

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

5 **Q. WHAT IS YOUR PROFESSION AND BACKGROUND?**

6 A. I am a Certified Public Accountant and am self-employed, providing consulting
7 services to utility companies as well as general accounting services. I have a B.S. in
8 Chemistry and Accounting from Northern Arizona University (1980) and an M.B.A.
9 with an emphasis in Finance from the University of Phoenix (1991).

10 **Q. WOULD YOU BRIEFLY SUMMARIZE YOUR PRIOR WORK AND
11 REGULATORY EXPERIENCE?**

12 A. Prior to becoming a private consultant, I was employed by High-Tech Institute, Inc.,
13 and served as controller and chief financial officer. Prior to working for High-Tech
14 Institute, I worked as a division controller for the Apollo Group, Inc. Before joining
15 the Apollo Group, I was employed at Kozoman & Kermode, CPAs. In that position,
16 I prepared compilations and other write-up work for water and wastewater utilities,
17 as well as tax returns.

18 In my private practice, I have prepared and/or assisted in the preparation of
19 numerous water and wastewater utilities rate applications before the Arizona
20 Corporation Commission ("Commission"). A copy of my regulatory work
21 experience is attached as **Exhibit TJB-DT1**.

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

23 A. On behalf of the Applicant, Pima Utility Company ("Pima" or "Company"). Pima
24 is seeking increases in its rates and charges for water and wastewater utility service
25 in its certificated service area.
26

1 **II. OVERVIEW OF PIMA'S REQUEST FOR RATE RELIEF**

2 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

3 A. I will testify in support of Pima's proposed adjustments to its rates and charges for
4 water and wastewater utility service. I am sponsoring the direct schedules
5 (A through C, E through F, and H for both divisions), which are filed concurrently
6 herewith. I was responsible for the preparation of these schedules based on my
7 investigation and review of Pima's relevant books and records, although I note that
8 another witness, Ray Jones, assisted with the plant, or B schedules. Pima has not
9 prepared cost of service studies (G schedules) for either division. Consequently, the
10 G Schedules are omitted.

11 **Q. WHY DIDN'T THE COMPANY PREPARE COST OF SERVICE STUDIES?**

12 A. Pima filed cost of service studies in its last rate case and did not feel it necessary to
13 conduct another study, as the previous study was not used to set rates in the last rate
14 case. Further, because the Commission does not generally set rates for water and
15 wastewater utility service based on cost of service, and because the changes to the
16 rate design that Pima is proposing do not necessitate a cost of service study, the
17 substantial expense of doing a cost of service study could not be justified. I have
18 taken a similar approach in other cases without complaint.

19 **Q. THANK YOU. PLEASE CONTINUE.**

20 A. For convenience, my direct testimony is being filed in two volumes. In this volume,
21 I address rate base, income statement (revenue and operating expenses), required
22 increase in revenue, and rate design and proposed rates and charges for service. In
23 the second volume, I address cost of capital and sponsor the D schedules. Pima is
24 requesting a return on common equity of 11.2 percent. As shown on Schedule D-1,
25 the Company's pro forma consolidated capital structure for ratemaking purposes
26 consists of 65 percent equity and 35 percent debt. The cost of debt is 3.42 percent

1 and the weighted average cost of capital is 8.48 percent.

2 **Q. IS THE CAPITAL STRUCTURE DESCRIBED ABOVE THE ACTUAL**
3 **CAPITAL STRUCTURE AT THE END OF THE TEST YEAR?**

4 A. No. The actual capital structure at the end of the test year for Pima was 72.4 percent
5 equity and 27.6 percent debt. However, the Company recently filed a financing
6 application to pay-off the existing debt and pay for additional capital improvements.
7 The resulting capital structure will be approximately 65 percent equity and 35
8 percent.

9 **Q. PLEASE SUMMARIZE PIMA'S APPLICATION.**

10 A. Pima is seeking increases for both its water and wastewater divisions. The test year
11 used by the Company is the 12-month period ending December 31, 2015. The
12 Company is requesting an 8.48 percent return on its fair value rate base ("FVRB").
13 The Company also has proposed certain pro forma adjustments to take into account
14 known and measurable changes to rate base, expenses and revenues for each
15 division. These pro forma adjustments are contemplated by the Commission's rules
16 and regulations governing rate applications (*see* A.A.C. R14-2-103), and they are
17 necessary to obtain a more normal or realistic relationship between revenues,
18 expenses and rate base on a going-forward basis.

19 The fair value rate base for Pima's water division is \$7,806,162. The increase
20 in revenues to provide for recovery of operating expenses and an 8.48 percent return
21 on rate base is approximately \$337,024, an increase of approximately 13.90 percent
22 over the adjusted and annualized test year revenues. The fair value rate base for
23 Pima's wastewater division is \$8,592,112. The increase in revenues to provide for
24 recovery of operating expenses and an 8.48 percent return on rate base is
25 approximately \$369,273, an increase of approximately 10.82 percent over the
26 adjusted and annualized test year revenues.

1 **III. PIMA – WATER DIVISION RATE APPLICATION**

2 **A. Summary of A, E and F Schedules**

3 **Q. PLEASE DESCRIBE THE SCHEDULES FOR THE WATER DIVISION**
4 **LABELED A, E, AND F.**

5 A. The A-1 Schedule is a summary of the water division rate base, operating income,
6 current operating margin, required operating margin, operating income deficiency,
7 and the increase in gross revenue. Revenues at present and proposed customer
8 classifications are also shown on this schedule.

9 The A-2 Schedule is a summary of results of operations for the test year, prior
10 years, and a projected year at present rates and proposed rates.

11 Schedule A-3 contains the Company's capital structure for the test year and
12 the two prior years.

13 Schedule A-4 contains the plant construction and plant-in-service for the test
14 year and prior years. The projected plant additions are also shown on this schedule.

15 Schedule A-5 is the summary of the Company's changes in financial position
16 (cash flow) for the prior two years, the test year at present rates, and a projected year
17 at present and proposed rates.

18 The E Schedules are based on the Company's actual operating results, as
19 reported by the Company in annual reports filed with the Commission. The E-1
20 Schedule contains the comparative balance sheet data for the years 2013, 2014, and
21 2015 ended on December 31.

22 Schedule E-2, page 1, contains the income statement for the years 2013, 2014,
23 and 2015 ended on December 31.

24 Schedule E-3 contains the statements of changes in the Company's financial
25 position for the test year and the two prior years.

26 Schedule E-4 provides the changes in membership equity.

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Schedule E-5 contains the Company's plant-in-service at the end of the test year, and one year prior to the end of the test year.

Schedule E-7 contains operating statistics for the years ended 2013, 2014, and 2015 ended on December 31.

Schedule E-8 contains the taxes charged to operations.

The accountant's notes to the financial statements and the financial assumptions used in preparing the rate filing schedules are shown on Schedules E-9 and F-4, respectively, in accordance with the Commission's standard filing requirements. The Company does prepare audited financial statements. Copies are attached as **Exhibit TJB-DT2**.

Schedule F-1 contains the results of operations at the present rates (actual and adjusted), and at proposed rates.

Schedule F-2 contains the summary of changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year at present and proposed rates.

Schedule F-3 shows the Company's projected construction requirements for 2016, 2017, 2018.

Schedule F-4 contains the assumptions used in developing the adjustments and projections contained in the rate filing.

B. Rate Base (B Schedules)

Q. WOULD YOU EXPLAIN THE RATE BASE SCHEDULES, WHICH ARE LABELED AS THE B SCHEDULES?

A. Yes. I will start with Schedule B-5, which is the cash working capital allowance. Pima's proposed cash working capital allowance for the water division is based upon a lead-lag study.

1 **Q. PLEASE CONTINUE.**

2 A. The Company did not file Schedules B-3 and B-4 for the water division. To limit
3 issues in dispute, Pima is requesting that its original cost rate base (“OCRB”) for the
4 water division be used as the FVRB.

5 **Q. HAVE YOU PREPARED SCHEDULES SHOWING ADJUSTMENTS TO**
6 **THE WATER DIVISION’S ORIGINAL COST RATE BASE?**

7 A. Yes. Schedule B-2 shows adjustments to the water division’s OCRB proposed by
8 the Company. Schedule B-2, pages 2 through 6, provides the supporting
9 information. These adjustments are, in summary:

10 B-2 adjustment number 1, as shown on Schedule B-2, page 2, adjusts plant-
11 in-service. There are a number of plant-in-service adjustments included in
12 Adjustment 1. These are shown on Schedule B-2, page 3, and are labeled as
13 adjustments “A,” “B,” “C,” “D,” and “E.”

14 Adjustment A of B-2 adjustment number 1 adjusts plant-in-service to reflect
15 the balances approved in the last rate decision. This plant adjustment is discussed in
16 more detail in the Direct Testimony of Ray Jones.¹

17 Adjustment B of B-2 adjustment number 1 adjusts plant-in-service to remove
18 plant charged in error. This plant adjustment is also discussed in more detail in Mr.
19 Jones’ direct.²

20 Adjustment C of B-2 adjustment number 1 adjusts plant-in-service to reflect
21 the transfer for plant from the water division to the wastewater division. The plant
22 transfer is discussed in more detail in Mr. Jones’ direct.³

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24 ¹ Direct Testimony of Ray L. Jones (“Jones Dt.”) at 8.

25 ² *Id.*

26 ³ *Id.*

1 Adjustment D of B-2 adjustment number 1 adjusts plant-in-service to reflect
2 plant reclassifications between the various plant accounts. This adjustment is also
3 discussed in more detail in Mr. Jones' direct.⁴ The net adjustment to plant-in-service
4 is zero.

5 Adjustment E of B-2 adjustment number 1 adjusts plant to reconcile to the
6 reconstructed plant balances, which are shown on the Company's B-2 plant detail
7 schedule (B-2 pages 3.6 to 3.11). The plant reconstructed balances start with the
8 balances approved in the last rate case and include the activity (additions and
9 retirements) from the end of the last test year through the end of the current test year.

10 **Q. PLEASE CONTINUE.**

11 A. Adjustment 2 shown on Schedule B-2, page 2, adjusts accumulated depreciation.
12 The details of the accumulated depreciation adjustment are shown on Schedule B-2,
13 page 4. There are two plant-in-service adjustments included in Adjustment 2. These
14 are shown on Schedule B-2, page 4, and are labeled as adjustments "A" and "B."

15 Adjustment A of B-2 adjustment number 2 adjusts accumulated depreciation
16 for the proposed reclassifications as discussed in Adjustment D of B-2 adjustment
17 number 1.

18 Adjustment B of B-2 adjustment number 2 adjusts accumulated depreciation
19 to reflect the recomputed amounts of accumulated depreciation per the Company's
20 water division B-2 plant detail schedule (Schedule B-2 pages 3.6 to 3.11).

21 **Q. DO THE PLANT-IN-SERVICE AND ACCUMULATED DEPRECIATION**
22 **BALANCES SHOWN ON B-2 REFLECT THE LAST COMMISSION RATE**
23 **ORDER?**

24 A. Yes. The construction of the plant and accumulated depreciation balances is

25 _____
26 ⁴ *Id.*

1 discussed in Mr. Jones' direct.⁵

2 **Q. PLEASE CONTINUE.**

3 A. B-2 adjustment number 3 shown on Schedule B-2, page 5, adjusts the accumulated
4 amortization balance of contributions-in-aid of construction ("CIAC") to the
5 recomputed amount reflecting the annual composite depreciation rate for plant-in-
6 service.

7 **Q. PLEASE DISCUSS THE ACCUMULATED DEFERRED INCOME TAXES**
8 **ADJUSTMENT FOR THE WATER DIVISION.**

9 A. B-2 adjustment number 4, shown on Schedule B-2, page 2, reflects imputed deferred
10 income taxes at the end of the test year. Pima's computation is based on the adjusted
11 plant-in-service, accumulated depreciation, AIAC, and CIAC balances for both
12 divisions in the instant case and the adjusted tax basis of its assets using the effective
13 tax rates computed on the Schedule C-3, page 2. Upon determination of the total
14 accumulated deferred income taxes ("ADIT") balance for Pima's water division, the
15 ADIT is allocated based upon the proportion of the water division's rate base to the
16 total rate base of both divisions. The detail of Pima's deferred income tax
17 computation is shown on Schedule B-2, pages 6.

18 **Q. PLEASE DISCUSS THE WORKING CAPITAL ADJUSTMENT FOR THE**
19 **WATER DIVISION.**

20 A. B-2 adjustment number 6, shown on Schedule B-2, page 2, reflects Pima's proposed
21 cash working capital allowance of \$59,729, which is based upon a lead-lag study and
22 is summarized on Schedule B-5.

23 **Q. HOW WAS THE PROPOSED "FAIR VALUE" RATE BASE SHOWN ON**
24 **SCHEDULE A-1 DETERMINED?**

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⁵ Jones Dt. at 9-11.

1 A. As stated, the FVRB shown on Schedule A-1 is based on OCRB, with no adjustment
2 for the current values of the Company's plant and property.

3 **C. Income Statement (C Schedules)**

4 **Q. PLEASE EXPLAIN THE ADJUSTMENTS YOU ARE PROPOSING TO THE**
5 **WATER DIVISION INCOME STATEMENT AS SHOWN ON SCHEDULES**
6 **C-1 AND C-2.**

7 A. The following is a summary of adjustments shown on Schedule C-1, the details of
8 which are found on Schedule C-2, pages 2 through 8:

9 Adjustment 1 annualizes depreciation expense. The proposed depreciation
10 rate for each component of utility plant is shown on Schedule C-2, page 2. The
11 depreciation rates approved in the water division's last rate case were plant account
12 specific rates. The Company proposes to use account specific rates on a going
13 forward basis, which includes a rate change to account 311 - Electric Pumping
14 Equipment. The Company proposes that the depreciation rate be lowered from
15 12.5 percent (8-years) to 8.33 percent (12-years). The proposed change to the
16 depreciation rate for pumping equipment is discussed in more detail in Mr. Jones'
17 direct.⁶

18 Adjustment 2 increases the property taxes based on proposed revenues. The
19 details of the computation are shown on Schedule C-2, page 3.

20 Adjustment 3 shows the rate case expense estimated by the Company. The
21 Company estimates rate case expense for the water division of \$175,000, which is
22 half of the total amount requested. The Company proposes that rate case expense be
23 recovered over five years because it believes a five-year cycle for future rate cases
24 is reasonable given this utility's circumstances.

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⁶ Jones Dt. at 11.

1 Adjustment 4 annualizes revenues to the year-end number of customers.
2 The annualization of revenues is based on the number of customers at the end of the
3 test year, compared to the actual number of customers during each month of the test
4 year. Average revenues per customer by month were computed for the test year and
5 then multiplied by the increase (or decrease) in number of customers for each month
6 of the test year. The total of the monthly revenue change comprises the revenue
7 annualization totaling \$(551). In addition to the downward adjustment in revenues,
8 purchased power expense, chemicals expense, and office expense have been adjusted
9 downward by \$29, \$2, and \$2, respectively, to reflect the change in pumping power
10 expense, treatment costs, and postage related to the anticipated additional gallons
11 sold.

12 Adjustment number 5 reflects Pima's proposed usage normalization
13 adjustment to the water division revenues. Pima's usage normalization adjustment
14 reduces metered revenues by \$35,413 and is based on the trend in customer water
15 usage by customer class measured over the past five years. I have used similar
16 methods to estimate changes in usage (i.e. declining usage adjustment) in past cases
17 before the Commission.⁷ In addition to the reduction in revenues, purchased power
18 expense, and chemicals expense have been reduced by \$3,492, and \$616,
19 respectively, to reflect the reduced pumping power expense and treatment costs
20 related to the anticipated reduction in gallons sold.

21 Adjustment 6 adjusts interest expense to reflect interest synchronization with
22 the water division rate base.

23
24 ⁷ See *EPCOR Water Arizona, Inc.*, Decision No. 75268 (September 8, 2015). EPCOR
25 *Water Arizona, Inc.*'s proposed declining usage adjustment was adopted. See *Liberty*
26 *Utilities (Litchfield Park Water & Sewer) Corp.*, Decision No. 74437 (April 18, 2014). The
Commission approved the settlement between the parties, which included Liberty Utilities
(Litchfield Park Water & Sewer) Corp.'s proposed declining usage adjustment.

1 Adjustment 7 reflects income taxes based upon the water division's adjusted
2 test year revenue and expense. The computation of the effective income tax rate
3 follows the framework set-forth in Decision 73379 (February 22, 2013) for tax pass-
4 through entities.

5 **D. Rate Design (H Schedules)**

6 **Q. WHAT ARE PIMA'S PRESENT RATES FOR WATER SERVICE?**

7 A. The present rates are set forth on Schedule H-3, pages 1 and 2.

8 **Q. WHAT ARE PIMA'S PROPOSED RATES FOR WATER SERVICE?**

9 A. The proposed rates are set forth on Schedule H-3, pages 1 and 2.

10 **Q. WHAT METER SIZE IS THE MAJORITY OF CUSTOMERS ON AND**
11 **WHAT WAS THE AVERAGE MONTHLY BILL DURING THE TEST**
12 **YEAR?**

13 A. The largest customer class is the 5/8 x 3/4 inch residential class which comprises
14 over 95 percent of the customer base. As shown on Schedule H-2, page 1, the
15 average monthly bill under present rates for a 5/8 x 3/4 inch residential customer
16 using an average 5,869 gallons is \$12.12.

17 **Q. WHAT WILL BE THE 5/8 X 3/4 INCH RESIDENTIAL CUSTOMER**
18 **AVERAGE MONTHLY BILL UNDER THE NEW RATES?**

19 A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates
20 for a 5/8 x 3/4 inch residential customer using an average 5,869 gallons is \$13.94 –
21 a \$1.83 increase over the present monthly bill or a 15.06 percent increase.

22 **Q. IS PIMA PROPOSING CHANGES TO THE WATER DIVISION RATE**
23 **DESIGN?**

24 A. No. Pima continues to propose a conservation-oriented inverted 3-tier rate design
25 for the 3/4 inch and smaller residential metered customers and a conservation-
26 oriented inverted 2-tier rate design for the 3/4 inch and larger metered commercial

1 and irrigation customers. No changes to the current break-over points are proposed.
2 The proposed rates reflect revenue recovery from the monthly fixed charges of about
3 45.13 percent, approximately the same as revenue recovery under present rates.

4 **Q. ARE THERE ANY PROPOSED CHANGES TO PIMA WATER DIVISION'S**
5 **MISCELLANEOUS SERVICE CHARGES?**

6 A. No.

7 **Q. ARE THERE ANY PROPOSED CHANGES TO THE METER AND**
8 **SERVICE LINE INSTALLATION CHARGES?**

9 A. No.

10 **IV. PIMA – WASTEWATER DIVISION RATE APPLICATION**

11 **A. Summary of A, E and F Schedules**

12 **Q. MR. BOURASSA, LET'S TURN TO PIMA'S WASTEWATER DIVISION**
13 **SCHEDULES. PLEASE DESCRIBE THE SCHEDULES LABELED AS A, E,**
14 **AND F.**

15 A. The A-1 Schedule is a summary of the wastewater division rate base, operating
16 income, current operating margin, required operating margin, operating income
17 deficiency, and the increase in gross revenue. Revenues at present and proposed
18 customer classifications are also shown on this schedule.

19 The A-2 Schedule is a summary of results of the wastewater division
20 operations for the test year, prior years, and a projected year at present rates and
21 proposed rates.

22 Schedule A-3 contains the Company's capital structure for the test year and
23 the two prior years.

24 Schedule A-4 contains the wastewater division plant construction and plant-
25 in-service for the test year and prior years. The projected plant additions are also
26 shown on this schedule.

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Schedule A-5 is the summary of the Company's changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year at present and proposed rates.

The E Schedules are based on the Company's actual operating results, as reported by the Company in annual reports filed with the Commission. The E-1 Schedule contains the comparative balance sheet data for the years 2013, 2014, and 2015 ended on December 31.

Schedule E-2, page 1, contains the income statement for the years 2013, 2014, and 2015 ended on December 31.

Schedule E-3 contains the statements of changes in the Company's financial position for the test year and the two prior years.

Schedule E-4 provides the changes in membership equity.

Schedule E-5 contains the Company's wastewater division plant-in-service at the end of the test year, and one year prior to the end of the test year.

Schedule E-7 contains operating statistics for the years ended 2013, 2014, and 2015 ended on December 31.

Schedule E-8 contains the taxes charged to operations.

The accountant's notes to the financial statements and the financial assumptions used in preparing the rate filing schedules are shown on Schedules E-9 and F-4, respectively, in accordance with the Commission's standard filing requirements. The Company does prepare audited financial statements. Copies are attached as **Exhibit TJB-DT2**.

Schedule F-1 contains the results of wastewater division operations at the present rates (actual and adjusted), and at proposed rates.

1 Schedule F-2 contains the summary of changes in financial position (cash
2 flow) for the prior two years, the test year at present rates, and a projected year at
3 present and proposed rates.

4 Schedule F-3 shows the Company's projected construction requirements for
5 2016, 2017, 2018 for the wastewater division.

6 Schedule F-4 contains the assumptions used in developing the adjustments
7 and projections contained in the rate filing.

8 **B. Rate Base (B Schedules)**

9 **Q. WOULD YOU EXPLAIN THE RATE BASE SCHEDULES FOR THE**
10 **WASTEWATER DIVISION, WHICH ARE LABELED AS THE B**
11 **SCHEDULES?**

12 A. Yes. I will start with Schedule B-5, which is the cash working capital allowance.
13 Pima's proposed cash working capital allowance for the wastewater division is based
14 upon a lead-lag study.

15 **Q. PLEASE CONTINUE.**

16 A. The Company did not file Schedules B-3 and B-4 for the wastewater division.
17 To limit issues in dispute, Pima is requesting that its OCRB for the wastewater
18 division be used as the FVRB.

19 **Q. HAVE YOU PREPARED SCHEDULES SHOWING ADJUSTMENTS TO**
20 **THE WASTEWATER DIVISION'S ORIGINAL COST RATE BASE?**

21 A. Yes. Schedule B-2 shows adjustments to the wastewater division's OCRB proposed
22 by the Company. Schedule B-2, pages 2 through 6, provides the supporting
23 information. These adjustments are, in summary:

24 B-2 adjustment number 1, as shown on Schedule B-2, page 2, adjusts plant-
25 in-service. There are a number of plant-in-service adjustments included in
26

1 adjustment 1. These are shown on Schedule B-2, page 3, and are labeled as
2 adjustments “A,” “B,” “C,” “D,” “E,” and “F.”

3 Adjustment A of B-2 adjustment number 1 adjusts plant-in-service to reflect
4 the balances approved in the last rate decision. This plant adjustment is discussed in
5 more detail in Mr. Jones’ direct.⁸

6 Adjustment B of B-2 adjustment number 1 adjusts plant-in-service to reverse
7 a retirement of disallowed plant. This plant adjustment is also discussed in more
8 detail in Mr. Jones’ direct.⁹

9 Adjustment C of B-2 adjustment number 1 adjusts plant-in-service to reflect
10 the reclassification of developer funds to CIAC. The reclassification of plant is
11 discussed in more detail in Mr. Jones’ direct.¹⁰

12 Adjustment D of B-2 adjustment number 1 adjusts plant-in-service to reflect
13 the transfer for plant from the water division to the wastewater division. The transfer
14 of plant is discussed in more detail in Mr. Jones’ direct.¹¹

15 Adjustment E of B-2 adjustment number 1 adjusts plant-in-service to reflect
16 plant reclassifications between the various plant accounts. This adjustment is also
17 discussed in more detail in Mr. Jones’ direct.¹² The net adjustment to plant-in-
18 service is zero.

19 Adjustment F of B-2 adjustment number 1 adjusts plant to reconcile to the
20 reconstructed plant balances, which balances are shown on the Company’s B-2 plant
21 detail schedule (B-2 pages 3.6 to 3.11). The plant reconstructed balances start with
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23 ⁸ Jones Dt. at 8-9.

24 ⁹ Jones Dt. at 9.

25 ¹⁰ *Id.*

26 ¹¹ *Id.*

¹² *Id.*

1 the balances approved in the last rate case, and include the activity (additions and
2 retirements) from the end of the last test year through the end of the current test year.

3 **Q. PLEASE CONTINUE.**

4 A. Adjustment 2 shown on Schedule B-2, page 2, adjusts accumulated depreciation.
5 The details of the accumulated depreciation adjustment are shown a Schedule B-2,
6 page 4. There are two plant-in-service adjustments included in Adjustment 2. These
7 are shown on Schedule B-2, page 4, and are labeled as adjustments "A" and "B."

8 Adjustment A of B-2 adjustment number 2 adjusts accumulated depreciation
9 for the proposed reclassifications as discussed in Adjustment E of B-2 adjustment
10 number 1.

11 Adjustment B of B-2 adjustment number 2 adjusts accumulated depreciation
12 to reflect the recomputed amounts of accumulated depreciation per the Company's
13 wastewater division B-2 plant detail schedule (Schedule B-2 pages 3.6 to 3.11).

14 **Q. DO THE PLANT-IN-SERVICE AND ACCUMULATED DEPRECIATION**
15 **BALANCES SHOWN ON SCHEDULE B-2 REFLECT THE LAST**
16 **COMMISSION RATE ORDER?**

17 A. Yes. The construction of the plant and accumulated depreciation balances is
18 discussed in Mr. Jones' direct.¹³

19 **Q. PLEASE CONTINUE.**

20 A. B-2 adjustment number 3 shown on Schedule B-2, page 5, adjusts the accumulated
21 amortization balance of CIAC to the recomputed amount reflecting the annual
22 composite depreciation rate for plant-in-service.

23 **Q. PLEASE DISCUSS THE ADIT ADJUSTMENT FOR THE WASTEWATER**
24 **DIVISION.**

25

26 ¹³ Jones Dt. at 9-11.

1 A. B-2 adjustment number 4, shown on Schedule B-2, page 2, reflects imputed deferred
2 income taxes at the end of the test year. Pima's computation is based on the adjusted
3 plant-in-service, accumulated depreciation, AIAC, and CIAC balances for both
4 divisions in the instant case and the adjusted tax basis of its assets using the effective
5 tax rates computed on the Schedule C-3, page 2. Upon determination of the total
6 ADIT balance for Pima's wastewater division, the ADIT is allocated based upon the
7 proportion of the wastewater division's rate base to the total rate base of both
8 divisions. The detail of Pima's deferred income tax computation is shown on
9 Schedule B-2, pages 6.

10 **Q. PLEASE DISCUSS THE WORKING CAPITAL ADJUSTMENT FOR THE**
11 **WASTEWATER DIVISION.**

12 A. B-2 adjustment number 6, shown on Schedule B-2, page 2, reflects Pima's proposed
13 cash working capital allowance of \$92,277, which is based upon a lead-lag study and
14 is summarized on Schedule B-5.

15 **Q. HOW WAS THE PROPOSED "FAIR VALUE" RATE BASE SHOWN ON**
16 **SCHEDULE A-1 DETERMINED?**

17 A. As stated, the FVRB shown on Schedule A-1 is based on OCRB, with no adjustment
18 for the current values of the Company's plant and property.

19 **C. Income Statement (C Schedules)**

20 **Q. PLEASE EXPLAIN THE ADJUSTMENTS YOU ARE PROPOSING TO THE**
21 **WASTEWATER DIVISION INCOME STATEMENT AS SHOWN ON**
22 **SCHEDULES C-1 AND C-2.**

23 A. The following is a summary of adjustments shown on Schedule C-1, the details of
24 which are found on Schedule C-2, pages 2 through 7:

25 Adjustment 1 annualizes depreciation expense. The proposed depreciation
26 rate for each component of utility plant is shown on Schedule C-2, page 2. The

1 depreciation rates approved in the wastewater division's last rate case were plant
2 account specific rates. The Company proposes to use account specific rates on a
3 going forward basis which includes a rate change to account 371 - Pumping
4 Equipment. The Company proposes the depreciation rate be lowered from
5 12.5 percent (8 years) to 6.67 percent (15 years). The proposed change to the
6 depreciation rate for pumping equipment is discussed in more detail in Mr. Jones'
7 direct.¹⁴

8 Adjustment 2 increases the property taxes based on proposed revenues.
9 The details of the computation are shown on Schedule C-2, page 3.

10 Adjustment 3 shows the rate case expense estimated by the Company.
11 The Company estimates rate case expense for the wastewater division of \$175,000,
12 which is half of the total amount requested. Pima proposes that rate case expense be
13 recovered over five years because it believes a five-year cycle for future rate cases
14 is reasonable given this utility's circumstances.

15 Adjustment 4 annualizes revenues to the year-end number of customers.
16 The annualization of revenues is based on the number of customers at the end of the
17 test year compared to the actual number of customers during each month of the test
18 year. Average revenues per customer by month were computed for the test year and
19 then multiplied by the increase (or decrease) in number of customers for each month
20 of the test year. The total of the monthly revenue change comprises the revenue
21 annualization totaling \$3,884. In addition to the upward adjustment in revenues,
22 purchased power expense, sludge removal expense, chemicals expense, and office
23 expense have been adjusted upward by \$42, \$108, \$83, and \$16, respectively, to
24 reflect the change in pumping power expense, sludge removal, treatment costs, and
25

26 ¹⁴ Jones Dt. at 11.

1 postage related to the anticipated additional gallons sold.

2 Adjustment 5 adjusts interest expense to reflect interest synchronization with
3 the wastewater division rate base.

4 Adjustment 6 reflects income taxes based upon the wastewater division's
5 adjusted test year revenue and expense. The computation of the effective income
6 tax rate follows the framework set-forth in Decision No. 73993 for tax pass-through
7 entities.

8 **D. Rate Design (H Schedules)**

9 **Q. WHAT ARE PIMA'S PRESENT RATES FOR WASTEWATER SERVICE?**

10 A. The present rates are set forth on Schedule H-3, pages 1 and 2.

11 **Q. WHAT ARE PIMA'S PROPOSED RATES FOR WASTEWATER SERVICE?**

12 A. The proposed rates are set forth on Schedule H-3, pages 1 and 2.

13 **Q. WHAT METER SIZE IS THE MAJORITY OF CUSTOMERS ON AND
14 WHAT WAS THE MONTHLY BILL DURING THE TEST YEAR?**

15 A. The largest customer class is the 5/8 x 3/4 inch residential class that comprises nearly
16 97 percent of the wastewater division's customer base. As shown on Schedule H-2,
17 page 1, the monthly bill under present rates for a 5/8 x 3/4 inch residential customer
18 is \$25.17.

19 **Q. WHAT WILL BE THE 5/8 X 3/4 INCH RESIDENTIAL CUSTOMER
20 AVERAGE MONTHLY BILL UNDER THE NEW RATES?**

21 A. As shown on Schedule H-2, page 1, the monthly bill under proposed rates for a 5/8
22 x 3/4 inch residential customer is \$27.91, a \$2.74 increase over the present monthly
23 bill or a 10.90 percent increase.

24 **Q. ARE THERE ANY PROPOSED CHANGES TO PIMA WASTEWATER
25 DIVISION'S MISCELLANEOUS SERVICE CHARGES?**

26 A. No.

1 **V. PURCHASED POWER ADJUSTMENT MECHANISM AND PROPERTY**
2 **TAX ADJUSTMENT MECHANISM**

3 **Q. PLEASE DISCUSS PIMA'S PROPOSED PURCHASED POWER**
4 **ADJUSTMENT MECHANISM AND PROPERTY TAX ADJUSTMENT**
5 **MECHANISM.**

6 A. The Company is seeking Commission approval of two adjuster mechanisms: (1) a
7 Purchased Power Adjustment Mechanism ("PPAM"); and (2) a Property Tax
8 Adjustment Mechanism ("PTAM").

9 **Q. WHAT IS THE PURPOSE OF THE PPAM AND HOW WOULD THE PPAM**
10 **WORK?**

11 A. The proposed PPAM would allow Pima to pass through increases or decreases in
12 purchased power costs that are due to changes in the rates for electric utility service.
13 The intent of the PPAM is to isolate changes in purchased power costs that are due
14 exclusively to a rate change beyond the control of Pima. The increases/decreases in
15 power costs will be allocated on a per customer basis and passed through to the
16 customer as a separate line item on the customer bill. The PPAM Plan of
17 Administration ("POA"), attached to the Application as Attachment 2, outlines the
18 implementation and filing requirements as well as how the surcharge will be
19 computed. The form of the PPAM proposed by Pima is consistent with the form of
20 PPAM approved in Decision No. 74437 for Liberty Utilities (Litchfield Park Water
21 & Sewer) Corp.

22 **Q. WHAT IS THE PURPOSE OF THE PTAM AND HOW WOULD THE PTAM**
23 **WORK?**

24 A. The proposed PTAM would allow Pima to pass through increases or decreases in
25 property taxes that are due to changes in the assessment ratio and effective property
26 tax rate. The intent of the PTAM is to isolate changes in property taxes that are due

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to assessment ratio and rate charges that are beyond Pima's control. The increases/decreases in property taxes will be allocated on a per customer basis and passed-through to customer as a separate line item on the customer bill. The PTAM POA, attached to the Application as Attachment 3, outlines the implementation and filing requirements as well as how the surcharge will be computed.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY ON RATE BASE, INCOME STATEMENT AND RATE DESIGN FOR PIMA'S WATER AND WASTEWATER DIVISIONS?

A. Yes.

EXHIBIT TJB-DT1

RESUME OF THOMAS J. BOURASSA, CPA

EDUCATIONAL BACKGROUND

B.S. Northern Arizona University Chemistry/Accounting (1980)

M.B.A. University of Phoenix with Emphasis in Finance (1991)

C.P.A. State of Arizona (1995)

Continuing Professional Education – In areas of tax, accounting, management, economics, finance, business valuation, consulting, and ethics (80 hrs every two years)

MEMBERSHIPS

Arizona Society of CPAs

Water Utilities Association of Arizona

American Water Works Association

EMPLOYMENT EXPERIENCE

- 1995 – Present CPA - Self Employed
Consultant to utilities on regulatory matters including all aspects of rate applications (rate base, income statement, cost of capital, cost of service, and rate design), rate reviews, certificates of convenience and necessity (CC&N), CC&N extensions, financing applications, accounting order applications, and off-site facilities hook-up fee applications. Provide expert testimony as required.
- Consult on various aspects of business, financial and accounting matters including best business practices, generally accepted accounting principles, generally accepted ratemaking principles, project analysis, cash flow analysis, regulatory treatment of certain expenditures and investments, business valuations, and rate reviews.
- Litigation support services.
- 1992-1995 Employed by High-Tech Institute, Phoenix, Arizona as Controller and C.F.O.
- 1989-1992 Employed by Alta Technical School, a division of University of Phoenix as Division Controller.
- 1985-1989 Employed by M.L.R. Builders, Tampa and Pensacola, Florida as Operations/Accounting Manager
- 1982-1985 Employed by and part owner in Area Sand and Clay Company, Pensacola, Florida.

1981-1982

Employed by Purdue University, West Lafayette, Indiana as
Teaching Assistant.

**SUMMARY OF REGULATORY WORK EXPERIENCE AS SELF EMPLOYED
CONSULTANT**

COMPANY/CLIENT

FUNCTION

Yarnell Water Co-Op
ACC Docket No. W-02255A-16-0153

Permanent Rate Application –Water
Prepared short-form schedules on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Oak Creek Water Company No. 1
ACC Docket No. W-01392A-16-0161

Permanent Rate Application –Water
Prepared short-form schedules on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Mountain Water Company
Montana PUC Docket No. D2016.2.15

Testified in the matter investigating
whether Mountain Water Company's rates
are just and reasonable.

Turner Ranches Water and Sanitation
Company

Permanent Rate Application –Water
Prepared short-form schedules on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

ACC Docket No. W-01677A-16-0076

Liberty Utilities (Entrada Del Oro Sewer)
Corp.
ACC Docket No. W-04316A-16-0078
ACC Docket No. W-04316A-16-0085

Permanent Rate Application –Wastewater.
Prepared financing application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Liberty Utilities (Rio Rico Water and
Sewer) Corp.
ACC Docket No. WS-02676A-15-0368
ACC Docket No. WS-02676A-15-0371

Permanent Rate Application – Water and
Wastewater. Prepared financing
application. Prepared schedules and
testified on Rate Base, Plant, Income
Statement, Revenue Requirement, Rate
Design, and Cost of Capital.

Liberty Utilities (Bella Vista Water) Corp.

ACC Docket No. W-02465A-15-0367
ACC Docket No. W-02465A-15-0370

Permanent Rate Application – Water.
Prepared financing application. Prepared
schedules and testified on Rate Base,
Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Community Water of Green Valley

Permanent Rate Application – Water.

COMPANY/CLIENT

ACC Docket No. W-02304A-15-0263

Sahuarita Water Company

ACC Docket No. W-03718A-15-0213

Liberty Utilities (Black Mountain Sewer)
Corp.

ACC Docket No. SW-0236 1A- 15-0206

ACC Docket No. SW-0236 1A- 15-0207

Tierra Buena Water Company

ACC Docket No. W-02076A-15-013

Red Rock Utilities, LLC

ACC Docket No. W-04245A-14-0295

Quail Creek Water Company

ACC Docket No. W-02514A-14-0370

Tonto Basin Water Company

ACC Docket No. W-03515A-14-0310

Navajo Water

ACC Docket No. W-03511A-14-304

Alaska Power Company

FUNCTION

Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.

Permanent Rate Application – Water. Assisted in preparation of short-form schedules.

Permanent Rate Application – Water and Wastewater. Prepared short-form schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Prepared schedules and testified on cost of

COMPANY/CLIENT

FUNCTION

Regulatory Commission of Alaska
Docket No. U-14-002

Anchorage Municipal Light & Power
Regulatory Commission of Alaska
Docket No. U-13-184

Liberty Utilities (Pine Bluff) Inc.
Arkansas Public Service Commission
Docket No. 14-020-U

Abra Water Company
ACC Docket No. W-01782A-14-0084

EPCOR Water Arizona, Inc.
ACC Docket No. W-01303A-14-0010

Liberty Utilities (Midstates Natural Gas),
Inc.
Missouri Public Service Commission
Case No. GR-2014-0152

Hydro Resources, LLC.
ACC Docket No. W-20770A-13-0313

Little Park Water Company
ACC Docket No. W-02192A-13-0336

Utility Source, LLC.
ACC Docket No. WS-04235A-13-0331

capital.

Prepared schedules and testified on cost of capital.

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Permanent Rate Application – Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Prepared rate designs and cost of Service studies for Mohave Water District, Mohave Wastewater District, Paradise Valley Water District, Tubac Water District, and Sun City Water District.

Permanent Rate Application – Assist in preparing required rate application schedules for Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Permanent Rate Application – Water and Sewer. Prepared schedules and testified

COMPANY/CLIENT

FUNCTION

Payson Water Company
ACC Docket No. W-03514A-13-0111
ACC Docket No. W-03514A-13-0142

on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Financing Application. Prepared financial ratios and debt surcharge mechanism.

Goodman Water Company

Valuation

Verde Santa Fe Wastewater
ACC Docket No. SW-03437A-13-0292

Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Lago Del Oro Water Company
ACC Docket No. W-01944A-13-0215

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Chaparral City Water Company
ACC Docket No. W-02113A-13-0118

Permanent Rate Application – Prepared and testified on cost of service study.

Las Quintas Serenas Water Company
ACC Docket No. W-01583A-13-0117

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Southwest Environmental Utilities, Inc.
ACC Docket No. WS-20878A-13-0065

Certificate of Convenience and Necessity – Water and Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.

Litchfield park Service Company
ACC Docket No. SW-01428A-13-0043
ACC Docket No. W-01428A-13-0042

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost

COMPANY/CLIENT

FUNCTION

Beaver Dam Water Company
ACC Docket No. WS-03067A-12-0232

of Service, and Cost of Capital.

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

Rio Rico Utilities
ACC Docket No. WS-02676A-12-0196

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Vail Water Company
ACC Docket No. W-01651B-12-0339

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Avra Water Co-Op.
ACC Docket No. W-02126A-11-0480

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Pima Utility Company
ACC Docket No. W-02199A-11-0329
ACC Docket No. SW-02199A-11-0330

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.

Work on financing application.

Liberty Utilities (CALPECO Electric),
LLC)
Docket No. 11202020

Work on preparation of permanent rate application. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement.

Livco Water Company
ACC Docket No. SW-02563A-11-0213

Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Orange Grove Water Company
ACC Docket No. W-02237A-11-0180

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

COMPANY/CLIENT

FUNCTION

Goodman Water Company
ACC Docket No. W-02500A-10-0382

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Doney Park Water
ACC Docket No. W-01416A-10-0450

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Grimmelmann, et. al. v. Pulte Home Corporation, et. al., case no. CV-08-1878-PHX-FJM, the United States District Court for the District of Arizona.

Consultant to defendant and expert witness for defendant on rates and ratemaking.

Southern Arizona Home Builders Association

Consultant on ratemaking aspects to line extension policies (electric).

H2O Water Company

Valuation

Tierra Linda HOA Water Company

Valuation

Las Quintas Serenas Water Company
ACC Docket No. W-01583A-09-0589

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Coronado Utilities
ACC Docket No. SW-04305A-09-0291

Permanent Rate Application – Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Little Park Water Company
ACC Docket No. W-02192A-09-0531

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

Sahuarita Water Company
ACC Docket No. W-03718A-09-0359

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.

COMPANY/CLIENT

FUNCTION

Bella Vista Water Company
Southern Sunrise Water Company
Northern Sunrise Water Company
ACC Docket No. W-02465A-09-0414
ACC Docket No. W-02453A-09-0414
ACC Docket No. W-02454A-09-0414

Permanent Rate Application – Water.
Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.

Rio Rico Utilities, Inc
ACC Docket No. WS-02676A-09-0257

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Litchfield park Service Company
ACC Docket No. SW-01428A-09-0103
ACC Docket No. W-01428A-09-0104

Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.

Town of Thatcher v. City of Safford, CV
2007-240, Superior Court of Arizona

Consultant to plaintiff on ratemaking and cost of service.

Valencia Water Company
California Public Utility Commission Case
No. 09-05-002

Cost of Capital

Valley Utilities
ACC Docket No. W-01412A-08-0586

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

Black Mountain Sewer Company
ACC Docket No. SW-02361A-08-0609

Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Far West Water and Sewer Company
ACC Docket No. WS-03478A-08-0608

Interim Rate Application (Emergency Rates)

Farmers Water Company
ACC Docket No. W-01654A-08-0502

Permanent Rate Application. Prepared schedules and testified on Rate Base,

COMPANY/CLIENT

FUNCTION

Far West Water and Sewer Company
ACC Docket No. WS-03478A-08-0454

Plant, Income Statement, Revenue Requirement, and Rate Design.

Permanent Rate Application. Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.

Ridgeline Water Company, LLC
ACC Docket No. W-20589A-08-0173

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rates.

Sacramento Utilities, Inc.
ACC Docket No. SW-20576A-08-0067

Certificate of Convenience and Necessity – Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.

Johnson Utilities
ACC Docket No. WS-02987A-08-0180

Permanent Rate Application. Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.

Participate in 40-252 proceeding.

Orange Grove Water Company
ACC Docket No. W-02237A-08-0455

Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.

Far West Water and Sewer Company
ACC Docket No. WS-03478A-07-0442

Financing Application. Prepare schedules to support application.

Oak Creek Water No.1
ACC Docket No. W-01392A-07-0679

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

ICR Water Users Association
Docket W-02824-07-0388

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

COMPANY/CLIENT

Johnson Utilities

FUNCTION

Valuation consultant in the matter of the sale of Johnson Utilities assets to the Town of Florence.

H2O, Inc
ACC Docket No. W-02234A-07-0550

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Chaparral City Water Company
ACC Docket No. W-02113A-07-0551

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Valley Utilities
ACC Docket No. W-01412A-07-0561

Financing Application. Prepare schedules to support application.

Valley Utilities
ACC Docket No. W-01412A-07-280

Emergency Rate Application. Prepare schedules to support application.

Valley Utilities
ACC Docket No. W-01412A-07-0278

Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.

Litchfield Park Service Company
ACC Docket No. W-01427A-06-0807

Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.

Golden Shores Water Company
ACC Docket No. W-01815A-07-0117

Permanent Rate Application. Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

Diablo Village Water Company
ACC Docket No. W-02309A-07-0140

Off-site facilities hook-up fee application. Prepare schedules to support application.

Diablo Village Water Company
ACC Docket No. W-02309A-07-0399

Permanent Rate Application (Class C). Water. Prepared schedules and testified

COMPANY/CLIENT

FUNCTION

Sahuarita Water Company
(Rancho Sahuarita Water Co.)
ACC Docket No. W-03718A-07-0687

on Rate Base, Plant, Income Statement,
Revenue Requirement, Rate Design, and
Cost of Capital.

Extension Certificate of Convenience and
Necessity – Water. Prepared pro-forma
balance sheets, income statements, plant
schedules, rate base, and financing.

Utility Source, L.L.C.
ACC Docket No. WS-04235A-06-0303

Permanent Rate Application- Water and
Wastewater. Prepared schedules and
testified on Rate Base, Plant, Income
Statement, Revenue Requirement, Rate
Design, and Cost of Capital.

Tierra Buena Water Company

Valuation of Tierra Buena Water
Company for estate purposes.

Goodman Water Company
ACC Docket No. W-02500A-06-0281

Permanent Rate Application (Class C).
Water. Prepared schedules and testified
on Rate Base, Plant, Income Statement,
and Cost of Capital.

Links at Coyote Wash Utilities
ACC Docket No. SW-04210A-06-0220

Certificate of Convenience and Necessity
– Sewer. Prepared pro-forma balance
sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

New River Utilities
ACC Docket No. W-0173A-06-0171

Extension Certificate of Convenience and
Necessity – Water. Prepared pro-forma
balance sheets, income statements, plant
schedules, rate base, and financing.

Johnson Utilities
ACC Docket No. WS-02987A-04-0501
Docket WS-02987A-04-0177

Extension of Certificate of Convenience
and Necessity – Sewer. Prepared pro-
forma balance sheets, income statements,
plant schedules, rate base, financing, and
initial rate design.

Bachmann Springs Utility
ACC Docket No. WS-03953A-07-0073

Permanent Rate Application – Water and
Sewer. Prepared short-form schedules for
Rate Base, Income Statement, Plant, Bill
Counts, and Rate Design.

COMPANY/CLIENT

Avra Water Cooperative
ACC Docket No. W-02126A-06-0234

Gold Canyon Sewer Company
ACC Docket No. SW-025191A-06-0015

*State of Arizona v. Far West Water and
Sewer, No. 1 CA-CR 06-0160*

Far West Water and Sewer Company
ACC Docket No. WS-03478A-05-0801

Black Mountain Sewer Company
ACC Docket No. SW-02361A-05-0657

Balterra Sewer Company
ACC Docket No. SW-02304A-05-0586

Community Water Company of Green
Valley
ACC Docket No. W-02304A-05-0830

McClain Water Systems
Northern Sunrise Water
Southern Sunrise Water
ACC Docket No. W-020453A-06-0251

Valley Utilities Water Company
ACC Docket No. W-01412A-04-0376

FUNCTION

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Permanent Rate Application – Sewer.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Expert witness on behalf of defendant in
penalty phase of case.

Permanent Rate Application – Sewer.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Permanent Rate Application – Sewer.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, Rate Design, and Cost of
Capital.

Certificate of Convenience and Necessity
– Sewer. Prepared pro-forma balance
sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

Permanent Rate Application – Water.
Prepared schedules and testified on Rate
Base, Plant, Income Statement, Revenue
Requirement, and Rate Design.

Certificate of Convenience and Necessity
– Water. Prepared pro-forma balance
sheets, income statements, plant
schedules, rate base, financing, and initial
rate design.

Off-site facilities hook-up fee application.
Prepare schedules to support application.

COMPANY/CLIENT

FUNCTION

Valley Utilities Water Company
ACC Docket No. W-01412A-04-0376

Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.

Beardsley Water Company
ACC Docket No. W-02074A-04-0358

Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Pine Water Company, Inc.
ACC Docket No. W-03512A-03-0279

Interim and Permanent Rate Application, Financing Application - Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Cost of Capital, and Rate Design.

Chaparral City Water Company
ACC Docket No. W-02113A-04-0616

Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, and Income Statement. Assisted in preparation Rate Design.

Tierra Linda Home Owners Association
ACC Docket No. W-0423A-04-0075

Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.

Diamond Ventures - Red Rock Utilities
ACC Docket No. WS-04245A-04-0184

Certificate of Convenience and Necessity – Water and Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.

Arizona-American Water Company, Inc.
ACC Docket No. WS-01303A-02-0867
ACC Docket No. WS-01303A-02-0868
ACC Docket No. WS-01303A-02-0869
ACC Docket No. WS-01303A-02-0870
ACC Docket No. WS-01303A-02-0908

Permanent Rate Application Water and Sewer (10 divisions). Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.

COMPANY/CLIENT

Bella Vista Water Company, Inc.
ACC Docket No. W-02465A-01-0776

Green Valley Water Company
Docket (2000 Not Filed)

Gold Canyon Sewer Company
ACC Docket No. SW-02519A-00-0638

Rio Verde Utilities, Inc.
ACC Docket No. WS-02156A-00-0321

Livco Water Company
Livco Sewer Company
ACC Docket No. SW-02563A-05-0820

Livco Water Company
ACC Docket No. SW-02563A-07-0506

Cave Creek Sewer Company

Avra Water Cooperative
ACC Docket No. W-02126A-00-0269

FUNCTION

Permanent Rate Application - Water.
Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.

Permanent Rate Application. Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.

Permanent Rate Application - Sewer.
Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.

Permanent Rate Application – Water and Sewer. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.

Permanent Rate Application – Water.
Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

Revenue Requirement, Rate Adjustment and Rate Design - Sewer.

Permanent Rate Application – Water.
Assisted in preparation of Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

COMPANY/CLIENT

Town of Oro Valley

Far West Water Company
ACC Docket No. WS-03478A-99-0144

MHC Operating Limited Partnership
Sedona Venture Wastewater
ACC Docket No. W-

Vail Water Company
ACC Docket No. W-01651B-99-0406

E&T Water Company
ACC Docket No. W-01409A-95-0440

New River Utility
ACC Docket No. W-01737A-99-0633

Golden Shores Water
ACC Docket No. W-01815A-98-0645

Ponderosa Utility Company
ACC Docket No. W-01717A-99-0572

FUNCTION

Revenue Requirements, Water Rate
Adjustments and Rate Design.

Permanent Rate Application – Water.
Assisted in preparation of schedules for
Rate Base, Income Statement, Revenue
Requirement, Lead-Lag Study, Cost of
Capital, and Rate Design.

Permanent Rate Application – Sewer.
Assisted in preparation of schedules for
Rate Base, Plant, Income Statement, and
Rate Design.

Permanent Rate Application. Assisted in
preparation of schedules for Rate Base,
Plant, Income Statement, and Rate Design.

Permanent Rate Application - Water.
Assisted in preparation of schedules for
Rate Base, Plant, Income Statement, and
Rate Design.

Permanent Rate Application - Water.
Assisted in preparation of schedules for
Rate Base, Plant, Income Statement, and
Rate Design.

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Rate Base, Plant, Income Statement, and
Rate Design.

Permanent Rate Application – Water.
Assisted in preparation of schedules for
Rate Base, Plant, Income Statement, and
Rate Design.

EXHIBIT TJB-DT2

BARRY & MOORE, P. C.

CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
Pima Utility Company
Sun Lakes, Arizona

We have audited the accompanying financial statements of *Pima Utility Company*, which comprise the balance sheets as of December 31, 2015 and 2014, and the related statements of income, capitalization, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair representation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of *Pima Utility Company* as of December 31, 2015 and 2014, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Barry & Moore, P.C.
Phoenix, Arizona
March 31, 2016

Barry & Moore, P.C.

PIMA UTILITY COMPANY

BALANCE SHEETS
DECEMBER 31, 2015 AND 2014

In thousands

	2015	2014
<u>ASSETS</u>		
PLANT IN SERVICE AND UNDER CONSTRUCTION, net	\$ 19,327	\$ 19,700
CURRENT ASSETS:		
Cash	338	294
Customer accounts receivable	543	497
Receivable from affiliate	2,838	2,760
Other assets	4	0
Total current assets	3,723	3,551
RESTRICTED FUNDS	1,003	1,002
DEFERRED CHARGES	401	581
	\$ 24,454	\$ 24,834
<u>LIABILITIES AND CAPITALIZATION</u>		
CURRENT LIABILITIES:		
Accounts payable	\$ 425	\$ 117
Accrued liabilities	359	353
Current portion of note payable	558	558
Total current liabilities	1,342	1,028
NOTE PAYABLE, net of current portion	5,952	6,510
CONTRIBUTIONS IN AID OF CONSTRUCTION, net	827	928
Total liabilities	8,121	8,466
CAPITALIZATION:		
Common stock, \$1 par value; 10,000,000 shares authorized; 180,041 shares issued and outstanding	180	180
Additional paid-in capital	10,801	10,801
Retained earnings	5,352	5,387
Total capitalization	16,333	16,368
	\$ 24,454	\$ 24,834

See accompanying notes and independent auditors' report.

PIMA UTILITY COMPANY

STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

In thousands

	<u>2015</u>	<u>2014</u>
OPERATING REVENUES:		
Flat rate	\$ 3,283	\$ 3,284
Metered	2,543	2,582
Other	<u>50</u>	<u>49</u>
Total operating revenues	<u>5,876</u>	<u>5,915</u>
OPERATING EXPENSES:		
Salaries and employee benefits	1,133	1,138
Purchased power	388	387
Chemicals	124	138
Repairs and maintenance	251	342
Office supplies and expense	289	258
Contractual services	266	270
Transportation	57	74
Insurance	95	46
Property taxes	306	308
Depreciation	1,739	1,551
Amortization	99	99
Other miscellaneous expense	<u>118</u>	<u>115</u>
Total operating expenses	<u>4,865</u>	<u>4,726</u>
Operating income	1,011	1,189
OTHER EXPENSE:		
Interest expense, net	(132)	(161)
Other expense	<u>(4)</u>	<u>(1)</u>
Total other expenses	<u>(136)</u>	<u>(162)</u>
NET INCOME	<u>\$ 875</u>	<u>\$ 1,027</u>

See accompanying notes and independent auditors' report.

PIMA UTILITY COMPANY

STATEMENTS OF CAPITALIZATION
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

In thousands

	<u>COMMON STOCK</u>	<u>ADDITIONAL PAID-IN CAPITAL</u>	<u>RETAINED EARNINGS</u>	<u>TOTAL CAPITALIZATION</u>
BALANCES, December 31, 2013	\$ 180	\$ 10,801	\$ 4,812	\$ 15,793
NET INCOME	0	0	1,027	1,027
DIVIDENDS	<u>0</u>	<u>0</u>	<u>(452)</u>	<u>(452)</u>
BALANCES, December 31, 2014	180	10,801	5,387	16,368
NET INCOME	0	0	875	875
DIVIDENDS	<u>0</u>	<u>0</u>	<u>(910)</u>	<u>(910)</u>
BALANCES, December 31, 2015	<u>\$ 180</u>	<u>\$ 10,801</u>	<u>\$ 5,352</u>	<u>\$ 16,333</u>

See accompanying notes and independent auditors' report.

PIMA UTILITY COMPANY

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

In thousands

	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$ 875	\$ 1,027
Adjustments to reconcile net income to net cash flows from operating activities-		
Depreciation	1,739	1,551
Amortization	99	99
(Increase) decrease in-		
Customer accounts receivable	(46)	19
Other assets	(4)	15
Deferred charges	81	80
Increase (decrease) in-		
Accounts payable	308	(304)
Accrued liabilities	6	37
	2,183	1,497
Total adjustments		
Net cash flows from operating activities	3,058	2,524
CASH FLOWS FROM INVESTING ACTIVITIES:		
Increase in restricted funds	(1)	0
Net advances on receivable from affiliate	(78)	(554)
Plant additions	(1,467)	(1,226)
	(1,546)	(1,780)
Net cash flows from investing activities		
CASH FLOWS FROM FINANCING ACTIVITIES:		
Repayments of note payable	(558)	(558)
Repayments in aid of construction	0	(14)
Dividends	(910)	(452)
	(1,468)	(1,024)
Net cash flows from financing activities		
INCREASE (DECREASE) IN CASH	44	(280)
CASH, beginning of year	294	574
CASH, end of year	\$ 338	\$ 294

See accompanying notes and independent auditors' report.

PIMA UTILITY COMPANY

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Business Activity-

Pima Utility Company (Company), an Arizona corporation organized in 1972, provides water and wastewater services to substantially all of the homes in the Sun Lakes retirement community in Arizona.

The rates for water and wastewater services are authorized by the Arizona Corporation Commission (Commission).

Recognition of Revenues and Expenses-

Revenues and expenses are recognized on the accrual method. Under this method, revenues are recognized when earned rather than when collected, and expenses are recognized when incurred rather than when paid.

Estimates-

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Plant in Service-

Plant in service is stated at original cost. Assets are depreciated on the straight-line method at the following composite rates-

Collection systems, manholes, cleanouts, service laterals	
transmission and distribution mains and hydrants	2.00%
Distribution reservoirs and standpipes - storage tanks	2.22%
Reuse transmission and distribution lines	2.50%
Structures, improvements, wells, springs and services	3.33%
Distribution reservoirs, standpipes - pressure tanks and	
treatment and disposal systems	5.00%
Meters	8.33%
Lift stations, recharge wells and pumping equipment	12.50%
Water treatment equipment	20.00%
Equipment	5.00% to 20.00%

Maintenance and repairs to plant in service are generally expensed as incurred. Expenditures determined to extend the useful life, including significant upgrades and replacement projects, represent additions and improvements and are capitalized.

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued):

Long-Lived Assets-

Management periodically evaluates the carrying value of the long-lived assets in accordance with the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC). Under the FASB ASC, long-lived assets and certain identifiable intangible assets to be held and used in operations are reviewed for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be fully recoverable. Management does not believe impairment exists at December 31, 2015.

Customer Accounts Receivable-

The Company grants credit on open account to its customers. As of December 31, 2015 and 2014, respectively, there were approximately \$22,000 and \$17,000 of receivables over 90 days past due. The Company wrote off \$16,000 and \$12,000 of receivables as uncollectible in 2015 and 2014, respectively.

Receivable from Affiliate-

Receivable from affiliate is due on demand with interest accrued monthly.

Deferred Charges-

Deferred charges represent costs amortizable pursuant to rulings by the Commission over the following periods-

Rate hearing costs	5 years
Deferred operating costs	5 years
Allowance for funds used during construction	22 years
Note issue costs	5 years

Income Taxes-

As required by the *Income Taxes* topic of the FASB ASC, management evaluates all tax positions as required by the *Contingencies* topic of the FASB ASC, which requires a more likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in the Company's tax returns. Management believes the tax positions taken in the Company's tax returns would be sustained upon examination. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2011.

The Company and its stockholders have elected to be taxed as an S corporation. In lieu of corporate income taxes, the stockholders are personally taxed on the Company's taxable income. Therefore, no provision or liability for income taxes has been included in these financial statements.

Supplemental Cash Flow Information-

Interest paid totaled \$205,000 and \$227,000 in 2015 and 2014, respectively.

(2) PLANT IN SERVICE AND UNDER CONSTRUCTION, net:

Plant in service and under construction, net consists of the following-

In thousands

	2015	2014
Construction work-in progress	\$ 43	\$ 2,539
Land	189	189
Water:		
Wells and springs	715	682
Electric pumping equipment	2,589	2,238
Distribution reservoirs and standpipes-storage tanks	1,180	1,201
Distribution reservoirs and standpipes-pressure tanks	74	74
Transmission and distribution mains	2,945	2,945
Services	5,407	5,175
Water treatment equipment	72	62
Hydrants	899	895
Structures and improvements	325	325
Office furniture and equipment	3	3
Transportation equipment	170	116
Power operated equipment	128	128
Communication equipment	252	251
Miscellaneous equipment	15	32
Tools and work equipment	131	126
Computers and software	12	14
Meters	915	876
Wastewater:		
Structures and improvements	409	324
Power generation equipment	100	0
Treatment and disposal systems	10,418	10,419
Collection system-gravity	3,775	3,855
Collection system-force	1,750	98
Manholes and cleanouts	1,938	1,928
Service laterals	661	644
Lift stations and pumping equipment	1,935	1,520
Recharge wells and pumping equipment	1,570	1,559
Reuse transmission and distribution lines	158	140
Receiving wells	704	225
Other plant and miscellaneous equipment	986	975
Office furniture and equipment	9	9
Computers and software	16	16
Transportation equipment	42	42
Tools and work equipment	115	114
Laboratory equipment	7	6
Communication equipment	181	175
Miscellaneous equipment	1	0
Other pumping equipment	106	106
	<u>40,945</u>	<u>40,026</u>
Less accumulated depreciation	<u>21,618</u>	<u>20,326</u>
	<u>\$ 19,327</u>	<u>\$ 19,700</u>

(3) RESTRICTED FUNDS:

The loan agreement with a bank (*Note 6*) requires a compensating balance of \$1,000,000. The restricted funds are invested in money markets and are recorded at cost in a trustee account.

(4) DEFERRED CHARGES:

Deferred charges consist of the following-

	<i>In thousands</i>	
	2015	2014
Rate hearing costs	\$ 146	\$ 227
Allowance for funds used during construction, net	134	166
Deferred operating costs	115	178
Note issue costs, net	6	10
	\$ 401	\$ 581

Pursuant to an order from the Commission, from 1996 to 1999, the Company was authorized to defer 30% of the incremental operating costs of the new wastewater treatment facilities. In accordance with the Commission's Decision 73573, pertaining to the most recent rate case filing, the Company was allowed \$315,000 of the \$1,049,000 deferred operating costs to be included in its rate base calculation to be amortized over 5 years.

The Company was also allowed \$200,000 in rate case expense recovery per division (water and wastewater). This is recovered through a monthly surcharge of \$0.33 per customer, with the surcharge remaining in place until the earlier of: 1) a period of 60 months or 2) until the Company has collected the \$200,000 per division.

(5) ACCRUED LIABILITIES:

Accrued liabilities consist of the following-

	<i>In thousands</i>	
	2015	2014
Taxes	\$ 196	\$ 194
Other	146	141
Interest	17	18
	\$ 359	\$ 353

(6) NOTE PAYABLE:

The Company entered into a loan agreement with a bank in July 2012, which provides for interest at LIBOR plus 200 basis points and is due in July 2017. Principal of \$46,500 plus accrued interest are payable monthly. The note payable is collateralized by the plant in service (*Note 2*).

Concurrently with the execution of the loan agreement, the Company entered into a swap agreement with the Bank that fixed the interest rate at 3.035%.

Annual principal payments are as follows-

<u>Year Ending December 31,</u>	<i>In thousands</i>
2016	\$ 558
2017	<u>5,952</u>
	<u>\$ 6,510</u>

(7) ADVANCES AND CONTRIBUTIONS IN AID OF CONSTRUCTION:

The advances in aid of construction contracts provide that a percentage of gross revenues from each applicable unit over a specified period will be paid to reimburse an unrelated developer for the cost of the water and wastewater systems.

Any unrefunded portion upon the contract expiration is transferred to contributions in aid of construction and is amortized over the remaining estimated useful life of the related water and wastewater systems.

(8) FLAT RATE OPERATING REVENUES:

Flat rate operating revenues consist of the following-

	<i>In thousands</i>	
	<u>2015</u>	<u>2014</u>
Residential - sewer	\$ 3,119	\$ 3,118
Commercial - sewer	<u>164</u>	<u>166</u>
	<u>\$ 3,283</u>	<u>\$ 3,284</u>

(9) METERED OPERATING REVENUES:

Metered operating revenues consist of the following-

	<i>In thousands</i>	
	2015	2014
Residential - water	\$ 1,623	\$ 1,656
Commercial - water	375	383
Irrigation - water	440	430
Effluent - sewer	105	113
	<u>\$ 2,543</u>	<u>\$ 2,582</u>

(10) INTEREST EXPENSE, net:

Interest expense, net consists of the following-

	<i>In thousands</i>	
	2015	2014
Interest income	\$ 72	\$ 64
Interest expense	(204)	(225)
	<u>\$ (132)</u>	<u>\$ (161)</u>

(11) FAIR VALUE OF FINANCIAL INSTRUMENTS:

In accordance with the *Fair Value Measurements and Disclosures* topic of the FASB ASC, the carrying amount reported in the balance sheet for current assets, restricted funds and current liabilities approximate fair values due to the short maturity of these instruments.

At December 31, 2015, the fair value of the note payable was equal to the carrying amount.

(12) TRANSACTIONS WITH RELATED PARTIES:

On an ongoing basis, Pima Utility Company engages in certain business activities with affiliates which arise through the normal course of business.

The Company paid \$193,000 and \$175,000 in 2015 and 2014, respectively, to an affiliate for administrative and accounting services.

The Company also advances excess funds to an affiliate. The advances are payable on demand and provide for monthly interest at a rate determined by management, which approximates the prime rate. The Company earned \$71,000 and \$64,000 of interest on the advances during 2015 and 2014, respectively. At December 31, 2015 and 2014, the outstanding receivable from affiliate was \$2,838,000 and \$2,760,000, respectively.

(13) RETIREMENT PLAN AND TRUST:

The Company and affiliated entities have a trust profit sharing plan under Section 401 and 401(K) of the Internal Revenue Code. The Plan and Trust provides for retirement, disability and accidental benefits for eligible employees. The Company matches employee contributions at a rate of 25%. The Plan and Trust also provides for additional contributions by the employer, at management's discretion. As of December 31, 2015, the Company had no liability to the Plan and Trust for matching or additional contributions. The Company contributed approximately \$13,000 and \$12,000 in 2015 and 2014, respectively, to the Plan.

(14) CONCENTRATIONS OF CREDIT RISK:

The *Risk and Uncertainties* topic of the FASB ASC requires certain disclosures relating to concentrations and the general risk associated with those concentrations.

Substantially all customers reside within the Sun Lakes retirement community in Arizona.

(15) SUBSEQUENT EVENTS:

Management has evaluated all subsequent events through the date the financial statements were available to be issued on March 31, 2016. No subsequent events occurred during this period which require adjustment to or disclosure in the financial statements.

RATE BASE SCHEDULES

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Computation of Increase in Gross Revenue
 Requirements As Adjusted

Exhibit
 Schedule A-1
 Page 1
 Witness: Bourassa

Line
 No.

1	Fair Value Rate Base	\$ 7,806,162
2		
3	Adjusted Operating Income	411,711
4		
5	Current Rate of Return	5.27%
6		
7	Required Operating Income	\$ 661,743
8		
9	Required Rate of Return on Fair Value Rate Base	8.48%
10		
11	Operating Income Deficiency	\$ 250,033
12		
13	Gross Revenue Conversion Factor	1.3479
14		
15	Increase in Gross Revenue Requirement	\$ 337,024
16		
17		
18	Adjusted Test Year Revenues	\$ 2,423,950
19	Increase in Gross Revenue Revenue Requirement	\$ 337,024
20	Proposed Revenue Requirement	\$ 2,760,974
21	% Increase	13.90%

Customer Classification (Residential Commercial, Irrigation)	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
26 5/8x3/4 Inch Residential	\$ 1,500,435	\$ 1,715,432	\$ 214,997	14.33%
27 1 Inch Residential	160,053	166,834	6,782	4.24%
28				
29 5/8x3/4 Inch Commercial	23,909	25,578	1,668	6.98%
30 3/4 Inch Commercial	3,454	3,646	192	5.57%
31 1 Inch Commercial	27,988	29,244	1,256	4.49%
32 1 1/2 Inch Commercial	11,833	13,189	1,355	11.45%
33 2 Inch Commercial	286,713	307,062	20,349	7.10%
34				
35 Irrigation	424,542	512,244	87,702	20.66%
36 Bulk/Construction	3,052	3,118	66	2.16%
37 Revenue Annualization	(551)	(624)	(73)	13.28%
38 Usage Normalization	(35,413)	(35,787)	(373)	1.05%
39 Subtotal	\$ 2,406,015	\$ 2,739,935	\$ 333,920	13.88%
40				
41 Other Water Revenues	21,607	21,607	-	0.00%
42 Reconciling Amount	(3,672)	(568)	3,104	-84.53%
43 Rounding			-	0.00%
44 Total of Water Revenues	\$ 2,423,950	\$ 2,760,974	\$ 337,024	13.90%

- 45
- 46
- 47 SUPPORTING SCHEDULES:
- 48 B-1
- 49 C-1
- 50 C-3
- 51 H-1

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Summary of Results of Operations

Exhibit
 Schedule A-2
 Page 1
 Witness: Bourassa

Line No.	Description	Prior Years Ended		Test Year		Projected Year	
		12/31/2013	12/31/2014	Actual 12/31/2015	Adjusted 12/31/2015	Present Rates 12/31/2016	Proposed Rates 12/31/2016
1	Gross Revenues	\$ 2,503,619	\$ 2,491,559	\$ 2,459,915	\$ 2,423,950	\$ 2,423,950	\$ 2,760,974
2							
3	Revenue Deductions and	1,938,985	1,920,325	1,934,924	2,012,240	2,012,240	2,099,231
4	Operating Expenses						
5							
6	Operating Income	\$ 564,634	\$ 571,234	\$ 524,991	\$ 411,711	\$ 411,711	\$ 661,743
7							
8	Other Income and	76,268	72,490	77,414	77,414	77,414	77,414
9	Deductions						
10							
11	Interest Expense	(121,260)	(112,681)	(102,054)	(62,278)	(62,278)	(62,278)
12							
13	Net Income	\$ 519,643	\$ 531,044	\$ 500,351	\$ 426,847	\$ 426,847	\$ 676,879
14							
15	Common Shares	180,041	180,041	180,041	180,041	180,041	180,041
16							
17	Earned Per Average						
18	Common Share	2.89	2.95	2.78	2.37	2.37	3.76
19							
20	Dividends Per						
21	Common Share	13.89	2.51	5.05	5.05	5.05	5.05
22							
23	Payout Ratio	4.81	0.85	1.82	2.13	2.13	1.34
24							
25	Return on Average						
26	Invested Capital	3.13%	3.47%	3.37%	2.81%	2.95%	4.67%
27							
28	Return on Year End						
29	Capital	3.37%	3.49%	3.45%	2.81%	3.10%	4.91%
30							
31	Return on Average						
32	Common Equity	4.14%	4.90%	4.69%	3.85%	4.00%	6.27%
33							
34	Return on Year End						
35	Common Equity	4.81%	4.88%	4.78%	3.78%	3.92%	6.08%
36							
37	Times Bond Interest Earned						
38	Before Income Taxes	4.66	5.07	5.14	9.27	9.27	14.60
39							
40	Times Total Interest and						
41	Preferred Dividends Earned						
42	After Income Taxes	4.67	5.09	5.16	9.67	9.67	11.87
43							
44							
45							
46							
47							
48	<u>SUPPORTING SCHEDULES</u>						
49	C-1						
50	E-2						
51	F-1						
52							

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Summary of Capital Structure

Exhibit
 Schedule A-3
 Page 1
 Witness: Bourassa

Line No.	Description:	Prior Years Ended		Test Year	Projected Year
		12/31/2013	12/31/2014	12/31/2015	12/31/2016
1					
2					
3	Short-Term Debt	-	-	-	-
4	Long-Term Debt	3,813,000	3,534,000	2,752,787 ¹	2,629,528 ¹
5					
6	Total Debt	\$ 3,813,000	\$ 3,534,000	\$ 2,752,787	\$ 2,629,528
7					
8					
9	Preferred Stock	-	-	-	-
10					
11	Common Equity	10,794,025	10,873,073	10,463,424	10,890,271
12					
13					
14	Total Capital & Debt	\$ 14,607,025	\$ 14,407,073	\$ 13,216,212	\$ 13,519,799
15					
16					
17	Capitalization Ratios:				
18					
19	Long-Term Debt	26.10%	24.53%	20.83%	19.45%
20					
21	Total Debt	26.10%	24.53%	20.83%	19.45%
22					
23					
24	Preferred Stock	-	-	-	-
25					
26	Common Equity	73.90%	75.47%	79.17%	80.55%
27					
28					
29	Total Capital	100.00%	100.00%	100.00%	100.00%
30					
31					
32	Weighted Cost of				
33	Senior Capital	0.00%	0.00%	0.63%	0.59%
34					
35					
36	¹ Allocated portion of long-term debt based upon consolidated capital structure				
37	and proposed rate base.				
38					
39					
40					
41					
42					
43					
44					
45	<u>SUPPORTING SCHEDULES:</u>				
46	E-1				
47	D-1				
48					
49					
50					

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Construction Expenditures
and Gross Utility Plant in Service

Exhibit
Schedule A-4
Page 1
Witness: Bourassa

<u>Line No.</u>		<u>Construction Expenditures</u>	<u>Net Plant Placed in Service</u>	<u>Gross Utility Plant in Service</u>
1				
2				
3				
4	Prior Year Ended 12/31/2013	142,987	142,987	15,053,015
5				
6	Prior Year Ended 12/31/2014	186,676	187,365	15,240,380
7				
8	Test Year Ended 12/31/2015	688,400	688,401	15,928,780
9				
10	Projected Year Ended 12/31/2016	190,898	190,898	16,119,678
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34	<u>SUPPORTING SCHEDULES:</u>			
35	B-2			
36	E-5			
37	F-3			
38				
39				
40				

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Summary Statements of Cash Flows

Exhibit
 Schedule A-5
 Page 1
 Witness: Bourassa

Line No.	Prior Year Ended 12/31/2013	Prior Year Ended 12/31/2014	Test Year Ended 12/31/2015	Projected Year Present Rates 12/31/2016	Projected Year Proposed Rates 12/31/2016
5	Cash Flows from Operating Activities				
6	\$ 519,643	\$ 531,044	\$ 500,351	\$ 426,847	\$ 676,879
7	Adjustments to reconcile net income to net cash provided by operating activities:				
9	699,552	700,458	729,831	680,774	680,774
10	(298,324)	(135,025)	(162,848)		
11	Changes in Certain Assets and Liabilities:				
12	(3,887)	7,183	(21,594)		
13	-	-	-		
14	-	-	-		
15	(15,240)	15,240	(3,805)		
16	3,828	3,827	3,828		
17	2,129,172	(531,812)	822,942		
18	-	-	-		
19	-	-	-		
20	(8,850)	(6,881)	12,434		
21	1,460	2,105	2,328		
22	(636)	(647)	(1,013)		
23	(2,175)	8,430	4,074		
24	43,996	58,128	34,300		
25	1	(2)	(1)		
26					
27	\$ 3,068,540	\$ 652,048	\$ 1,920,827	\$ 1,107,621	\$ 1,357,653
28	Cash Flow From Investing Activities:				
29	(142,987)	(186,676)	(688,400)	(190,898)	(190,898)
30	-	-	-		
31	-	-	-		
32	\$ (142,987)	\$ (186,676)	\$ (688,400)	\$ (190,898)	\$ (190,898)
33	Cash Flow From Financing Activities				
34	-	-	-		
35	(279,000)	(279,000)	(279,000)	(279,000)	(279,000)
36	(12,220)	331,354	-	-	-
37	-	(345,609)	-	-	-
38	(2,500,002)	(451,996)	(910,000)	(323,262)	(542,190)
39	-	-	-	-	-
40	-	-	-	-	-
41					
42	\$ (2,791,222)	\$ (745,251)	\$ (1,189,000)	\$ (602,262)	\$ (821,190)
43	134,331	(279,879)	43,427	314,461	345,565
44	439,964	574,295	294,415	337,843	337,843
45	\$ 574,295	\$ 294,415	\$ 337,843	\$ 652,304	\$ 683,408

50 SUPPORTING SCHEDULES:

51 E-3

52 F-2

53

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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Summary of Rate Base

Exhibit
 Schedule B-1
 Page 1
 Witness: Bourassa

Line No.	<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1		
2	Gross Utility Plant in Service	
3	\$ 15,963,424	\$ 15,963,424
4	Less: Accumulated Depreciation	
	<u>6,717,951</u>	<u>6,717,951</u>
5	Net Utility Plant in Service	
6	\$ 9,245,474	\$ 9,245,474
7	<u>Less:</u>	
8	Advances in Aid of Construction	-
9		-
10	Contributions in Aid of Construction	
11	632,418	632,418
12	Accumulated Amortization of CIAC	
13	(461,407)	(461,407)
14	Customer Meter Deposits	-
15	Deferred Income Taxes & Credits	
16	1,331,835	1,331,835
17		
18		
19	<u>Plus:</u>	
20	Unamortized Finance	
21	Charges	-
22	Prepayments	-
23	3,805	3,805
24	Materials and Supplies	-
25	Allowance for Cash Working Capital	
	59,729	59,729
26	Total Rate Base	
27	<u>\$ 7,806,162</u>	<u>\$ 7,806,162</u>
28		
29		
30		
31		
32		
33		
34		
35	<u>SUPPORTING SCHEDULES:</u>	
36	B-2	
37	B-3	
38	B-5	
39	E-1	
40		

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Schedule B-2
 Page 1
 Witness: Bourassa

Line No.		Actual at End of <u>Test Year</u>	Proforma <u>Adjustment</u>	Adjusted at end of <u>Test Year</u>
1	Gross Utility			
2	Plant in Service	\$ 15,928,780	34,644	\$ 15,963,424
3				
4	Less:			
5	Accumulated			
6	Depreciation	6,659,675	58,276	6,717,951
7				
8				
9	Net Utility Plant			
10	in Service	\$ 9,269,105		\$ 9,245,474
11				
12	Less:			
13	Advances in Aid of			
14	Construction	-	-	-
15				
16	Contributions in Aid of			
17	Construction - Gross	963,772	(331,354)	632,418
18				
19	Accumulated Amortization of CIAC	(501,336)	39,929	(461,407)
20				
21	Customer Meter Deposits	-		-
22	Accumulated Deferred Income Tax	-	1,331,835	1,331,835
23				
24				-
25				-
26	Plus:			
27	Unamortized Finance			
28	Charges	-		-
29	Prepayments	3,805		3,805
30	Materials and Supplies	-		-
31	Allowance for Cash Working Capital	-	59,729	59,729
32				-
33				
34	Total	<u>\$ 8,810,474</u>		<u>\$ 7,806,162</u>

SUPPORTING SCHEDULES:

B-2, pages 2

E-1

RECAP SCHEDULES:

B-1

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49
50

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Schedule B-2
 Page 2
 Witness: Bourassa

Line No.	Description	Actual at End of Test Year	Proforma Adjustments				Adjusted at end of Test Year
			1 Plant-in-Service	2 Accumulated Depreciation	3 CIAC	4 ADIT		5 Working Capital
1	Gross Utility Plant in Service	\$ 15,928,780	34,644				\$ 15,963,424
4	Less:						
5	Accumulated Depreciation	6,659,675		58,276			6,717,951
9	Net Utility Plant in Service	\$ 9,269,105	\$ 34,644	\$ (58,276)	\$ -	\$ -	\$ 9,245,474
12	Less:						
13	Advances in Aid of Construction	-					-
16	Contributions in Aid of Construction (CIAC)	963,772		(331,354)			632,418
19	Accumulated Amort of CIAC	(501,336)		39,929			(461,407)
21	Customer Meter Deposits	-					-
22	Accumulated Deferred Income Taxes	-			1,331,835		1,331,835
25	Plus:						
26	Unamortized Finance Charges	-					-
28	Prepayments	3,805					3,805
29	Materials and Supplies	-					-
30	Allowance for Cash Working Capital	-				59,729	59,729
31	Total	\$ 8,810,474	\$ 34,644	\$ (58,276)	\$ 291,424	\$ (1,331,835)	\$ 59,729
32							\$ 7,806,162

SUPPORTING SCHEDULES:
 B-2, pages 3-5
 B-5
 E-1

RECAP SCHEDULES:
 B-1

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - A

Schedule B-2
 Page 3.1
 Witness: Jones/Bourassa

Line No.	Acct. No. Description	Adjustment
1	<u>Conforming Adjustments to Prior Decision</u>	
2		
3		
4	Acct.	
5	No. Description	Adjustment
6	301 Organization Cost	-
7	302 Franchise Cost	-
8	303 Land and Land Rights	-
9	304 Structures and Improvements	-
10	305 Collecting and Impounding Res.	-
11	306 Lake River and Other Intakes	-
12	307 Wells and Springs	3,902
13	308 Infiltration Galleries and Tunnels	-
14	309 Supply Mains	-
15	310 Power Generation Equipment	-
16	311 Electric Pumping Equipment	7,034
17	320 Water Treatment Equipment	-
18	320.1 Water Treatment Plant	-
19	320.2 Chemical Solution Feeders	4,307
20	330 Dist. Reservoirs & Standpipe	-
21	330.1 Storage tanks	-
22	330.2 Pressure Tanks	-
23	331 Trans. and Dist. Mains	(11,112)
24	333 Services	27,694
25	334 Meters	-
26	335 Hydrants	-
27	336 Backflow Prevention Devices	-
28	339 Other Plant and Misc. Equip.	-
29	340 Office Furniture and Fixtures	-
30	340.1 Computers and Software	17,015
31	341 Transportation Equipment	-
32	342 Stores Equipment	-
33	343 Tools and Work Equipment	15,330
34	344 Laboratory Equipment	-
35	345 Power Operated Equipment	-
36	346 Communications Equipment	-
37	347 Miscellaneous Equipment	(21,532)
38	348 Other Tangible Plant	-
39		
40	TOTALS	\$ 42,638
41		
42		
43	<u>SUPPORTING SCHEDULE</u>	
44	Work Papers	
45		
46		
47		
48		
49		
50		

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - B

Schedule B-2
 Page 3.2
 Witness: Jones/Bourassa

Line			
No.			
1	<u>Remove Plant Charged in Error</u>		
2			
3			
4	Acct.		
5	No.	Description	Adjustment
6	301	Organization Cost	-
7	302	Franchise Cost	-
8	303	Land and Land Rights	-
9	304	Structures and Improvements	-
10	305	Collecting and Impounding Res.	-
11	306	Lake River and Other Intakes	-
12	307	Wells and Springs	-
13	308	Infiltration Galleries and Tunnels	-
14	309	Supply Mains	-
15	310	Power Generation Equipment	-
16	311	Electric Pumping Equipment	-
17	320	Water Treatment Equipment	-
18	320.1	Water Treatment Plant	-
19	320.2	Chemical Solution Feeders	-
20	330	Dist. Reservoirs & Standpipe	-
21	330.1	Storage tanks	-
22	330.2	Pressure Tanks	-
23	331	Trans. and Dist. Mains	-
24	333	Services	(890)
25	334	Meters	-
26	335	Hydrants	-
27	336	Backflow Prevention Devices	-
28	339	Other Plant and Misc. Equip.	-
29	340	Office Furniture and Fixtures	-
30	340.1	Computers and Software	-
31	341	Transportation Equipment	-
32	342	Stores Equipment	-
33	343	Tools and Work Equipment	-
34	344	Laboratory Equipment	-
35	345	Power Operated Equipment	-
36	346	Communications Equipment	-
37	347	Miscellaneous Equipment	(5,817)
38	348	Other Tangible Plant	-
39			
40		TOTALS	\$ (6,707)
41			
42			
43	<u>SUPPORTING SCHEDULE</u>		
44	Work Papers		
45			
46			
47			
48			
49			
50			

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - C

Schedule B-2
 Page 3.3
 Witness: Jones/Bourassa

Line No.	Acct. No.	Description	Adjustment
1		<u>Transfer Plant to Wastewater Division</u>	
2			
3			
4		Acct.	
5	No.	Description	Adjustment
6	301	Organization Cost	-
7	302	Franchise Cost	-
8	303	Land and Land Rights	-
9	304	Structures and Improvements	-
10	305	Collecting and Impounding Res.	-
11	306	Lake River and Other Intakes	-
12	307	Wells and Springs	-
13	308	Infiltration Galleries and Tunnels	-
14	309	Supply Mains	-
15	310	Power Generation Equipment	-
16	311	Electric Pumping Equipment	(1,097)
17	320	Water Treatment Equipment	-
18	320.1	Water Treatment Plant	-
19	320.2	Chemical Solution Feeders	-
20	330	Dist. Reservoirs & Standpipe	-
21	330.1	Storage tanks	-
22	330.2	Pressure Tanks	-
23	331	Trans. and Dist. Mains	-
24	333	Services	-
25	334	Meters	-
26	335	Hydrants	-
27	336	Backflow Prevention Devices	-
28	339	Other Plant and Misc. Equip.	-
29	340	Office Furniture and Fixtures	-
30	340.1	Computers and Software	-
31	341	Transportation Equipment	-
32	342	Stores Equipment	-
33	343	Tools and Work Equipment	-
34	344	Laboratory Equipment	-
35	345	Power Operated Equipment	-
36	346	Communications Equipment	-
37	347	Miscellaneous Equipment	-
38	348	Other Tangible Plant	-
39			
40		TOTALS	
41			\$ (1,097)
42			
43		<u>SUPPORTING SCHEDULE</u>	
44		Work Papers	
45			
46			
47			
48			
49			
50			

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - D

Schedule B-2
 Page 3.4
 Witness: Jones/Bourassa

Line No.	Acct. No.	Description	Reclass 12/31/10 Plant to Correct NARUC Acct.	Reclass 2011-2014 Plant Add. To Corr. NARUC Acct.	Reclass Retire to Correct NARUC Acct.	Total Adjustment
1		<u>Reclassification Adjustments</u>				
2						
3						
4						
5	301	Organization Cost	-	-	-	-
6	302	Franchise Cost	-	-	-	-
7	303	Land and Land Rights	-	-	-	-
8	304	Structures and Improvements	-	-	-	-
9	305	Collecting and Impounding Res.	-	-	-	-
10	306	Lake River and Other Intakes	-	-	-	-
11	307	Wells and Springs	-	-	-	-
12	308	Infiltration Galleries and Tunnels	-	-	-	-
13	309	Supply Mains	-	-	-	-
14	310	Power Generation Equipment	-	-	-	-
15	311	Electric Pumping Equipment	-	37,876	-	37,876
16	320	Water Treatment Equipment	-	-	-	-
17	320.1	Water Treatment Plant	-	-	-	-
18	320.2	Chemical Solution Feeders	-	-	-	-
19	330	Dist. Reservoirs & Standpipe	-	-	-	-
20	330.1	Storage tanks	-	(37,876)	-	(37,876)
21	330.2	Pressure Tanks	-	-	-	-
22	331	Trans. and Dist. Mains	-	-	-	-
23	333	Services	-	-	-	-
24	334	Meters	-	7,445	-	7,445
25	335	Hydrants	-	(7,445)	-	(7,445)
26	336	Backflow Prevention Devices	-	-	-	-
27	339	Other Plant and Misc. Equip.	-	-	-	-
28	340	Office Furniture and Fixtures	-	-	-	-
29	340.1	Computers and Software	-	1,290	(17,015)	(15,725)
30	341	Transportation Equipment	-	-	-	-
31	342	Stores Equipment	-	-	-	-
32	343	Tools and Work Equipment	(4,517)	(1,290)	-	(5,807)
33	344	Laboratory Equipment	-	-	-	-
34	345	Power Operated Equipment	-	-	-	-
35	346	Communications Equipment	-	-	-	-
36	347	Miscellaneous Equipment	4,517	-	17,015	21,532
37	348	Other Tangible Plant	-	-	-	-
38						
39						
40		TOTALS	\$ -	\$ -	\$ -	\$ -
41						
42						
43		<u>SUPPORTING SCHEDULE</u>				
44		Work Papers				
45						
46						
47						
48						
49						
50						

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - E

Schedule B-2
 Page 3.5
 Witness: Jones/Bourassa

Line
 No.

Reconciliation of Plant to Plant Reconstruction						
Acct.	Original	B-2	Adjusted	Plant		
No. Description	Cost	Adjustments	Original	Per	Reconstruction	Difference
			Cost			
301	Organization Cost	-	-	-	-	-
302	Franchise Cost	-	-	-	-	-
303	Land and Land Rights	97,637	-	97,637	97,637	-
304	Structures and Improvements	324,999	-	324,999	324,999	-
305	Collecting and Impounding Res.	-	-	-	-	-
306	Lake River and Other Intakes	-	-	-	-	-
307	Wells and Springs	714,808	3,902	718,709	718,709	-
308	Infiltration Galleries and Tunnels	-	-	-	-	-
309	Supply Mains	-	-	-	-	-
310	Power Generation Equipment	-	-	-	-	-
311	Electric Pumping Equipment	2,589,173	43,813	2,632,985	2,632,985	-
320	Water Treatment Equipment	-	-	-	-	-
320.1	Water Treatment Plant	-	-	-	-	-
320.2	Chemical Solution Feeders	71,866	4,307	76,173	76,173	-
330	Dist. Reservoirs & Standpipe	-	-	-	-	-
330.1	Storage tanks	1,180,022	(37,876)	1,142,147	1,142,147	-
330.2	Pressure Tanks	73,937	-	73,937	73,937	-
331	Trans. and Dist. Mains	2,944,836	(11,112)	2,933,724	2,933,724	0
333	Services	5,406,777	26,804	5,433,581	5,433,391	(190)
334	Meters	914,648	7,445	922,093	922,093	-
335	Hydrants	898,849	(7,445)	891,404	891,404	-
336	Backflow Prevention Devices	-	-	-	-	-
339	Other Plant and Misc. Equip.	-	-	-	-	-
340	Office Furniture and Fixtures	2,832	-	2,832	2,832	-
340.1	Computers and Software	12,335	1,290	13,625	13,625	-
341	Transportation Equipment	169,565	-	169,565	169,565	-
342	Stores Equipment	-	-	-	-	-
343	Tools and Work Equipment	130,961	9,523	140,485	140,485	-
344	Laboratory Equipment	-	-	-	-	-
345	Power Operated Equipment	128,036	-	128,036	128,036	-
346	Communications Equipment	252,285	-	252,285	252,285	-
347	Miscellaneous Equipment	15,214	(5,817)	9,397	9,397	-
348	Other Tangible Plant	-	-	-	-	-
TOTALS						
	\$ 15,928,780	\$ 34,834	\$ 15,963,615	\$ 15,963,424	\$	(190)

43 SUPPORTING SCHEDULE
 44 B-2, pages 3.1 through 3.4
 45 B-2, pages 3.6 through 3.11

RECAP SCHEDULES:
 B-2, page 3

46
 47
 48
 49
 50

Line No.	G/L No.	NARUC Account No.	Description	Prior Depr. Rate	Allowed Depr. Rate	2012											
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprac.	Net Plant	
1		301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
2		302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
3	2405	303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
4	2450.XXX	304	Structures & Improvements	3.00%	3.33%	-	-	-	-	-	-	-	-	97,637	-	97,637	
5		305	Collecting & Impounding Reservoirs	3.00%	2.50%	-	-	-	-	-	-	-	9,627	315,125	158,531	158,595	
6		306	Lake, River, Canal Intakes	3.00%	2.50%	-	-	-	-	-	-	-	-	-	-	-	
7	2415	307	Wells & Springs	3.00%	3.33%	22,464	-	22,464	-	-	-	-	-	-	-	-	
8		308	Infiltration Galleries	3.00%	6.67%	-	-	-	-	-	-	-	19,187	639,287	299,097	340,190	
9		309	Raw Water Supply Mains	3.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
10		310	Power Generation Equipment	3.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	
11	2420.XXX	311	Pumping Equipment	3.00%	12.50%	14,921	21,452	36,373	129,748	-	-	129,748	-	104,253	2,227,913	413,448	1,814,465
12		320	Water Treatment Equipment	3.00%	3.33%	-	-	-	-	-	-	-	-	-	-	-	-
13		320.1	Water Treatment Plants	3.00%	3.33%	-	-	-	-	-	-	-	-	-	-	-	-
14	2470	320.2	Solution Chemical Feeders	3.00%	20.00%	8,266	-	8,266	3,793	-	-	3,793	-	3,529	62,728	11,373	51,355
15		330	Distribution Reservoirs & Standpipes	3.00%	3.00%	-	-	-	-	-	-	-	-	-	-	-	-
16	2425	330.1	Storage Tanks	3.00%	2.22%	144,910	(21,452)	123,458	75,200	-	-	75,200	-	32,326	1,150,456	480,400	670,056
17	2425.100	330.2	Pressure Tanks	3.00%	5.00%	-	-	-	-	-	-	-	-	2,465	73,937	28,962	44,975
18	2460.100	331	Transmission & Distribution Mains	3.00%	2.00%	3,891	-	3,891	2,640	-	-	2,640	-	82,724	2,920,287	1,793,477	1,126,810
19	2435	333	Services	3.00%	3.33%	219,056	-	219,056	285,761	-	-	285,761	-	150,574	4,895,421	852,550	4,042,871
20	2465	334	Meters	3.00%	8.33%	88,841	-	88,841	152,506	-	-	152,506	-	36,283	901,300	273,791	627,508
21	2445	335	Hydrants	3.00%	2.00%	-	-	-	2,640	-	-	2,640	-	25,105	884,741	599,221	285,520
22		336	Backflow Prevention Devices	3.00%	6.67%	-	-	-	-	-	-	-	-	-	-	-	-
23		339	Other Plant & Misc Equipment	3.00%	6.67%	-	-	-	-	-	-	-	-	-	-	-	-
24	2460	340	Office Furniture & Equipment	3.00%	6.67%	-	-	-	2,639	-	-	2,639	-	105	1,600	(2,297)	3,897
25	2460.600	340.1	Computers & Software	3.00%	20.00%	-	-	-	-	-	-	-	-	1,661	28,479	2,794	25,685
26	2460.100	341	Transportation Equipment	3.00%	4.00%	-	-	-	23,000	-	-	23,000	-	4,698	69,040	(67,070)	136,110
27		342	Stores Equipment	3.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	-
28	2460.500	343	Tools, Shop & Garage Equipment	3.00%	10.00%	-	-	-	-	-	-	-	-	4,468	134,029	41,584	92,445
29		344	Laboratory Equipment	3.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	-
30	2460.200	345	Power Operated Equipment	3.00%	10.00%	-	-	-	-	-	-	-	-	4,163	124,899	42,025	82,874
31	2460.300	346	Communication Equipment	3.00%	10.00%	-	-	-	-	-	-	-	-	10,259	246,205	84,018	152,186
32	2460.400	347	Miscellaneous Equipment	3.00%	10.00%	1,125	-	1,125	-	-	-	-	-	306	7,907	1,570	6,337
33		348	Other Tangible Plant	3.00%		-	-	-	-	-	-	-	-	-	-	-	-
34																	
35																	
36			TOTALS			503,474	-	503,474	677,928	-	-	677,928	-	491,732	14,780,989	5,023,474	9,757,515
37																	
38			Depreciable Plant Balance														
39			Depreciation											14,683,352			
40														491,732			
														3,3489%			

Line No.	G/L No.	NARUC Account No.	Description	Prior Deprc. Rate	Allowed Deprc. Rate	2015											
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprc.	Net Plant	
1		301	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
2		302	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
3	2405	303	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-	97,637	-	97,637	
4	2450.XXX	304	Structures & Improvements	3.00%	3.33%	4,050	-	4,050	3,650	-	3,650	10,816	324,999	185,572	139,428	-	
5		305	Collecting & Impounding Reservoirs	3.00%	2.50%	-	-	-	-	-	-	-	-	-	-	-	
6		306	Lake, River, Canal Intakes	3.00%	2.50%	-	-	-	-	-	-	-	-	-	-	-	
7	2415	307	Wells & Springs	3.00%	3.33%	33,163	-	33,163	-	-	-	23,381	718,709	325,171	393,539	-	
8		308	Infiltration Galleries	3.00%	6.67%	-	-	-	-	-	-	-	-	-	-	-	
9		309	Raw Water Supply Mains	3.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
10		310	Power Generation Equipment	3.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	
11	2420.XXX	311	Pumping Equipment	3.00%	12.50%	381,903	-	381,903	46,031	-	46,031	308,131	2,632,985	1,167,545	1,465,440	-	
12		320	Water Treatment Equipment	3.00%	3.00%	-	-	-	-	-	-	-	-	-	-	-	
13		320.1	Water Treatment Plants	3.00%	3.33%	-	-	-	-	-	-	-	-	-	-	-	
14	2470	320.2	Solution Chemical Feeders	3.00%	20.00%	9,751	-	9,751	-	-	-	14,260	76,173	35,236	40,938	-	
15		330	Distribution Reservoirs & Standpipes	3.00%	3.00%	-	-	-	-	-	-	-	-	-	-	-	
16	2425	330.1	Storage Tanks	3.00%	2.22%	-	-	-	10,000	-	10,000	25,467	1,142,147	543,965	598,181	-	
17	2425.100	330.2	Pressure Tanks	3.00%	5.00%	-	-	-	-	-	-	3,697	73,937	40,052	33,885	-	
18	2460.100	331	Transmission & Distribution Mains	3.00%	2.00%	-	-	-	-	-	-	58,674	2,933,724	1,969,366	964,358	-	
19	2435	333	Services	3.00%	3.33%	281,645	-	281,645	48,046	-	48,046	177,042	5,433,391	1,184,149	4,249,241	-	
20	2465	334	Meters	3.00%	8.33%	66,732	-	66,732	28,213	-	28,213	75,206	822,093	336,444	585,649	-	
21	2445	335	Hydrants	3.00%	2.00%	3,368	-	3,368	-	-	-	17,794	891,404	650,308	241,097	-	
22		336	Backflow Prevention Devices	3.00%	6.67%	-	-	-	-	-	-	-	-	-	-	-	
23		339	Other Plant & Misc Equipment	3.00%	6.67%	-	-	-	-	-	-	-	-	-	-	-	
24	2460	340	Office Furniture & Equipment	3.00%	6.67%	-	-	-	-	-	-	189	2,832	(1,771)	4,603	-	
25	2460.600	340.1	Computers & Software	3.00%	20.00%	3,784	-	3,784	5,751	17,015	22,766	4,623	13,625	(4,108)	17,734	-	
26	2460.100	341	Transportation Equipment	3.00%	20.00%	2,000	-	2,000	7,445	-	7,445	1,600	34,458	169,565	(2,403)	171,968	-
27		342	Stores Equipment	3.00%	4.00%	-	-	-	-	-	-	-	-	-	-	-	
28	2460.500	343	Tools, Shop & Garage Equipment	3.00%	5.00%	4,738	-	4,738	-	-	-	6,906	140,485	61,969	78,516	-	
29		344	Laboratory Equipment	3.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
30	2460.200	345	Power Operated Equipment	3.00%	5.00%	-	-	-	-	-	-	6,402	128,036	61,152	66,884	-	
31	2460.300	346	Communication Equipment	3.00%	10.00%	1,652	-	1,652	-	-	-	25,146	252,285	161,080	91,185	-	
32	2460.400	347	Miscellaneous Equipment	3.00%	10.00%	494	-	494	17,015	(17,015)	-	915	9,397	4,216	5,181	-	
33		348	Other Tangible Plant	3.00%		-	-	-	-	-	-	-	-	-	-	-	
34																	
35																	
36		TOTALS				793,280	-	793,280	166,151	-	166,151	3,300	793,106	15,963,424	6,717,951	9,245,474	-
37																	
38			Depreciable Plant Balance											15,865,788			
39			Depreciation											793,106			
40														4.9988%			

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2

Exhibit
 Schedule B-2
 Page 4
 Witness: Jones/Bourassa

Accumulated Depreciation

Line No.	Acct. No.	Description	Adjustments		Adjusted Accum. Depr.
			Per Books Accum. Depr.	Reclass A/D for reclassified Plant		Reconciliation to Reconstructed Balance
1					
2					
3					
4					
5	301	Organization Cost	-	-	-
6	302	Franchise Cost	-	-	-
7	303	Land and Land Rights	(0)	-	0
8	304	Structures and Improvements	186,169	-	(597)
9	305	Collecting and Impounding Res.	-	-	-
10	306	Lake River and Other Intakes	-	-	(192)
11	307	Wells and Springs	325,362	-	-
12	308	Infiltration Galleries and Tunnels	-	-	-
13	309	Supply Mains	-	-	-
14	310	Power Generation Equipment	-	-	-
15	311	Electric Pumping Equipment	1,150,138	-	17,407
16	320	Water Treatment Equipment	-	-	-
17	320.1	Water Treatment Plant	-	-	-
18	320.2	Chemical Solution Feeders	33,082	-	2,154
19	330	Dist. Reservoirs & Standpipe	-	-	-
20	330.1	Storage tanks	547,455	-	(3,490)
21	330.2	Pressure Tanks	40,052	-	(0)
22	331	Trans. and Dist. Mains	1,970,190	-	(824)
23	333	Services	1,180,171	-	3,978
24	334	Meters	335,492	-	952
25	335	Hydrants	650,680	-	(372)
26	336	Backflow Prevention Devices	-	-	-
27	339	Other Plant and Misc. Equip.	-	-	-
28	340	Office Furniture and Fixtures	(1,498)	-	(273)
29	340.1	Computers and Software	3,755	(17,015)	9,151
30	341	Transportation Equipment	(21,450)	-	19,047
31	342	Stores Equipment	-	-	-
32	343	Tools and Work Equipment	46,225	(1,095)	16,838
33	344	Laboratory Equipment	-	-	0
34	345	Power Operated Equipment	61,151	-	2
35	346	Communications Equipment	161,089	-	(5,511)
36	347	Miscellaneous Equipment	(8,383)	18,110	-
37	348	Other Tangible Plant	-	-	6
38		Unspecified	(6)	-	-
39		TOTALS	\$ 6,659,675	\$ -	\$ 58,276
40					\$ 6,717,951
41					
42		Accumulated Depreciation per Books			\$ 6,659,675
43					
44		Increase (decrease) in Accumulated Depreciation			\$ 58,276
45					
46		Adjustment to Accumulated Depreciation			\$ 58,276
47					
48		<u>SUPPORTING SCHEDULES</u>			
49		B-2, pages 4.1 to 4.2			
50					

Line No.	Acct. No.	Description	Reclass A/D for reclassified Plant	Reclass Retire to Correct NARUC Acct.	Adjustment
1		<u>Reclass A/D for Reclassed Plant</u>			
2					
3					
4					
5	301	Organization Cost	-	-	-
6	302	Franchise Cost	-	-	-
7	303	Land and Land Rights	-	-	-
8	304	Structures and Improvements	-	-	-
9	305	Collecting and Impounding Res.	-	-	-
10	306	Lake River and Other Intakes	-	-	-
11	307	Wells and Springs	-	-	-
12	308	Infiltration Galleries and Tunnels	-	-	-
13	309	Supply Mains	-	-	-
14	310	Power Generation Equipment	-	-	-
15	311	Electric Pumping Equipment	-	-	-
16	320	Water Treatment Equipment	-	-	-
17	320.1	Water Treatment Plant	-	-	-
18	320.2	Chemical Solution Feeders	-	-	-
19	330	Dist. Reservoirs & Standpipe	-	-	-
20	330.1	Storage tanks	-	-	-
21	330.2	Pressure Tanks	-	-	-
22	331	Trans. and Dist. Mains	-	-	-
23	333	Services	-	-	-
24	334	Meters	-	-	-
25	335	Hydrants	-	-	-
26	336	Backflow Prevention Devices	-	-	-
27	339	Other Plant and Misc. Equip.	-	-	-
28	340	Office Furniture and Fixtures	-	-	-
29	340.1	Computers and Software	-	(17,015)	(17,015)
30	341	Transportation Equipment	-	-	-
31	342	Stores Equipment	-	-	-
32	343	Tools and Work Equipment	(1,095)	-	(1,095)
33	344	Laboratory Equipment	-	-	-
34	345	Power Operated Equipment	-	-	-
35	346	Communications Equipment	-	-	-
36	347	Miscellaneous Equipment	1,095	17,015	18,110
37	348	Other Tangible Plant	-	-	-
38					
39					
40		TOTALS	\$ -	\$ -	\$ -

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 43 SUPPORTING SCHEDULE
 44 Work Papers

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 46
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 48
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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2 - B

Exhibit
 Schedule B-2
 Page 4.2
 Witness: Jones/Bourassa

Line
 No.

1 Reconciliation of A/D to A/D Reconstruction

Acct. No.	Description	Original Cost	B-2 Adjustments	Adjusted Original Cost	A/D Per Reconstruction	Difference
301	Organization Cost	-	-	-	-	-
302	Franchise Cost	-	-	-	-	-
303	Land and Land Rights	(0)	-	(0)	-	0
304	Structures and Improvements	186,169	-	186,169	185,572	(597)
305	Collecting and Impounding Res.	-	-	-	-	-
306	Lake River and Other Intakes	-	-	-	-	-
307	Wells and Springs	325,362	-	325,362	325,171	(192)
308	Infiltration Galleries and Tunnels	-	-	-	-	-
309	Supply Mains	-	-	-	-	-
310	Power Generation Equipment	-	-	-	-	-
311	Electric Pumping Equipment	1,150,138	-	1,150,138	1,167,545	17,407
320	Water Treatment Equipment	-	-	-	-	-
320.1	Water Treatment Plant	-	-	-	-	-
320.2	Chemical Solution Feeders	33,082	-	33,082	35,236	2,154
330	Dist. Reservoirs & Standpipe	-	-	-	-	-
330.1	Storage tanks	547,455	-	547,455	543,965	(3,490)
330.2	Pressure Tanks	40,052	-	40,052	40,052	(0)
331	Trans. and Dist. Mains	1,970,190	-	1,970,190	1,969,366	(824)
333	Services	1,180,171	-	1,180,171	1,184,149	3,978
334	Meters	335,492	-	335,492	336,444	952
335	Hydrants	650,680	-	650,680	650,308	(372)
336	Backflow Prevention Devices	-	-	-	-	-
339	Other Plant and Misc. Equip.	-	-	-	-	-
340	Office Furniture and Fixtures	(1,498)	-	(1,498)	(1,771)	(273)
340.1	Computers and Software	3,755	(17,015)	(13,260)	(4,108)	9,151
341	Transportation Equipment	(21,450)	-	(21,450)	(2,403)	19,047
342	Stores Equipment	-	-	-	-	-
343	Tools and Work Equipment	46,225	(1,095)	45,131	61,969	16,838
344	Laboratory Equipment	-	-	-	-	-
345	Power Operated Equipment	61,151	-	61,151	61,152	0
346	Communications Equipment	161,089	-	161,089	161,090	2
347	Miscellaneous Equipment	(8,383)	18,110	9,727	4,216	(5,511)
348	Other Tangible Plant	-	-	-	-	-
	Unspecified	(6)	-	(6)	-	6
	TOTALS	\$ 6,659,675	\$ -	\$ 6,659,675	\$ 6,717,951	\$ 58,276

43 SUPPORTING SCHEDULE
 44 B-2, pages 4.1 to 4.2
 45 B-2, pages 3.6 through 3.11

RECAP SCHEDULES:
 B-2, page 4

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 47
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 49
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Contributions-in-Aid of Construction (CIAC) and Accumulated Amortization

Line No.		CIAC	Accumulated Amortization
1			
2	Calculated Balance at 12/31/2015	\$ 632,418	\$ 461,407
3			
4	Book Balance at 12/31/2015	\$ 963,772	\$ 501,336
5			
6	Increase / (Decrease) in CIAC or AA CIAC	\$ (331,354)	\$ (39,929)
7			
8			
9			

Line No.	Balance 12/31/2010	2011		2012		2013		2014		2015	
		Additions	Balance	Additions	Balance	Additions	Balance	Additions	Balance	Additions	Balance
14											
15	CIAC	632,418	-	632,418	-	632,418	-	632,418	-	632,418	-
16											
17	Amortization Decision No. 73573	346,223									
18	Amortization Rate		3.3489%		4.9007%		4.9648%		4.9988%		0.0000%
19	Amortization (1/2 yr convention)		21,179		30,993		31,398		31,613		-
20	Accumulated Amortization		367,402		398,395		429,793		461,407		461,407
21											
22	Net CIAC	286,195	-	265,016	-	234,023	-	202,624	-	171,011	-
23											

Notes:
 1. 12/31/10 Balanes agree to rate case balances approved in Decision 73573.
 2. Amortization rate agrees to composite depreciation rate for the year.

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment 4

Exhibit
 Schedule B-2
 Page 6
 Witness: Bourassa

Line
 No.

<u>Proforma Deferred Income Tax as of December 31, 2015</u>										
		<u>Water & Sewer Adjusted Book Value</u>	<u>Water & Sewer Tax Value</u>	<u>Probability of Realization of Future Tax Benefit</u>	<u>Deductible TD (Taxable TD) Expected to be Realized</u>	<u>Effective Tax Rate</u>	<u>Future Tax Asset</u>		<u>Future Tax Liability</u>	
							<u>Current</u>	<u>Non Current</u>	<u>Current</u>	<u>Non Current</u>
6	Plant-in-Service	\$ 40,848,313 ¹								
7	Accum. Deprec.	(21,667,729) ¹								
8	CIAC	(543,941) ³								
9	Fed. Fixed Assets	\$ 18,636,644	\$ 8,447,592 ²	100.0%	\$ (10,189,051)	21.50%	-	-		(2,190,594)
11	State Fixed Assets	\$ 18,636,644	\$ 8,447,592 ²	100.0%	\$ (10,189,051)	3.236%	-	-		(329,759)
13	Fed & State AIAC		- ⁴	100.0%	\$ - ⁴	24.736%	-	-		
							<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (2,520,353)</u>
18	Net Asset (Liability)						\$ (2,520,353)			
19	Allocation Factor - Water-Division (based on rate base before ADIT)						0.5284			
22	Net Asset (Liability) Water Division						\$ (1,331,835)			
25	ADIT Asset (Liability) as Adjusted						<u>\$ -</u>			
27	Adjustment to ADIT						<u>\$ 1,331,835</u>			

Footnotes - See page 7.1

RECAP SCHEDULES:
 B-2, page 2

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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Cash Working Capital

Exhibit
 Schedule B-5
 Page 1
 Witness: Bourassa

Line No.	Description	Proforma Test Year Amount ¹	Revenue Lag (Lead) Days	Expense Lag (Lead) Days	Net Lag (Lead) Days Col. C - Col. D	Lead/Lag Factor Col. E/365	Cash Working Capital Required Col. B * Col. F
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
7	OPERATING EXPENSES						
8	Salaries and Wages	\$ 351,829	51.00	13.00	38.00	0.104122	\$ 36,643
9	Employee Pensions and Benefits	53,750	51.00	18.00	33.00	0.090423	4,860
10	Purchased Water	-	51.00	-	51.00	0.138738	-
11	Purchased Power	238,567	51.00	51.74	(0.74)	(0.002015)	(481)
12	Chemicals	16,377	51.00	12.11	38.89	0.106560	1,745
13	Repairs and Maintenance	74,217	51.00	22.35	28.65	0.078505	5,826
14	Office Supplies and Expense	72,824	51.00	16.02	34.98	0.095848	6,980
15	Contractual Services - Engineering	287	51.00	29.33	21.67	0.059382	18
16	Contractual Services - Accounting	4,148	51.00	24.00	27.00	0.073985	307
17	Contractual Services - Legal	5,414	51.00	96.02	(45.02)	(0.123330)	(668)
18	Contractual Services - Other	87,018	51.00	14.11	36.89	0.101081	8,796
19	Contractual Services - Water Testing	29,786	51.00	(22.42)	73.42	0.201163	5,992
20	Rents	2,680	51.00	(3.83)	54.83	0.150231	403
21	Transportation Expense	29,667	51.00	39.26	11.74	0.032177	955
22	Insurance - Vehicle	14,085	51.00	(182.50)	233.50	0.639738	9,011
23	Insurance - General Liability	26,844	51.00	(182.50)	233.50	0.639738	17,173
24	Insurance - Health & Life	729	51.00	18.00	33.00	0.090423	66
25							
26							
27							
28	Miscellaneous Expense	30,053	51.00	(37.27)	88.27	0.241848	7,268
29							
30							
31							
32							
33	TAXES						
34	General Taxes-Property ¹	\$ 127,891	51.00	214.29	(163.29)	(0.44736226)	\$ (57,214)
35	General Taxes-Other	44,751	51.00	5.91	45.09	0.12354641	5,529
36	Income Tax ¹	169,906	51.00	37.00	14.00	0.03836833	6,519
37							
38	OTHER						
39							
40							
41	TOTAL	<u>\$ 1,380,935</u>					<u>WORKING CASH REQUIREMENT \$ 59,729</u>
42							
43							
44							
45							
46							
47							
48							
49							
50							

¹At proposed rates.

RECAP SCHEDULES:
 B-2, page 2

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Income Statement

Exhibit
 Schedule C-1
 Page 1
 Witness: Bourassa

Line No.		Test Year Book Results	<u>Adjustment</u>	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	Revenues					
2	Metered Water Revenues	\$ 2,438,308	\$ (35,965)	\$ 2,402,343	\$ 337,024	\$ 2,739,367
3	Unmetered Water Revenues	-	-	-		-
4	Other Water Revenues	21,607	-	21,607		21,607
5		<u>\$ 2,459,915</u>	<u>\$ (35,965)</u>	<u>\$ 2,423,950</u>	<u>\$ 337,024</u>	<u>\$ 2,760,974</u>
6	Operating Expenses					
7	Salaries and Wages	\$ 351,929	-	\$ 351,929		\$ 351,929
8	Employee Pensions and Benefits	53,750	-	53,750		53,750
9	Purchased Water	-	-	-		-
10	Purchased Power	238,567	(3,521)	235,046		235,046
11	Chemicals	16,377	(618)	15,759		15,759
12	Repairs and Maintenance	74,217	-	74,217		74,217
13	Office Supplies and Expense	72,824	(2)	72,822		72,822
14	Contractual Services - Engineering	297	-	297		297
15	Contractual Services - Accounting	4,148	-	4,148		4,148
16	Contractual Services - Legal	5,414	-	5,414		5,414
17	Contractual Services - Other	87,018	-	87,018		87,018
18	Contractual Services - Water Testing	29,786	-	29,786		29,786
19	Rents	2,680	-	2,680		2,680
20	Transportation Expense	29,667	-	29,667		29,667
21	Insurance - Vehicle	14,085	-	14,085		14,085
22	Insurance - General Liability	26,844	-	26,844		26,844
23	Insurance - Health & Life	729	-	729		729
24	Regulatory Commission Expense	-	-	-		-
25	Regulatory Commission Expense - Rate Ca	-	35,000	35,000		35,000
26	Bad Debt Expense	6,663	-	6,663		6,663
27	Miscellaneous Expense	30,053	-	30,053		30,053
28	Depreciation & Amortization Expense	729,831	(49,058)	680,774		680,774
29	Taxes Other Than Income	44,751	-	44,751		44,751
30	Property Taxes	115,292	7,019	122,311	5,581	127,891
31	Income Tax	-	88,496	88,496	81,411	169,906
32		-	-	-		-
33	Total Operating Expenses	<u>\$ 1,934,924</u>	<u>\$ 77,316</u>	<u>\$ 2,012,240</u>	<u>\$ 86,991</u>	<u>\$ 2,099,231</u>
34	Operating Income	<u>\$ 524,991</u>	<u>\$ (113,280)</u>	<u>\$ 411,711</u>	<u>\$ 250,032</u>	<u>\$ 661,743</u>
35	Other Income (Expense)					
36	Interest Income	79,249	-	79,249		79,249
37	Other income	1,431	-	1,431		1,431
38	Interest Expense	(102,054)	39,776	(62,278)		(62,278)
39	Other Expense	(3,266)	-	(3,266)		(3,266)
40		-	-	-		-
41	Total Other Income (Expense)	<u>\$ (24,640)</u>	<u>\$ 39,776</u>	<u>\$ 15,136</u>	<u>\$ -</u>	<u>\$ 15,136</u>
42	Net Profit (Loss)	<u>\$ 500,351</u>	<u>\$ (73,504)</u>	<u>\$ 426,847</u>	<u>\$ 250,032</u>	<u>\$ 676,879</u>

43
 44 SUPPORTING SCHEDULES:
 45 C-1, page 2
 46 E-2
 47

RECAP SCHEDULES:
 A-1

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Income Statement

Exhibit
 Schedule C-1
 Page 2
 Witness: Bourassa

Line No.	LABEL>>>>>	1	2	3	4	5	6	7	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase	
	Test Year Book Results	Depreciation	Property Taxes	Rate Case Expense	Revenue Annualization	Usage Normalization	Interest Synch.	Income Tax				
1	Revenues											
2	Metered Water Revenues	\$ 2,438,308				(551)	(35,413)		\$ 2,402,343	\$ 337,024	\$ 2,739,367	
3	Unmetered Water Revenues	-							-		-	
4	Other Water Revenues	21,607							21,607		21,607	
5		\$ 2,459,915	\$ -	\$ -	\$ -	\$ (551)	\$ (35,413)	\$ -	\$ 2,423,950	\$ 337,024	\$ 2,760,974	
6	Operating Expenses											
7	Salaries and Wages	\$ 351,929							\$ 351,929		\$ 351,929	
8	Employee Pensions and Benefits	53,750							53,750		53,750	
9	Purchased Water	-							-		-	
10	Purchased Power	238,567			(29)	(3,492)			235,046		235,046	
11	Chemicals	16,377			(2)	(616)			15,759		15,759	
12	Repairs and Maintenance	74,217							74,217		74,217	
13	Office Supplies and Expense	72,824			(2)				72,822		72,822	
14	Contractual Services - Engineering	297							297		297	
15	Contractual Services - Accounting	4,148							4,148		4,148	
16	Contractual Services - Legal	5,414							5,414		5,414	
17	Contractual Services - Other	87,018							87,018		87,018	
18	Contractual Services - Water Testing	29,786							29,786		29,786	
19	Rents	2,680							2,680		2,680	
20	Transportation Expense	29,667							29,667		29,667	
21	Insurance - Vehicle	14,085							14,085		14,085	
22	Insurance - General Liability	26,844							26,844		26,844	
23	Insurance - Health & Life	729							729		729	
24	Regulatory Commission Expense	-							-		-	
25	Regulatory Commission Expense - Rate (	-		35,000					-		-
26	Bad Debt Expense	6,663							6,663		6,663	
27	Miscellaneous Expense	30,053							30,053		30,053	
28	Depreciation & Amortization Expense	729,831	(49,058)						680,774		680,774	
29	Taxes Other Than Income	44,751							44,751		44,751	
30	Property Taxes	115,292		7,019					122,311	5,581	127,891	
31	Income Tax	-						88,496	88,496	81,411	169,906	
32												
33	Total Operating Expenses	\$ 1,934,924	\$ (49,058)	\$ 7,019	\$ 35,000	\$ (33)	\$ (4,108)	\$ -	\$ 88,496	\$ 2,012,240	\$ 86,991	\$ 2,099,231
34	Operating Income	\$ 524,991	\$ 49,058	\$ (7,019)	\$ (35,000)	\$ (518)	\$ (31,305)	\$ -	\$ (88,496)	\$ 411,711	\$ 250,032	\$ 661,743
35	Other Income (Expense)											
36	Interest Income	79,249							79,249		79,249	
37	Other Income	1,431							1,431		1,431	
38	Interest Expense	(102,054)							(62,278)		(62,278)	
39	Other Expense	(3,266)					39,776		(3,266)		(3,266)	
40												
41	Total Other Income (Expense)	\$ (24,640)	\$ -	\$ -	\$ -	\$ -	\$ 39,776	\$ -	\$ 15,136	\$ -	\$ 15,136	
42	Net Profit (Loss)	\$ 500,351	\$ 49,058	\$ (7,019)	\$ (35,000)	\$ (518)	\$ (31,305)	\$ 39,776	\$ (88,496)	\$ 426,847	\$ 250,032	\$ 676,879

44 SUPPORTING SCHEDULES:
 45 C-2
 46 E-2

RECAP SCHEDULES:
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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Adjustments to Revenues and Expenses
 Adjustment Number 1

Exhibit
 Schedule C-2
 Page 2
 Witness: Bourassa

Depreciation Expense

Line No.	Acct. No.	Description	Original Cost	Non-Depr. or Fully Depr. Plant	Adjusted Original Cost	Proposed Rates	Depreciation Expense
1							
2							
3							
4							
5	301	Organization Cost	-	-	-	0.00%	-
6	302	Franchise Cost	-	-	-	0.00%	-
7	303	Land and Land Rights	97,637	(97,637)	-	0.00%	-
8	304	Structures and Improvements	324,999		324,999	3.33%	10,822
9	305	Collecting and Impounding Res.	-		-	2.50%	-
10	306	Lake River and Other Intakes	-		-	2.50%	-
11	307	Wells and Springs	718,709		718,709	3.33%	23,933
12	308	Infiltration Galleries and Tunnels	-		-	6.67%	-
13	309	Supply Mains	-		-	2.00%	-
14	310	Power Generation Equipment	-		-	5.00%	-
15	311	Electric Pumping Equipment	2,632,985		2,632,985	8.33%	219,328
16	320	Water Treatment Equipment	-		-	3.33%	-
17	320.1	Water Treatment Plant	-		-	3.33%	-
18	320.2	Chemical Solution Feeders	76,173		76,173	20.00%	15,235
19	330	Dist. Reservoirs & Standpipe	-		-	2.22%	-
20	330.1	Storage tanks	1,142,147		1,142,147	2.22%	25,356
21	330.2	Pressure Tanks	73,937		73,937	5.00%	3,697
22	331	Trans. and Dist. Mains	2,933,724		2,933,724	2.00%	58,674
23	333	Services	5,433,391		5,433,391	3.33%	180,932
24	334	Meters	922,093		922,093	8.33%	76,810
25	335	Hydrants	891,404		891,404	2.00%	17,828
26	336	Backflow Prevention Devices	-		-	6.67%	-
27	339	Other Plant and Misc. Equip.	-		-	6.67%	-
28	340	Office Furniture and Fixtures	2,832		2,832	6.67%	189
29	340.1	Computers and Software	13,625		13,625	20.00%	2,725
30	341	Transportation Equipment	169,565		169,565	20.00%	33,913
31	342	Stores Equipment	-		-	4.00%	-
32	343	Tools and Work Equipment	140,485		140,485	5.00%	7,024
33	344	Laboratory Equipment	-		-	10.00%	-
34	345	Power Operated Equipment	128,036		128,036	5.00%	6,402
35	346	Communications Equipment	252,285		252,285	10.00%	25,229
36	347	Miscellaneous Equipment	9,397		9,397	10.00%	940
37	348	Other Tangible Plant	-		-	10.00%	-
38		TOTALS	\$ 15,963,424	\$ (97,637)	\$ 15,865,788		\$ 709,036
39							
40							
41		Less: Amortization of Contributions			Gross CIAC	Amort. Rate	
42		Total Depreciation Expense			\$ 632,418	4.4690%	\$ (28,263)
43							\$ 680,774
44		Adjusted Test Year Depreciation Expense					729,831
45							
46		Increase (decrease) in Depreciation Expense					(49,058)
47							
48		Adjustment to Revenues and/or Expenses					\$ (49,058)
49							
50		<u>SUPPORTING SCHEDULE</u>					
51		B-2, page 3					

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 2

Exhibit
 Schedule C-2
 Page 3
 Witness: Bourassa

Property Taxes

Line No.	DESCRIPTION	Test Year as adjusted	Company Recommended
1	Company Adjusted Test Year Revenues - 2007	\$ 2,423,950	\$ 2,423,950
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	4,847,901	4,847,901
4	Company Recommended Revenue	2,423,950	2,760,974
5	Subtotal (Line 4 + Line 5)	7,271,851	7,608,875
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	2,423,950	2,536,292
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	4,847,901	5,072,583
10	Plus: 10% of CWIP - 2010	-	-
11	Less: Net Book Value of Licensed Vehicles	171,968	171,968
12	Full Cash Value (Line 9 + Line 10 - Line 11)	4,675,932	4,900,615
13	Assessment Ratio	18.0%	18.0%
14	Assessment Value (Line 12 * Line 13)	841,668	882,111
15	Composite Property Tax Rate - Obtained from ADOR	13.7992%	13.7992%
16	Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 116,144	\$ 121,724
17	Tax on Parcels	6,167	6,167
18	Total Property Taxes (Line 16 + Line 17)	\$ 122,311	
19	Test Year Property Taxes	\$ 115,292	
20	Adjustment to Test Year Property Taxes (Line 18 - Line 19)	\$ 7,019	
21			
22	Property Tax on Company Recommended Revenue (Line 16 + Line 17)		\$ 127,891
23	Company Test Year Adjusted Property Tax Expense (Line 18)		\$ 122,311
24	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 5,581
25			
26	Increase in Property Tax Due to Increase in Revenue Requirement (Line 24)		\$ 5,581
27	Increase in Revenue Requirement		\$ 337,024
28	Increase in Property Tax Per Dollar Increase in Revenue (Line 26 / Line 27)		1.65591%
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 3

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Page 4
Witness: Bourassa

Rate Case Expense

Line

No.

1			
2			
3	Estimated Rate Case Expense	\$	175,000
4			
5	Estimated Amortization Period in Years		5
6			
7	Annual Rate Case Expense	\$	35,000
8			
9	Test Year Rate Case Expense	\$	-
10			
11	Increase(decrease) Rate Case Expense	\$	35,000
12			
13	Adjustment to Revenue and/or Expense	\$	35,000
14			
15			
16			
17			
18			
19			
20			

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 4

Exhibit
 Schedule C-2
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 Witness: Bourassa

Revenue Annualization

Line			
<u>No.</u>			
1			
2			
3			
4	Revenue Annualization	\$	(551)
5			
6	Total Revenue from Annualization	<u>\$</u>	<u>(551)</u>
7			
8			
9	Purchased Power Expense	\$	238,567
10	Gallons Sold During Test Year (in 1,000s)		1,631,562
11	Cost per 1,000 gallons	\$	0.1462
12			
13	Additional Gallons Sold from Annualization (in 1,000s)		(196)
14			
15	Increase (decrease) in Purchased Power	<u>\$</u>	<u>(29)</u>
16			
17	TY Chemicals Expense	\$	16,377
18	Gallons Sold During Test Year (in 1,000s)		1,631,562
19	Cost per 1,000 gallons	\$	0.0100
20			
21	Additional Gallons Sold from Annualization (in 1,000s)		(196)
22			
23	Increase (decrease) in Chemicals Expense	<u>\$</u>	<u>(2)</u>
24			
25	Additional billings from annualization		(5)
26	Postage rate	\$	0.44
27			
28	Increase (decrease) in Office Expense	<u>\$</u>	<u>(2)</u>
29			
30			
31	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>(518)</u>
32			
33	<u>SUPPORTING SCHEDULES</u>		
34	Work Papers		
35	H-1		
36			
37			
38			
39			
40			

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Schedule C-2
Page 6
Witness: Bourassa

Usage Normalization Adjustment

Line			
<u>No.</u>			
1			
2			
3	Revenue Adjustment	\$	(35,413)
4			
5			
6	Adjustment to Revenues	<u>\$</u>	<u>(35,413)</u>
7			
8	Purchased Power Expense	\$	238,567
9	Gallons Sold During Test Year (in 1,000s)		1,631,562
10	Cost per 1,000 gallons	\$	0.1462
11			
12	Additional Gallons Sold from Usage Normalization (in 1,000s)		(23,886)
13			
14	Increase (decrease) in Purchased Power	<u>\$</u>	<u>(3,492)</u>
15			
16	TY Chemicals Expense	\$	16,377
17	Gallons Sold During Test Year (in 1,000s)		636,008
18	Cost per 1,000 gallons	\$	0.0258
19			
20	Additional Gallons Sold from Usage Normalization (in 1,000s)		(23,886)
21			
22	Increase (decrease) in Chemicals Expense	<u>\$</u>	<u>(616)</u>
23			
24			
25	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>(31,305)</u>
26			
27	<u>Reference</u>		
28	Testimony		
29	Work Papers		
30			

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
Schedule C-2
Page 7
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Annualize Purchased Power

Line
No.

1		
2	Test Year purchased power expense	\$ 238,567
3	Purchased Power Adjustments (Adjustment 5)	<u>(3,492)</u>
4		
5	Adjusted Test Year purchased power expense	\$ 235,074
6		
7		
8	Gallons sold during test year (in , 1000's)	1,756,437
9		
10	Cost per 1,000 gallons = line 3 / line 5	\$ 0.13
11		
12	Additional gallons from annualization (in 1,000's)	(21,469)
13		
14	Additional purchased power expense	\$ (2,791)
15		
16		
17	Adjustment to Revenue and/or Expense	<u>\$ (2,791)</u>
18		
19	<u>REFERENCE</u>	
20	Line 3: C-1 line 11	
21	Line 5: H-1 annualized gallons	
22	H-2, page 3: total gallons sold	
23		

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 7

Exhibit
 Schedule C-2
 Page 8
 Witness: Bourassa

Interest Synchronization

Line
No.
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
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 28
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 30

Fair Value Rate Base	\$	7,806,162	
Weighted Cost of Debt		0.80%	
Interest Expense	\$	62,278	
Test Year Interest Expense	\$	<u>102,054</u>	
Increase (decrease) in Interest Expense		(39,776)	
Adjustment to Revenue and/or Expense	\$	<u><u>39,776</u></u>	

Weighted Cost of Debt Computation

	<u>Amount</u>	<u>Percent</u>	<u>Cost</u>	<u>Weighted Cost</u>
Debt	\$ -	#DIV/0!	0.00%	#DIV/0!
Equity	\$ -	#DIV/0!	0.00%	#DIV/0!
Total	\$ -	#DIV/0!		#DIV/0!

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and/or Expenses
 Adjustment Number 8

Exhibit
 Schedule C-2
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 Witness: Bourassa

Line
No.

1	<u>Income Tax Computation</u>		
2			
3			
4		Test Year	Adjusted
5		Adjusted	with Rate
6		Results	Increase
6	Revenue	\$ 2,423,950	\$ 2,760,974
7	Operating Expenses Excluding Income Taxes	1,923,744	1,929,325
8	Synchronized Interest	62,278	62,278
9		<u> </u>	<u> </u>
10	Income Before Taxes	<u>\$ 437,929</u>	<u>\$ 769,371</u>
11			
12	Arizona Income Before Taxes	\$ 437,929	\$ 769,371
13			
14			
15	Effective Rate	1 2.94%	3.07%
16			
17			
18	Arizona Income Taxes	\$ 12,893	\$ 23,602
19			
20	Federal Income Before Taxes	\$ 437,929	\$ 769,371
21			
22	Less Arizona Income Taxes	<u>\$ 12,893</u>	<u>\$ 23,602</u>
23			
24	Federal Taxable Income	<u>\$ 425,035</u>	<u>\$ 745,769</u>
25			
26			
27			
28	FEDERAL INCOME TAXES:		
29	Effective Federal Tax Rate =	19.38%	20.58%
30			
31	Federal Income Taxes	<u>\$ 82,381</u>	<u>\$ 153,474</u>
32			
33			
34	Total Income Tax	<u>\$ 95,274</u>	<u>\$ 177,077</u>
35			
36	Overall Tax Rate	<u>21.76%</u>	<u>23.02%</u>
37			
38	Income Tax	\$ 95,274	\$ 177,077
39	Test Year Income tax Expense	-	95,274
40	Adjustment to Income Tax Expense	<u>\$ 95,274</u>	<u>\$ 81,803</u>
41			
42			
43	¹ See work papers/testimony		

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Computation of Gross Revenue Conversion Factor

Exhibit
 Schedule C-3
 Page 1
 Witness: Bourassa

Line No.	<u>Description</u>	Percentage of Incremental Gross <u>Revenues</u>
1	Combined Federal and State Effective Income Tax Rate	24.562%
2		
3	Property Taxes	1.249%
4		
5		
6	Total Tax Percentage	25.812%
7		
8	Operating Income % = 100% - Tax Percentage	74.188%
9		
10		
11		
12		
13	<u>1</u> = Gross Revenue Conversion Factor	
14	Operating Income %	1.3479
15		
16		
17		
18		
19		
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21		
22		
23		
24		
25	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
26	C-3, page 2	A-1
27		
28		
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GROSS REVENUE CONVERSION FACTOR

Line No.	Description	(A)	(B)	(C)	(D)	(E)	(F)
<u>Calculation of Gross Revenue Conversion Factor:</u>							
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)	25.8116%					
5	Subtotal (L3 - L4)	74.1884%					
6	Revenue Conversion Factor (L1 / L5)	1.347919					
<u>Calculation of Uncollectible Factor:</u>							
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	24.5624%					
9	One Minus Combined Income Tax Rate (L7 - L8)	75.4376%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
<u>Calculation of Effective Tax Rate:</u>							
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	3.2194%					
14	Federal Taxable Income (L12 - L13)	96.7806%					
15	Applicable Federal Income Tax Rate (Line 44)	22.0529%					
16	Effective Federal Income Tax Rate (L14 x L15)	21.3430%					
17	Combined Federal and State Income Tax Rate (L13 + L16)		24.5624%				
<u>Calculation of Effective Property Tax Factor:</u>							
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	24.5624%					
20	One Minus Combined Income Tax Rate (L18-L19)	75.4376%					
21	Property Tax Factor	1.6559%					
22	Effective Property Tax Factor (L20*L21)		1.2492%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			25.8116%			
24	Required Operating Income	\$ 661,743					
25	Adjusted Test Year Operating Income (Loss)	\$ 411,711					
26	Required Increase in Operating Income (L24 - L25)		\$ 250,033				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	\$ 169,906					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	\$ 88,496					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		\$ 81,411				
30	Recommended Revenue Requirement	\$ 2,760,974					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	\$ -					
33	Adjusted Test Year Uncollectible Expense	\$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		\$ -				
35	Property Tax with Recommended Revenue	\$ 127,891					
36	Property Tax on Test Year Revenue	\$ 122,311					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		\$ 5,581				
38	Total Required Increase in Revenue (L26 + L29 + L37)		\$ 337,024				

	(A) Test Year			(B) Company Recommended		
	(A)	(B)	(C)	(D)	(E)	(F)
<u>Calculation of Income Tax:</u>						
39	Revenue	\$ 2,423,950	\$ 2,423,950	\$ 2,760,974	\$ 2,760,974	
40	Operating Expenses Excluding Income Taxes	\$ 1,923,744	\$ 1,923,744	\$ 1,929,325	\$ 1,929,325	
41	Synchronized Interest (L47)	\$ 93,433	\$ 93,433	\$ 93,433	\$ 93,433	
42	Arizona Taxable Income (L30 - L31 - L32)	\$ 406,773	\$ 406,773	\$ 738,217	\$ 738,217	\$ -
43	Arizona State Effective Income Tax Rate (see work papers)	2.9441%	2.9441%	3.0677%	3.0677%	3.0677%
44	Arizona Income Tax (L33 x L34)	\$ 11,976	\$ 11,976	\$ 22,647	\$ 22,647	\$ -
45	Federal Taxable Income (L33 - L35)	\$ 394,797	\$ 394,797	\$ 715,570	\$ 715,570	\$ -
46	Effective Tax Rate (see work papers)	19.3821%	19.3821%	20.5794%	20.5794%	
47	Federal Income Tax	\$ 76,520	\$ 76,520	\$ 147,260	\$ 147,260	
48		\$ -		\$ -		
49		\$ -		\$ -		
50		\$ -		\$ -		
51	Total Federal Income Tax	\$ 76,520	\$ 76,520	\$ 147,260	\$ 147,260	\$ -
52	Combined Federal and State Income Tax (L35 + L42)	\$ 88,496	\$ 88,496	\$ 169,906	\$ 169,906	\$ -

53 Applicable State Income Tax Rate [Col. (E), L44 - Col. (B), L44] / [Col. (E), L42 - Col. (B), L42] 3.2194%

54 Applicable Federal Income Tax Rate [Col. (E), L51 - Col. (B), L51] / [Col. (E), L45 - Col. (B), L45] 22.0529%

55

Calculation of Interest Synchronization:

56	Rate Base	\$ 7,806,162	N/A
57	Weighted Average Cost of Debt	1.1969%	0.0000%
58	Synchronized Interest (L45 X L46)	\$ 93,433	\$ -

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Comparative Balance Sheets

Exhibit
 Schedule E-1
 Page 1
 Witness: Bourassa

Line No.		Test Year Ended <u>12/31/2015</u>	Year Ended <u>12/31/2014</u>	Year Ended <u>12/31/2013</u>
1	<u>ASSETS</u>			
2	Plant In Service	\$ 15,928,780	\$ 15,240,380	\$ 15,053,015
3	Non-Utility Plant	-	-	-
4	Construction Work in Progress	3,135	3,135	3,824
5	Accumulated Depreciation	<u>(6,659,675)</u>	<u>(6,045,380)</u>	<u>(5,440,977)</u>
6	Net Plant	<u>\$ 9,272,240</u>	<u>\$ 9,198,134</u>	<u>\$ 9,615,861</u>
7				
8	Debt Reserve Fund	\$ -	\$ -	\$ -
9				
10		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
11				
12	CURRENT ASSETS			
13	Cash and Equivalents	\$ 337,843	\$ 294,415	\$ 574,294
14	Restricted Cash	-	-	-
15	Accounts Receivable, Net	212,386	190,792	197,975
16	Other Receivables	8,446	-	-
17	Receivables from Associated Companies	3,574,593	4,397,535	3,865,723
18	Materials and Supplies	-	-	-
19	Prepayments	3,805	-	15,240
20	Other Current Assets	<u>1,075,435</u>	<u>1,114,501</u>	<u>1,154,298</u>
21	Total Current Assets	<u>\$ 5,212,508</u>	<u>\$ 5,997,244</u>	<u>\$ 5,807,530</u>
22				
23	Unamortized Debt Discount	\$ 6,060	\$ 9,888	\$ 13,715
24	Other Deferred Debits	-	-	-
25	Deferred Debits	<u>\$ 6,060</u>	<u>\$ 9,888</u>	<u>\$ 13,715</u>
26				
27	Other Investments & Special Funds	\$ -	\$ -	\$ -
28				
29	TOTAL ASSETS	<u>\$ 14,490,808</u>	<u>\$ 15,205,266</u>	<u>\$ 15,437,106</u>
30				
31				
32	<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>			
33				
34	Common Equity	<u>\$ 10,463,424</u>	<u>\$ 10,873,073</u>	<u>\$ 10,794,025</u>
35				
36	Long-Term Debt	<u>\$ 2,976,000</u>	<u>\$ 3,255,000</u>	<u>\$ 3,534,000</u>
37				
38	CURRENT LIABILITIES			
39	Accounts Payable	\$ 81,803	\$ 69,369	\$ 76,250
40	Current Portion of Long-Term Debt	279,000	279,000	279,000
41	Payables to Associated Companies	-	-	-
42	Security Deposits	-	-	-
43	Customer Meter Deposits, Current	5,893	3,565	1,460
44	Accrued Taxes	100,675	96,601	88,171
45	Accrued Interest	8,223	9,236	9,883
46	Other Current Liabilities	<u>113,354</u>	<u>109,674</u>	<u>91,343</u>
47	Total Current Liabilities	<u>\$ 588,948</u>	<u>\$ 567,445</u>	<u>\$ 546,108</u>
48	DEFERRED CREDITS			
49	Customer Meter Deposits, less current	\$ -	\$ -	\$ -
50	Advances in Aid of Construction	-	-	345,609
51	Accumulated Deferred Income Taxes	-	-	-
52	Contributions In Aid of Construction	963,772	963,772	632,418
53	Accumulated Amortization	<u>(501,336)</u>	<u>(454,024)</u>	<u>(415,054)</u>
54	Total Deferred Credits	<u>\$ 462,436</u>	<u>\$ 509,748</u>	<u>\$ 562,973</u>
55				
56	Total Liabilities & Common Equity	<u>\$ 14,490,808</u>	<u>\$ 15,205,266</u>	<u>\$ 15,437,106</u>

SUPPORTING SCHEDULES:
 Workpapers

RECAP SCHEDULES:
 A-3

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Comparative Income Statements

Exhibit
 Schedule E-2
 Page 1
 Witness: Bourassa

Line No.		Test Year Ended 12/31/2015	Prior Year Ended 12/31/2014	Prior Year Ended 12/31/2013
1	Revenues			
2	Metered Water Revenues	\$ 2,438,308	\$ 2,468,948	\$ 2,481,911
3	Unmetered Water Revenues	-	-	-
4	Other Water Revenues	21,607	22,611	21,709
5	Total Revenues	\$ 2,459,915	\$ 2,491,559	\$ 2,503,619
6	Operating Expenses			
7	Salaries and Wages	\$ 351,929	\$ 343,089	\$ 343,428
8	Employee Pensions and Benefits	53,750	57,139	56,318
9	Purchased Water	-	-	-
10	Purchased Power	238,567	233,581	244,914
11	Chemicals	16,377	18,632	23,797
12	Repairs and Maintenance	74,217	103,877	69,729
13	Office Supplies and Expense	72,824	71,835	76,939
14	Contractual Services - Engineering	297	-	2,514
15	Contractual Services - Accounting	4,148	5,230	3,325
16	Contractual Services - Legal	5,414	9,934	12,290
17	Contractual Services - Other	87,018	85,185	93,204
18	Contractual Services - Water Testing	29,786	30,894	17,259
19	Rents	2,680	450	798
20	Transportation Expense	29,667	33,867	41,296
21	Insurance - Vehicle	14,085	8,628	11,899
22	Insurance - General Liability	26,844	14,520	15,382
23	Insurance - Health & Life	729	428	624
24	Regulatory Commission Expense	-	-	-
25	Regulatory Commission Expense - Rate Case	-	-	-
26	Bad Debt Expense	6,663	1,790	8,703
27	Miscellaneous Expense	30,053	31,963	39,365
28	Depreciation & Amortization Expense	729,831	700,458	699,552
29	Taxes Other Than Income	44,751	55,463	69,545
30	Property Taxes	115,292	113,362	108,105
31	Income Tax	-	-	-
32		-	-	-
33	Total Operating Expenses	\$ 1,934,924	\$ 1,920,325	\$ 1,938,985
34	Operating Income	\$ 524,991	\$ 571,234	\$ 564,634
35	Other Income (Expense)			
36	Interest Income	79,249	71,613	75,880
37	Other Income	1,431	2,684	1,521
38	Interest Expense	(102,054)	(112,681)	(121,260)
39	Other Expense	(3,266)	(1,807)	(1,132)
40	Gain (loss) on Disposal of Equip	-	-	-
41	Total Other Income (Expense)	\$ (24,640)	\$ (40,190)	\$ (44,992)
42	Net Profit (Loss)	\$ 500,351	\$ 531,044	\$ 519,643

46 SUPPORTING SCHEDULES:
 47 Workpapers
 48

RECAP SCHEDULES:
 A-2

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Comparative Statements of Cash Flows

Exhibit
 Schedule E-3
 Page 1
 Witness: Bourassa

Line No.	Test Year Ended 12/31/2015	Prior Year Ended 12/31/2014	Prior Year Ended 12/31/2013
3	Cash Flows from Operating Activities		
4	\$ 500,351	\$ 531,044	\$ 519,643
5	Adjustments to reconcile net income to net cash provided by operating activities:		
7	729,831	700,458	699,552
8	(162,848)	(135,025)	(298,324)
9	Changes in Certain Assets and Liabilities:		
10	(21,594)	7,183	(3,887)
11	Unbilled Revenues		
12	Materials and Supplies Inventory		
13	(3,805)	15,240	(15,240)
14	3,828	3,827	3,828
15	822,942	(531,812)	2,129,172
16	Other Receivables		
17	Deferred Debits		
18	12,434	(6,881)	(8,850)
19	2,328	2,105	1,460
20	(1,013)	(647)	(636)
21	4,074	8,430	(2,175)
22	34,300	58,128	43,996
23	(1)	(2)	1
24	\$ 1,920,827	\$ 652,048	\$ 3,068,540
25	Cash Flow From Investing Activities:		
26	(688,400)	(186,676)	(142,987)
27	Plant Held for Future Use		
28	Changes in debt reserve fund		
29	\$ (688,400)	\$ (186,676)	\$ (142,987)
30	Cash Flow From Financing Activities		
31	Change in Restricted Cash		
32	(279,000)	(279,000)	(279,000)
33	-	331,354	(12,220)
34	-	(345,609)	-
35	(910,000)	(451,996)	(2,500,002)
36	Deferred Financing Costs		
37	Paid in Capital		
38	\$ (1,189,000)	\$ (745,251)	\$ (2,791,222)
39	43,427	(279,879)	134,331
40	294,415	574,295	439,964
41	\$ 337,843	\$ 294,415	\$ 574,295

44 SUPPORTING SCHEDULES:
 45 Workpapers/cashflow water.xls
 46

RECAP SCHEDULES:
 A-5

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Statement of Changes in Stockholder's Equity

Exhibit
 Schedule E-4
 Page 1
 Witness: Bourassa

Line No.		<u>Common</u> <u>Stock</u>	<u>Additional</u> <u>Paid-In-Capital</u>	<u>Retained</u> <u>Earnings</u>	<u>Total</u>
1					
2					
3					
4	Balance, December 31, 2007	\$ 107,416	\$ 7,467,861	\$ 6,718,708	\$ 14,293,986
5	Addnl Paid In Capital Adjustment				-
6	Distributions/Dividends			(2,500,002)	(2,500,002)
7	Rounding			3	3
8	Net Income			519,643	519,643
9					
10	Balance, December 31, 2008	\$ 107,416	\$ 7,467,861	\$ 4,738,352	\$ 12,313,629
11	Addnl Paid In Capital		-		-
12	Distributions/Dividends			(451,996)	(451,996)
13	Rounding			(2)	(2)
14	Net Income			531,044	531,044
15					
16	Balance, December 31, 2009	\$ 107,416	\$ 7,467,861	\$ 4,817,397	\$ 12,392,675
17	Addnl Paid In Capital				-
18	Distributions/Dividends			(910,000)	(910,000)
19	Rounding			(1)	(1)
20	Net Income			500,351	500,351
21					
22	Balance, December 31, 2010	<u>\$ 107,416</u>	<u>\$ 7,467,861</u>	<u>\$ 4,407,747</u>	<u>\$ 11,983,025</u>
23					
24					
25					
26					
27					
28					
29	<u>SUPPORTING SCHEDULES:</u>			<u>RECAP SCHEDULES:</u>	
30				E-1	
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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Detail of Plant in Service

Exhibit
 Schedule E-5
 Page 1
 Witness: Bourassa

<u>Line No.</u>	<u>Acct. No.</u>	<u>Plant Description</u>	<u>Plant Balance at 12/31/2014</u>	<u>Plant Additions, Reclassifications or Retirements</u>	<u>Plant Balance at 12/31/2015</u>
1					
2	301	Organization Cost		\$ -	
3	302	Franchise Cost		-	
4	303	Land and Land Rights	97,637	-	97,637
5	304	Structures and Improvements	2,284,496	7,500	2,291,996
6	305	Collecting and Impounding Res.		-	
7	306	Lake River and Other Intakes		-	
8	307	Wells and Springs	1,692,115	97,217	1,789,332
9	308	Infiltration Galleries and Tunnels		-	
10	309	Supply Mains		-	
11	310	Power Generation Equipment		-	
12	311	Electric Pumping Equipment	730,779	99,163	829,942
13	320	Water Treatment Equipment		-	
14	320	Water Treatment Equipment		-	
15	320.1	Water Treatment Plant		-	
16	320.2	Chemical Solution Feeders	2,678,929	28,643	2,707,572
17	330	Dist. Reservoirs & Standpipe		-	
18	330.1	Storage tanks		-	
19	330.2	Pressure Tanks	3,056,451	-	3,056,451
20	333	Services	4,321,228	177,591	4,498,820
21	334	Meters	974,840	36,478	1,011,318
22	335	Hydrants	891,614	-	891,614
23	336	Backflow Prevention Devices		-	
24	339	Other Plant and Miscellaneous Equipment		-	
25	340	Office Furniture and Fixtures	651,634	5,481	657,115
26	341	Transportation Equipment		-	
27	342	Stores Equipment		-	
28	343	Tools and Work Equipment		-	
29	344	Laboratory Equipment		-	
30	345	Power Operated Equipment		-	
31	346	Communications Equipment	35,000	24,539	59,539
32	347	Miscellaneous Equipment	13,239	-	13,239
33	348	Other Tangible Plant		-	
34		Plant Held for Future Use		-	
35		Rounding		-	
36		TOTAL WATER PLANT	\$ 17,427,962	\$ 476,612	\$ 17,904,574

37
 38 SUPPORTING SCHEDULES
 39 Workpapers/Trial Balance Mapping Water and Sewer tjb.xls
 40
 41

RECAP SCHEDULES:
 A-4
 E-1

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Operating Statistics

Exhibit
 Schedule E-7
 Page 1
 Witness: Bouras

Line No.		Test Year Ended <u>12/31/2015</u>	Prior Year Ended <u>12/31/2014</u>	Prior Year Ended <u>12/31/2013</u>
1	<u>WATER STATISTICS:</u>			
2				
3				
4				
5	Total Gallons Sold (in Thousands)	1,756,437	2,251,050	2,241,014
6				
7				
8				
9	Water Revenues from Customers:	\$ 2,438,308	\$ 2,468,948	\$ 2,481,911
10				
11				
12				
13				
14	Year End Number of Customers	10,188	10,193	10,187
15				
16				
17	Annual Gallons (in Thousands)			
18	Sold Per Year End Customer	172	221	220
19				
20				
21				
22	Annual Revenue per Year End Customer	\$ 239.33	\$ 242.22	\$ 243.64
23				
24	Pumping Cost Per 1,000 Gallons	\$ 0.1358	\$ 0.1038	\$ 0.1093
25	Purchased Water Cost per 1,000 Gallons	\$ -	\$ -	\$ -

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Taxes Charged to Operations

Exhibit
Schedule E-8
Page 1
Witness: Bourassa

Line No.	Description	Test Year Ended <u>12/31/2015</u>	Prior Year Ended <u>12/31/2014</u>	Prior Year Ended <u>12/31/2013</u>
1	Description			
2				
3	State Income Taxes	\$ -	\$ -	\$ -
4	Federal Income Taxes	-	-	-
5	Payroll Taxes	1,818	1,568	1,835
6	Property Taxes	115,292	113,362	108,105
7				
8	Totals	<u>\$ 117,110</u>	<u>\$ 114,930</u>	<u>\$ 109,941</u>
9				
10				
11				
12				
13				
14				
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Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Notes To Financial Statements

Exhibit
Schedule E-9
Page 1
Witness: Bourassa

Line
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See attached audited financial statements.

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Projected Income Statements - Present & Proposed Rates

Exhibit
 Schedule F-1
 Page 1
 Witness: Bourassa

Line No.		Test Year Actual Results	At Present Rates Year Ended 12/31/2016	At Proposed Rates Year Ended 12/31/2016
1	Revenues			
2	Metered Water Revenues	\$ 2,438,308	\$ 2,402,343	\$ 2,739,367
3	Unmetered Water Revenues	-	-	-
4	Other Water Revenues	21,607	21,607	21,607
5		<u>\$ 2,459,915</u>	<u>\$ 2,423,950</u>	<u>\$ 2,760,974</u>
6	Operating Expenses			
7	Salaries and Wages	\$ 351,929	\$ 351,929	\$ 351,929
8	Employee Pensions and Benefits	53,750	53,750	53,750
9	Purchased Water	-	-	-
10	Purchased Power	238,567	235,046	235,046
11	Chemicals	16,377	15,759	15,759
12	Repairs and Maintenance	74,217	74,217	74,217
13	Office Supplies and Expense	72,824	72,822	72,822
14	Contractual Services - Engineering	297	297	297
15	Contractual Services - Accounting	4,148	4,148	4,148
16	Contractual Services - Legal	5,414	5,414	5,414
17	Contractual Services - Other	87,018	87,018	87,018
18	Contractual Services - Water Testing	29,786	29,786	29,786
19	Rents - Equipment	2,680	2,680	2,680
20	Transportation Expenses	29,667	29,667	29,667
21	Insurance - Vehicle	14,085	14,085	14,085
22	Insurance - General Liability	26,844	26,844	26,844
23	Insurance - Worker's Comp	729	729	729
24	Regulatory Commission Expense	-	-	-
25	Regulatory Commission Expense - Rate Case	-	35,000	35,000
26	Bad Debt Expense	6,663	6,663	6,663
27	Miscellaneous Expense	30,053	30,053	30,053
28	Depreciation Expense	729,831	680,774	680,774
29	Taxes Other Than Income	44,751	44,751	44,751
30	Property Taxes	115,292	122,311	127,891
31	Income Tax	-	88,496	169,906
32				
33	Total Operating Expenses	<u>\$ 1,934,924</u>	<u>\$ 2,012,240</u>	<u>\$ 2,099,231</u>
34	Operating Income	<u>\$ 524,991</u>	<u>\$ 411,711</u>	<u>\$ 661,743</u>
35	Other Income (Expense)			
36	Interest Income	79,249	79,249	79,249
37	Other income	1,431	1,431	1,431
38	Interest Expense	(102,054)	(62,278)	(62,278)
39	Other Expense	(3,266)	(3,266)	(3,266)
40	Gain/Loss Sale of Fixed Assets	-	-	-
41	Total Other Income (Expense)	<u>\$ (24,640)</u>	<u>\$ 15,136</u>	<u>\$ 15,136</u>
42	Net Profit (Loss)	<u>\$ 500,351</u>	<u>\$ 426,847</u>	<u>\$ 676,879</u>
43				
44				
45	<u>SUPPORTING SCHEDULES:</u>			
46	C-1			
47				
48				
49				

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Projected Statements of Changes in Financial Position
 Present and Proposed Rates

Exhibit
 Schedule F-2
 Page 1
 Witness: Bourassa

Line No.	Test Year Ended <u>12/31/2015</u>	At Present Rates Year Ended <u>12/31/2016</u>	At Proposed Rates Year Ended <u>12/31/2016</u>	
1				
2				
3				
4				
5	Cash Flows from Operating Activities			
6	Net Income	\$ 500,351	\$ 426,847	\$ 676,879
7	Adjustments to reconcile net income to net cash			
8	provided by operating activities:			
9	Depreciation and Amortization	729,831	680,774	680,774
10	Other	(162,848)		
11	Changes in Certain Assets and Liabilities:			
12	Accounts Receivable	(21,594)		
13	Unbilled Revenues	-		
14	Materials and Supplies Inventory	-		
15	Prepaid Expenses	(3,805)		
16	Deferred Charges	3,828		
17	Receivables/Payables from Assoc. Cos.	822,942		
18	Other Receivables	-		
19	Deferred Debits	-		
20	Accounts Payable	12,434		
21	Customer Deposits	2,328		
22	Interest Payable	(1,013)		
23	Taxes Payable	4,074		
24	Other assets and liabilities	34,300		
25	Rounding	(1)		
26				
27	Net Cash Flow provided by Operating Activities	<u>\$ 1,920,827</u>	<u>\$ 1,107,621</u>	<u>\$ 1,357,653</u>
28	Cash Flow From Investing Activities:			
29	Capital Expenditures	(688,400)	(190,898)	(190,898)
30	Plant Held for Future Use	-		
31	Changes in debt reserve fund	-		
32	Net Cash Flows from Investing Activities	<u>\$ (688,400)</u>	<u>\$ (190,898)</u>	<u>\$ (190,898)</u>
33	Cash Flow From Financing Activities			
34	Change in Restricted Cash	-		
35	Proceeds from Long-Term Debt	(279,000)	(279,000)	(279,000)
36	Net receipt of contributions in aid of construction	-	-	-
37	Net receipts of advances in aid of construction	-	-	-
38	Distributions/Dividends Paid	(910,000)	(323,262)	(542,190)
39	Deferred Financing Costs	-	-	-
40	Paid in Capital	-	-	-
41				
42	Net Cash Flows Provided by Financing Activities	<u>\$ (1,189,000)</u>	<u>\$ (602,262)</u>	<u>\$ (821,190)</u>
43	Increase(decrease) in Cash and Cash Equivalents	43,427	314,461	345,565
44	Cash and Cash Equivalents at Beginning of Year	294,415	337,843	337,843
45	Cash and Cash Equivalents at End of Year	<u>\$ 337,843</u>	<u>\$ 652,304</u>	<u>\$ 683,408</u>
46				
47				
48				
49	<u>SUPPORTING SCHEDULES:</u>			
50	E-3			
51				
52				
53				
54				

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Projected Construction Requirements

Exhibit
 Schedule F-3
 Page 1
 Witness: Bourassa

Line No.	Account	Test Year	2016	2017	2018
1					
2	Account				
3	<u>Number</u> <u>Plant Asset:</u>				
4	301 Organization Cost	\$ -	-	\$ -	\$ -
5	302 Franchise Cost	-	-	-	-
6	303 Land and Land Rights	-	-	-	-
7	304 Structures and Improvements	7,500	-	-	-
8	305 Collecting and Impounding Res.	-	-	-	-
9	306 Lake River and Other Intakes	-	-	-	-
10	307 Wells and Springs	97,217	-	500,000	1,000,000
11	308 Infiltration Galleries and Tunnels	-	-	-	-
12	309 Supply Mains	-	-	-	-
13	310 Power Generation Equipment	-	-	-	-
14	311 Electric Pumping Equipment	99,163	190,898	-	550,000
15	320 Water Treatment Equipment	-	-	-	-
16	320 Water Treatment Equipment	-	-	-	-
17	320.1 Water Treatment Plant	-	-	-	-
18	320.2 Chemical Solution Feeders	28,643	-	-	1,005,000
19	330 Dist. Reservoirs & Standpipe	-	-	-	-
20	330.1 Storage tanks	-	-	-	-
21	330.2 Pressure Tanks	-	-	475,000	225,000
22	333 Services	177,591	-	-	-
23	334 Meters	36,478	-	-	-
24	335 Hydrants	-	-	-	-
25	336 Backflow Prevention Devices	-	-	-	-
26	339 Other Plant and Miscellaneous Equipment	-	-	-	-
27	340 Office Furniture and Fixtures	5,481	-	-	-
28	340.1 Computers and Equipment	-	-	-	-
29	341 Transportation Equipment	-	-	-	-
30	342 Stores Equipment	-	-	-	-
31	343 Tools and Work Equipment	-	-	-	-
32	344 Laboratory Equipment	-	-	-	-
33	345 Power Operated Equipment	24,539	-	-	-
34	346 Communications Equipment	-	-	-	-
35	347 Miscellaneous Equipment	-	-	-	-
36	348 Other Tangible Plant	-	-	-	-
37					
38	Total	\$ 476,612	\$ 190,898	\$ 975,000	\$ 2,780,000
39					
40					
41					

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Present and Proposed Rates

Exhibit
 Schedule H-3
 Page 1

Line No.	Monthly Usage Charge for:	Present Rates	Proposed Rates	Change	Percent Change		
1	<u>Meter Size (All Classes):</u>						
2	5/8x3/4 Inch	\$ 7.39	\$ 9.09	\$ 1.70	23.00%		
2	3/4 Inch	11.09	13.64	2.55	23.00%		
3	1 Inch	21.12	22.73	1.61	7.62%		
4	1 1/2 Inch	36.96	45.46	8.50	23.00%		
5	2 Inch	59.14	72.74	13.60	23.00%		
6	3 Inch	137.28	145.47	8.19	5.97%		
7	4 Inch	184.80	227.30	42.50	23.00%		
8	6 Inch	369.60	454.61	85.01	23.00%		
9							
10	Irrigation	180.00	180.00	-	0.00%		
11							
12	Gallons In Minimum (All Classes, except irrigation)	-	-				
13							
14	Gallons In Minimum (Irrigation)	-	-				
15							
16							
17							
18			(Per 1,000 gallons)				
19	<u>Commodity Rates</u>		<u>Present Rate</u>	<u>Proposed Rate</u>	<u>Change</u>	<u>Percent Change</u>	
20							
21							
22	5/8x3/4 Inch - Residential		1 gallons to 4,000 gallons	\$ 0.71	\$ 0.73	\$ 0.02	3.00%
23			4,001 gallons to 10,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
24			over 10,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
25							
26	3/4 Inch Meter - Residential		1 gallons to 4,000 gallons	\$ 0.71	\$ 0.73	\$ 0.02	3.00%
27			4,001 gallons to 10,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
28			over 10,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
29							
30	3/4 Inch Meter - Commercial		1 gallons to 10,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
31			over 10,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
32							
33							
34	NT = No Tariff						
35							

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Present and Proposed Rates

Exhibit
 Schedule H-3
 Page 2

Line No.	Commodity Rates	Block	(Per 1,000 gallons)			
			Present Rate	Proposed Rate		
4	1 Inch Meter - Residential, Commercial	1 gallons to 30,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
5		over 30,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
7	1.5 Inch Meter - Residential, Commercial	1 gallons to 65,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
8		over 65,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
10	2 Inch Meter - Residential, Commercial	1 gallons to 110,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
11		over 110,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
13	3 Inch Meter - Residential, Commercial	1 gallons to 275,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
14		over 275,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
16	4 Inch Meter - Residential, Commercial	1 gallons to 375,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
17		over 375,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
19	6 Inch Meter - Residential, Commercial	1 gallons to 800,000 gallons	\$ 1.01	\$ 1.03	\$ 0.02	2.11%
20		over 800,000 gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
22	Irrigation (all meter sizes)	All gallons	\$ 0.55	\$ 0.67	\$ 0.12	21.20%
24	Construction/Standpipe	All gallons	\$ 1.45	\$ 1.48	\$ 0.03	2.16%
26	NT = No Tariff					

Pima Utility Company - Water Division
Present and Proposed Rates
Test Year Ended December 31, 2015

Exhibit
Schedule H-3
Page 3
Witness: Bourassa

Line
No.

	Present Service Line Charge	Present Meter Install- ation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Install- ation Charge	Total Proposed Charge
1	<u>Meter and Service Line Charges¹</u>					
2						
3						
4						
5						
6						
7	5/8 x 3/4 Inch \$ 385.00	\$ 135.00	\$ 520.00	\$ 385.00	\$ 135.00	\$ 520.00
8	3/4 Inch 415.00	205.00	620.00	415.00	205.00	620.00
9	1 Inch 465.00	265.00	730.00	465.00	265.00	730.00
10	1 1/2 Inch 520.00	475.00	995.00	520.00	475.00	995.00
11	2 Inch Turbo 800.00	995.00	1,795.00	800.00	995.00	1,795.00
12	2 Inch, Compound 800.00	1,840.00	2,640.00	800.00	1,840.00	2,640.00
13	3 Inch Turbo 1,015.00	1,620.00	2,635.00	1,015.00	1,620.00	2,635.00
14	3 Inch, compound 1,135.00	2,495.00	3,630.00	1,135.00	2,495.00	3,630.00
15	4 Inch Turbo 1,430.00	2,570.00	4,000.00	1,430.00	2,570.00	4,000.00
16	4 Inch, compound 1,610.00	3,545.00	5,155.00	1,610.00	3,545.00	5,155.00
17	6 Inch Turbo 2,150.00	4,925.00	7,075.00	2,150.00	4,925.00	7,075.00
18	6 Inch, compound 2,270.00	6,820.00	9,090.00	2,270.00	6,820.00	9,090.00

20 ¹ Based on ACC Staff Engineering Memo dated February 21, 2008
21 NT = No Tariff

23 Other Charges:

	Present	Proposed
26 Establishment	\$ 25.00	\$ 25.00
27 Reestablishment (within 12 months)	*	*
28 Reconnection (Delinquent)	\$ 25.00	\$ 25.00
29 Meter Test (if correct)	\$ 20.00	\$ 20.00
30 Meter Re-read (if correct)	\$ 25.00	\$ 25.00
31 Deposit	**	**
32 Deposit Interest	**	**
33 NSF Check	\$ 15.00	\$ 15.00
34 Deferred Payment, per month	1.5%	1.5%
35 Late Payment Fee (per month)	1.5%	1.5%
36 After hours service charge	\$ 50.00	\$ 50.00

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

39 ** Per Rule R14-2-403.B

41 NT = No Tariff

42
43
44
45

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 5/8x3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 1
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 7.39	\$ 9.09	\$ 1.70	23.00%
1,000	8.10	9.82	1.72	21.25%
2,000	8.81	10.55	1.74	19.78%
3,000	9.52	11.29	1.76	18.53%
4,000	10.23	12.02	1.79	17.45%
5,000	11.24	13.05	1.81	16.07%
6,000	12.25	14.08	1.83	14.92%
7,000	13.26	15.11	1.85	13.94%
8,000	14.27	16.14	1.87	13.11%
9,000	15.28	17.17	1.89	12.38%
10,000	16.29	18.21	1.91	11.74%
12,000	19.19	21.17	1.98	10.29%
14,000	22.09	24.13	2.04	9.23%
16,000	24.99	27.09	2.10	8.41%
18,000	27.89	30.06	2.16	7.76%
20,000	30.79	33.02	2.23	7.23%
25,000	38.04	40.42	2.38	6.26%
30,000	45.29	47.83	2.54	5.61%
35,000	52.54	55.24	2.70	5.13%
40,000	59.79	62.64	2.85	4.77%
45,000	67.04	70.05	3.01	4.49%
50,000	74.29	77.46	3.17	4.26%
60,000	88.79	92.27	3.48	3.92%
70,000	103.29	107.08	3.79	3.67%
80,000	117.79	121.90	4.10	3.48%
90,000	132.29	136.71	4.42	3.34%
100,000	146.79	151.52	4.73	3.22%
Average Usage				
5,869	\$ 12.12	\$ 13.94	\$ 1.83	15.06%
Median Usage				
4,500	\$ 10.74	\$ 12.53	\$ 1.80	16.73%

Present Rates:

Monthly Minimum:	\$	7.39
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	4,000	\$ 0.71
Over	4,000	\$ 1.01

Proposed Rates:

Monthly Minimum:	\$	9.09
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	4,000	\$ 0.73
Up to	10,000	\$ 1.03
Over	10,000	\$ 1.48

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 1 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 2
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 21.12	\$ 22.73	\$ 1.61	7.62%
1,000	22.13	23.76	\$ 1.63	7.37%
2,000	23.14	24.79	\$ 1.65	7.14%
3,000	24.15	25.82	\$ 1.67	6.93%
4,000	25.16	26.86	\$ 1.70	6.74%
5,000	26.17	27.89	\$ 1.72	6.56%
6,000	27.18	28.92	\$ 1.74	6.40%
7,000	28.19	29.95	\$ 1.76	6.24%
8,000	29.20	30.98	\$ 1.78	6.10%
9,000	30.21	32.01	\$ 1.80	5.97%
10,000	31.22	33.04	\$ 1.82	5.84%
12,000	33.24	35.11	\$ 1.87	5.61%
14,000	35.26	37.17	\$ 1.91	5.41%
16,000	37.28	39.23	\$ 1.95	5.23%
18,000	39.30	41.29	\$ 1.99	5.07%
20,000	41.32	43.36	\$ 2.04	4.93%
25,000	46.37	48.51	\$ 2.14	4.62%
30,000	51.42	53.67	\$ 2.25	4.37%
35,000	58.67	61.08	\$ 2.41	4.10%
40,000	65.92	68.48	\$ 2.56	3.89%
45,000	73.17	75.89	\$ 2.72	3.72%
50,000	80.42	83.30	\$ 2.88	3.58%
60,000	94.92	98.11	\$ 3.19	3.36%
70,000	109.42	112.92	\$ 3.50	3.20%
80,000	123.92	127.73	\$ 3.81	3.08%
90,000	138.42	142.55	\$ 4.13	2.98%
100,000	152.92	157.36	\$ 4.44	2.90%
Average Usage				
29,772	\$ 51.19	\$ 53.43	\$ 2.24	4.38%
Median Usage				
22,500	\$ 43.85	\$ 45.93	\$ 2.09	4.77%

Present Rates:

Monthly Minimum:	\$	21.12
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	30,000	\$ 1.01
Over	30,000	\$ 1.45

Proposed Rates:

Monthly Minimum:	\$	22.73
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	30,000	\$ 1.03
Over	30,000	\$ 1.48

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 5/8x3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 3
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 7.39	\$ 9.09	\$ 1.70	23.00%
1,000	8.40	10.12	\$ 1.72	20.49%
2,000	9.41	11.15	\$ 1.74	18.52%
3,000	10.42	12.19	\$ 1.76	16.93%
4,000	11.43	13.22	\$ 1.79	15.62%
5,000	12.44	14.25	\$ 1.81	14.52%
6,000	13.45	15.28	\$ 1.83	13.59%
7,000	14.46	16.31	\$ 1.85	12.79%
8,000	15.47	17.34	\$ 1.87	12.09%
9,000	16.48	18.37	\$ 1.89	11.48%
10,000	17.49	19.41	\$ 1.91	10.94%
12,000	20.39	22.37	\$ 1.98	9.69%
14,000	23.29	25.33	\$ 2.04	8.75%
16,000	26.19	28.29	\$ 2.10	8.02%
18,000	29.09	31.26	\$ 2.16	7.44%
20,000	31.99	34.22	\$ 2.23	6.96%
25,000	39.24	41.62	\$ 2.38	6.07%
30,000	46.49	49.03	\$ 2.54	5.46%
35,000	53.74	56.44	\$ 2.70	5.02%
40,000	60.99	63.84	\$ 2.85	4.68%
45,000	68.24	71.25	\$ 3.01	4.41%
50,000	75.49	78.66	\$ 3.17	4.19%
60,000	89.99	93.47	\$ 3.48	3.86%
70,000	104.49	108.28	\$ 3.79	3.63%
80,000	118.99	123.10	\$ 4.10	3.45%
90,000	133.49	137.91	\$ 4.42	3.31%
100,000	147.99	152.72	\$ 4.73	3.20%
Average Usage				
18,413	\$ 29.69	\$ 31.87	\$ 2.18	7.33%
Median Usage				
3,500	\$ 10.93	\$ 12.70	\$ 1.77	16.24%

Present Rates:

Monthly Minimum:	\$	7.39
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	10,000	\$ 1.01
Over	10,000	\$ 1.45

Proposed Rates:

Monthly Minimum:	\$	9.09
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	10,000	\$ 1.03
Over	10,000	\$ 1.48

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 4
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase	
-	\$ 11.09	\$ 13.64	\$ 2.55	23.00%	
1,000	12.10	14.67	\$ 2.57	21.26%	
2,000	13.11	15.70	\$ 2.59	19.78%	
3,000	14.12	16.73	\$ 2.61	18.52%	
4,000	15.13	17.76	\$ 2.64	17.42%	
5,000	16.14	18.79	\$ 2.66	16.46%	
6,000	17.15	19.83	\$ 2.68	15.62%	
7,000	18.16	20.86	\$ 2.70	14.87%	
8,000	19.17	21.89	\$ 2.72	14.19%	
9,000	20.18	22.92	\$ 2.74	13.59%	
10,000	21.19	23.95	\$ 2.76	13.04%	
12,000	24.09	26.91	\$ 2.83	11.73%	
14,000	26.99	29.88	\$ 2.89	10.70%	
16,000	29.89	32.84	\$ 2.95	9.87%	
18,000	32.79	35.80	\$ 3.01	9.19%	
20,000	35.69	38.76	\$ 3.08	8.62%	
25,000	42.94	46.17	\$ 3.23	7.53%	
30,000	50.19	53.58	\$ 3.39	6.75%	
35,000	57.44	60.98	\$ 3.55	6.17%	
40,000	64.69	68.39	\$ 3.70	5.72%	
45,000	71.94	75.80	\$ 3.86	5.36%	
50,000	79.19	83.20	\$ 4.02	5.07%	
60,000	93.69	98.02	\$ 4.33	4.62%	
70,000	108.19	112.83	\$ 4.64	4.29%	
80,000	122.69	127.64	\$ 4.95	4.04%	
90,000	137.19	142.46	\$ 5.27	3.84%	
100,000	151.69	157.27	\$ 5.58	3.68%	
Average Usage					
40,183	\$ 64.95	\$ 68.66	\$ 3.71	5.71%	
Median Usage					
1,500	\$ 12.60	\$ 15.19	\$ 2.58	20.49%	

Present Rates:

Monthly Minimum:	\$	11.09
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	10,000	\$ 1.01
Over	10,000	\$ 1.45

Proposed Rates:

Monthly Minimum:	\$	13.64
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	10,000	\$ 1.03
Over	10,000	\$ 1.48

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 1 Inch Meter
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Page 5
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase	
-	\$ 21.12	\$ 22.73	\$ 1.61	7.62%	
1,000	22.13	23.76	\$ 1.63	7.37%	
2,000	23.14	24.79	\$ 1.65	7.14%	
3,000	24.15	25.82	\$ 1.67	6.93%	
4,000	25.16	26.86	\$ 1.70	6.74%	
5,000	26.17	27.89	\$ 1.72	6.56%	
6,000	27.18	28.92	\$ 1.74	6.40%	
7,000	28.19	29.95	\$ 1.76	6.24%	
8,000	29.20	30.98	\$ 1.78	6.10%	
9,000	30.21	32.01	\$ 1.80	5.97%	
10,000	31.22	33.04	\$ 1.82	5.84%	
12,000	33.24	35.11	\$ 1.87	5.61%	
14,000	35.26	37.17	\$ 1.91	5.41%	
16,000	37.28	39.23	\$ 1.95	5.23%	
18,000	39.30	41.29	\$ 1.99	5.07%	
20,000	41.32	43.36	\$ 2.04	4.93%	
25,000	46.37	48.51	\$ 2.14	4.62%	
30,000	51.42	53.67	\$ 2.25	4.37%	
35,000	58.67	61.08	\$ 2.41	4.10%	
40,000	65.92	68.48	\$ 2.56	3.89%	
45,000	73.17	75.89	\$ 2.72	3.72%	
50,000	80.42	83.30	\$ 2.88	3.58%	
60,000	94.92	98.11	\$ 3.19	3.36%	
70,000	109.42	112.92	\$ 3.50	3.20%	
80,000	123.92	127.73	\$ 3.81	3.08%	
90,000	138.42	142.55	\$ 4.13	2.98%	
100,000	152.92	157.36	\$ 4.44	2.90%	
Average Usage 22,943	\$ 44.29	\$ 46.39	\$ 2.10	4.74%	
Median Usage 4,500	\$ 25.67	\$ 27.37	\$ 1.71	6.65%	

Present Rates:		
Monthly Minimum:	\$	21.12
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	30,000	\$ 1.01
Over	30,000	\$ 1.45

Proposed Rates:		
Monthly Minimum:	\$	22.73
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	30,000	\$ 1.03
Over	30,000	\$ 1.48

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase	
-	\$ 36.96	\$ 45.46	\$ 8.50	23.00%	
1,000	37.97	46.49	\$ 8.52	22.44%	
2,000	38.98	47.52	\$ 8.54	21.92%	
3,000	39.99	48.55	\$ 8.56	21.42%	
4,000	41.00	49.59	\$ 8.59	20.94%	
5,000	42.01	50.62	\$ 8.61	20.49%	
6,000	43.02	51.65	\$ 8.63	20.06%	
7,000	44.03	52.68	\$ 8.65	19.65%	
8,000	45.04	53.71	\$ 8.67	19.25%	
9,000	46.05	54.74	\$ 8.69	18.88%	
10,000	47.06	55.77	\$ 8.71	18.52%	
12,000	49.08	57.84	\$ 8.76	17.84%	
14,000	51.10	59.90	\$ 8.80	17.22%	
16,000	53.12	61.96	\$ 8.84	16.64%	
18,000	55.14	64.02	\$ 8.88	16.11%	
20,000	57.16	66.09	\$ 8.93	15.62%	
25,000	62.21	71.24	\$ 9.03	14.52%	
30,000	67.26	76.40	\$ 9.14	13.59%	
35,000	72.31	81.56	\$ 9.25	12.79%	
40,000	77.36	86.71	\$ 9.35	12.09%	
45,000	82.41	91.87	\$ 9.46	11.48%	
50,000	87.46	97.03	\$ 9.57	10.94%	
60,000	97.56	107.34	\$ 9.78	10.02%	
70,000	109.86	119.90	\$ 10.04	9.14%	
80,000	124.36	134.71	\$ 10.35	8.33%	
90,000	138.86	149.53	\$ 10.67	7.68%	
100,000	153.36	164.34	\$ 10.98	7.16%	
Average Usage					
39,700	\$ 77.06	\$ 86.40	\$ 9.35	12.13%	
Median Usage					
22,500	\$ 59.69	\$ 68.67	\$ 8.98	15.05%	

Present Rates:			
Monthly Minimum:		\$	36.96
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	65,000	\$	1.01
Over	65,000	\$	1.45

Proposed Rates:			
Monthly Minimum:		\$	45.46
Gallons in Minimum			-
Charge Per 1,000 Gallons			
Up to	65,000	\$	1.03
Over	65,000	\$	1.48

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 2 Inch Meter
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Page 7
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>		
-	\$ 59.14	\$ 72.74	\$ 13.60	23.00%		
1,000	60.15	73.77	\$ 13.62	22.65%		
2,000	61.16	74.80	\$ 13.64	22.31%		
3,000	62.17	75.83	\$ 13.67	21.98%		
4,000	63.18	76.86	\$ 13.69	21.66%		
5,000	64.19	77.89	\$ 13.71	21.36%		
6,000	65.20	78.93	\$ 13.73	21.06%		
7,000	66.21	79.96	\$ 13.75	20.77%		
8,000	67.22	80.99	\$ 13.77	20.49%		
9,000	68.23	82.02	\$ 13.79	20.22%		
10,000	69.24	83.05	\$ 13.81	19.95%		
12,000	71.26	85.11	\$ 13.86	19.45%		
14,000	73.28	87.18	\$ 13.90	18.97%		
16,000	75.30	89.24	\$ 13.94	18.52%		
18,000	77.32	91.30	\$ 13.98	18.09%		
20,000	79.34	93.36	\$ 14.03	17.68%		
25,000	84.39	98.52	\$ 14.13	16.75%		
30,000	89.44	103.68	\$ 14.24	15.92%		
35,000	94.49	108.83	\$ 14.35	15.18%		
40,000	99.54	113.99	\$ 14.45	14.52%		
45,000	104.59	119.15	\$ 14.56	13.92%		
50,000	109.64	124.30	\$ 14.67	13.38%		
60,000	119.74	134.62	\$ 14.88	12.43%		
70,000	129.84	144.93	\$ 15.09	11.62%		
80,000	139.94	155.24	\$ 15.31	10.94%		
90,000	150.04	165.55	\$ 15.52	10.34%		
100,000	160.14	175.87	\$ 15.73	9.82%		
Average Usage						
81,355	\$ 141.30	\$ 156.64	\$ 15.33	10.85%		
Median Usage						
75,000	\$ 134.89	\$ 150.08	\$ 15.20	11.27%		

Present Rates:						
Monthly Minimum:		\$	59.14			
Gallons in Minimum			-			
Charge Per 1,000 Gallons						
Up to	110,000	\$	1.01			
Over	110,000	\$	1.45			

Proposed Rates:						
Monthly Minimum:		\$	72.74			
Gallons in Minimum			-			
Charge Per 1,000 Gallons						
Up to	110,000	\$	1.03			
Over	110,000	\$	1.48			

Pima Utility Company - Water Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Irrigation
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
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 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 180.00	\$ 180.00	\$ -	0.00%
1,000	180.55	180.67	\$ 0.12	0.06%
2,000	181.10	181.33	\$ 0.23	0.13%
3,000	181.65	182.00	\$ 0.35	0.19%
4,000	182.20	182.67	\$ 0.47	0.26%
5,000	182.75	183.33	\$ 0.58	0.32%
6,000	183.30	184.00	\$ 0.70	0.38%
7,000	183.85	184.67	\$ 0.82	0.44%
8,000	184.40	185.33	\$ 0.93	0.51%
9,000	184.95	186.00	\$ 1.05	0.57%
10,000	185.50	186.67	\$ 1.17	0.63%
12,000	186.60	188.00	\$ 1.40	0.75%
14,000	187.70	189.33	\$ 1.63	0.87%
16,000	188.80	190.67	\$ 1.87	0.99%
18,000	189.90	192.00	\$ 2.10	1.11%
20,000	191.00	193.33	\$ 2.33	1.22%
25,000	193.75	196.66	\$ 2.91	1.50%
30,000	196.50	200.00	\$ 3.50	1.78%
35,000	199.25	203.33	\$ 4.08	2.05%
40,000	202.00	206.66	\$ 4.66	2.31%
45,000	204.75	210.00	\$ 5.25	2.56%
50,000	207.50	213.33	\$ 5.83	2.81%
60,000	213.00	220.00	\$ 7.00	3.28%
70,000	218.50	226.66	\$ 8.16	3.73%
80,000	224.00	233.33	\$ 9.33	4.16%
90,000	229.50	239.99	\$ 10.49	4.57%
100,000	235.00	246.66	\$ 11.66	4.96%
Average Usage				
12,537,628	\$ 7,075.70	\$ 8,537.39	\$ 1,461.70	20.66%
Median Usage				
7,451,900	\$ 4,278.55	\$ 5,147.32	\$ 868.78	20.31%

Present Rates:
 Monthly Minimum: \$ 180.00
 Gallons in Minimum -
 Charge Per 1,000 Gallons Over - \$ 0.55

Proposed Rates:
 Monthly Minimum: \$ 180.00
 Gallons in Minimum -
 Charge Per 1,000 Gallons Over - \$ 0.67

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
1	1,000	1		1			3		1				1	7	7	4
1,001	2,000		1				1	1		2	3		2	11	18	20
2,001	3,000		1					1						5	23	33
3,001	4,000				1	1		1			1		2	2	25	40
4,001	5,000			1					1					2	27	49
5,001	6,000							1						1	28	54
6,001	7,000													-	28	54
7,001	8,000													-	28	54
8,001	9,000	1								1				2	30	71
9,001	10,000										1			-	30	71
10,001	11,000													-	30	71
11,001	12,000													-	30	71
12,001	13,000													-	30	71
13,001	14,000													-	30	71
14,001	15,000													-	30	71
15,001	16,000													-	30	71
16,001	17,000													-	30	71
17,001	18,000			1										-	30	71
18,001	19,000													1	31	89
19,001	20,000													-	31	89
20,001	21,000													-	31	89
21,001	22,000													-	31	89
22,001	23,000													-	31	89
23,001	24,000													-	31	89
24,001	25,000		1											-	31	89
25,001	26,000								1					1	32	113
26,001	27,000				1			1						1	33	139
27,001	28,000					1								2	35	192
28,001	29,000													-	35	192
29,001	30,000													-	35	192
30,001	31,000													-	35	192
31,001	32,000													-	35	192
32,001	33,000													-	35	192
33,001	34,000		1					1	1					-	35	192
34,001	35,000													3	38	292
35,001	36,000	1												-	38	292
36,001	37,000			1										1	39	328
37,001	38,000					1								1	40	364
38,001	39,000													-	41	402
39,001	40,000													-	41	402
40,001	41,000													-	41	402
41,001	42,000													-	41	402
42,001	43,000													-	41	402
43,001	44,000													-	41	402
44,001	45,000													-	41	402
45,001	46,000													-	41	402
46,001	47,000													-	41	402

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
47,001	48,000													-	41	402
48,001	49,000													-	41	402
49,001	50,000													-	41	402
50,001	51,000													-	41	402
51,001	52,000													-	41	402
52,001	53,000													-	41	402
53,001	54,000								1					1	42	454
54,001	55,000													-	42	454
55,001	56,000													-	42	454
56,001	57,000													-	42	454
57,001	58,000													-	42	454
58,001	59,000													-	42	454
59,001	60,000													-	42	454
60,001	61,000													-	42	454
61,001	62,000				1									-	42	454
62,001	63,000													1	43	516
63,001	64,000													-	43	516
64,001	65,000													-	43	516
65,001	66,000					1								-	43	516
66,001	67,000													1	44	581
67,001	68,000													-	44	581
68,001	69,000													-	44	581
69,001	70,000													-	44	581
70,001	71,000													-	44	581
71,001	72,000													-	44	581
72,001	73,000							1						1	45	653
73,001	74,000													-	45	653
74,001	75,000													-	45	653
75,001	76,000													-	45	653
76,001	77,000													-	45	653
77,001	78,000													-	45	653
78,001	79,000													-	45	653
79,001	80,000													-	45	653
80,001	81,000													-	45	653
81,001	82,000													-	45	653
82,001	83,000													-	45	653
83,001	84,000													-	45	653
84,001	85,000													-	45	653
85,001	86,000													-	45	653
86,001	87,000													-	45	653
87,001	88,000													-	45	653
88,001	89,000													-	45	653
89,001	90,000													-	45	653
90,001	91,000													-	45	653
91,001	92,000													-	45	653
92,001	93,000													-	45	653
93,001	94,000													-	45	653
94,001	95,000													-	45	653

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
95,001	96,000													-	45	653
96,001	97,000													-	45	653
97,001	98,000													-	45	653
98,001	99,000													-	45	653
99,001	100,000													-	45	653
691,300	691,300				1									1	46	1,344
235,800	235,800					1								1	47	1,580
167,600	167,600						1							1	48	1,747
148,100	148,100							1						1	49	1,895
209,600	209,600								1					1	50	2,105
-	-													-	50	2,105
-	-													-	50	2,105
Totals		3	4	4	5	6	3	7	7	4	2	2	3	50		2,105
															Average Usage	42,098
															Median Usage	4,000
															Average # Customers	4
															Change in Number of Customers	-

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 5/8x3/4 Inch Meter

Exhibit
 Schedule H-5
 Page 1
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	231	164	166	138	210	290	348	345	357	333	201	266	3,049	3,049	-
1	1,000	537	503	454	517	920	942	1,124	1,026	957	869	616	801	9,266	12,315	4,638
1,001	2,000	1,114	1,014	877	847	1,093	955	1,064	998	910	1,079	947	1,271	12,169	24,484	22,897
2,001	3,000	1,431	1,387	1,209	1,070	1,254	989	1,125	1,003	1,040	1,129	1,116	1,396	14,149	38,633	58,277
3,001	4,000	1,514	1,489	1,324	1,140	1,181	960	1,047	953	957	1,113	1,208	1,433	14,319	52,952	108,400
4,001	5,000	1,296	1,332	1,269	1,093	1,018	882	852	844	905	982	1,050	1,221	12,744	65,696	165,755
5,001	6,000	994	1,044	1,049	870	900	746	731	754	778	862	928	951	10,607	76,303	224,099
6,001	7,000	754	820	867	798	651	692	633	623	690	693	797	648	8,666	84,969	280,432
7,001	8,000	514	541	661	712	568	560	521	540	565	563	640	469	6,854	91,823	331,840
8,001	9,000	354	358	477	565	378	434	407	459	414	401	482	300	5,029	96,852	374,589
9,001	10,000	225	286	304	435	305	376	281	345	347	329	355	243	3,831	100,683	410,986
10,001	12,000	310	323	464	553	444	573	509	517	517	456	491	304	5,461	106,144	471,060
12,001	14,000	142	154	227	355	288	363	320	366	391	286	313	168	3,373	109,517	514,910
14,001	16,000	100	92	132	199	163	267	210	252	254	185	179	95	2,128	111,645	546,831
16,001	18,000	50	66	88	128	109	199	145	191	165	141	109	48	1,439	113,084	571,295
18,001	20,000	46	45	54	107	71	132	97	116	111	82	97	49	1,007	114,091	590,429
20,001	25,000	58	66	79	140	99	180	154	188	183	114	111	53	1,425	115,516	622,492
25,001	30,000	34	41	47	52	53	90	75	99	100	57	52	22	722	116,238	642,347
30,001	35,000	15	7	9	27	25	50	37	38	40	17	22	10	297	116,535	652,000
35,001	40,000	9	6	8	12	13	29	16	41	28	21	16	7	206	116,741	659,725
40,001	45,000	9	3	-	7	7	14	21	18	13	13	11	3	119	116,860	664,782
45,001	50,000	1	2	7	7	8	16	13	13	11	8	4	2	92	116,952	669,152
50,001	60,000	3	6	4	3	5	11	9	10	10	12	8	2	83	117,035	673,717
60,001	70,000	2	2	5	5	2	6	9	6	2	1	3	2	45	117,080	676,643
70,001	80,000	2	3	-	2	2	5	4	7	4	5	1	1	36	117,116	679,343
80,001	90,000	1	1	-	1	2	4	1	3	3	2	-	-	18	117,134	680,873
90,001	100,000	-	-	-	-	1	-	3	3	4	1	2	-	14	117,148	682,203
115,170	115,170	-	-	-	-	-	-	-	-	-	-	1	-	1	117,149	682,318
117,550	117,550	-	-	-	-	-	-	-	-	-	-	1	-	1	117,150	682,435
175,270	175,270	-	-	-	-	-	-	-	-	-	-	1	-	1	117,151	682,611
186,300	186,300	-	-	-	-	-	-	-	-	-	-	1	-	1	117,152	682,797
217,480	217,480	-	-	-	-	-	-	-	-	-	-	1	-	1	117,153	683,014
364,070	364,070	-	-	-	-	-	-	-	-	-	-	1	-	1	117,154	683,378
102,260	102,260	-	-	-	-	-	-	-	-	-	-	1	-	1	117,155	683,481
106,350	106,350	-	-	-	-	-	-	-	-	-	1	-	-	1	117,156	683,587
153,280	153,280	-	-	-	-	-	-	-	-	-	1	-	-	1	117,157	683,740
157,240	157,240	-	-	-	-	-	-	-	-	-	1	-	-	1	117,158	683,898
246,230	246,230	-	-	-	-	-	-	-	-	-	1	-	-	1	117,159	684,144
254,600	254,600	-	-	-	-	-	-	-	-	-	1	-	-	1	117,160	684,398
107,360	107,360	-	-	-	-	-	-	-	-	1	-	-	-	1	117,161	684,506
118,450	118,450	-	-	-	-	-	-	-	-	1	-	-	-	1	117,162	684,624
128,620	128,620	-	-	-	-	-	-	-	-	1	-	-	-	1	117,163	684,753
136,590	136,590	-	-	-	-	-	-	-	-	1	-	-	-	1	117,164	684,889
162,760	162,760	-	-	-	-	-	-	-	-	1	-	-	-	1	117,165	685,052
104,230	104,230	-	-	-	-	-	-	-	1	-	-	-	-	1	117,166	685,156
107,030	107,030	-	-	-	-	-	-	-	1	-	-	-	-	1	117,167	685,263
140,450	140,450	-	-	-	-	-	-	-	1	-	-	-	-	1	117,168	685,404
140,630	140,630	-	-	-	-	-	-	-	1	-	-	-	-	1	117,169	685,544
150,970	150,970	-	-	-	-	-	-	-	1	-	-	-	-	1	117,170	685,695
270,700	270,700	-	-	-	-	-	-	-	1	-	-	-	-	1	117,171	685,966
115,420	115,420	-	-	-	-	-	-	-	1	-	-	-	-	1	117,172	686,082
136,120	136,120	-	-	-	-	-	-	-	1	-	-	-	-	1	117,173	686,218

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 5/8x3/4 Inch Meter

Exhibit
 Schedule H-5
 Page 1
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
108,990	108,990	-	-	-	-	-	1	-	-	-	-	-	-	1	117,174	686,327
152,540	152,540	-	-	-	-	-	1	-	-	-	-	-	-	1	117,175	686,479
164,940	164,940	-	-	-	-	-	1	-	-	-	-	-	-	1	117,176	686,644
178,850	178,850	-	-	-	-	-	1	-	-	-	-	-	-	1	117,177	686,823
108,450	108,450	-	-	-	1	-	-	-	-	-	-	-	-	1	117,178	686,931
131,960	131,960	-	-	-	1	-	-	-	-	-	-	-	-	1	117,179	687,063
115,400	115,400	-	-	1	-	-	-	-	-	-	-	-	-	1	117,180	687,179
330,220	330,220	-	-	1	-	-	-	-	-	-	-	-	-	1	117,181	687,509
108,760	108,760	-	1	-	-	-	-	-	-	-	-	-	-	1	117,182	687,618
140,230	140,230	1	-	-	-	-	-	-	-	-	-	-	-	1	117,183	687,758
Totals		9,747	9,756	9,783	9,785	9,770	9,769	9,758	9,764	9,761	9,760	9,765	9,765	117,183		
											Average Usage			5,869		
											Median Usage			4,500		
											Average # Customers			9,765		
											Change in Number of Customers			18		

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 1 Inch Meter

Exhibit
 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	3	2	5	4	3	4	3	5	7	4	3	5	48	48	-
1	1,000	4	3	4	4	2	3	3	2	1	2	3	3	34	82	17
1,001	2,000	2	3	1	3	2	-	2	1	3	1	3	1	22	104	50
2,001	3,000	6	5	2	-	2	3	2	1	4	9	1	2	37	141	143
3,001	4,000	6	5	8	3	4	4	3	4	1	4	4	8	54	195	332
4,001	5,000	6	6	3	2	4	-	2	2	3	3	3	7	41	236	516
5,001	6,000	8	9	3	5	2	3	1	6	2	2	5	3	49	285	786
6,001	7,000	7	5	6	-	3	2	4	2	3	3	1	11	47	332	1,091
7,001	8,000	9	8	6	5	3	3	1	-	-	5	4	5	49	381	1,459
8,001	9,000	10	10	5	2	4	5	4	-	2	1	5	9	57	438	1,943
9,001	10,000	11	7	9	1	6	1	2	3	2	3	9	10	64	502	2,551
10,001	12,000	17	25	13	6	9	7	1	4	11	12	12	12	129	631	3,970
12,001	14,000	22	12	17	8	16	12	12	5	6	5	11	17	143	774	5,829
14,001	16,000	15	26	14	10	10	6	8	12	11	5	18	22	157	931	8,184
16,001	18,000	21	12	19	12	9	8	9	7	8	5	13	21	144	1,075	10,633
18,001	20,000	13	18	12	10	10	7	5	10	14	9	11	19	138	1,213	13,255
20,001	25,000	34	35	41	25	24	14	20	18	17	29	28	22	307	1,520	20,162
25,001	30,000	12	19	22	17	32	23	23	11	21	25	31	31	267	1,787	27,505
30,001	35,000	9	11	22	23	22	18	20	21	23	23	20	11	223	2,010	34,752
35,001	40,000	8	4	9	23	19	13	11	20	22	16	12	9	166	2,176	40,978
40,001	45,000	5	5	6	20	17	17	12	11	18	17	13	3	144	2,320	47,098
45,001	50,000	4	6	6	13	7	15	18	22	11	15	3	3	123	2,443	52,940
50,001	60,000	4	-	5	18	15	37	27	23	25	19	11	4	188	2,631	63,280
60,001	70,000	1	3	1	15	7	12	18	16	14	13	6	2	108	2,739	70,300
70,001	80,000	1	-	-	5	3	6	5	10	5	5	7	1	48	2,787	73,900
80,001	90,000	1	-	1	3	6	5	8	7	4	2	2	1	40	2,827	77,300
90,001	100,000	-	-	-	3	1	3	8	8	3	2	2	1	31	2,858	80,245
114,210	114,210	-	-	-	-	-	-	-	-	-	-	-	1	1	2,859	80,360
144,940	144,940	-	-	-	-	-	-	-	-	-	-	-	1	1	2,860	80,505
104,010	104,010	-	-	-	-	-	-	-	-	-	-	-	1	1	2,861	80,609
107,440	107,440	-	-	-	-	-	-	-	-	-	-	1	-	1	2,862	80,716
107,820	107,820	-	-	-	-	-	-	-	-	-	-	1	-	1	2,863	80,824
113,330	113,330	-	-	-	-	-	-	-	-	-	1	-	-	1	2,864	80,937
127,720	127,720	-	-	-	-	-	-	-	-	-	1	-	-	1	2,865	81,065
143,390	143,390	-	-	-	-	-	-	-	-	-	1	-	-	1	2,866	81,208
107,300	107,300	-	-	-	-	-	-	-	-	1	-	-	-	1	2,867	81,316
116,260	116,260	-	-	-	-	-	-	-	-	1	-	-	-	1	2,868	81,432
124,670	124,670	-	-	-	-	-	-	-	-	1	-	-	-	1	2,869	81,556
100,280	100,280	-	-	-	-	-	-	-	1	-	-	-	-	1	2,870	81,657
104,220	104,220	-	-	-	-	-	-	-	1	-	-	-	-	1	2,871	81,761
104,360	104,360	-	-	-	-	-	-	-	1	-	-	-	-	1	2,872	81,865
116,530	116,530	-	-	-	-	-	-	-	1	-	-	-	-	1	2,873	81,982
117,800	117,800	-	-	-	-	-	-	-	1	-	-	-	-	1	2,874	82,100
120,200	120,200	-	-	-	-	-	-	-	1	-	-	-	-	1	2,875	82,220
130,640	130,640	-	-	-	-	-	-	-	1	-	-	-	-	1	2,876	82,351
131,660	131,660	-	-	-	-	-	-	-	1	-	-	-	-	1	2,877	82,482
144,850	144,850	-	-	-	-	-	-	-	1	-	-	-	-	1	2,878	82,627
146,210	146,210	-	-	-	-	-	-	-	1	-	-	-	-	1	2,879	82,773
146,620	146,620	-	-	-	-	-	-	-	1	-	-	-	-	1	2,880	82,920

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 1 Inch Meter

Exhibit
 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals. (1,000s)
100,350	100,350	-	-	-	-	-	-	1	-	-	-	-	-	1	2,881	83,020
108,340	108,340	-	-	-	-	-	-	1	-	-	-	-	-	1	2,882	83,129
112,140	112,140	-	-	-	-	-	-	1	-	-	-	-	-	1	2,883	83,241
115,410	115,410	-	-	-	-	-	-	1	-	-	-	-	-	1	2,884	83,356
122,800	122,800	-	-	-	-	-	-	1	-	-	-	-	-	1	2,885	83,479
126,360	126,360	-	-	-	-	-	-	1	-	-	-	-	-	1	2,886	83,605
140,160	140,160	-	-	-	-	-	-	1	-	-	-	-	-	1	2,887	83,745
165,840	165,840	-	-	-	-	-	-	1	-	-	-	-	-	1	2,888	83,911
178,820	178,820	-	-	-	-	-	-	1	-	-	-	-	-	1	2,889	84,090
252,070	252,070	-	-	-	-	-	-	1	-	-	-	-	-	1	2,890	84,342
101,550	101,550	-	-	-	-	-	1	-	-	-	-	-	-	1	2,891	84,444
103,730	103,730	-	-	-	-	-	1	-	-	-	-	-	-	1	2,892	84,547
104,210	104,210	-	-	-	-	-	1	-	-	-	-	-	-	1	2,893	84,652
106,880	106,880	-	-	-	-	-	1	-	-	-	-	-	-	1	2,894	84,761
109,570	109,570	-	-	-	-	-	1	-	-	-	-	-	-	1	2,895	84,870
113,140	113,140	-	-	-	-	-	1	-	-	-	-	-	-	1	2,896	84,983
115,030	115,030	-	-	-	-	-	1	-	-	-	-	-	-	1	2,897	85,098
117,410	117,410	-	-	-	-	-	1	-	-	-	-	-	-	1	2,898	85,216
118,400	118,400	-	-	-	-	-	1	-	-	-	-	-	-	1	2,899	85,334
121,090	121,090	-	-	-	-	-	1	-	-	-	-	-	-	1	2,900	85,455
134,510	134,510	-	-	-	-	-	1	-	-	-	-	-	-	1	2,901	85,590
135,880	135,880	-	-	-	-	-	1	-	-	-	-	-	-	1	2,902	85,726
149,370	149,370	-	-	-	-	-	1	-	-	-	-	-	-	1	2,903	85,875
190,410	190,410	-	-	-	-	-	1	-	-	-	-	-	-	1	2,904	86,065
124,310	124,310	-	-	-	-	1	-	-	-	-	-	-	-	1	2,905	86,190
132,140	132,140	-	-	-	-	1	-	-	-	-	-	-	-	1	2,906	86,322
139,120	139,120	-	-	-	1	-	-	-	-	-	-	-	-	1	2,907	86,461
115,120	115,120	-	-	1	-	-	-	-	-	-	-	-	-	1	2,908	86,576
Totals		239	239	241	241	244	245	242	242	244	243	243	245	2,908	2,908	86,576
														Average Usage	29,772	
														Median Usage	22,500	
														Average # Customers	242	
														Change in Number of Customers	6	

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 5/8x3/4 Inch Meter

Exhibit
 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	16	15	15	9	12	12	11	13	10	14	13	14	154	154	-
1	1,000	7	10	8	5	5	8	6	4	8	9	11	11	92	246	46
1,001	2,000	3	6	4	5	5	3	3	4	6	9	5	9	62	308	139
2,001	3,000	4	2	6	4	4	4	4	5	3	2	5	3	46	354	254
3,001	4,000	3	2	2	3	4	3	3	2	3	2	1	1	29	383	356
4,001	5,000	2	1	1	1	3	2	3	-	3	1	3	1	21	404	450
5,001	6,000	2	4	3	3	-	-	1	2	1	-	-	1	17	421	544
6,001	7,000	5	2	2	1	2	-	1	2	-	-	-	1	20	441	674
7,001	8,000	1	1	1	1	-	3	2	-	-	3	1	1	17	441	674
8,001	9,000	1	-	-	1	2	2	2	2	-	-	-	1	12	453	764
9,001	10,000	1	2	2	1	2	1	4	2	1	-	3	1	14	467	883
10,001	12,000	5	4	2	2	2	5	-	3	5	1	2	2	20	487	1,073
12,001	14,000	-	2	2	2	1	2	1	-	1	3	2	2	33	520	1,436
14,001	16,000	2	3	2	2	3	-	-	-	1	-	2	2	18	538	1,670
16,001	18,000	-	2	-	-	2	1	-	2	-	-	2	4	19	557	1,955
18,001	20,000	-	-	1	3	1	-	1	1	3	1	1	1	10	567	2,125
20,001	25,000	2	1	3	4	2	2	1	3	2	2	1	-	13	580	2,372
25,001	30,000	4	1	1	-	2	2	2	2	1	2	4	1	24	604	2,912
30,001	35,000	1	2	1	1	-	1	-	2	1	1	1	3	24	628	3,572
35,001	40,000	1	-	2	1	-	-	3	1	2	-	1	-	11	639	3,929
40,001	45,000	1	2	1	2	1	1	1	1	2	-	1	1	12	651	4,379
45,001	50,000	-	-	-	1	1	1	1	2	1	-	-	-	12	663	4,889
50,001	60,000	-	-	-	2	2	3	4	-	1	3	-	1	9	672	5,317
60,001	70,000	-	-	1	-	1	-	1	2	2	2	1	1	16	688	6,197
70,001	80,000	-	-	-	2	4	-	1	1	2	1	-	1	9	697	6,782
80,001	90,000	-	-	-	2	2	1	1	1	2	-	1	-	11	708	7,607
90,001	100,000	-	-	-	2	-	3	1	1	-	2	1	-	10	718	8,457
111,950	111,950	-	-	-	-	-	-	-	1	-	-	-	-	7	725	9,122
182,260	182,260	-	-	-	-	-	-	-	-	-	-	1	-	1	726	9,234
153,980	153,980	-	-	-	-	-	-	-	-	1	1	-	-	1	727	9,416
156,160	156,160	-	-	-	-	-	-	-	-	-	-	-	-	1	728	9,570
111,600	111,600	-	-	-	-	-	-	-	-	1	-	-	-	1	729	9,726
114,320	114,320	-	-	-	-	-	-	-	1	-	-	-	-	1	730	9,838
140,050	140,050	-	-	-	-	-	-	-	1	-	-	-	-	1	731	9,952
148,120	148,120	-	-	-	-	-	-	-	1	-	-	-	-	1	732	10,092
174,560	174,560	-	-	-	-	-	-	-	1	-	-	-	-	1	733	10,240
110,120	110,120	-	-	-	-	-	-	-	1	-	-	-	-	1	734	10,415
111,360	111,360	-	-	-	-	-	-	1	-	-	-	-	-	1	735	10,525
120,400	120,400	-	-	-	-	-	-	1	-	-	-	-	-	1	736	10,636
121,580	121,580	-	-	-	-	-	-	1	-	-	-	-	-	1	737	10,757
129,570	129,570	-	-	-	-	-	-	1	-	-	-	-	-	1	738	10,878
129,820	129,820	-	-	-	-	-	-	1	-	-	-	-	-	1	739	11,008
104,360	104,360	-	-	-	-	-	-	1	-	-	-	-	-	1	740	11,138
108,750	108,750	-	-	-	-	-	-	1	-	-	-	-	-	1	741	11,242
128,460	128,460	-	-	-	-	-	-	1	-	-	-	-	-	1	742	11,351
103,800	103,800	-	-	-	1	-	-	-	-	-	-	-	-	1	743	11,479
300,000	300,000	-	-	-	1	-	-	-	-	-	-	-	-	1	744	11,583
107,830	107,830	-	-	1	-	-	-	-	-	-	-	-	-	1	745	11,883
561,760	561,760	-	-	1	-	-	-	-	-	-	-	-	-	1	746	11,991
624,110	624,110	-	1	-	-	-	-	-	-	-	-	-	-	1	747	12,553
614,730	614,730	1	-	-	-	-	-	-	-	-	-	-	-	1	748	13,177
														1	749	13,791

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Residential 5/8x3/4 Inch Meter

Exhibit
 Schedule H-5
 Page 3
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Sales (1,000s)
-	-													-	749	13,791
Totals		62	63	62	62	63	63	62	63	63	62	62	62	749		
														Average Usage	18,413	
														Median Usage	3,500	
														Average # Customers	62	
														Change in Number of Customers	-	

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 3/4 Inch Meter

Exhibit
 Schedule H-5
 Page 4
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	-	-	-	-	-	1	-	-	-	-	-	-	3	3	-
1	1,000	1	1	-	-	2	-	1	-	-	-	-	-	7	10	4
1,001	2,000	1	1	1	3	-	2	-	3	3	2	3	1	20	30	34
2,001	3,000	-	-	1	-	-	-	-	-	-	-	-	-	1	31	36
3,001	4,000	-	-	1	-	-	1	1	-	-	1	-	-	4	35	50
4,001	5,000	1	1	-	-	-	-	1	-	-	-	-	-	3	38	64
5,001	6,000	-	-	-	-	1	-	-	-	-	-	-	-	1	39	69
6,001	7,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
7,001	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
8,001	9,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
9,001	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
10,001	12,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
12,001	14,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
14,001	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
16,001	18,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
18,001	20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
20,001	25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
25,001	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
30,001	35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	39	69
35,001	40,000	-	-	1	-	-	-	-	-	-	-	-	1	2	41	144
40,001	45,000	1	-	-	-	-	-	-	-	-	-	-	-	1	42	187
45,001	50,000	-	1	-	-	-	-	-	-	-	-	1	-	2	44	282
50,001	60,000	-	-	-	-	-	-	-	-	-	-	-	-	-	44	282
60,001	70,000	-	-	-	-	-	-	-	-	-	-	-	-	-	44	282
70,001	80,000	-	-	-	-	-	-	-	-	-	-	-	-	-	44	282
80,001	90,000	-	-	-	-	-	-	-	-	-	-	-	-	-	44	282
90,001	100,000	-	-	-	-	-	-	-	-	-	1	-	-	1	45	377
169,100	169,100	-	-	-	-	-	-	-	-	1	-	-	-	1	46	546
565,300	565,300	-	-	-	-	-	-	-	1	-	-	-	-	1	47	1,111
534,300	534,300	-	-	-	-	-	-	1	-	-	-	-	-	1	48	1,645
196,900	196,900	-	-	-	-	-	1	-	-	-	-	-	-	1	49	1,842
105,800	105,800	-	-	-	-	1	-	-	-	-	-	-	-	1	50	1,948
101,400	101,400	-	-	-	1	-	-	-	-	-	-	-	-	1	51	2,049
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	2,049
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	2,049
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	2,049
Totals		4	4	4	4	4	5	4	5	4	5	4	4	51		

Average Usage 40,183
 Median Usage 1,500
 Average # Customers 4
 Change in Number of Customers -

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 1 Inch Meter

Exhibit
 Schedule H-5
 Page 5
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	13	11	8	7	8	8	8	8	4	6	8	6	95	95	-
1	1,000	9	11	11	6	8	6	8	8	8	10	8	10	103	198	52
1,001	2,000	3	3	4	2	1	4	2	3	6	4	6	6	44	242	118
2,001	3,000	2	2	2	2	3	2	3	2	2	3	1	-	24	266	178
3,001	4,000	1	2	2	2	1	1	1	1	-	2	1	2	16	282	234
4,001	5,000	-	3	-	1	-	-	-	-	1	1	-	1	7	289	265
5,001	6,000	2	-	-	1	-	-	-	-	1	1	1	-	6	295	298
6,001	7,000	2	-	1	1	-	-	1	2	-	1	1	2	11	306	370
7,001	8,000	1	1	-	-	1	1	1	1	-	-	2	2	10	316	445
8,001	9,000	-	-	-	-	2	-	-	-	-	-	-	1	3	319	470
9,001	10,000	-	-	1	-	-	2	1	2	-	1	1	-	8	327	546
10,001	12,000	1	1	1	1	1	2	-	1	2	2	1	-	13	340	689
12,001	14,000	2	1	-	2	3	2	1	1	2	1	1	-	16	356	897
14,001	16,000	1	1	2	2	1	1	-	-	-	1	2	1	12	368	1,077
16,001	18,000	1	-	1	3	1	2	3	-	4	1	-	2	18	386	1,383
18,001	20,000	-	2	-	1	-	1	1	-	-	-	-	-	7	393	1,516
20,001	25,000	2	3	2	3	2	3	3	1	4	3	4	2	32	425	2,236
25,001	30,000	-	-	-	-	3	1	-	1	1	1	-	1	8	433	2,456
30,001	35,000	1	-	1	2	1	3	3	2	2	2	-	3	22	455	3,171
35,001	40,000	-	1	-	3	1	1	1	-	2	1	3	-	12	467	3,621
40,001	45,000	-	-	3	-	1	1	1	2	1	-	-	-	9	476	4,004
45,001	50,000	-	1	-	1	1	-	-	2	-	2	-	-	7	483	4,336
50,001	60,000	2	-	3	1	1	1	2	1	1	-	-	-	12	495	4,996
60,001	70,000	1	2	1	1	1	1	-	1	3	2	1	3	17	512	6,101
70,001	80,000	-	-	-	1	1	1	-	1	1	1	-	3	9	521	6,776
80,001	90,000	-	1	1	1	1	-	1	1	-	-	-	-	7	528	7,371
90,001	100,000	1	2	1	1	2	-	-	-	-	-	1	-	8	536	8,131
129700	129,700	-	-	-	-	-	-	-	-	-	-	-	1	1	537	8,261
147470	147,470	-	-	-	-	-	-	-	-	-	-	-	-	1	538	8,408
103000	103,000	-	-	-	-	-	-	-	-	-	-	-	-	1	539	8,511
116900	116,900	-	-	-	-	-	-	-	-	-	-	1	-	1	540	8,628
155810	155,810	-	-	-	-	-	-	-	-	-	-	1	-	1	541	8,784
156700	156,700	-	-	-	-	-	-	-	-	-	1	-	-	1	542	8,941
224230	224,230	-	-	-	-	-	-	-	-	1	-	-	-	1	543	9,165
149600	149,600	-	-	-	-	-	-	-	1	-	-	-	-	1	544	9,315
166700	166,700	-	-	-	-	-	-	-	1	-	-	-	-	1	545	9,481
112750	112,750	-	-	-	-	-	-	-	1	-	-	-	-	1	546	9,594
119650	119,650	-	-	-	-	-	-	-	1	-	-	-	-	1	547	9,714
132000	132,000	-	-	-	-	-	-	-	1	-	-	-	-	1	548	9,846
148170	148,170	-	-	-	-	-	-	-	1	-	-	-	-	1	549	9,994
165700	165,700	-	-	-	-	-	-	-	1	-	-	-	-	1	550	10,160
269800	269,800	-	-	-	-	-	-	-	1	-	-	-	-	1	551	10,429
105460	105,460	-	-	-	-	-	-	1	-	-	-	-	-	1	552	10,535
118630	118,630	-	-	-	-	-	-	1	-	-	-	-	-	1	553	10,653
121360	121,360	-	-	-	-	-	-	1	-	-	-	-	-	1	554	10,775
142400	142,400	-	-	-	-	-	-	1	-	-	-	-	-	1	555	10,917
144740	144,740	-	-	-	-	-	-	1	-	-	-	-	-	1	556	11,062
316800	316,800	-	-	-	-	-	-	1	-	-	-	-	-	1	557	11,379
126470	126,470	-	-	-	-	-	1	-	-	-	-	-	-	1	558	11,505
138000	138,000	-	-	-	-	-	1	-	-	-	-	-	-	1	559	11,643
163870	163,870	-	-	-	-	-	1	-	-	-	-	-	-	1	560	11,807
246500	246,500	-	-	-	-	-	1	-	-	-	-	-	-	1	561	12,054

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 1 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
110620	110,620	-	-	-	-	1	-	-	-	-	-	-	-	1	562	12,164
186900	186,900	-	-	-	-	1	-	-	-	-	-	-	-	1	563	12,351
126760	126,760	-	-	-	1	-	-	-	-	-	-	-	-	1	564	12,478
224900	224,900	-	-	-	1	-	-	-	-	-	-	-	-	1	565	12,703
131100	131,100	-	-	1	-	-	-	-	-	-	-	-	-	1	566	12,834
175020	175,020	1	-	-	-	-	-	-	-	-	-	-	-	1	567	13,009
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	567	13,009
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	567	13,009
Totals		46	48	46	47	47	48	47	48	48	48	47	47	567		
															Average Usage	22,943
															Median Usage	4,500
															Average # Customers	47
															Change in Number of Customers	1

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 1.5 Inch Meter

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 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	1	1	1	1	1	1	1	1	1	1	1	1	10	10	-
1,001	1,000	-	-	-	1	1	1	1	1	1	1	1	1	8	18	4
2,001	2,000	-	-	-	-	-	-	-	-	1	1	1	1	4	22	10
3,001	3,000	-	-	-	-	1	1	1	1	2	-	-	-	3	25	18
4,001	4,000	1	1	1	-	-	1	1	1	-	2	-	1	9	34	49
5,001	5,000	-	-	-	1	1	1	1	1	1	-	2	1	6	40	76
6,001	6,000	1	1	-	1	1	1	-	1	-	-	-	-	6	46	109
7,001	7,000	-	1	-	-	-	-	-	-	-	-	-	-	1	47	116
8,001	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	47	116
9,001	9,000	-	-	-	-	-	-	-	-	-	-	-	-	-	47	116
10,001	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	47	116
12,001	12,000	-	-	1	-	-	-	-	-	-	-	-	-	1	48	127
14,001	14,000	-	-	-	-	-	-	-	-	-	-	-	-	-	48	127
16,001	16,000	-	-	-	-	-	-	-	-	-	-	-	1	1	49	142
18,001	18,000	1	-	2	-	1	-	1	-	-	-	-	2	6	55	244
20,001	20,000	2	3	1	-	-	1	1	-	1	1	2	-	12	67	472
25,001	25,000	1	1	2	1	2	2	2	1	1	1	2	2	18	85	877
30,001	30,000	2	1	-	3	1	-	-	2	2	1	1	-	13	98	1,234
35,001	35,000	-	-	-	-	-	1	-	1	-	-	1	1	4	102	1,364
40,001	40,000	-	-	-	-	-	-	-	-	-	-	-	1	1	103	1,402
45,001	45,000	-	-	1	-	-	-	1	-	-	2	-	-	4	107	1,572
50,001	50,000	-	1	1	-	-	-	-	-	-	-	-	-	2	109	1,667
60,001	60,000	1	-	-	-	1	-	1	-	2	-	-	-	5	114	1,942
70,001	70,000	-	-	-	1	1	-	-	2	-	-	-	-	4	118	2,202
80,001	80,000	-	-	-	-	-	-	-	-	-	1	-	-	1	119	2,277
90,001	90,000	-	-	-	-	-	1	-	-	-	-	-	-	1	120	2,362
105,700	105,700	-	-	-	-	-	1	-	-	-	-	-	-	1	121	2,457
134,600	134,600	-	-	-	-	-	-	-	-	-	-	-	1	1	122	2,562
104,700	104,700	-	-	-	-	-	-	-	-	-	-	-	1	1	123	2,697
139,800	139,800	-	-	-	-	-	-	-	-	-	-	1	-	1	124	2,802
129,900	129,900	-	-	-	-	-	-	-	-	-	-	1	-	1	125	2,941
162,700	162,700	-	-	-	-	-	-	-	-	-	1	-	-	1	126	3,071
128,500	128,500	-	-	-	-	-	-	-	-	-	1	-	-	1	127	3,234
228,700	228,700	-	-	-	-	-	-	-	-	1	-	-	-	1	128	3,362
206,900	206,900	-	-	-	-	-	-	-	1	1	-	-	-	1	129	3,591
226,200	226,200	-	-	-	-	-	-	-	1	-	-	-	-	1	130	3,798
165,700	165,700	-	-	-	-	-	-	1	-	-	-	-	-	1	131	4,024
171,300	171,300	-	-	-	-	-	-	1	-	-	-	-	-	1	132	4,190
182,800	182,800	-	-	-	-	-	-	1	-	-	-	-	-	1	133	4,361
105,800	105,800	-	-	-	-	-	-	1	-	-	-	-	-	1	134	4,544
184,200	184,200	-	-	-	-	-	1	-	-	-	-	-	-	1	135	4,650
108,600	108,600	-	-	-	-	-	-	1	-	-	-	-	-	1	136	4,834
141,600	141,600	-	-	-	-	1	-	-	-	-	-	-	-	1	137	4,943
101,400	101,400	-	-	-	-	1	-	-	-	-	-	-	-	1	138	5,084
129,500	129,500	-	-	-	1	-	-	-	-	-	-	-	-	1	139	5,186
118,500	118,500	-	-	1	-	-	-	-	-	-	-	-	-	1	140	5,315
131,200	131,200	-	1	-	-	-	-	-	-	-	-	-	-	1	141	5,434
112,300	112,300	1	-	-	-	-	-	-	-	-	-	-	-	1	142	5,565
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	143	5,677
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	143	5,677
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	143	5,677

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 1.5 Inch Meter

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 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
Totals		11	11	11	11	11	12	11	12	13	15	12	13	143	143	5,677
														Average Usage		39,700
														Median Usage		22,500
														Average # Customers		12
														Change in Number of Customers		2

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-	3	3	3	4	2	5	2	5	3	3	2	3	38	38	-
1	1,000	3	1	1	2	3	2	3	2	2	1	2	1	23	61	12
1,001	2,000	4	4	4	1	2	3	2	2	3	2	2	3	32	93	60
2,001	3,000	2	3	3	3	4	3	3	2	3	4	4	5	39	132	157
3,001	4,000	-	1	2	2	-	-	-	1	-	1	-	2	9	141	189
4,001	5,000	2	1	-	-	1	2	1	-	1	-	-	3	11	152	238
5,001	6,000	2	2	1	1	-	1	1	1	1	1	2	-	13	165	310
6,001	7,000	2	2	2	-	2	1	-	1	1	1	1	2	14	179	401
7,001	8,000	-	1	1	2	-	-	1	-	-	1	-	1	7	186	453
8,001	9,000	-	1	2	-	-	2	2	-	-	1	-	1	12	198	555
9,001	10,000	-	-	-	1	2	3	3	2	-	-	1	3	12	210	669
10,001	12,000	2	-	5	-	3	-	2	4	4	-	1	5	28	236	955
12,001	14,000	4	1	-	3	2	-	-	-	1	1	5	1	18	254	1,189
14,001	16,000	4	3	3	1	-	-	-	2	2	3	2	1	21	275	1,504
16,001	18,000	1	2	2	4	2	3	3	3	1	2	1	1	25	300	1,929
18,001	20,000	2	3	1	1	2	2	-	1	2	-	1	1	16	316	2,233
20,001	25,000	4	3	4	2	1	2	1	1	3	4	2	4	31	347	2,931
25,001	30,000	2	4	2	2	2	1	2	2	2	1	2	3	25	372	3,618
30,001	35,000	3	2	1	2	4	2	2	1	5	4	2	3	31	403	4,626
35,001	40,000	2	4	3	2	1	-	2	-	-	1	1	3	19	422	5,338
40,001	45,000	2	3	2	2	3	2	1	3	-	1	3	3	25	447	6,401
45,001	50,000	1	2	3	2	1	3	2	2	3	3	2	1	25	472	7,588
50,001	60,000	7	5	2	3	4	4	4	4	4	2	3	8	50	522	10,338
60,001	70,000	4	5	2	-	2	3	2	3	3	4	4	4	36	558	12,678
70,001	80,000	3	6	4	3	1	2	3	2	5	2	3	2	36	594	15,378
80,001	90,000	3	4	3	2	5	2	4	1	6	4	2	2	38	632	18,608
90,001	100,000	4	6	2	1	1	2	2	4	3	-	3	5	33	665	21,743
101,300	101,300	-	-	-	-	-	-	-	-	-	-	-	1	1	666	21,845
108,400	108,400	-	-	-	-	-	-	-	-	-	-	-	1	1	667	21,953
127,100	127,100	-	-	-	-	-	-	-	-	-	-	-	1	1	668	22,080
128,800	128,800	-	-	-	-	-	-	-	-	-	-	1	1	2	670	22,338
137,500	137,500	-	-	-	-	-	-	-	-	-	-	-	1	1	671	22,475
137,600	137,600	-	-	-	-	-	-	-	-	-	1	-	1	2	673	22,750
140,200	140,200	-	-	-	-	-	-	-	-	-	-	-	1	1	674	22,891
148,000	148,000	-	-	-	-	-	-	-	-	-	-	-	1	1	675	23,039
151,500	151,500	-	-	-	-	-	-	-	-	-	1	-	1	2	677	23,342
159,400	159,400	-	-	-	-	-	-	-	-	-	-	-	1	1	678	23,501
163,000	163,000	-	-	-	-	-	-	-	-	1	1	-	1	3	681	23,960
172,600	172,600	-	-	-	-	-	-	-	-	-	-	-	1	1	682	24,163
182,400	182,400	-	-	-	-	-	-	-	-	-	-	-	1	1	683	24,345
191,600	191,600	-	-	-	-	-	-	-	-	-	-	-	1	1	684	24,537
193,800	193,800	-	-	-	-	-	-	-	-	-	-	-	1	1	685	24,730
198,600	198,600	-	-	-	-	-	-	-	-	-	-	-	1	1	686	24,929
216,000	216,000	-	-	-	-	-	-	-	-	-	-	-	1	1	687	25,145
231,100	231,100	-	-	-	-	-	-	-	1	-	-	-	1	2	689	25,607
235,400	235,400	-	-	-	-	-	-	-	-	-	-	-	1	1	690	25,843
245,200	245,200	-	-	-	-	-	-	-	-	-	-	1	1	2	692	26,333
260,100	260,100	-	-	-	-	-	-	-	-	-	-	-	1	1	693	26,593
336,200	336,200	-	-	-	-	-	-	-	-	-	-	-	1	1	694	26,929
346,700	346,700	-	-	-	-	-	-	-	-	-	-	-	1	1	695	27,276
347,000	347,000	-	-	-	-	-	-	-	-	-	-	-	1	1	696	27,623
347,800	347,800	-	-	-	-	-	-	-	-	-	-	-	1	1	697	27,971
351,300	351,300	-	-	-	-	-	-	-	-	-	-	-	1	1	698	28,322
419,700	419,700	-	-	-	-	-	-	-	-	-	-	-	1	1	699	28,742

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Schedule H-5
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
102,600	102,600	-	-	-	-	-	-	-	-	-	-	1	-	1	700	28,844
103,800	103,800	-	-	-	-	1	-	-	-	-	-	1	-	2	702	29,052
106,800	106,800	-	-	-	-	-	-	-	-	-	-	1	-	1	703	29,159
114,700	114,700	-	-	-	-	-	-	-	-	-	-	1	-	1	704	29,274
118,900	118,900	-	-	-	-	-	-	-	-	-	-	1	-	1	705	29,392
119,900	119,900	-	-	-	-	-	-	-	-	1	-	1	-	2	707	29,632
124,300	124,300	-	-	1	-	-	-	-	-	1	-	1	-	3	710	30,005
127,700	127,700	-	-	-	-	-	-	-	-	-	-	1	-	1	711	30,133
131,000	131,000	-	-	-	-	-	-	-	-	-	-	1	-	1	712	30,264
141,000	141,000	-	-	-	-	-	-	-	-	-	-	1	-	1	713	30,405
141,100	141,100	-	-	-	-	-	-	-	-	-	-	1	-	1	714	30,546
156,900	156,900	-	-	-	-	-	-	-	-	-	-	2	-	2	716	30,860
158,000	158,000	-	-	-	-	-	-	-	-	-	-	1	-	1	717	31,018
169,800	169,800	-	-	-	-	-	-	-	-	-	-	1	-	1	718	31,188
180,400	180,400	-	-	-	-	-	-	-	-	-	-	1	-	1	719	31,368
182,700	182,700	-	-	-	-	-	-	-	-	-	-	1	-	1	720	31,551
184,500	184,500	-	-	-	-	-	-	-	-	-	-	1	-	1	721	31,735
185,300	185,300	-	-	-	-	-	-	-	-	-	-	1	-	1	722	31,920
186,400	186,400	-	-	-	-	-	-	-	-	-	-	1	-	1	723	32,107
194,500	194,500	-	-	-	-	-	-	-	-	-	-	1	-	1	724	32,301
205,400	205,400	-	-	-	-	-	-	-	-	-	-	1	-	1	725	32,507
218,800	218,800	-	-	-	-	-	-	-	-	-	-	1	-	1	726	32,726
220,200	220,200	-	-	-	-	-	-	-	-	-	-	1	-	1	727	32,946
220,600	220,600	-	-	-	-	-	-	-	-	-	-	1	-	1	728	33,166
224,000	224,000	-	-	-	-	-	-	-	-	-	-	1	-	1	729	33,390
224,200	224,200	-	-	-	-	-	-	-	-	-	-	1	-	1	730	33,615
229,600	229,600	-	-	-	-	-	-	-	-	-	-	1	-	1	731	33,844
232,600	232,600	-	-	-	-	-	-	-	-	-	-	1	-	1	732	34,077
236,900	236,900	-	-	-	-	-	-	-	-	-	-	1	-	1	733	34,314
239,300	239,300	-	-	-	-	-	-	-	-	-	-	1	-	1	734	34,553
250,300	250,300	-	-	-	-	-	-	-	-	-	-	1	-	1	735	34,803
296,900	296,900	-	-	1	-	-	-	-	-	-	-	1	-	2	737	35,397
311,600	311,600	-	-	-	-	-	-	-	-	-	-	1	-	1	738	35,709
332,100	332,100	-	-	-	-	-	-	-	-	-	-	1	-	1	739	36,041
357,700	357,700	-	-	-	-	-	-	-	-	-	-	1	-	1	740	36,398
368,700	368,700	-	-	-	-	-	-	-	-	-	-	1	-	1	741	36,767
387,400	387,400	-	-	-	-	-	-	-	-	-	-	1	-	1	742	37,155
473,900	473,900	-	-	-	-	-	-	-	-	-	-	1	-	1	743	37,628
537,000	537,000	-	-	-	-	-	-	-	-	-	-	1	1	1	744	38,165
102,200	102,200	-	-	-	-	-	-	-	-	-	1	-	-	1	745	38,268
102,500	102,500	-	-	-	-	-	-	-	-	-	1	-	-	1	746	38,370
114,100	114,100	-	-	-	-	-	-	-	-	-	1	-	-	1	747	38,484
122,800	122,800	-	1	-	-	-	-	-	-	-	1	-	-	2	749	38,730
128,500	128,500	-	-	-	1	-	-	-	-	-	1	-	-	2	751	38,987
145,500	145,500	-	-	-	-	-	-	-	-	-	1	-	-	1	752	39,132
177,900	177,900	-	-	-	-	-	-	-	-	-	1	-	-	1	753	39,310
179,400	179,400	-	-	-	-	-	-	-	-	-	1	-	-	1	754	39,490
180,000	180,000	-	-	-	-	-	-	-	-	-	1	-	-	1	755	39,670
183,200	183,200	-	-	-	-	-	-	-	-	-	1	-	-	1	756	39,853
183,400	183,400	-	-	-	-	-	-	-	-	-	1	-	-	1	757	40,036
189,100	189,100	-	-	-	-	-	-	-	-	-	1	-	-	1	758	40,225
199,200	199,200	-	-	-	-	-	-	-	-	-	1	-	-	1	759	40,425
199,600	199,600	-	-	-	-	-	-	-	-	-	1	-	-	1	760	40,624
202,800	202,800	-	-	-	-	-	-	-	-	-	1	-	-	1	761	40,827

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commencal 2 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
215,300	215,300	-	-	-	-	-	-	-	-	-	1	-	-	1	762	41,042
217,600	217,600	-	-	-	-	-	-	-	-	-	1	-	-	1	763	41,260
221,300	221,300	-	-	-	-	-	-	-	-	-	1	-	-	1	764	41,481
222,200	222,200	-	-	-	-	-	-	-	-	-	1	-	-	1	765	41,703
240,400	240,400	-	-	-	-	-	-	-	-	-	1	-	-	1	766	41,944
246,800	246,800	-	-	-	-	-	-	-	-	-	1	-	-	1	767	42,191
258,100	258,100	-	-	-	1	-	-	-	-	-	1	-	-	2	769	42,707
258,900	258,900	-	-	-	-	-	-	-	-	-	1	-	-	1	770	42,966
261,600	261,600	-	-	-	-	-	-	-	-	-	1	-	-	1	771	43,227
268,100	268,100	-	-	-	-	-	-	-	-	-	1	-	-	1	772	43,495
273,700	273,700	-	-	-	-	-	-	-	-	-	1	-	-	1	773	43,769
274,200	274,200	-	-	-	-	-	-	-	-	-	1	-	-	1	774	44,043
277,000	277,000	-	-	-	-	-	-	-	-	-	1	-	-	1	775	44,320
282,900	282,900	-	-	-	-	-	-	-	-	-	1	-	-	1	776	44,603
293,800	293,800	-	-	-	-	-	-	-	-	-	1	-	-	1	777	44,897
373,400	373,400	-	-	-	-	-	-	-	-	-	1	-	-	1	778	45,270
394,700	394,700	-	-	-	-	-	-	-	-	-	1	-	-	1	779	45,665
415,600	415,600	-	-	-	1	-	-	-	-	-	1	-	-	2	781	46,496
437,800	437,800	-	-	-	-	-	-	-	-	-	1	-	-	1	782	46,934
472,800	472,800	-	-	-	-	-	-	-	-	-	1	-	-	1	783	47,407
481,900	481,900	-	-	-	-	-	-	-	-	-	1	-	-	1	784	47,889
523,100	523,100	-	-	-	-	-	-	-	-	-	1	-	-	1	785	48,412
534,100	534,100	-	-	-	-	-	-	-	-	-	1	-	-	1	786	48,946
559,000	559,000	-	-	-	-	-	-	-	-	-	1	-	-	1	787	49,505
598,400	598,400	-	-	-	-	-	-	-	-	-	1	-	-	1	788	50,103
893,100	893,100	-	-	-	-	-	-	-	-	-	1	-	-	1	789	50,966
1,032,500	1,032,500	-	-	-	-	-	-	-	-	-	1	-	-	1	790	52,029
1,413,700	1,413,700	-	-	-	-	-	-	-	-	-	1	-	-	1	791	53,443
1,456,000	1,456,000	-	-	-	-	-	-	-	-	-	1	-	-	1	792	54,899
1,471,700	1,471,700	-	-	-	-	-	-	-	-	-	1	-	-	1	793	56,370
105,400	105,400	-	-	-	-	-	-	-	-	1	-	-	-	1	794	56,476
110,500	110,500	-	-	-	-	-	-	-	-	1	-	-	-	1	795	56,586
119,000	119,000	-	-	-	-	-	-	-	-	1	-	-	-	1	796	56,705
125,900	125,900	-	-	-	-	-	-	-	-	1	-	-	-	1	797	56,831
138,700	138,700	-	-	-	-	-	-	-	-	1	-	-	-	1	798	56,970
143,200	143,200	-	-	-	-	-	-	-	-	1	-	-	-	1	799	57,113
157,500	157,500	-	-	-	-	-	-	-	-	1	-	-	-	1	800	57,271
169,500	169,500	-	-	-	-	-	-	-	-	1	-	-	-	1	801	57,440
172,200	172,200	-	-	-	-	-	-	-	-	1	-	-	-	1	802	57,612
175,900	175,900	-	-	-	-	-	-	-	-	1	-	-	-	1	803	57,788
183,300	183,300	-	-	-	-	-	-	-	-	1	-	-	-	1	804	57,971
188,800	188,800	-	-	1	-	-	-	-	-	1	-	-	-	2	806	58,349
189,300	189,300	-	-	-	-	-	-	-	1	-	-	-	-	2	808	58,728
191,900	191,900	-	-	-	-	-	-	-	1	-	-	-	-	1	809	58,920
207,400	207,400	-	-	-	-	-	-	-	1	-	-	-	-	1	810	59,127
213,600	213,600	-	-	-	-	-	-	-	1	-	-	-	-	1	811	59,341
224,600	224,600	-	-	-	-	-	-	-	1	-	-	-	-	1	812	59,565
261,500	261,500	-	-	-	-	-	-	-	1	-	-	-	-	1	813	59,827
263,400	263,400	-	-	-	-	-	-	-	1	-	-	-	-	1	814	60,090
267,500	267,500	-	-	-	-	-	-	-	1	-	-	-	-	1	815	60,358
273,300	273,300	-	-	-	-	-	-	-	1	-	-	-	-	1	816	60,631
294,000	294,000	-	-	-	-	-	-	-	1	-	-	-	-	1	817	60,925
298,500	298,500	-	-	-	-	-	-	-	1	-	-	-	-	1	818	61,223
318,300	318,300	-	-	-	1	-	-	-	-	1	-	-	-	2	820	61,860

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
319,900	319,900	-	-	-	-	-	-	-	-	1	-	-	-	1	821	62,180
323,600	323,600	-	-	-	-	-	-	-	-	1	-	-	-	1	822	62,503
331,300	331,300	-	-	-	-	-	-	-	-	1	-	-	-	1	823	62,835
342,900	342,900	-	-	-	-	-	-	-	-	1	-	-	-	1	824	63,178
359,200	359,200	-	-	-	-	-	-	-	-	1	-	-	-	1	825	63,537
394,600	394,600	-	-	-	-	-	-	-	-	1	-	-	-	1	826	63,931
423,200	423,200	-	-	-	-	-	-	-	-	1	-	-	-	1	827	64,355
495,100	495,100	-	-	-	-	-	-	-	-	1	-	-	-	1	828	64,850
534,000	534,000	-	-	-	-	-	-	-	-	1	-	-	-	1	829	65,384
788,800	788,800	-	-	-	-	-	-	-	-	1	-	-	-	1	830	66,173
968,700	968,700	-	-	-	-	-	-	-	-	1	-	-	-	1	831	67,141
107,100	107,100	-	-	-	-	-	-	-	1	-	-	-	-	1	832	67,248
111,100	111,100	-	-	-	-	-	-	-	1	-	-	-	-	1	833	67,359
112,400	112,400	-	-	-	-	-	-	-	1	-	-	-	-	1	834	67,472
123,400	123,400	-	-	-	-	-	-	-	1	-	-	-	-	1	835	67,595
131,700	131,700	-	-	-	-	-	-	-	1	-	-	-	-	1	836	67,727
132,400	132,400	-	-	-	-	-	-	-	1	-	-	-	-	1	837	67,859
155,200	155,200	-	-	-	-	-	-	-	1	-	-	-	-	1	838	68,015
157,600	157,600	-	-	-	-	-	-	-	1	-	-	-	-	1	839	68,172
166,200	166,200	-	-	-	-	-	-	-	1	-	-	-	-	1	840	68,338
167,000	167,000	-	-	-	-	-	-	-	1	-	-	-	-	1	841	68,505
175,400	175,400	-	-	1	-	-	-	-	1	-	-	-	-	2	843	68,856
176,700	176,700	-	-	-	-	-	-	-	1	-	-	-	-	1	844	69,033
190,700	190,700	-	-	-	-	-	-	-	1	-	-	-	-	1	845	69,224
191,300	191,300	-	-	-	-	-	-	-	1	-	-	-	-	1	846	69,415
192,500	192,500	1	-	-	-	-	-	-	2	-	-	-	-	3	849	69,992
216,300	216,300	-	-	-	-	-	-	-	1	-	-	-	-	1	850	70,209
238,900	238,900	-	-	-	-	-	-	-	1	-	-	-	-	1	851	70,448
249,700	249,700	-	-	-	-	-	-	-	1	-	-	-	-	1	852	70,697
267,200	267,200	-	-	-	-	-	-	-	1	-	-	-	-	1	853	70,964
280,500	280,500	-	-	-	-	-	-	-	1	-	-	-	-	1	854	71,245
311,100	311,100	-	-	-	-	-	-	-	1	-	-	-	-	1	855	71,556
311,400	311,400	-	-	-	-	-	-	-	1	-	-	-	-	1	856	71,867
314,800	314,800	-	-	-	-	-	-	-	1	-	-	-	-	1	857	72,182
317,600	317,600	-	-	-	-	-	-	-	1	-	-	-	-	1	858	72,500
321,700	321,700	-	-	-	-	-	-	-	1	-	-	-	-	1	859	72,822
364,600	364,600	-	-	-	-	-	-	-	1	-	-	-	-	1	860	73,186
375,000	375,000	-	-	-	-	-	-	-	1	-	-	-	-	1	861	73,561
388,200	388,200	-	-	-	-	-	-	-	1	-	-	-	-	1	862	73,949
389,500	389,500	-	-	-	-	-	-	-	1	-	-	-	-	1	863	74,339
417,100	417,100	-	-	-	-	-	-	-	1	-	-	-	-	1	864	74,756
423,500	423,500	-	-	-	-	-	-	-	1	-	-	-	-	1	865	75,179
427,500	427,500	-	-	-	-	-	-	-	1	-	-	-	-	1	866	75,607
446,100	446,100	-	-	-	-	-	-	-	1	-	-	-	-	1	867	76,053
451,900	451,900	-	-	-	-	-	-	-	1	-	-	-	-	1	868	76,505
507,100	507,100	-	-	-	-	-	-	-	1	-	-	-	-	1	869	77,012
589,000	589,000	-	-	-	-	-	-	-	1	-	-	-	-	1	870	77,601
629,500	629,500	-	-	-	-	-	-	-	1	-	-	-	-	1	871	78,231
669,200	669,200	-	-	-	-	-	-	-	1	-	-	-	-	1	872	78,900
674,400	674,400	-	-	-	-	-	-	-	1	-	-	-	-	1	873	79,574
703,800	703,800	-	-	-	-	-	-	-	1	-	-	-	-	1	874	80,278
757,300	757,300	-	-	-	-	-	-	-	1	-	-	-	-	1	875	81,035
810,000	810,000	-	-	-	-	-	-	-	1	-	-	-	-	1	876	81,845
824,500	824,500	-	-	-	-	-	-	-	1	-	-	-	-	1	877	82,670

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
885,200	885,200	-	-	-	-	-	-	-	1	-	-	-	-	1	878	83,555
975,000	975,000	-	-	-	-	-	-	-	1	-	-	-	-	1	879	84,530
1,297,200	1,297,200	-	-	-	-	-	-	-	1	-	-	-	-	1	880	85,827
114,000	114,000	-	-	-	-	-	-	1	-	-	-	-	-	1	881	85,941
120,100	120,100	-	-	-	-	-	-	1	-	-	-	-	-	1	882	86,061
129,000	129,000	-	-	-	-	-	-	1	-	-	-	-	-	1	883	86,190
146,200	146,200	-	-	-	-	-	-	1	-	-	-	-	-	1	884	86,336
146,500	146,500	-	-	-	-	-	-	1	-	-	-	-	-	1	885	86,483
147,800	147,800	-	-	-	-	-	-	1	-	-	-	-	-	1	886	86,631
150,600	150,600	-	-	-	-	-	-	1	-	-	-	-	-	1	887	86,781
154,700	154,700	-	-	-	-	-	-	1	-	-	-	-	-	1	888	86,936
160,600	160,600	-	-	-	-	-	-	1	-	-	-	-	-	1	889	87,097
162,900	162,900	-	-	-	-	-	-	1	-	-	-	-	-	1	890	87,260
179,000	179,000	-	-	-	-	-	-	1	-	-	-	-	-	1	891	87,439
191,400	191,400	-	-	-	-	-	-	1	-	-	-	-	-	1	892	87,630
195,500	195,500	-	-	-	-	-	-	1	-	-	-	-	-	1	893	87,825
210,800	210,800	-	-	-	-	-	-	1	-	-	-	-	-	1	894	88,036
228,400	228,400	-	-	-	-	-	-	1	-	-	-	-	-	1	895	88,265
231,400	231,400	-	-	-	-	-	-	1	-	-	-	-	-	1	896	88,496
235,200	235,200	-	-	-	-	-	-	1	-	-	-	-	-	1	897	88,731
256,200	256,200	-	-	-	-	-	-	1	-	-	-	-	-	1	898	88,987
257,200	257,200	-	-	-	-	-	-	1	-	-	-	-	-	1	899	89,245
262,500	262,500	-	-	-	-	-	-	1	-	-	-	-	-	1	900	89,507
275,900	275,900	-	-	-	-	-	-	1	-	-	-	-	-	1	901	89,783
299,800	299,800	-	-	-	-	-	-	1	-	-	-	-	-	1	902	90,083
305,200	305,200	-	-	-	1	-	-	1	-	-	-	-	-	2	904	90,693
313,100	313,100	-	-	-	-	-	-	1	-	-	-	-	-	1	905	91,006
318,600	318,600	-	-	-	-	-	-	1	-	-	-	-	-	1	906	91,325
338,700	338,700	-	-	-	-	-	-	1	-	-	-	-	-	1	907	91,664
363,700	363,700	-	-	-	-	-	-	1	-	-	-	-	-	1	908	92,027
379,300	379,300	-	-	-	-	-	-	1	-	-	-	-	-	1	909	92,407
403,800	403,800	-	-	-	-	-	-	1	-	-	-	-	-	1	910	92,810
418,200	418,200	-	-	-	-	-	-	1	-	-	-	-	-	1	911	93,229
429,600	429,600	-	-	-	-	-	-	1	-	-	-	-	-	1	912	93,658
435,400	435,400	-	-	-	-	-	-	1	-	-	-	-	-	1	913	94,094
468,400	468,400	-	-	-	-	-	-	1	-	-	-	-	-	1	914	94,562
489,400	489,400	-	-	-	-	-	-	1	-	-	-	-	-	1	915	95,051
495,200	495,200	-	-	-	-	-	-	1	-	-	-	-	-	1	916	95,547
535,100	535,100	-	-	-	-	-	-	1	-	-	-	-	-	1	917	96,082
603,000	603,000	-	-	-	-	-	-	1	-	-	-	-	-	1	918	96,685
608,500	608,500	-	-	-	-	-	-	1	-	-	-	-	-	1	919	97,293
699,900	699,900	-	-	-	-	-	-	1	-	-	-	-	-	1	920	97,993
708,900	708,900	-	-	-	-	-	-	1	-	-	-	-	-	1	921	98,702
738,400	738,400	-	-	-	-	-	-	1	-	-	-	-	-	1	922	99,440
765,000	765,000	-	-	-	-	-	-	1	-	-	-	-	-	1	923	100,205
773,700	773,700	-	-	-	-	-	-	1	-	-	-	-	-	1	924	100,979
812,100	812,100	-	-	-	-	-	-	1	-	-	-	-	-	1	925	101,791
900,700	900,700	-	-	-	-	-	-	1	-	-	-	-	-	1	926	102,692
990,300	990,300	-	-	-	-	-	-	1	-	-	-	-	-	1	927	103,682
1,170,700	1,170,700	-	-	-	-	-	-	1	-	-	-	-	-	1	928	104,853
1,200,000	1,200,000	-	-	-	-	-	-	1	-	-	-	-	-	1	929	106,053
100,900	100,900	-	1	-	-	-	1	-	-	-	-	-	-	2	931	106,255
109,400	109,400	-	-	-	-	-	1	-	-	-	-	-	-	1	932	106,364
111,700	111,700	-	-	-	-	-	1	-	-	-	-	-	-	1	933	106,476

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
118,100	118,100	-	-	1	-	-	1	-	-	-	-	-	-	2	935	106,712
118,300	118,300	-	-	-	-	-	1	-	-	-	-	-	-	1	936	106,830
120,600	120,600	-	-	-	-	-	1	-	-	-	-	-	-	1	937	106,951
137,900	137,900	-	-	-	-	-	1	-	-	-	-	-	-	1	938	107,089
152,600	152,600	-	-	1	-	-	1	-	-	-	-	-	-	2	940	107,394
163,900	163,900	-	-	-	-	-	1	-	-	-	-	-	-	1	941	107,558
165,500	165,500	-	-	-	-	-	1	-	-	-	-	-	-	1	942	107,723
179,900	179,900	-	-	-	-	-	1	-	-	-	-	-	-	1	943	107,903
186,200	186,200	-	-	-	-	-	1	-	-	-	-	-	-	1	944	108,090
187,700	187,700	-	-	-	-	-	1	-	-	-	-	-	-	1	945	108,277
193,300	193,300	-	-	-	-	-	1	-	-	-	-	-	-	1	946	108,471
208,500	208,500	-	-	-	-	-	1	-	-	-	-	-	-	1	947	108,679
209,300	209,300	-	-	-	-	-	1	-	-	-	-	-	-	1	948	108,888
209,800	209,800	-	-	-	-	-	1	-	-	-	-	-	-	1	949	109,098
242,000	242,000	-	-	-	-	-	1	-	-	-	-	-	-	1	950	109,340
254,500	254,500	-	-	-	-	-	1	-	-	-	-	-	-	1	951	109,595
255,700	255,700	-	-	-	-	-	1	-	-	-	-	-	-	1	952	109,850
258,400	258,400	-	-	-	-	-	1	-	-	-	-	-	-	1	953	110,109
260,700	260,700	-	-	-	-	-	1	-	-	-	-	-	-	1	954	110,369
270,100	270,100	-	-	-	-	-	1	-	-	-	-	-	-	1	955	110,640
277,400	277,400	-	-	-	-	-	1	-	-	-	-	-	-	1	956	110,917
288,500	288,500	-	-	-	-	-	1	-	-	-	-	-	-	1	957	111,205
319,200	319,200	-	-	-	-	-	1	-	-	-	-	-	-	1	958	111,525
320,400	320,400	-	-	-	-	-	1	-	-	-	-	-	-	1	959	111,845
347,200	347,200	-	-	-	-	-	1	-	-	-	-	-	-	1	960	112,192
366,900	366,900	-	-	-	-	-	1	-	-	-	-	-	-	1	961	112,559
373,300	373,300	-	-	-	-	-	1	-	-	-	-	-	-	1	962	112,932
381,600	381,600	-	-	-	-	-	1	-	-	-	-	-	-	1	963	113,314
382,300	382,300	-	-	-	-	-	1	-	-	-	-	-	-	1	964	113,696
394,300	394,300	-	-	-	-	-	1	-	-	-	-	-	-	1	965	114,091
401,600	401,600	-	-	-	-	-	1	-	-	-	-	-	-	1	966	114,492
429,800	429,800	-	-	-	-	-	1	-	-	-	-	-	-	1	967	114,922
431,000	431,000	-	-	-	-	-	1	-	-	-	-	-	-	1	968	115,353
461,900	461,900	-	-	-	-	-	1	-	-	-	-	-	-	1	969	115,815
490,200	490,200	-	-	-	-	-	1	-	-	-	-	-	-	1	970	116,305
594,900	594,900	-	-	-	-	-	2	-	-	-	-	-	-	2	972	117,495
652,300	652,300	-	-	-	-	-	1	-	-	-	-	-	-	1	973	118,147
678,900	678,900	-	-	-	-	-	1	-	-	-	-	-	-	1	974	118,827
732,000	732,000	-	-	-	-	-	1	-	-	-	-	-	-	1	975	119,559
760,900	760,900	-	-	-	-	-	1	-	-	-	-	-	-	1	976	120,320
815,800	815,800	-	-	-	-	-	1	-	-	-	-	-	-	1	977	121,136
835,700	835,700	-	-	-	-	-	1	-	-	-	-	-	-	1	978	121,972
853,700	853,700	-	-	-	-	-	1	-	-	-	-	-	-	1	979	122,905
935,100	935,100	-	-	-	-	-	1	-	-	-	-	-	-	1	980	123,840
107,600	107,600	-	-	-	-	1	-	-	-	-	-	-	-	1	981	123,948
114,800	114,800	-	-	-	-	1	-	-	-	-	-	-	-	1	982	124,063
116,900	116,900	-	-	-	-	1	-	-	-	-	-	-	-	1	983	124,180
128,000	128,000	-	-	-	-	1	-	-	-	-	-	-	-	1	984	124,308
131,500	131,500	-	-	-	-	1	-	-	-	-	-	-	-	1	985	124,439
136,800	136,800	-	-	-	-	1	-	-	-	-	-	-	-	1	986	124,576
143,000	143,000	-	-	-	-	1	-	-	-	-	-	-	-	1	987	124,719
144,200	144,200	-	-	-	-	1	-	-	-	-	-	-	-	1	988	124,863
156,100	156,100	-	-	-	-	1	-	-	-	-	-	-	-	1	989	125,019
156,200	156,200	-	-	-	-	1	-	-	-	-	-	-	-	1	990	125,175

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 Test Year Ended December 31, 2015
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
167,600	167,600	-	-	-	-	1	-	-	-	-	-	-	-	1	991	125,343
175,600	175,600	-	-	-	-	1	-	-	-	-	-	-	-	1	992	125,519
178,000	178,000	-	-	-	-	1	-	-	-	-	-	-	-	1	993	125,697
178,200	178,200	-	-	-	-	1	-	-	-	-	-	-	-	1	994	125,875
184,400	184,400	1	-	-	-	1	-	-	-	-	-	-	-	2	996	126,244
189,700	189,700	-	-	-	-	1	-	-	-	-	-	-	-	1	997	126,433
194,000	194,000	-	-	-	-	1	-	-	-	-	-	-	-	1	998	126,627
195,400	195,400	-	-	-	-	1	-	-	-	-	-	-	-	1	999	126,823
215,700	215,700	-	-	-	-	1	-	-	-	-	-	-	-	1	1,000	127,038
219,000	219,000	-	-	-	-	1	-	-	-	-	-	-	-	1	1,001	127,257
220,900	220,900	-	-	-	-	1	-	-	-	-	-	-	-	1	1,002	127,476
239,900	239,900	-	-	-	-	1	-	-	-	-	-	-	-	1	1,003	127,718
241,600	241,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,004	127,960
244,200	244,200	-	-	-	-	1	-	-	-	-	-	-	-	1	1,005	128,204
247,500	247,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,006	128,452
251,300	251,300	-	-	-	-	1	-	-	-	-	-	-	-	1	1,007	128,703
255,900	255,900	-	-	-	-	1	-	-	-	-	-	-	-	1	1,008	128,959
302,200	302,200	-	-	-	-	1	-	-	-	-	-	-	-	1	1,009	129,261
318,700	318,700	-	-	-	-	1	-	-	-	-	-	-	-	1	1,010	129,580
335,000	335,000	-	-	-	-	1	-	-	-	-	-	-	-	1	1,011	129,915
365,500	365,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,012	130,280
366,800	366,800	-	-	-	-	1	-	-	-	-	-	-	-	1	1,013	130,647
378,900	378,900	-	-	-	-	1	-	-	-	-	-	-	-	1	1,014	131,026
383,700	383,700	-	-	-	-	1	-	-	-	-	-	-	-	1	1,015	131,410
398,600	398,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,016	131,808
430,900	430,900	-	-	-	1	1	-	-	-	-	-	-	-	2	1,018	132,670
471,000	471,000	-	-	-	-	1	-	-	-	-	-	-	-	1	1,019	133,141
504,100	504,100	-	-	-	-	1	-	-	-	-	-	-	-	1	1,020	133,645
521,900	521,900	-	-	-	-	1	-	-	-	-	-	-	-	1	1,021	134,167
549,200	549,200	-	-	-	-	1	-	-	-	-	-	-	-	1	1,022	134,716
610,500	610,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,023	135,327
644,300	644,300	-	-	-	-	1	-	-	-	-	-	-	-	1	1,024	135,971
673,600	673,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,025	136,645
740,100	740,100	-	-	-	-	1	-	-	-	-	-	-	-	1	1,026	137,385
950,500	950,500	-	-	-	-	1	1	-	-	-	-	-	-	1	1,027	138,335
103,300	103,300	-	-	-	-	1	-	-	-	-	-	-	-	1	1,028	138,438
113,300	113,300	-	-	-	-	1	-	-	-	-	-	-	-	1	1,029	138,552
113,600	113,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,030	138,665
116,800	116,800	-	-	-	-	1	-	-	-	-	-	-	-	1	1,031	138,782
121,800	121,800	-	-	-	-	1	-	-	-	-	-	-	-	1	1,032	138,904
134,800	134,800	-	-	-	-	1	-	-	-	-	-	-	-	1	1,033	139,039
138,600	138,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,034	139,177
142,600	142,600	-	-	-	-	1	-	-	-	-	-	-	-	1	1,035	139,320
168,500	168,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,036	139,488
171,500	171,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,037	139,660
175,300	175,300	-	-	-	-	1	-	-	-	-	-	-	-	1	1,038	139,835
176,800	176,800	-	-	-	-	1	-	-	-	-	-	-	-	1	1,039	140,012
186,500	186,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,040	140,199
192,700	192,700	-	-	-	-	1	-	-	-	-	-	-	-	1	1,041	140,391
195,000	195,000	-	-	-	-	1	-	-	-	-	-	-	-	1	1,042	140,586
214,200	214,200	-	-	-	-	1	-	-	-	-	-	-	-	1	1,043	140,800
219,500	219,500	-	-	-	-	1	-	-	-	-	-	-	-	1	1,044	141,020
227,000	227,000	-	-	-	-	1	-	-	-	-	-	-	-	1	1,045	141,247
230,700	230,700	-	-	-	-	1	-	-	-	-	-	-	-	1	1,046	141,478

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
244,000	244,000	-	-	-	1	-	-	-	-	-	-	-	-	1	1,047	141,722
245,800	245,800	-	-	-	1	-	-	-	-	-	-	-	-	1	1,048	141,967
247,000	247,000	-	-	-	1	-	-	-	-	-	-	-	-	1	1,049	142,214
267,400	267,400	-	-	-	1	-	-	-	-	-	-	-	-	1	1,050	142,482
303,100	303,100	-	-	-	1	-	-	-	-	-	-	-	-	1	1,051	142,785
322,200	322,200	-	-	-	1	-	-	-	-	-	-	-	-	1	1,052	143,107
366,700	366,700	-	-	-	1	-	-	-	-	-	-	-	-	1	1,053	143,474
378,300	378,300	-	-	-	1	-	-	-	-	-	-	-	-	1	1,054	143,852
396,500	396,500	-	-	-	1	-	-	-	-	-	-	-	-	1	1,055	144,249
421,800	421,800	-	-	-	1	-	-	-	-	-	-	-	-	1	1,056	144,670
454,700	454,700	-	-	-	1	-	-	-	-	-	-	-	-	1	1,057	145,125
481,400	481,400	-	-	-	1	-	-	-	-	-	-	-	-	1	1,058	145,607
487,600	487,600	-	-	-	1	-	-	-	-	-	-	-	-	1	1,059	146,094
496,400	496,400	-	-	-	1	-	-	-	-	-	-	-	-	1	1,060	146,591
574,800	574,800	-	-	-	1	-	-	-	-	-	-	-	-	1	1,061	147,165
600,900	600,900	-	-	-	1	-	-	-	-	-	-	-	-	1	1,062	147,766
603,300	603,300	-	-	-	1	-	-	-	-	-	-	-	-	1	1,063	148,370
608,700	608,700	-	-	-	1	-	-	-	-	-	-	-	-	1	1,064	148,978
633,800	633,800	-	-	-	1	-	-	-	-	-	-	-	-	1	1,065	149,612
747,400	747,400	-	-	-	1	-	-	-	-	-	-	-	-	1	1,066	150,359
802,500	802,500	-	-	-	1	-	-	-	-	-	-	-	-	1	1,067	151,162
817,800	817,800	-	-	-	1	-	-	-	-	-	-	-	-	1	1,068	151,980
824,600	824,600	-	-	-	1	-	-	-	-	-	-	-	-	1	1,069	152,804
104,000	104,000	-	-	1	-	-	-	-	-	-	-	-	-	1	1,070	152,908
104,300	104,300	-	-	1	-	-	-	-	-	-	-	-	-	1	1,071	153,013
105,500	105,500	-	-	1	-	-	-	-	-	-	-	-	-	1	1,072	153,118
108,200	108,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,073	153,226
127,200	127,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,074	153,354
131,100	131,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,075	153,485
142,100	142,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,076	153,627
145,800	145,800	-	-	1	-	-	-	-	-	-	-	-	-	1	1,077	153,773
147,200	147,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,078	153,920
155,700	155,700	-	-	1	-	-	-	-	-	-	-	-	-	1	1,079	154,075
157,200	157,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,080	154,233
158,600	158,600	-	-	1	-	-	-	-	-	-	-	-	-	1	1,081	154,391
169,200	169,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,082	154,560
178,600	178,600	-	-	1	-	-	-	-	-	-	-	-	-	1	1,083	154,739
178,900	178,900	-	-	1	-	-	-	-	-	-	-	-	-	1	1,084	154,918
187,400	187,400	-	-	1	-	-	-	-	-	-	-	-	-	1	1,085	155,105
189,200	189,200	-	-	1	-	-	-	-	-	-	-	-	-	1	1,086	155,295
194,100	194,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,087	155,489
211,500	211,500	-	-	1	-	-	-	-	-	-	-	-	-	1	1,088	155,700
216,900	216,900	-	-	1	-	-	-	-	-	-	-	-	-	1	1,089	155,917
241,800	241,800	-	-	1	-	-	-	-	-	-	-	-	-	1	1,090	156,159
248,400	248,400	-	-	1	-	-	-	-	-	-	-	-	-	1	1,091	156,407
249,300	249,300	-	-	1	-	-	-	-	-	-	-	-	-	1	1,092	156,657
264,400	264,400	-	-	1	-	-	-	-	-	-	-	-	-	1	1,093	156,921
275,100	275,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,094	157,196
277,500	277,500	-	-	1	-	-	-	-	-	-	-	-	-	1	1,095	157,474
294,100	294,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,096	157,768
295,400	295,400	-	-	1	-	-	-	-	-	-	-	-	-	1	1,097	158,063
298,300	298,300	-	-	1	-	-	-	-	-	-	-	-	-	1	1,098	158,361
384,100	384,100	-	-	1	-	-	-	-	-	-	-	-	-	1	1,099	158,745
390,900	390,900	-	-	1	-	-	-	-	-	-	-	-	-	1	1,100	159,136

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

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 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
455,800	455,800	-	-	1	-	-	-	-	-	-	-	-	-	1	1,101	159,592
104,400	104,400	-	1	-	-	-	-	-	-	-	-	-	-	1	1,102	159,697
105,800	105,800	-	1	-	-	-	-	-	-	-	-	-	-	1	1,103	159,802
117,800	117,800	-	1	-	-	-	-	-	-	-	-	-	-	1	1,104	159,920
121,100	121,100	-	1	-	-	-	-	-	-	-	-	-	-	1	1,105	160,041
131,300	131,300	-	1	-	-	-	-	-	-	-	-	-	-	1	1,106	160,173
150,700	150,700	-	1	-	-	-	-	-	-	-	-	-	-	1	1,107	160,323
165,900	165,900	-	1	-	-	-	-	-	-	-	-	-	-	1	1,108	160,489
174,900	174,900	-	1	-	-	-	-	-	-	-	-	-	-	1	1,109	160,664
175,800	175,800	-	1	-	-	-	-	-	-	-	-	-	-	1	1,110	160,840
182,200	182,200	-	1	-	-	-	-	-	-	-	-	-	-	1	1,111	161,022
194,900	194,900	-	1	-	-	-	-	-	-	-	-	-	-	1	1,112	161,217
198,900	198,900	-	1	-	-	-	-	-	-	-	-	-	-	1	1,113	161,416
202,000	202,000	-	1	-	-	-	-	-	-	-	-	-	-	1	1,114	161,618
204,600	204,600	-	1	-	-	-	-	-	-	-	-	-	-	1	1,115	161,822
204,800	204,800	-	1	-	-	-	-	-	-	-	-	-	-	1	1,116	162,027
209,200	209,200	-	1	-	-	-	-	-	-	-	-	-	-	1	1,117	162,236
210,700	210,700	-	1	-	-	-	-	-	-	-	-	-	-	1	1,118	162,447
217,000	217,000	-	1	-	-	-	-	-	-	-	-	-	-	1	1,119	162,664
236,000	236,000	-	1	-	-	-	-	-	-	-	-	-	-	1	1,120	162,900
320,200	320,200	-	1	-	-	-	-	-	-	-	-	-	-	1	1,121	163,220
340,100	340,100	-	1	-	-	-	-	-	-	-	-	-	-	1	1,122	163,560
406,200	406,200	-	1	-	-	-	-	-	-	-	-	-	-	1	1,123	163,967
4,598,200	4,598,200	-	1	-	-	-	-	-	-	-	-	-	-	1	1,124	168,565
103,100	103,100	1	-	-	-	-	-	-	-	-	-	-	-	1	1,125	168,668
105,700	105,700	1	-	-	-	-	-	-	-	-	-	-	-	1	1,126	168,774
107,300	107,300	1	-	-	-	-	-	-	-	-	-	-	-	1	1,127	168,881
108,800	108,800	1	-	-	-	-	-	-	-	-	-	-	-	1	1,128	168,990
115,300	115,300	1	-	-	-	-	-	-	-	-	-	-	-	1	1,129	169,105
118,000	118,000	1	-	-	-	-	-	-	-	-	-	-	-	1	1,130	169,223
121,600	121,600	1	-	-	-	-	-	-	-	-	-	-	-	1	1,131	169,345
124,200	124,200	1	-	-	-	-	-	-	-	-	-	-	-	1	1,132	169,469
131,200	131,200	1	-	-	-	-	-	-	-	-	-	-	-	1	1,133	169,600
135,200	135,200	1	-	-	-	-	-	-	-	-	-	-	-	1	1,134	169,735
135,400	135,400	1	-	-	-	-	-	-	-	-	-	-	-	1	1,135	169,871
146,000	146,000	1	-	-	-	-	-	-	-	-	-	-	-	1	1,136	170,017
149,700	149,700	1	-	-	-	-	-	-	-	-	-	-	-	1	1,137	170,166
159,000	159,000	1	-	-	-	-	-	-	-	-	-	-	-	1	1,138	170,325
160,700	160,700	1	-	-	-	-	-	-	-	-	-	-	-	1	1,139	170,486
182,800	182,800	1	-	-	-	-	-	-	-	-	-	-	-	1	1,140	170,669
189,500	189,500	1	-	-	-	-	-	-	-	-	-	-	-	1	1,141	170,858
192,100	192,100	1	-	-	-	-	-	-	-	-	-	-	-	1	1,142	171,050
197,800	197,800	1	-	-	-	-	-	-	-	-	-	-	-	1	1,143	171,248
204,700	204,700	1	-	-	-	-	-	-	-	-	-	-	-	1	1,144	171,453
214,000	214,000	1	-	-	-	-	-	-	-	-	-	-	-	1	1,145	171,667
229,200	229,200	1	-	-	-	-	-	-	-	-	-	-	-	1	1,146	171,896
233,000	233,000	1	-	-	-	-	-	-	-	-	-	-	-	1	1,147	172,129
242,400	242,400	1	-	-	-	-	-	-	-	-	-	-	-	1	1,148	172,372
255,300	255,300	1	-	-	-	-	-	-	-	-	-	-	-	1	1,149	172,627
282,300	282,300	1	-	-	-	-	-	-	-	-	-	-	-	1	1,150	172,909
322,500	322,500	1	-	-	-	-	-	-	-	-	-	-	-	1	1,151	173,232
333,900	333,900	1	-	-	-	-	-	-	-	-	-	-	-	1	1,152	173,566
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,152	173,566

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

Exhibit
 Schedule H-5
 Page 7
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
Totals		96	97	96	95	95	98	96	97	97	95	95	95	840		
														Average Usage		81,355
														Median Usage		75,000
														Average # Customers		70
														Change in Number of Customers		(1)

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Irrigation

Exhibit
 Schedule H-5
 Page 8
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-													2	2	-
1,001	2,000													-	2	-
2,001	3,000													-	2	-
3,001	4,000			1										1	3	4
4,001	5,000													-	3	4
5,001	6,000													-	3	4
6,001	7,000													-	3	4
7,001	8,000													-	3	4
8,001	9,000													-	3	4
9,001	10,000													-	3	4
10,001	12,000													-	3	4
12,001	14,000													-	3	4
14,001	16,000													-	3	4
16,001	18,000													-	3	4
18,001	20,000													-	3	4
20,001	25,000													-	3	4
25,001	30,000													-	3	4
30,001	35,000													-	3	4
35,001	40,000													-	3	4
40,001	45,000													-	3	4
45,001	50,000													-	3	4
50,001	60,000													-	3	4
60,001	70,000													-	3	4
70,001	80,000													-	3	4
80,001	90,000	1												1	4	89
90,001	100,000													-	4	89
848,300	848,300		1											1	5	937
954,300	954,300													1	6	1,891
1,050,000	1,050,000												1	1	7	2,941
1,391,000	1,391,000	1												1	8	4,332
2,181,000	2,181,000													1	9	6,513
2,417,300	2,417,300													1	10	8,930
2,611,900	2,611,900					1								1	11	11,542
2,892,000	2,892,000		1											1	12	14,434
3,034,000	3,034,000				1									1	13	17,468
3,370,200	3,370,200													1	14	20,839
3,606,900	3,606,900			1										1	15	24,445
3,754,300	3,754,300					1								1	16	28,200
3,799,000	3,799,000													1	17	31,999
3,799,100	3,799,100	1												1	18	35,798
3,848,000	3,848,000										1			1	19	39,646
4,099,000	4,099,000									1				1	20	43,745
4,137,600	4,137,600										1			1	21	47,882
4,238,000	4,238,000											1		1	22	52,120
4,892,400	4,892,400				1									1	23	57,013
5,262,000	5,262,000		1											1	24	62,275
5,488,100	5,488,100									1				1	25	67,763
5,827,500	5,827,500					1								1	26	73,590
5,956,900	5,956,900								1					1	27	79,547
6,193,300	6,193,300						1							1	28	85,741
6,329,200	6,329,200	1												1	29	92,070
6,722,000	6,722,000			1										1	30	98,792
7,190,700	7,190,700		1											1	31	105,983
7,713,100	7,713,100						1							1	32	113,696
7,840,000	7,840,000					1								1	33	121,536

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
-	-													-	-	-
1	1,000	1		1			3	1	1	3	1	2	1	7	7	4
1,001	2,000		1							2				11	18	20
2,001	3,000		1					1						5	23	33
3,001	4,000							1				1		2	25	40
4,001	5,000			1	1									2	27	49
5,001	6,000							1						1	28	54
6,001	7,000													-	28	54
7,001	8,000													-	28	54
8,001	9,000	1								1				2	30	71
9,001	10,000													-	30	71
10,001	11,000													-	30	71
11,001	12,000													-	30	71
12,001	13,000													-	30	71
13,001	14,000													-	30	71
14,001	15,000													-	30	71
15,001	16,000													-	30	71
16,001	17,000													-	30	71
17,001	18,000			1										1	31	89
18,001	19,000													-	31	89
19,001	20,000													-	31	89
20,001	21,000													-	31	89
21,001	22,000													-	31	89
22,001	23,000													-	31	89
23,001	24,000													-	31	89
24,001	25,000		1						1					1	32	113
25,001	26,000													-	32	139
26,001	27,000				1			1						2	35	192
27,001	28,000													-	35	192
28,001	29,000													-	35	192
29,001	30,000													-	35	192
30,001	31,000													-	35	192
31,001	32,000													-	35	192
32,001	33,000													-	35	192
33,001	34,000		1					1	1					3	38	292
34,001	35,000													-	38	292
35,001	36,000	1												1	39	328
36,001	37,000			1										1	40	364
37,001	38,000					1								1	41	402
38,001	39,000													-	41	402
39,001	40,000													-	41	402
40,001	41,000													-	41	402
41,001	42,000													-	41	402
42,001	43,000													-	41	402
43,001	44,000													-	41	402
44,001	45,000													-	41	402
45,001	46,000													-	41	402
46,001	47,000													-	41	402

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
47,001	48,000													-	41	402
48,001	49,000													-	41	402
49,001	50,000													-	41	402
50,001	51,000													-	41	402
51,001	52,000													-	41	402
52,001	53,000								1					1	42	454
53,001	54,000													-	42	454
54,001	55,000													-	42	454
55,001	56,000													-	42	454
56,001	57,000													-	42	454
57,001	58,000													-	42	454
58,001	59,000													-	42	454
59,001	60,000													-	42	454
60,001	61,000													-	42	454
61,001	62,000				1									1	43	516
62,001	63,000													-	43	516
63,001	64,000													-	43	516
64,001	65,000													-	43	516
65,001	66,000						1							1	44	581
66,001	67,000													-	44	581
67,001	68,000													-	44	581
68,001	69,000													-	44	581
69,001	70,000													-	44	581
70,001	71,000													-	44	581
71,001	72,000							1						1	45	653
72,001	73,000													-	45	653
73,001	74,000													-	45	653
74,001	75,000													-	45	653
75,001	76,000													-	45	653
76,001	77,000													-	45	653
77,001	78,000													-	45	653
78,001	79,000													-	45	653
79,001	80,000													-	45	653
80,001	81,000													-	45	653
81,001	82,000													-	45	653
82,001	83,000													-	45	653
83,001	84,000													-	45	653
84,001	85,000													-	45	653
85,001	86,000													-	45	653
86,001	87,000													-	45	653
87,001	88,000													-	45	653
88,001	89,000													-	45	653
89,001	90,000													-	45	653
90,001	91,000													-	45	653
91,001	92,000													-	45	653
92,001	93,000													-	45	653
93,001	94,000													-	45	653
94,001	95,000													-	45	653

Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Customer Classification Construction Water

Exhibit
 Schedule H-5
 Page 9
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
95,001	96,000													-	45	653
96,001	97,000													-	45	653
97,001	98,000													-	45	653
98,001	99,000													-	45	653
99,001	100,000													-	45	653
691,300	691,300				1									1	46	1,344
235,800	235,800					1								1	47	1,580
167,600	167,600						1							1	48	1,747
148,100	148,100							1						1	49	1,895
209,600	209,600								1					1	50	2,105
-	-													-	50	2,105
-	-													-	50	2,105
Totals		3	4	4	5	6	3	7	7	4	2	2	3	50		
										Average Usage				42,098		
										Median Usage				4,000		
										Average # Customers				4		
										Change in Number of Customers				-		

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Computation of Increase in Gross Revenue
 Requirements As Adjusted

Exhibit
 Schedule A-1
 Page 1
 Witness: Bourassa

Line
 No.

1	Fair Value Rate Base	\$ 8,592,112
2		
3	Adjusted Operating Income	455,043
4		
5	Current Rate of Return	5.30%
6		
7	Required Operating Income	\$ 728,370
8		
9	Required Rate of Return on Fair Value Rate Base	8.48%
10		
11	Operating Income Deficiency	\$ 273,326
12		
13	Gross Revenue Conversion Factor	1.3510
14		
15	Increase in Gross Revenue Requirement	\$ 369,273
16		
17		
18	Adjusted Test Year Revenues	\$ 3,412,382
19	Increase in Gross Revenue Revenue Requirement	\$ 369,273
20	Proposed Revenue Requirement	\$ 3,781,654
21	% Increase	10.82%

Customer Classification <u>(Residential Commercial, Irrigation)</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
26 5/8x3/4 Inch Residential	\$ 2,949,320	\$ 3,270,796	\$ 321,476	10.90%
27 1 Inch Residential	173,679	192,610	18,931	10.90%
28				
29 5/8x3/4 Inch Commercial	6,921	7,676	754	10.90%
30 3/4 Inch Commercial	\$ 1,408	\$ 1,562	154	10.90%
31 1 Inch Commercial	17,604	19,523	1,919	10.90%
32 1 1/2 Inch Commercial	16,238	18,008	1,770	10.90%
33 2 Inch Commercial	121,546	134,795	13,249	10.90%
34				
35 Effluent	104,788	115,691	10,904	10.41%
36				
37 Revenue Annualization	3,884	4,307	423	10.90%
38				
39 Subtotal	\$ 3,395,390	\$ 3,764,969	\$ 369,579	10.88%
40				
41 Other Water Revenues	20,050	20,050	-	0.00%
42 Reconciling Amount	(3,058)	(3,364)	(306)	10.01%
43 Rounding			-	0.00%
44 Total of Water Revenues	\$ 3,412,382	\$ 3,781,655	\$ 369,273	10.82%

47 SUPPORTING SCHEDULES:

- 48 B-1
- 49 C-1
- 50 C-3
- 51 H-1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Summary of Results of Operations

Exhibit
 Schedule A-2
 Page 1
 Witness: Bourassa

Line No.	Description	Prior Years Ended		Test Year		Projected Year	
		12/31/2013	12/31/2014	Actual 12/31/2015	Adjusted 12/31/2015	Present Rates 12/31/2016	Proposed Rates 12/31/2016
1	Gross Revenues	\$ 3,361,879	\$ 3,415,529	\$ 3,408,498	\$ 3,412,382	\$ 3,412,382	\$ 3,781,654
2							
3	Revenue Deductions and	2,841,752	2,805,464	2,930,008	2,957,338	2,957,338	3,053,285
4	Operating Expenses						
5							
6	Operating Income	\$ 520,126	\$ 610,065	\$ 478,490	\$ 455,043	\$ 455,043	\$ 728,369
7							
8	Other Income and	(394)	(1,697)	(1,882)	(1,882)	(1,882)	(1,882)
9	Deductions						
10							
11	Interest Expense	(121,260)	(112,681)	(102,054)	(67,198)	(67,198)	(67,198)
12							
13	Net Income	\$ 398,473	\$ 495,687	\$ 374,554	\$ 385,963	\$ 385,963	\$ 659,289
14							
15	Common Shares	180,041	180,041	180,041	180,041	180,041	180,041
16							
17	Earned Per Average						
18	Common Share	2.21	2.75	2.08	2.14	2.14	3.66
19							
20	Dividends Per						
21	Common Share	-	-	-	-	-	-
22							
23	Payout Ratio	-	-	-	-	-	-
24							
25	Return on Average						
26	Invested Capital	3.65%	4.37%	3.41%	3.41%	3.53%	6.03%
27							
28	Return on Year End						
29	Capital	3.49%	4.40%	3.50%	3.41%	3.65%	6.24%
30							
31	Return on Average						
32	Common Equity	7.25%	9.45%	6.59%	6.79%	6.37%	10.64%
33							
34	Return on Year End						
35	Common Equity	7.97%	9.02%	6.38%	6.56%	6.17%	10.10%
36							
37	Times Bond Interest Earned						
38	Before Income Taxes	4.29	5.41	4.69	8.35	8.35	13.75
39							
40	Times Total Interest and						
41	Preferred Dividends Earned						
42	After Income Taxes	4.29	5.42	4.69	7.09	7.09	10.81
43							
44							
45							
46							
47							
48	<u>SUPPORTING SCHEDULES</u>						
49	C-1						
50	E-2						
51	F-1						
52							

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Summary of Capital Structure

Exhibit
 Schedule A-3
 Page 1
 Witness: Bourassa

Line No.	Description:	Prior Years Ended		Test Year	Projected Year
		12/31/2013	12/31/2014	12/31/2015	12/31/2016
1					
2					
3	Short-Term Debt	-	-	-	-
4	Long-Term Debt	3,813,000	3,534,000	3,411,008 ¹	3,118,636 ¹
5					
6	Total Debt	\$ 3,813,000	\$ 3,534,000	\$ 3,411,008	\$ 3,118,636
7					
8					
9	Preferred Stock	-	-	-	-
10					
11	Common Equity	4,999,162	5,494,850	5,869,403	6,255,367
12					
13					
14	Total Capital & Debt	\$ 8,812,162	\$ 9,028,850	\$ 9,280,412	\$ 9,374,003
15					
16					
17	Capitalization Ratios:				
18					
19	Long-Term Debt	43.27%	39.14%	36.75%	33.27%
20					
21	Total Debt	43.27%	39.14%	36.75%	33.27%
22					
23					
24	Preferred Stock	-	-	-	-
25					
26	Common Equity	56.73%	60.86%	63.25%	66.73%
27					
28					
29	Total Capital	100.00%	100.00%	100.00%	100.00%
30					
31					
32	Weighted Cost of				
33	Senior Capital	0.00%	0.00%	1.12%	1.01%
34					
35					
36					
37	¹ Allocated portion of long-term debt based upon consolidated capital structure				
38	and proposed rate base.				
39					
40					
41					
42					
43					
44					
45	<u>SUPPORTING SCHEDULES:</u>				
46	E-1				
47	D-1				
48					
49					
50					

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Construction Expenditures
and Gross Utility Plant in Service

Exhibit
Schedule A-4
Page 1
Witness: Bourassa

<u>Line No.</u>		<u>Construction Expenditures</u>	<u>Net Plant Placed in Service</u>	<u>Gross Utility Plant in Service</u>
1				
2				
3				
4	Prior Year Ended 12/31/2013	1,895,789	1,895,789	22,240,467
5				
6	Prior Year Ended 12/31/2014	649,828	5,943	22,246,410
7				
8	Test Year Ended 12/31/2015	230,633	2,726,181	24,972,591
9				
10	Projected Year Ended 12/31/2016	162,971	162,971	25,135,561
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34	<u>SUPPORTING SCHEDULES:</u>			
35	B-2			
36	E-5			
37	F-3			
38				
39				
40				

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Summary Statements of Cash Flows

Exhibit
 Schedule A-5
 Page 1
 Witness: Bourassa

Line No.	Prior Year Ended 12/31/2013	Prior Year Ended 12/31/2014	Test Year Ended 12/31/2015	Projected Year Present Rates 12/31/2016	Projected Year Proposed Rates 12/31/2016
5	Cash Flows from Operating Activities				
6	\$ 398,473	\$ 495,687	\$ 374,554	\$ 385,963	\$ 659,289
7	Adjustments to reconcile net income to net cash provided by operating activities:				
8					
9	1,017,967	849,996	1,008,985	911,901	911,901
10	(275,998)	(253,636)	(383,915)		
11	Changes in Certain Assets and Liabilities:				
12	(17,686)	2,915	(13,970)		
13	-	-	-		
14	-	-	-		
15	-	-	-		
16	-	-	-		
17	664,964	(21,827)	(801,100)		
18	2,353	8,988	(1,844)		
19	135,174	135,110	135,184		
20	249,006	(297,277)	195,846		
21	-	-	-		
22	(636)	(647)	(1,013)		
23	430	4,112	(1,700)		
24	742	5,407	(1,396)		
25	-	-	2		
26	<u>\$ 2,174,789</u>	<u>\$ 928,828</u>	<u>\$ 509,633</u>	<u>\$ 1,297,865</u>	<u>\$ 1,571,191</u>
27	Cash Flow From Investing Activities:				
28	(1,895,789)	(649,828)	(230,633)	(162,971)	(162,971)
29	-	-	-		
30	-	-	-		
31	<u>\$ (1,895,789)</u>	<u>\$ (649,828)</u>	<u>\$ (230,633)</u>	<u>\$ (162,971)</u>	<u>\$ (162,971)</u>
32	Cash Flow From Financing Activities				
33	-	-	-		
34	(279,000)	(279,000)	(279,000)	(279,000)	(279,000)
35	-	-	-	-	-
36	-	-	-	-	-
37	-	-	-	(320,119)	(560,279)
38	-	-	-	-	-
39	-	-	-	-	-
40					
41	<u>\$ (279,000)</u>	<u>\$ (279,000)</u>	<u>\$ (279,000)</u>	<u>\$ (599,119)</u>	<u>\$ (839,279)</u>
42	(0)	0	0	535,775	568,942
43	-	(0)	0	0	0
44	<u>\$ (0)</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 535,775</u>	<u>\$ 568,942</u>

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 48
 49 SUPPORTING SCHEDULES:
 50 E-3
 51 F-2
 52
 53

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Summary of Rate Base

Exhibit
 Schedule B-1
 Page 1
 Witness: Bourassa

Line No.		<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1			
2	Gross Utility Plant in Service	\$ 25,011,061	\$ 25,011,061
3	Less: Accumulated Depreciation	<u>14,949,778</u>	<u>14,949,778</u>
4			
5	Net Utility Plant in Service	\$ 10,061,283	\$ 10,061,283
6			
7	<u>Less:</u>		
8	Advances in Aid of Construction	-	-
9			
10	Contributions in Aid of Construction	1,261,344	1,261,344
11			
12	Accumulated Amortization of CIAC	(888,415)	(888,415)
13			
14	Customer Meter Deposits	-	-
15	Deferred Income Taxes & Credits	1,188,519	1,188,519
16			
17			
18			
19	<u>Plus:</u>		
20			
21			
22	Prepayments	-	-
23	Materials and Supplies	-	-
24	Allowance for Cash Working Capital	92,277	92,277
25			
26	Total Rate Base	<u>\$ 8,592,112</u>	<u>\$ 8,592,112</u>
27			
28			
29			
30			
31			
32	<u>SUPPORTING SCHEDULES:</u>		
33	B-2		
34	B-3		
35	B-5		
36	E-1		
37			
38			
39			
40			

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Schedule B-2
 Page 1
 Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustment	Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	\$ 24,972,591	38,470	\$ 25,011,061
3				
4	Less:			
5	Accumulated			
6	Depreciation	14,958,290	(8,512)	14,949,778
7				
8				
9	Net Utility Plant			
10	in Service	\$ 10,014,301		\$ 10,061,283
11				
12	Less:			
13	Advances in Aid of			
14	Construction	-	-	-
15				
16	Contributions in Aid of			
17	Construction - Gross	1,242,739	18,605	1,261,344
18				
19	Accumulated Amortization of CIAC	(878,028)	(10,387)	(888,415)
20				
21	Customer Meter Deposits	-		-
22	Accumulated Deferred Income Tax	-	1,188,519	1,188,519
23				
24				
25				
26	Plus:			
27				
28				
29	Prepayments	-		-
30	Materials and Supplies	-		-
31	Allowance for Cash Working Capital	-	92,277	92,277
32				
33				
34	Total	<u>\$ 9,649,590</u>		<u>\$ 8,592,112</u>

45 SUPPORTING SCHEDULES:
 46 B-2, pages 2
 47 E-1

RECAP SCHEDULES:
 B-1

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 49
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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Schedule B-2
 Page 2
 Witness: Bourassa

Line No.	Description	Actual at End of Test Year	1 Plant-in-Service	2 Accumulated Depreciation	Proforma Adjustments			Adjusted at end of Test Year
					3 CIAC	4 ADIT	5 Working Capital	
1	Gross Utility Plant in Service	\$ 24,972,591	38,470					\$ 25,011,061
4	Less:							
5	Accumulated Depreciation	14,958,290		(8,512)				14,949,778
9	Net Utility Plant in Service	\$ 10,014,301	\$ 38,470	\$ 8,512	\$ -	\$ -	\$ -	\$ 10,061,283
12	Less:							
13	Advances in Aid of Construction	-						-
17	Contributions in Aid of Construction (CIAC)	1,242,739			18,605			1,261,344
19	Accumulated Amort of CIAC	(878,028)			(10,387)			(888,415)
21	Customer Meter Deposits	-						-
22	Accumulated Deferred Income Taxes	-				1,188,519		1,188,519
26	Plus:							
28	Prepayments	-						-
29	Materials and Supplies	-						-
30	Allowance for Cash Working Capital	-					\$ 92,277	92,277
32	Total	\$ 9,649,590	\$ 38,470	\$ 8,512	\$ (8,218)	\$ (1,188,519)	\$ 92,277	\$ 8,592,112

SUPPORTING SCHEDULES:

B-2, pages 3-5
 B-5
 E-1

RECAP SCHEDULES:

B-1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1

Exhibit
 Schedule B-2
 Page 3
 Witness: Jones/Bourassa

Plant-in-Service

Line No.	Acct. No.	Description	Adjustments						Adjusted Original Cost
			A	B	C	D	E	E	
		Actual Original Cost	Conforming Adjustments to Prior Decision	Reverse Retirement of Disallowed Plant	Reclass Developer Funds to CIAC	Transfer Plant From Water Division	Plant Reclassification	Reconciliation to Reconstruction	
1									
2									
3									
4									
5									
6	351	Organization Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
7	352	Franchise Cost	-	-	-	-	-	-	-
8	353	Land and Land Rights	91,528	-	-	-	-	-	91,528
9	354	Structures & Improvements	409,323	-	-	-	32,507	-	441,830
10	355	Power Generation Equipment	100,000	-	-	-	38,104	-	138,104
11	360	Collection Sewers - Force	1,749,752	-	-	-	(2,880)	-	1,746,872
12	361.1	Collection Sewers - Gravity	3,775,149	-	-	-	-	-	3,775,149
13	361.2	Manholes & Cleanouts	1,938,211	-	-	-	-	-	1,938,211
14	362	Special Collecting Structures	-	-	-	-	-	-	-
15	363	Services to Customers	660,785	-	-	-	-	0	660,785
16	364	Flow Measuring Devices	-	-	-	-	-	-	-
17	365	Flow Measuring Installations	-	-	-	-	-	-	-
18	366	Reuse Services	-	-	-	-	-	-	-
19	367	Reuse Meters and Meter Installations	-	-	-	-	-	-	-
20	370	Receiving Wells	703,439	-	-	-	(29,613)	-	673,826
21	371.1	Pumping Equipment - Lift Stations	1,935,409	(13,328)	22,507	18,605	(67,732)	(0)	1,895,461
22	371.2	Other Pumping Equipment	106,322	-	-	-	7,823	-	114,145
23	371.3	Pumping Equipment - Recharge Wells	1,570,291	4,617	10,665	1,097	1,041	-	1,587,711
24	374	Reuse Distribution Reservoirs	-	-	-	-	-	-	-
25	375	Reuse Transmission and Distribution	158,258	(3,260)	1,057	-	(18,588)	-	137,467
26	380	Treatment & Disposal Equipment	10,418,168	13,212	-	-	27,853	-	10,459,232
27	381	Plant Sewers	-	-	-	-	-	-	-
28	382	Outfall Sewer Lines	-	-	-	-	-	-	-
29	389	Other Plant & Misc Equipment	985,468	-	-	-	(4,894)	-	980,573
30	390	Office Furniture & Equipment	9,154	(2,616)	-	-	2,616	-	9,154
31	390.1	Computers & Software	16,463	(939)	-	-	939	-	16,463
32	391	Transportation Equipment	41,640	(2,966)	-	-	2,966	-	41,640
33	392	Stores Equipment	-	-	-	-	-	-	-
34	393	Tools, Shop & Garage Equipment	114,604	40,819	1,101	-	(44,551)	(0)	111,972
35	394	Laboratory Equipment	7,302	-	-	-	-	-	7,302
36	395	Power Operated Equipment	-	-	-	-	-	-	-
37	396	Communication Equipment	180,757	(52,101)	-	-	54,410	-	183,066
38	397	Miscellaneous Equipment	570	-	-	-	-	-	570
39	398	Other Tangible Plant	-	-	-	-	-	-	-
40									
41		TOTALS	\$ 24,972,591	\$ (16,562)	\$ 35,330	\$ 18,605	\$ 1,097	\$ 0	(0) \$ 25,011,061
42									
43		Plant-in-Service per Books							\$ 24,972,591
44									
45		Increase (decrease) in Plant-in-Service							\$ 38,470
46									
47		Adjustment to Plant-in-Service							\$ 38,470
48									
49		<u>SUPPORTING SCHEDULES</u>							
50		Workpapers/B-2 Schedule - Pima Sewer.xlsx							
51		B-2, pages 3.1 to 3.18							

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - A

Schedule B-2
 Page 3.1
 Witness: Jones/Bourassa

Line No.	Acct. No. Description	Adjustment
1	<u>Conforming Adjustments to Prior Decision</u>	
2		
3		
4	Acct.	
5	No. Description	Adjustment
6	351 Organization Cost	-
7	352 Franchise Cost	-
8	353 Land and Land Rights	-
9	354 Structures & Improvements	-
10	355 Power Generation Equipment	-
11	360 Collection Sewers - Force	-
12	361.1 Collection Sewers - Gravity	-
13	361.2 Manholes & Cleanouts	-
14	362 Special Collecting Structures	-
15	363 Services to Customers	-
16	364 Flow Measuring Devices	-
17	365 Flow Measuring Installations	-
18	366 Reuse Services	-
19	367 Reuse Meters and Meter Installations	-
20	370 Receiving Wells	-
21	371.1 Pumping Equipment - Lift Stations	(13,328)
22	371.2 Other Pumping Equipment	-
23	371.3 Pumping Equipment - Recharge Wells	4,617
24	374 Reuse Distribution Reservoirs	-
25	375 Reuse Transmission and Distribution	(3,260)
26	380 Treatment & Disposal Equipment	13,212
27	381 Plant Sewers	-
28	382 Outfall Sewer Lines	-
29	389 Other Plant & Misc Equipment	-
30	390 Office Furniture & Equipment	(2,616)
31	390.1 Computers & Software	(939)
32	391 Transportation Equipment	(2,966)
33	392 Stores Equipment	-
34	393 Tools, Shop & Garage Equipment	40,819
35	394 Laboratory Equipment	-
36	395 Power Operated Equipment	-
37	396 Communication Equipment	(52,101)
38	397 Miscellaneous Equipment	-
39	398 Other Tangible Plant	-
40	TOTALS	\$ (16,562)
41		
42		
43	<u>SUPPORTING SCHEDULE</u>	
44	Work Papers	
45		
46		
47		
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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - B

Schedule B-2
 Page 3.2
 Witness: Jones/Bourassa

Line

1	<u>Reverse Retirement of Disallowed Plant</u>		
2			
3			
4	Acct.		
5	<u>No.</u>	<u>Description</u>	<u>Adjustment</u>
6	351	Organization Cost	-
7	352	Franchise Cost	-
8	353	Land and Land Rights	-
9	354	Structures & Improvements	-
10	355	Power Generation Equipment	-
11	360	Collection Sewers - Force	-
12	361.1	Collection Sewers - Gravity	-
13	361.2	Manholes & Cleanouts	-
14	362	Special Collecting Structures	-
15	363	Services to Customers	-
16	364	Flow Measuring Devices	-
17	365	Flow Measuring Installations	-
18	366	Reuse Services	-
19	367	Reuse Meters and Meter Installations	-
20	370	Receiving Wells	-
21	371.1	Pumping Equipment - Lift Stations	22,507
22	371.2	Other Pumping Equipment	-
23	371.3	Pumping Equipment - Recharge Wells	10,665
24	374	Reuse Distribution Reservoirs	-
25	375	Reuse Transmission and Distribution	1,057
26	380	Treatment & Disposal Equipment	-
27	381	Plant Sewers	-
28	382	Outfall Sewer Lines	-
29	389	Other Plant & Misc Equipment	-
30	390	Office Furniture & Equipment	-
31	390.1	Computers & Software	-
32	391	Transportation Equipment	-
33	392	Stores Equipment	-
34	393	Tools, Shop & Garage Equipment	1,101
35	394	Laboratory Equipment	-
36	395	Power Operated Equipment	-
37	396	Communication Equipment	-
38	397	Miscellaneous Equipment	-
39	398	Other Tangible Plant	-
40		TOTALS	\$ 35,330

41
 42
 43 SUPPORTING SCHEDULE
 44 Work Papers

45
 46
 47
 48
 49
 50

Line No.	Acct. No. Description	Adjustment
1	Reclass Developer Funds to CIAC	
2		
3		
4	Acct.	
5	No. Description	Adjustment
6	351 Organization Cost	-
7	352 Franchise Cost	-
8	353 Land and Land Rights	-
9	354 Structures & Improvements	-
10	355 Power Generation Equipment	-
11	360 Collection Sewers - Force	-
12	361.1 Collection Sewers - Gravity	-
13	361.2 Manholes & Cleanouts	-
14	362 Special Collecting Structures	-
15	363 Services to Customers	-
16	364 Flow Measuring Devices	-
17	365 Flow Measuring Installations	-
18	366 Reuse Services	-
19	367 Reuse Meters and Meter Installations	-
20	370 Receiving Wells	-
21	371.1 Pumping Equipment - Lift Stations	18,605
22	371.2 Other Pumping Equipment	-
23	371.3 Pumping Equipment - Recharge Wells	-
24	374 Reuse Distribution Reservoirs	-
25	375 Reuse Transmission and Distribution	-
26	380 Treatment & Disposal Equipment	-
27	381 Plant Sewers	-
28	382 Outfall Sewer Lines	-
29	389 Other Plant & Misc Equipment	-
30	390 Office Furniture & Equipment	-
31	390.1 Computers & Software	-
32	391 Transportation Equipment	-
33	392 Stores Equipment	-
34	393 Tools, Shop & Garage Equipment	-
35	394 Laboratory Equipment	-
36	395 Power Operated Equipment	-
37	396 Communication Equipment	-
38	397 Miscellaneous Equipment	-
39	398 Other Tangible Plant	-
40	TOTALS	\$ 18,605
41		
42		
43	<u>SUPPORTING SCHEDULE</u>	
44	Work Papers	
45		
46		
47		
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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - D

Schedule B-2
 Page 3.4
 Witness: Jones/Bourassa

Line

1	<u>Transfer Plant from Water Division</u>		
2			
3			
4	Acct.		
5	<u>No.</u>	<u>Description</u>	<u>Adjustment</u>
6	351	Organization Cost	-
7	352	Franchise Cost	-
8	353	Land and Land Rights	-
9	354	Structures & Improvements	-
10	355	Power Generation Equipment	-
11	360	Collection Sewers - Force	-
12	361.1	Collection Sewers - Gravity	-
13	361.2	Manholes & Cleanouts	-
14	362	Special Collecting Structures	-
15	363	Services to Customers	-
16	364	Flow Measuring Devices	-
17	365	Flow Measuring Installations	-
18	366	Reuse Services	-
19	367	Reuse Meters and Meter installations	-
20	370	Receiving Wells	-
21	371.1	Pumping Equipment - Lift Stations	-
22	371.2	Other Pumping Equipment	-
23	371.3	Pumping Equipment - Recharge Wells	1,097
24	374	Reuse Distribution Reservoirs	-
25	375	Reuse Transmission and Distribution	-
26	380	Treatment & Disposal Equipment	-
27	381	Plant Sewers	-
28	382	Outfall Sewer Lines	-
29	389	Other Plant & Misc Equipment	-
30	390	Office Furniture & Equipment	-
31	390.1	Computers & Software	-
32	391	Transportation Equipment	-
33	392	Stores Equipment	-
34	393	Tools, Shop & Garage Equipment	-
35	394	Laboratory Equipment	-
36	395	Power Operated Equipment	-
37	396	Communication Equipment	-
38	397	Miscellaneous Equipment	-
39	398	Other Tangible Plant	-
40		TOTALS	\$ 1,097
41			
42			
43	<u>SUPPORTING SCHEDULE</u>		
44	Work Papers		
45			
46			
47			
48			
49			
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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - E

Schedule B-2
 Page 3.5
 Witness: Jones/Bourassa

Line No.	Acct. No.	Description	Reclass 12/31/10 Plant to Correct NARUC Acct.	Reclass 2011-2014 Plant Add. To Contr. NARUC Acct.	Reclass Retire to Correct NARUC Acct.	Total Adjustment
1		<u>Reclassification Adjustments</u>				
2						
3						
4						
5	351	Organization Cost	-	-	-	-
6	352	Franchise Cost	-	-	-	-
7	353	Land and Land Rights	-	-	-	-
8	354	Structures & Improvements	-	32,507	-	32,507
9	355	Power Generation Equipment	-	39,304	(1,200)	38,104
10	360	Collection Sewers - Force	-	(2,880)	-	(2,880)
11	361.1	Collection Sewers - Gravity	-	-	-	-
12	361.2	Manholes & Cleanouts	-	-	-	-
13	362	Special Collecting Structures	-	-	-	-
14	363	Services to Customers	-	-	-	-
15	364	Flow Measuring Devices	-	-	-	-
16	365	Flow Measuring Installations	-	-	-	-
17	366	Reuse Services	-	-	-	-
18	367	Reuse Meters and Meter Installations	-	-	-	-
19	370	Receiving Wells	-	(29,613)	-	(29,613)
20	371.1	Pumping Equipment - Lift Stations	-	(68,932)	1,200	(67,732)
21	371.2	Other Pumping Equipment	-	7,823	-	7,823
22	371.3	Pumping Equipment - Recharge Wells	(16,379)	17,420	-	1,041
23	374	Reuse Distribution Reservoirs	-	-	-	-
24	375	Reuse Transmission and Distribution	-	(18,588)	-	(18,588)
25	380	Treatment & Disposal Equipment	-	27,853	-	27,853
26	381	Plant Sewers	-	-	-	-
27	382	Outfall Sewer Lines	-	-	-	-
28	389	Other Plant & Misc Equipment	-	(4,894)	-	(4,894)
29	390	Office Furniture & Equipment	184	-	2,432	2,616
30	390.1	Computers & Software	939	-	-	939
31	391	Transportation Equipment	2,966	-	-	2,966
32	392	Stores Equipment	-	-	-	-
33	393	Tools, Shop & Garage Equipment	(39,810)	(2,309)	(2,432)	(44,551)
34	394	Laboratory Equipment	-	-	-	-
35	395	Power Operated Equipment	-	-	-	-
36	396	Communication Equipment	52,101	2,309	-	54,410
37	397	Miscellaneous Equipment	-	-	-	-
38	398	Other Tangible Plant	-	-	-	-
39		TOTALS	\$ 0	\$ 0	\$ -	\$ 0

43 SUPPORTING SCHEDULE

44 Work Papers

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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 1 - F

Schedule B-2
 Page 3.6
 Witness: Jones/Bourassa

Line
 No.

Reconciliation of Plant to Plant Reconstruction

Acct. No.	Description	Original Cost	B-2 Adjustments	Adjusted Original Cost	Plant Per Reconstruction	Difference
351	Organization Cost	-	-	-	-	-
352	Franchise Cost	-	-	-	-	-
353	Land and Land Rights	91,528	-	91,528	91,528	-
354	Structures & Improvements	409,323	32,507	441,830	441,830	-
355	Power Generation Equipment	100,000	38,104	138,104	138,104	-
360	Collection Sewers - Force	1,749,752	(2,880)	1,746,872	1,746,872	-
361.1	Collection Sewers - Gravity	3,775,149	-	3,775,149	3,775,149	-
361.2	Manholes & Cleanouts	1,938,211	-	1,938,211	1,938,211	-
362	Special Collecting Structures	-	-	-	-	-
363	Services to Customers	660,785	-	660,785	660,785	0
364	Flow Measuring Devices	-	-	-	-	-
365	Flow Measuring Installations	-	-	-	-	-
366	Reuse Services	-	-	-	-	-
367	Reuse Meters and Meter Installation:	-	-	-	-	-
370	Receiving Wells	703,439	(29,613)	673,826	673,826	-
371.1	Pumping Equipment - Lift Stations	1,935,409	(39,947)	1,895,461	1,895,461	(0)
371.2	Other Pumping Equipment	106,322	7,823	114,145	114,145	-
371.3	Pumping Equipment - Recharge Wel	1,570,291	17,420	1,587,711	1,587,711	-
374	Reuse Distribution Reservoirs	-	-	-	-	-
375	Reuse Transmission and Distributor	158,258	(20,791)	137,467	137,467	-
380	Treatment & Disposal Equipment	10,418,168	41,065	10,459,232	10,459,232	-
381	Plant Sewers	-	-	-	-	-
382	Outfall Sewer Lines	-	-	-	-	-
389	Other Plant & Misc Equipment	985,468	(4,894)	980,573	980,573	-
390	Office Furniture & Equipment	9,154	-	9,154	9,154	-
390.1	Computers & Software	16,463	-	16,463	16,463	-
391	Transportation Equipment	41,640	-	41,640	41,640	-
392	Stores Equipment	-	-	-	-	-
393	Tools, Shop & Garage Equipment	114,604	(2,632)	111,972	111,972	(0)
394	Laboratory Equipment	7,302	-	7,302	7,302	-
395	Power Operated Equipment	-	-	-	-	-
396	Communication Equipment	180,757	2,309	183,066	183,066	-
397	Miscellaneous Equipment	570	-	570	570	-
398	Other Tangible Plant	-	-	-	-	-
TOTALS		\$ 24,972,591	\$ 38,470	\$ 25,011,061	\$ 25,011,061	\$ (0)

SUPPORTING SCHEDULE
 B-2, pages 3.1 through 3.4
 B-2, pages 3.7 through 3.12

RECAP SCHEDULES:
 B-2, page 3

46
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 49
 50

Line No.	G/L No.	NARUC Account No.	Description	Prior Deprec. Rate	Allowed Deprec. Rate	2011										
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprec.	Net Plant
1		351	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-
2		352	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-
3	2505	353	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	91,528	-	-	91,528
4	2510	354	Structures & Improvements	3.33%	3.33%	37,895	-	37,895	-	-	-	8,972	288,428	93,116.43	-	185,311
5	2511	355	Power Generation Equipment	5.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-
6	2520	360	Collection Sewers - Force	2.00%	2.00%	-	-	-	-	-	-	1,950	97,523	17,067	-	80,456
7	2520	361.1	Collection Sewers - Gravity	2.00%	2.00%	-	-	-	-	-	-	77,090	3,854,512	1,283,352	-	2,571,161
8	2520.100	361.2	Manholes & Cleanouts	2.00%	2.00%	4,083	-	4,083	-	-	-	35,875	1,795,805	565,425	-	1,230,381
9		362	Special Collecting Structures	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-
10	2530	363	Services to Customers	2.00%	2.00%	3,456	-	3,456	-	-	-	12,680	635,705	159,148	-	476,556
11		364	Flow Measuring Devices	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-
12		365	Flow Measuring Installations	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-
13		366	Reuse Services	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-
14		367	Reuse Meters and Meter Installations	8.33%	8.33%	-	-	-	-	-	-	-	-	-	-	-
15	2540	370	Receiving Wells	3.57%	3.57%	7,218	-	7,218	-	-	-	8,206	233,469	134,279	-	99,190
16	2535	371.1	Pumping Equipment - Lift Stations	10.00%	12.50%	74,607	-	74,607	-	-	-	156,812	1,605,425	1,379,868	-	225,557
17	2536	371.2	Other Pumping Equipment	10.00%	12.50%	-	-	-	-	-	-	10,344	103,441	47,073	-	56,369
18	2538	371.3	Pumping Equipment - Recharge Well	10.00%	12.50%	54,322	-	54,322	-	-	-	143,632	1,463,478	1,265,513	-	197,965
19		374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-	-	-
20	2539	375	Reuse Transmission and Distribution	2.00%	2.50%	-	-	-	-	-	-	2,684	134,184	37,901	-	96,283
21	2515	380	Treatment & Disposal Equipment	5.00%	5.00%	293,574	-	293,574	-	-	-	502,204	10,190,858	6,232,573	-	3,958,284
22		381	Plant Sewers	5.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-
23		382	Outfall Sewer Lines	3.33%	3.33%	-	-	-	-	-	-	-	-	-	-	-
24	2545	389	Other Plant & Misc Equipment	6.67%	6.67%	-	-	-	-	-	-	64,866	972,509	650,635	-	321,874
25	2545.100	390	Office Furniture & Equipment	6.67%	6.67%	-	-	-	-	-	-	448	6,713	1,869	-	4,844
26	2545.200	390.1	Computers & Software	20.00%	20.00%	-	-	-	-	-	-	2,365	11,823	11,587	-	236
27	2545.300	391	Transportation Equipment	20.00%	20.00%	-	-	-	-	-	-	445	24,796	24,796	-	-
28		392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-	-	-
29	2545.400	393	Tools, Shop & Garage Equipment	10.00%	5.00%	5,622	(2,309)	3,313	-	-	-	11,662	118,279	91,383	-	26,896
30	2545.500	394	Laboratory Equipment	10.00%	10.00%	-	-	-	-	-	-	199	1,993	1,893	-	100
31	2545.600	395	Power Operated Equipment	5.00%	5.00%	-	-	-	-	-	-	-	-	-	(1,016)	1,016
32	2545.700	396	Communication Equipment	10.00%	10.00%	-	2,309	2,309	-	-	-	17,208	173,238	143,774	-	29,464
33	2560	397	Miscellaneous Equipment	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-
34		398	Other Tangible Plant	-	-	-	-	-	-	-	-	-	-	-	-	-
35																
36			Sub Total			480,876	-	480,876	-	-	-	1,057,642	21,803,707	12,140,237	-	9,663,470
37																
38			Post-In Service AFUDC	4.52%	4.52%							32,396	716,722	453,542	-	263,180
39																
40			TOTALS			480,876	-	480,876	-	-	-	1,090,038	22,520,429	12,593,779	-	9,926,651
41																
42			Depreciable Plant Balance										21,712,179			
43			Depreciation										1,057,642			
44													4.8712%			

Line No.	G/L No.	NARUC Account No.	Description	Prior Deprc. Rate	Allowed Deprc. Rate	2012											
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Deprc.	Net Plant	
1		351	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
2		352	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
3	2505	353	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-	91,528	-	91,528	
4	2510	354	Structures & Improvements	3.33%	3.33%	4,879	29,627	34,506	-	-	-	10,179	322,934	103,296	219,638	219,638	
5	2511	355	Power Generation Equipment	5.00%	5.00%	-	38,086	38,086	-	-	-	952	38,086	952	37,133	37,133	
6	2520	360	Collection Sewers - Force	2.00%	2.00%	-	-	-	-	-	-	1,950	97,523	19,018	78,505	78,505	
7	2520	361.1	Collection Sewers - Gravity	2.00%	2.00%	-	-	-	-	-	-	77,090	3,854,512	1,360,442	2,494,070	2,494,070	
8	2520.100	361.2	Manholes & Cleanouts	2.00%	2.00%	-	-	-	-	-	-	35,916	1,795,805	601,341	1,194,465	1,194,465	
9		362	Special Collecting Structures	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
10	2530	363	Services to Customers	2.00%	2.00%	-	-	-	-	-	-	12,714	635,705	171,862	463,842	463,842	
11		364	Flow Measuring Devices	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
12		365	Flow Measuring Installations	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
13		366	Raise Services	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
14		367	Reuse Meters and Meter Installations	8.33%	8.33%	-	-	-	-	-	-	-	-	-	-	-	
15	2540	370	Receiving Wells	3.57%	3.33%	2,715	(2,715)	-	11,163	-	11,163	8,044	222,306	131,160	91,146	91,146	
16	2535	371.1	Pumping Equipment - Lift Stations	10.00%	12.50%	78,432	(67,713)	10,720	63,457	(21,085)	42,373	165,583	1,573,772	1,503,079	70,694	70,694	
17	2536	371.2	Other Pumping Equipment	10.00%	12.50%	2,881	2,715	5,596	-	-	-	11,067	109,038	58,139	50,898	50,898	
18	2538	371.3	Pumping Equipment - Recharge Wells	10.00%	12.50%	117,755	-	117,755	65,476	-	65,476	155,168	1,515,757	1,355,206	160,551	160,551	
19		374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-	-	-	
20	2539	375	Reuse Transmission and Distribution	2.00%	2.50%	-	-	-	1,057	(1,057)	-	2,796	134,164	40,696	93,468	93,468	
21	2515	380	Treatment & Disposal Equipment	5.00%	5.00%	295,607	-	295,607	255,374	-	255,374	510,549	10,231,091	6,487,748	3,743,343	3,743,343	
22		381	Plant Sewers	5.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	
23		382	Outfall Sewer Lines	3.33%	3.33%	-	-	-	-	-	-	-	-	-	-	-	
24	2545	389	Other Plant & Misc Equipment	6.67%	6.67%	-	-	-	-	-	-	64,866	972,509	715,501	257,008	257,008	
25	2545.100	390	Office Furniture & Equipment	6.67%	6.67%	-	-	-	-	-	-	448	6,713	2,317	4,396	4,396	
26	2545.200	390.1	Computers & Software	20.00%	20.00%	-	-	-	-	-	-	236	11,823	11,823	-	-	
27	2545.300	391	Transportation Equipment	20.00%	20.00%	-	-	-	2,583	-	2,583	-	22,213	22,213	-	-	
28		392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-	-	-	
29	2545.400	393	Tools, Shop & Garage Equipment	10.00%	5.00%	-	-	-	34,442	-	34,442	9,264	83,837	66,205	17,632	17,632	
30	2545.500	394	Laboratory Equipment	10.00%	10.00%	-	-	-	-	-	-	100	1,993	1,993	-	-	
31	2545.600	395	Power Operated Equipment	5.00%	5.00%	-	-	-	-	-	-	-	-	-	(1,016)	(1,016)	
32	2545.700	396	Communication Equipment	10.00%	10.00%	3,302	-	3,302	4,598	-	4,598	17,259	171,943	156,436	15,507	15,507	
33	2560	397	Miscellaneous Equipment	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
34		398	Other Tangible Plant			-	-	-	-	-	-	-	-	-	-	-	
35																	
36			Sub Total			505,572	0	505,572	438,150	(22,142)	416,009	-	1,084,182	21,893,271	12,808,410	9,084,861	9,084,861
37																	
38			Post-In Service AFUDC	4.52%	4.52%								32,396	716,722	485,938	230,784	230,784
39																	
40			TOTALS			505,572	0	505,572	438,150	(22,142)	416,009	-	1,116,578	22,609,993	13,294,347	9,315,645	9,315,645
41																	
42			Depreciable Plant Balance											21,801,743			
43			Depreciation											1,084,182			
44														4,972,994			

Line No.	G/L No.	NARUC Account No.	Description	Prior Depr. Rate	Allowed Depr. Rate	2013											
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Depr.	Net Plant	
1		351	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	-
2		352	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	-
3	2505	353	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	-	91,528	-	91,528	
4	2510	354	Structures & Improvements	3.33%	3.33%	1,620	-	1,620	-	-	-	-	10,781	324,554	114,076	210,477	
5	2511	355	Power Generation Equipment	5.00%	5.00%	-	-	-	-	-	-	-	1,904	38,086	2,856	35,229	
6	2520	360	Collection Sewers - Force	2.00%	2.00%	-	-	-	-	-	-	-	1,950	87,523	20,968	76,555	
7	2520	361.1	Collection Sewers - Gravity	2.00%	2.00%	-	-	-	-	-	-	-	77,090	3,854,512	1,437,532	2,416,980	
8	2520.100	361.2	Manholes & Cleanouts	2.00%	2.00%	132,214	-	132,214	-	-	-	-	37,238	1,928,019	638,579	1,289,440	
9		362	Special Collecting Structures	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	-
10	2530	363	Services to Customers	2.00%	2.00%	-	-	-	-	-	-	-	12,714	635,705	184,576	451,128	
11		364	Flow Measuring Devices	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	-
12		365	Flow Measuring Installations	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	-
13		366	Reuse Services	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	-
14		367	Reuse Meters and Meter Installations	8.33%	8.33%	-	-	-	-	-	-	-	-	-	-	-	-
15	2540	370	Receiving Wells	3.57%	3.33%	-	-	-	-	-	-	-	7,403	222,306	138,563	83,743	
16	2535	371.1	Pumping Equipment - Lift Stations	10.00%	12.50%	24,023	-	24,023	20,854	-	20,854	-	94,717	1,576,942	1,576,942	-	
17	2536	371.2	Other Pumping Equipment	10.00%	12.50%	-	-	-	-	-	-	-	13,630	109,038	71,769	37,269	
18	2538	371.3	Pumping Equipment - Recharge Wells	10.00%	12.50%	63,090	1,097	64,187	57,087	-	57,087	-	189,913	1,522,857	1,488,032	34,825	
19		374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-	-	-	-
20	2539	375	Reuse Transmission and Distribution	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	-
21	2515	380	Treatment & Disposal Equipment	5.00%	5.00%	329,022	-	329,022	194,532	-	194,532	-	3,355	134,184	44,051	90,133	
22		381	Plant Sewers	5.00%	5.00%	-	-	-	-	-	-	-	514,917	10,365,581	6,808,133	3,557,449	
23		382	Outfall Sewer Lines	3.33%	3.33%	-	-	-	-	-	-	-	-	-	-	-	-
24	2545	389	Other Plant & Misc Equipment	6.67%	6.67%	-	-	-	-	-	-	-	64,866	972,509	780,368	192,141	
25	2545.100	390	Office Furniture & Equipment	6.67%	6.67%	2,440	-	2,440	2,432	(2,432)	-	-	529	8,154	2,846	6,307	
26	2545.200	390.1	Computers & Software	20.00%	20.00%	2,232	-	2,232	-	-	-	-	2,232	14,055	14,055	-	
27	2545.300	391	Transportation Equipment	20.00%	20.00%	19,428	-	19,428	-	-	-	-	6,385	41,640	28,598	13,042	
28		392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-	-	-	-
29	2545.400	393	Tools, Shop & Garage Equipment	10.00%	5.00%	25,986	-	25,986	1,101	1,331	2,432	-	4,781	107,391	68,554	38,838	
30	2545.500	394	Laboratory Equipment	10.00%	10.00%	-	-	-	-	-	-	-	-	1,993	1,993	-	-
31	2545.600	395	Power Operated Equipment	5.00%	5.00%	-	-	-	-	-	-	-	-	-	-	(1,016)	1,016
32	2545.700	396	Communication Equipment	10.00%	10.00%	4,974	-	4,974	-	-	-	-	17,443	176,917	173,879	3,038	
33	2560	397	Miscellaneous Equipment	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	-
34		398	Other Tangible Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35																	
36			Sub Total			605,030	1,097	606,127	276,005	(1,101)	274,904	-	1,061,849	22,224,494	13,595,354	8,629,140	
37																	
38			Post-In Service AFUDC	4.52%	4.52%								32,396	716,722	518,333	198,389	
39																	
40			TOTALS			605,030	1,097	606,127	276,005	(1,101)	274,904	-	1,094,244	22,941,216	14,113,687	8,827,528	
41																	
42			Depreciable Plant Balance											22,132,965			
43			Depreciation										1,061,849				
44													4.7976%				

Line No.	G/L No.	NARUC Account No.	Description	Prior Depr. Rate	Allowed Depr. Rate	2015											
						Plant Additions (Per Books)	Plant Adjustments	Adjusted Plant Additions	Plant Retirements (Per Books)	Retirement Adjustments	Adjusted Plant Retirements	Salvage A/D Only	Depreciation (Calculated)	Plant Balance	Accum. Depr.	Net Plant	
1		351	Organization Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
2		352	Franchise Cost	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	
3	2505	353	Land and Land Rights	0.00%	0.00%	-	-	-	-	-	-	-	91,528	-	-	91,528	
4	2510	354	Structures & Improvements	3.33%	3.33%	84,757	2,880	87,637	-	-	-	13,254	441,830	138,631	-	303,199	
5	2511	355	Power Generation Equipment	5.00%	5.00%	100,000	1,219	101,219	-	1,200	1,200	4,405	138,104	7,965	-	130,139	
6	2520	360	Collection Sewers - Force	2.00%	2.00%	1,652,229	(2,880)	1,649,349	-	-	-	18,444	1,746,872	41,363	-	1,705,509	
7	2520	361.1	Collection Sewers - Gravity	2.00%	2.00%	-	-	-	79,363	-	-	79,363	76,297	3,775,149	1,511,556	-	2,263,593
8	2520.100	361.2	Manholes & Cleanouts	2.00%	2.00%	10,192	-	10,192	-	-	-	38,662	1,938,211	715,802	-	1,222,410	
9		362	Special Collecting Structures	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
10	2530	363	Services to Customers	2.00%	2.00%	16,380	-	16,380	-	-	-	13,052	660,785	210,429	-	450,356	
11		364	Flow Measuring Devices	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
12		365	Flow Measuring Installations	10.00%	10.00%	-	-	-	-	-	-	-	-	-	-	-	
13		366	Reuse Services	2.00%	2.00%	-	-	-	-	-	-	-	-	-	-	-	
14		367	Reuse Meters and Meter Installations	8.33%	8.33%	-	-	-	-	-	-	-	-	-	-	-	
15	2540	370	Receiving Wells	3.57%	3.33%	478,418	(26,898)	451,520	-	-	-	14,921	673,826	160,886	-	512,939	
16	2535	371.1	Pumping Equipment - Lift Stations	10.00%	12.50%	516,240	(1,219)	515,021	101,346	(2,622)	98,724	210,814	1,895,461	1,591,354	-	304,107	
17	2536	371.2	Other Pumping Equipment	10.00%	12.50%	-	-	-	-	-	-	14,268	114,145	98,986	-	14,159	
18	2538	371.3	Pumping Equipment - Recharge Wells	10.00%	12.50%	35,177	26,898	62,075	23,948	-	23,948	62,075	1,587,711	1,587,711	-	-	
19		374	Reuse Distribution Reservoirs	2.50%	2.50%	-	-	-	-	-	-	-	-	-	-	-	
20	2539	375	Reuse Transmission and Distribution	2.00%	2.50%	18,588	(18,588)	-	-	-	-	3,437	137,467	48,633	-	87,834	
21	2515	380	Treatment & Disposal Equipment	5.00%	5.00%	175,123	23,482	198,605	175,847	-	175,847	522,393	10,458,232	7,588,426	-	2,869,807	
22		381	Plant Sewers	5.00%	5.00%	-	-	-	-	-	-	-	-	-	-	-	
23		382	Outfall Sewer Lines	3.33%	3.33%	-	-	-	-	-	-	-	-	-	-	-	
24	2545	388	Other Plant & Misc Equipment	6.67%	6.67%	10,025	(4,804)	5,131	-	-	-	65,233	980,573	910,565	-	70,008	
25	2545.100	390	Office Furniture & Equipment	6.67%	6.67%	-	-	-	-	-	-	611	9,154	4,067	-	5,086	
26	2545.200	390.1	Computers & Software	20.00%	20.00%	1,678	-	1,678	730	-	730	1,678	16,463	16,463	-	-	
27	2545.300	391	Transportation Equipment	20.00%	20.00%	-	-	-	-	-	-	4,714	41,640	41,640	-	-	
28		392	Stores Equipment	4.00%	4.00%	-	-	-	-	-	-	-	-	-	-	-	
29	2545.400	393	Tools, Shop & Garage Equipment	10.00%	5.00%	2,127	-	2,127	1,447	-	1,447	5,582	111,972	78,155	-	33,817	
30	2545.500	394	Laboratory Equipment	10.00%	10.00%	1,213	-	1,213	-	-	-	670	7,302	3,066	-	4,236	
31	2545.600	395	Power Operated Equipment	5.00%	5.00%	-	-	-	-	-	-	-	-	-	(1,016)	1,016	
32	2545.700	396	Communication Equipment	10.00%	10.00%	7,381	-	7,381	1,232	-	1,232	7,381	183,066	183,066	-	-	
33	2560	397	Miscellaneous Equipment	10.00%	10.00%	570	-	570	-	-	-	28	570	28	-	541	
34		398	Other Tangible Plant			-	-	-	-	-	-	-	-	-	-	-	
35																	
36			Sub Total			3,110,096	(0)	3,110,096	383,913	(1,422)	382,491	-	1,078,017	25,011,061	14,949,778	10,061,283	
37																	
38			Post-In Service AFUDC	4.52%	4.52%								32,396	716,722	583,125	133,597	
39																	
40			TOTALS			3,110,096	(0)	3,110,096	383,913	(1,422)	382,491	-	1,110,413	25,727,783	15,532,903	10,194,880	
41																	
42			Depreciable Plant Balance											24,919,533			
43			Depreciation											1,078,017			
44														4.3260%			

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2

Exhibit
 Schedule B-2
 Page 4
 Witness: Jones/Bourassa

Accumulated Depreciation

Line No.	Acct. No.	Description	Per Books Accum. Depr.	Adjustments			Adjusted Accum. Depr.
				A Reclass A/D for reclassified Plant	B Reverse Retire of Disallowed Plant	C Reconciliation to Reconstruction	
5	351	Organization Cost	-	-	-	-	-
6	352	Franchise Cost	-	-	-	-	-
7	353	Land and Land Rights	-	-	-	-	-
8	354	Structures & Improvements	135,103	-	-	3,528	138,631
9	355	Power Generation Equipment	2,500	(1,200)	-	6,665	7,965
10	360	Collection Sewers - Force	41,392	-	-	(29)	41,363
11	361.1	Collection Sewers - Gravity	1,511,555	-	-	1	1,511,556
12	361.2	Manholes & Cleanouts	715,801	-	-	0	715,802
13	362	Special Collecting Structures	-	-	-	-	-
14	363	Services to Customers	210,430	-	-	(0)	210,429
15	364	Flow Measuring Devices	-	-	-	-	-
16	365	Flow Measuring Installations	-	-	-	-	-
17	366	Reuse Services	-	-	-	-	-
18	367	Reuse Meters and Meter Installations	-	-	-	-	-
19	370	Receiving Wells	161,151	-	-	(264)	160,886
20	371.1	Pumping Equipment - Lift Stations	1,603,166	1,200	22,507	(35,518)	1,591,354
21	371.2	Other Pumping Equipment	105,948	-	-	(5,962)	99,986
22	371.3	Pumping Equipment - Recharge Well	1,552,474	(8,125)	10,665	32,697	1,587,711
23	374	Reuse Distribution Reservoirs	-	-	-	-	-
24	375	Reuse Transmission and Distribution	49,064	-	1,057	(489)	49,633
25	380	Treatment & Disposal Equipment	7,597,303	-	-	1,122	7,598,426
26	381	Plant Sewers	-	-	-	-	-
27	382	Outfall Sewer Lines	-	-	-	-	-
28	389	Other Plant & Misc Equipment	911,688	-	-	(1,123)	910,565
29	390	Office Furniture & Equipment	1,079	2,958	-	31	4,067
30	390.1	Computers & Software	16,463	658	-	(658)	16,463
31	391	Transportation Equipment	41,640	2,521	-	(2,521)	41,640
32	392	Stores Equipment	-	-	-	-	-
33	393	Tools, Shop & Garage Equipment	112,675	(55,128)	1,101	19,506	78,155
34	394	Laboratory Equipment	3,067	-	-	(0)	3,066
35	395	Power Operated Equipment	(1,016)	-	-	(0)	(1,016)
36	396	Communication Equipment	137,156	57,116	-	(11,206)	183,066
37	397	Miscellaneous Equipment	28	-	-	-	28
38	398	Other Tangible Plant	-	-	-	-	-
39		Unspecified	49,624	-	-	(49,624)	-
40		TOTALS	\$ 14,958,290	\$ 0	\$ 35,330	\$ (43,842)	\$ 14,949,778
41		Accumulated Depreciation per Books					\$ 14,958,290
42		Increase (decrease) in Accumulated Depreciation					\$ (8,512)
43		Adjustment to Accumulated Depreciation					\$ (8,512)

SUPPORTING SCHEDULES

Workpapers/B-2 Schedule - Pima Sewer.xlsx
 B-2, pages 3.1 to 3.18

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2 - A

Schedule B-2
 Page 4.1
 Witness: Jones/Bourassa

Line

No.

1 <u>Reclass A/D for Reclassed Plant</u>				
2				
3				
4	Acct.	Reclass A/D for reclassified	Reclass Retire to Correct	Adjustment
5	No. Description	Plant	NARUC Acct.	
6	351 Organization Cost	-	-	-
7	352 Franchise Cost	-	-	-
8	353 Land and Land Rights	-	-	-
9	354 Structures & Improvements	-	-	-
10	355 Power Generation Equipment	-	(1,200)	(1,200)
11	360 Collection Sewers - Force	-	-	-
12	361.1 Collection Sewers - Gravity	-	-	-
13	361.2 Manholes & Cleanouts	-	-	-
14	362 Special Collecting Structures	-	-	-
15	363 Services to Customers	-	-	-
16	364 Flow Measuring Devices	-	-	-
17	365 Flow Measuring Installations	-	-	-
18	366 Reuse Services	-	-	-
19	367 Reuse Meters and Meter Installations	-	-	-
20	370 Receiving Wells	-	-	-
21	371.1 Pumping Equipment - Lift Stations	-	1,200	1,200
22	371.2 Other Pumping Equipment	-	-	-
23	371.3 Pumping Equipment - Recharge Wells	(8,125)	-	(8,125)
24	374 Reuse Distribution Reservoirs	-	-	-
25	375 Reuse Transmission and Distribution	-	-	-
26	380 Treatment & Disposal Equipment	-	-	-
27	381 Plant Sewers	-	-	-
28	382 Outfall Sewer Lines	-	-	-
29	389 Other Plant & Misc Equipment	-	-	-
30	390 Office Furniture & Equipment	526	2,432	2,958
31	390.1 Computers & Software	658	-	658
32	391 Transportation Equipment	2,521	-	2,521
33	392 Stores Equipment	-	-	-
34	393 Tools, Shop & Garage Equipment	(52,695)	(2,432)	(55,128)
35	394 Laboratory Equipment	-	-	-
36	395 Power Operated Equipment	-	-	-
37	396 Communication Equipment	57,116	-	57,116
38	397 Miscellaneous Equipment	-	-	-
39	398 Other Tangible Plant	-	-	-
40	Unspecified	-	-	-
41	TOTALS	\$ -	\$ -	\$ 0

44 SUPPORTING SCHEDULE

45 Work Papers

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Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2 - B

Schedule B-2
 Page 4.2
 Witness: Jones/Bourassa

Line
 No.

1	<u>Reverse Retirement of Disallowed Plant</u>		
2			
3			
4	Acct.		
5	<u>No.</u>	<u>Description</u>	<u>Adjustment</u>
6	351	Organization Cost	-
7	352	Franchise Cost	-
8	353	Land and Land Rights	-
9	354	Structures & Improvements	-
10	355	Power Generation Equipment	-
11	360	Collection Sewers - Force	-
12	361.1	Collection Sewers - Gravity	-
13	361.2	Manholes & Cleanouts	-
14	362	Special Collecting Structures	-
15	363	Services to Customers	-
16	364	Flow Measuring Devices	-
17	365	Flow Measuring Installations	-
18	366	Reuse Services	-
19	367	Reuse Meters and Meter Installations	-
20	370	Receiving Wells	-
21	371.1	Pumping Equipment - Lift Stations	22,507
22	371.2	Other Pumping Equipment	-
23	371.3	Pumping Equipment - Recharge Wells	10,665
24	374	Reuse Distribution Reservoirs	-
25	375	Reuse Transmission and Distribution	1,057
26	380	Treatment & Disposal Equipment	-
27	381	Plant Sewers	-
28	382	Outfall Sewer Lines	-
29	389	Other Plant & Misc Equipment	-
30	390	Office Furniture & Equipment	-
31	390.1	Computers & Software	-
32	391	Transportation Equipment	-
33	392	Stores Equipment	-
34	393	Tools, Shop & Garage Equipment	1,101
35	394	Laboratory Equipment	-
36	395	Power Operated Equipment	-
37	396	Communication Equipment	-
38	397	Miscellaneous Equipment	-
39	398	Other Tangible Plant	-
40		Unspecified	-
41		TOTALS	\$ 35,330

44 SUPPORTING SCHEDULE
 45 Work Papers

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Pima Utility Company - Water Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment Number 2 - C

Exhibit
 Schedule B-2
 Page 4.3
 Witness: Jones/Bourassa

Line
 No.

<u>Reconciliation of A/D to A/D Reconstruction</u>						
Acct. No.	Description	Original Cost	B-2 Adjustments	Adjusted Original Cost	A/D Per Reconstruction	Difference
351	Organization Cost	-	-	-	-	-
352	Franchise Cost	-	-	-	-	-
353	Land and Land Rights	-	-	-	-	-
354	Structures & Improvements	135,103	-	135,103	138,631	3,528
355	Power Generation Equipment	2,500	(1,200)	1,300	7,965	6,665
360	Collection Sewers - Force	41,392	-	41,392	41,363	(29)
361.1	Collection Sewers - Gravity	1,511,555	-	1,511,555	1,511,556	1
361.2	Manholes & Cleanouts	715,801	-	715,801	715,802	0
362	Special Collecting Structures	-	-	-	-	-
363	Services to Customers	210,430	-	210,430	210,429	(0)
364	Flow Measuring Devices	-	-	-	-	-
365	Flow Measuring Installations	-	-	-	-	-
366	Reuse Services	-	-	-	-	-
367	Reuse Meters and Meter Installations	-	-	-	-	-
370	Receiving Wells	161,151	-	161,151	160,886	(264)
371.1	Pumping Equipment - Lift Stations	1,603,166	23,707	1,626,872	1,591,354	(35,518)
371.2	Other Pumping Equipment	105,948	-	105,948	99,986	(5,962)
371.3	Pumping Equipment - Recharge Well	1,552,474	2,540	1,555,014	1,587,711	32,697
374	Reuse Distribution Reservoirs	-	-	-	-	-
375	Reuse Transmission and Distribution	49,064	1,057	50,122	49,633	(489)
380	Treatment & Disposal Equipment	7,597,303	-	7,597,303	7,598,426	1,122
381	Plant Sewers	-	-	-	-	-
382	Outfall Sewer Lines	-	-	-	-	-
389	Other Plant & Misc Equipment	911,688	-	911,688	910,565	(1,123)
390	Office Furniture & Equipment	1,079	2,958	4,037	4,067	31
390.1	Computers & Software	16,463	658	17,120	16,463	(658)
391	Transportation Equipment	41,640	2,521	44,161	41,640	(2,521)
392	Stores Equipment	-	-	-	-	-
393	Tools, Shop & Garage Equipment	112,675	(54,027)	58,649	78,155	19,506
394	Laboratory Equipment	3,067	-	3,067	3,066	(0)
395	Power Operated Equipment	(1,016)	-	(1,016)	(1,016)	(0)
396	Communication Equipment	137,156	57,116	194,272	183,066	(11,206)
397	Miscellaneous Equipment	28	-	28	28	-
398	Other Tangible Plant	-	-	-	-	-
40	Unspecified	49,624	-	49,624	-	(49,624)
TOTALS		\$ 14,958,290	\$ 35,330	\$ 14,993,620	\$ 14,949,778	\$ (43,842)

SUPPORTING SCHEDULE

B-2, pages 4.1 to 4.2
 B-2, pages 3.6 through 3.11

RECAP SCHEDULES:

B-2, page 4

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Contributions-in-Aid of Construction (CIAC) and Accumulated Amortization

Line No.		CIAC	Accumulated Amortization
1			
2	Calculated Balance at 12/31/2015	\$ 1,261,344	\$ 888,415
3			
4	Book Balance at 12/31/2015	\$ 1,242,739	\$ 878,028
5			
6	Increase / (Decrease) in CIAC or AA CIAC	\$ 18,605	\$ 10,387
7			
8			
9			

Line No.	Balance 12/31/2010	2011		2012		2013		2014		2015	
		Additions	Balance	Additions	Balance	Additions	Balance	Additions	Balance	Additions	Balance
14											
15	CIAC	1,242,739	- 1,242,739	- 1,242,739	- 1,242,739	18,605	1,261,344	-	1,261,344		
16											
17	Amortization Decision No. 73573	601,008									
18	Amortization Rate		4.8712%	4.9729%	4.7976%		4.0640%		4.3260%		
19	Amortization (1/2 yr convention)		60,536	61,800	59,622		50,883		54,566		
20	Accumulated Amortization		661,544	723,344	782,966		833,849		888,415		
21											
22	Net CIAC	641,731	- 581,195	- 519,394	- 459,773	18,605	427,495	-	372,929		
23											

Notes:
 1. 12/31/10 Balances agree to rate case balances approved in Decision 73573
 2. Amortization rate agrees to composite depreciation rate for the year.

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Original Cost Rate Base Proforma Adjustments
 Adjustment 4

Exhibit
 Schedule B-2
 Page 6
 Witness: Bourassa

Line No.
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Proforma Deferred Income Tax as of December 31, 2015

	Water & Sewer Adjusted Book Value	Water & Sewer Tax Value	Probability of Realization of Future Tax Benefit	Deductible TD (Taxable TD) Expected to be Realized	Effective Tax Rate	Future Tax Asset Current	Future Tax Asset Non Current	Future Tax Liability Current	Future Tax Liability Non Current
	\$ 40,848,313 ¹								
	(21,667,729) ¹								
	(543,941) ³								
Fed.	\$ 18,636,644	\$ 8,447,592 ²	100.0%	\$ (10,189,051)	21.50%	-	-	(2,190,594)	
State	\$ 18,636,644	\$ 8,447,592 ²	100.0%	\$ (10,189,051)	3.236%	-	-	(329,759)	
Fed & State		- ⁴	100.0%	\$ - ⁴	24.736%	\$ -	-	-	
						\$ -	\$ -	\$ -	\$ (2,520,353)
						\$ (2,520,353)			
						0.4716			
						\$ (1,188,519)			
						\$ -			
						\$ 1,188,519			

Footnotes - See page 7.1

RECAP SCHEDULES:
 B-2, page 2

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Cash Working Capital

Exhibit
 Schedule B-5
 Page 1
 Witness: Bourassa

Line No.	Description	Proforma Test Year Amount ¹	Revenue Lag (Lead) Days	Expense Lag (Lead) Days	Net Lag (Lead) Days Col. C - Col. D	Lead/Lag Factor Col. E/365	Cash Working Capital Required Col. B * Col. F
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
7	OPERATING EXPENSES						
8	Salaries and Wages	\$ 586,136	51.00	13.00	38.00	0.104122	\$ 61,030
9	Employee Pensions and Benefits	78,458	51.00	18.00	33.00	0.090423	7,094
10	Purchased Water	139,495	51.00	46.88	4.12	0.011300	1,576
11	Purchased Power	149,682	51.00	51.92	(0.92)	(0.002508)	(375)
12	Chemicals	107,881	51.00	15.91	35.09	0.096149	10,373
13	Repairs and Maintenance	176,709	51.00	25.02	25.98	0.071190	12,580
14	Office Supplies and Expense	76,710	51.00	18.80	32.20	0.088231	6,768
15	Contractual Services - Engineering	3,534	51.00	18.63	32.37	0.088697	313
16	Contractual Services - Accounting	4,148	51.00	24.00	27.00	0.073985	307
17	Contractual Services - Legal	3,404	51.00	78.29	(27.29)	(0.074755)	(254)
18	Contractual Services - Other	108,289	51.00	14.04	36.96	0.101272	10,968
19	Contractual Services - Water Testing	19,670	51.00	(21.52)	72.52	0.198697	3,908
20	Rents	7,339	51.00	(3.83)	54.83	0.150231	1,103
21	Transportation Expense	27,038	51.00	39.47	11.53	0.031601	854
22	Insurance - Vehicle	3,524	51.00	(182.50)	233.50	0.639738	2,254
23	Insurance - General Liability	48,767	51.00	(182.50)	233.50	0.639738	31,198
24	Insurance - Health & Life	799	51.00	18.00	33.00	0.090423	72
25							
26							
27							
28	Miscellaneous Expense	24,725	51.00	(53.33)	104.33	0.285848	7,068
29							
30	Taxes Other Than Income	58,058	51.00	3.73	47.27	0.129519	7,520
31							
32							
33	TAXES						
34	General Taxes-Property ¹	\$ 178,073	51.00	214.29	(163.29)	(0.44736226)	\$ (79,663)
35	General Taxes-Other	-	51.00	-	51.00	0.13973819	-
36	Income Tax ¹	197,670	51.00	37.00	14.00	0.03836833	7,584
37							
38	OTHER						
39							
40							
41	TOTAL	<u>\$ 2,000,127</u>					<u>\$ 92,277</u>
42							
43							
44							
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51							

¹At proposed rates.

RECAP SCHEDULES:
 B-2, page 2

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Income Statement

Exhibit
 Schedule C-1
 Page 1
 Witness: Bourassa

Line No.		Test Year Book Results	Adjustment	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	Revenues					
2	Flat Rate Revenues	\$ 3,283,063	\$ 3,884	\$ 3,286,947	\$ 369,273	\$ 3,656,220
3	Metered Revenues	105,384	-	105,384		105,384
4	Other Revenues	20,050	-	20,050		20,050
5		<u>\$ 3,408,498</u>	<u>\$ 3,884</u>	<u>\$ 3,412,382</u>	<u>\$ 369,273</u>	<u>\$ 3,781,654</u>
6	Operating Expenses					
7	Salaries and Wages	\$ 586,136	-	\$ 586,136		\$ 586,136
8	Employee Pensions and Benefits	78,458	-	78,458		78,458
9	Sludge Removal	139,495	108	139,603		139,603
10	Purchased Power	149,692	42	149,734		149,734
11	Chemicals	107,881	83	107,964		107,964
12	Materials and Supplies	176,709	-	176,709		176,709
13	Office Supplies and Expense	76,710	16	76,726		76,726
14	Contractual Services - Engineering	3,534	-	3,534		3,534
15	Contractual Services - Accounting	4,148	-	4,148		4,148
16	Contractual Services - Legal	3,404	-	3,404		3,404
17	Contractual Services - Other	108,299	-	108,299		108,299
18	Contractual Services - Water Testing	19,670	-	19,670		19,670
19	Rents - Equipment	7,339	-	7,339		7,339
20	Transportation Expenses	27,038	-	27,038		27,038
21	Insurance - Vehicle	3,524	-	3,524		3,524
22	Insurance - General Liability	48,767	-	48,767		48,767
23	Insurance - Worker's Comp	799	-	799		799
24	Reg. Comm. Exp.	-	-	-		-
25	Reg. Comm. Exp. - Rate Case	-	35,000	35,000		35,000
26	Bad Debt Expense	8,816	-	8,816		8,816
27	Miscellaneous Expense	24,725	-	24,725		24,725
28	Depreciation & Amortization Expense	1,008,985	(97,084)	911,901		911,901
29	Amortization - Deferred Costs	97,191	-	97,191		97,191
30	Taxes Other Than Income	58,058	-	58,058		58,058
31	Property Taxes	190,631	(18,674)	171,957	6,117	178,073
32	Income Tax	-	107,839	107,839	89,830	197,670
33						
34	Total Operating Expenses	<u>\$ 2,930,008</u>	<u>\$ 27,330</u>	<u>\$ 2,957,338</u>	<u>\$ 95,947</u>	<u>\$ 3,053,285</u>
35	Operating Income	<u>\$ 478,490</u>	<u>\$ (23,447)</u>	<u>\$ 455,043</u>	<u>\$ 273,326</u>	<u>\$ 728,369</u>
36	Other Income (Expense)					
37	Interest Income	674	-	674		674
38	Other income	-	-	-		-
39	Interest Expense	(102,054)	34,856	(67,198)		(67,198)
40	Other Expense	(2,556)	-	(2,556)		(2,556)
41	Gain/Loss Sale of Fixed Assets	-	-	-		-
42	Total Other Income (Expense)	<u>\$ (103,936)</u>	<u>\$ 34,856</u>	<u>\$ (69,080)</u>	<u>\$ -</u>	<u>\$ (69,080)</u>
43	Net Profit (Loss)	<u>\$ 374,554</u>	<u>\$ 11,409</u>	<u>\$ 385,963</u>	<u>\$ 273,326</u>	<u>\$ 659,289</u>

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 45 SUPPORTING SCHEDULES:
 46 C-1, page 2
 47 E-2
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RECAP SCHEDULES:
 A-1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Income Statement

Exhibit
 Schedule C-1
 Page 2
 Witness: Bourassa

Line No.	Label>>>>	1	2	3	4	4	5	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase	
	Test Year Book Results	Depreciation	Property Taxes	Rate Case Expense	Revenue Annualization	Interest Synchronization	Income tax				
1	Revenues										
2	Flat Rate Revenues	\$ 3,283,063			3,884			\$ 3,286,947	\$ 369,273	\$ 3,656,220	
3	Metered Revenues	105,384						105,384		105,384	
4	Other Revenues	20,050						20,050		20,050	
5		\$ 3,408,498	\$ -	\$ -	\$ -	\$ 3,884	\$ -	\$ 3,412,382	\$ 369,273	\$ 3,781,654	
6	Operating Expenses										
7	Salaries and Wages	\$ 586,136						\$ 586,136		\$ 586,136	
8	Employee Pensions and Benefits	78,458						78,458		78,458	
9	Sludge Removal	139,495			108			139,603		139,603	
10	Purchased Power	149,692			42			149,734		149,734	
11	Chemicals	107,881			83			107,964		107,964	
12	Materials and Supplies	176,709						176,709		176,709	
13	Office Supplies and Expense	76,710			16			76,726		76,726	
14	Contractual Services - Engineering	3,534						3,534		3,534	
15	Contractual Services - Accounting	4,148						4,148		4,148	
16	Contractual Services - Legal	3,404						3,404		3,404	
17	Contractual Services - Other	108,299						108,299		108,299	
18	Contr. Services - Water Testing	19,670						19,670		19,670	
19	Rents - Equipment	7,339						7,339		7,339	
20	Transportation Expenses	27,038						27,038		27,038	
21	Insurance - Vehicle	3,524						3,524		3,524	
22	Insurance - General Liability	48,767						48,767		48,767	
23	Insurance - Worker's Comp	799						799		799	
24	Reg. Comm. Exp.	-						-		-	
25	Reg. Comm. Exp. - Rate Case	-		35,000				35,000		35,000	
26	Bad Debt Expense	8,816						8,816		8,816	
27	Miscellaneous Expense	24,725						24,725		24,725	
28	Depreciation Expense	1,008,985	(97,084)					911,901		911,901	
29	Amortization - Deferred Costs	97,191						97,191		97,191	
30	Taxes Other Than Income	58,058						58,058		58,058	
31	Property Taxes	190,631	(18,674)					171,957	6,117	178,073	
32	Income Tax	-					107,839	107,839	89,830	197,670	
33											
34	Total Operating Expenses	\$ 2,930,008	\$ (97,084)	\$ (18,674)	\$ 35,000	\$ 249	\$ -	\$ 107,839	\$ 2,957,338	\$ 95,947	\$ 3,053,285
35	Operating Income	\$ 478,490	\$ 97,084	\$ 18,674	\$ (35,000)	\$ 3,635	\$ -	\$ (107,839)	\$ 455,043	\$ 273,326	\$ 728,369
36	Other Income (Expense)										
37	Interest Income	674						674		674	
38	Other Income	-						-		-	
39	Interest Expense	(102,054)				34,856		(67,198)		(67,198)	
40	Other Expense	(2,556)						(2,556)		(2,556)	
41	Gain/Loss Sale of Fixed Assets	-						-		-	
42	Total Other Income (Expense)	\$ (103,936)	\$ -	\$ -	\$ -	\$ 34,856	\$ -	\$ (69,080)	\$ -	\$ (69,080)	
43	Net Profit (Loss)	\$ 374,554	\$ 97,084	\$ 18,674	\$ (35,000)	\$ 3,635	\$ 34,856	\$ (107,839)	\$ 385,963	\$ 273,326	\$ 659,289
44											

SUPPORTING SCHEDULES:
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RECAP SCHEDULES:
 C-1, page 1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustments to Revenues and Expenses

Exhibit
 Schedule C-2
 Page 1
 Witness: Bourassa

Line No.	Adjustments to Revenues and Expenses						Subtotal
	1	2	3	4	5	6	
	<u>Depreciation</u>	<u>Property Taxes</u>	<u>Rate Case Expense</u>	<u>Revenue Annualization & Bill Correct.</u>	<u>Interest Synchronization</u>	<u>Income tax</u>	
1							
2							
3	Revenues	-	-	-	3,884	-	3,884
4							
5	Expenses	(97,084)	(18,674)	35,000	249	-	27,330
6							
7	Operating Income	97,084	18,674	(35,000)	3,635	-	(23,447)
8							
9							
10	Interest Expense	-	-	-	-	34,856	34,856
11							
12	Other Income / Expense						-
13							
14							
15							
16	Net Income	97,084	18,674	(35,000)	3,635	34,856	11,409
17							
18							

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustments to Revenues and Expenses
 Adjustment Number 1

Exhibit
 Schedule C-2
 Page 2
 Witness: Bourassa

Depreciation Expense

Line No.	Acct. No.	Description	Adjusted Original Cost	Fully Depr or Non-Depr.	Depr. Original Cost	Proposed Rates	Depreciation Expense
1							
2							
3							
4							
5	351	Organization Cost	-	-	-	0.00%	-
6	352	Franchise Cost	-	-	-	0.00%	-
7	353	Land and Land Rights	91,528	(91,528)	-	0.00%	-
8	354	Structures & Improvements	441,830		441,830	3.33%	14,713
9	355	Power Generation Equipment	138,104		138,104	5.00%	6,905
10	360	Collection Sewers - Force	1,746,872		1,746,872	2.00%	34,937
11	361.1	Collection Sewers - Gravity	3,775,149		3,775,149	2.00%	75,503
12	361.2	Manholes & Cleanouts	1,938,211		1,938,211	2.00%	38,764
13	362	Special Collecting Structures	-		-	2.00%	-
14	363	Servcies to Customers	660,785		660,785	2.00%	13,216
15	364	Flow Measuring Devices	-		-	10.00%	-
16	365	Flow Measuring Installations	-		-	10.00%	-
17	366	Reuse Services	-		-	2.00%	-
18	367	Reuse Meters and Meter Installations	-		-	8.33%	-
19	370	Receiving Wells	673,826		673,826	3.57%	24,056
20	371.1	Pumping Equipment - Lift Stations	1,895,461		1,895,461	6.67%	126,427
21	371.2	Other Pumping Equipment	114,145		114,145	6.67%	7,613
22	371.3	Pumping Equipment - Recharge Wells	1,587,711	(1,587,711)	-	6.67%	-
23	374	Reuse Distribution Reserviors	-		-	2.50%	-
24	375	Reuse Transmission and Distribution	137,467		137,467	2.00%	2,749
25	380	Treatment & Disposal Equipment	10,459,232		10,459,232	5.00%	522,962
26	381	Plant Sewers	-		-	5.00%	-
27	382	Outfall Sewer Lines	-		-	3.33%	-
28	389	Other Plant & Misc Equipment	980,573		980,573	6.67%	65,404
29	390	Office Furniture & Equipment	9,154		9,154	6.67%	611
30	390.1	Computers & Software	16,463	(16,463)	-	20.00%	-
31	391	Transportation Equipment	41,640	(41,640)	-	20.00%	-
32	392	Stores Equipment	-		-	4.00%	-
33	393	Tools, Shop & Garage Equipment	111,972		111,972	10.00%	11,197
34	394	Laboratory Equipment	7,302		7,302	10.00%	730
35	395	Power Operated Equipment	-		-	5.00%	-
36	396	Communication Equipment	183,066		183,066	10.00%	18,307
37	397	Miscellaneous Equipment	570		570	10.00%	57
38	398	Other Tangible Plant	-		-	10.00%	-
39		Post-in-service AFUDC	-		-	4.52%	-
40							
41		TOTALS	\$ 25,011,061	\$ (1,737,342)	\$ 23,273,719		\$ 964,152
42							
43							
44		Less: Amortization of Contributions			\$ 1,261,344	4.1424%	\$ (52,250)
45		Total Depreciation Expense					\$ 911,901
46							
47		Adjusted Test Year Depreciation Expense					1,008,985
48							
49		Increase (decrease) in Depreciation Expense					(97,084)
50							
51		Adjustment to Revenues and/or Expenses					\$ (97,084)
52							
53		<u>SUPPORTING SCHEDULE</u>					
54		B-2, page 3					

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 2

Exhibit
 Schedule C-2
 Page 3
 Witness: Bourassa

Property Taxes

Line No.	DESCRIPTION	Test Year as adjusted	Company Recommended
1	Company Adjusted Test Year Revenues - 2007	\$ 3,412,382	\$ 3,412,382
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	6,824,763	6,824,763
4	Company Recommended Revenue	3,412,382	3,781,654
5	Subtotal (Line 4 + Line 5)	10,237,145	10,606,418
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	3,412,382	3,535,473
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	6,824,763	7,070,945
10	Plus: 10% of CWIP	40,135	40,135
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	6,864,898	7,111,080
13	Assessment Ratio	18.0%	18.0%
14	Assessment Value (Line 12 * Line 13)	1,235,682	1,279,994
15	Composite Property Tax Rate - Obtained from ADOR	13.8032%	13.8032%
16	Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	\$ 170,563	\$ 176,680
17	Tax on Parcels	1,393	1,393
18	Total Property Taxes (Line 16 + Line 17)	\$ 171,957	
19	Test Year Property Taxes	\$ 190,631	
20	Adjustment to Test Year Property Taxes (Line 18 - Line 19)	\$ (18,674)	
21			
22	Property Tax on Company Recommended Revenue (Line 16 + Line 17)		\$ 178,073
23	Company Test Year Adjusted Property Tax Expense (Line 18)		\$ 171,957
24	Increase in Property Tax Due to Increase in Revenue Requirement		\$ 6,117
25			
26	Increase in Property Tax Due to Increase in Revenue Requirement (Line 24)		\$ 6,117
27	Increase in Revenue Requirement		\$ 369,273
28	Increase in Property Tax Per Dollar Increase in Revenue (Line 26 / Line 27)		1.65638%
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 3

Exhibit
Schedule C-2
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Witness: Bourassa

Rate Case Expense

Line
No.

1		
2		
3	Estimated Rate Case Expense	\$ 175,000
4		
5	Estimated Amortization Period in Years	5
6		
7	Annual Rate Case Expense	<u>\$ 35,000</u>
8		
9	Test Year Rate Case Expense	\$ -
10		
11	Increase(decrease) Rate Case Expense	<u>\$ 35,000</u>
12		
13	Adjustment to Revenue and/or Expense	<u>\$ 35,000</u>
14		
15		
16		
17		
18		
19		
20		

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 4

Exhibit
 Schedule C-2
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 Witness: Bourassa

Revenue Annualization

Line			
<u>No.</u>			
1	Revenue Annualization	\$	3,884
2			
3			
4	Total Revenue from Annualization	<u>\$</u>	<u>3,884</u>
5			
6	Purchased Power Expense	\$	149,692
7	Gallons Treated During Test Year (in 1,000s)		377,587
8	Cost per 1,000 gallons	\$	0.3964
9			
10	Additional Gallons Treated from Annualization (in 1,000s)		105.00
11			
12	Increase (decrease) in Purchased Power	<u>\$</u>	<u>42</u>
13			
14	TY Sludge Removal Expense	\$	139,495
15	Gallons Treated During Test Year (in 1,000s)		135,782
16	Cost per 1,000 gallons	\$	1.0273
17			
18	Additional Treated from Annualization (in 1,000s)		105.00
19			
20	Increase (decrease) in Chemicals Expense	<u>\$</u>	<u>108</u>
21			
22	TY Chemicals Expense	\$	107,881
23	Gallons Treated During Test Year (in 1,000s)		135,782
24	Cost per 1,000 gallons	\$	0.7945
25			
26	Additional Treated from Annualization (in 1,000s)		105.00
27			
28	Increase (decrease) in Chemicals Expense	<u>\$</u>	<u>83</u>
29			
30	Additional billings from annualization		35
31	Postage rate	\$	0.46
32			
33	Increase (decrease) in Office Expense	<u>\$</u>	<u>16</u>
34			
35			
36	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>16</u>
37			
38			
39			
40			
41	Adjustment to Revenue and/or Expense	<u>\$</u>	<u>3,635</u>
42			
43	<u>SUPPORTING SCHEDULES</u>		
44	Work Papers		
45	H-1		

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Schedule C-2
Page 6
Witness: Bourassa

Purchased Power Adjustments

Line
No.

1		
2		
3	Rebate from Ocotillo Water Conservation District	\$ 26,712
4	Add power costs for recharge wells	<u>3,211</u>
5		
6	Total	<u>\$ 29,923</u>
7		
8		
9		
10		
11	Adjustment to purchased power expense	\$ 29,923
12		
13		
14	Adjustment to Revenue and/or Expense	<u>\$ 29,923</u>
15		
16	<u>REFERENCE</u>	
17	Testimony	
18		
19		
20		

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
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Annualize Purchased Power

Line No.		
1		
2	Test Year purchased power expense	\$ 149,692
3	Purchased Power Adjustments (Adjustment 5)	<u>29,923</u>
4		
5	Test Year purchased power expense	\$ 179,615
6		
7	Gallons treated during test year (in ,1000's)	390,108
8		
9	Cost per 1,000 gallons = line3 / line 5	\$ 0.46
10		
11	Additional billings from annualization	(69)
12		
13	Annual waste water flow per additional connection (in 1,000's)	38.8
14		
15		
16	Additional gallons treated from annualization (in 1,000's)	(2,676)
17		
18	Additional purchased power expense	\$ (1,231)
19		
20		
21	Adjustment to Revenue and/or Expense	<u>\$ (1,231)</u>
22		
23	<u>REFERENCE</u>	
24	Line 3: C-1 line 11	
25	Line 5: from 2010 annual report	
26	Line 11: Annual gallons treated per customer. See Schedule E-7	
27	Line 14: Line 9 times Line 11	
28	Line 16: Line 7 times Line 14	

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Schedule C-2
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Witness: Bourassa

Line
No.

1	<u>Amorization of deferred operating costs</u>		
2			
3			
4	Deferred operating costs at end of test year	\$	1,048,756
5			
6	Proposed percentage of costs to be recovered		30%
7			
8	Proposed amount to be recovered	\$	314,627
9			
10	Amortization period (years)		5
11			
12	Annual amortization	\$	62,925
13			
14			
15			
16	Adjustment to Amortization Expense	\$	<u>62,925</u>
17			
18			
19	Adjustment to Revenue and/or Expense	\$	<u><u>62,925</u></u>
20			
21			
22			
23			
24			

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Adjustment to Revenues and Expenses
Adjustment Number 8

Exhibit
Schedule C-2
Page 9
Witness: Bourassa

Line			
<u>No.</u>			
1	<u>Annualize effluent credit sales</u>		
2			
3	Test year effluent credit sales	\$	40,000
4			
5	Normalization period (years)	\$	10
6			
7	Normalized annual effluent credit sales	\$	4,000
8			
9			
10	Test year effluent credit sales	\$	<u>40,000</u>
11			
12			
13	Adjustment to Revenue and/or Expense	\$	<u>(36,000)</u>
14			
15			
16			
17			
18			
19			
20			
21			
22			

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and Expenses
 Adjustment Number 9

Exhibit
 Schedule C-2
 Page 10
 Witness: Bourassa

Interest Synchronization

Line
No.

1				
2				
3				
4	Fair Value Rate Base	\$	8,592,112	
5	Weighted Cost of Debt		0.78%	
6	Interest Expense			\$ 67,198
7				
8	Test Year Interest Expense			<u>\$ 102,054</u>
9				
10	Increase (decrease) in Interest Expense			(34,856)
11				
12				
13				
14	Adjustment to Revenue and/or Expense			<u>\$ 34,856</u>
15				

Weighted Cost of Debt Computation

	<u>Amount</u>	<u>Percent</u>	<u>Cost</u>	<u>Weighted Cost</u>
20 Debt	\$ -	#DIV/0!	0.00%	#DIV/0!
21 Equity	\$ -	#DIV/0!	0.00%	#DIV/0!
22 Total	\$ -	#DIV/0!		<u>#DIV/0!</u>
23				
24				
25				
26				
27				
28				
29				
30				

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Adjustment to Revenues and/or Expenses
 Adjustment Number 10

Exhibit
 Schedule C-2
 Page 11
 Witness: Bourassa

Line No.		Test Year Adjusted Results	Adjusted with Rate Increase
1	<u>Income Tax Computation</u>		
2			
3			
4			
5			
6	Revenue	\$ 3,412,382	\$ 3,781,654
7	Operating Expenses Excluding Income Taxes	2,849,499	2,855,615
8	Synchronized Interest	67,198	67,198
9			
10	Income Before Taxes	<u>\$ 495,685</u>	<u>\$ 858,841</u>
11			
12	Arizona Income Before Taxes	\$ 495,685	\$ 858,841
13			
14	Effective Rate ¹	2.94%	3.07%
15			
16	Arizona Income Taxes	\$ 14,593	\$ 26,347
17			
18	Federal Income Before Taxes	\$ 495,685	\$ 858,841
19			
20	Less Arizona Income Taxes	<u>\$ 14,593</u>	<u>\$ 26,347</u>
21			
22	Federal Taxable Income	<u>\$ 481,092</u>	<u>\$ 832,495</u>
23			
24			
25	FEDERAL INCOME TAXES:		
26	Effective Federal Tax Rate	19.38%	20.58%
27			
28			
29	Federal Income Taxes	<u>\$ 93,246</u>	<u>\$ 171,322</u>
30			
31			
32	Total Income Tax	<u>\$ 107,839</u>	<u>\$ 197,669</u>
33			
34	Overall Tax Rate	<u>21.76%</u>	<u>23.02%</u>
35			
36	Income Tax	\$ 107,839	\$ 197,669
37	Test Year Income tax Expense	-	107,839
38	Adjustment to Income Tax Expense	<u>\$ 107,839</u>	<u>\$ 89,830</u>
39			
40			
41	¹ See work papers/testimony		
42			

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Computation of Gross Revenue Conversion Factor

Exhibit
 Schedule C-3
 Page 1
 Witness: Bourassa

Line No.	<u>Description</u>	Percentage of Incremental Gross <u>Revenues</u>
1	Combined Federal and State Effective Income Tax Rate	24.7359%
2		
3	Property Taxes	1.2467%
4		<hr/>
5		
6	Total Tax Percentage	25.9826%
7		
8	Operating Income % = 100% - Tax Percentage	74.0174%
9		
10		
11		
12		
13	<u>1</u> = Gross Revenue Conversion Factor	
14	Operating Income %	1.3510
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

25 SUPPORTING SCHEDULES:
 26 C-3, page 2

RECAP SCHEDULES:
 A-1

27
 28
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 40

GROSS REVENUE CONVERSION FACTOR

Line No.	Description	(A)	(B)	(C)	(D)	(E)	(F)
Calculation of Gross Revenue Conversion Factor:							
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)		25.9826%				
5	Subtotal (L3 - L4)		74.0174%				
6	Revenue Conversion Factor (L1 / L5)		1.351033				
Calculation of Uncollectible Factor:							
7	Unity		100.0000%				
8	Combined Federal and State Tax Rate (Line 17)		24.7359%				
9	One Minus Combined Income Tax Rate (L7 - L8)		75.2641%				
10	Uncollectible Rate		0.0000%				
11	Uncollectible Factor (L9 * L10)		0.0000%				
Calculation of Effective Tax Rate:							
12	Operating Income Before Taxes (Arizona Taxable Income)		100.0000%				
13	Arizona State Income Tax Rate		3.2364%				
14	Federal Taxable Income (L12 - L13)		96.7636%				
15	Applicable Federal Income Tax Rate (Line 44)		22.2186%				
16	Effective Federal Income Tax Rate (L14 x L15)		21.4995%				
17	Combined Federal and State Income Tax Rate (L13 + L16)		24.7359%				
Calculation of Effective Property Tax Factor:							
18	Unity		100.0000%				
19	Combined Federal and State Income Tax Rate (L17)		24.7359%				
20	One Minus Combined Income Tax Rate (L18-L19)		75.2641%				
21	Property Tax Factor		1.6564%				
22	Effective Property Tax Factor (L20*L21)		1.2467%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)		25.9826%				
24	Required Operating Income	\$	728,370				
25	Adjusted Test Year Operating Income (Loss)	\$	455,043				
26	Required Increase in Operating Income (L24 - L25)	\$	273,326				
27	Income Taxes on Recommended Revenue (Col. (E), L52)	\$	197,670				
28	Income Taxes on Test Year Revenue (Col. (B), L52)	\$	107,839				
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)	\$	89,830				
30	Recommended Revenue Requirement	\$	3,781,654				
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.	\$	-				
35	Property Tax with Recommended Revenue	\$	178,073				
36	Property Tax on Test Year Revenue	\$	171,957				
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)	\$	6,117				
38	Total Required Increase in Revenue (L26 + L29 + L37)	\$	369,273				

	(A) (B) (C)		
	Test Year		
Total			
39 Revenue	\$ 3,412,382	\$ 3,412,382	
40 Operating Expenses Excluding Income Taxes	\$ 2,849,499	\$ 2,849,499	
41 Synchronized Interest (L47)	\$ 67,198	\$ 67,198	\$ -
42 Arizona Taxable Income (L30 - L31 - L32)	\$ 495,685	\$ 495,685	\$ -
43 Arizona State Effective Income Tax Rate (see work papers)	2.9441%	2.9441%	2.9441%
44 Arizona Income Tax (L33 x L34)	\$ 14,593	\$ 14,593	\$ -
45 Federal Taxable Income (L33 - L35)	\$ 481,092	\$ 481,092	\$ -
46 Effective Tax Rate (see work papers)	19.3821%	19.3821%	\$ -
47 Federal Income Tax	\$ 93,246	\$ 93,246	\$ -
48			
49			
50			
51 Total Federal Income Tax	\$ 93,246	\$ 93,246	\$ -
52 Combined Federal and State Income Tax (L35 + L42)	\$ 107,839	\$ 107,839	\$ -

	(D) (E) (F)		
	Company Recommended		
Total			
39 Revenue	\$ 3,781,654	\$ 3,781,654	
40 Operating Expenses Excluding Income Taxes	\$ 2,855,615	\$ 2,855,615	
41 Synchronized Interest (L47)	\$ 67,198	\$ 67,198	\$ -
42 Arizona Taxable Income (L30 - L31 - L32)	\$ 858,842	\$ 858,842	\$ -
43 Arizona State Effective Income Tax Rate (see work papers)	3.0677%	3.0677%	3.0677%
44 Arizona Income Tax (L33 x L34)	\$ 26,347	\$ 26,347	\$ -
45 Federal Taxable Income (L33 - L35)	\$ 832,496	\$ 832,496	\$ -
46 Effective Tax Rate (see work papers)	20.5794%	20.5794%	\$ -
47 Federal Income Tax	\$ 171,323	\$ 171,323	\$ -
48			
49			
50			
51 Total Federal Income Tax	\$ 171,323	\$ 171,323	\$ -
52 Combined Federal and State Income Tax (L35 + L42)	\$ 197,670	\$ 197,670	\$ -

53 Applicable State Income Tax Rate [Col. (E), L44 - Col. (B), L44] / [Col. (E), L42 - Col. (B), L42]
 54 Applicable Federal Income Tax Rate [Col. (E), L51 - Col. (B), L51] / [Col. (E), L45 - Col. (B), L45]
 55

3.2364%
 22.2186%

Calculation of Interest Synchronization:
 56 Rate Base
 57 Weighted Average Cost of Debt
 58 Synchronized Interest (L56 X L57)

\$ 8,592,112	N/A	\$ -
0.7821%		0.0000%
\$ 67,198	\$ -	\$ -

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Comparative Balance Sheets

Exhibit
 Schedule E-1
 Page 1
 Witness: Bourassa

Line No.	Test Year Ended <u>12/31/2015</u>	Year Ended <u>12/31/2014</u>	Year Ended <u>12/31/2013</u>
1	<u>ASSETS</u>		
2	\$ 24,972,591	\$ 22,246,410	\$ 22,240,467
3	-	-	-
4	40,135	2,535,683	1,891,798
5	(14,958,290)	(14,280,175)	(13,633,303)
6	<u>\$ 10,054,435</u>	<u>\$ 10,501,918</u>	<u>\$ 10,498,962</u>
7			
8	\$ -	\$ -	\$ -
9			
10	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
11			
12	CURRENT ASSETS		
13	\$ -	\$ -	\$ -
14	-	-	-
15	316,033	302,063	304,978
16	6,171	4,327	13,315
17	-	-	-
18	-	-	-
19	-	-	-
20	-	-	-
21	<u>\$ 322,203</u>	<u>\$ 306,390</u>	<u>\$ 318,293</u>
22			
23	\$ -	\$ -	\$ -
24	322,890	458,074	593,184
25	<u>\$ 322,890</u>	<u>\$ 458,074</u>	<u>\$ 593,184</u>
26			
27	\$ -	\$ -	\$ -
28			
29	<u>\$ 10,699,529</u>	<u>\$ 11,266,382</u>	<u>\$ 11,410,439</u>
30			
31			
32	<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>		
33			
34	\$ 5,869,403	\$ 5,494,850	\$ 4,999,162
35			
36	\$ 2,976,000	\$ 3,255,000	\$ 3,534,000
37			
38	CURRENT LIABILITIES		
39	\$ 243,365	\$ 47,519	\$ 344,796
40	279,000	279,000	279,000
41	836,837	1,637,937	1,659,764
42	-	-	-
43	-	-	-
44	95,326	97,026	92,914
45	8,223	9,236	9,883
46	26,663	28,059	22,652
47	<u>\$ 1,489,414</u>	<u>\$ 2,098,777</u>	<u>\$ 2,409,010</u>
48	DEFERRED CREDITS		
49	\$ -	\$ -	\$ -
50	-	-	-
51	-	-	-
52	1,242,739	1,242,739	1,242,739
53	(878,028)	(824,983)	(774,471)
54	<u>\$ 364,711</u>	<u>\$ 417,756</u>	<u>\$ 468,268</u>
55			
56	<u>\$ 10,699,529</u>	<u>\$ 11,266,382</u>	<u>\$ 11,410,439</u>
57			
58			
59			
60	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>	
61	Workpapers	A-3	
62			

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Comparative Income Statements

Exhibit
 Schedule E-2
 Page 1
 Witness: Bourassa

Line No.	Test Year Ended 12/31/2015	Prior Year Ended 12/31/2014	Prior Year Ended 12/31/2013
1	Revenues		
2	\$ 3,283,063	\$ 3,284,391	\$ 3,199,138
3	105,384	113,063	114,906
4	20,050	18,075	47,835
5	<u>\$ 3,408,498</u>	<u>\$ 3,415,529</u>	<u>\$ 3,361,879</u>
6	Operating Expenses		
7	\$ 586,136	\$ 579,670	\$ 507,675
8	78,458	88,412	76,365
9	139,495	118,021	110,876
10	149,692	153,297	152,826
11	107,881	119,435	102,239
12	176,709	237,924	214,942
13	76,710	68,000	62,679
14	3,534	1,488	14,766
15	4,148	5,230	3,325
16	3,404	8,709	14,890
17	108,299	105,334	111,596
18	19,670	17,709	14,218
19	7,339	450	886
20	27,038	39,789	41,114
21	3,524	3,712	3,197
22	48,767	18,444	19,104
23	799	469	512
24	-	-	-
25	-	-	-
26	8,816	9,878	5,921
27	24,725	30,207	35,602
28	1,008,985	849,996	1,017,967
29	97,191	97,191	97,191
30	58,058	57,783	47,954
31	190,631	194,318	185,909
32	-	-	-
33	-	-	-
34	<u>\$ 2,930,008</u>	<u>\$ 2,805,464</u>	<u>\$ 2,841,752</u>
35	<u>\$ 478,490</u>	<u>\$ 610,065</u>	<u>\$ 520,126</u>
36	Other Income (Expense)		
37	674	254	452
38	-	232	4
39	(102,054)	(112,681)	(121,260)
40	(2,556)	(2,183)	(849)
41	-	-	-
42	<u>\$ (103,936)</u>	<u>\$ (114,378)</u>	<u>\$ (121,654)</u>
43	<u>\$ 374,554</u>	<u>\$ 495,687</u>	<u>\$ 398,473</u>

47 SUPPORTING SCHEDULES:
 48 Workpapers
 49

RECAP SCHEDULES:
 A-2

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Comparative Statements of Cash Flows

Exhibit
 Schedule E-3
 Page 1
 Witness: Bourassa

Line No.	Test Year Ended <u>12/31/2015</u>	Prior Year Ended <u>12/31/2014</u>	Prior Year Ended <u>12/31/2013</u>
3	Cash Flows from Operating Activities		
4	Net Income		
	\$ 374,554	\$ 495,687	\$ 398,473
5	Adjustments to reconcile net income to net cash		
6	provided by operating activities:		
7	1,008,985	849,996	1,017,967
8	(383,915)	(253,636)	(275,998)
9	Changes in Certain Assets and Liabilities:		
10	(13,970)	2,915	(17,686)
11	Unbilled Revenues		
12	Materials and Supplies Inventory		
13	Prepaid Expenses		
14	Restricted Cash		
15	(801,100)	(21,827)	664,964
16	(1,844)	8,988	2,353
17	135,184	135,110	135,174
18	195,846	(297,277)	249,006
19	Customer Deposits		
20	(1,013)	(647)	(636)
21	(1,700)	4,112	430
22	(1,396)	5,407	742
23	2		
24	<u>\$ 509,633</u>	<u>\$ 928,828</u>	<u>\$ 2,174,789</u>
25	Cash Flow From Investing Activities:		
26	(230,633)	(649,828)	(1,895,789)
27	Plant Held for Future Use		
28	Changes in debt reserve fund		
29	<u>\$ (230,633)</u>	<u>\$ (649,828)</u>	<u>\$ (1,895,789)</u>
30	Cash Flow From Financing Activities		
31	Change in Restricted Cash		
32	(279,000)	(279,000)	(279,000)
33	Proceeds from Long-Term Debt		
34	Net receipt of contributions in aid of construction		
35	Net receipts of advances in aid of construction		
36	Distributions/Dividends Paid		
37	Deferred Financing Costs		
38	Paid in Capital		
38	<u>\$ (279,000)</u>	<u>\$ (279,000)</u>	<u>\$ (279,000)</u>
39	0	0	(0)
40	Increase(decrease) in Cash and Cash Equivalents		
40	0	(0)	-
41	Cash and Cash Equivalents at Beginning of Year		
41	<u>0</u>	<u>0</u>	<u>(0)</u>
42	Cash and Cash Equivalents at End of Year		

44 SUPPORTING SCHEDULES:
 45 Workpapers/cashflow sewer.xls
 46

RECAP SCHEDULES:
 A-5

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Statement of Changes in Stockholder's Equity

Exhibit
 Schedule E-4
 Page 1
 Witness: Bourassa

Line

No.

	<u>Common</u> <u>Stock</u>	<u>Additional</u> <u>Paid-In-Capital</u>	<u>Retained</u> <u>Earnings</u>	<u>Total</u>
1				
2				
3				
4	\$ 72,624	\$ 4,037,614	\$ 1,887,682	\$ 5,997,920
5				-
6				-
7				-
8			398,473	398,473
9				
10	\$ 72,624	\$ 4,037,614	\$ 2,286,154	\$ 6,396,392
11				-
12				-
13				-
14			495,687	495,687
15				
16	\$ 72,624	\$ 4,037,614	\$ 2,781,842	\$ 6,892,080
17				-
18				-
19				-
20			374,554	374,554
21				
22	\$ 72,624	\$ 4,037,614	\$ 3,156,396	\$ 7,266,634

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SUPPORTING SCHEDULES:

RECAP SCHEDULES:
E-1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Detail of Plant in Service

Exhibit
 Schedule E-5
 Page 1
 Witness: Bourassa

Line No.	Acct. No.	Plant Description	Plant Balance at 12/31/2014	Plant Additions, Reclassifications or Retirements	Plant Balance at 12/31/2015
1					
2	351	Organization Cost	\$ -	\$ -	\$ -
3	352	Franchise Cost		-	
4	353	Land and Land Rights	92,008	-	92,008
5	354	Structures & Improvements	5,421	3,479	8,901
6	355	Power Generation Equipment		-	
7	360	Collection Sewers - Force	1,526,701	62,307	1,589,008
8	361.1	Collection Sewers - Gravity	5,919,663	73,351	5,993,014
9	361.2	Manholes & Cleanouts		-	
10	362	Special Collecting Structures		-	
11	363	Servcies to Customers	628,785	-	628,785
12	364	Flow Measuring Devices		-	
13	365	Flow Measuring Installations		-	
14	366	Reuse Services		-	
15	367	Reuse Meters and Meter Installations		-	
16	370	Receiving Wells		-	
17	371.1	Pumping Equipment - Lift Stations		-	
18	371.2	Other Pumping Equipment		-	
19	371.3	Pumping Equipment - Recharge Wells		-	
20	374	Reuse Distribution Reservoirs		-	
21	375	Reuse Transmission and Distribution		-	
22	380	Treatment & Disposal Equipment	10,583,267	72,476	10,655,743
23	381	Plant Sewers		-	
24	382	Outfall Sewer Lines	536,196	2,243	538,439
25	389	Other Plant & Misc Equipment	327,190	14,028	341,218
26	390	Office Furniture & Equipment		-	
27	390.1	Computers & Software		-	
28	391	Transportation Equipment		-	
29	392	Stores Equipment		-	
30	393	Tools, Shop & Garage Equipment		-	
31	394	Laboratory Equipment		-	
32	395	Power Operated Equipment		-	
33	396	Communication Equipment		-	
34	397	Miscellaneous Equipment		-	
35	398	Other Tangible Plant		-	
36		Post-in-service AFUDC	421,146		421,146
37				-	
38		Rounding			-
39		TOTAL WATER PLANT	<u>\$ 20,040,377</u>	<u>\$ 227,885</u>	<u>\$ 20,268,262</u>

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 41 SUPPORTING SCHEDULES
 42 Workpapers/Trial Balance Mapping Water and Sewer tjb.xls
 43
 44

RECAP SCHEDULES:
 A-4
 E-1

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Operating Statistics

Exhibit
 Schedule E-7
 Page 1
 Witness: Bouras

Line No.		Test Year Ended <u>12/31/2015</u>	Prior Year Ended <u>12/31/2014</u>	Prior Year Ended <u>12/31/2013</u>
1	<u>WATER STATISTICS:</u>			
2				
3				
4				
5	Gallons Treated (in Thousands)	390,108	387,475	392,907
6				
7				
8				
9	Sewer Revenues from Customers:	\$ 3,283,063	\$ 3,284,391	\$ 3,199,138
10				
11				
12				
13				
14	Year End Number of Customers	10,058	10,049	10,187
15				
16				
17	Annual Gallons Treated (in Thousands)			
18	Per Year End Customer	38.8	38.6	38.6
19				
20				
21				
22	Annual Revenue per Year End Customer	\$ 326.41	\$ 326.84	\$ 314.04
23				
24	Pumping Cost Per 1,000 Gallons	\$ 0.3837	\$ 0.3956	\$ 0.3890
25				

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Taxes Charged to Operations

Exhibit
Schedule E-8
Page 1
Witness: Bourassa

Line No.	Description	Test Year Ended <u>12/31/2015</u>	Prior Year Ended <u>12/31/2014</u>	Prior Year Ended <u>12/31/2013</u>
1	Description			
2				
3	State Income Taxes	\$ -	\$ -	\$ -
4	Federal Income Taxes	-	-	-
5	Payroll Taxes	619	578	616
6	Property Taxes	190,631	194,318	185,909
7				
8	Totals	<u>\$ 191,250</u>	<u>\$ 194,897</u>	<u>\$ 186,525</u>
9				
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Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Notes To Financial Statements

Exhibit
Schedule E-9
Page 1
Witness: Bourassa

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See attached audited financial statements.

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Projected Income Statements - Present & Proposed Rates

Exhibit
 Schedule F-1
 Page 1
 Witness: Bourassa

Line No.	Test Year Actual Results	At Present Rates Year Ended 12/31/2016	At Proposed Rates Year Ended 12/31/2016
1	Revenues		
2	Metered Water Revenues	\$ 3,283,063	\$ 3,286,947
3	Unmetered Water Revenues	105,384	105,384
4	Other Water Revenues	20,050	20,050
5		<u>\$ 3,408,498</u>	<u>\$ 3,412,382</u>
6	Operating Expenses		
7	Salaries and Wages	\$ 586,136	\$ 586,136
8	Employee Pensions and Benefits	78,458	78,458
9	Purchased Power	149,692	149,734
10	Chemicals	107,881	107,964
11	Materials and Supplies	176,709	176,709
12	Office Supplies and Expense	76,710	76,726
13	Contractual Services - Engineering	3,534	3,534
14	Contractual Services - Accounting	4,148	4,148
15	Contractual Services - Legal	3,404	3,404
16	Contractual Services - Other	108,299	108,299
17	Contractual Services - Water Testing	19,670	19,670
18	Rents - Equipment	7,339	7,339
19	Transportation Expenses	27,038	27,038
20	Insurance - Vehicle	3,524	3,524
21	Insurance - General Liability	48,767	48,767
22	Insurance - Worker's Comp	799	799
23	Regulatory Commission Expense	-	-
24	Regulatory Commission Expense - Rate Case	-	35,000
25	Bad Debt Expense	8,816	8,816
26	Miscellaneous Expense	24,725	24,725
27	Depreciation Expense	1,008,985	911,901
28	Taxes Other Than Income	58,058	58,058
29	Property Taxes	190,631	171,957
30	Income Tax	-	107,839
31			197,670
32	Total Operating Expenses	<u>\$ 2,693,322</u>	<u>\$ 2,720,544</u>
33	Operating Income	<u>\$ 715,176</u>	<u>\$ 691,837</u>
34	Other Income (Expense)		
35	Interest Income	674	674
36	Other income	-	-
37	Interest Expense	(102,054)	(67,198)
38	Other Expense	(2,556)	(2,556)
39	Gain/Loss Sale of Fixed Assets	-	-
40	Total Other Income (Expense)	<u>\$ (103,936)</u>	<u>\$ (69,080)</u>
41	Net Profit (Loss)	<u>\$ 611,240</u>	<u>\$ 896,083</u>

44 SUPPORTING SCHEDULES:

45 C-1

46

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48 XXXX

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Projected Statements of Changes in Financial Position
 Present and Proposed Rates

Exhibit
 Schedule F-2
 Page 1
 Witness: Bourassa

Line No.		Test Year Ended <u>12/31/2015</u>	At Present Rates Year Ended <u>12/31/2016</u>	At Proposed Rates Year Ended <u>12/31/2016</u>
5	Cash Flows from Operating Activities			
6	Net Income	\$ 374,554	\$ 385,963	\$ 659,289
7	Adjustments to reconcile net income to net cash			
8	provided by operating activities:			
9	Depreciation and Amortization	1,008,985	911,901	911,901
10	Other	(383,915)		
11	Changes in Certain Assets and Liabilities:			
12	Accounts Receivable	(13,970)		
13	Unbilled Revenues	-		
14	Materials and Supplies Inventory	-		
15	Prepaid Expenses	-		
16	Restricted Cash	-		
17	Receivable/Payable from Assoc. Co.	(801,100)		
18	Other Receivable	(1,844)		
19	Deferred Debits	135,184		
20	Accounts Payable	195,846		
21	Customer Deposits	-		
22	Interest Payable	(1,013)		
23	Taxes Payable	(1,700)		
24	Other assets and liabilities	(1,396)		
25	Rounding	2		
26	Net Cash Flow provided by Operating Activities	<u>\$ 509,633</u>	<u>\$ 1,297,865</u>	<u>\$ 1,571,191</u>
27	Cash Flow From Investing Activities:			
28	Capital Expenditures	(230,633)	(162,971)	(162,971)
29	Plant Held for Future Use	-		
30	Changes in debt reserve fund	-		
31	Net Cash Flows from Investing Activities	<u>\$ (230,633)</u>	<u>\$ (162,971)</u>	<u>\$ (162,971)</u>
32	Cash Flow From Financing Activities			
33	Change in Restricted Cash	-		
34	Proceeds from Long-Term Debt	(279,000)	(279,000)	(279,000)
35	Net receipt of contributions in aid of construction	-	-	-
36	Net receipts of advances in aid of construction	-	-	-
37	Distributions/Dividends Paid	-	(320,119)	(560,279)
38	Deferred Financing Costs	-	-	-
39	Paid in Capital	-	-	-
40				
41	Net Cash Flows Provided by Financing Activities	<u>\$ (279,000)</u>	<u>\$ (599,119)</u>	<u>\$ (839,279)</u>
42	Increase(decrease) in Cash and Cash Equivalents	0	535,775	568,942
43	Cash and Cash Equivalents at Beginning of Year	0	0	0
44	Cash and Cash Equivalents at End of Year	<u>\$ 0</u>	<u>\$ 535,775</u>	<u>\$ 568,942</u>

SUPPORTING SCHEDULES:

E-3

53

Pima Utility Company - Wastewater Division
 Test Year Ended December 31, 2015
 Projected Construction Requirements

Exhibit
 Schedule F-3
 Page 1
 Witness: Bourassa

Line No.	Account Number	Plant Asset:	Test Year	2016	2017	2018
1						
2						
3						
4	351	Organization Cost	\$ -	\$ -	\$ -	\$ -
5	352	Franchise Cost	-	-	-	-
6	353	Land and Land Rights	-	-	-	-
7	354	Structures & Improvements	3,479	-	30,000	-
8	355	Power Generation Equipment	-	-	-	-
9	360	Collection Sewers - Force	62,307	-	-	-
10	361.1	Collection Sewers - Gravity	73,351	-	-	-
11	361.2	Manholes & Cleanouts	-	-	-	-
12	362	Special Collecting Structures	-	-	-	-
13	363	Servcies to Customers	-	-	-	-
14	364	Flow Measuring Devices	-	4,200	-	-
15	365	Flow Measuring Installations	-	-	-	-
16	366	Reuse Services	-	-	-	-
17	367	Reuse Meters and Meter Installations	-	-	-	-
18	370	Receiving Wells	-	-	-	-
19	371.1	Pumping Equipment - Lift Stations	-	70,000	-	-
20	371.2	Other Pumping Equipment	-	-	-	-
21	371.3	Pumping Equipment - Recharge Wells	-	4,600	-	-
22	374	Reuse Distribution Reservoirs	-	-	-	-
23	375	Reuse Transmission and Distribution	-	-	-	-
24	380	Treatment & Disposal Equipment	72,476	84,171	305,000	110,000
25	381	Plant Sewers	-	-	-	-
26	382	Outfall Sewer Lines	2,243	-	-	-
27	389	Other Plant & Misc Equipment	14,028	-	-	-
28	390	Office Furniture & Equipment	-	-	-	-
29	390.1	Computers & Software	-	-	-	-
30	391	Transportation Equipment	-	-	-	-
31	392	Stores Equipment	-	-	-	-
32	393	Tools, Shop & Garage Equipment	-	-	-	-
33	394	Laboratory Equipment	-	-	-	-
34	395	Power Operated Equipment	-	-	-	-
35	396	Communication Equipment	-	-	-	-
36	397	Miscellaneous Equipment	-	-	-	-
37	398	Other Tangible Plant	-	-	-	-
38						
39	Total		\$ 227,885	\$ 162,971	\$ 335,000	\$ 110,000
40						
41						
42						

Pima Utility Company - Wastewater Division
Test Year Ended December 31, 2015
Assumptions Used in Rate Filing

Exhibit
Schedule F-4
Page 1
Witness: Bourassa

Line

No.

- 1 Property Taxes were computed using the method used by the Arizona Department
- 2 of Revenue modified for ratemaking.
- 3
- 4 Projected construction expenditures are shown on Schedule A-4.
- 5
- 6 Expense adjustments are shown on Schedule C2, and are explained in the testimony.
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- 37
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- 39
- 40

Pima Utility Company - Sewer Division
 Test Year Ended December 31, 2015
 Present and Proposed Rates

Exhibit
 Schedule H-3
 Page 1

Line No.	Monthly Usage Charge for:	Present Rates	Proposed Rates	Change	Percent Change
1	Meter Size (All Classes):				
2	5/8x3/4 Inch	\$ 25.17	\$ 27.91	\$ 2.74	10.90%
3	3/4 Inch	39.12	43.39	4.26	10.90%
4	1 Inch	65.69	72.85	7.16	10.90%
5	1 1/2 Inch	129.91	144.07	14.16	10.90%
6	2 Inch	207.42	230.03	22.61	10.90%
7	3 Inch	402.68	446.57	43.89	
8	4 Inch	629.18	697.76	68.58	
9	6 Inch	1,198.44	1,198.44	-	
10	Effluent Sales	180.00	181.11	1.11	0.62%
11	Charge per 1,000 gallons	\$ 0.51	\$ 0.57	0.06	10.90%
12					
13	Recovered Effluent Sales	180.00	181.11	1.11	0.62%
14	Charge per 1,000 gallons	\$ 0.51	\$ 0.57	0.06	10.90%
15					
16					
17					
18					
19					
20	NT = No Tariff				

Pima Utility Company - Sewer Division
Present and Proposed Rates
Test Year Ended December 31, 2015

Exhibit
Schedule H-3
Page 2
Witness: Bourassa

Line
No.

1
2 Other Charges:
3
4

5	Establishment	\$ 25.00	\$ 25.00
6	Re-establishment (Within 12 months)	*	*
7	Reconnection (Delinquent)	\$ 25.00	\$ 25.00
8	Deposit	**	**
9	Deposit Interest	**	**
10	NSF Check	\$ 15.00	\$ 15.00
11	Meter Re-read	\$ 20.00	\$ 20.00
12	Late Payment Fee, per month***	1.5%	1.5%
13	After hours service charge	\$ 50.00	\$ 50.00

14
15
16 * Number of months off the system times the applicable sewer charges.
17 ** Per A.A.C. R-14-2-603.B.7 and 603.B.3
18 *** Late payment charge based upon balance owing at the end of the billing cycle wich is added to next bill.
19
20

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 5/8x3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 1
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 25.17	\$ 27.91	\$ 2.74	10.90%
1,000	25.17	27.91	\$ 2.74	10.90%
2,000	25.17	27.91	\$ 2.74	10.90%
3,000	25.17	27.91	\$ 2.74	10.90%
4,000	25.17	27.91	\$ 2.74	10.90%
5,000	25.17	27.91	\$ 2.74	10.90%
6,000	25.17	27.91	\$ 2.74	10.90%
7,000	25.17	27.91	\$ 2.74	10.90%
8,000	25.17	27.91	\$ 2.74	10.90%
9,000	25.17	27.91	\$ 2.74	10.90%
10,000	25.17	27.91	\$ 2.74	10.90%
12,000	25.17	27.91	\$ 2.74	10.90%
14,000	25.17	27.91	\$ 2.74	10.90%
16,000	25.17	27.91	\$ 2.74	10.90%
18,000	25.17	27.91	\$ 2.74	10.90%
20,000	25.17	27.91	\$ 2.74	10.90%
25,000	25.17	27.91	\$ 2.74	10.90%
30,000	25.17	27.91	\$ 2.74	10.90%
35,000	25.17	27.91	\$ 2.74	10.90%
40,000	25.17	27.91	\$ 2.74	10.90%
45,000	25.17	27.91	\$ 2.74	10.90%
50,000	25.17	27.91	\$ 2.74	10.90%
60,000	25.17	27.91	\$ 2.74	10.90%
70,000	25.17	27.91	\$ 2.74	10.90%
80,000	25.17	27.91	\$ 2.74	10.90%
90,000	25.17	27.91	\$ 2.74	10.90%
100,000	25.17	27.91	\$ 2.74	10.90%

Present Rates:
 Monthly Minimum: \$ 25.17

Proposed Rates:
 Monthly Minimum: \$ 27.91

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 1 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 2
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
-	\$ 65.69	\$ 72.85	\$ 7.16	10.90%
1,000	65.69	72.85	\$ 7.16	10.90%
2,000	65.69	72.85	\$ 7.16	10.90%
3,000	65.69	72.85	\$ 7.16	10.90%
4,000	65.69	72.85	\$ 7.16	10.90%
5,000	65.69	72.85	\$ 7.16	10.90%
6,000	65.69	72.85	\$ 7.16	10.90%
7,000	65.69	72.85	\$ 7.16	10.90%
8,000	65.69	72.85	\$ 7.16	10.90%
9,000	65.69	72.85	\$ 7.16	10.90%
10,000	65.69	72.85	\$ 7.16	10.90%
12,000	65.69	72.85	\$ 7.16	10.90%
14,000	65.69	72.85	\$ 7.16	10.90%
16,000	65.69	72.85	\$ 7.16	10.90%
18,000	65.69	72.85	\$ 7.16	10.90%
20,000	65.69	72.85	\$ 7.16	10.90%
25,000	65.69	72.85	\$ 7.16	10.90%
30,000	65.69	72.85	\$ 7.16	10.90%
35,000	65.69	72.85	\$ 7.16	10.90%
40,000	65.69	72.85	\$ 7.16	10.90%
45,000	65.69	72.85	\$ 7.16	10.90%
50,000	65.69	72.85	\$ 7.16	10.90%
60,000	65.69	72.85	\$ 7.16	10.90%
70,000	65.69	72.85	\$ 7.16	10.90%
80,000	65.69	72.85	\$ 7.16	10.90%
90,000	65.69	72.85	\$ 7.16	10.90%
100,000	65.69	72.85	\$ 7.16	10.90%

Present Rates:
 Monthly Minimum: \$ 65.69

Proposed Rates:
 Monthly Minimum: \$ 72.85

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 5/8x3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 3
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
-	\$ 25.17	\$ 27.91	\$ 2.74	10.90%
1,000	25.17	27.91	\$ 2.74	10.90%
2,000	25.17	27.91	\$ 2.74	10.90%
3,000	25.17	27.91	\$ 2.74	10.90%
4,000	25.17	27.91	\$ 2.74	10.90%
5,000	25.17	27.91	\$ 2.74	10.90%
6,000	25.17	27.91	\$ 2.74	10.90%
7,000	25.17	27.91	\$ 2.74	10.90%
8,000	25.17	27.91	\$ 2.74	10.90%
9,000	25.17	27.91	\$ 2.74	10.90%
10,000	25.17	27.91	\$ 2.74	10.90%
12,000	25.17	27.91	\$ 2.74	10.90%
14,000	25.17	27.91	\$ 2.74	10.90%
16,000	25.17	27.91	\$ 2.74	10.90%
18,000	25.17	27.91	\$ 2.74	10.90%
20,000	25.17	27.91	\$ 2.74	10.90%
25,000	25.17	27.91	\$ 2.74	10.90%
30,000	25.17	27.91	\$ 2.74	10.90%
35,000	25.17	27.91	\$ 2.74	10.90%
40,000	25.17	27.91	\$ 2.74	10.90%
45,000	25.17	27.91	\$ 2.74	10.90%
50,000	25.17	27.91	\$ 2.74	10.90%
60,000	25.17	27.91	\$ 2.74	10.90%
70,000	25.17	27.91	\$ 2.74	10.90%
80,000	25.17	27.91	\$ 2.74	10.90%
90,000	25.17	27.91	\$ 2.74	10.90%
100,000	25.17	27.91	\$ 2.74	10.90%

Present Rates:
 Monthly Minimum: \$ 25.17

Proposed Rates:
 Monthly Minimum: \$ 27.91

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 3/4 Inch Meter
 Test Year Ended December 31, 2015
 (Excludes all Revenue Related Taxes)

Exhibit
 Schedule H-4
 Page 4
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 39.12	\$ 43.39	\$ 4.26	10.90%
1,000	39.12	43.39	\$ 4.26	10.90%
2,000	39.12	43.39	\$ 4.26	10.90%
3,000	39.12	43.39	\$ 4.26	10.90%
4,000	39.12	43.39	\$ 4.26	10.90%
5,000	39.12	43.39	\$ 4.26	10.90%
6,000	39.12	43.39	\$ 4.26	10.90%
7,000	39.12	43.39	\$ 4.26	10.90%
8,000	39.12	43.39	\$ 4.26	10.90%
9,000	39.12	43.39	\$ 4.26	10.90%
10,000	39.12	43.39	\$ 4.26	10.90%
12,000	39.12	43.39	\$ 4.26	10.90%
14,000	39.12	43.39	\$ 4.26	10.90%
16,000	39.12	43.39	\$ 4.26	10.90%
18,000	39.12	43.39	\$ 4.26	10.90%
20,000	39.12	43.39	\$ 4.26	10.90%
25,000	39.12	43.39	\$ 4.26	10.90%
30,000	39.12	43.39	\$ 4.26	10.90%
35,000	39.12	43.39	\$ 4.26	10.90%
40,000	39.12	43.39	\$ 4.26	10.90%
45,000	39.12	43.39	\$ 4.26	10.90%
50,000	39.12	43.39	\$ 4.26	10.90%
60,000	39.12	43.39	\$ 4.26	10.90%
70,000	39.12	43.39	\$ 4.26	10.90%
80,000	39.12	43.39	\$ 4.26	10.90%
90,000	39.12	43.39	\$ 4.26	10.90%
100,000	39.12	43.39	\$ 4.26	10.90%
7,500	\$ 39.12	\$ 43.39	\$ 4.26	10.90%

Present Rates:
 Monthly Minimum: \$ 39.12

Proposed Rates:
 Monthly Minimum: \$ 43.39

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 1 Inch Meter
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Page 5
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
-	\$ 65.69	\$ 72.85	\$ 7.16	10.90%
1,000	65.69	72.85	\$ 7.16	10.90%
2,000	65.69	72.85	\$ 7.16	10.90%
3,000	65.69	72.85	\$ 7.16	10.90%
4,000	65.69	72.85	\$ 7.16	10.90%
5,000	65.69	72.85	\$ 7.16	10.90%
6,000	65.69	72.85	\$ 7.16	10.90%
7,000	65.69	72.85	\$ 7.16	10.90%
8,000	65.69	72.85	\$ 7.16	10.90%
9,000	65.69	72.85	\$ 7.16	10.90%
10,000	65.69	72.85	\$ 7.16	10.90%
12,000	65.69	72.85	\$ 7.16	10.90%
14,000	65.69	72.85	\$ 7.16	10.90%
16,000	65.69	72.85	\$ 7.16	10.90%
18,000	65.69	72.85	\$ 7.16	10.90%
20,000	65.69	72.85	\$ 7.16	10.90%
25,000	65.69	72.85	\$ 7.16	10.90%
30,000	65.69	72.85	\$ 7.16	10.90%
35,000	65.69	72.85	\$ 7.16	10.90%
40,000	65.69	72.85	\$ 7.16	10.90%
45,000	65.69	72.85	\$ 7.16	10.90%
50,000	65.69	72.85	\$ 7.16	10.90%
60,000	65.69	72.85	\$ 7.16	10.90%
70,000	65.69	72.85	\$ 7.16	10.90%
80,000	65.69	72.85	\$ 7.16	10.90%
90,000	65.69	72.85	\$ 7.16	10.90%
100,000	65.69	72.85	\$ 7.16	10.90%

Present Rates:		
Monthly Minimum:	\$	65.69
Proposed Rates:		
Monthly Minimum:	\$	72.85
Gallons in Minimum		-
Charge Per 1,000 Gallons		
Up to	25,000	\$ -
Over	25,000	\$ -

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 1.5 Inch Meter Page 6
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>	
-	\$ 129.91	\$ 144.07	\$ 14.16	10.90%	
1,000	129.91	144.07	\$ 14.16	10.90%	Present Rates:
2,000	129.91	144.07	\$ 14.16	10.90%	Monthly Minimum: \$ 129.91
3,000	129.91	144.07	\$ 14.16	10.90%	
4,000	129.91	144.07	\$ 14.16	10.90%	
5,000	129.91	144.07	\$ 14.16	10.90%	
6,000	129.91	144.07	\$ 14.16	10.90%	
7,000	129.91	144.07	\$ 14.16	10.90%	
8,000	129.91	144.07	\$ 14.16	10.90%	
9,000	129.91	144.07	\$ 14.16	10.90%	
10,000	129.91	144.07	\$ 14.16	10.90%	
12,000	129.91	144.07	\$ 14.16	10.90%	Proposed Rates:
14,000	129.91	144.07	\$ 14.16	10.90%	Monthly Minimum: \$ 144.07
16,000	129.91	144.07	\$ 14.16	10.90%	
18,000	129.91	144.07	\$ 14.16	10.90%	
20,000	129.91	144.07	\$ 14.16	10.90%	
25,000	129.91	144.07	\$ 14.16	10.90%	
30,000	129.91	144.07	\$ 14.16	10.90%	
35,000	129.91	144.07	\$ 14.16	10.90%	
40,000	129.91	144.07	\$ 14.16	10.90%	
45,000	129.91	144.07	\$ 14.16	10.90%	
50,000	129.91	144.07	\$ 14.16	10.90%	
60,000	129.91	144.07	\$ 14.16	10.90%	
70,000	129.91	144.07	\$ 14.16	10.90%	
80,000	129.91	144.07	\$ 14.16	10.90%	
90,000	129.91	144.07	\$ 14.16	10.90%	
100,000	129.91	144.07	\$ 14.16	10.90%	

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Commercial 2 Inch Meter
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Page 7
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
-	\$ 207.42	\$ 230.03	\$ 22.61	10.90%
1,000	207.42	230.03	\$ 22.61	10.90%
2,000	207.42	230.03	\$ 22.61	10.90%
3,000	207.42	230.03	\$ 22.61	10.90%
4,000	207.42	230.03	\$ 22.61	10.90%
5,000	207.42	230.03	\$ 22.61	10.90%
6,000	207.42	230.03	\$ 22.61	10.90%
7,000	207.42	230.03	\$ 22.61	10.90%
8,000	207.42	230.03	\$ 22.61	10.90%
9,000	207.42	230.03	\$ 22.61	10.90%
10,000	207.42	230.03	\$ 22.61	10.90%
12,000	207.42	230.03	\$ 22.61	10.90%
14,000	207.42	230.03	\$ 22.61	10.90%
16,000	207.42	230.03	\$ 22.61	10.90%
18,000	207.42	230.03	\$ 22.61	10.90%
20,000	207.42	230.03	\$ 22.61	10.90%
25,000	207.42	230.03	\$ 22.61	10.90%
30,000	207.42	230.03	\$ 22.61	10.90%
35,000	207.42	230.03	\$ 22.61	10.90%
40,000	207.42	230.03	\$ 22.61	10.90%
45,000	207.42	230.03	\$ 22.61	10.90%
50,000	207.42	230.03	\$ 22.61	10.90%
60,000	207.42	230.03	\$ 22.61	10.90%
70,000	207.42	230.03	\$ 22.61	10.90%
80,000	207.42	230.03	\$ 22.61	10.90%
90,000	207.42	230.03	\$ 22.61	10.90%
100,000	207.42	230.03	\$ 22.61	10.90%

Present Rates:
 Monthly Minimum: \$ 207.42

Proposed Rates:
 Monthly Minimum: \$ 230.03

Pima Utility Company - Sewer Division
 Bill Comparison of Present and Proposed Rates
 Customer Classification Effluent
 Test Year Ended December 31, 2015

Exhibit
 Schedule H-4
 Page 7
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 180.00	\$ 181.11	\$ 1.11	0.62%
1,000	180.51	181.67	\$ 1.16	0.65%
2,000	181.02	182.24	\$ 1.22	0.67%
3,000	181.53	182.81	\$ 1.28	0.70%
4,000	182.04	183.37	\$ 1.33	0.73%
5,000	182.55	183.94	\$ 1.39	0.76%
6,000	183.06	184.50	\$ 1.44	0.79%
7,000	183.57	185.07	\$ 1.50	0.82%
8,000	184.08	185.63	\$ 1.55	0.84%
9,000	184.59	186.20	\$ 1.61	0.87%
10,000	185.10	186.76	\$ 1.66	0.90%
12,000	186.12	187.90	\$ 1.78	0.95%
14,000	187.14	189.03	\$ 1.89	1.01%
16,000	188.16	190.16	\$ 2.00	1.06%
18,000	189.18	191.29	\$ 2.11	1.12%
20,000	190.20	192.42	\$ 2.22	1.17%
25,000	192.75	195.25	\$ 2.50	1.30%
30,000	195.30	198.08	\$ 2.78	1.42%
35,000	197.85	200.90	\$ 3.05	1.54%
40,000	200.40	203.73	\$ 3.33	1.66%
45,000	202.95	206.56	\$ 3.61	1.78%
50,000	205.50	209.39	\$ 3.89	1.89%
60,000	210.60	215.04	\$ 4.44	2.11%
70,000	215.70	220.70	\$ 5.00	2.32%
80,000	220.80	226.36	\$ 5.56	2.52%
90,000	225.90	232.01	\$ 6.11	2.71%
100,000	231.00	237.67	\$ 6.67	2.89%
Average Usage				
6,985,145	\$ 3,742.42	\$ 4,131.84	\$ 389.41	10.41%
Median Usage				
5,365,000	\$ 2,916.15	\$ 3,215.50	\$ 299.35	10.27%

Present Rates:
 Monthly Minimum: \$ 180.00
 Gallons in Minimum -
 Charge Per 1,000 Gallons 0.51

Proposed Rates:
 Monthly Minimum: \$ 181.11
 Gallons in Minimum -
 Charge Per 1,000 Gallons 0.57

Pima Utility Company - Sewer Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 3/4 Inch Meter

Exhibit
 Schedule H-5
 Page 4
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	
-	-	3	3	3	3	3	3	3	3	3	3	3	3	36	
1	1,000													-	
1,001	2,000													-	
2,001	3,000													-	
3,001	4,000													-	
4,001	5,000													-	
5,001	6,000													-	
6,001	7,000													-	
7,001	8,000													-	
8,001	9,000													-	
9,001	10,000													-	
10,001	12,000													-	
12,001	14,000													-	
14,001	16,000													-	
16,001	18,000													-	
18,001	20,000													-	
20,001	25,000													-	
25,001	30,000													-	
30,001	35,000													-	
35,001	40,000													-	
40,001	45,000													-	
45,001	50,000													-	
50,001	60,000													-	
60,001	70,000													-	
70,001	80,000													-	
80,001	90,000													-	
90,001	100,000													-	
Totals		3	3	3	3	3	3	3	3	3	3	3	3	36	
														Average Usage	-
														Median Usage	-
														Average # Customers	3
														Change in Number of Customers	-

Pima Utility Company - Sewer Division
 Test Year Ended December 31, 2015
 Customer Classification Commercial 2 Inch Meter

Exhibit
 Schedule H-5
 Page 7
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan 49	Month of Feb 50	Month of Mar 50	Month of Apr 48	Month of May 48	Month of Jun 48	Month of Jul 49	Month of Aug 49	Month of Sep 48	Month of Oct 49	Month of Nov 49	Month of Dec 49	Total Year	Cumulative Billing	
-	-													586	586	
1	1,000													-	586	
1,001	2,000													-	586	
2,001	3,000													-	586	
3,001	4,000													-	586	
4,001	5,000													-	586	
5,001	6,000													-	586	
6,001	7,000													-	586	
7,001	8,000													-	586	
8,001	9,000													-	586	
9,001	10,000													-	586	
10,001	12,000													-	586	
12,001	14,000													-	586	
14,001	16,000													-	586	
16,001	18,000													-	586	
18,001	20,000													-	586	
20,001	25,000													-	586	
25,001	30,000													-	586	
30,001	35,000													-	586	
35,001	40,000													-	586	
40,001	45,000													-	586	
45,001	50,000													-	586	
50,001	60,000													-	586	
60,001	70,000													-	586	
70,001	80,000													-	586	
80,001	90,000													-	586	
90,001	100,000													-	586	
Totals		49	50	50	48	48	48	49	49	48	49	49	49	586		
															Average Usage	-
															Median Usage	-
															Average # Customers	49
															Change in Number of Customers	-

Pima Utility Company - Sewer Division
 Test Year Ended December 31, 2015
 Customer Classification Effluent

Exhibit
 Schedule H-5
 Page 7
 Witness: Bourassa

Usage From:	Usage To:	Month of Jan	Month of Feb	Month of Mar	Month of Apr	Month of May	Month of Jun	Month of Jul	Month of Aug	Month of Sep	Month of Oct	Month of Nov	Month of Dec	Total Year	Cumulative Billing	Cumulative Gals (1,000s)
1,001	2,000												1	1	1	-
2,001	3,000													-	1	-
3,001	4,000													-	1	-
4,001	5,000													-	1	-
5,001	6,000													-	1	-
6,001	7,000													-	1	-
7,001	8,000													-	1	-
8,001	9,000													-	1	-
9,001	10,000													-	1	-
10,001	12,000													-	1	-
12,001	14,000													-	1	-
14,001	16,000													-	1	-
16,001	18,000													-	1	-
18,001	20,000													-	1	-
20,001	25,000													-	1	-
25,001	30,000													-	1	-
30,001	35,000													-	1	-
35,001	40,000													-	1	-
40,001	45,000													-	1	-
45,001	50,000													-	1	-
50,001	60,000													-	1	-
60,001	70,000													-	1	-
70,001	80,000													-	1	-
80,001	90,000													-	1	-
90,001	100,000													-	1	-
923,000	923,000													-	1	-
1,082,000	1,082,000												1	1	2	923
1,501,060	1,501,060							1						1	3	2,005
1,940,000	1,940,000	1												1	4	3,506
2,179,000	2,179,000	1												1	5	5,446
2,316,000	2,316,000		1								1			1	6	7,625
2,451,000	2,451,000			1										1	7	9,941
2,833,000	2,833,000											1		1	8	12,392
3,780,000	3,780,000							1				1		1	9	15,225
4,261,000	4,261,000					1								1	10	19,005
4,646,000	4,646,000	1												1	11	23,266
4,837,000	4,837,000			1										1	12	27,912
5,320,000	5,320,000								1					1	13	32,749
5,410,000	5,410,000									1				1	14	38,069
5,623,000	5,623,000						1						1	1	15	43,479
5,626,000	5,626,000													1	16	49,102
6,815,000	6,815,000				1					1				1	17	54,728
8,000,000	8,000,000					1								1	18	61,543
10,640,000	10,640,000			1									1	1	19	69,543
11,000,000	11,000,000													1	20	80,183
13,690,000	13,690,000								1					1	21	91,183
13,712,000	13,712,000										1			1	22	104,873
15,148,000	15,148,000					1				1				1	23	118,585
15,955,000	15,955,000						1							1	24	133,733
18,545,000	18,545,000							1						1	25	149,688
21,000,000	21,000,000								1					1	26	168,233
21,706,000	21,706,000									1				-	26	168,233
5,645,000	5,645,000							1						1	27	189,939
													1	1	28	195,584
														-	28	195,584

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Attorneys for Pima Utility Company

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION
OF PIMA UTILITY COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE
OF ITS UTILITY PLANTS AND
PROPERTY AND FOR INCREASES IN ITS
WATER RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

DOCKET NO: W-02199A-16-

**DIRECT TESTIMONY OF
THOMAS J. BOURASSA**

COST OF CAPITAL

November 15, 2016

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1 **I. INTRODUCTION**

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

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

5 **Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT**
6 **TESTIMONY ON RATE BASE, INCOME STATEMENT, REVENUE**
7 **REQUIREMENT AND RATE DESIGN IN THIS DOCKET?**

8 A. Yes. I have prepared a separate volume of my direct testimony covering rate base,
9 income statement, revenue requirement and rate design, along with the A-F and H
10 schedules, for Applicant Pima Utility Company ("Pima" or "Company").
11 Testimony regarding my background and qualifications is contained in that volume
12 of my direct testimony. In this portion of my direct testimony, I address the cost of
13 capital for Pima.

14 **II. SUMMARY OF TESTIMONY AND THE PROPOSED COST OF CAPITAL**

15 **Q. WHAT IS THE PURPOSE OF THIS PORTION OF YOUR DIRECT**
16 **TESTIMONY?**

17 A. I will testify in support of the proposed rate of return on Pima's fair value rate base
18 ("FVRB"). I am sponsoring the D Schedules, which are attached to this testimony,
19 along with Exhibits TJB-COC-DT1 and TJB-COC-DT2 discussed herein.

20 **Q. PLEASE SUMMARIZE YOUR COST OF CAPITAL TESTIMONY.**

21 A. I have determined that the cost of equity for the publicly traded water utilities is
22 10.1 percent. After considering the differences in business and financial risk
23 between Pima and the publicly traded water utilities, I have found that the cost of
24 equity for Pima is 11.2 percent.

25

26

1 Q. OKAY, THANK YOU MR. BOURASSA. WHAT IS PIMA'S CAPITAL
2 STRUCTURE?

3 A. The actual capital structure for Pima at the end of the test year (December 31,
4 2015) was 27.61 percent debt and 72.39 percent equity. However, Pima is
5 currently requesting approval of new long-term debt, which will bring the debt and
6 equity proportions to approximately 35 percent debt and 65 percent equity.
7 Therefore, I am assuming a capital structure consisting of 35 percent debt and 65
8 percent equity for Pima for purposes of my analysis and recommendations.

9 Q. WHAT COST OF DEBT DID YOU UTILIZE?

10 A. I used a cost of debt equal to 3.42 percent. The cost of debt is based upon the
11 current 5-year LIBOR rate plus two percent.¹

12 Q. WHAT ABOUT THE WEIGHTED AVERAGE COST OF CAPITAL?

13 A. Pima's weighted average cost of capital is 8.48 percent.²

14 Q. PLEASE SUMMARIZE THE APPROACH YOU USED TO ESTIMATE
15 THE COST OF EQUITY.

16 A. The cost of equity for Pima cannot be estimated directly because the equity is not
17 in the form of a publicly traded security and there is no market data. Consequently,
18 I applied market based models (Discounted Cash Flow ("DCF"), Risk Premium
19 Model ("RPM"), and Capital Asset Pricing Model ("CAPM")) using data from a
20 sample of water utilities selected from the *Value Line* Investment Survey and then
21 determined the difference in risk between Pima and the publicly traded water
22 utilities. I employ two versions of the DCF – one using analyst forecasts of growth
23 and one using both analyst forecasts of growth and historical growth estimates.

24 ¹ This is the interest rate given in the Company's contemplated financing.
25 See Application (Financing) filed October 20, 2016 in Docket Nos. SW-02199A-16-0380
and W-02199A-16-0381 (consolidated).

26 ² Schedule D-1.

1 Additionally, I employ three versions of the CAPM – a traditional CAPM, an
2 empirical CAPM, and a modified CAPM. I will describe the DCF and CAPM, as
3 well as the RPM, later in my testimony.

4 There are seven publicly traded water utilities in my water proxy group:
5 American States Water, Aqua America, California Water, Connecticut Water,
6 Middlesex Water, SJW Corp., and York Water Company. As explained later in my
7 testimony, these companies aren't really comparable to Pima, but the publicly
8 traded utilities are utilities with available market data, and they are the same
9 proxies the Commission's Utilities Division Staff has relied on for data on water
10 utilities in a number of recent water and sewer utility rate cases.

11 Consistent with my past practice, and the Commission's past practices in
12 prior rate cases, my specification of the DCF model is based on historical growth
13 and analysts' growth projections, current indicated annual dividends, and actual
14 stock price information. Similarly, my CAPM approach is specified with actual
15 and projected market data with respect to Treasury yields, Beta estimates from
16 *Value Line*,³ and market risk premia data from *Duff & Phelps*⁴ and *Value Line*.
17 My RPM approach is based upon comparing historical total market returns
18 obtained from *Value Line* with historical Treasury yields.

19 In assessing the results of my DCF, CAPM, and RPM analyses, I considered
20 several specific risk trends, including the effect of a potential rise in interest rates.
21 In my view, this approach appropriately balances practical concerns regarding
22 certain underlying assumptions associated with each methodology or approach
23 used to determine a cost of equity.

24
25 ³ *Value Line* Investment Analyzer.

26 ⁴ *Duff & Phelps, LLC. 2015 Valuation Handbook; Guide to Cost of Capital*. Hoboken,
NJ: John Wiley and Sons, 2015 ("Duff & Phelps").

1 **Q. DID YOU CONSIDER OTHER FACTORS, IN ADDITION TO THE**
2 **ANALYSES DESCRIBED ABOVE, IN ORDER TO DETERMINE THE**
3 **APPROPRIATE ROE?**

4 A. Yes, in addition to the three distinct analyses discussed above, I considered the
5 following: (1) the economic conditions expected to prevail during the period in
6 which new rates will be in effect; (2) the financial risks associated with the
7 proposed pro forma capital structures; (3) the incremental business risks associated
8 with the small size; and (4) an assessment of the business risks associated relative
9 to the large publicly traded utilities. I considered explicit adjustments to my ROE
10 estimates for these factors and I did take them into consideration when determining
11 where, within a reasonable range of analytical results from the DCF, CAPM and
12 RPM methods, the required ROE rightly falls. As explained earlier, I also
13 considered the unique Arizona regulatory environment and the inherent limitations
14 faced by utilities operating in this state.

15 **III. OVERVIEW OF THE RELATIONSHIP BETWEEN RISK AND THE**
16 **EXPECTED RETURN ON INVESTMENT**

17 **Q. WHAT EXACTLY IS THE COST OF EQUITY?**

18 A. The cost of equity is the rate of return that equity investors expect to receive on
19 their investment. Investors can choose from numerous investment options, not
20 simply publicly traded stock. Investments have varying degrees of risk, ranging
21 from relatively low risk assets such as Treasury securities to somewhat higher risk
22 corporate bonds to even higher risk common stocks. As the level of risk increases,
23 investors require higher returns on their investment. The cost of equity is therefore
24 the expected rate of return that the market requires to attract funds to a particular
25 investment.⁵ Finance models that are used to estimate the cost of equity rely on

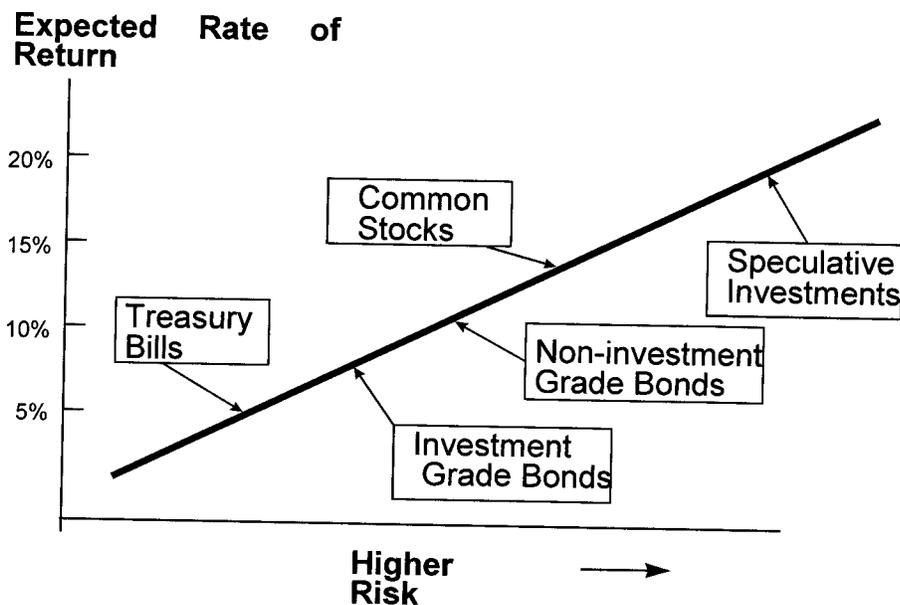
26 ⁵ Pratt, Shannon P. and Grabowski, Roger J. *Cost of capital: Applications and Examples*,

1 this basic concept.

2 **Q. CAN YOU ILLUSTRATE THE CAPITAL MARKET RISK-RETURN**
3 **CONCEPT?**

4 **A.** Yes. The following graph depicts the risk-return relationship that has become
5 widely known as the Capital Market Line ("CML"). The CML illustrates in a
6 general way the risk-return relationship.

8 The Capital Market Line (CML)



21 The CML can be viewed as a continuum of the available investment opportunities
22 for investors. Investment risk increases as you move upward and to the right
23 along the CML. Again, the return required by investors increases with the risk.

24
25
26 *Fifth Edition.* Hoboken, NJ: John Wiley and Sons, 2014, p. 2.

1 **Q. HOW DOES THE RISK-RETURN TRADE OFF CONCEPT WORK IN**
2 **THE CAPITAL MARKET?**

3 A. As indicated by the CML, the allocation of capital in a free market economy is
4 based upon the relative risk of, and expected return from, an investment.
5 In general, investors rank investment opportunities in the order of their relative
6 risks. Investment alternatives in which the expected return is commensurate with
7 the perceived risk become viable investment options. If all other factors remain
8 equal, the greater the risk, the higher the rate of return investors will require to
9 compensate them for the possibility of loss of either the principal amount invested
10 or the expected annual income from such investment.

11 Short-term Treasury bills provide a high degree of certainty, and in nominal
12 terms (after considering inflation) are considered virtually risk free. Long-term
13 bonds and preferred stocks, having priority claims to assets and fixed income
14 payments, are relatively low risk, but are not risk free. The market values of long-
15 term bonds often fluctuate when government policies or other factors cause interest
16 rates to change. Common stocks are higher and farther to the right on the CML
17 continuum because they are exposed to more risk. Common stock risk includes the
18 nature of the underlying business and financial strength of the issuing corporation
19 as well as market-wide factors, such as general changes in capital costs.

20 The capital markets reflect investor expectations and requirements each day
21 through market prices. Prices for stocks and bonds change to reflect investor
22 expectations and the relative attractiveness of one investment relative to others.
23 While the example provided above seems straightforward, returns on common
24 stocks are not directly observable in advance, in contrast to debt or preferred stocks
25 with fixed payment terms. This means that these returns must be estimated from
26 market data. Estimating the cost of equity capital should be a matter of informed

1 judgment about the relative risk of the investment in question and the expected rate
2 of return characteristics of other alternative investments. It isn't sufficient, in my
3 view, to simply run a financial model and just uncritically accept the results.

4 The estimation of a utility's cost of equity is complex. It requires an
5 analysis of the factors influencing the cost of various types of capital, such as
6 interest on long-term debt, dividends on preferred stock, and earnings on common
7 equity. The data for such an analysis comes from highly competitive capital
8 markets, where the firm raises funds by issuing common stock, selling bonds, and
9 borrowing (both long-term and short-term) from banks and other financial
10 institutions. In the capital markets, the cost of capital, whether the capital is in the
11 form of debt or equity, is determined by two important factors: (1) the pure or real
12 rate of interest, often called the risk-free rate of interest; and (2) the uncertainty or
13 risk premium (the compensation the investor requires over and above the real or
14 pure rate of interest for subjecting his capital to additional risk).

15 **Q. PLEASE DISCUSS THESE FACTORS IN GREATER DETAIL.**

16 A. The pure rate of interest essentially reflects both the time preference for and the
17 productivity of capital. From the standpoint of the individual, it is the rate of
18 interest required to induce the individual to forgo present consumption and offer
19 the funds thus saved to others for a specified length of time. Moreover, the pure
20 rate of interest concept is based on the assumption that no uncertainty affects the
21 investment undertaken by the individual, i.e., there is no doubt that the periodic
22 interest payments will be made and the principal returned at the end of the time
23 period. In reality, investments without any risk do not exist. Every commitment of
24 funds involves some degree of uncertainty.

25 Turning to the second factor affecting the cost of capital, it is generally
26 accepted that the higher the degree of uncertainty, the higher the cost of capital.

1 Investors are regarded as risk averse and require that the rate of return increase as
2 the risk(s) (uncertainty) associated with an investment increase(s).

3 **Q. CAN YOU PROVIDE SOME PERSPECTIVE ON YOUR PREVIOUS**
4 **DISCUSSION WITH RESPECT TO RETURNS ON COMMON STOCKS?**

5 A. Yes. Conceptually,

6 [1] Required Return for Common Stocks = Return on a risk-free asset + Risk Premium
7

8 where the risk premium investors require for common stocks will be higher than
9 the risk premium they require for investment grade bonds. This relationship is
10 depicted in the graph of the CML above. As I will discuss later in this testimony,
11 this concept is the basis of risk premium methods, such as the CAPM, that are used
12 to estimate the cost of equity.

13 **Q. PLEASE DISCUSS IN MORE DETAIL THE IMPACT OF RISK ON**
14 **CAPITAL COSTS.**

15 A. With reference to specific utilities, risk is often discussed as consisting of two
16 separate types of risk: business risk and financial risk.

17 Business risk, the basic risk associated with any business undertaking, is the
18 uncertainty associated with the enterprise's day-to-day operations. In essence, it is
19 a function of the normal day-to-day business environment, both locally and
20 nationally. Business risks include the condition of the economy and capital
21 markets, the state of labor markets, regional stability, government regulation,
22 technological obsolescence, and other similar factors that may impact demand for
23 the business product and its cost of production. For utilities, business risk also
24 includes the volatility of revenues due to abnormal weather conditions, degree of
25 operational leverage, regulation, and regulatory climate. Regulation, for example,
26 can compound the business risk if it is unpredictable in reacting to cost increases,

1 both in terms of the time lag and magnitude for recovery of such increases. This is
2 a problem in Arizona where regulatory lag is long, which makes it difficult for
3 utilities to earn their authorized return, particularly in an inflationary environment
4 and/or when there is significant lag between the timing of investment in capital
5 projects and its recognition in rates. As discussed, not only is Arizona's regulatory
6 environment unique, but there are limits on the Commission's authority to use the
7 many tools available to ameliorate the adverse consequences of regulatory lag.
8 Put simply, the greater the degree of uncertainty regarding these various factors
9 affecting a company's business, the greater the risk of an investment in that
10 company and the greater the compensation required by the investor.

11 Financial risk, on the other hand, concerns the distribution of business risk
12 to the various capital investors in the utility. Permanent capital is normally divided
13 into three categories: long-term debt, preferred stock, and common equity.
14 Because common equity owners have only a residual claim on earnings after debt
15 and preferred stockholders are paid, financial risk tends to be concentrated in that
16 element of the firm's capital. Thus, a decision by management to raise additional
17 capital by issuing additional debt concentrates even more of the financial risk of
18 the utility in the common equity owners.

19 **Q. WHAT ARE THE DETERMINANTS OF THE RISK FREE RATE IN**
20 **EQUATION [1]?**

21 A. The risk-free rate can be disaggregated into a "real" rate of interest and an inflation
22 premium (expected future inflation).

23 **Q. WHAT ARE THE DETERMINANTS OF THE REQUIRED RISK**
24 **PREMIUM FROM EQUATION [1] ABOVE?**

25 A. The risk premium can be disaggregated into five general components: (1) Interest
26 Rate Risk; (2) Business Risk; (3) Regulatory Risk; (4) Financial Risk; and

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(5) Liquidity Risk.⁶

Interest Rate Risk refers to the variability in return caused by subsequent changes in interest rates and stems from the inverse relationship between interest rates and asset prices. For example, bond prices fall when interest rates rise and vice versa.

Business risk, the basic risk associated with any business undertaking, is the uncertainty associated with the enterprise's day-to-day operations. In essence, it is a function of the normal day-to-day business environment, both locally and nationally, that increases the probability that expected future income flows accruing to investors might not be realized. Business risks include the condition of the economy and capital markets, the state of labor markets, regional stability, technological obsolescence, degree of competition, sales volatility, government regulation, and other similar factors that may impact demand for the business product and its cost of production. For utilities, business risk also includes the volatility of revenues due to abnormal weather conditions and the degree of operational leverage.

Regulatory risk refers to the quality and consistency of regulation applied to a given regulated utility. Regulatory jurisdictions are evaluated on the basis of three major factors: (1) earnable return on equity, (2) regulatory quality, and (3) regulatory practices.⁷ These three factors collectively impact a utility's ability to earn its authorized return. The type of test year employed (historical or future), capital structure and rate base issues, and length of regulatory lag are among the reasons a utility may or may not have a reasonable opportunity to earn its

⁶ Morin, Dr. Roger A. *New Regulatory Finance*. Vienna, VA: Public Utilities Reports, Inc., 2006 ("Morin"), p. 36.

⁷ Morin, p.43.

1 authorized return. I have already discussed the unique nature of this risk in
2 Arizona and will not repeat that discussion again here.

3 Financial risk concerns the distribution of business risk to the various capital
4 investors in the utility and refers to the additional variability imparted to income
5 available to common shareholders stemming from the entity's method of financing
6 its capital needs. As I discussed earlier, because common equity owners have only
7 a residual claim on earnings after debt and preferred stockholders are paid,
8 financial risk tends to be concentrated in that element of the firm's capital.

9 Construction risk is an important component of financial risk. Construction
10 risk is the risk of tying capital up in projects that are not earning returns, or not
11 having sufficient capital to build the assets needed to keep generating returns. If an
12 entity has a large construction budget relative to internally generated cash flows, it
13 will require external financing, which will also have an impact on financial risk.
14 It is important that entities have access to capital funds on reasonable terms and
15 conditions.

16 Utilities are more susceptible to construction risk for two reasons. First,
17 water and wastewater utilities generally have high capital requirements to build
18 plant to serve customers. Second, utilities have a mandated obligation to serve,
19 leaving less flexibility both in the timing and discretion of scheduling capital
20 projects. This is compounded by the limited ability to wait for more favorable
21 market conditions to raise the capital necessary to fund the capital projects, and
22 then the lag between when plant can be built and when rates can be approved to
23 provide returns on and of that capital. It is imperative that the utility has access to
24 needed capital and on reasonable terms and conditions. The return allowed on
25 common equity will have a critical role in determining those terms and conditions.⁸

26 ⁸ Morin, p. 48.

1 Although often discussed separately, the two types of risks (business and
2 financial) are interrelated. A study by Scott and Martin found statistically
3 significant results for unregulated firms in twelve industries that “smaller equity
4 ratios (higher leverage use) are generally associated with larger companies.”⁹
5 One should expect unregulated enterprises to seek the best balance between debt
6 and equity to obtain the lowest overall cost of capital. The findings of Scott and
7 Martin suggest smaller firms found it prudent to *offset higher business risks related*
8 *to being small by reducing financial risk*. This evidence suggests the least cost
9 equity ratio for these two utilities may be bigger than the average equity ratio for
10 the benchmark water proxy group.

11 Finally, Liquidity Risk refers to the ability to readily convert an investment
12 into cash without sustaining a loss. Capital market theory generally assumes that
13 investments are liquid and observations about risk and return are drawn from
14 information about liquid investments. Non-publicly traded or privately-held
15 investments possess little liquidity.

16 **Q. IS INVESTMENT RISK IMPACTED BY COMPANY SIZE?**

17 A. Yes. Investment risk is size related.¹⁰ In other words, investment risk increases as
18 company size decreases.¹¹ Investment liquidity may be a significant factor
19 explaining this relationship. However, the illiquidity of smaller stocks does not
20 capture the size effect completely.¹² Size may be a proxy for one or more true
21 unknown factors correlated with size.¹³

22 _____
23 ⁹ Scott, D.F. and Martin, J.D., “Industry Influence on Financial Structure,” *Financial*
Management, Spring 1975, pp. 67-71.

24 ¹⁰ Morin, p. 49.

25 ¹¹ *Id.*

26 ¹² *Duff & Phelps*, pp. 4-21 – 4-22.

¹³ *Duff & Phelps*, p.4-25.

1 **IV. THE MEANING OF "JUST AND REASONABLE" RATE OF RETURN**

2 **Q. HAVE THE COURTS SET FORTH ANY CRITERIA THAT GOVERN THE**
3 **RATE OF RETURN THAT A UTILITY'S RATES SHOULD PRODUCE?**

4 A. Yes. In 1923, the U.S. Supreme Court set forth the following criteria for
5 determining whether a rate of return is reasonable in *Bluefield Water Works and*
6 *Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679,
7 692-93 (1923):

8 A public utility is entitled to such rates as will permit it to
9 earn a return on the value of the property which it employs
10 for the convenience of the public equal to that generally being
11 made at the same time and in the same general part of the
12 country on investments in other business undertakings which
13 are attended by corresponding risks and uncertainties ... The
14 return should be reasonably sufficient to assure confidence in
15 the financial soundness of the utility, and should be adequate,
16 under efficient and economical management, to maintain and
17 support its credit and enable it to raise the money necessary
18 for the proper discharge of its public duties. A rate of return
19 may be reasonable at one time and become too high or too
20 low by changes affecting opportunities for investment, the
21 money market, and business conditions generally.

22 Then, in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591
23 (1944), the U.S. Supreme Court stated the following regarding the return to owners
24 of an entity:

25 [T]he return to the equity owner should be commensurate
26 with returns on investments in other enterprises having
corresponding risks. That return, moreover, should be
sufficient to assure confidence in the financial integrity of the
enterprise, so as to maintain its credit and to attract capital.

320 U.S. at 603.

In summary, under *Hope* and *Bluefield*:

- (1) The rate of return should be similar to the return in businesses with similar or comparable risks;
- (2) The return should be sufficient to ensure the confidence in the

1 financial integrity of the utility; and

2 (3) The return should be sufficient to maintain and support the utility's
3 credit.

4 **Q. HAVE THESE CRITERIA BEEN APPLIED IN REGULATORY**
5 **PROCEEDINGS?**

6 A. Yes, but the application of the "reasonableness" criteria laid down by the Supreme
7 Court has resulted in controversy. The typical method of computing the overall
8 cost of capital is quite straightforward; it is the composite, weighted cost of the
9 various classes of capital (debt, preferred stock, and common equity) used by the
10 utility. Calculating the proportion that each class of capital bears to total capital
11 does the weighting. However, there is no consensus regarding the best method of
12 estimating the cost of equity capital. The increasing regulatory use of market-
13 based finance models in equity return determinations has not led to a universally
14 accepted means of estimating the ROE. In addition, the market-based results are
15 too often applied to a book-value investment base, which, as I will discuss,
16 understates the return expected by investors who invest in real markets based on
17 market values.

18 **V. PIMA'S ESTIMATED COST OF EQUITY**

19 **A. The Publicly Traded Utilities that Comprise the Sample Group Used to**
20 **Estimate the Cost of Equity**

21 **Q. PLEASE DESCRIBE THE APPROACH YOU FOLLOWED IN YOUR**
22 **COST OF CAPITAL ANALYSIS FOR PIMA.**

23 A. Again, estimating the cost of equity is a matter of informed judgment.
24 The development of an appropriate rate of return for a regulated enterprise involves
25 a determination of the level of risk associated with that enterprise and the
26 determination of an appropriate return for that risk level. Practitioners employ

1 various techniques that provide a link to actual capital market data and assist in
2 defining the various relationships that underlie the equity cost estimation process.

3 Pima is not publicly traded so the information required to directly estimate
4 its cost of equity is not available. Accordingly, as previously noted, I used a
5 sample group of water utilities as a *starting point* to develop an appropriate cost of
6 equity for Pima. An analysis of a proxy group serves as a starting point because no
7 proxy group is identical in risk to Pima. Therefore, the proxy group's results must
8 be adjusted to reflect the unique relative risks, financial and business risks of the
9 Company, as I will discuss in detail below.

10 **Q. WHICH COMPANIES COMPRISE YOUR SAMPLE GROUP AGAIN?**

11 A. For the three models employed in my analysis, I used data from a sample of
12 publicly traded water utilities, or proxy group, selected from the *Value Line*
13 *Investment Survey* as a starting point. There are seven water utilities in my sample:
14 American States Water ("AWR"), Aqua America ("WTR"), California Water
15 Company ("CWT"), Connecticut Water ("CTWS"), Middlesex Water ("MSEX"),
16 SJW Corp. ("SJW"), and York Water Company ("YORW").

17 The basis of selection for the proxy group of seven water companies was to
18 select those companies that meet the following criteria: (1) they are included in the
19 Water Company Group of AUS Utility Reports (September 2016); (2) they are
20 followed by the *Value Line Investment Survey*; (3) they have at least ten years of
21 historical financial and market information; (4) they have a *Value Line* adjusted
22 beta; (5) they have not cut or omitted their common dividends during the five years
23 ending 2015 or through the time of the preparation of this testimony; (6) they have
24 60 percent or greater of 2015 total net operating income derived from regulated
25 water operations; and (7) at the time of the preparation of this testimony, they had
26 not publicly announced that they were involved in any major merger or acquisition

1 activity.

2 **Q. BUT THE WATER UTILITIES IN YOUR SAMPLE ARE NOT DIRECTLY**
3 **COMPARABLE TO PIMA?**

4 A. That is correct. However, they are utilities for which market data is available. All
5 of them are regulated, they primarily provide water service, although some provide
6 both water and wastewater services, and their primary source of revenues is from
7 regulated services. Therefore, they provide a useful *starting point* for developing a
8 cost of equity for Pima, recognizing that the proxy group is not perfectly
9 comparable.

10 **Q. BRIEFLY, WHY IS A PROXY GROUP NECESSARY FOR COMPARISON**
11 **IN A COST OF CAPITAL ANALYSIS?**

12 A. First, a fair rate of return for a specific utility is the return required by investors to
13 hold correspondingly risky assets. Market data for a sample of comparable risk
14 companies provides insight into the investors' required return, and that satisfies the
15 U.S. Supreme Court's decisions in *Bluefield* and *Hope*, which I discussed earlier.
16 The comparable earnings standard set forth in the *Hope* and *Bluefield* decisions
17 requires that the rate of return afforded to utilities be similar to the return in
18 businesses with similar or comparable risks. It follows that a proxy group of
19 companies with comparable risk is the starting point in a cost of capital analysis.

20 Second, a primary objective of rate regulation is to determine an authorized
21 ROE that is both fair to customers and provides satisfactory returns for the subject
22 utility. The best estimate of that ROE is the cost of equity for Pima. The cost of
23 equity is a cost of service fairly recovered from customers through rates. It is also
24 satisfactory to investors in Pima, because it is commensurate with returns an
25 investor in these utilities would expect to earn from investments of comparable
26 risk. To estimate the cost of equity requires market data that reveal investor-

1 required returns. But Pima is not publicly traded so there is no market information
2 to determine the cost of equity. This necessitates the selection of a proxy group.

3 **Q. THANK YOU. CAN YOU PLEASE PROVIDE A GENERAL**
4 **DESCRIPTION OF THE WATER UTILITIES IN YOUR SAMPLE?**

5 A. Yes. Schedule D-4.2 lists the percentages of regulated revenues, operating
6 revenues, net plant, S&P bond ratings, allowed ROEs, *Value Line* betas, market
7 capitalization, and market size category for the seven water utilities. Comparative
8 data for Pima is also shown in Schedule D-4.2. The seven sample companies may
9 be generally described as follows:

10 (1) American States Water (AWR) primarily serves the California
11 market through Golden State Water Company, which provides water
12 services to over 256,000 customers within 75 communities in
13 10 counties in the State of California, primarily in Los Angeles,
14 San Bernardino, and Orange counties. AWR also owns an electric
15 utility service provider, Bear Valley Electric Service, with over
16 23,600 customers. AWR also provides contractual services to the
17 U.S. government and private entities located in 5 states through its
18 subsidiary, American States Utility Services. Total operating
19 revenues for AWR are nearly \$465 million and net plant is nearly
20 \$999 million.

21 (2) Aqua America (WTR) owns regulated utilities in Pennsylvania,
22 Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana, and
23 Virginia, serving nearly 940,000 customers. WTR's utility base is
24 diversified among residential water, commercial water, fire
25 protection, industrial water, other water, and wastewater customers.
26 Total operating revenues for WTR are nearly \$780 million and net

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plant is over \$4.4 billion.

- (3) California Water Service Group (CWT) owns subsidiaries in California, New Mexico, Washington, and Hawaii serving nearly 506,000 customers. CWT also owns HWS Utility Services, which conducts CWT's non-regulated business. These services include billing, water quality testing, and water and wastewater system operations and management services to cities and other companies. Operating revenues for CWT are nearly \$598 million and net plant is nearly \$1.6 billion.
- (4) Connecticut Water Services (CTWS) owns subsidiaries in Connecticut and Maine serving over 123,000 customers. CTWS also provides utility operating services under contract to municipalities and other water systems. Revenues for CTWS are nearly \$95 million and net plant is nearly \$495 million.
- (5) Middlesex Water (MSEX) owns subsidiaries in New Jersey, and Delaware serving over 100,000 customers and provides water service under contract to municipalities in central New Jersey serving a population of 219,000. Operating revenues for MSEX are over \$117 million and net plant is over \$465 million.
- (6) SJW Corp. (SJW) owns San Jose Water, which provides water service in a 138 square mile area in San Jose, California, and surrounding communities serving nearly 229,000 customers. SJW also owns operations in Texas serving approximately 12,000 connections. San Jose Water Company also provides non-regulated services under agreements with municipalities and other utilities. Operating revenues for SJW are nearly \$318 million and net plant is

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nearly \$944 million.

(7) York Water Company (YORW) provides water service in the state of Pennsylvania serving over 65,000 water and wastewater customers in more than 47 communities. Operating revenues for YORW are nearly \$46 million and net plant is nearly \$250 million.

Q. DO ANY OF THE SAMPLE COMPANIES HAVE OPERATIONS IN ARIZONA?

A. No, and that's just one of several reasons why the publicly traded utilities are very different from Pima. The utilities in the water proxy group are much larger and, according to the empirical financial data, they are less risky than Pima. Pima is much smaller with fewer customers, a relatively small and limited service territory, far less revenues and far less net plant. At the end of the test year, Pima had approximately 10,250 water customers and 10,150 wastewater customers.

Additionally, Pima's revenues totaled approximately \$5.9 million, and net plant-in-service was approximately \$19.3 million. The average revenues of my water proxy group are nearly 60 times greater than Pima, and those entities have on average over 75 times the net plant of Pima. The smallest of the publicly traded water utilities in my proxy group, York Water Company, has over 8 times the revenues and nearly 14 times the net plant of Pima.

In other words, the proxy companies are a starting point but that does not mean they are comparable. I will discuss specific measures of business risk that quantify the differences between Pima and the water proxy group later in my testimony.

Q. DO RECENT DEVELOPMENTS IN THE WATER UTILITY INDUSTRY IMPACT INVESTMENTS?

A. Yes. On the whole, the water and wastewater utility industry is expected to

1 continue to confront increasing need for infrastructure upgrades and replacement,
2 as well as possible additional demand. *Value Line Investment Survey* (October 14,
3 2015) continues to stress that many utilities have facilities that are decades old and
4 in need of significant maintenance and, in some cases, massive renovation and
5 replacement. *Value Line* also notes that both the industry and regulators agree that
6 not enough maintenance capital has been spent during the previous decades as
7 customer water bills have been kept artificially low. Companies in this sector have
8 done a good job of managing the process without having to rely too heavily on new
9 debt and that the regulatory climate has generally been constructive. *Value Line*
10 also notes that water stock valuations are still too rich due to institutional investors
11 pushing the stock prices to all-time highs, which have been spurred on by low rates
12 on U.S. Treasuries. Water stocks have not advanced because of improved earnings
13 prospects and this has led to historically high P/E ratios. *Value Line* suggests that
14 just as a flow of funds has driven up stock prices, sudden withdrawals from the
15 water sector will have the opposite effect. Indeed, during the first half of 2016,
16 demand for income-generating stocks reached peak levels that pushed stock prices
17 to all-time highs. *Value Line* also notes that water stock valuations are still too
18 high but during the most recent quarter these stocks have declined by 12 percent
19 while the S&P 500 declined only 3 percent. A copy of the most recent *Value Line*
20 report on the water industry along with each water utility in my proxy group is
21 attached as **Exhibit TJB-COC-DT1**.

22 **Q. WHAT OTHER RISK FACTORS DISTINGUISH PIMA FROM THE**
23 **LARGER WATER UTILITIES IN YOUR PROXY GROUP?**

24 A. First, water and wastewater utilities are capital intensive and typically have
25 relatively large construction budgets. As I have previously discussed in this
26 testimony, firms with large capital budgets face construction risk (a form of

1 financial risk). The size of a utility's capital budget relative to the size of the utility
2 itself often increases construction risk. Large utilities are better able to fund their
3 capital budgets from their earnings, cash flows, and short-term borrowings. Value
4 Line notes that cash flow generated by the companies in the water sector has been
5 sufficient to finance most of the capital spending and keep dividend growth rates at
6 healthy levels. For smaller utilities the ability to fund relatively large capital
7 budgets from earnings, cash flows, and short-term debt is difficult, if not
8 impossible, without reliance upon additional outside capital.

9 Second, smaller companies are simply less able to cope with significant
10 events that affect sales, revenues and earnings. In general, the loss of revenues
11 from a few larger customers or from trends in the reduction of usage by customers
12 through conservation or the makeup of the customer base, for example, would have
13 a greater effect on a small company than on a much larger company with a larger
14 customer base.

15 Third, there are a number of other factors, including the differences in
16 regulatory environments, differences in the type of test year used for rate making,
17 and differences in the available regulatory mechanisms for recovery of costs
18 outside of a rate case. The large water utilities in my water proxy group are
19 generally not subject to the adverse impacts of an unfavorable regulatory
20 environment of one jurisdiction. In contrast, Pima is entirely subject to the impact
21 of Arizona regulation which, while taking steps to reduce uncertainty in earnings
22 through system improvement benefit surcharges ("SIB"), is still an historical test
23 year state, which means that most plant investment will typically have to be
24 funded, built and put in service before the utility can file a rate case to put such
25 plant in rates.
26

1 In summary, there are many factors that impact the ability of a smaller
2 utility to actually earn its authorized return. An inadequate opportunity to earn the
3 revenues authorized in a rate case leads to a greater variability of earnings for
4 entities like Pima when compared to the proxy group. This volatility means greater
5 risk, and greater risk requires higher returns.

6 **Q. ARE THERE QUANTITATIVE MEASURES THAT CAN BE USED TO**
7 **HELP IDENTIFY DIFFERENCES IN BUSINESS RISK?**

8 A. Yes. There are a number of fundamental accounting based business risk measures
9 that can be used to assess the relative differences between firms and include:
10 (1) the co-efficient of variance of ROE; (2) the co-efficient of variance of operating
11 income; (3) the co-efficient of variance of operating margin; and (4) Operating
12 Leverage. The first three reflect the distributions of earnings. These are
13 meaningful when measured against the distribution of earnings of alternative
14 investments, like the water utilities in my water proxy group. The fourth business
15 risk measure reflects the impact of sales fluctuations and the impact of fixed
16 operating costs on earnings.

17 The co-efficient of variance of ROE can be quantified using a relatively
18 simple formula:

19 [2] Co-efficient of Variance of ROE = Standard Deviation of ROE/Mean of ROE

20 The co-efficient of variance of operating income can be quantified using a
21 relatively simple formula:

22 [3] Co-efficient of Variance of Operating Income = Standard Deviation of
23 Operating Income/Mean of Operating Income

24 The co-efficient of variance of operating margin can be quantified using a
25 relatively simple formula:

1 [4] Co-efficient of Variance of Operating Margin = Standard Deviation of
2 Operating Margin/Mean of Operating Margin

3 And, the Operating Leverage formula is expressed as:

4 [5] Operating Leverage = Percentage Change in Operating Income/Percentage
5 Change in Sales

6 Using the business risk measures expressed in equations [2], [3], and [4], the
7 greater the co-efficient of variation or Operating Leverage, the greater the risk to
8 investors of not receiving expected returns.¹⁴ Below are the computed co-efficient
9 of variation for ROE, Operating Income, and Operating Margin, as well as
10 Operating Leverage using the most recent 5 years of historical data for my water
11 proxy group and Pima:

<u>Company</u>	<u>Business Risk Co-efficient of variance of ROE</u>	<u>Business Risk Co-efficient of variance of Operating Income</u>	<u>Business Risk Co-efficient of variance of Operating Margin</u>	<u>Operating Leverage</u>
Water Proxy Group	0.1332	0.1384	0.0863	3.14
Pima	0.4226	0.1761	0.1657	16.68
Relative Risk of Pima to Water Proxy Group	3.17	1.27	1.92	5.31

19 These metrics show that Pima is 1.3 to 5.3 times more risky than the water proxy
20 group.

21 **Q. CAN METRICS LIKE A COMPANY'S CO-EFFICIENT OF VARIATION**
22 **IN ROE, CO-EFFICIENT OF VARIATION IN OPERATING INCOME,**
23 **AND OPERATING MARGIN, BE USED ALONG WITH MARKET DATA**
24 **TO DEVELOP COMPANY SPECIFIC RISK PREMIUMS?**

25 ¹⁴ Tuller, Lawrence W. *The Small Business Valuation*. Avon, MA: Adams Media
26 Corporation, 1994, p. 89.

1 A. Yes. *Duff & Phelps* publishes comparative risk characteristics using market data
2 that provides a nexus between a market beta and the metrics operating margin, the
3 coefficient of variation in operating margin, and the coefficient of variation in
4 return on equity.¹⁵ This information can be used to develop an implied beta for
5 Pima for use in the CAPM. By comparing the results of the CAPM for the water
6 proxy group with the CAPM for Pima using the implied beta, indicated risk
7 premiums can be developed. As one would expect, the implied beta for Pima is
8 higher than the beta of my water proxy group. A risk premium of 110 to 150 basis
9 points over the cost of equity of the water proxy group is indicated for Pima. I will
10 discuss the indicated risk premiums and implied beta in more detail in the
11 Company Specific Risk Premium section of this direct testimony.

12 **Q. WHAT ABOUT LIQUIDITY RISK, MR. BOURASSA?**

13 A. A rational investor would not regard an investment in Pima as having the same
14 level of risk as Aqua America (WTR) or even the smaller Connecticut Water
15 Services (CTWS) because of the previously mentioned small size characteristics,
16 and the fact that an investment in Pima is relatively illiquid compared to the
17 publicly traded water utilities. An investor in a publicly traded stock can sell
18 his/her stock in a very short period of time if he/she is dissatisfied with the returns.
19 An investor in a non-publicly traded stock does not have the ability to sell quickly.
20 Consequently, investors will require a greater risk premium, often called liquidity
21 risk premium. As a consequence of these differences in risk, the results produced
22 by the DCF, RPM, and CAPM methodologies, utilizing data for the sample
23 utilities, often understate the appropriate return on equity for a small, regulated
24 water and/or wastewater utility provider such as Pima.

25
26 ¹⁵ *Duff & Phelps*, Exhibits D-1 through D-3.

1 **Q. IS THERE A RELATIONSHIP BETWEEN A UTILITY'S CAPITAL**
2 **STRUCTURE AND ITS COST OF CAPITAL?**

3 A. Yes. Generally speaking, when a firm engages in debt financing, it exposes itself
4 to greater risk. Once debt becomes significant relative to the total capital structure,
5 the risk increases in a geometric fashion compared to the linear percentage increase
6 in the debt ratio itself. This risk is illustrated by considering the effect of leverage
7 on net earnings. For example, as leverage increases, the equity ratio falls. This
8 creates two adverse effects. First, equity earnings decline rapidly and may even
9 disappear. Second, the "cushion" of equity protection for debt falls. A decline in
10 the protection afforded debt holders, or the possibility of a serious decline in debt
11 protection, will act to increase the cost of debt financing. Therefore, one may
12 conclude that each new financing, whether through debt or equity, impacts the
13 marginal cost of future financing by any alternative method.

14 For a firm already perceived as being over-leveraged, this additional
15 borrowing would cause the marginal costs of both equity and debt to increase.
16 On the other hand, if the same firm instead successfully employed equity funding,
17 this could actually reduce the real marginal cost of additional borrowing, even if
18 the particular equity issuance occurred at a higher unit cost than an equivalent
19 amount of debt.

20 **Q. HOW DO THE CAPITAL STRUCTURES OF THE SAMPLE WATER**
21 **UTILITIES COMPARE TO THE PROPOSED PRO FORMA CAPITAL**
22 **STRUCTURES FOR PIMA?**

23 A. Schedule D-4.3 shows that the debt and equity capital structure used to develop the
24 cost of capital for Pima contains 65 percent equity and 35 percent debt, compared
25 to the average of the water utility sample of approximately 55 percent equity and
26 45 percent debt. Having less debt in its capital structure implies that Pima has

1 lower financial risk than the sample water utilities. I have taken into account the
2 lower financial risk of Pima compared to the water proxy group using the Hamada
3 method, which I will discuss later.

4 **B. Overview of the DCF, RPM, AND CAPM Methodologies**

5 **Q. PLEASE EXPLAIN THE GENERAL APPROACHES TO ESTIMATING**
6 **THE COST OF CAPITAL.**

7 A. There are two broad approaches:

- 8 1) identify comparable-risk sample companies and estimate the cost of
9 capital directly, or
- 10 2) find the location of the CML and estimate the relative risk of the
11 company, which jointly determines the cost of capital.

12 The DCF method is an example of a method falling into the first general
13 approach. It is a direct method, but uses only a subset of the total capital market
14 evidence. The DCF rests on the premise that the fundamental value of an asset
15 (stock) is its ability to generate future cash flows to the owner of that asset (stock).
16 I will explain the DCF in detail in a moment, but for now, the DCF is simply the
17 sum of a stock's expected dividend yield and the expected long-term growth rate.
18 Dividend yields are readily available, but long-term growth estimates are not.

19 The RPM and CAPM are examples of methods falling into the second
20 general approach. An equity risk premium is made first by determining the
21 relationship between the cost of equity and an interest rate over time.
22 To implement these approaches, it is generally assumed that the past relationship
23 will continue on into the future. The RPM generally uses a small subset of the
24 capital market evidence whereas the CAPM uses information on all securities
25 rather than a small subset. I will explain the RPM and CAPM in more detail later.
26 For now, both the RPM and CAPM reflect a risk-return relationship, often depicted

1 graphically as the CML. The RPM and CAPM cost of equity estimates are the sum
2 of a risk-free return and a risk premium.

3 Each of these methods measures investor expectations. In the final analysis,
4 ROE estimates are subjective and should be based on sound, informed judgment
5 rationally articulated and supported by competent evidence. I have applied two
6 versions of the DCF, one version of the RPM, and three versions of the CAPM to
7 “bracket” the fair cost of equity capital for the publicly traded water utilities in my
8 proxy group. I then add a risk premium to results of the models for the water proxy
9 group to account for the differences in risk (business, regulatory, liquidity, size)
10 between the water proxy group and Pima.

11 **C. Explanation of the DCF Model and Its Inputs**

12 **Q. PLEASE EXPLAIN THE DCF METHOD OF ESTIMATING THE COST OF**
13 **EQUITY.**

14 **A.** The DCF model is based on the concept that the current price of a share of stock is
15 equal to the present value of future cash flows from the purchase of the stock.
16 In other words, the DCF model is an attempt to replicate the market valuation
17 process that sets the price investors are willing to pay for a share of an entity’s
18 stock. It rests on the assumption that investors rely on the expected returns (i.e.,
19 cash flow they expect to receive) to set the price of a security. The DCF model in
20 its most general form is:

21 [6]
$$P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \dots + CF_n/(1+k)^n$$

22 where k is the cost of equity; n the number of years and is a very large number; P₀
23 is the current stock price; and, CF₁, CF₂,...CF_n are all the expected future cash
24 flows expected to be received in periods 1, 2, ... n.

25 Equation [6] can be written to show that the current price (P₀) is also equal
26 to

1 [7] $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \dots + P_t/(1+k)^t$

2 where P_t is the price expected to be received at the end of the period t . If the future
3 price (P_t) included a premium (an expected increase in the stock price or capital
4 gain), the price the investor would pay today (in anticipation of receiving that
5 premium) would increase. In other words, by estimating the cash flows from the
6 purchase of a stock in the form of dividends and capital gains, we can calculate the
7 investor's required rate of return, i.e., the rate of return an investor presumptively
8 used in bidding the current price to the stock (P_0) to its current level.

9 Equation [7] is a Market Price version of the DCF model. As with the
10 general form of the DCF model in equation [6], in the Market Price approach the
11 current stock price (P_0) is the present value of the expected cash inflows. The cash
12 flows are comprised of dividends and the final selling price of the stock.
13 The estimated cost of equity (k) is the rate of return investors expect if they bought
14 the stock at today's price, held the stock and received dividends through the
15 transition period, and then sold it for price (P_t).

16 **Q. CAN YOU PROVIDE AN EXAMPLE TO ILLUSTRATE THE MARKET**
17 **PRICE VERSION OF THE DCF MODEL?**

18 A. Yes. Assume an investor buys a share of common stock for \$40. If the expected
19 dividend during the coming year is \$2.00, then the expected dividend yield is
20 5 percent ($\$2.00/\$40 = 5.0$ percent). If the stock price is also expected to increase
21 to \$43.00 after one year, this \$3.00 expected gain adds an additional 7.5 percent to
22 the expected total rate of return ($\$3.00/\$40 = 7.5$ percent). Thus, the investor
23 buying the stock at \$40 per share expects a total return of 12.5 percent (5 percent
24 dividend yield plus 7.5 percent price appreciation). The total return of 12.5 percent
25 is the appropriate measure of the cost of capital because this is the rate of return
26 that caused the investor to commit \$40 of his capital by purchasing the stock.

1 **Q. PLEASE CONTINUE WITH YOUR DESCRIPTION OF THE DCF**
2 **MODEL.**

3 A. Under the assumption that future cash flow is expected to grow at a constant rate
4 (“g”), equation [6] can be solved for k and rearranged into the simple form:

5 [8] $k = CF_1/P_0 + g$

6 where CF_1/P_0 is the expected dividend yield and g is the expected long-term
7 dividend (price) growth rate. The expected dividend yield is computed as the ratio
8 of next period’s expected dividend (“ CF_1 ”) divided by the current stock price
9 (“ P_0 ”).

10 This form of the DCF model is known as the constant growth DCF model
11 and recognizes that investors expect to receive a portion of their total return in the
12 form of current dividends and the remainder through future dividends and capital
13 (price) appreciation. A key assumption of this form of the model is that investors
14 expect that same rate of return (k) every year and that market price grows at the
15 same rate as dividends. But, this has not been historically true for the water utility
16 sample, as shown by the data in Schedule D-4.4 and Schedule D-4.5. As a result,
17 estimates of long-term growth rates (g) should take this into account.

18 **Q. ARE THERE ANY CONCERNS ABOUT APPLYING THE DCF MODEL**
19 **TO UTILITY STOCKS?**

20 A. Yes, there are a number of reasons why caution must be used when applying the
21 DCF model to utility stocks. First, a non-publicly traded company does not have a
22 stock market price. Using the stock prices from a proxy group assumes that the
23 stock of Pima would be similarly priced and has similar dividend yields to the
24 publicly traded water companies. Second, the stock price and dividend yield
25 components may be unduly influenced by structural changes in the industry, such
26 as mergers and acquisitions, which influence investor expectations. Third, the

1 DCF model is based on a number of assumptions that may not be realistic given the
2 current capital market environment. The traditional DCF model assumes that the
3 stock price, book value, dividends, and earnings all grow at the same rate. This has
4 not been historically true for the sample water utility companies.

5 We should be especially concerned with the DCF model's applicability
6 under current market conditions. The Federal Reserve's bond buying programs
7 have kept longer-term bond yields low and interest rates are expected to rise,¹⁶ but
8 in the meantime, and because bond yields are still very low, investors are "chasing
9 yields" and driving up the stock prices of companies that pay dividends, like
10 utilities. The *Value Line* Investment Survey (April 17, 2016) for the Water Utility
11 Industry noted:

12 Low bond yields seem to have driven many income-
13 oriented investors into the equity markets. All this
14 money chasing income has brought down the yield on
15 water utilities, relative to the average stock. Currently,
16 the yield of a typical water utility is only about 60 to
17 65 basis points higher than the average stock. This
18 spread is very low, on an historical basis.

19 More recently, the *Value Line* Investment Survey (July 15, 2016) for the Water
20 Utility Industry notes:

21 It also should be noted that these stocks have not
22 advanced because of improved earnings prospects by
23 Wall Street analysts. Hence the P/E ratios of many in
24 the industry are extremely high compared to historical
25 averages. Thus investors should be aware that despite
26 the low Beta coefficients of these stocks, the
possibility of a sharp correction exists. Just as a flow
of funds into the industry drove up stock prices, sudden
withdrawals from the sector could well produce the
opposite effect.

¹⁶ *Blue Chip Financial Forecasts*, August 2015.

1 Consider that while dividend yields for the water proxy group have been
2 decreasing, 3-year, and 5-year average annual total returns for the water proxy
3 group are 17.62 percent and 15.5 percent, respectively, from advances in stock
4 prices. These returns are significantly higher than my DCF estimate of the cost of
5 equity of just 8.8 percent.¹⁷ The expected equity returns suggested by the market
6 based DCF model does not line up with recent experience in the markets. As Dr.
7 Morin notes,

8 To the extent that increases (decreases) in relative
9 market valuation are anticipated by investors,
10 especially myopic investors with short-term
investment horizons, the standard DCF model will
understate (overstate) the cost of equity.

11 Another way of stating this point is that the DCF model does not account for
12 the ebb and flow of investor sentiments over the course of the business cycle.
13 The problem was particularly acute in the mid 1990's and mid 2000's where
14 investors, faced with very low returns on short-term fixed-income securities and an
15 uncertain market outlook, sought higher yields offered by utility stocks in a so-
16 called flight to quality, boosting their stock price and lowering the dividend yield.¹⁸
17 These circumstances then are not so different from what is occurring today.

18 Fourth, the application of the DCF model produces estimates of the cost of
19 equity that are consistent with investor expectations *only* when the market price of
20 a stock and the stock's book value are approximately the same. The DCF model
21 will understate the cost of equity when the market-to-book ratio exceeds 1.0 and
22 conversely will overstate the cost of equity when the market-to-book ratio is less
23 than 1.0. The reason for this is that the market-derived return produced by the
24 DCF is often applied to book value rate base by regulators.

25 ¹⁷ *Value Line* Analyzer data from October 1, 2015.

26 ¹⁸ Morin, p. 433.

1 Fifth, the assumption of a constant growth rate may be unrealistic, and there
2 may be difficulty in finding an adequate proxy for the growth rate. Historical
3 growth rates can be downward biased as a result of the impact of anemic historical
4 growth rates in earnings, mergers and acquisitions, restructuring, unfavorable
5 regulatory decisions, and even abnormal weather patterns. Further, by placing too
6 much emphasis on the past, the estimation of future growth becomes circular.

7 **Q. THANK YOU. LET'S TURN TO THE SPECIFIC INPUTS USED IN YOUR**
8 **DCF MODELS. WHAT DATA HAVE YOU USED TO COMPUTE THE**
9 **EXPECTED DIVIDEND YIELD (CF_1/P_0) IN YOUR MODELS?**

10 A. First, I computed a current dividend yield (CF_0/P_0). The expected dividend yield
11 (CF_1/P_0) is the current dividend yield (CF_0/P_0) times one plus the growth rate (g).
12 I used the spot price for each of the stocks of the water utilities in the sample group
13 as reported by the *Value Line Investment Analyzer* for September 30, 2016 for P_0 .
14 The current dividend (CF_0) is the current indicated dividend as reported by Value
15 Line. In my schedules, the current dividend yield is denoted as (D_0/P_0), where D_0
16 is the current dividend and P_0 is the spot stock price. (D_1/P_0) is used to denote the
17 expected dividend yield in the schedules.

18 **Q. WHAT MEASURES OF GROWTH (“g”) HAVE YOU USED?**

19 A. I have used two estimates of growth – one based on an average of historical and
20 forecast growth and the other based only on forecast growth. For my average
21 historical and forecast growth estimate, I averaged the 5-year historical average
22 growth rates in the stock price, book value per share (“BVPS”), earnings per share
23 (“EPS”) and dividends per share (“DPS”) with *Value Line's* forecast of EPS
24 growth.¹⁹ Using the historical average of growth in price, BVPS, EPS, and DPS is

25
26 ¹⁹ See Schedule D-4.4.

1 reasonable because investors know that, in equilibrium, common stock prices,
2 BVPS, EPS and DPS will all grow at the same rate and would take information
3 about changes in stock prices and growth in BVPS into account when they price
4 utility stocks. As I stated earlier, a basic assumption of the DCF model is that the
5 stock price, BVPS, EPS and DPS all grow at the same rate. For my forecast
6 growth estimate, I have used the growth forecasts from *Value Line*.²⁰

7 **Q. WHY DID YOU INCORPORATE A HISTORICAL GROWTH RATE**
8 **ESTIMATE INTO ONE OF YOUR GROWTH ESTIMATES?**

9 A. Past growth rates may provide a reasonable basis for determining prospective
10 growth rates. Their use assumes the past is a reflection of the future. While I
11 believe the use of historical growth rates give added recognition to the past, which
12 is already incorporated into analyst estimates of growth, I nevertheless include a
13 version of the DCF that reflects historical growth. I would point out, however, that
14 historical growth rates may not be the best measure for the future. The empirical
15 evidence indicates that analyst estimates of growth are the best measure of growth
16 for use in the DCF for utility stocks.²¹

17 ²⁰ *See id.*

18 ²¹ Gordon, David A., Gordon, Myron J. and Gould, Lawrence I., "Choice Among
19 Methods of Estimating Share Yield," *Journal of Portfolio Management*, Spring 1989, pp.
20 50-55. Gordon, Gordon and Gould found that a consensus of analysts' forecasts of
21 earnings per share growth for the next five years provides a more accurate estimate of
22 growth required in the DCF model than three different historical measures of growth
23 (historical EPS, historical DPS, and historical retention growth). They explain that this
24 result makes sense because analysts would take into account such past growth as
25 indicators of future growth as well as any new information. Other studies confirm the
26 superiority of analysts' estimates such as Vander Weide, James H. and Carleton, Willard
T., "Investor Growth Expectations: Analysts vs. History," *Journal of Portfolio
Management*, Spring 1988, pp. 78-87, Brown, Lawrence D. and Rozeff, Michael S.,
"The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from
Earnings," *Journal of Finance*, March 1978, pp. 1-16, and Timme, Stephen G. and
Eisemann, Peter C., "On the Use of Consensus Forecasts of Growth in the Constant
Growth Model: The Case for Electric Utilities," *Journal of Financial Management*,
Winter 1989, pp. 23-35. A 2004 study by the Kentucky Public Service Commission
Advance Research Center updated the study by Vander Weide and Carleton (1988)

1 **Q. WHY DID YOU USE FORECASTED GROWTH RATES IN YOUR**
2 **GROWTH ESTIMATES?**

3 A. The DCF model requires estimates of growth that investors expect in the future and
4 not past estimates of growth that have already occurred. Accordingly, I use
5 analysts' forecasts of growth. Logically, in estimating future growth, financial
6 institutions and analysts have taken into account all relevant historical information
7 on an entity as well as other more recent information.²² To the extent that past
8 results provide useful indications of future growth prospects, analysts' forecasts
9 would already incorporate that information. In addition, a stock's current price
10 reflects known historic information on that entity, including its past earnings
11 history. Any further recognition of the past will double count what has already
12 occurred. Therefore, forward-looking growth rates should be used.

13 **Q. HAVE YOU ADJUSTED YOUR DCF RESULTS?**

14 A. Yes. I have removed any indicated DCF result below 7.0 percent (the expected
15 cost of Baa bonds plus 100 basis points) when computing the average DCF result
16 for the water proxy group. For example, the DCF indicated result on Schedule D-
17 4.7, page 1, is just 3.38 percent for SJW water. This result is not plausible.
18 Investors will not invest in risky common stocks if they can earn a higher return on
19 less risky investment grade bonds.

20 **D. Explanation of the RPM and Its Inputs**

21 **Q. PLEASE EXPLAIN THE RPM METHODOLOGY FOR ESTIMATING**
22 **THE COST OF EQUITY.**

23 A. The RPM is sometimes referred to as the "bond yield plus risk premium method."
24 The general approach is to determine the spread between the return on debt and the
25 confirmed the superiority of analyst estimates over historical averages.

26 ²² Gordon, Gordon, and Gould.

1 return on equity, and to add this spread to the current debt yield to derive an
2 estimate of the cost of equity. To implement the RPM, it is assumed that the past
3 relationship will continue into the future. The RPM is widely used by analysts and
4 investors.²³

5 The RPM formula provides a formal risk-return relationship and is stated as:

6 (6) $k = K_d + \text{Historical bond-equity spread}$

7 where k is the expected return on equity and K_d is the current cost of debt or debt
8 yield. I computed two historical bond-equity spreads – a 5-year and a 15-year and
9 computed indicated cost of equity based upon each and then computed a mid-point
10 estimate.

11 **Q. HOW DID YOU DETERMINE THE HISTORICAL BOND-EQUITY**
12 **SPREAD?**

13 A. I computed the bond-equity spread as the difference between the average total
14 realized market return of my water proxy group and the average annual long-term
15 treasury yields for the years 2001 to 2015.²⁴

16 **Q. WHY DID YOU USE TOTAL REALIZED MARKET RETURNS?**

17 A. Total realized market returns are market based which makes this approach a
18 market-based approach. While the annual actual risk premium in any given year
19 may not equal the required risk premium, over longer periods of time, the average
20 actual risk premiums can provide a good estimate of the average risk premium
21 required.

22 **Q. WHAT DO YOU USE AS THE CURRENT COST OF DEBT (K_d)?**

23 A. I use the expected U.S. Long-term Treasury rate for 2017-2019 as the basis for the
24 risk free rate. Since the cost of capital is an opportunity cost and is prospective,

25 ²³ Morin, p. 108.

26 ²⁴ See Schedule D-4.9.

1 it necessarily requires the use of a forward-looking bond yield. In recent years,
2 interest rates have dropped to very low levels when compared to interest rates for
3 similar securities in the past. From 1999 to 2007, the annual average rates for
4 long-term Treasury bonds was 5.24 percent ranging from a low of 4.84 percent in
5 2007 to a high of 5.94 in 2000. In 2008, and during the recent recession, that
6 annual average dropped to 4.24 percent and dropped further in 2012 to 2.9 percent.

7 The drop in long-term Treasury rates has been largely attributed to the
8 market intervention by the Federal Reserve through its quantitative easing
9 programs. Long-term Treasury rates for 2013 and 2014 averaged 3.45 percent and
10 3.34 percent, respectively. For the first 8 months of 2016, long-term Treasury rates
11 have averaged 2.54 percent. The Federal Reserve is expected to raise interest rates
12 towards the end of this year. Notwithstanding these current low rates, 30-year
13 Treasury rates are expected to bounce back up in 2017-2019 timeframe. Analysts
14 at *Value Line* expect that future average to be 3.7 percent. The consensus estimate
15 made by analysts surveyed by the *Blue Chip Financial Forecasts* indicates analysts
16 expect that average to be higher at 3.8 percent. For my analyses, I have relied upon
17 the average of *Value Line Quarterly Forecast* forecasts and the consensus forecast
18 reported by *Blue Chip Financial Forecasts* of 3.8 percent.²⁵

19 **Q. WHY DO YOU USE LONG-TERM U.S. TREASURY YIELDS?**

20 A. The yields on long-term Treasury bonds match more closely with the perpetual
21 nature of common stock investments.²⁶ Further, short-term rates are more volatile,
22 fluctuate widely and are subject to more random disturbances than long-term rates.
23 In short, long-term Treasury rates are preferred for these reasons and because long-
24 term rates are more appropriately matched to securities with an indefinite life or

25 ²⁵ See Schedule D-4.8.

26 ²⁶ Morin, p. 112.

1 long-term investment horizon.

2 **E. Explanation of the CAPM and Its Inputs**

3 **Q. PLEASE EXPLAIN THE CAPM METHODOLOGY FOR ESTIMATING**
4 **THE COST OF EQUITY.**

5 A. Like the RPM, the CAPM is the sum of a risk-free rate plus a risk premium. And,
6 like the RPM, it quantifies the additional return required by investors for bearing
7 incremental risk. The CAPM was developed by William Sharpe and John Lintner
8 in the mid-1960's and is a common topic in college finance textbooks. The CAPM
9 provides a formal risk-return relationship premised on the idea that only market
10 risk matters, as measured by beta. The traditional version of CAPM is represented
11 by the formula:

12
$$[9] k = R_f + \beta(R_m - R_f)$$

13 where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the
14 market return, $(R_m - R_f)$ is the market risk premium, and β is beta.

15 **Q. ARE THERE ANY CONCERNS ABOUT APPLYING THE CAPM MODEL**
16 **TO UTILITY STOCKS?**

17 A. Yes. I have concerns with using this model in most periods because mechanical
18 application of the model may produce unreasonable results. The traditional CAPM
19 only captures a single measure of systematic risk as measured by beta, but there are
20 other forms of systematic risk priced by the market such as company size. A size
21 premium is necessary because the empirical evidence indicates that beta alone does
22 not measure the risk of smaller companies.²⁷

23 **Q. ARE THERE ALTERNATIVES TO THE TRADITIONAL CAPM?**

24 A. Yes, alternative versions of the CAPM have been developed that provide more
25

26 ²⁷ *Duff & Phelps*, pp. 2-5.

1 robust explanations of returns required by investors. A version of the CAPM
2 called the Empirical CAPM or ECAPM was developed to recognize that
3 estimations of R_f are higher than the return on long-term Treasuries. Dr. Roger
4 Morin discusses ECAPM at pages 189-191 of his book, *New Regulatory Finance*.
5 The ECPAM is represented as follows:

$$6 \quad [10] \quad k = R_f + .25(R_m - R_f) + .75\beta(R_m - R_f)$$

7 The ECAPM was developed from the empirical findings which show the
8 slope of the CML is flatter and intercept or risk-free rate is at a higher point than
9 predicted by the pure CAPM. The ECAPM has been shown to do a better job at
10 predicting market returns.

11 *Duff & Phelps* suggest a version of the CAPM in which a size premium is
12 included.²⁸ This modified CAPM or MCAPM is represented as follows:

$$13 \quad [11] \quad k = R_f + \beta(R_m - R_f) + RP_s$$

14 where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the
15 market return, $(R_m - R_f)$ is the market risk premium, β is beta, and RP_s is the size
16 premium. The MCAPM recognizes the CAPM is incomplete and does not fully
17 account for the higher returns that are needed on smaller company stocks. In other
18 words, the higher risks associated with smaller firms are not fully accounted for by
19 beta.²⁹

20 **Q. IS FIRM SIZE A UNIQUE RISK?**

21 A. No. The firm size is a systematic risk factor and is an adjustment to the pure
22 CAPM.³⁰ Putting aside the empirical financial data, the need for a risk premium

23 ²⁸ *Duff & Phelps*, pp. 2-7.

24 ²⁹ Morningstar, *Ibbotson SBBi 2013 Valuation Yearbook*, pp. 85-88.

25 ³⁰ Pratt, Shannon P. and Roger J. Grabowski. *Cost of Capital: Applications and*
26 *Examples, Fourth Edition*. John Wiley and Sons, 2010, p. 56.

1 for size makes sense. Company size is a significant element of business risk for
2 which investors expect to be compensated through greater returns. As discussed
3 earlier, smaller companies are simply less able to cope with significant events that
4 impact sales, revenues, and earnings. For example, smaller companies face more
5 risk exposure to business cycles and economic conditions, both nationally and
6 locally. Additionally, the loss of revenues from a few larger customers would have
7 a greater effect on a small entity than on a much larger entity with a larger, more
8 diverse, customer base. Moreover, smaller companies are generally less diverse in
9 their operations and have less financial flexibility.

10 **Q. DID YOU EMPLOY EITHER OF THESE ALTERNATIVE CAPM**
11 **METHODS (EQUATIONS 10 AND 11) AS PART OF YOUR ANALYSIS?**

12 A. Yes. I employed all three versions of the CAPM to estimate the cost of equity for
13 the water proxy group.

14 **Q. WHAT IS THE RISK-FREE RATE (R_f)?**

15 A. It is the return on an investment with no risk. The U.S. Treasury rate serves as the
16 basis for the risk-free rate because the yields are directly observable in the market
17 and are backed by the U.S. government. Practically speaking, short-term rates are
18 volatile, fluctuate widely and are subject to more random disturbances than long-
19 term rates. In short, long-term Treasury rates are preferred for these reasons and
20 because long-term rates are more appropriately matched to securities with an
21 indefinite life or long-term investment horizon.

22 **Q. WHAT DO YOU ADOPT AS THE RETURN FOR THE RISK-FREE RATE?**

23 A. I use long-term expected Treasury bond rates as the measure of the risk-free return
24 for use with CAPM cost of equity estimates from two sources: the *Blue Chip*
25 *Financial Forecasts* and the *Value Line Quarterly Forecast*.³¹ The appropriate

26 ³¹ See Schedule D-4.9.

1 choice for the risk-free rate is the *expected* return for long-term Treasury
2 securities.³² Thus, when determining an estimate of the risk-free rate, it is
3 appropriate to adopt a return that is no less than the expected return on the long-
4 term Treasury bond rate. Both of my CAPM estimates are based on expected
5 yields of the long-term Treasury rates for 2017 through 2019 (from *Blue Chip*
6 *Financial Forecasts* and *Value Line Quarterly Forecasts*).³³

7 **Q. WHAT IS BETA AND WHAT DOES IT MEASURE?**

8 A. Beta is a measure of the relative risk of a security in relation to the market.
9 In other words, it is a measure of the sensitivity of a security to the market as a
10 whole. This sensitivity is also known as systematic risk. It is estimated by
11 regressing a security's excess returns against a market portfolio's excess returns.
12 The slope of the regression line is the beta.

13 Beta for the market is 1.0. A security with a beta greater than 1.0 is
14 considered riskier than the market. A security with a beta less than 1.0 is
15 considered less risky than the market.

16 There are computational problems surrounding beta. It depends on the
17 return data, the time period used, its duration, the choice of the market index, and
18 whether annual, monthly, or weekly return figures are used. Betas are estimated
19 with error. Based on empirical evidence, high betas will tend to have a positive
20 error (risk is overestimated) and low betas will have a negative error (risk is
21 underestimated).³⁴

22
23
24 ³² *Duff & Phelps*, p. 3-1.

25 ³³ See Schedule D-4.8.

26 ³⁴ Fama, Eugene F. and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives*, Summer 2004, pp. 25-46.

1 **Q. WHAT DID YOU USE AS THE PROXY OF THE BETA IN YOUR CAPM**
2 **MODELS?**

3 A. I used the average beta of the sample water utility companies. Betas were obtained
4 from *Value Line Investment Analyzer* (weekly data as of September 29, 2016).
5 *Value Line* is the source for estimated betas that I regularly employ. The average
6 beta for my water proxy group as shown on Schedule D-4.2 is 0.69. I should note
7 that because Pima is not publicly traded, it has no beta. In my expert opinion,
8 I strongly believe Pima, if it were publicly traded, would have a higher beta than
9 the sample water utility companies.

10 Smaller companies are just inherently more risky than larger companies.
11 *Morningstar* reports that when betas (a measure of market risk) are properly
12 estimated, betas are greater for small companies than for larger companies.³⁵
13 *Morningstar* also finds that even after accounting for differences in beta risk, small
14 firms require an additional risk premium over and above the added risk premium
15 indicated by differences in beta risk.

16 **Q. PLEASE EXPLAIN THE MARKET RISK PREMIUM.**

17 A. The market-risk premium ($R_m - R_f$) is the return an investor expects to receive as
18 compensation for market risk. It is the expected market return minus the risk-free
19 rate. Approaches for estimating the market risk premium can be historical or
20 prospective.

21 Since expected returns are not directly observable, historical realized returns
22 are often used as a proxy for expected returns on the basis that the historical market
23 risk premium follows what is known in statistics as a “random walk.” If the
24 historical risk premium does follow the random walk, then one should expect the
25

26 ³⁵ *Morningstar, Ibbotson SBBi 2013 Valuation Yearbook, Chapter 7.*

1 risk premium to remain at its historical mean. Based on this argument, the best
2 estimate of the future market risk premium is the historical mean. *Duff & Phelps*
3 provides historical market returns for various asset classes from various historical
4 time periods. This publication also provides market risk premiums over U.S.
5 Treasury bonds, which makes it an excellent source for historical market risk
6 premiums.

7 Prospective market risk premium estimation approaches necessarily require
8 examining the returns expected from common equities and bonds. One method
9 employs application of the DCF model to a representative market index such as the
10 *Value Line* 1700 stocks. The expected return from the DCF is measured for a
11 number of periods of time, and then subtracted from the prevailing risk-free rate for
12 each period to arrive at market risk premium for each period. The market risk
13 premium that is subsequently employed in the CAPM is the average market risk
14 premium of the overall period.

15 **Q. HOW MANY MARKET RISK PREMIUM ESTIMATES DID YOU**
16 **PREPARE?**

17 A. I used two market risk premium estimates: an average of an historical market risk
18 premium (1926-2015) and a current market risk premium that is used in the
19 traditional CAPM and ECAPM, and an historical market risk premium (1963-
20 2015) and a current market risk premium that is used in the MCAPM.

21 **Q. HOW DID YOU ESTIMATE THE HISTORICAL MARKET RISK**
22 **PREMIUMS?**

23 A. I used the *Duff & Phelps* measure of the average premium of the market over long-
24 term treasury securities from 1926 through 2015 and 1963 through 2015, both of
25 which use the S&P 500 market index. The average historical market risk premium
26 over long-term treasury securities is 7.0 percent for the 1926 to 2015 time period

1 and 5.0 percent for the 1963 through 2015 time period.

2 **Q. WHY USE TWO DIFFERENT RISK PREMIUM ESTIMATES?**

3 A. I use the average of the historical risk premium and a current market risk premium
4 for my traditional CAPM and ECAPM. I use the average historical market risk
5 premium (1963–2015) and a current market risk premium for use in the
6 MCAPM.³⁶ Staff typically employs both an historical market risk premium (1926-
7 2015) and a current market risk premium for use it its CAPM analysis.

8 **Q. HOW DID YOU ESTIMATE THE CURRENT MARKET RISK PREMIUM?**

9 A. I derived a market risk premium by first using the DCF model to compute an
10 expected market return for each of the past 12 months using *Value Line's*
11 projections of the median dividend yield for the dividend yield in the DCF and an
12 average of the median EPS, DPS and BVPS growth on the *Value Line* 1700 stocks.
13 I then subtracted the historical monthly average 30-year Treasury yield for each
14 month from the expected market returns to arrive at the expected market risk
15 premiums. Finally, I averaged the computed market risk premiums to determine
16 the current market risk premium for the last 12 months, 9 months, 6 months, and
17 3 months. The data and computations are shown on Schedule D-4.10. The recent
18 3 month average current market risk premium is 8.6 percent. Estimates of the
19 current market risk premium have ranged from 8.22 percent to 9.15 percent over
20 the past 12 months. My recommended market risk premium is based on the recent
21 3-month average estimate of 8.6 percent somewhat below the mid-point of the
22 range of the past 12-months.
23
24

25 ³⁶ *Duff & Phelps* Risk Premium Report size and risk premia are calculated over the time
26 horizon 1963 – 2015. See *Duff & Phelps* p. 7-6.

1 **Q. HOW DID YOU ESTIMATE THE SIZE PREMIUM FOR THE WATER**
2 **PROXY GROUP FOR USE IN THE MCAPM?**

3 A. *Duff & Phelps's* Size Study sorts companies by eight measures of size, breaking
4 down the NYSE universe of companies into 25 size-ranked portfolios.³⁷ The Size
5 Study provides two ways to match a company's size (or risk) characteristics to the
6 appropriate size (or risk) premium – a guideline portfolio method and a regression
7 equation method. I used the regression equation method to find the size risk
8 premium for each of the publicly traded utilities in the proxy group for six
9 measures of size (market value of equity, book equity, market value of invested
10 capital, 5-year average of net income, total assets, and earnings before interest,
11 taxes, depreciation and amortization).³⁸ I determined the average size premium of
12 all size measures for the proxy group (3.96 percent) and then adjusted the average
13 size premium to reflect the lower risk of the water proxy group compared to the
14 companies that make up the respective size-ranked portfolios. This comparative
15 risk study uses the fundamental measures of company risk (operating margin,
16 coefficient of variation in operating income, and coefficient of variation in return
17 on book equity) to gauge how alike or different the water proxy group is compared
18 to the companies that make up the size-ranked portfolios. In the instant case, the
19 estimated reduction in risk is -0.92 percent. Thus, the market risk premium for size
20 for the proxy group is 2.95 percent (3.86% - 0.92%)(rounded).

21
22
23
24 ³⁷ The size measures include: 1) Market Capitalization; 2) Book Value of Equity; 3) 5-
25 year Average Net Income; 4) Market Value of Invested Capital; 5) Total Assets; 6) 5-year
26 Average Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA”);
7) Sales; and 8) Number of Employees.

³⁸ *Duff & Phelps*, Exhibits B-1 through B-6.

1 **F. Financial Risk Adjustment**

2 **Q. ARE YOU RECOMMENDING A FINANCIAL RISK ADJUSTMENT TO**
3 **ACCOUNT FOR DIFFERENCES IN LEVERAGE BETWEEN YOUR**
4 **WATER PROXY GROUP AND PIMA?**

5 A. Yes. I have included a downward financial risk adjustment to the cost of equity of
6 10 basis points based upon the Hamada method³⁹ to account for the difference in
7 financial risk between Pima and the water proxy group.⁴⁰

8 **G. Company Specific Risk Premium for Size**

9 **Q. PLEASE DISCUSS YOUR COMPANY SPECIFIC RISK PREMIUM.**

10 A. As I testified earlier, Pima is not directly comparable to the publicly traded water
11 utilities in my water proxy group. The characteristics associated with small size,
12 such as the lack of diversification, limited revenue and cash flow, relatively small
13 customer base, lack of investment liquidity, and earnings volatility, increase the
14 risk faced by smaller water and wastewater utilities over the risk associated with
15 the water proxy group.

16 **Q. PLEASE DISCUSS SIZE RISK FOR SMALL UTILITY COMPANIES.**

17 A. Investment risk increases as the firm size decreases, all else remaining constant.
18 There is a great deal of empirical evidence that the firm size phenomenon exists.
19 Morningstar's *Ibbotson SBBI 2013 Valuation Yearbook* (Chapter 7) reports that
20 smaller companies have experienced higher returns that are not fully explainable
21 by their higher betas, and that beta is inversely related to firm size. In other words,
22 smaller companies not only have higher betas but higher returns than larger ones.
23 Even after accounting for differences in beta risk, small companies require an

24
25 ³⁹ Hamada, Robert S., "Effects of the Firm's Capital Structure on Systematic Risk of
Common Stock," *Journal of Finance*, Vol. 27 No. 2 (May 1972) pp. 435 – 453.

26 ⁴⁰ See Schedule D-4.14, page 1 and Schedule D-4.14, page 2.

1 additional risk premium over and above the added risk premium indicated by
2 differences in beta risk. Dr. Zepp also reported evidence that the stocks of small
3 water or wastewater utilities are more risky than the stocks of larger water utilities,
4 such as those in the water utilities sample.⁴¹ And the California PUC conducted a
5 study that showed smaller water utilities are more risky than larger ones.⁴² Based
6 on the evidence, it is clear that investors require higher returns on small company
7 stocks than on large company stocks. I have included in Schedule D-4.15 the
8 results of a *Morningstar* study using annual data reporting the size premium based
9 upon firm size and return data (1) provided in Duff & Phelps *2016 Valuation*
10 *Handbook, Guide to Cost of Capital*, and (2) contained in Dr. Thomas M. Zepp's
11 2003 article in *The Quarterly Review Economic and Finance*. Based on these
12 sources, I have estimated that a small company risk premium in the range of 99 to
13 319 basis points is appropriate for Pima.

14 **Q. HAVE YOU CONDUCTED A COMPARATIVE RISK STUDY TO**
15 **DEVELOP AN INDICATED RISK PREMIUM FOR PIMA TO BE ADDED**
16 **TO THE RESULTS FOR THE WATER PROXY GROUP?**

17 A. Yes. Attached as **Exhibit TJB-COC-DT2** is the risk study I prepared for Pima.
18 To conduct my risk study, I started by computing the 5-year historical operating
19 margin, coefficient of variation of operating margin, and coefficient of variation of
20 ROE for Pima. Operating margin is a measure of profitability. The co-efficient of
21 variation of operating margin is a measure of earnings variability. Both of these
22 metrics are highly correlated with size and risk. Next, I cross-referenced these
23

24 ⁴¹ Zepp, Thomas M., *Utility Stocks and the Size Effect – Revisited*, *The Quarterly Review*
25 *Economics and Finance*, Vol. 43, Issue 3, Autumn 2003, pp. 578-582.

26 ⁴² Staff Report on Issues Related to Small Water Utilities, June 10, 1991 and CPUC
Decision 92-03-093.

1 metrics with data published by *Duff & Phelps*⁴³ and identified the corresponding
2 market portfolio beta for the utility and for my water proxy group. I then computed
3 the relative difference in beta between each utility and my proxy group. Assuming
4 that the relative difference in the market portfolio beta for the all publicly traded
5 companies is the same for publicly traded water utilities, I then computed an
6 implied beta for each utility using the difference in portfolio betas.⁴⁴ Finally, I
7 used the CAPM models to compute the indicated cost of equity for each utility and
8 compared the results to the CAPM results for my water proxy group.⁴⁵

9 **Q. BASED ON YOUR COMPARATIVE RISK STUDY, WHAT ADDITIONAL**
10 **RISK PREMIUM IS INDICATED?**

11 A. The indicated risk premium for Pima is in the range of 110 to 150 basis points with
12 a midpoint of 130 basis points.

13 **Q. WHAT COMPANY SPECIFIC-RISK PREMIUM DO YOU RECOMMEND**
14 **FOR PIMA?**

15 A. I recommend the mid-point of 120 basis points which is somewhat below the mid-
16 point.

17 **H. Summary and Conclusions**

18 **Q. HAVE YOU PREPARED A SCHEDULE THAT SUMMARIZES YOUR**
19 **EQUITY COST ESTIMATES AND PRESENTS YOUR**
20 **RECOMMENDATIONS?**

21 A. Yes. The equity cost estimates and my recommendations are summarized in
22 Schedule D-4.1 for Pima.

23
24 ⁴³ *Duff & Phelps*, Exhibits D-1, and D-2.

25 ⁴⁴ See page 1 of Exhibit TJB-COC-DT2.

26 ⁴⁵ See page 2 of Exhibit TJB-COC-DT2.

1 In the first part of my analysis, I applied two versions of the constant growth
2 DCF model, one using historical and forecast growth and one using only forecast
3 growth. The DCF models produce an indicated equity cost for the water proxy
4 group of 8.8 percent.⁴⁶

5 In the second part of my analysis, I applied an RPM. I used historical
6 annual total market returns for the water proxy group and historical average annual
7 average long-term treasury yields to develop an equity risk premium to which I
8 added the expected long-term treasury to estimate the current cost of equity.
9 My RPM produces an indicated cost of equity of 11.3 percent for the water proxy
10 group.⁴⁷

11 In the third part of my analysis, I applied three versions of the CAPM –
12 a traditional CAPM, an ECAPM, and MCAPM. The CAPM analyses produce an
13 indicated cost of equity 10.1 percent for the water proxy group.⁴⁸

14 The overall results on the DCF, CAPM, and RPM analyses for the water
15 proxy group are in the range of 8.8 percent to 11.3 percent with a mid-point of
16 10.1 percent.

17 In the fourth part of my analysis, I determine that a downward adjustment of
18 10 basis points is required to account for the difference in financial risk between
19 the water proxy group and Pima.

20 In the fifth part of my analysis, I reviewed the financial literature on the
21 small firm size effect and determined that an appropriate risk premium for small
22 utilities like Pima that should be applied to the DCF, RPM, and CAPM results is
23

24 _____
⁴⁶ See Schedule D-4.7, pages 1 and 2.

25 ⁴⁷ See Schedule D-4.9.

26 ⁴⁸ See Schedule D-4.11.

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the range of 99 to 319 basis points.⁴⁹

In the sixth part of my analysis, I conducted a comparative risk study using market based information and financial data for the water proxy group and Pima. Based upon my comparative risk study using market based information and financial data for the water proxy group and Pima, I determined the indicated risk premium for Pima falls in the range of 110 to 150 basis points.⁵⁰ I recommend a risk premium of 120 basis points. Using my recommended risk premium of 120 basis points, the DCF models produce an indicated equity cost for Pima of 10.0 percent. My RPM produces an indicated cost of equity of 12.5 percent for Pima. My CAPM analyses produce an indicated cost of equity 11.3 percent. After adjusting for the difference in financial risk, the range of cost of equity estimates falls in the range of 10.0 to 12.5 percent with a midpoint of 11.2 percent.⁵¹

Q. WHAT EQUITY RETURN DO YOU RECOMMEND?

A. I am recommending a cost of equity of *no less* than 11.2 percent for Pima.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY ON COST OF CAPITAL?

A. Yes.

⁴⁹ See Schedule D-4.12.
⁵⁰ See Exhibit TJB-COC-DT2.
⁵¹ See Schedule D-4.1, page 1.

EXHIBIT TJB-COC-DT1

The market sentiment for the Water Utility Industry has changed dramatically since we last reported on the group in July. Indeed, the value of almost all equities in this sector have declined by double digits on average, while the broader market averages have advanced modestly.

The underlying fundamentals of this sector remain basically unchanged. Following decades of underinvestment in new water infrastructure, utilities have substantially increased capital budgets to replace aging pipelines. As internally generated funds are not sufficient to fund all of the construction costs, debt and equity offerings are often required. Still, the financial condition of the industry remains very stable.

Most authorities realize that the capital being spent to modernize systems in their states are necessary and have generally had a constructive working relationship with water utilities they regulate.

Traditionally, a haven for conservative, income-oriented investors, we continue to urge subscribers to use more caution when getting involved in this sector because the low Beta coefficients can sometimes be misleading. Due to the industry's small market capitalization, a shift in institutional investor sentiment, can move the prices of stocks widely in a short period of time.

A Major Retreat

When we went to press last July, institutional investors, spurred by low rates on U.S. Treasury securities, had plowed large amounts of funds into this relatively minor segment of the U.S. equity market. Consisting of only nine stocks, the industry has a combined market capitalization of less than \$25 billion. Long known to many retail investors for their modest, but well-defined earnings, many accounts have also been attracted to these shares because of their higher-than-average yields, solid dividend growth prospects, low volatility, and defensive nature. During the first half of 2016, however, demand for certain income-generating stocks reached peak levels. Indeed, the price of the equities in this industry were pushed to such all time highs, that their yields (the primary reason to buy the stocks) fell below the median of the *Value Line* universe. Over the past quarter, the stocks in this industry have declined 12.0% on average, while the S&P 500 Index has increased by about 3%.

Capital Expenditures And Balance Sheets

Currently, the average utility is in the process of replacing aging pipelines systems, upgrading and expanding wastewater facilities, and spending funds to be in compliance in EPA regulations. As an example, *American Water Works*, the largest and one of the best run utilities in the country broke out the age of its pipeline system at a recent presentation. (Keep in mind that the following numbers come from a company that has been spending heavily to upgrade its assets.) The age of its pipes are as follows: 21%, 30 years old or less; 51%, 31-69 years; 24%, 70 to 90 years; and 4%, at least 100 years. Over 25% of this elite utility's pipe are 70 years or older. So, clearly America's water infrastructure is aging and huge sums of capital will have to be invested for a long

INDUSTRY TIMELINESS: 44 (of 97)

period of time. Fortunately, the industry and regulators are in agreement that not enough maintenance capital had been spent during the previous decades, as customers water bills, in many parts of the country were kept artificially low. An emphasis has been placed on modernizing most water districts at a gradual, but determined pace.

All of the regulated utilities in this group have relatively sound balance sheets. Capital outlays have increased for most companies, but they haven't had to take on excessive amounts of debt or issue too much new equity. We expect this trend to continue with companies probably being marginally more leveraged later in the decade.

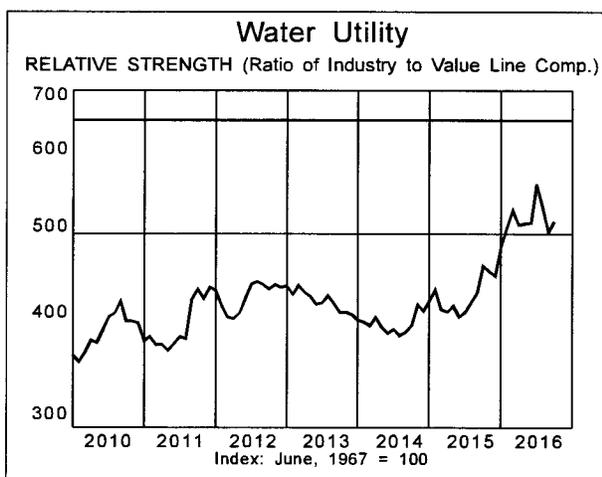
Regulation Continues To Be Reasonable

Utilities are governed by authorities in the state in which they operate. In addition to setting the rates for what water users pay, these regulatory bodies also have the power to set the return a company can earn. Even a very well run utility can have a difficult time being successful in a harsh regulatory climate. Fortunately, in this industry, both the utilities and regulator seem to be working toward a common goal. As we often point out, the regulatory impact on a utility's bottom line should never be underestimated.

Conclusion

The industry ranking here has plunged from among the highest of all those followed by *Value Line* to somewhere around the middle of the pack. Actually, we do not have a negative outlook on the operational side of the business. Our problem is simply that the valuations are too rich. And, while the recent sell off has improved the prospects of these stocks over the pull to 2019-2021, there is still not one that has above-average capital appreciation to that time. *Aqua American* comes close, and still may interest some conservative investors, willing to sacrifice some capital appreciation in return for safety. Also, of the nine equities, only *California Water* is expected to outperform the broader market averages in the year ahead.

James A. Flood

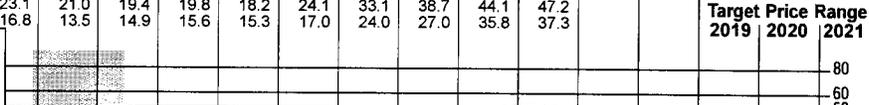


AMER. STATES WATER NYSE-AWR

RECENT PRICE **38.62** P/E RATIO **22.7** (Trailing: 24.1 Median: 20.0) RELATIVE P/E RATIO **1.23** DIV'D YLD **2.4%** VALUE LINE

TIMELINESS 3 Raised 8/19/16
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 10/14/16
BETA .70 (1.00 = Market)

High: 17.3 21.9 23.1 21.0 19.4 19.8 18.2 24.1 33.1 38.7 44.1 47.2
 Low: 12.2 15.1 16.8 13.5 14.9 15.6 15.3 17.0 24.0 27.0 35.8 37.3



2019-21 PROJECTIONS

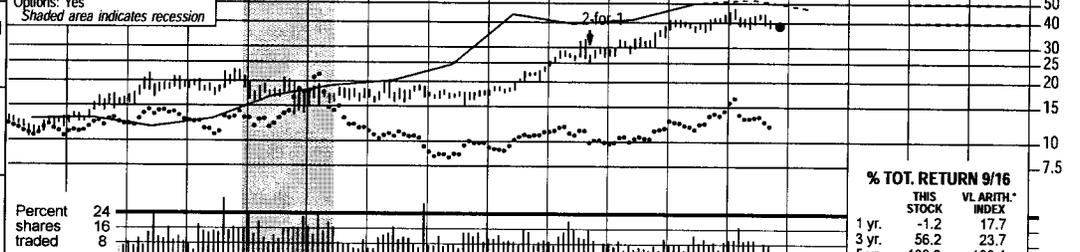
Price	Gain	Ann'l Total Return
High 50	(+30%)	9%
Low 40	(+5%)	4%

Insider Decisions

	D	J	F	M	A	M	J	J	A
to Buy	0	0	0	0	0	0	0	0	0
Options	2	1	1	1	0	1	4	1	1
to Sell	1	2	1	2	2	3	2	2	2

Institutional Decisions

	4Q2015	1Q2016	2Q2016
to Buy	88	100	95
to Sell	88	96	90
Hold(000)	23016	22935	23585



2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	% VALUE LINE PUB. LLC	19-21
6.08	6.53	6.89	6.99	6.81	7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.17	12.56	12.35	12.90	Revenues per sh	15.50
1.10	1.26	1.27	1.04	1.11	1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	2.67	2.81	2.75	2.90	"Cash Flow" per sh	3.80
.64	.67	.67	.39	.53	.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.57	1.60	1.65	1.75	Earnings per sh A	2.25
.43	.43	.44	.44	.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.87	.91	.96	Div'd Decl'd per sh B=C	1.25
1.51	1.59	1.34	1.88	2.51	2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	1.89	2.39	2.45	2.45	Cap'l Spending per sh	2.75
6.37	6.61	7.02	6.98	7.51	7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.24	12.77	13.70	14.50	Book Value per sh	16.45
30.24	30.24	30.36	30.42	33.50	33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.29	36.50	36.50	36.50	Common Shs Outst'g C	37.00
15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	20.1	24.6	24.5	24.5	Avg Ann'l P/E Ratio	21.0
1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.06	1.25	1.25	1.25	Relative P/E Ratio	1.30
4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.6%	2.2%	2.2%	2.2%	Avg Ann'l Div'd Yield	2.6%

CAPITAL STRUCTURE as of 6/30/16
 Total Debt \$384.7 mill. Due in 5 Yrs \$41.6 mill.
 LT Debt \$320.9 mill. LT Interest \$21.1 mill.
 (40% of Cap'l)

Leases, Uncapitalized: Annual rentals \$2.5 mill.
Pension Assets-12/15 \$142.2 mill.
Obliq. \$168.9 mill.

Pfd Stock None.

Common Stock 36,558,468 shs. as of 8/1/16

MARKET CAP: \$1.4 billion (Mid Cap)

CURRENT POSITION (\$MILL.)	2014	2015	6/30/16
Cash Assets	76.0	4.4	4.5
Accts Receivable	18.8	18.9	20.4
Other	114.7	109.4	107.9
Current Assets	209.5	132.7	132.8
Accts Payable	41.9	50.6	54.0
Debt Due	.3	28.3	63.8
Other	57.1	44.6	42.4
Current Liab.	99.3	123.5	160.2

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15 to '19-'21
Revenues	6.0%	4.5%	4.0%
"Cash Flow"	9.0%	8.0%	6.0%
Earnings	12.0%	12.0%	6.0%
Dividends	6.5%	10.0%	7.0%
Book Value	5.5%	6.0%	4.0%

Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2013	110.6	120.7	130.9	109.9	472.1
2014	102.0	115.6	138.3	109.9	465.8
2015	100.9	114.6	133.0	110.1	458.6
2016	93.5	112.0	134.5	115	450
2017	98.0	117	143	117	475

Cal-endar	EARNINGS PER SHARE A				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2013	.35	.43	.53	.30	1.61
2014	.28	.39	.54	.36	1.57
2015	.32	.41	.56	.31	1.60
2016	.28	.45	.58	.34	1.65
2017	.33	.47	.62	.33	1.75

Cal-endar	QUARTERLY DIVIDENDS PAID B=C				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2012	.14	.14	.1775	.1775	.64
2013	.1775	.1775	.2025	.2025	.76
2014	.2025	.2025	.213	.213	.83
2015	.213	.213	.224	.224	.87
2016	.224	.224	.224	.224	.87

268.6	301.4	318.7	361.0	398.9	419.3	466.9	472.1	465.8	458.6	450	470	Revenues (\$mill)	575
23.1	28.0	26.8	29.5	41.4	42.0	54.1	62.7	61.1	60.5	60.0	64.0	Net Profit (\$mill)	83.0
40.5%	42.6%	37.8%	38.9%	43.2%	41.7%	39.9%	36.3%	38.4%	38.4%	33.0%	36.0%	Income Tax Rate	36.0%
12.2%	8.5%	6.9%	3.2%	5.8%	2.0%	2.5%	--	2.5%	.5%	1.0%	1.5%	AFUDC % to Net Profit	1.0%
48.6%	46.9%	46.2%	45.9%	44.3%	45.4%	42.2%	39.8%	39.1%	41.1%	41.5%	42.5%	Long-Term Debt Ratio	57.0%
51.4%	53.1%	53.8%	54.1%	55.7%	54.6%	57.8%	60.2%	60.9%	58.9%	58.5%	57.5%	Common Equity Ratio	43.0%
551.6	569.4	577.0	665.0	677.4	749.1	787.0	818.4	832.6	791.5	855	920	Total Capital (\$mill)	1065
750.6	776.4	825.3	866.4	855.0	896.5	917.8	981.5	1003.5	1060.8	1110	1150	Net Plant (\$mill)	1370
6.0%	6.7%	6.4%	5.9%	7.6%	7.1%	8.3%	8.9%	8.6%	9.0%	8.5%	8.5%	Return on Total Cap'l	9.5%
8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	12.0%	13.0%	12.0%	12.0%	Return on Shr. Equity	13.5%
8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	12.0%	13.0%	12.0%	12.0%	Return on Com Equity	13.5%
2.7%	3.9%	3.1%	3.2%	5.8%	5.3%	6.6%	6.8%	5.7%	6.0%	5.5%	5.5%	Retained to Com Eq	6.0%
67%	58%	64%	61%	47%	49%	45%	47%	53%	54%	55%	55%	All Div'ds to Net Prof	56%

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden States Water Company, it supplies water to 260,151 customers in 75 cities and 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to 23,846 customers in the city of Big Bear Lake and in areas of San Bernardino County. Sold Chaparral City Water of Arizona (6/11). Has 707 employees. Blackrock Inc., owns 9.9% of out. shares; Vanguard, 9.4%; off. & dir. 1.4%. (4/16 Proxy). Chairman: Lloyd Ross. President & Chief Executive Officer: Robert J. Sprawls. Inc. CA. Address: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

American States Water did not raise the dividend at the last board meeting. Over the past four years, the company has increased the payout annually, but chose not to do so in August. We do not think that investors should be too concerned as management is probably awaiting a decision on a pending rate case and it also kept the dividend the same for five straight quarters in 2011-2012. **The long-awaited outcome of an important rate case should be revealed in the coming months.** We have been anticipating this for quite some time now. Through its Golden State Water Company (GSWC), the company filed a petition for rate relief for the years 2016 to 2018. The original filing was made in 2014, but the drought in California led to complications as consumers were ordered to reduce water usage. In any case, California regulators have acted constructively with water utilities in the recent past. **Earnings will probably be flat this year.** By the time any rate hike is implemented, it will be too late to have a major impact on 2016's bottom line. (We are assuming that the utility doesn't take the

gain all at once or restate 2016 financials.) So, for now, we are sticking with our share-net estimate of \$1.65. **Next year should be better.** No matter how American States chooses to recognize the 2016 rate relief, higher tariffs for two years should be in effect for 2017. As a result, share earnings could rise 6% to \$1.75. **The nonregulated sector of the business should continue to grow.** The ASUS subsidiary was established to use the company's expertise in the private segment of the economy where it can earn higher returns on equity. The focus here has been the privatization of the water systems at U.S. Army facilities. Thus far, ASUS has won 10 contracts, and many more bases are in the process of placing contracts out in a formal bidding process. American States seems to be holding its own as it recently won a 50-year contract with the Elgin Air Force Base. **These shares do not stand out for either short- or long-term potential performance.** The Timeliness rank is 3 (Average), and return prospects to 2019-2021 are subpar.

James A. Flood October 14, 2016

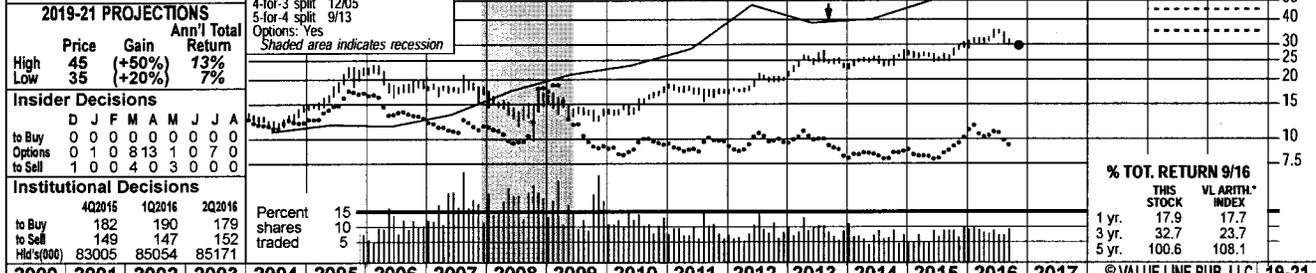
(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 7¢; '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢) '11, 10¢. Next earnings report due early November.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.

(C) In millions, adjusted for split.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	75
Earnings Predictability	85

TIMELINESS 3 Lowered 8/26/16	High: 23.4	23.8	21.3	17.6	17.2	18.4	19.0	21.5	28.1	28.2	31.1	35.8	Target Price 2019 2020 2021
SAFETY 2 Raised 4/20/12	Low: 14.0	16.1	15.1	9.8	12.3	13.2	15.4	16.8	20.6	22.4	24.4	28.3	
TECHNICAL 3 Lowered 10/7/16	LEGENDS 1.60 x Dividends p sh divided by Interest Rate Relative Price Strength 5-for-4 split 12/03 4-for-3 split 12/05 5-for-4 split 9/13 Options: Yes Shaded area indicates recession												



Insider Decisions	D J F M A M J J A to Buy 0 0 0 0 0 0 0 0 0 0 0 0 0 Options 0 1 0 8 13 1 0 7 0 0 to Sell 1 0 0 4 0 3 0 0 0 0												
Institutional Decisions	4Q2016 1Q2016 2Q2016 to Buy 182 190 179 to Sell 149 147 152 Hld's(000) 83005 85054 85171												
2019-21 PROJECTIONS	Price	Gain	Ann'l Total										
High	45	(+50%)	13%										
Low	35	(+20%)	7%										
MARKET CAP: \$5.3 billion (Large Cap)	© VALUE LINE PUB. LLC 19-21 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017												

CAPITAL STRUCTURE as of 6/30/16	533.5	602.5	627.0	670.5	726.1	712.0	757.8	768.6	779.9	814.2	830	875	Revenues (\$mill)	1050
Total Debt \$1840.4 mill. Due in 5 Yrs \$441.5 mill.	92.0	95.0	97.9	104.4	124.0	144.8	153.1	205.0	213.9	201.8	240	260	Net Profit (\$mill)	315
LT Debt \$1775.9 mill. LT Interest \$78.6 mill. (50% of Cap'l)	39.6%	38.9%	39.7%	39.4%	39.2%	32.9%	39.0%	10.0%	10.5%	6.9%	7.0%	7.0%	Income Tax Rate	20.0%
Pension Assets-12/15 \$238.6 mill.	51.6%	55.4%	54.1%	55.6%	56.6%	52.7%	52.7%	48.9%	48.5%	50.3%	50.0%	51.0%	AFUDC % to Net Profit	3.0%
Pfd Stock None	48.4%	44.6%	45.9%	44.4%	43.4%	47.3%	47.3%	51.1%	51.5%	49.7%	50.0%	49.0%	Long-Term Debt Ratio	51.5%
Common Stock 177,329,959 shares as of 7/20/16	1904.4	2191.4	2306.6	2495.5	2706.2	2646.8	2929.7	3003.6	3216.0	3469.5	3700	4040	Cap'l Spending per sh	2.10
	2506.0	2792.8	2997.4	3227.3	3469.3	3612.9	3936.2	4167.3	4402.0	4688.9	4700	5075	Book Value per sh	13.75
	6.4%	5.9%	5.7%	5.6%	5.9%	6.9%	6.6%	8.0%	7.8%	6.9%	7.5%	7.5%	Common Shs Outst'g	180.00
	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	12.9%	11.7%	13.0%	13.0%	Avg Ann'l P/E Ratio	22.5
	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	12.9%	11.7%	13.0%	13.0%	Relative P/E Ratio	1.40
	3.7%	3.2%	2.8%	2.7%	3.7%	4.6%	4.3%	6.7%	6.1%	4.7%	6.0%	6.0%	Avg Ann'l Div'd Yield	2.7%
	63%	67%	70%	72%	65%	60%	61%	50%	52%	60%	55%	55%	Return on Total Cap'l	7.5%
													Return on Shr. Equity	12.5%
													Return on Com Equity	12.5%
													Retained to Com Eq	5.0%
													All Div's to Net Prof	60%

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Has 1,617 employees. Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water supply revenues '2015: residential, 69%; commercial, 18%; industrial & other, 13%. Officers and directors own less than 1% of the common stock; Vanguard Group, 7.7%; Blackrock, Inc, 7.3%; State Street Capital, 5.5% (3/16 Proxy). President & Chief Executive Officer: Christopher Franklin. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Tel.: 610-525-1400. Internet: www.aquaamerica.com.

ANNUAL RATES	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15	'19-'21
of change (per sh)				
Revenues	5.0%	2.5%	4.5%	
"Cash Flow"	8.0%	8.0%	6.0%	
Earnings	8.5%	13.0%	7.0%	
Dividends	8.0%	7.5%	9.0%	
Book Value	7.0%	7.0%	7.0%	

QUARTERLY REVENUES (\$ mill.)	Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	180.0	195.7	204.3	188.6	768.6	
2014	182.7	195.3	210.5	191.4	779.9	
2015	190.3	205.8	221.0	197.1	814.2	
2016	192.6	208.4	227	202	830	
2017	205	220	240	210	875	

EARNINGS PER SHARE A	Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	.26	.30	.36	.24	1.16	
2014	.24	.31	.38	.27	1.20	
2015	.27	.32	.38	.17	1.14	
2016	.29	.33	.42	.31	1.35	
2017	.31	.37	.45	.32	1.45	

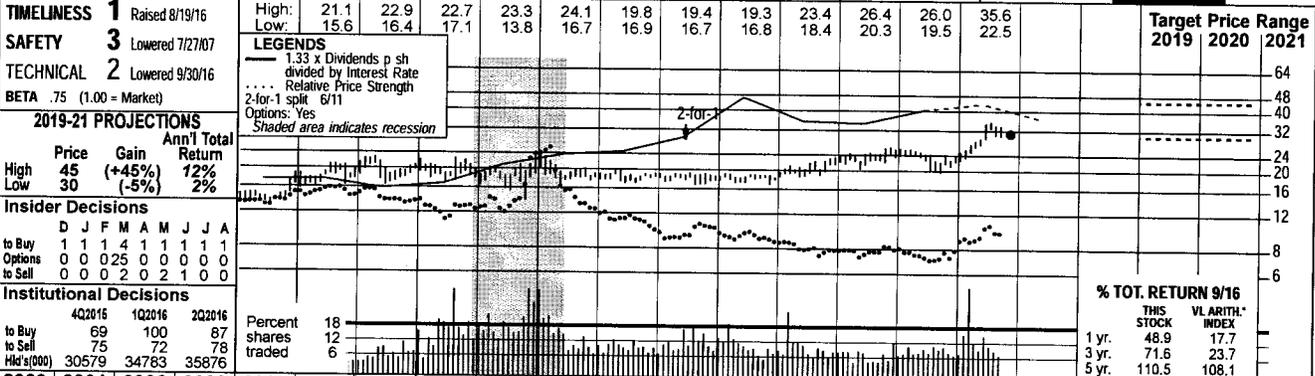
QUARTERLY DIVIDENDS PAID B	Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.132	.132	.132	.14	.54	
2013	.14	.14	.152	.152	.58	
2014	.152	.152	.165	.165	.63	
2015	.165	.165	.178	.178	.69	
2016	.178	.178	.1913			

Aqua America should maintain its solid dividend growth rate, in our opinion. Last quarter, the company raised the interim payout to \$0.1913 a share, a healthy 7.5% increase. This hike was in line with Aqua's historical dividend policy over the past 10-year period. We project the annual advance will be in the 7.5%-9.0% range through 2019-2021. **Earnings are on track for a solid comeback in 2016.** We expect the positive earnings momentum from the first two quarters to pick up steam in the second half of the year. The utility, through its various subsidiaries, has received permission to charge higher fees in five separate states this year. With all of these increases in effect for the second half and an easy final-quarter comparison, Aqua's share net will likely climb 18%, compared to 2015's depressed level. **Additional rate relief should make 2017 a good year, too.** Large rate cases are currently pending in New Jersey and Ohio. While we don't believe state regulators will grant the utility its full revenue requests, Aqua's constructive relationship with state authorities ought to help. All

told, for the full year, we think the increased tariffs from these two states, together with the increases from 2016, should enable the company's share net to rise 7%-8%, to \$1.35. **Shares of Aqua have performed poorly of late.** The price of WTR (like others in the water utility group) spiked in the first half of the year due in part to strong demand for higher-yielding stocks with solid dividend growth prospects resulting from, in part, low interest rates on U.S. Treasuries. As a result of institutional investors recently reducing their positions in this sector significantly, the prices of water stocks have tumbled. Indeed, WTR has declined about 20% in value since our July report. By comparison, the S&P 500 Index has risen roughly 3%. **This equity is ranked to mirror the market in the coming year.** Over the next 3- to 5-year period, conservative, income-oriented investors may want to take a look here, however. Capital appreciation is a tad below the Value Line median, but the stock has a 2 (Above Average) rank for Safety and a solid balance sheet. *James A. Flood* October 14, 2016

CALIFORNIA WATER NYSE-CWT

RECENT PRICE **30.96** P/E RATIO **28.9** (Trailing: 33.7) RELATIVE P/E RATIO **1.56** DIV'D YLD **2.2%** VALUE LINE



2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	© VALUE LINE PUB. LLC 19-21	
8.08	8.13	8.67	8.18	8.59	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	12.29	12.60	13.00	Revenues per sh	14.70
1.26	1.10	1.32	1.26	1.42	1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	2.47	2.22	2.30	2.65	"Cash Flow" per sh	3.25
.66	.47	.63	.61	.73	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	.94	1.00	1.35	Earnings per sh A	1.60
.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	.69	.71	Div'd Decl'd per sh B	.99
1.23	2.04	2.91	2.19	1.87	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	2.76	3.69	3.65	3.55	Cap'l Spending per sh	3.30
6.45	6.48	6.56	7.22	7.83	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.11	13.41	13.55	14.25	Book Value per sh C	16.00
30.29	30.36	30.36	33.86	36.73	36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	47.81	47.88	48.00	48.00	Common Shs Outst'g D	50.00
19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	19.7	24.8	24.8	24.8	Avg Ann'l P/E Ratio	23.0
1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.04	1.26	1.26	1.26	Relative P/E Ratio	1.45
4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	2.9%	2.9%	2.9%	Avg Ann'l Div'd Yield	2.6%

CAPITAL STRUCTURE as of 6/30/16
 Total Debt \$637.0 mill. Due in 5 Yrs \$175.3 mill.
 LT Debt \$555.8 mill. LT Interest \$27.2 mill. (47% of Cap'l)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
334.7	367.1	410.3	449.4	460.4	501.8	560.0	584.1	597.5	588.3	605	625	605	625	605	625
25.6	31.2	39.8	40.6	37.7	36.1	42.6	47.3	56.7	45.0	48.0	65.0	48.0	65.0	48.0	65.0

Pension Assets-12/15 \$328.6 mill. Oblig. \$501.9 mill.
Pfd Stock None
Common Stock 47,971,000 shs.

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
37.4%	39.9%	37.7%	40.3%	39.5%	40.5%	37.5%	30.3%	33.0%	35.3%	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%
10.6%	8.3%	8.6%	7.6%	4.2%	7.6%	8.0%	4.3%	2.7%	4.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
43.5%	42.9%	41.6%	47.1%	52.4%	51.7%	47.8%	41.6%	40.1%	44.4%	46.0%	45.0%	46.0%	45.0%	46.0%	45.0%
55.9%	56.6%	58.4%	52.9%	47.6%	48.3%	52.2%	58.4%	59.9%	55.6%	54.0%	55.0%	54.0%	55.0%	54.0%	55.0%
670.1	674.9	690.4	794.9	914.7	931.5	908.2	1024.9	1045.9	1154.5	1200	1250	1200	1250	1200	1250
941.5	1010.2	1112.4	1198.1	1294.3	1381.1	1457.1	1515.8	1590.4	1701.8	1775	1815	1775	1815	1775	1815
5.2%	5.9%	7.1%	6.5%	5.5%	5.5%	6.3%	6.0%	6.3%	5.1%	5.0%	6.5%	5.0%	6.5%	5.0%	6.5%
6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	9.1%	7.0%	7.5%	9.5%	7.0%	7.5%	7.0%	7.5%
6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	9.1%	7.0%	7.5%	9.5%	7.0%	7.5%	7.0%	7.5%
1.0%	1.8%	3.8%	3.8%	3.0%	2.3%	3.4%	3.4%	4.1%	2.0%	2.5%	4.5%	2.0%	2.5%	2.0%	2.5%
86%	77%	61%	60%	66%	71%	62%	56%	55%	55%	69%	52%	55%	69%	52%	52%

MARKET CAP: \$1.5 billion (Mid Cap)

CURRENT POSITION (\$MILL.)

	2014	2015	6/30/16
Cash Assets	19.6	8.8	30.8
Other	134.5	118.8	128.2
Current Assets	154.1	127.6	159.0
Accts Payable	59.4	66.4	77.6
Debt Due	85.7	40.2	81.2
Other	72.6	41.9	43.2
Current Liab.	217.7	148.5	202.0

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 477,900 customers in 85 communities in the state of California. Accounts for over 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown: '15: residential, 70%; business, 20%; industrial, 5%; public authorities, 4%; other 1%. '15 reported depreciation rate: 4.0%. Has 1,155 employees. President, Chairman, and CEO: Peter C. Nelson. Inc. DE. Address: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

California Water Service Group shares have dipped about 10% in price since our July review. Similar to a handful of other equities in the utility industry, CWT stock recently etched an all-time high in 2016, and investors unsurprisingly took this opportune time to take some profits off the table. However, California posted better-than-anticipated financial results in the second quarter, leading us to believe the selloff may be short-lived.

Revenues and earnings improved nicely compared to prior-year figures. California Water generated \$152 million in sales during the second quarter (a 6% annual increase), largely due to higher accrued unbilled revenues. Moreover, we are lifting our full-year revenue call by \$5 million, to \$605 million, supported by continued collections on drought expenses (conditions that have yet to improve), as well as potentially positive rate activity on the horizon for 2017. On the earnings front, second-quarter net income was \$0.02 better than we expected, at \$0.24 a share, marking a healthy double-digit improvement over the year-earlier tally. Thinner operating and maintenance expenses, namely pension costs, gave the bottom line a boost. Though, at this time, our 2016 share net estimate remains unchanged, at \$1.00.

ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '13-'15 of change (per sh)

Revenues	4.0%	5.0%	3.0%
"Cash Flow"	6.0%	5.5%	6.0%
Earnings	5.0%	4.0%	7.5%
Dividends	1.5%	2.0%	7.0%
Book Value	5.5%	5.0%	3.5%

Capital investment will likely be the main theme in California's long-term story. Over the 3- to 5-year stretch, it is probable that CWT will spend more than \$3.00 per share annually to revitalize aging infrastructure, water tanks, and water supply. The company has already spent more in the first half of 2016 than it has in past years, and we think this trend ought to continue further out. In addition, acquisitions are likely to be an supplemental growth avenue. The balance sheet is in good shape, with a decent amount of cash on hand and less than 50% of its total capital comprised of debt.

These favorably ranked shares are best suited for near-term accounts. Meanwhile, those looking to add a security to the buy-and-hold portion of their portfolio should exercise patience, as the stock is already trading inside of our 3- to 5-year Target Price Range.

Nicholas P. Patrikis October 14, 2016

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	111.4	154.6	184.4	133.7	584.1
2014	110.5	158.4	191.2	137.4	597.5
2015	122.0	144.4	183.5	138.4	588.3
2016	121.7	152.4	190	140.9	605
2017	130	155	195	145	625

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	.01	.28	.61	.12	1.02
2014	d.11	.36	.70	.24	1.19
2015	.03	.21	.52	.18	.94
2016	d.02	.24	.58	.20	1.00
2017	.05	.35	.65	.30	1.35

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.1575	.1575	.1575	.1575	.63
2013	.16	.16	.16	.16	.64
2014	.1625	.1625	.1625	.1625	.65
2015	.1675	.1675	.1675	.1675	.67
2016	.1725	.1725	.1725	.1725	.67

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (4c); '01, 2c; '02, 4c; '11, 4c. Next earnings report due late November.
 (B) Dividends historically paid in late Feb.
 (C) Incl. intangible assets. In '15: \$7.5 mill., \$0.16/sh.
 (D) In millions, adjusted for splits.
 (E) Excludes non-reg. rev.

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CONNECTICUT WATER NDQ-CTWS

RECENT PRICE **49.21** P/E RATIO **22.2** (Trailing: 22.8) RELATIVE P/E RATIO **1.20** DIV'D YLD **2.3%** VALUE LINE

TIMELINESS 3 Lowered 9/2/16	High: 28.2 27.7 25.6 29.0 26.4 27.9 29.1 32.8 36.4 37.5 39.9 56.6	Low: 21.9 20.3 22.4 19.3 17.3 20.0 23.3 26.2 27.8 31.0 33.2 37.5	Target Price Range 2019 | 2020 | 2021
SAFETY 3 New 1/18/13	LEGENDS 1.30 x Dividends p sh divided by Interest Rate Relative Price Strength Options: Yes Shaded area indicates recession		
TECHNICAL 3 Lowered 10/7/16			
BETA .60 (1.00 = Market)			
2019-21 PROJECTIONS			
Price	Gain	Ann'l Total Return	
High 55	(+10%)	5%	
Low 40	(-20%)	-2%	
Insider Decisions			
D J F M A M J J A			
to Buy 0 0 0 0 0 0 0 0 0			
Options 0 0 0 2 0 0 0 0 0			
to Sell 0 0 0 0 0 0 0 0 0			
Institutional Decisions			
4Q2015 1Q2016 2Q2016			
to Buy 51 45 49			
to Sell 44 48 52			
Hld's(000) 4535 4728 5138			
Percent shares traded			
12 8 4			
7.5			
% TOT. RETURN 9/16			
THIS STOCK VL ARTH. INDEX			
1 yr. 39.7 17.7			
3 yr. 68.4 23.7			
5 yr. 131.0 108.1			

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	© VALUE LINE PUB. LLC	19-21
5.70	5.93	5.77	5.91	6.04	5.81	5.68	7.05	7.24	6.93	7.65	7.93	9.47	8.29	8.45	8.58	8.70	9.20	Revenues per sh	13.35
1.73	1.78	1.78	1.89	1.91	1.62	1.52	1.90	1.95	1.93	2.04	2.11	2.64	2.63	2.97	3.18	3.35	3.45	"Cash Flow" per sh	3.75
1.09	1.13	1.12	1.15	1.16	.88	.81	1.05	1.11	1.19	1.13	1.13	1.53	1.66	1.92	2.04	2.20	2.25	Earnings per sh A	2.50
.79	.80	.81	.83	.84	.85	.86	.87	.88	.90	.92	.94	.96	.98	1.01	1.05	1.12	1.20	Div'd Decl'd per sh B	1.35
1.43	1.86	1.98	1.49	1.58	1.96	1.96	2.24	2.44	3.28	3.06	2.61	2.79	3.02	4.11	4.29	5.80	4.35	Cap'l Spending per sh	3.35
8.92	9.25	10.06	10.46	10.94	11.52	11.60	11.95	12.23	12.67	13.05	13.50	20.95	17.92	18.83	20.02	20.70	21.75	Book Value per sh D	22.90
7.28	7.65	7.94	7.97	8.04	8.17	8.27	8.38	8.46	8.57	8.68	8.76	8.85	11.04	11.12	11.19	11.35	11.50	Common Shs Outst'g C	12.00
18.2	21.5	24.3	23.5	22.9	28.6	29.0	23.0	22.2	18.4	20.7	23.0	19.4	18.4	17.5	17.6	18.9	18.9	Avg Ann'l P/E Ratio	19.0
1.18	1.10	1.33	1.34	1.21	1.52	1.57	1.22	1.34	1.23	1.32	1.44	1.23	1.03	.92	.89	.89	.89	Relative P/E Ratio	1.20
4.0%	3.3%	3.0%	3.0%	3.1%	3.4%	3.6%	3.6%	3.6%	4.1%	3.9%	3.6%	3.2%	3.2%	3.0%	2.9%	2.9%	2.9%	Avg Ann'l Div'd Yield	2.8%

CAPITAL STRUCTURE as of 6/30/16		2014	2015	6/30/16	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Total Debt	\$203.8 mill.			\$19.3 mill.	46.9	59.0	61.3	59.4	66.4	69.4	83.8	91.5	94.0	96.0	99.0	106	106	Revenues (\$mill)	160																						
LT Debt	\$200.9 mill.			\$8.0 mill.	6.7	8.8	9.4	10.2	9.8	9.9	13.6	18.3	21.3	22.7	25.0	26.0	26.0	Net Profit (\$mill)	30.0																						
				(47% of Cap'l)	23.5%	32.4%	27.2%	19.5%	35.2%	41.3%	32.0%	28.0%	14.4%	4.2%	7.5%	19.0%	14.4%	Income Tax Rate	28.0%																						
Leases, Uncapitalized:	Annual rentals \$3 mill.				--	--	1.7%	--	--	--	1.7%	2.0%	2.4%	2.2%	2.5%	2.5%	2.5%	AFUDC % to Net Profit	2.0%																						
Pension Assets-12/15	\$56.6 mill.				44.4%	47.8%	46.9%	50.6%	49.5%	53.2%	49.0%	46.9%	45.7%	44.2%	46.0%	47.0%	47.0%	Long-Term Debt Ratio	47.5%																						
	Obliq. \$75.8 mill.				55.1%	51.8%	52.7%	49.1%	50.2%	46.5%	50.8%	52.9%	54.1%	55.8%	54.0%	53.0%	53.0%	Common Equity Ratio	52.5%																						
Pfd Stock	\$0.8 mill.				174.1	193.2	196.5	221.3	225.6	254.2	364.6	373.6	386.8	401.7	435	470	470	Total Capital (\$mill)	525																						
Common Stock	11,231,037 shs.				268.1	284.3	302.3	325.2	344.2	362.4	447.9	471.9	506.9	546.3	565	580	580	Net Plant (\$mill)	675																						
					4.9%	5.5%	5.9%	5.5%	5.4%	4.9%	4.8%	5.9%	6.4%	6.6%	6.5%	6.5%	6.5%	Return on Total Cap'l	6.5%																						
					6.9%	8.7%	9.0%	9.3%	8.6%	8.3%	7.3%	9.2%	10.1%	10.1%	10.5%	10.5%	10.5%	Return on Shr. Equity	11.0%																						
					7.0%	8.7%	9.1%	9.4%	8.7%	8.3%	7.3%	9.2%	10.2%	10.1%	10.5%	10.5%	10.5%	Return on Com Equity	11.0%																						
					NMF	1.6%	1.9%	2.3%	1.6%	1.4%	2.8%	3.8%	4.8%	4.9%	5.0%	5.0%	5.0%	Retained to Com Eq	5.0%																						
					105%	82%	79%	76%	81%	83%	62%	59%	53%	52%	51%	53%	53%	All Div'ds to Net Prof	54%																						

CURRENT POSITION (\$MILL.)	2014	2015	6/30/16
Cash Assets	2.5	.7	1.1
Accounts Receivable	12.0	11.0	11.6
Other	21.7	15.3	18.2
Current Assets	36.2	27.0	30.9
Accts Payable	10.0	11.9	11.6
Debt Due	4.4	2.8	2.9
Other	9.2	22.2	15.8
Current Liab.	23.6	36.9	30.3

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15	'19-'21
Revenues	4.0%	4.5%	8.0%	8.0%
"Cash Flow"	4.0%	7.5%	4.0%	4.0%
Earnings	4.0%	9.0%	5.0%	5.0%
Dividends	2.0%	2.0%	5.0%	5.0%
Book Value	6.5%	9.5%	3.0%	3.0%

Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun. 30	Sep. 30	Dec. 31	
2013	19.7	22.6	27.6	21.6	91.5
2014	20.3	25.4	27.6	20.7	94.0
2015	20.0	26.6	28.4	21.0	96.0
2016	21.6	26.1	29.0	22.3	99.0
2017	23.0	28.0	32.0	23.0	106

Cal-endar	EARNINGS PER SHARE A				Full Year
	Mar.31	Jun. 30	Sep. 30	Dec. 31	
2013	.24	.39	.86	.17	1.66
2014	.27	.67	.76	.22	1.92
2015	.28	.77	.79	.20	2.04
2016	.28	.89	.83	.20	2.20
2017	.30	.79	.88	.28	2.25

Cal-endar	QUARTERLY DIVIDENDS PAID B				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2012	.238	.238	.2425	.2425	.962
2013	.2425	.2425	.2475	.2475	.98
2014	.2475	.2475	.2575	.2575	1.01
2015	.2575	.2575	.2675	.2675	1.05
2016	.2675	.2825	.2825		

BUSINESS: Connecticut Water Service, Inc. is a non-operating holding company, whose income is derived from earnings of its wholly-owned subsidiary companies (regulated water utilities). In 2015, 92% of net income was derived from these activities. Provides water services to 400,000 people in 77 municipalities throughout Connecticut and Maine. Acquired The Maine Water Company, January, 2012; Biddeford and Saco Water, December, 2012. Incorporated: Connecticut. Has 266 employees. Chairman/President/Chief Executive Officer: Eric W. Thornburg. Officers and directors own 2.6% of the common stock; BlackRock, Inc. 7.0%; (4/16 proxy). Address: 93 West Main Street, Clinton, CT 06413. Telephone: (860) 669-8636. Internet: www.ctwater.com.

Connecticut Water Service delivered mixed results in the second quarter. The New England water utility owner registered better-than-expected share-net of \$0.89, well above our \$0.72 call. The out-performance can largely be attributed to slimmer operating and maintenance expenses (nearly 20% lower than the prior year), coupled with reduced pension costs. On the other hand, revenues contracted slightly, on an annual basis, to about \$26 million. The manner in which Connecticut Water is required to recognize revenues, mainly unbilled, resulted in a softer top-line figure for the June period. This was partly offset by beneficial surcharges in Maine and Connecticut.

As a consequence, we are simultaneously lowering and raising our 2016 top- and bottom-line outlooks, respectively. Unfavorable accounting methods may persist in the near term, spurring us to trim \$2 million from this year's revenue estimate, to \$99 million. Conversely, we are tacking a dime onto our full-year earnings estimate, to \$2.20 a share, stemming largely from CTWS' drastically higher profits in the most recent quarter.

Robust capital spending and tuck-in acquisitions are likely to remain in the spotlight over the foreseeable future. The company is patiently awaiting town approval for its purchase of Heritage Village Water Company, a \$20 million stock-for-stock transaction that would add approximately 40,000 people to its total service count. The deal is slated to close within the year. What's more, we think CTWS will be actively sourcing new opportunities to expand its footprint over the pull to late decade. On top of that, due to the industry's capital-intensive nature, investment in its aging infrastructure should be par for the course. In fact, we think the company could spend upward of \$150 million over that time frame.

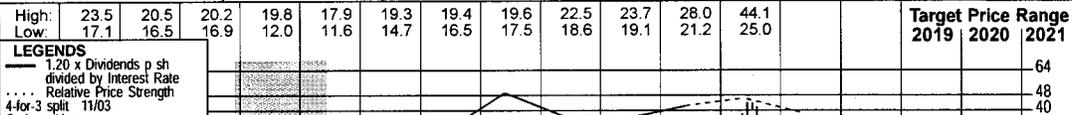
The stock price has cooled a bit since our July review. These neutrally ranked shares have declined roughly 10% in value over the past three months, scaling back from all-time highs set earlier this year. At recent levels, our model projects limited upside out to 2019-2021. Thus, we advise investors to wait for a more attractive entry point before committing funds.

Nicholas P. Patrikis
October 14, 2016

MIDDLESEX WATER NDQ-MSEX

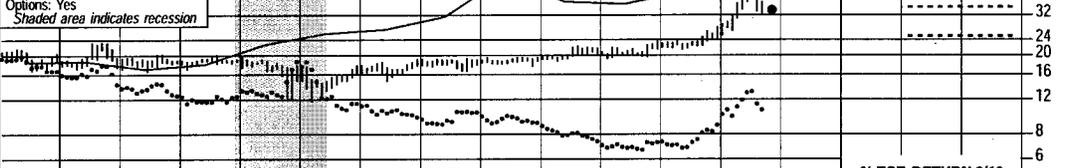
RECENT PRICE **34.04** P/E RATIO **23.8** (Trailing: 25.4 Median: 20.0) RELATIVE P/E RATIO **1.29** DIV'D YLD **2.4%** VALUE LINE

TIMELINESS 3 Lowered 10/14/16
SAFETY 2 New 10/21/11
TECHNICAL 2 Lowered 9/30/16
BETA .70 (1.00 = Market)



2019-21 PROJECTIONS
 Price Gain Ann'l Total
 High 35 (+5%) 3%
 Low 25 (-25%) -4%

Insider Decisions
 D J F M A M J J A
 to Buy 0 0 0 1 0 0 0 0 0
 Options 0 0 0 1 0 0 0 0 0
 to Sell 1 0 0 1 2 0 0 0 0



to Buy	41	62	59
to Sell	50	45	52
Net	11	17	7
Hdr's(100)	6584	6822	7208

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5.39	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	7.26	7.77	8.05	8.05	8.05	8.05	8.05	8.05
.99	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	1.84	1.97	2.20	2.30	2.30	2.30	2.30	2.30
.51	.66	.73	.61	.73	.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	1.22	1.40	1.45	1.45	1.45	1.45	1.45
.61	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.78	.81	.84	.84	.84	.84	.84
1.32	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	1.40	1.59	1.75	1.80	1.80	1.80	1.80	1.80
6.98	7.11	7.39	7.60	8.02	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	12.24	12.74	13.15	13.35	13.35	13.35	13.35	13.35
10.11	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	16.12	16.23	16.30	16.50	16.50	16.50	16.50	16.50
28.7	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	18.5	19.1	18.5	19.1	19.1	19.1	19.1	19.1
1.87	1.26	1.28	1.71	1.39	1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	.97	.97	1.00	1.00	1.00	1.00	1.00	1.00
4.2%	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.7%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%

CAPITAL STRUCTURE as of 6/30/16
 Total Debt \$147.4 mill. Due in 5 Yrs \$30.8 mill.
 LT Debt \$131.0 mill. LT Interest \$5.6 mill.
 (Total interest coverage: 7.4x)
 (39% of Cap'l)

Pension Assets-12/15 \$52.9 mill.
 Oblig. \$72.5 mill.
 Pfd Stock \$2.4 mill. Pfd Div'd: \$.1 mill.

Common Stock 16,280,430 shs.
 as of 7/31/16

MARKET CAP: \$550 million (Small Cap)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
81.1	86.1	91.0	91.2	102.7	102.1	110.4	114.8	117.1	126.0	131	133	133	133	133	133	133	133	133	133	133	133
10.0	11.8	12.2	10.0	14.3	13.4	14.4	16.6	18.4	20.0	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
33.4%	32.6%	33.2%	34.1%	32.1%	32.7%	33.9%	34.1%	35.0%	34.5%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
49.5%	49.0%	45.6%	46.6%	43.1%	42.3%	41.5%	40.4%	40.5%	39.4%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%	38.5%
264.0	268.8	259.4	267.9	310.5	312.5	316.5	321.4	335.8	345.4	350	360	360	360	360	360	360	360	360	360	360	360
317.1	333.9	366.3	376.5	405.9	422.2	435.2	446.5	465.4	481.9	495	515	515	515	515	515	515	515	515	515	515	515
5.1%	5.6%	5.8%	5.0%	5.7%	5.2%	5.4%	5.9%	6.3%	6.6%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
7.5%	8.6%	8.8%	7.0%	8.1%	7.5%	7.8%	8.7%	9.2%	9.6%	10.5%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
7.8%	8.7%	8.9%	7.0%	8.2%	7.5%	7.8%	8.7%	9.3%	9.6%	10.5%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
1.3%	1.8%	2.0%	.1%	2.1%	1.0%	1.4%	2.4%	3.1%	3.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
84%	79%	78%	98%	75%	87%	83%	73%	67%	63%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%

CURRENT POSITION (MILL.)

	2014	2015	6/30/16
Cash Assets	2.7	3.5	1.2
Other	20.2	20.9	27.1
Current Assets	22.9	24.4	28.3
Accts Payable	6.4	6.5	9.5
Debt Due	24.9	8.7	16.4
Other	12.6	13.1	13.2
Current Liab.	43.9	28.3	39.1

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 60,000 retail customers, primarily in Middlesex County, New Jersey. In 2015, the Middlesex System accounted for 59% of operating revenues. At 12/31/15, the company had 293 employees. Incorporated: N.J. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 3.5% of the common stock; BlackRock Institutional Trust Co., 6.4% (4/16 proxy). Add: 1500 Ronson Road, Iselin, NJ 08830. Tel: 732-634-1500. Internet: www.middlesexwater.com.

ANNUAL RATES of change (per sh)

	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15 to '19-'21
Revenues	1.5%	2.0%	4.0%
"Cash Flow"	4.0%	4.5%	5.5%
Earnings	5.0%	5.5%	5.0%
Dividends	1.5%	1.5%	3.0%
Book Value	4.5%	3.0%	4.0%

Middlesex Water Company shares have taken a step back in price subsequent to registering strong gains over the past few quarters. Since our July review, MSEX stock shed nearly 15% in value. We think the selloff was somewhat warranted, given the equity's rich valuation (from a P/E standpoint). Nevertheless, the company delivered a slightly better-than-expected financial performance in the second quarter. Revenues of \$32.7 million came in modestly above our call. Middlesex's New Jersey operations experienced strong demand for regulated water and from contract customers. Moreover, the rate increase implemented in August of last year by the Board of Public Utilities continues to be a net positive. On the earnings front, the company reported net income of \$0.36 a share, \$0.03 better than we had expected.

We are adding two pennies to our 2016 bottom-line estimate. Profit margins are being helped along by lower operation and maintenance expenses, as well as lighter employee benefit costs. This has more than offset higher labor costs. Indeed, we think year-over-year quarterly

share-net comparables should be strong through the remainder of the year, resulting in earnings of \$1.40 a share for 2016. **The infrastructure replacement project in Edison and South Amboy, New Jersey is under way.** Eight miles and \$12 million worth of water mains, valves, and service lines are being upgraded to support the company's distribution system in the area. **This equity has been lowered two notches for Timeliness, to 3.** Now pegged to mirror the broader market averages over the coming six to 12 months, investors may want to stay on the sidelines, at this juncture. That said, we think conservative, income-seeking accounts should keep MSEX on their radar. We anticipate an above-average dividend yield over the pull to late decade. What's more, water utilities, in general, can be a safe haven in times of turbulent market conditions. Thus, given Middlesex's low Beta (0.70) and relatively noncyclical business model, investors could find these shares appealing should broader market indices take a turn for the worse.

QUARTERLY REVENUES (\$ mill.)

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	27.0	29.1	31.3	27.4	114.8
2014	27.1	29.2	32.7	28.1	117.1
2015	28.8	31.7	34.7	30.8	126.0
2016	30.6	32.7	35.5	32.2	131
2017	31.0	33.0	36.0	33.0	133

EARNINGS PER SHARE A

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2013	.20	.28	.36	.19	1.03
2014	.20	.29	.42	.22	1.13
2015	.22	.31	.41	.28	1.22
2016	.29	.36	.43	.32	1.40
2017	.32	.34	.46	.33	1.45

QUARTERLY DIVIDENDS PAID B

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2012	.185	.185	.185	.1875	.74
2013	.1875	.1875	.1875	.19	.75
2014	.19	.19	.19	.1925	.76
2015	.1925	.1925	.1925	.19875	.78
2016	.19875	.19875	.19875		

(A) Diluted earnings. May not sum due to rounding. Next earnings report due early November.
 (B) Dividends historically paid in mid-Feb., May, Aug., and November. Div'd reinvestment plan available.
 (C) In millions, adjusted for split.

Company's Financial Strength B++
Stock's Price Stability 90
Price Growth Persistence 40
Earnings Predictability 85

To subscribe call 1-800-VALUELINE

Nicholas P. Patrikis October 14, 2016

SJW CORP. NYSE-SJW

RECENT PRICE **42.19**

P/E RATIO **21.2** (Trailing: 18.9 Median: 24.0)

RELATIVE P/E RATIO **1.15**

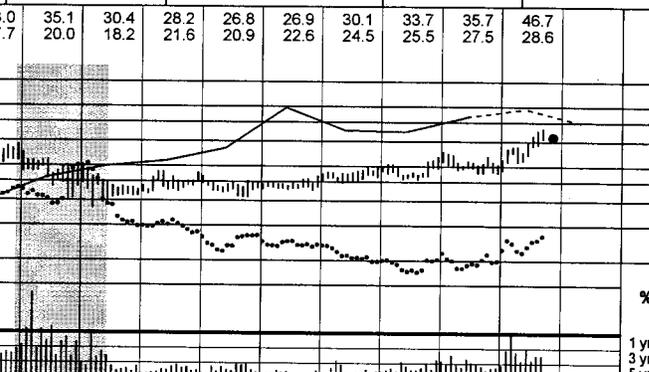
DIV'D YLD **1.9%**

VALUE LINE

TIMELINESS 3 Lowered 5/6/16
SAFETY 3 New 4/22/11
TECHNICAL 2 Raised 10/14/16
BETA .70 (1.00 = Market)

High: 27.8 45.3 43.0 35.1 30.4 28.2 26.8 26.9 30.1 33.7 35.7 46.7
 Low: 16.1 21.2 27.7 20.0 18.2 21.6 20.9 22.6 24.5 25.5 27.5 28.6

LEGENDS
 1.50 x Dividends p sh divided by Interest Rate
 Relative Price Strength
 3-for-1 split 3/04
 2-for-1 split 3/06
 Options: Yes
 Shaded area indicates recession



Target Price Range
 2019 2020 2021

2019-21 PROJECTIONS

Price	Gain	Ann'l Total Return
High 55	(+30%)	9%
Low 35	(-15%)	-2%

Insider Decisions

	D	J	F	M	A	M	J	J	A
to Buy	3	0	0	0	0	0	0	0	0
Options	0	0	5	8	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	1

Institutional Decisions

	4Q2016	1Q2016	2Q2016
to Buy	43	84	64
to Sell	59	41	68
Hld's(000)	8694	9256	9308

Percent shares traded
 15
 10
 5

% TOT. RETURN 9/16
 THIS STOCK VL ARITH.
 1 yr. 45.5 17.7
 3 yr. 68.2 23.7
 5 yr. 129.3 108.1

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	© VALUE LINE PUB. LLC	19-21
6.74	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	15.76	14.97	15.10	15.00	Revenues per sh	18.50
1.23	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	4.42	3.86	3.95	4.00	"Cash Flow" per sh	3.95
.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	2.54	1.85	1.90	1.95	Earnings per sh A	2.00
.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.78	.81	.84	Div'd Decl'd per sh B	1.05
1.89	2.63	2.06	3.41	2.31	2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	5.02	5.24	5.35	5.50	Cap'l Spending per sh	5.00
7.90	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	17.75	18.83	19.00	19.75	Book Value per sh	22.40
18.27	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	20.29	20.38	20.50	21.00	Common Shs Outst'g C	23.00
33.1	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	11.2	16.6	16.6	16.6	Avg Ann'l P/E Ratio	22.0
2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.59	.84	.84	.84	Relative P/E Ratio	1.40
2.1%	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.6%	2.5%	2.5%	2.5%	Avg Ann'l Div'd Yield	2.3%

CAPITAL STRUCTURE as of 6/30/16
 Total Debt \$431.7 mill. Due in 5 Yrs \$21.2 mill.
 LT Debt \$364.2 mill. LT Interest \$21.0 mill.
 (49% of Cap'l)

Leases, Uncapitalized: Annual rentals \$6.6 mill.

Pension Assets-12/15 \$105.0 mill.
 Oblig. \$164.3 mill.

Pfd Stock None.

Common Stock 20,442,128 shs.

MARKET CAP: \$850 million (Small Cap)

CURRENT POSITION (\$MILL.)	2014	2015	6/30/16
Cash Assets	2.4	5.2	12.5
Acc'ts Receivable	15.0	16.4	17.3
Other	50.7	51.8	62.9
Current Assets	68.1	73.4	92.7
Acc'ts Payable	7.0	16.2	23.8
Debt Due	13.8	38.1	67.5
Other	23.9	25.3	28.8
Current Liab.	44.7	79.6	120.1

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15	'19-'21
Revenues	5.0%	4.5%	4.0%	4.0%
"Cash Flow"	6.5%	10.0%	1.0%	1.0%
Earnings	6.5%	15.0%	1.5%	1.5%
Dividends	4.0%	2.5%	5.5%	5.5%
Book Value	6.0%	5.0%	4.0%	4.0%

Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2013	50.1	74.2	85.2	67.4	276.9
2014	54.6	70.4	125.4	69.3	319.7
2015	62.1	72.4	83.0	87.6	305.1
2016	61.1	86.9	87.0	75.0	310
2017	66.0	77.0	90.0	82.0	315

Cal-endar	EARNINGS PER SHARE A				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2013	.07	.37	.44	.24	1.12
2014	.04	.34	1.88	.28	2.54
2015	.23	.36	.46	.80	1.85
2016	.16	.82	.45	.47	1.90
2017	.25	.45	.65	.60	1.95

Cal-endar	QUARTERLY DIVIDENDS PAID B				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2012	.1775	.1775	.1775	.1775	.71
2013	.1825	.1825	.1825	.1825	.73
2014	.1875	.1875	.1875	.1875	.75
2015	.1950	.1950	.1950	.1950	.78
2016	.2025	.2025	.2025		

BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 229,000 connections with a total population of roughly one million people in the San Jose area and 12,000 connections that reaches about 36,000 residents in the region between San Antonio and Austin, Texas. The company also offers nonregulated water-related services and owns and operates commercial real estate investments. Has about 399 employees. Officers and directors (including Nancy O. Moss) own 28.3% of outstanding shares. Chairman: Charles J. Toeniskoetter. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

Shares of SJW Corp. are making up for their relatively lagging price performance over the first half of the year. The stock is up more than 10% in value since our July review, which compares favorably to the rest of the water utility industry that, on average, is down approximately 10% over the same time frame. To wit, SJW had not experienced as robust a price ascent as others in the early stages of 2016, but its most recent financial showing has undoubtedly given the stock support.

SJW Corp.'s second-quarter results were impressive. Revenues of about \$87 million during the period improved 20%, year over year, driven primarily by true-up revenue recognition stemming from its California general rate case application, as well as revenue built up in the Water Conservation Memorandum account (also a form of special recognition). Between the two, a positive of nearly \$8 million was recognized this quarter. Much of the quarter's revenue gains seemed to make their way to the bottom line, as operating and interest expenses remained relatively flat, on both a sequential and year-over-

year basis. Net income of \$0.82 a share more than doubled from the like 2015 figure. All things considered, we are raising our 2016 top- and bottom-line estimates by \$5 million and \$0.15, to \$310 million and \$1.90 a share, respectively.

The company is moving full steam ahead with its capital expenditure program. With more than \$300 million earmarked for water system upgrades, just over \$30 million was spent in the second quarter for utility plant improvements (\$60 million year to date). A good portion of the funds will likely be allocated to new construction through the remainder of this year and next, which includes \$25 million for its Montevina Water Treatment Plant project. All in all, we expect capital spending to be one of the main growth drivers over the pull to late decade.

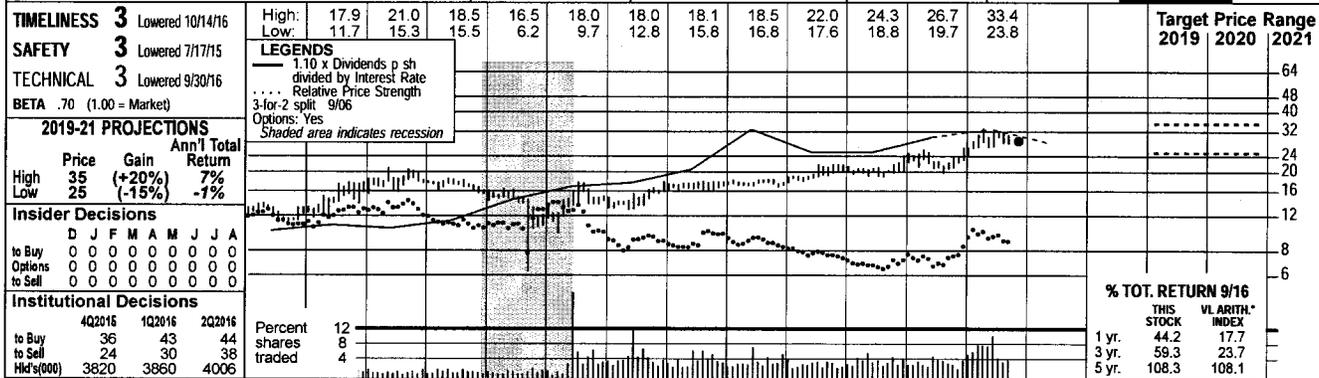
At the moment, SJW stock does not stand out for either the short or long haul. The equity is ranked to be a market performer in the year ahead. Also, capital appreciation potential three to five years out is below *The Value Line Investment Survey* median.

Nicholas P. Patrikis October 14, 2016

(A) Diluted earnings. Excludes nonrecurring losses: '03, \$1.97; '04, \$3.78; '05, \$1.09; '06, \$16.36; '08, \$1.22; '10, \$0.46. GAAP accounting as of 2013. Next earnings report due late November. Quarterly earnings may not add due to rounding.
 (B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
 (C) In millions, adjusted for stock splits.
 Company's Financial Strength B+
 Stock's Price Stability 85
 Price Growth Persistence 25
 Earnings Predictability 50
To subscribe call 1-800-VALUELINE

YORK WATER NDQ-YORW

RECENT PRICE **28.76** P/E RATIO **28.8** (Trailing: 29.6 Median: 24.0) RELATIVE P/E RATIO **1.56** DIV'D YLD **2.2%** VALUE LINE



2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	© VALUE LINE PUB. LLC	19-21
--	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.58	3.68	3.80	4.10	Revenues per sh	5.40
--	.59	.57	.65	.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	1.36	1.47	1.50	1.65	"Cash Flow" per sh	1.90
--	.43	.40	.47	.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	.97	.97	1.05	Earnings per sh ^A	1.25
--	.34	.35	.37	.39	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	.63	.66	Div'd Decl'd per sh ^B	.85
--	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	1.08	1.60	1.70	Cap'l Spending per sh	.85
--	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.15	8.52	8.75	8.95	Book Value per sh	10.15
--	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.83	12.81	12.80	12.50	Common Shs Outs't'g ^C	12.00
--	17.8	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	23.1	23.5	23.5	23.5	Avg Ann'l P/E Ratio	22.5
--	.91	1.47	1.40	1.36	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.22	1.19	1.19	1.19	Relative P/E Ratio	1.40
--	4.4%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.8%	2.6%	2.6%	2.6%	Avg Ann'l Div'd Yield	3.4%

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	© VALUE LINE PUB. LLC	19-21
28.7	31.4	32.8	37.0	39.0	40.6	41.4	42.4	45.9	47.1	48.5	51.0	51.0	51.0	51.0	51.0	51.0	51.0	Revenues (\$mill)	65.0
6.1	6.4	6.4	7.5	8.9	9.1	9.3	9.7	11.5	11.5	12.6	12.5	13.0	13.0	13.0	13.0	13.0	13.0	Net Profit (\$mill)	15.0
34.4%	36.5%	36.1%	37.9%	38.5%	35.3%	37.6%	37.6%	29.8%	27.2%	28.5%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	Income Tax Rate	32.5%
7.2%	3.6%	10.1%	--	1.2%	1.1%	1.1%	.8%	1.8%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	AFUDC % to Net Profit	1.0%
48.3%	46.5%	54.5%	45.7%	48.3%	47.1%	46.0%	45.1%	44.8%	44.5%	43.5%	46.0%	46.0%	46.0%	46.0%	46.0%	46.0%	46.0%	Long-Term Debt Ratio	47.0%
51.7%	53.5%	45.5%	54.3%	51.7%	52.9%	54.0%	54.9%	55.2%	55.5%	56.5%	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	Common Equity Ratio	53.0%
126.5	125.7	153.4	160.1	176.4	180.2	184.8	188.4	189.4	196.4	195	205	205	205	205	205	205	205	Total Capital (\$mill)	230
174.4	191.6	211.4	222.0	228.4	233.0	240.3	244.2	253.2	261.4	270	275	275	275	275	275	275	275	Net Plant (\$mill)	290
6.2%	6.7%	5.7%	6.2%	6.5%	6.4%	6.4%	6.5%	7.4%	7.4%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	Return on Total Cap'l	7.5%
9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	11.0%	11.5%	11.0%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	Return on Shr. Equity	12.5%
9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	11.0%	11.5%	11.0%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	Return on Com Equity	12.5%
2.2%	1.7%	1.4%	1.9%	2.7%	2.5%	2.4%	2.4%	3.9%	4.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	Retained to Com Eq	4.0%
77%	82%	85%	78%	72%	73%	74%	74%	64%	61%	65%	63%	63%	63%	63%	63%	63%	63%	All Div'ds to Net Prof	68%

CAPITAL STRUCTURE as of 6/30/16
 Total Debt \$84.6 mill. Due in 5 Yrs \$30.5 mill.
 LT Debt \$84.6 mill. LT Interest \$5.1 mill.
 (44% of Cap'l)

Pension Assets 12/15 \$31.8 mill.
 Oblig. \$39.5 mill.

Pfd Stock None

Common Stock 12,867,736 shs.

MARKET CAP: \$375 million (Small Cap)

CURRENT POSITION (\$MILL.)

	2014	2015	6/30/16
Cash Assets	1.5	2.9	5.0
Accounts Receivable	4.0	3.5	3.8
Inventory (Avg. Cost)	.8	.8	.8
Other	4.9	4.6	3.4
Current Assets	11.2	11.8	13.0
Accts Payable	1.6	1.8	1.6
Debt Due	--	--	--
Other	4.3	4.4	4.4
Current Liab.	5.9	6.2	6.0

ANNUAL RATES of change (per sh)

	Past 10 Yrs.	Past 5 Yrs.	Est'd '13-'15 to '19-'21
Revenues	4.5%	3.0%	7.5%
"Cash Flow"	7.0%	6.5%	6.0%
Earnings	5.5%	6.0%	6.0%
Dividends	4.0%	2.5%	6.5%
Book Value	6.5%	4.5%	3.5%

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2015, the company's average daily availability was 35.4 million gallons and its service territory had an estimated population of 194,000. Has more than 66,000 customers. Residential customers accounted for 63% of 2015 revenues; commercial and industrial (29%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/15. President/CEO: Jeffrey R. Hines. Officers/directors own 1.1% of the common stock (4/16 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water's second-quarter financial results were little changed from the prior year. The Pennsylvania-based operator generated revenues of \$11.8 million, marginally lower than the comparable 2015 figure. There has been no movement on the rate hike front, and this, in conjunction with lower consumption, yielded a top-line contraction for the June period. In the same breath, earnings of \$0.23 a share during the period, while improving by a penny, year over year, missed our mark by \$0.03. Still, a higher tax rate continues to ail the bottom line, which more than outweighed benefits from lower operating expenses. This scenario of higher taxes and lackluster revenue growth ought to stay in place over the near term.

Therefore, we are reducing our full-year 2016 top- and bottom-line estimates accordingly. Earnings comparisons over the back half of the year ought to be flat, with revenues picking up slightly. We are trimming the latter by \$1.5 million, to \$48.5 million, representing modest growth, on an annual basis. Likewise, our 2016 earnings estimate is being lowered by \$0.03, to \$0.97 a share,

in line with the prior year's profit figure. Looking further out, we think meaningful growth will likely come back into the picture in 2017.

Long-term growth will likely come from acquisitions and internal investments. York has spent about \$5 million in capex through the first half of the year. For the remainder of 2016, management has guided expenditures of approximately \$12 million. The use of these funds ought to oscillate between revamping its aging infrastructure, strengthening water treatment systems, and additional water mains if needed. Furthermore, acquisitions are likely in the cards over the pull to late decade. The company's balance sheet is in relatively good shape, and its cash reserves are abundant, when compared to normal levels.

This neutrally ranked issue lacks investment appeal at the moment. It is slated to be a market performer in the year ahead. Too, the stock is already trading inside of our 3- to 5-year Target Price Range, thereby discounting much of the growth we envision over that time frame.

Nicholas P. Patrikis
 October 14, 2016

EXHIBIT TJB-COC-DT2

Pima Utility Company
Comparative Risk Study
Beta Estimate Using Duff and Phelps Risk Study Portfolio Information

Exhibit
Page 2 of 3

Line
No.

A. Beta Estimates for Water Sample Group and Company

	<u>Portfolio</u>	<u>Operating Margin</u> ¹	<u>Portfolio</u>	<u>CV (Operating Margin)</u> ¹	<u>Portfolio</u>	<u>CV (ROE)</u> ¹		
1	Company	14	10.72%	13	16.57%	11	42.26%	
2	Water Proxy Group	2	29.43%	19	8.63%	22	13.32%	
			<u>Portfolio Sum Beta</u> ²		<u>Portfolio Sum Beta</u> ³		<u>Portfolio Sum Beta</u> ⁴	<u>Average</u>
3	Company		1.19		1.12		1.17	
4	Water Proxy Group		0.84		1.00		0.91	
5	Percentage Difference		41.7%		12.0%		28.6%	27.4%
<u>B. Assume percentage difference is the same for water utilities as companies in general</u>								
6	Water Sample Group ⁵		0.69		0.69		0.69	
7	Implied Beta for Company ⁶		0.98		0.77		0.89	0.88

Notes:

¹ See work papers. CV stands for Coefficient of Variation.

² Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-1, Companies Ranked by Operating Margin.

³ Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-2, Companies Ranked by CV (Operating Margin).

⁴ Source is Duff & Phelps 2016 Valuation Handbook, Risk Study, Exhibit D-3, Companies Ranked by CV (Operating Margin).

⁵ Source is Schedule D-4.3.

⁶ Calculated by multiplying (1+ percentage difference in risk study betas) times average beta for the water sample group.

Pima Utility Company
Traditional Capital Asset Pricing Model (CAPM)

Exhibit
Page 3 of 3
Witness: Bourassa

Line No.		R_f^1	+	$(\text{beta}^2$	x	RP_M^3	)	=	k	CAPM Results From Sched. D-4.11	Difference	
1	Traditional CAPM	3.8%	+	0.88	x	7.80%	)	=	10.7%	9.2%	1.5%	
2													
3		R_f^1		$RP_M^3 \times .25$	+	$(\text{beta}^2$	x	RP_M^3	) x .75			
4	Empirical CAPM	3.8%	+	7.80%	x .25	+	$(0.88$	x	7.80%) x .75	= 10.9%	9.8%	1.1%
5													
6		R_f^1	+	beta^2	x	RP_M^4	) +	RP_S^5				
7	Modified CAPM	3.8%	+	0.88	x	6.80%) +	2.95%	=	12.7%	11.4%	1.3%	
8													
9													
10	Average								11.4%	10.1%	1.3%		

Notes:

¹ Forecasts of long-term treasury yields. See Schedule D-4.8.

² Implied Beta.

³ Estimate of current MRP.

⁴ Current expected MRP from Duff&PHELPS for use with their data.

⁵ Average water proxy group adjusted company specific risk premium developed from Duff & Phelps data.

D SCHEDULES

Pima Utility Company
 Test Year Ended December 31, 2015
 Summary of Cost of Capital

Exhibit
 Schedule D-1
 Page 1
 Witness: Bourassa

Consolidated Capital Structure of Water and Sewer Division

Line No.	Item of Capital	Adjusted End of Test Year				End of Projected Year				Proforma		
		Dollar Amount	Percent of Total	Cost Rate	Weighted Cost	Dollar Amount	Percent of Total	Cost Rate	Weighted Cost	Percent of Total	Cost Rate	Weighted Cost
1	Long-Term Debt	6,231,000	27.61%	3.035%	0.84%	5,952,000	25.92%	3.035%	0.79%	35.00%	3.42%	1.20%
3	Stockholder's Equity	16,332,828	72.39%	11.20%	8.11%	17,009,843	74.08%	11.20%	8.30%	65.00%	11.20%	7.28%
5	Totals	22,563,828	100.00%		8.95%	22,961,843	100.00%		9.08%	100.00%		8.48%

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SUPPORTING SCHEDULES:

- 23 D-1
- 24 D-3
- 25 D-4
- 26 E-1 water and sewer
- 27 Testimony

RECAP SCHEDULES:

A-3

Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Cost of Preferred Stock

Exhibit
Schedule D-3
Page 1
Witness: Bourassa

Line

No.

1

End of Test Year

End of Projected Year

2

Description
of Issue

Shares
Outstanding

Amount

Dividend
Requirement

Shares
Outstanding

Amount

Dividend
Requirement

3

4

5

6

NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING

7

8

9

10

11

12

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14

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19

20

SUPPORTING SCHEDULES:

E-1 water and sewer

RECAP SCHEDULES:

D-1

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Pima Utility Company - Water Division
Test Year Ended December 31, 2015
Cost of Common Equity

Exhibit
Schedule D-4
Page 1
Witness: Bourassa

Line

No.

1

2

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20

The Company is proposing a cost of common equity of

11.2% .

SUPPORTING SCHEDULES:

E-1 water and sewer

D-4.1 to D-4.15

RECAP SCHEDULES:

D-1

Pima Utility Company
Summary of Results

Exhibit
Schedule D-4.1
Page 1
Witness: Bourassa

<u>Line No.</u>		<u>Indicated Cost of Equity for Water Sample Group</u>	<u>Indicated Cost of Equity for Company¹</u>
1	DCF Constant Growth - Schedule D-4-7	8.8%	10.0%
2	Risk Premium Model - Schedule D-4.9	11.3%	12.5%
3	CAPM - Schedule D-4.11	10.1%	11.3%
4	Mid-point	10.1%	11.3%
5	Financial Risk Adjustment - Schedule D-4.14		-0.1%
6	Adjusted Cost of Equity Estimate	10.1%	11.2%
7	Cost of Equity Recommendation		11.2%

Notes:

¹Estimates include an equity risk premium of 120 basis points based on risk study. See Testimony.

Pima Utility Company

Exhibit
Schedule D-4.2
Witness: Bourassa

Selected Characteristics of Sample Group of Water Utilities

Line No.	Company	Symbol	% Water Revenues ¹	Operating Revenues (millions) ¹	Net Plant (millions) ¹	S&P Bond Rating ¹	Moody's Bond Rating ¹	Allowed ROE (%) ¹	Value Line Beta ²	Market Capitalization ²	Size Category ³
1	American States Water	AWR	71%	\$ 448.6	\$ 1,107.1	A+	A2	9.43	0.70	\$ 1,445.5	Low-Cap
2	Aqua America	WTR	97%	\$ 814.6	\$ 4,823.5	AA-	NR	9.79	0.70	\$ 5,477.5	Mid cap
3	California Water	CWT	97%	\$ 596.1	\$ 1,785.1	AA-	NR	9.43	0.75	\$ 1,541.3	Low-Cap
4	Connecticut Water	CTWS	98%	\$ 100.6	\$ 568.4	A/A-	NR	9.63	0.60	\$ 561.8	Micro-cap
5	Middlesex	MSEX	87%	\$ 128.9	\$ 497.1	A	NR	9.75	0.70	\$ 577.6	Micro-cap
6	SJW Corp.	SJW	103%	\$ 318.6	\$ 1,068.7	A	NR	9.43	0.70	\$ 893.5	Micro-cap
7	York Water Company	YORW	100%	\$ 47.1	\$ 263.7	A-	NR	NM	0.70	\$ 377.8	Micro-cap
8	Average		93%	\$ 350.6	\$ 1,444.8			9.58	0.69	\$ 1,553.6	
9	Pima Utility Company		42%	\$ 5.9	\$ 19.3	NR	NR				

Notes:

¹AUS Utility Reports (September 2016).

² Value Line Analyzer Data (Weekly as of September 29, 2016)

³ See Schedule D-4.15 for definitions of size category

Pima Utility Company

**Exhibit
Schedule D-4.3
Witness: Bourassa**

Capital Structures

Line No.	Company	Symbol	Book Value ¹		Market Value ¹	
			Long-Term Debt	Common Equity	Long-Term Debt	Common Equity
1	American States Water	AWR	41.1%	58.9%	18.4%	81.6%
2	Aqua America	WTR	50.3%	49.7%	24.1%	75.9%
3	California Water	CWT	44.4%	55.6%	24.9%	75.1%
4	Connecticut Water	CTWS	44.2%	55.8%	24.0%	76.0%
5	Middlesex	MSEX	39.8%	60.2%	19.1%	80.9%
6	SJW Corp.	SJW	49.8%	50.2%	29.9%	70.1%
7	York Water Company	YORW	44.5%	55.5%	18.8%	81.2%
8	Average		44.9%	55.1%	22.7%	77.3%
9	Pima Utility Company	Proforma	35.0%	65.0%	N/A	N/A

¹ Value Line Analyzer Data (Weekly as of September 29, 2016)

Pima Utility Company

Exhibit
Schedule D-4.4
Witness: Bourassa

Comparisons of Past and Future Estimates of Growth

Line No.	Company	Five-year historical average annual changes				[5] Average Historical Growth	[6] Value Line Projected Growth ²	[7] Average of Historical and Proj. Grwth
		[1] Stock Price ¹	[2] Book Value ²	[3] EPS ²	[4] DPS ²			
1	American States Water	19.46%	6.00%	12.00%	10.00%	11.87%	6.00%	8.93%
2	Aqua America	10.63%	7.00%	13.00%	7.50%	9.53%	7.00%	8.27%
3	California Water	4.54%	5.00%	2.00%	2.00%	3.38%	7.50%	5.44%
4	Connecticut Water	6.39%	8.50%	10.50%	2.50%	6.97%	4.00%	5.49%
5	Middlesex	7.66%	3.00%	5.50%	1.50%	4.41%	5.00%	4.71%
6	SJW Corp.	2.29%	5.00%	15.00%	2.50%	6.20%	1.50%	3.85%
7	York Water Company	7.60%	4.00%	6.50%	2.50%	5.15%	6.00%	5.58%
8	GROUP AVERAGE	8.37%	5.50%	9.21%	4.07%	6.79%	5.29%	6.04%

Notes:

¹ Compound growth in stock prices ending December 31 through 2015. Data from Yahoo Finance website.

² Value Line Analyzer, weekly as of September 29, 2016.

Pima Utility Company

Exhibit
Schedule D-4.5
Witness: Bourassa

Comparisons of Past and Future Estimates of Growth

Line No.	Company	[1]	[2]	[3]	[4]	[5]	[6]	[7]
		<u>Ten-year historical average annual changes</u>				Average	Value Line	Average
		Stock Price ¹	Book Value ²	EPS ²	DPS ²	Col 1-4	Growth ²	of Historical and Proj. Grwth
1	American States Water	10.54%	5.50%	12.00%	6.50%	8.64%	6.00%	7.32%
2	Aqua America	3.16%	7.00%	8.50%	8.00%	6.66%	7.00%	6.83%
3	California Water	1.98%	5.50%	4.50%	1.50%	3.37%	7.50%	5.44%
4	Connecticut Water	4.49%	5.50%	6.00%	2.00%	4.50%	4.00%	4.25%
5	Middlesex	4.35%	4.50%	5.00%	1.50%	3.84%	5.00%	4.42%
6	SJW Corp.	2.68%	6.00%	6.50%	4.00%	4.80%	1.50%	3.15%
7	York Water Company	3.71%	6.00%	5.50%	4.00%	4.80%	6.00%	5.40%
8	GROUP AVERAGE	4.42%	5.71%	6.86%	3.93%	5.23%	5.29%	5.26%

Notes:

¹ Compound growth in stock prices ending December 31 through 2015. Data from Yahoo Finance website.

² Value Line Analyzer, weekly as of September 29, 2016.

**Pima Utility Company
Current Dividend Yields for Water Utility Sample Group**

**Exhibit
Schedule D-4.6
Witness: Bourassa**

Line No.	Company	[1] Stock Price (P ₀) ¹	[2] Current Dividend (D ₀) ¹	[3] Current Dividend Yield (D ₀ /P ₀)	[4] Average Annual Dividend Yield (D ₀ /P ₀) ^{1,2}
1	American States Water	\$ 40.05	\$ 0.94	2.35%	2.21%
2	Aqua America	\$ 30.48	\$ 0.76	2.49%	2.58%
3	California Water	\$ 32.09	\$ 0.69	2.15%	2.88%
4	Connecticut Water	\$ 49.73	\$ 1.13	2.27%	2.93%
5	Middlesex	\$ 35.24	\$ 0.80	2.27%	3.33%
6	SJW Corp.	\$ 43.68	\$ 0.81	1.85%	2.53%
7	York Water Company	\$ 29.66	\$ 0.62	2.09%	2.63%
8	GROUP AVERAGE			2.21%	2.73%

Notes:

¹ Stock prices as of September 30, 2016. Indicated Dividend from Value Line Analyzer weekly as of September 29, 2016.

² Average Annual Dividend is dividends declared per share for a year divided by the average annual price of the stock in the same year, expressed as a percentage. As report by Value Line Analyzer software. For comparison purposes only.

**Pima Utility Company
Discounted Cash Flow Analysis
DCF Constant Growth**

**Exhibit
Schedule D-4.7 (page 1)
Witness: Bourassa**

Line No.	[1] Dividend Yield (D_0/P_0) ¹	[2] Expected Dividend Yield (D_1/P_0) ²	[3] Value Line Projected Growth (g) ³	[4] Indicated Cost of Equity (COE) $k = \text{Div Yld} + g$ (Cols 2+3)
1	1. American States Water	2.35%	2.21%	+ 6.00% = 8.21%
2	2. Aqua America	2.49%	2.67%	+ 7.00% = 9.67%
3	3. California Water	2.15%	2.31%	+ 7.50% = 9.81%
4	4. Connecticut Water	2.27%	2.36%	+ 4.00% = 6.36% *
5	5. Middlesex	2.27%	2.38%	+ 5.00% = 7.38%
6	6. SJW Corp.	1.85%	1.88%	+ 1.50% = 3.38% *
7	7. York Water Company	2.09%	2.22%	+ 6.00% = 8.22%
8	Average			7.6%
9	Adjusted Average ⁴			8.70%

Notes:

¹ Spot Dividend Yield = D_0/P_0 . See Rebuttal Schedule D-4.6.

² Expected Dividend Yield = $D_1/P_0 = D_0/P_0 * (1+g)$.

³ Value Line Growth rate (g). See Schedule D-4.5, Col. 6.

⁴ Excluded because results are less than projected Baa bond yields plus 100 basis points or 7.0%. See Testimony.

**Pima Utility Company
Discounted Cash Flow Analysis
DCF Constant Growth**

**Exhibit
Schedule D-4.7 (page 2)
Witness: Bourassa**

Line No.	[1] Dividend Yield (D_0/P_0) ¹	[2] Expected Dividend Yield (D_1/P_0) ²	[3] Average of Historical and Proj. Growth ³	[4] Indicated Cost of Equity (COE) $k = \text{Div Yld} + g$ (Cols 2+3)
1	1. American States Water	2.35%	2.56% +	8.93% = 11.49%
2	2. Aqua America	2.49%	2.70% +	8.27% = 10.97%
3	3. California Water	2.15%	2.27% +	5.44% = 7.71%
4	4. Connecticut Water	2.27%	2.40% +	5.49% = 7.88%
5	5. Middlesex	2.27%	2.38% +	4.71% = 7.08%
6	6. SJW Corp.	1.85%	1.93% +	3.85% = 5.78%
7	7. York Water Company	2.09%	2.21% +	5.58% = 7.78%
8	Average			8.4%
9	Adjusted Average ⁴			8.8%

Notes:

¹ Spot Dividend Yield = D_0/P_0 . See Table 7.

² Expected Dividend Yield = $D_1/P_0 = D_0/P_0 * (1+g)$.

³ Historical Growth rate (g). See Schedule D-4.5 Col. 7.

⁴ Excluded because results are less than projected Baa bond yields plus 100 basis points or 7.0%. See Testimony.

**Pima Utility Company
Forecasts of Long-Term Interest Rates**

**Exhibit
Schedule D-4.8
Witness: Bourassa**

Line No.		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Average</u>
1	Long-term Treasury Rates				
2	Blue Chip Consensus Forecasts ¹	3.30%	3.90%	4.20%	
3	Value Line ²	3.30%	3.60%	4.20%	
4	Average				3.8%
5	Aaa Corporate Bonds				
6	Blue Chip Consensus Forecasts ¹	4.50%	5.10%	5.70%	
7	Value Line ²	4.40%	4.80%	5.20%	
8	Average				5.0%
9	Baa Corporate Bonds				
10	Blue Chip Consensus Forecasts ¹	5.60%	6.10%	6.40%	
11	Value Line ²				
12	Average				6.0%

Notes:

¹ Blue Chip consensus forecasts (June 2016).

² Value Line Quarterly Forecasts dated September 2, 2016.

**Pima Utility Company
Risk Premium Analysis Based on Total Returns**

**Exhibit
Schedule D-4.9
Witness: Bourassa**

Line No.		Annual Total Return ¹	Treasury Bond Yields ²	Annual Risk Premiums
1	2001	16.59%	5.49%	11.10%
2	2002	-4.05%	5.43%	-9.48%
3	2003	23.97%	5.05%	18.92%
4	2004	13.75%	5.12%	8.63%
5	2005	19.09%	4.56%	14.53%
6	2006	15.88%	4.91%	10.97%
7	2007	-2.73%	4.84%	-7.57%
8	2008	-1.81%	4.28%	-6.09%
9	2009	-0.22%	4.08%	-4.30%
10	2010	15.30%	4.25%	11.05%
11	2011	1.54%	3.91%	-2.37%
12	2012	15.08%	2.92%	12.16%
13	2013	20.44%	3.45%	16.99%
14	2014	14.98%	3.34%	11.64%
15	2015	8.23%	2.84%	5.39%
16	15-year Average	10.4%	4.3%	6.1%
17	5-year Average	12.1%	3.3%	8.8%
18		Expected Long-term Treasury Bond Rate ³		3.8%
19		Projected Returns on Equity for Sample		
20		15-Year Average		9.9%
21		5-Year Average		12.6%
22		Mid-point		11.3%

Notes:

¹ Computed Composite Total Returns from Yahoo Finance data.

² Average annual 30 Yr. U.S. Treasury Bond yields as reported by the Federal Reserve.

³ Source is Schedule D-4.8.

Pima Utility Company
Estimation of Current Market Risk Premium
Using DCF Analysis

Exhibit
Schedule D-4.10
Witness: Bourassa

Line No.	Month	Dividend Yield (D ₀ /P ₀) ¹	Expected Dividend Yield (D ₁ /P ₀) ²	Expected Growth (g) ³	Expected Market Return (k)	Monthly Average 30 Year Treasury Rate ⁴	Expected Market Risk Premium (MRP)
1	Jan 2015	2.45%	2.68%	+ 9.50%	= 12.18%	- 2.46%	= 9.72%
2	Feb	2.38%	2.61%	+ 9.50%	= 12.11%	- 2.57%	= 9.54%
3	Mar	2.42%	2.64%	+ 9.17%	= 11.81%	- 2.63%	= 9.18%
4	Apr	2.40%	2.61%	+ 9.00%	= 11.61%	- 2.59%	= 9.02%
5	May	2.41%	2.63%	+ 9.00%	= 11.63%	- 2.96%	= 8.67%
6	June	2.50%	2.72%	+ 8.83%	= 11.56%	- 3.11%	= 8.45%
7	July	2.56%	2.78%	+ 8.83%	= 11.62%	- 3.07%	= 8.55%
8	Aug	2.70%	2.95%	+ 9.00%	= 11.95%	- 2.86%	= 9.09%
9	Sept 2015	2.84%	3.10%	+ 9.00%	= 12.10%	- 2.95%	= 9.15%
10	Oct	2.67%	2.91%	+ 9.00%	= 11.91%	- 2.89%	= 9.02%
11	Nov	2.70%	2.94%	+ 8.83%	= 11.77%	- 3.03%	= 8.74%
12	Dec	2.80%	3.04%	+ 8.67%	= 11.71%	- 2.97%	= 8.74%
13	Jan 2016	3.07%	3.33%	+ 8.50%	= 11.83%	- 2.86%	= 8.97%
14	Feb	2.91%	3.16%	+ 8.50%	= 11.66%	- 2.62%	= 9.04%
15	Mar	2.75%	2.97%	+ 8.00%	= 10.97%	- 2.68%	= 8.29%
16	Apr	2.63%	2.84%	+ 8.00%	= 10.84%	- 2.62%	= 8.22%
17	May	2.67%	2.89%	+ 8.00%	= 10.89%	- 2.63%	= 8.26%
18	June	2.66%	2.88%	+ 8.00%	= 10.88%	- 2.45%	= 8.43%
19	July	2.56%	2.77%	+ 8.17%	= 10.93%	- 2.23%	= 8.70%
20	Aug Sep	2.56%	2.77%	+ 8.17%	= 10.93%	- 2.26%	= 8.67%
21	Recommended	2.59%	2.80%	+ 8.11%	= 10.91%	- 2.31%	= 8.60%
22	Short-term Trends						
23	Recent Twelve Months Avg	2.73%	2.96%	+ 8.40%	= 11.37%	- 2.68%	= 8.68%
24	Recent Nine Months Avg	2.73%	2.96%	+ 8.22%	= 11.18%	- 2.59%	= 8.59%
25	Recent Six Months Avg	2.64%	2.85%	+ 8.06%	= 10.90%	- 2.48%	= 8.43%
26	Recent Three Months Avg	2.59%	2.80%	+ 8.11%	= 10.91%	- 2.31%	= 8.60%

Notes:

¹ Average Dividend Yield (D₀/P₀) of dividend paying stocks. Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

² Expected Dividend Yield (D₁/P₀) equals current average dividend yield (D₀/P₀) times one plus growth rate(g).

³ Median of Projected EPS and Projected DPS Growth for VL 1700 stocks. Data from Value Line Investment Analyzer Software.

⁴ Monthly average 30 year U.S. Treasury. Federal Reserve.

Pima Utility Company
Capital Asset Pricing Model (CAPM)

Exhibit
Schedule D-4.11
Witness: Bourassa

Line No.		R_f^1	+	$(\text{beta}^2$	x	RP_M^3	)	=	k		
1	Traditional CAPM	3.8%	+ <td>(0.69</td> <td>x</td> <td>7.80%</td> <td>)</td> <td>=</td> <td>9.2%</td>	(0.69	x	7.80%)	=	9.2%			
2												
3		R_f^1		$RP_M^3 \times .25$	+ <td>$(\text{beta}^2$</td> <td>x</td> <td>RP_M^3</td> <td>) x .75</td>	$(\text{beta}^2$	x	RP_M^3) x .75			
4	Empirical CAPM	3.8%	+	7.80%	x .25	+ <td>(0.69</td> <td>x</td> <td>7.80%</td> <td>) x .75</td> <td>=</td> <td>9.8%</td>	(0.69	x	7.80%) x .75	=	9.8%
5												
6		R_f^1	+ <td>$(\text{beta}^2$</td> <td>x</td> <td>RP_M^4</td> <td>)</td> <td>+</td> <td>RP_e^5</td>	$(\text{beta}^2$	x	RP_M^4)	+	RP_e^5			
7	Modified CAPM	3.8%	+ <td>(0.69</td> <td>x</td> <td>6.80%</td> <td>)</td> <td>+</td> <td>2.95%</td> <td>=</td> <td>11.4%</td>	(0.69	x	6.80%)	+	2.95%	=	11.4%	
8												
9												
10	Average								10.1%			

Notes:

¹ Forecasts of long-term treasury yields. See Schedule D-4.8.

² Average Beta or Water Proxy Group. See Schedule D-4.2.

³ Estimate of current MRP. Average of historical MRP (1926-2015) and current MRP (using current VL 1700 average dividend yields and median projected book value, earnings, and dividend growth).

Historical MRP (1926-2015)	7.00%
Current MRP	8.60%
Average	7.80%

⁴ Estimate of Current MRP.

Historical MRP (1963-2015)	5.00%
Current MRP	8.60%
Average	6.80%

⁵ Average water proxy group adjusted company size risk premium Duff & Phelps Size Study and Risk Study. See Testimony.

**Pima Utility Company
Financial Risk Computation
Unlevered Beta**

**Exhibit
Schedule D-4.12
Witness: Bourassa**

Line

No.

Line No.	Company	VL Beta B_L^1	Raw Beta B_U^2	Tax Rate t^3	MV Debt D^4	MV Equity E^4	Unlevered Raw Beta B_U^5
5	1. American Water Works	0.70	0.55	38.4%	18.4%	81.6%	0.48
6	2. Aqua America	0.70	0.55	6.9%	24.1%	75.9%	0.42
7	3. California Water	0.75	0.63	36.0%	24.9%	75.1%	0.52
8	4. Connecticut Water	0.60	0.40	3.5%	24.0%	76.0%	0.31
9	5. Middlesex	0.70	0.55	34.5%	19.1%	80.9%	0.48
10	6. SJW Corp.	0.70	0.55	38.1%	29.9%	70.1%	0.44
11	7. York Water	0.70	0.55	27.5%	18.8%	81.2%	0.47
13	Sample Water Utilities	0.69	0.54	26.4%	22.7%	77.3%	0.45

¹ Value Line Investment Analyzer data. See Schedule D-4.1.

Value Line uses the historical data of the stock, but assumes that a security's beta moves toward the market average over time. The formula is as follows:
Adjusted beta = .33 + (.67) * Raw beta

² Raw Beta = (VL beta - .33)/(.67)

³ Effective tax rates for year ended December 31, 2015.

⁴ See Schedule D-4.2.

⁵ Raw $B_U = B_L / (1 + (1-t)^*D/E)$

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28
29
30

**Pima Utility Company
Financial Risk Computation
Relevered Beta**

Exhibit
Schedule D-4.13
Page 1
Witness: Bourassa

Line No.	Unlevered Raw Beta	MV Book Debt	MV Equity Capital	Tax Rate	Relevered Raw Beta	VL Adjusted Relevered Beta
	β_U^1	BD^2	EC^2	t^3	$\beta_{RL} = \beta_U (1 + (1-t)BD/EC)$	$.33 + .67(\text{Raw Beta})$
					β_{RL}	β_{RL}
5 Pima Utility Company	0.45	16.1%	83.9%	24.56%	0.51	0.67

¹ Unlevered Beta from Unlevered Beta tab in WP.

² Proforma Capital Structure of Company per D-1

	Company (in Thousands)		MV (in Thousands)	MV %
17 Long-term Debt	\$ 8,370	1.00	\$ 8,370	16.10%
18 Preferred Stock	\$ -	1.00	-	0.0%
19 Common Stock	\$ 15,546	2.81	43,756	83.9%
20 Total Capital	\$ 23,916		\$ 52,126	100.0%

(a) Current market-to-book ratio of sample water utilities. See work papers.

³ Current Tax rate based on test year. See Schedule C-5.

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Pima Utility Company
Traditional Capital Asset Pricing Model (CAPM)

Exhibit
Schedule D-4.14
Witness: Bourassa

Line No.		R_f^1	+	(	β^2	x	RP_M^3	)	=	k
1	Traditional CAPM	3.8%	+	(	0.69	x	7.80%	)	=	9.2%
2										
3		R_f^1			RP_M^3	x .25 + (	β^2	x	RP_M^3	) x .75
4	Empirical CAPM	3.8%	+	7.80%	x .25 + (	0.69	x	7.80%	) x .75	= 9.8%
5										
6		R_f^1	+	(	β^2	x	RP_M^4	) +	RP_s^5	= k
7	Modified CAPM	3.8%	+	(	0.69	x	6.80%	) +	2.95%	= 11.4%
8										
9										
10	Average									10.1%
11										
12										
13										
14	Traditional CAPM	R_f^1	+	(	β^5	x	RP_M^3	)	=	k
15		3.8%	+	(	0.67	x	7.80%	)	=	9.0%
16										
17										
18	Empirical CAPM	R_f^1			RP_M^3	x .25 + (	β^5	x	RP_M^3	) x .75
19		3.8%	+	7.80%	x .25 + (	0.67	x	7.80%	) x .75	= 9.7%
20										
21										
22	Modified CAPM	R_f^1	+	(	β^5	x	RP_M^4	) +	RP_s^5	= k
23		3.8%	+	(	0.67	x	6.80%	) +	2.95%	= 11.3%
24										
25	Average									10.0%
26										
27	Indicated Financial Risk Adjustment									-0.1%

Notes:

¹ Forecasts of long-term treasury yields. See Schedule D-4.8.

² Average Beta or Water Proxy Group

³ Estimate of current MRP. Average of historical MRP (1926-2015) and current MRP (using current VL 1700 average dividend yields and median projected book value, earnings, and dividend growth).

⁴ Current expected MRP from Duff&Phelps for use with their data.

⁵ Average water proxy group adjusted company specific risk premium developed from Duff & Phelps data. See Testimony.

⁶ Relevered Beta. See Schedule D-4.13

**Pima Utility Company
Risk Premium¹**

**Exhibit
Schedule D-4.15
Witness: Bourassa**

Line No.		Beta(β)	Size Premium	Risk Premium for Small Water Utilities ⁷
1	Mid-Cap Companies ²	1.12	1.00%	
2	Low-Cap Companies ³	1.22	1.70%	
3	Micro-Cap Companies ⁴	1.35	3.58%	
4	Decile 10 ⁵	1.40	5.60%	3.19%
				<u>Risk Premium for Small Water Utilities</u>
5	Estimated Risk Premium for small utilities ⁶			0.99%
6	Estimated Risk Premium for Company ⁸		1.10%	to 1.50%

¹ Data from Table 4-7 of Duff & Phelps, 2016 Valuation Handbook Guide to Cost of Capital.

² Mid-Cap companies includes companies with market capitalization between \$2,090.6 million and \$9,611.2 million.

³ Low-Cap companies includes companies with market capitalization between \$448.5 million and \$2,090.6 million.

⁴ Micro-Cap companies includes companies with market capitalization less than \$448.5 million.

⁵ Decile 10 includes companies with market capitalization less than \$209 million.

⁶ From Table 2, Thomas M. Zepp, "Utility Stocks and the Size Effect Revisited," *The Quarterly Review of Economics and Finance*, 43 (2003), 578-582.

⁷ Computed as the weighted differences between the Micro-Cap risk premium and the indicated risk premiums for the sample water utilities as shown below. Excludes risk due to differences in beta.

	Market Cap. (Millions)	Class	Size Premium	Difference to Decile 10	Weight	Weighted Size Premium	
1.	American States	\$ 1,446	Low-Cap	1.70%	3.90%	0.14285714	0.56%
2.	Aqua America	\$ 5,478	Mid-Cap	1.00%	4.60%	0.14285714	0.66%
3.	California Water	\$ 1,541	Low-Cap	1.70%	3.90%	0.14285714	0.56%
4.	Connecticut Water	\$ 562	Micro-Cap	3.58%	2.02%	0.14285714	0.29%
5.	Middlesex	\$ 578	Micro-Cap	3.58%	2.02%	0.14285714	0.29%
6.	SJW Corp.	\$ 894	Micro-Cap	1.70%	3.90%	0.14285714	0.56%
7.	York Water Company	\$ 378	Micro-Cap	3.58%	2.02%	0.14285714	0.29%
	Average		2.41%	Wghtd Size Prem. for Small Utilities			3.19%

⁸ Results of Comparative Risk Study. See work papers.