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BEFORE THE ARIZONA CORPORATION COMMISSION

SUSAN BITTER SMITH
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BOB STUMP
Commissioner

BOB BURNS
Commissioner

DOUG LITTLE
Commissioner

TOM FORESE
Commissioner

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA, INC. FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	**DOCKET NO. WS-01303A-14-0010** **NOTICE OF FILING REBUTTAL TESTIMONY**

EPCOR Water Arizona, Inc. files the attached rebuttal testimony of Sheryl L. Hubbard, Shawn Bradford, Jeffrey W. Stuck, Jake Lenderking, Sandra L. Murrey, Candace Coleman, Mike Worlton, Pauline Ahern, John Guastella, and Thomas Bourassa dated February 9, 2015.

RESPECTFULLY SUBMITTED this 9th day of February, 2015.

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WS-01303A-14-0010

PART 1 OF 2
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To review Part 2 please see:

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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
SHERYL L. HUBBARD
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
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SHERYL L. HUBBARD
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Sheryl L. Hubbard first describes the challenges that led to EPCOR Water Arizona Inc. ("EWAZ" or "Company") filing revised schedules on October 14, 2014. Ms. Hubbard also responds to concerns raised by ACC Staff and RUCO regarding the Company's accounting records.

Ms. Hubbard then presents the Company's revised requested annual revenue increase of $4,443,437, or a 15.9% increase, highlighting the major changes from the October 14, 2014 filing in response to issues raised by other parties to this case.

Ms. Hubbard next addresses recommendations by ACC Staff and RUCO witnesses to the Company's proposed Rate Base components and several adjustments to expenses level in the proposed Adjusted Test Year Operating Income. Specifically, she addresses adjustments proposed by ACC Staff and RUCO to the Company's request for the expense categories identified as Depreciation and Amortization, Labor (specifically incentive compensation expense), and Corporate Allocation (specifically at-risk compensation and public and governmental affairs expenses).

Finally, Ms. Hubbard responds to certain recommendations relating to the Company's proposed adjustor mechanisms.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Sheryl L. Hubbard. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, Arizona 85027, and my business phone number is (623) 445-2419.

Q. ARE YOU THE SAME SHERYL L. HUBBARD THAT SUBMITTED DIRECT TESTIMONY IN THIS CASE?

A. Yes.

Q. PLEASE EXPLAIN WHY THE COMPANY FILED NEW SCHEDULES IN THIS CASE ON OCTOBER 14, 2014.

A. The Company prepared and filed revised schedules based on discussions with, and to address the concerns raised by, the Arizona Corporation Commission Staff ("ACC Staff") and the Residential Consumer Utility Office ("RUCO") in regards to the Company's responses to some data requests. More specifically, in response to data request number RUCO 1.52, the Company submitted plant and accumulated depreciation calculations incorporating adjustments ordered in each district's previous rate decision that had not been included in the Company's direct case filing. The calculations involved using the plant and accumulated depreciation balances authorized in each district's last rate case decision and rolling those balances forward to the end of the test year in this case. To roll forward the plant balances by the National Association of Regulatory Utility Commissioners ("NARUC") account, monthly plant additions, retirements, and transfers/adjustments from the last case's test year end through and including the current test year end are included. Depreciation expense calculations, plant retirements, costs of removal associated with retirements, and salvage activities are the inputs included in the Accumulated Depreciation roll forward calculations.

For Paradise Valley Water, Tubac Water, and Mohave Wastewater, the starting point for the roll forward calculations was December 31, 2007, the test year in those districts' last rate case. For Sun City Water, the starting point was December 31, 2008. For Mohave Water district and the Arizona Corporate business unit, the starting point was June 30, 2010. The Arizona Corporate business unit has historically been rolled forward with each rate case filing so the most recent test year ended June 30, 2010 as was used in Docket No. W-01303A-10-0448.

Numerous iterations were required to accurately incorporate the starting point from the last Commission decisions for each district and to include the timing of depreciation rate changes to the satisfaction of the ACC Staff and the RUCO analysts. One challenge is that the detail for the authorized plant and accumulated depreciation balances are not set forth in ACC decisions, which requires the use of working papers and exhibits from the last rate cases. In addition, the manner in which the plant and accumulated depreciation are combined in the final plant and accumulated depreciation schedules submitted by the parties to the respective cases was inconsistent. For instance, in some cases, plant, corporate plant, and post-test year plant were combined and reflected in the total plant and accumulated depreciation by NARUC account balances and had to be segregated to accurately reflect the district-only plant and accumulated depreciation for the roll forward calculations. While the Company worked tirelessly to provide this level of detail, ultimately these challenges contributed to the delay in accurately responding to RUCO's data request number 1.52.

The roll forward calculations resulted in revised balances to the test year for both the plant and accumulated depreciation components of the rate base calculations in the current case. Due to the need to reflect these revised balances in the Company's rate base

schedules, which the Company would have done in conjunction with their rebuttal filing, ACC Staff and RUCO requested the Company file revised schedules incorporating the revised June 30, 2013 balances sooner than the rebuttal phase of the case. The Company filed those revised schedules on October 14, 2014. In addition, the Company worked closely with all of the parties involved in this case and agreed to a 90-day delay to the procedural schedule to provide all parties involved adequate time to review the revised data.

Q. WERE THERE ANY OTHER CHANGES REFLECTED IN THE OCTOBER 14, 2014 REVISED SCHEDULES?

A. Yes. Through the course of responding to data requests in this case, the Company identified some adjustments that should be made to some adjusted test year expenses. In some of our data responses, we noted that adjustments would be made in our Rebuttal filing. However, since revised schedules were being submitted on October 14, 2014, all of the adjustments that had been noted in responses to data requests were identified and included in the revised schedules as well. Exhibit SLH-1R, attached to this testimony, is a copy of the Notice of Filing Schedules that accompanied the filing of revised schedules on October 14, 2014. The Notice identifies all of the schedules that were affected by revisions to the Company's original application.

II. <u>COMPANY'S ACCOUNTING RECORDS</u>

Q. ACC STAFF AND RUCO HAVE RAISED CONCERNS ABOUT THE COMPANY'S RECORD KEEPING AND ACCOUNTING RECORDS. HOW DOES THE COMPANY RESPOND?

A. The Company acknowledges that there were some challenges with the plant accounting record keeping that contributed to the difficulty in processing this case in a timely

fashion. The Company willingness to agree to a 90-day delay in the procedural schedule to allow the parties ample time to investigate the revisions to the original application reinforces the Company's willingness to work with all parties involved in the filing.

Q. CAN YOU ELABORATE ON THE CHALLENGES THAT YOU REFER TO ABOVE?

A. Yes. In February 2012, EPCOR Water USA ("EWUS") purchased Arizona American Water Company from American Water. At the time of the purchase, the Company was using JD Edwards accounting software and PowerPoint capital asset software to maintain its general ledger accounting and fixed asset (plant) accounting transactions, respectively. The accounting software in use by EPCOR Utilities Inc. ("EUI"), the parent company of EWUS, was ORACLE, which includes general ledger accounting, fixed assets (plant), and inventory (IVARA) modules. All of the existing accounting in place at the time of purchase had to be remapped to the new ORACLE systems and the finance team (finance, accounting and rates personnel) had to convert to using these new systems. In addition, all of the fixed assets had to be remapped and uploaded into the ORACLE fixed asset ("OFA") module.

Q. IS IT THE COMPANY'S POSITION THAT THE RATE BASE FIGURES SUBMITTED WITH THE OCTOBER 14, 2014 FILING REFLECT THE APPROPRIATE BALANCES FOR PURPOSES OF ESTABLISHING RATES FOR WATER AND WASTEWATER SERVICE FOR THE DISTRICTS INCLUDED IN THIS RATE APPLICATION?

A. Yes.

III. PURPOSE OF TESTIMONY

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The purpose of my rebuttal testimony is to present the Company's **revised** requested annual revenue increase of $4,443,437, or a 15.9% increase.

My rebuttal testimony will also provide a summary of the Company's rebuttal case presentation highlighting the major changes from the October 14, 2014 filing in response to issues raised by other parties to this case.

In addition, my rebuttal testimony will provide the Company's response to recommendations by ACC Staff and RUCO witnesses to the Company's proposed Rate Base components and several adjustments to expenses level in the proposed Adjusted Test Year Operating Income. Specifically, my rebuttal testimony will respond to adjustments proposed by ACC Staff and RUCO to the Company's request for the expense categories identified as Depreciation and Amortization, Labor (specifically incentive compensation expense), and Corporate Allocation (specifically at-risk compensation and public and governmental affairs expenses).

Q. HOW IS YOUR REBUTTAL TESTIMONY ORGANIZED?

A. Section IV of my rebuttal testimony will provide a summary of the Company's **revised** requested revenue requirement including a brief summary of other witnesses' support to the Company's rebuttal presentation.

Section V of my rebuttal testimony will identify schedules and exhibits that I am sponsoring.

Section VI of my rebuttal testimony will focus on the Company's response to recommended adjustments to the Company's Adjusted Test Year Rate Base. This part of the testimony will be arranged by subject matter including plant, accumulated depreciation, Contributions in Aid of Construction ("CIAC"), deferred debits (including the 24-month deferral request), and cash working capital.

Section VII of my rebuttal testimony will present the Company's response to recommended adjustments to the requested Adjusted Test Year Operating Income for Depreciation and Amortization, Labor (specifically incentive compensation expense), and Corporate Allocation (specifically at-risk compensation and public and governmental affairs expenses).

IV. SUMMARY OF REVISED REVENUE REQUIREMENT

Q. WHAT IS EWAZ'S REVISED REQUESTED REVENUE INCREASE IN THIS CASE?

A. The Company's revised requested revenue increase, rate base and operating expense are summarized on column [c] of Rebuttal Exhibit SLH-2R. The Company's **revised** requested annual revenue increase of $4,443,437, or a 15.9% increase as summarized in Table 1 below.

District	Mohave Water	Paradise Valley	Sun City Water	Tubac Water	Mohave Wastewater	Total 5 Districts
Revenue Increase	$1,889,415	$587,088	$1,239,639	$280,652	$446,643	$4,443,437

Q. PLEASE EXPLAIN EXHIBIT SLH-2R.

A. Exhibit SLH-2R labeled "Summary of Parties' Positions" is an eighteen page exhibit which enables a comparison of the adjustments to the Company's October 14, 2014 filing recommended by ACC Staff (column [D]) and RUCO (column [F]). Pages 1-6 are

summaries of the Company's, ACC Staff's and RUCO's Schedule A-1 - Computation of Increase in Gross Revenue Requirement schedules. Pages 7-12 are summaries of the Company's, ACC Staff's and RUCO's Schedule B-1 - Summary of Fair Value Rate Base schedules. Pages 13-18 are summaries of the Company's, ACC Staff's and RUCO's Schedule C-1 - Calculation of Operating Income schedules. For each schedule (A-1, B-1, and C-1), there are separate pages for each of the districts in this case as well as a total of all of the districts. The Company's requested revenue requirement has been revised as a result of accepting certain of the positions recommended by ACC Staff and RUCO, as well as correcting some minor errors uncovered in the discovery process.

Q. PLEASE PROVIDE A HIGH-LEVEL SUMMARY OF THE CHANGES TO THE COMPANY'S ORIGINAL REVENUE INCREASE PRESENTED IN THE OCTOBER 14, 2014 FILING AND ITS REBUTTAL PRESENTATION.

A. The **original** requested annual revenue increase (as reflected in the Company's revised schedules filed October 14, 2014) of $5,276,122, has been reduced to $4,443,338 in the Company's rebuttal presentation. The Company, through rebuttal testimony of Ms. Pauline Ahern, has updated its cost of equity calculation to reflect updated calculations for the three cost of common equity models including forecasted interest rates in the risk premium and CAPM analyses and some recognition of ACC Staff's Mr. Cassidy's economic assessment adjustment for a revised cost of equity of 10.55 percent.

The Company, in my testimony, adjusted its request for a 24-month deferral of post in service AFUDC and depreciation to reflect actual additions to plant in service from July 1, 2012 through June 30, 2014. The Company is also accepting recommendations of

ACC Staff and RUCO to exclude the balances due to collections from the low income surcharges from rate base and, instead, refund them to customers over a three year period.

Expense changes include elimination of the request to recover deferred arsenic media replacement costs in base rates for recovery through a separate surcharge that would cease upon full recovery of the expense as discussed by Mr. Shawn Bradford. Tank Maintenance expense has been reduced, as discussed in greater detail by Mr. Jeffrey W. Stuck, to incorporate more recent cost estimates similar to those proposed by ACC Staff. Other expense changes, discussed in my testimony, include revisions to depreciation expense to accept ACC Staff's recommendations to exclude depreciation on fully-depreciated assets, exclusion of incentive compensation dependent on financial metrics consistent with past treatment of this component of employees' compensation in both the Labor expense and Corporate Allocation as discussed further in my testimony. The Company has also revised its customer annualization to accept a correction identified by RUCO which impacts customer accounting expenses. As a separate calculation, the Company annualized revenue and associated expenses for fuel and power, and chemicals to reflect the addition of two 6-inch meter commercial customers as discussed in the testimony of Ms. Sandra L. Murrey. Changes to property and income taxes reflect acceptance of corrections identified by ACC Staff or RUCO or conforming changes to incorporate income or expense adjustments are also discussed in the testimony of Ms. Sandra L. Murrey.

Q. HOW DOES EWAZ'S REVISED REVENUE REQUIREMENT COMPARE TO THE ACC STAFF'S AND RUCO'S POSITIONS SUBMITTED ON JANUARY 23, 2015?

A. ACC Staff recommends the Company be authorized approximately 47% of the Company's October 14, 2014 revised requested overall revenue requirement, and RUCO recommends the Company be authorized approximately 2% of the Company's October 14, 2014 revised requested overall revenue requirement. Although RUCO and the ACC Staff have recommended increases that are significantly less than EWAZ's original requested increase, the Company has reviewed each of their recommendations and accepted as many of the ACC Staff's and RUCO's recommendations as possible to reduce the remaining open issues.

Q. WHAT OTHER WITNESSES ARE SUPPORTING THE COMPANY'S REVISED REVENUE REQUIREMENT THROUGH THEIR REBUTTAL TESTIMONY?

A. The Company's rebuttal presentation is supported by testimony from the following witnesses:

Mr. Shawn Bradford (ACC Staff's and RUCO's recommendations regarding Tubac Water's on-going and deferred arsenic media replacement costs, storage capacity in Tubac, and miscellaneous service charges)

Mr. Jeffrey Stuck (ACC Staff's and RUCO's tank maintenance recommendations)

Mr. Mike Worlton (Rebuttal of RUCO's recommendation regarding post test year plant additions)

Ms. Candace Coleman (Rebuttal of RUCO's and the Resorts' recommendations opposing a System Improvement Benefit mechanism)

Mr. Jake Lenderking (Rebuttal of RUCO's recommendation regarding discontinuance of the Company's existing Central Arizona Project ("CAP") purchased water adjustment mechanisms and non-compliance allegations)

Ms. Sandra L. Murrey (Rebuttal of ACC Staff's and RUCO's operating expense recommendations, excluding Arizona incentive compensation included in Labor expense, Corporate Allocation, and depreciation)

Mr. Thomas J. Bourassa (Rebuttal of Cost of Service Study recommendations by the ACC Staff and Rate Design)

Ms. Pauline Ahern (Rebuttal of the ACC Staff's and RUCO's recommended returns on equity)

Mr. John F. Guastella (Rebuttal of ACC Staff's and RUCO's recommendations regarding debit balances in accumulated depreciation, and over-depreciation of some asset groups and RUCO's recommendation regarding depreciation studies)

V. SPONSORED SCHEDULES AND EXHIBITS

Q. PLEASE IDENTIFY THE SCHEDULES YOU ARE SPONSORING.

A. I am sponsoring the following schedules in the Company's Rebuttal filing[1] :

- Schedule A-1 Rebuttal –Computation of Increase In Gross Revenue Requirements
- Schedule B-1 Rebuttal – Summary of Fair Value Rate Base
- Schedule B-2 Rebuttal – Original Cost Rate Base Pro Forma Adjustments
- Schedule B-5 Rebuttal – Computation of Working Capital Allowance
- Schedule B-6 Rebuttal – Lead/Lag Study – Cash Working Capital Requirement
- Schedule D-1 Rebuttal – Summary of Cost of Capital
- Schedule D-2 Rebuttal – Cost of Long-Term Debt

[1] The same witnesses that sponsored schedules from the initial filing will be sponsoring the corresponding revised schedules in the Company's October 14, 2014 filing.

Q. PLEASE IDENTIFY THE EXHIBITS YOU ARE SPONSORING.

A. I am sponsoring the following exhibits, which are attached to this rebuttal testimony:

- Exhibit SLH-1R – Notice of Filing Schedules (October 14, 2014)
- Exhibit SLH-2R - Summary of Parties' Positions

VI. ADJUSTMENTS TO RATE BASE

A Utility Plant in Service

Q. HAVE YOU REVIEWED THE ADJUSTMENTS PROPOSED BY THE ACC STAFF AND RUCO TO EWAZ'S UTILITY PLANT IN SERVICE?

A. Yes.

Q. PLEASE RESPOND TO STAFF'S COMMENTS REGARDING NEGATIVE BALANCES FOR CERTAIN PLANT ASSETS.

A. The ACC Staff has proposed adjustments to the Company's requested utility plant in service for Paradise Valley Water of $15,161 and for Sun City Water of $98,493 because certain plant asset accounts had negative balances. The negative balance for Paradise Valley is comprised of the following 2 accounts:

304800 – Structures & Improvements – Misc	($8,633.09)
340330-Computer Software Other	($6,527.83)

The ($8,633.09) was a plant balance approved in the last rate case for Paradise Valley while the ($6,527.83) appears to be the result of unitizing an asset to the wrong account in July 2008. My suggestion for both of these would be to transfer the credits and any accumulated depreciation (debit balances) to the appropriate accounts and eliminate these

negative balances. The Company disagrees with the position taken by Ms. Rimback, where she recommends to just increase plant. Clearly, an entry to reflect a credit received after construction had been completed and classified was charged to the incorrect account. Account 340300 should be used for the ($6,527.83) correction and account 340300 has the same depreciation rate so no further adjustment is needed to the Company's case.

The credit balance for Sun City Water of $98,492.54 in Account 340100-Structures and Improvements Supply is a case of the recording of an as-built true up being charged to the wrong subaccount.

The Company will commit to making these entries which should not have any effect on plant or accumulated depreciation balances in total.

B <u>ACCUMULATED DEPRECIATION</u>

Q. HAVE YOU REVIEWED RUCO'S PROPOSED ADJUSTMENTS TO ACCUMULATED DEPRECIATION?

A. Yes, I have.

Q. PLEASE DISCUSS THE PROPOSED ADJUSTMENTS THAT RUCO IS RECOMMENDING.

A. RUCO has quantified assets by district where the net book value is less than $0 at the test year end and to that amount has added additional depreciation expense from June 30, 2013 through an estimated decision date. Based on this calculation, a regulatory liability is established to require the Company to refund these amounts to customers over a 5 year period. The Company is opposed to this treatment, because it implies that something was done incorrectly, but without some prior guidance from the Commission that a Company

should stop recording depreciation expense on an asset, even though the expense is included in rates that are charged to its customers, seems extreme and unnecessary. The reduction to rate base associated with the additional depreciation expense is included in the Company's application and unless the Company is shown to have over-earned its authorized rate of return, refunding an authorized expense should not be required. Please see also the rebuttal testimony of the Company's witness, John F. Guastella, for more of the Company's response to RUCO's proposed adjustments to the district's accumulated depreciation accounts.

1 Regulatory Liability

Q. RUCO HAS ALSO CREATED A REGULATORY LIABILITY IN RELATION TO CERTAIN ASSETS IT DEEMS TO BE OVER DEPRECIATED. HOW DOES THIS COMPANY RESPOND TO RUCO'S RECOMMENDATION?

A. The Company has applied the depreciation rates authorized by the Commission in each rate case decision applicable to the periods since the last rate case and has expensed the level of depreciation expense that those rates were intended to generate. The Company has asked a depreciation expert to analyze this issue and provide some industry perspective on this subject on behalf of the Company. Please see the testimony of Mr. John F. Guastella. Mr. Guastella has provided expert testimony on behalf of EPCOR's predecessor, Arizona American Water Company, in the development of some of the depreciation rates that the Company uses today.

The Company is in compliance with GAAP and the Commission's decisions in regards to depreciation accounting. For every dollar of depreciation expense that the Company has recorded, rate base is decreased which ultimately results in reduced rates to customers..

Q. IF THE COMMISSION CHOSE TO REVERSE THE DEPRECIATION ON ASSETS EFFECTIVE FROM THE TIME THEY BECAME FULLY DEPRECIATED, HOW SHOULD THEY ACCOMPLISH THIS?

A. The Company is unaware that any adjustment of this kind has ever been done, so it is purely hypothetical to discuss, but hypothetically, the depreciation expense calculations that were made from the time the groups of assets became fully-depreciated would need to be quantified and that amount would be removed from the accumulated depreciation balances. The other side of the entry would be a credit to retained earnings (net income) as this type of adjustment would be recognized as a prior period adjustment and would be accounted for as an adjustment to retained earnings. The impact on retained earnings would also be reflected as an increase to the equity balance in the capital structure.

Q. WHAT IS WRONG WITH RUCO'S RECOMMENDATION TO ESTABLISH A REGULATORY LIABILITY AND REFUND THE OVER DEPRECIATION OF SOME ASSETS?

A. The Commission authorized the plant and accumulated depreciation balances in the last rate cases for each district as discussed above. Included in those balances were both asset groups with net book values less than or equal to $0 which implies over-depreciation of the group. In addition, there were accumulated depreciation balances that showed debit balances which resulted from early retirements. Based on that plant, the ACC Staff and RUCO recommended depreciation expense levels that were, in turn, approved by the Commission. The Company has not earned more than its authorized return on equity during the ensuing periods subsequent to the Commission decisions. Adopting RUCO's recommendation in this case has no merit and would be punitive to the Company, constitutes retroactive ratemaking, sets a dangerous precedent for all regulated utilities in Arizona and has no real foundational basis.

C 24-MONTH DEFERRAL REQUEST

Q. BOTH THE ACC STAFF AND RUCO ARE RECOMMENDING THE REJECTION OF THE COMPANY'S REQUEST FOR A 24-MONTH DEFERRAL OF POST IN SERVICE AFUDC AND DEPRECIATION. CAN YOU ELABORATE ON THE COMPANY'S REQUEST FOR THIS DEFERRAL?

A. This request for a 24-month deferral of post in service AFUDC and depreciation is intended to reduce regulatory lag by deferring the return on and of an investment in plant until such time as a Commission decision can be issued. Once an asset goes into service, AFUDC on that investment ceases, both the interest cost and the return on the investment, until such time as a Commission decision can be requested and issued; a process that can take anywhere from 13 months to 24 months. In addition, depreciation on that asset starts immediately once an asset is in service whether or not the expense is recovered through rates, contributing to an additional drain on a Company's ability to earn its authorized rate of return. The impact of this regulatory lag can be demonstrated by looking at the cost of $1 million dollars of investment placed in service where the rate decision is issued 24 months later. For every $1 million of investment at a 6.81% cost of capital (debt and equity as requested in this rebuttal filing), and a composite depreciation rate of approximately 3%, the annual lost revenue to the Company is approximately $157,000 of revenue, or $13,080 per month.

The Company's proposal for a 24-month deferral of both a post in-service return (AFUDC) and depreciation expense starting with day one of a test year and continuing up to the time the Commission issues a decision but not more than 24 months, would compensate the Company with a return on plant already in service and providing a benefit to our customers that otherwise, is lost until such time as a rate case request to include that plant in rate base and a Commission decision can be issued. In addition to

the loss of any return on its investment until a decision can be issued, depreciation of the asset must commence once an asset goes into service, whether it is included in rates or not. Depreciation, absent recovery in rates, immediately begins to drain the company's earnings impeding the Company from earning its authorized return.

This inability to recover a return on assets that are providing service to customers and the associated depreciation expense until a rate decision can be issued has long been referred to as regulatory lag, and the ACC Staff had proposed a deferral method such as the Company's requested 24-month deferral of post in service AFUDC and depreciation to address this lag in a March 19, 2012 Staff Report. Interestingly, Staff now claims that this approach is contrary to the NARUC Uniform System of Accounts. Post in-service AFUDC is a regulatory asset to provide recovery of the financing costs (both debt and equity) associated with an asset once it is in service. It is not truly AFUDC, because AFUDC becomes part of the cost of the asset and that is not what the Company is proposing. This Commission has authorized the creation of a regulatory asset on several occasions based on providing the financing costs of a project after it has gone into service[2].

The deferral mechanism, if approved, would allow the deferral of financing costs (AFUDC), both debt and equity, and the depreciation expense throughout the processing of a rate application beginning on day one of the test year. The deferrals would continue on any plant placed in service throughout the test year and for the following 12 months to allow for the processing of the rate application that would be filed as soon after the end of the test year as possible.

[2] One instance, see Decision 69914, issued September 27, 2007.

Although both the ACC Staff and RUCO have rejected the Company's request for this deferral mechanism, they do so based on a faulty premise and attempt to make the Company's request sound illogical. The deferral of the financing component (AFUDC) and depreciation would be unnecessary if rates could be adjusted to provide a return on investment in a shorter period of time than is now the case such as occurred with the Arsenic Cost Recovery Mechanisms ("ACRM") and now the System Improvement Benefit ("SIB") mechanism or as in some states through the use of interim rates implemented within an abbreviated time frame after an application for rate change is filed. Typically, these interim rates can be implemented in 3- to 6-months after the filing of a rate application and are always subject to refund to protect customers from utilities that might request higher rates than are ultimately approved.

Q. ARE THE 24-MONTH DEFERRAL MECHANISM AND THE SIB MECHANISM INTENDED TO RECOVER A DEFERRED RETURN AND DEFERRED DEPRECIATION ON THE SAME ASSETS?

A. No. The SIB Mechanism has strictly been limited to replacing mains, meters, hydrants, services, and valves. The Company's request for a 24-month deferral would encompass all other types of investment such as wells, treatment facilities, and storage tanks. The need for these types of mechanisms has been the subject of a Commission-initiated working group which resulted in a Staff Report that identified several alternatives to assist in reducing regulatory lag and the 24-month deferral was one of the alternatives. The Company did not see the alternatives proposed as mutually exclusive and the adoption of a SIB mechanism is definitely a step in the right direction.

A SIB Mechanism is designed to recover a return on and of assets placed in service a full year after the completion of a rate case while the 24-month deferral mechanism is intended to

recover a return on and of assets placed in service starting on day one of a test year through the 24-month period that ends with the issuance of a decision. Because the SIB period does not begin until a full year after the issuance of a decision on this rate application and the 24-month deferral period ends June 30, 2014 in this rate application, there could not be any overlap of the two mechanisms with the request in this case. However, in the future, the deferrals would clearly apply only to non-SIB eligible assets in the test year; the Company would exclude any SIB-eligible investments from the Company's calculations for this deferral of post in service AFUDC and depreciation because those assets are subject to the SIB mechanisms and its requirements. As noted above, in this case, this cannot be an issue as the Company's calculation does not include the time period in which the SIB mechanism would be in place.

Q. HAS EWAZ UPDATED THE CALCULATION OF ITS 24-MONTH DEFERRAL REQUEST IN THIS CASE?

A. Yes, and the original request has been revised to $1,733,331with an associated revision in the requested amortization of $44,827. The revised amount does not include any SIB-eligible projects because it reflects actual plant additions from July 1, 2012 through June 30, 2014, a time period when the SIB Mechanism was not in place.

Q. DID THE COMPANY APPLY THE ACTUAL DEPRECIATION RATES TO THE PLANT ADDITIONS THAT HAVE BEEN INCLUDED IN THE REVISED 24-MONTH DEFERRAL MECHANISM IN COMPUTING THE ASSOCIATED DEPRECIATION EXPENSE?

A. No. The depreciation calculation is based on the actual composite depreciation rates in effect from July 1, 2012 to June 30, 2014.

A. <u>CASH WORKING CAPITAL</u>

Q. HAVE YOU REVIEWED THE CASH WORKING CAPITAL RECOMMENDATIONS OF THE ACC STAFF AND RUCO IN THIS PROCEEDING?

A. Yes, I have.

Q. DOES THE COMPANY AGREE WITH THE ACC STAFF'S ADJUSTMENTS TO CASH WORKING CAPITAL?

A. No. ACC Staff recommends exclusion of rate case expense from the calculation of cash working capital stating the amount included in the income statement is a non-cash amortization expense in future operating years and on that basis it should be excluded from the cash working capital allowance calculation.

Q. DO YOU AGREE THAT RATE CASE EXPENSE SHOULD BE EXCLUDED FROM THE CALCULATION OF CASH WORKING CAPITAL?

A. No, I do not. On the contrary, to be correct, the lag days should be extended to account for the time between the incurrence of the expense and the recovery in rates of the expense. The Company has historically used the annual amortization as the basis for this expense in it operating expenses because this is the manner in which the Commission historically authorizes recovery of this expense item. One could argue that the amount that should be included in the determination of the cash working capital calculation should be the full cost to litigate a rate case application. For the ACC Staff to exclude this expense from the calculation of the cash working capital without any consideration of the lengthy time between incurrence of the expense and recovery of the expense in rates in simply unreasonable. Utilities have settled on using the annual rate case expense recovery as a proxy for the annual expense associated with the cash outlay.

Q. DOES THE COMPANY CONCUR WITH RUCO'S RECOMMENDED ADJUSTMENTS TO THE CALCULATION OF CASH WORKING CAPITAL?

A. No. RUCO has revised the calculation of the interest expense lag based upon a hypothetical payment process, whereas, the Company's lag is based on actual payment history. Also, RUCO proposed to exclude bad debt expense from the working capital calculation even though the Company's bad debt expense is based on actual debts written off and are uncollectible accounts which represent a loss of revenue to the Company and should be included in the calculation of the cash working capital.

B. CONTRIBUTIONS IN AID OF CONSTRUCTION ("CIAC")

Q. ACC STAFF HAS TAKEN ISSUE WITH THE COMPANY'S TREATMENT OF CIAC AS IT RELATES TO DEVELOPER-FUNDED CONSTRUCTION WORK IN PROGRESS ("CWIP"). PLEASE DESCRIBE THE COMPANY'S RESPONSE.

A. The adjustment that the Company made in the Schedule B-2s submitted for each district is necessary to properly match the CIAC amortization to the depreciation deduction for developer-funded projects. When the situation arises where the plant funded by developer contributions is in construction work in progress at the end of the test year, there will not be any depreciation expense on that plant. If the associated CIAC is included as a reduction to rate base, the associated amortization reduces depreciation expense in the determination of the cost of service creating a mismatch between depreciation on developer-funded plant and the related amortization of the CIAC.

The adjustment that the Company proposed in its direct case presentation preserves the matching principle by removing the CIAC and its associated amortization until such time as the depreciation on the related plant is included in rate base.

The Company would also point out that developer-funded CWIP does not accumulate any allowance for funds used during construction ("AFUDC") and the Company does not earn anything on the developer-funded projects either while they are in CWIP or when they are completed and transferred into plant in service.

Q. RUCO HAS ALSO MADE AN ADJUSTMENT RELATING TO CIAC. PLEASE EXPLAIN THE COMPANY'S RATIONALE FOR ITS APPROACH.

A. RUCO's adjustment to reject the Company's removal of developer-funded CWIP is the same as the ACC Staff's adjustment discussed above. Both parties' positions must be rejected in order to preserve a matching of the depreciation expense and the related amortization of the CIAC on developer-funded plant that is in plant in service at the end of the test year. To make one adjustment to reduce depreciation expense without providing the Company the opportunity to make an off-setting adjustment for the amortization is inappropriate and does not satisfy the matching principle. It should also be noted that none of the developer-funded CWIP is included in the Company's post-test year plant additions ("PTYPA"). The Company's PTYPA are all intended to provide service to test year customers and are funded by the Company. Conversely, developer-funded projects are for growth adding additional revenue and expenses and are not funded by the Company.

C. <u>LOW INCOME PROGRAMS FUNDS AS REGULATORY LIABILITY</u>

Q. BOTH ACC STAFF AND RUCO HAVE TAKEN ISSUE WITH THE COMPANY'S TREATMENT OF THE LOW INCOME FUND AS A REGULATORY LIABILITY. PLEASE DESCRIBE THE COMPANY'S POSITION.

A. The Company currently has low-income programs in the Sun City Water and Mohave Water districts. Both of the programs provide discounted monthly service charges and the costs to fund these discounts are recovered via a commodity surcharge that is assessed to usage in the highest block tier of the Company's rate structures. The collection of the funding for these programs has occurred since the decisions were issued in each district's prior rate cases. For Sun City Water, the surcharge has been in effect since January 1, 2011 and for Mohave Water, the surcharge has been in effect since July 1, 2012.

Participation in the low-income program has been greater in the Sun City Water district than in the Mohave Water district, but it took a couple of years to achieve the level of participation that the Company now experiences in that district. This lower than anticipated participation rate in the beginning of the programs has contributed to the balances that are recorded as liability accounts in both districts. In the Company's direct case presentation, the liability account was treated as a reduction to rate base to provide the customers with the benefit to the Company of the availability of those funds.

The Company is not opposed to including a portion of the funds as an adjustment to revenue, and has accepted the 3-year periods proposed by the ACC Staff and RUCO. In addition, however, the ongoing expense of continuing the program should be recovered through a surcharge to the highest block commodity rate. Based on the experience of the few years that these programs have been in effect, the Company estimates the cost to be $37,528 per year for Sun City Water and $34,987 for Mohave Water. The proposed rate design for these programs is reflected in the H Schedules for these districts.

VII. ADJUSTED OPERATING INCOME ADJUSTMENTS

A CORPORATE ALLOCATIONS

Q. BOTH ACC STAFF AND RUCO PROPOSE ADJUSTMENTS TO THE COMPANY'S CORPORATE ALLOCATION EXPENSE. PLEASE GENERALLY DESCRIBE THE ACC STAFF'S ADJUSTMENTS AND WHETHER THE COMPANY ACCEPTS ACC STAFF'S PROPOSED ADJUSTMENT.

A. ACC Staff's proposed adjustment to the corporate allocation cost pool impacts many different expense categories including the Corporate Allocation line item on Schedules C-1 and C-2. Company witness, Ms. Sandy Murrey, will address each expense category at the corporate level except for the Labor adjustment related to the Arizona corporate employees' incentive compensation and the at-risk compensation included in the Corporate Allocation which will then be allocated to the districts based on their appropriate 4-factor allocator. Please see the Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts. My testimony will respond to the ACC Staff's proposed adjustments to the Labor adjustment related to the Arizona corporate employees' incentive compensation (ACC Staff Adj 5a) and the at-risk compensation included in the Corporate Allocation (ACC Staff Adj 5b).

Q. PLEASE DISCUSS THE ACC STAFF'S ADJ 5A AS IT RELATES TO THE LABOR EXPENSE LINE OF THE INCOME STATEMENT.

A. ACC Staff's proposed adjustment 5a to the Labor Expense line of the income statement removes the entire incentive compensation related to Arizona employees in the Arizona Corporate business unit. The affected employees provide finance, accounting, tax, engineering, water resources, environmental compliance and managerial oversight of the EPCOR Water Arizona organization. From discussions with ACC Staff, it appears that their major concern is that the metrics include not only a target payout, but also a stretch

payout when safety (30%), customer service (30%), operational efficiency (30%), and financial (10%) goals are achieved. As a point of clarification, the Company limited the requested incentive compensation to a 100% payout if targets for all metrics are achieved and only included the Pool A incentive compensation (Pool B was not included at all).

To further address the concerns of the parties that the Company may over recover this expense if targets are in fact not achieved, in our rebuttal, the Company has voluntarily removed 10% of the incentive compensation to eliminate the portion of the incentive compensation based on meeting the Pool A financial target to be consistent with how incentive compensation was treated in the past for Arizona American Water Company, EPCOR Water Arizona, Inc.'s ("EWAZ") predecessor. Please see the labor expense pro forma on Company's rebuttal adjustment SH-15R on Schedule C-2 Rebuttal for all districts. I would also note that a removal of the financial target portion of the Arizona Corporate incentive compensation was not made in the Chaparral City Water Company ("CCWC") case and the full 100% of the incentive compensation for Arizona Corporate and CCWC employees.

Q. PLEASE DISCUSS THE ACC STAFF'S ADJ 5B AS IT RELATES TO THE CORPORATE ALLOCATION LINE OF THE INCOME STATEMENT.

A. ACC Staff's proposed adjustment 5b removes $890,336 of incentive compensation included in the Corporate Allocation from the parent company. However, the actual amount of incentive compensation (also referred to as at-risk compensation) included in the Company's adjusted test year expense in the Corporate Allocation line on the Income Statement is only $597,657 due to reductions in the test year expenses reflected in pro forma ADJ SM-18. This error in the ACC Staff's recommendation overstates the disallowance by $292,679 which is then allocated to the districts using a 4-factor allocator.

The employees that are included in the Corporate Allocation at-risk compensation provide Corporate Finance, Executive, Information Technology and Human Resources functions to the EWAZ operations.

In this rebuttal filing, the Company is modifying its request related to inclusion of the Corporate Allocation at-risk compensation to be consistent with its request for recovery of the incentive compensation for Arizona employees discussed above. The revised request only includes 90% of the Pool A incentive compensation and removes all other at-risk compensation from the Corporate Allocation costs. The revised Corporate Allocation at-risk compensation adjustment removes $315,793 of all other at-risk compensation which is allocated based on the 4-factor allocation methodology and appears as pro forma adjustment SLH-11R on Schedule C-2.

Q. PLEASE DISCUSS THE ACC STAFF'S ADJ 5C AS IT RELATES TO THE CORPORATE ALLOCATION LINE OF THE INCOME STATEMENT.

A. ACC Staff's proposed adjustment 5c disallows $105,782 from the Corporate Allocation for Public and Government Affairs ("P&GA") activities. However, the calculation of pro forma adjustment SM-18 in the Company's October 14, 2014 revised Schedule C-2 that annualized the Corporate Allocation already removed all of the P&GA costs (in their entirety). The Company requested clarification from ACC Staff in our Data Request number 1-21 to better understand the source of the expenditures that ACC Staff was disallowing. From the response to that data request, we are still unable to determine the source of ACC Staff's expenses, and we are therefore unable to address ACC Staff's concerns and we must, therefore, reject this proposed adjustment.

Q. STAFF REMOVED ALL INCENTIVE COMPENSATION FROM THE CORPORATE ALLOCATION EXPENSE BASED ON THE COMMISSION'S DECISION IN THE CHAPARRAL CITY WATER COMPANY RATE CASE (DOCKET NO. W-02113A-13-0118). WHY DID THE COMPANY INCLUDE THESE AMOUNTS?

A. The basis of the Commission's rejection of the Company's request to include incentive compensation related to employees that have labor costs allocated to EWAZ through the Corporate Allocation in the Chaparral City Water Company case seemed to be the lack of detailed support of the related charges. In this case, the Company has provided more detailed information about the calculations to all parties and in this rebuttal phase of the case, the Company is addressing the concerns about financial metrics included in the at-risk compensation determinations.

Q. ACC STAFF REMOVED CERTAIN GENERAL OFFICE EXPENSES FROM THE CORPORATE ALLOCATION. WHY WERE THESE INCLUDED BY THE COMPANY?

A. ACC Staff's corporate allocation cost pool has co-mingled the Arizona Corporate functions provided in Phoenix with the Corporate Allocation that is comprised of cost allocated to EWAZ from the Canadian parent. The Company, through its witness, Ms. Sandra Murrey has tried to segregate the expenses to provide more detailed information on these costs as well as the source of the charges that support the Company's position.

Q. HAS THE COMMISSION ACCEPTED THIS TYPE OF ALLOCATION IN PRIOR DECISIONS?

A. Most certainly. The Arizona Corporate charges are merely a centralized service company function for all of the operating districts while the corporate headquarters are in Edmonton and there are some corporate governance charges that are allocated to the EWAZ operations.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 6 RECOMMENDS AN ADJUSTMENT TO CORPORATE ALLOCATION EXPENSE IN ALL DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. The Company believes that it is important to better define the elements that are allocated to the districts both from Arizona Corporate activities and Canadian Corporate Allocation activities. RUCO's adjustment to the corporate allocation cost pool impacts many expense categories. Both the ACC Staff and RUCO are combining the Arizona Corporate office charges (which are charged to the appropriate NARUC categories of expensed) and the Canadian Corporate office charges (which are only charged to the

Corporate Allocation line of the income statement) in one basket which appears to be confusing the arguments for and against their recommendations. The Arizona Corporate office function provides accounting, finance, engineering, rates and senior management functions for the EWAZ operations. Please see the Company's rebuttal adjustment SM-10R. RUCO has confused the Corporate Allocation and has assumed Arizona Corporate employees' costs are included in the Corporate Allocation line item on the income statement. Arizona employees' labor costs, benefits, as well as incentive compensation awards are included in labor expense line of the income statement.

Q. MORE SPECIFICALLY, RUCO ADJUSTMENT 6A DISALLOWS ALL INCENTIVE PAY AND BASES THEIR ADJUSTMENT ON DECISION 74568 IN THE CHAPARRAL CITY WATER COMPANY CASE REFERRED TO ABOVE. DOES THE COMPANY AGREE THAT THE COMMISSION DISALLOWED ALL INCENTIVE PAY IN THAT DECISION?

A. No. In Decision No. 74568, specifically in the section labeled Corporate Allocation[3], the Commission agreed with an ACC Staff recommendation to disallow incentive pay noting the Company failed to quantify or justify its proposed recovery of incentive pay. The Company notes that only the Corporate Allocation portion of incentive pay was disallowed and 100% of the Arizona and Direct district incentive pay was approved. The Company believes that it has remedied the "quantify and justify" arguments through additional data provided to intervenors.

[3] Decision No. 74568 at pages 24-25.

Q. HAS THE COMMISSION HISTORICALLY DISALLOWED A PORTION OF INCENTIVE PAY ON THE BASIS THAT IT WAS TIED TO FINANCIAL PERFORMANCE?

A. Yes. In this filing only 10% of the Company's Pool A incentive compensation has a financial metric. As discussed above in relation to the ACC Staff's adjustments to incentive compensation and at-risk compensation, to address concerns of the parties, the Company has submitted a detailed calculation of the incentive calculation and we have voluntarily removed all of the incentive compensation representing the financial component to be consistent with how incentive compensation has been treated in the past with EWAZ's predecessor (as discussed in RUCO's testimony). Also, I would note that the adjustment to the Corporate Allocation expense line item made by RUCO for $801,709, and then allocated using the 4 factor, is not part of the Corporate Allocation but rather it is related to Arizona Corporate employees and is included in the Labor expense line in Schedules C-1 and C-2 in the Company's filing.

Q. HAS RUCO ALSO REMOVED COSTS ASSOCIATED WITH AN INCENTIVE PLAN THAT THE COMPANY DID NOT AND HAS NOT SOUGHT TO RECOVER IN THIS PROCEEDING?

A. Yes. RUCO's Adjustment 6b removes incentive compensation of $179,100 that the Company never included in its requested expenses.

Q. WHERE DID RUCO'S MISUNDERSTANDING ORIGINATE?

A. In response to data request number RUCO 17.31, the Company suggested an intent to include an additional $179,100 in the Arizona Corporate labor expense. However, the Company has decided not to make a pro forma adjustment to its October 2014 filing, nor are we requesting such an adjustment at this time. Therefore, RUCO's removal is unnecessary.

Q. HAS RUCO ALSO VOICED CONCERNS ABOUT THE INCLUSION OF POOL B INCENTIVE COMPENSATION IN ITS REQUESTED EXPENSES?

A. Yes. RUCO expressed "that it is not entirely clear from the information provided to date by EPCOR" whether Pool B incentive compensation is included in the Company's filing. The Company did not include any Pool B incentive compensation in the filing for Arizona Corporate employees and clarifies further that only 90% of any eligible incentive pay for district employees and Arizona Corporate employees, has been included in the rebuttal Labor Expense line item.

B <u>DEPRECIATION EXPENSE</u>

Q. HAVE YOU REVIEWED THE DEPRECIATION EXPENSE ADJUSTMENTS PROPOSED BY THE ACC STAFF AND RUCO?

A. Yes, I have.

Q. WHAT IS THE COMPANY'S POSITION ON THE ADJUSTMENTS PROPOSED BY ACC STAFF AND RUCO?

A. The Company agrees that additional depreciation expense should not be computed on groups of assets where the net book value, that is the plant balance less the accumulated depreciation balance is less than or equal to $0. The Company has accepted the ACC Staff's adjustment no. 2 which is shown on Schedule C-2 for each district as ADJ SLH-2R.

1 **1 DEPRECIATION ON FULLY-DEPRECIATED ASSETS**

2 **Q. THE ACC STAFF AND RUCO HAVE PROPOSED AN ADJUSTMENT TO**
3 **REMOVE PLANT ASSETS FROM THE CALCULATION OF DEPRECIATION**
4 **EXPENSE ON THE BASIS THAT THEY DEEM THESE ASSETS TO BE FULLY**
5 **DEPRECIATED. DOES EWAZ AGREE WITH THIS ADJUSTMENT?**

6 A. Yes, on a prospective basis. It has been my experience that utility assets that are
7 depreciated using the group method of depreciation remain in service until they are
8 retired from service and the entire group of assets continues to be depreciated during that
9 time. The rationale for this is that other assets in the same depreciable group may not
10 realize the useful life that has been used in determining their depreciation rate. As a
11 result, the corresponding depreciation rate and the accumulated depreciation of all the
12 group's assets offset each other over time. However, once the net book value of the
13 group, plant in service less accumulated depreciation, reaches $0, depreciation should
14 cease. The Company's witness, Mr. John F. Guastella discusses this issue in greater
15 detail in his rebuttal testimony.

16 Q. **DID THIS ISSUE ARISE IN THE CHAPARRAL CITY WATER CASE?**

17 A. Yes. However, the circumstances were somewhat different and the problem was resolved
18 by modifying the depreciation rates. There were two asset groups, pumping equipment
19 and transportation equipment, that the ACC Staff recommended no depreciation expense
20 because they would be fully depreciated in a few years. The Company proposed longer
21 depreciable lives for these accounts which the Commission accepted in that case.

22 **Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 2 RECOMMENDS**
23 **A DECREASE TO DEPRECIATION EXPENSE IN ALL DISTRICTS. DOES**
24 **THE COMPANY AGREE WITH THIS ADJUSTMENT?**

A. ACC Staff has proposed adjustments to depreciation expense totaling $449,904 for all five districts. The Company has calculated that $332,056 of this adjustment relates to depreciation expense on groups of assets that at the end of the test year in this case are fully depreciated assets, $43,141 is the associated amortization of the regulatory assets associated with the Company's request for a 24-month deferral of Post In-Service AFUDC and depreciation, $69,676 relates to the amortization of Regulatory assets, $5,700 relates to differences between the ACC Staff's CIAC balances and composite depreciation rate and the Company's, and $669 from rounding.

The Company acknowledges and accepts conforming adjustments to depreciation expense on fully depreciated assets and the portion of Tubac Water's regulatory asset amortization related to arsenic media replacement costs provided such costs may be recovered through a surcharge mechanism over the next three years. The Company believes the regulatory asset amortization of Mummy Mountain Acquisition costs in Paradise Valley, Sun City Fire Hydrant testing and Fire Flow costs in Sun City Water (as ordered in Decision No. 67093) and Y2K preparation costs and a depreciation study where applicable to the five districts should be included and accepted in the Company's calculation of depreciation expense.

In addition, the Company is adjusting its request related to the 24-month deferral of Post In-Service AFUDC and depreciation. In Adj. SM-12R, the Company revises its calculation of the deferral and the associated amortization of the deferral to incorporate actual plant completed during the 24-month period and uses the composite depreciation rates from the last rate case for each district. In addition, adjustments to reflect actual contributions in aid of construction have been included for the 24-month period. If the Commission approves the Company's request for the 24-month deferral of Post In-

Service AFUDC and depreciation, the associated amortization included in the Company's request should also be reflected in the calculation of total depreciation expense.

A. AMORTIZATION OF 24-MONTH DEFERRAL

Q. AS DISCUSSED ABOVE, BOTH THE ACC STAFF AND RUCO ARE OPPOSED TO INCLUSION OF THE 24-MONTH DEFERRAL OF AFUDC AND DEPRECIATION AND THE ASSOCIATED AMORTIZATION OF THE BALANCE OF THAT DEFERRAL. WHAT IS THE COMPANY'S POSITION?

A. As discussed above in conjunction with Company's position on the inclusion in Rate Base of the 24-month deferral of AFUDC and depreciation, including the regulatory asset and providing an amortization to expense alleviates some of the regulatory lag inherent in the current process seeking rate relief for water utilities.

VIII. ADJUSTOR MECHANISMS

Q. RUCO RECOMMENDS DENIAL OF THE COMPANY'S REQUEST FOR A POWER COST ADJUSTMENT MECHANISM. WHAT IS THE COMPANY'S RESPONSE?

A. RUCO bases its denial of the Company's request for a power cost adjustment mechanism on its assertion that the Company has not met "adjustor mechanism criteria laid-out by the Commission" and there "simply has not been shown that there is a need for it". RUCO does, however, acknowledge that the cost of power has increased.

Q. IF THE COMMISSION TRULY WANTS TO PROVIDE WATER COMPANIES WITH RELIEF FROM REGULATORY LAG, AREN'T MECHANISMS SUCH AS A POWER COST ADJUSTOR MECHANISM A REASONABLE TOOL FOR THE COMMISSION TO USE?

A. Yes. A mechanism such as a power cost adjustor mechanism can enable a water utility to recover the changes in the costs of power that it has little control over, but are passed on from the power companies through fuel and power adjustment mechanisms. It should be noted that ACC Staff supports the Company's request for a power cost adjustor mechanism.

Q. RUCO ALSO RECOMMENDS DENIAL OF THE COMPANY'S REQUEST FOR AN AFFORDABLE HEALTH CARE COST ADJUSTOR. DOES THE COMPANY AGREE WITH RUCO'S POSITION?

A. When the Affordable Care Act adjustor mechanism was proposed by the Company, changes in costs due to this federally-directed program were a looming, potentially costly expense outside of the Company's control. An adjustor mechanism is the perfect vehicle to enable recovery of the potential large cost increases associated with that program and a reasonable option for the Commission to authorize. The Company is continuing to assess the impact the Affordable Care Act will have on its health care costs and continues to seek the approval of its request for the Affordable Care Act adjustor mechanism.

Q. REGARDING THE SIB ADJUSTOR MECHANISM, BOTH MR. MEASE ON BEHALF OF RUCO AND MR. THORNTON ON BEHALF OF THE RESORTS, QUESTION WHETHER THE SIB MECHANISM INCLUDES A RATE BASE ADJUSTMENT FOR ACCUMULATED DEPRECIATION. HOW DOES THE COMPANY RESPOND?

A. Based on a review of the SIB Plan of Administration submitted in compliance with the Chaparral City Water Company decision authorizing a SIB mechanism, there is an offset for accumulated depreciation based on a half-year convention for computing the

depreciation expense in the determination of rate base for purposes of calculating the revenue requirement.

Q. MR. THORNTON'S TESTIMONY REFERS TO CONCERNS PERTAINING TO LABOR EXPENSES AND OVERHEAD CHARGES THAT MAY BE DOUBLE-COUNTED BY INCLUSION IN SIB PROJECTS. HOW DOES THE COMPANY RESPOND?

A. Mr. Thornton specifically refers to Company labor for field services and oversight and Company labor for project management as potentially double counted in the SIB surcharge mechanism. These types of labor charges are typically capitalized with the projects that they are related to and as such are not part of labor costs reflected in the operating and maintenance expenses in the Company's revenue requirement calculation and as such would not be double counted. The same is true of overhead charges that are capitalized in the normal course of business.

Q. RUCO ALSO CLAIMS THAT CERTAIN CAP EXPENSES ARE NOT ACCOUNTED FOR CORRECTLY. HOW DOES THE COMPANY RESPOND?

A. The Company is recording its CAP expenses in accordance with Generally Accepted Accounting Principles (GAAP) to reflect the over- or under-recovery of its costs to purchase CAP water outstanding at any reporting period. The Company has been using this accounting for many years and has filed annual reconciliations of the revenue collected and expenses incurred which are subject to reviews by ACC Staff based on this accounting. The accounting that has been in use has not been an issue with which ACC Staff has taken issue in its Staff Reports authorizing the annual changes in CAP surcharges.

Q. HAVE YOU RESPONDED TO EVERY RECOMMENDATION PROPOUNDED BY ALL OF THE PARTIES TO THIS PROCEEDING?

A. No, and my failure to respond to any issue should not be construed as acceptance of that issue.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

EXHIBIT SLH – 1R

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman

GARY PIERCE
Commissioner

BRENDA BURNS
Commissioner

SUSAN BITTER SMITH
Commissioner

BOB BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA, INC. FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	**DOCKET NO. WS-01303A-14-0010** **NOTICE OF FILING SCHEDULES**

LEWIS ROCA ROTHGERBER
201 E. Washington St., Suite 1200
Phoenix, AZ 85004-2595

At the request of Commission Staff, EPCOR Water Arizona, Inc. is docketing certain revised schedules based on its discussions with Commission Staff and RUCO and related data responses. The revised schedules are as follows:

I. Revised Schedules for all districts (unless noted):

- A-1, A-2, A-5,
- B-1, B-2, B-5, B-6
- C-1, C-2
- D-1 (pp. 1-2) – Tubac only
- D-1 (p. 2)
- D-2 – Tubac only
- E-1--Sun City Water only (Reclass Other Credit amount of $60,803 to AIAC)
- E-2
- F-1, F-2

- G
- H-1 through H-4

II. Rate Base Adjustments for all Districts (unless noted):

Revisions of roll-forwards resulted in the plant and accumulated depreciation adjustments below:

- RB ADJ SLH-10 Beginning Balance Pro Forma
- RB ADJ SLH-11 Additional YE Pro Forma
- RB ADJ SLH-12 Post Test Year Pro Forma
- B-5--Material and Supplies updated (Mohave Water, Mohave Wastewater and Sun City Water only)
- B-6--Revised Expense Lag Days (all districts)

III. Income Statement Adjustments for all Districts unless noted:

- IS SM-40 Revised Depreciation
- IS SM-41 Reclass Water Testing Expense
- IS SM-42 Reclass Adj SM-10
- IS SM-43 Update Regulatory Expense
- IS SM-44 Reclass Group Insurance (Tubac Water only)
- IS SM-45 Update Miscellaneous Expense (Mohave Water only)

IV. Income Statement Conforming adjustments:

- IS SM-14 REV Federal and State Income Tax
- IS SM-16 REV Interest Synchronization

RESPECTFULLY SUBMITTED this 14th day of October, 2014.

LEWIS ROCA ROTHGERBER, LLP

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Attorneys for EPCOR Water Arizona, Inc.

ORIGINAL AND thirteen (13) copies of the foregoing hand-delivered this 14th day of October, 2014, to:

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Copy of the foregoing hand-delivered
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Scottsdale Resort & Spa at Montelucia

Marshall Magruder
P.O. Box 1267
Tubac, AZ 85646-1267

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EXHIBIT SLH – 2R

EPCOR WATER ARIZONA - TOTAL OF ALL 5 DISTRICTS
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

Line No.		[A] Company Direct @ 10.7% ROE	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted @10.55% ROE	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1	Original Cost Rate Base	$ 96,199,100	$ (59,326)	$ 96,139,774	$ (5,826,030)	$ 90,373,070	$ (15,818,604)	$ 80,380,496
2								
3	Adjusted Operating Income	$ 3,412,691	$ 428,075	$ 3,840,767	$ 833,014	$ 4,245,705 (a)	$ 1,384,603	$ 4,797,294
4								
5	Current Rate of Return	3.55%		3.99%		4.70%		5.97%
6								
7	Required Operating Income	$ 6,608,878		$ 6,547,119		$ 5,783,876		$ 4,895,172
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 3,196,187		$ 2,706,352		$ 1,538,171		$ 97,885
12								
13	Gross Revenue Conversion Factor	1.6508		1.6419		1.6257		1.2698
14								
15	**Increase in Gross Revenue Requirement**	**$ 5,276,155**		**$ 4,443,437**		**$ 2,508,541** (a)		**$ 124,299**
16								
17	Test Year Adjusted Present Rate Revenue	$ 27,903,131		$ 27,992,123		$ 27,968,724		$ 28,344,937
18								
19	**Percent Rate Increase**	**18.91%**		**15.87%**		**8.97%**		**0.44%**

(a) ACC Staff's Miscellaneous Expense Adjustment does not use the Company's October 14, 2014 filed amount of $6,577 for Tubac, so Revenue Increase is slightly different than their filing.

EPCOR WATER ARIZONA - MOHAVE WATER
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

		[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Company			Staff		RUCO	
			Rebuttal		Direct		Direct	
Line No.		Company @ 10.7% ROE	Rebuttal Adjustments	As Adjusted	Adjustments to Company Direct	As Adjusted	Adjustments to Company Direct	As Adjusted
1	Original Cost Rate Base	$ 23,496,514	$ 66,355	$ 23,562,869	$ (1,135,595)	$ 22,360,919	$ (7,327,265)	$ 16,169,249
2								
3	Adjusted Operating Income	$ 416,266	$ 34,986	$ 451,252	$ 177,788	$ 594,054	$ 403,332	$ 819,598
4								
5	Current Rate of Return	1.77%		1.92%		2.66%		5.07%
6								
7	Required Operating Income	$ 1,614,211		$ 1,604,631		$ 1,431,099		$ 984,707
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 1,197,945		$ 1,153,380		$ 837,045		$ 165,112
12								
13	Gross Revenue Conversion Factor	1.6469		1.6382		1.6257		1.6378
14								
15	Increase in Gross Revenue Requirement	$ 1,972,914		$ 1,889,415		$ 1,360,784		$ 270,427
16								
17	Test Year Adjusted Present Rate Revenue	$ 6,354,293		$ 6,389,776		$ 6,389,776		$ 6,455,475
18								
19	Percent Rate Increase	31.05%		29.57%		21.30%		4.19%

EPCOR WATER ARIZONA - PARADISE VALLEY WATER
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

		[A]	[B]	[C]	[D]	[E]	[F]	[G]
			Company		Staff		RUCO	
			Rebuttal		Direct		Direct	
Line No.		Company @ 10.7% ROE	Rebuttal Adjustments	As Adjusted	Adjustments to Company Direct	As Adjusted	Adjustments to Company Direct	As Adjusted
1	Original Cost Rate Base	$ 39,380,442	$ (378,875)	$ 39,001,567	$ (2,231,450)	$ 37,148,992	$ (3,883,888)	$ 35,496,554
2								
3	Adjusted Operating Income	$ 2,193,723	$ 103,299	$ 2,297,022	$ 189,831	$ 2,383,554	$ 353,700	$ 2,547,423
4								
5	Current Rate of Return	5.57%		5.89%		6.42%		7.18%
6								
7	Required Operating Income	$ 2,705,436		$ 2,656,007		$ 2,377,535		$ 2,161,740
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 511,713		$ 358,985		$ (6,019)		$ (385,680)
12								
13	Gross Revenue Conversion Factor	1.6442		1.6354		1.6257		1.6350
14								
15	Increase in Gross Revenue Requirement	$ 841,337		$ 587,088		$ (9,784)		$ (630,578)
16								
17	Test Year Adjusted Present Rate Revenue	$ 9,648,251		$ 9,657,395		$ 9,648,251		$ 9,797,436
18								
19	Percent Rate Increase	8.72%		6.08%		-0.10%		-6.44%

EPCOR WATER ARIZONA - SUN CITY WATER
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

Line No.		[A] Company @ 10.7% ROE	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1	Original Cost Rate Base	$ 26,409,286	$ 257,389	$ 26,666,676	$ (1,619,179)	$ 24,790,107	$ (3,665,291)	$ 22,743,995
2								
3	Adjusted Operating Income	$ 843,696	$ 219,279	$ 1,062,975	$ 336,923	$ 1,180,619	$ 543,547	$ 1,387,243
4								
5	Current Rate of Return	3.19%		3.99%		4.76%		6.10%
6								
7	Required Operating Income	$ 1,814,318		$ 1,816,001		$ 1,586,567		$ 1,385,109
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 970,622		$ 753,026		$ 405,948		$ (2,131)
12								
13	Gross Revenue Conversion Factor	1.6550		1.6462		1.6257		1.6459
14								
15	Increase in Gross Revenue Requirement	$ 1,606,392		$ 1,239,639		$ 659,949		$ (3,507)
16								
17	Test Year Adjusted Present Rate Revenue	$ 10,265,553		$ 10,309,919		$ 10,295,663		$ 10,498,798
18								
19	Percent Rate Increase	15.65%		12.02%		6.41%		-0.03%

EPCOR WATER ARIZONA - TUBAC WATER
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

Line No.		[A] Company @ 10.7% ROE	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1	Original Cost Rate Base	$ 1,607,775	$ (64,727)	$ 1,543,048	$ (170,110)	$ 1,437,665	$ (131,831)	$ 1,475,944
2								
3	Adjusted Operating Income	$ (131,793)	$ 66,795	$ (64,998)	$ 104,858	$ (26,935) (a)	$ 60,329	$ (71,464)
4								
5	Current Rate of Return	-8.20%		-4.21%		-1.87%		-4.84%
6								
7	Required Operating Income	$ 110,454		$ 105,082		$ 92,011		$ 89,885
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 242,247		$ 170,080		$ 118,946		$ 161,352
12								
13	Gross Revenue Conversion Factor	1.6589		1.6501		1.6404		1.4456
14								
15	Increase in Gross Revenue Requirement	$ 401,874		$ 280,652		$ 195,118 (a)		$ 233,251
16								
17	Test Year Adjusted Present Rate Revenue	$ 579,194		$ 579,194		$ 579,194		$ 537,388
18								
19	Percent Rate Increase	69.39%		48.46%		33.69%		43.40%

(a) ACC Staff's Miscellaneous Expense Adjustment does not use the Company's October 14, 2014 filed amount of $6,577 for Tubac, so Revenue Increase is slightly different than their filing.

EPCOR WATER ARIZONA - MOHAVE WASTEWATER
Rebuttal Summary of Schedule A-1s
Computation of Increase in Gross Revenue Requirement
Test Year Ended June 30, 2013

		[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Company			Staff		RUCO	
			Rebuttal		Direct		Direct	
Line No.		Company @ 10.7% ROE	Rebuttal Adjustments	As Adjusted	Adjustments to Company Direct	As Adjusted	Adjustments to Company Direct	As Adjusted
1	Original Cost Rate Base	$ 5,305,082	$ 60,532	$ 5,365,614	$ (669,696)	$ 4,635,386	$ (810,329)	$ 4,494,753
2								
3	Adjusted Operating Income	$ 90,799	$ 3,718	$ 94,517	$ 23,614	$ 114,413	$ 23,695	$ 114,494
4								
5	Current Rate of Return	1.71%		1.76%		2.47%		2.55%
6								
7	Required Operating Income	$ 364,459		$ 365,398		$ 296,665		$ 273,730
8								
9	Required Rate of Return	6.87%		6.81%		6.40%		6.09%
10								
11	Operating Income Deficiency	$ 273,660		$ 270,881		$ 182,251		$ 159,239
12								
13	Gross Revenue Conversion Factor	1.6577		1.6489		1.6257		1.5996
14								
15	Increase in Gross Revenue Requirement	$ 453,638		$ 446,643		$ 296,286		$ 254,720
16								
17	Test Year Adjusted Present Rate Revenue	$ 1,055,839		$ 1,055,839		$ 1,055,839		$ 1,055,839
18								
19	Percent Rate Increase	42.96%		42.30%		28.06%		24.12%

EPCOR WATER ARIZONA - TOTAL OF ALL 5 DISTRICTS
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1								
2	Gross Utility Plant in Service	$ 211,204,524	$ -	$ 211,204,524	$ 113,654	$ 211,318,178	$ (10,076,793)	$ 201,127,731
3								
4	Less:							
5								
6	Accumulated Depreciation	68,306,105	-	68,306,105	2,826,903	71,133,008	(2,042,685)	66,263,420
7								
8	Net Utility Plant in Service	142,898,420	-	142,898,420	(2,713,249)	140,185,171	(8,034,108)	134,864,312
9								
10	Less:							
11		-	-	-	-	-	-	-
12	Advances in Aid of Construction							
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	27,831,617	-	27,831,617	1,191,249	29,022,866	1,191,249	29,022,866
16								
17	Customer Meter Deposits	37,502	-	37,502	-	37,502	-	37,502
18	Deferred Income Taxes & Credits	2,012,387	-	2,012,387	-	2,012,387	-	2,012,387
19	Investment Tax Credits	39,646	-	39,646	-	39,646	-	39,646
20	Regulatory Liabilities	196,779	(196,779)	0	(196,779)	0	4,511,728	4,708,507
21								
22	Plus:							
23	Deferred Debits	1,989,807	(256,476)	1,733,331	(1,989,808)	(1)	(1,908,438)	81,369
24	Working Capital Allowance	239,113	371	239,484	(59,334)	179,779	(103,912)	135,201
25	Utility Plant Acquisition Adjustment	-	-	-	-	-	-	-
26								
27								
28	**Total Rate Base**	**96,199,100**	**(59,326)**	**96,139,774**	**(5,826,030)**	**90,373,070**	**(15,818,604)**	**80,380,496**

EPCOR WATER ARIZONA - MOHAVE WATER
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1								
2	Gross Utility Plant in Service	$ 46,731,131	$ -	$ 46,731,131		$ 46,731,131	$ (6,121,255)	$ 40,609,876
3				-		-		-
4	Less:							
5								
6	Accumulated Depreciation	15,934,125	-	15,934,125	279,644	16,213,769	(1,016,767)	14,917,358
7								
8	Net Utility Plant in Service	$ 30,797,006	$ -	$ 30,797,006	$ (279,644)	$ 30,517,362	$ (5,104,488)	$ 25,692,518
9								
10	Less:							
11								
12	Advances in Aid of Construction	$ 7,012,710	$ -	$ 7,012,710	$ 69,169	$ 7,081,879	$ 69,169	$ 7,081,879
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	481,135	-	481,135		481,135		481,135
16								
17	Customer Meter Deposits	8,257	-	8,257		8,257		8,257
18	Deferred Income Taxes & Credits	696,852	-	696,852		696,852		696,852
19	Investment Tax Credits	-	-	-		-		-
20	Regulatory Liabilities	106,450	(106,450)	(0)	(106,450)	(0)	1,265,114	1,371,564
21								
22	Plus:							
23	Deferred Debits	873,903	(42,994)	830,910	(873,903)	0	(873,903)	0
24	Working Capital Allowance	131,008	2,899	133,907	(19,329)	111,679	(14,591)	116,417
25	Utility Plant Acquisition Adjustment	-	-	-		-		-
26								
27								
28	**Total Rate Base**	**$ 23,496,514**	**$ 66,355**	**$ 23,562,869**	**$ (1,135,595)**	**$ 22,360,919**	**$ (7,327,265)**	**$ 16,169,249**

EPCOR WATER ARIZONA - PARADISE VALLEY WATER
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal: Rebuttal Adjustments	[C] Company Rebuttal: As Adjusted	[D] Staff Direct: Adjustments to Company Direct	[E] Staff Direct: As Adjusted	[F] RUCO Direct: Adjustments to Company Direct	[G] RUCO Direct: As Adjusted
1								
2	Gross Utility Plant in Service	$ 73,128,007	$ -	$ 73,128,007	$ 15,161	$ 73,143,168	$ (1,639,177)	$ 71,488,830
3				-		-		-
4	Less:							
5								
6	Accumulated Depreciation	23,455,384	-	23,455,384	1,416,773	24,872,157	961,222	24,416,606
7								
8	Net Utility Plant in Service	$ 49,672,623	$ -	$ 49,672,623	$ (1,401,612)	$ 48,271,011	$ (2,600,399)	$ 47,072,224
9								
10	Less:							
11								
12	Advances in Aid of Construction	$ 1,554,766	$ -	$ 1,554,766		$ 1,554,766		$ 1,554,766
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	9,259,772	-	9,259,772	43,632	9,303,404	43,632	9,303,404
16								
17	Customer Meter Deposits	23,819	-	23,819		23,819		23,819
18	Deferred Income Taxes & Credits	212,749	-	212,749		212,749		212,749
19	Investment Tax Credits	39,646	-	39,646		39,646		39,646
20	Regulatory Liabilities	-	-	-		-	426,346	426,346
21								
22	Plus:							
23	Deferred Debits	778,686	(381,529)	397,156	(778,686)	(0)	(778,686)	(0)
24	Working Capital Allowance	19,885	2,655	22,540	(7,520)	12,365	(34,825)	(14,940)
25	Utility Plant Acquisition Adjustment	-	-	-		-		-
26								
27								
28	**Total Rate Base**	**$ 39,380,442**	**$ (378,875)**	**$ 39,001,567**	**$ (2,231,450)**	**$ 37,148,992**	**$ (3,883,888)**	**$ 35,496,554**

EPCOR WATER ARIZONA - SUN CITY WATER
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1								
2	Gross Utility Plant in Service	$ 76,011,241	$ -	$ 76,011,241	$ 98,493	$ 76,109,734	$ (1,941,674)	$ 74,069,567
3				-		-		-
4	Less:							
5								
6	Accumulated Depreciation	26,280,898	-	26,280,898	715,283	26,996,181	(2,117,287)	24,163,611
7								
8	Net Utility Plant in Service	$ 49,730,343	$ -	$ 49,730,343	$ (616,790)	$ 49,113,553	$ 175,613	$ 49,905,956
9								
10	Less:							
11								
12	Advances in Aid of Construction	$ 6,374,283	$ -	$ 6,374,283		$ 6,374,283		$ 6,374,283
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	16,125,275	-	16,125,275	845,933	16,971,208	845,933	16,971,208
16								
17	Customer Meter Deposits	4,903	-	4,903		4,903		4,903
18	Deferred Income Taxes & Credits	1,014,247	-	1,014,247		1,014,247		1,014,247
19	Investment Tax Credits	-	-	-		-		-
20	Regulatory Liabilities	90,329	(90,329)	0	(90,329)	0	2,732,719	2,823,048
21								
22	Plus:							
23	Deferred Debits	225,112	167,250	392,361	(225,112)	(0)	(225,112)	(0)
24	Working Capital Allowance	62,870	(190)	62,681	(21,673)	41,197	(37,140)	25,730
25	Utility Plant Acquisition Adjustment	-	-	-		-		-
26								
27								
28	**Total Rate Base**	**$ 26,409,286**	**$ 257,389**	**$ 26,666,676**	**$ (1,619,179)**	**$ 24,790,107**	**$ (3,665,291)**	**$ 22,743,995**

EPCOR WATER ARIZONA - TUBAC WATER
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1								
2	Gross Utility Plant in Service	$ 6,467,719	$ -	$ 6,467,719		$ 6,467,719	$ (272,065)	$ 6,195,654
3				-		-		-
4	Less:							
5								
6	Accumulated Depreciation	1,942,238	-	1,942,238	1,877	1,944,115	(278,631)	1,663,607
7								
8	Net Utility Plant in Service	$ 4,525,481	$ -	$ 4,525,481	$ (1,877)	$ 4,523,604	$ 6,566	$ 4,532,047
9								
10	Less:							
11								
12	Advances in Aid of Construction	$ 1,952,127	$ -	$ 1,952,127		$ 1,952,127		$ 1,952,127
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	1,030,362	-	1,030,362	74,010	1,104,372	74,010	1,104,372
16								
17	Customer Meter Deposits	517	-	517		517		517
18	Deferred Income Taxes & Credits	26,304	-	26,304		26,304		26,304
19	Investment Tax Credits	-	-	-		-		-
20	Regulatory Liabilities	-	-	-		-	55,990	55,990
21								
22	Plus:							
23	Deferred Debits	83,390	(60,009)	23,381	(83,390)	(0)	(2,020)	81,370
24	Working Capital Allowance	8,215	(4,719)	3,496	(10,833)	(2,618)	(6,377)	1,838
25	Utility Plant Acquisition Adjustment	-	-	-		-		-
26								
27								
28	**Total Rate Base**	**$ 1,607,775**	**$ (64,727)**	**$ 1,543,048**	**$ (170,110)**	**$ 1,437,665**	**$ (131,831)**	**$ 1,475,944**

EPCOR WATER ARIZONA - MOHAVE WASTEWATER
Rebuttal Summary of Schedule B-1s
Summary of Fair Value Rate Base
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1								
2	Gross Utility Plant in Service	$ 8,866,427	$ -	$ 8,866,427		$ 8,866,427	$ (102,622)	$ 8,763,805
3				-		-		-
4	Less:							
5								
6	Accumulated Depreciation	693,460	-	693,460	413,326	1,106,786	408,778	1,102,238
7								
8	Net Utility Plant in Service	$ 8,172,966	$ -	$ 8,172,966	$ (413,326)	$ 7,759,640	$ (511,400)	$ 7,661,566
9								
10	Less:							
11								
12	Advances in Aid of Construction	$ 1,916,421	$ -	$ 1,916,421		$ 1,916,421		$ 1,916,421
13								
14	Contribution in Aid of Construction -							
15	Net of Amortization	935,072	-	935,072	227,674	1,162,746	227,674	1,162,746
16								
17	Customer Meter Deposits	5	-	5		5		5
18	Deferred Income Taxes & Credits	62,236	-	62,236		62,236		62,236
19	Investment Tax Credits	-	-	-		-		-
20	Regulatory Liabilities	-	-	-		-	31,559	31,559
21								
22	Plus:							
23	Deferred Debits	28,717	60,806	89,523	(28,717)	(0)	(28,717)	(0)
24	Working Capital Allowance	17,134	(274)	16,860	21	17,155	(10,979)	6,155
25	Utility Plant Acquisition Adjustment	-	-	-		-		-
26								
27								
28	**Total Rate Base**	**$ 5,305,082**	**$ 60,532**	**$ 5,365,614**	**$ (669,696)**	**$ 4,635,386**	**$ (810,329)**	**$ 4,494,753**

EPCOR WATER ARIZONA - TOTAL OF ALL 5 DISTRICTS
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Rebuttal Adjustments	[C] As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] As Adjusted
		Company	Rebuttal		Staff		RUCO	
1	**Revenues**							
2	Water Revenues	$ 27,451,849	$ 88,992	$ 27,540,841	$ 65,593	$ 27,517,442	$ 441,806	$ 27,893,655
3	Other Revenues	451,282	-	451,282	-	451,282	-	451,282
4				-		-		-
5		$ 27,903,131	$ 88,992	$ 27,992,123	$ 65,593	$ 27,968,724	$ 441,806	$ 28,344,937
6	**Operating Expenses**							
7	Labor	$ 4,754,876	$ (23,076)	$ 4,731,800	$ (230,761)	$ 4,524,115	$ -	$ 4,754,876
8	Purchased Water	26,831	-	26,831	-	26,831	700,753	727,584
9	Fuel & Power	3,513,444	3,638	3,517,081	-	3,513,444	(39,282)	3,474,162
10	Chemicals	214,775	(50,771)	164,003	(98,934)	115,841	(47,821)	166,954
11	Waste Disposal	62,983	-	62,983	-	62,983	-	62,983
12	Intercompany Support Services	3,462	-	3,462	-	3,462	-	3,462
13	Corporate Allocation	1,264,944	(90,897)	1,174,047	(286,719)	978,225	(479,103)	785,841
14	Outside Services	767,997	-	767,997	(19,288)	748,709	-	767,997
15	Group Insurance	1,322,188	-	1,322,188	-	1,322,188	-	1,322,188
16	Pensions	18,029	-	18,029	(15,619)	2,410	-	18,029
17	Regulatory Expense	272,683	-	272,683	(23,147)	249,536	(108,335)	164,348
18	Insurance Other Than Group	555,336	-	555,336	-	555,336	-	555,336
19	Customer Accounting	1,687,109	27,955	1,715,064	(76,569)	1,610,540	14,092	1,701,201
20	Rents	108,948	-	108,948	-	108,948	-	108,948
21	General Office Expense	642,158	(27,705)	614,453	(79,236)	562,922	-	642,158
22	Miscellaneous	611,450	53	611,503	120	611,570 (a)	-	611,450
23	Maintenance Expense	1,185,325	(50,700)	1,134,625	(63,908)	1,121,417	(185,851)	999,474
24	Depreciation & Amortization	5,352,957	(385,347)	4,967,610	(449,903)	4,903,054	(1,910,369)	3,442,588
25	General Taxes-Property	1,017,530	3,098	1,020,628	1,914	1,019,444	(7,845)	1,009,685
26	General Taxes-Other	518,061	-	518,061	-	518,061	-	518,061
27	Income Taxes	589,355	254,670	844,025	574,628	1,163,983	1,120,964	1,710,319
28								
29	**Total Operating Expenses**	$ 24,490,439	$ (339,083)	$ 24,151,356	$ (767,422)	$ 23,723,017	$ (942,797)	$ 23,547,642
30	Utility Operating Income	$ 3,412,691	$ 428,075	$ 3,840,767	$ 833,015	$ 4,245,706	$ 1,384,603	$ 4,797,294
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-	-	-	-	-
33	Interest Expense	2,462,858	(8,114)	2,454,744	-	2,462,858	-	2,462,858
34	Other Expense	-	-	-	-	-	-	-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-	-	-	-	-
36	**Total Other Income & Deductions**	$ (2,462,858)	$ 8,114	$ (2,454,744)	$ -	$ (2,462,858)	$ -	$ (2,462,858)
37	**Net Profit (Loss)**	$ 949,833	$ 436,190	$ 1,386,023	$ 833,015	$ 1,782,848	$ 1,384,603	$ 2,334,436

(a) ACC Staff's Miscellaneous Expense Adjustment does not use the Company's October 14, 2014 filed amount of $6,577 for Tubac, so Revenue Increase is slightly different than their filing.

EPCOR WATER ARIZONA - MOHAVE WATER
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1	**Revenues**							
2	Water Revenues	$ 6,132,996	$ 35,483	$ 6,168,480	$ 35,483	$ 6,168,479	$ 101,182	$ 6,234,178
3	Other Revenues	221,297	-	221,297		221,297		221,297
4				-		-		-
5		$ 6,354,293	$ 35,483	$ 6,389,776	$ 35,483	$ 6,389,776	$ 101,182	$ 6,455,475
6	**Operating Expenses**							
7	Labor	$ 1,389,973	(6,331)	$ 1,383,642	(63,306)	$ 1,326,667		$ 1,389,973
8	Purchased Water	26,831	-	26,831		26,831	(52)	26,779
9	Fuel & Power	546,720	-	546,720		546,720	(1,638)	545,082
10	Chemicals	10,916	-	10,916		10,917	(49)	10,867
11	Waste Disposal	7,886	-	7,886		7,886		7,886
12	Intercompany Support Services	950	-	950		950		950
13	Corporate Allocation	347,018	(24,936)	322,082	(78,657)	268,361	(134,211)	212,807
14	Outside Services	192,587	-	192,587	(5,291)	187,296		192,587
15	Group Insurance	418,599	-	418,599		418,599		418,599
16	Pensions	6,694	-	6,694	(4,285)	2,409		6,694
17	Regulatory Expense	85,438	-	85,438	(15,667)	69,771	(29,720)	55,718
18	Insurance Other Than Group	101,045	-	101,045		101,045		101,045
19	Customer Accounting	581,279	50,590	631,868	(21,006)	560,273	(602)	580,677
20	Rents	16,923	-	16,923		16,923		16,923
21	General Office Expense	247,950	(9,248)	238,703	(21,737)	226,213		247,950
22	Miscellaneous	50,657	5,023	55,680	5,023	55,680		50,657
23	Maintenance Expense	377,160	-	377,160		377,160		377,160
24	Depreciation & Amortization	1,331,139	(37,471)	1,293,668	(60,978)	1,270,161	(501,828)	829,311
25	General Taxes-Property	163,376	906	164,282	906	164,282	(1,159)	162,217
26	General Taxes-Other	149,829	-	149,829		149,829		149,829
27	Income Taxes	(114,941)	21,964	(92,977)	122,693	7,752	367,109	252,168
28								
29	**Total Operating Expenses**	$ 5,938,027	$ 497	$ 5,938,524	$ (142,305)	$ 5,795,723	$ (302,150)	$ 5,635,877
30	Utility Operating Income	$ 416,266	$ 34,986	$ 451,252	$ 177,788	$ 594,053	$ 403,332	$ 819,598
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-		-		-
33	Interest Expense	601,511	1,698	603,209		601,511		601,511
34	Other Expense	-	-	-		-		-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-		-		-
36	**Total Other Income & Deductions**	$ (601,511)	$ (1,698)	$ (603,209)	$ -	$ (601,511)	$ -	$ (601,511)
37	**Net Profit (Loss)**	$ (185,245)	$ 33,288	$ (151,958)	$ 177,788	$ (7,458)	$ 403,332	$ 218,087

EPCOR WATER ARIZONA - PARADISE VALLEY WATER
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal Rebuttal Adjustments	[C] Company Rebuttal As Adjusted	[D] Staff Direct Adjustments to Company Direct	[E] Staff Direct As Adjusted	[F] RUCO Direct Adjustments to Company Direct	[G] RUCO Direct As Adjusted
1	**Revenues**							
2	Water Revenues	$ 9,589,273	$ 9,143	$ 9,598,416		$ 9,589,273	$ 149,185	$ 9,738,458
3	Other Revenues	58,978	-	58,978		58,978		58,978
4				-		-		-
5		$ 9,648,251	$ 9,143	$ 9,657,395	$ -	$ 9,648,251	$ 149,185	$ 9,797,436
6	**Operating Expenses**							
7	Labor	$ 1,205,431	(5,735)	$ 1,199,696	(57,346)	$ 1,148,085		$ 1,205,431
8	Purchased Water	-	-	-		-	151,278	151,278
9	Fuel & Power	1,329,578	219	1,329,797		1,329,578	(21,500)	1,308,078
10	Chemicals	58,805	10	58,815		58,805	2,073	60,878
11	Waste Disposal	15,320	-	15,320		15,320		15,320
12	Intercompany Support Services	860	-	860		860		860
13	Corporate Allocation	314,349	(22,589)	291,760	(71,252)	243,097	(118,248)	196,101
14	Outside Services	233,418	-	233,418	(4,793)	228,625		233,418
15	Group Insurance	321,965	-	321,965		321,965		321,965
16	Pensions	3,881	-	3,881	(3,881)	0		3,881
17	Regulatory Expense	66,802	-	66,802	(1,767)	65,035	(26,922)	39,880
18	Insurance Other Than Group	138,643	-	138,643		138,643		138,643
19	Customer Accounting	197,288	(5,261)	192,027	(19,028)	178,260	(832)	196,456
20	Rents	30,456	-	30,456		30,456		30,456
21	General Office Expense	132,498	(9,166)	123,332	(19,691)	112,807		132,498
22	Miscellaneous	91,440	954	92,394	954	92,394		91,440
23	Maintenance Expense	512,882	(50,700)	462,182	(63,908)	448,974	(185,851)	327,031
24	Depreciation & Amortization	1,608,655	(61,124)	1,547,531	(80,911)	1,527,744	(277,730)	1,330,925
25	General Taxes-Property	335,846	318	336,164		335,846	(2,503)	333,343
26	General Taxes-Other	120,776	-	120,776		120,776		120,776
27	Income Taxes	735,635	58,920	794,554	131,792	867,427	275,720	1,011,355
28								
29	**Total Operating Expenses**	$ 7,454,528	$ (94,155)	$ 7,360,373	$ (189,831)	$ 7,264,697	$ (204,515)	$ 7,250,013
30	Utility Operating Income	$ 2,193,723	$ 103,299	$ 2,297,022	$ 189,831	$ 2,383,554	$ 353,700	$ 2,547,423
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-		-		-
33	Interest Expense	1,008,139	(9,699)	998,440		1,008,139		1,008,139
34	Other Expense	-	-	-		-		-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-		-		-
36	**Total Other Income & Deductions**	$ (1,008,139)	$ 9,699	$ (998,440)	$ -	$ (1,008,139)	$ -	$ (1,008,139)
37	**Net Profit (Loss)**	$ 1,185,584	$ 112,997	$ 1,298,581	$ 189,831	$ 1,375,415	$ 353,700	$ 1,539,284

EPCOR WATER ARIZONA - SUN CITY WATER
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Company			Staff		RUCO	
			Rebuttal		Direct		Direct	
		Company Direct	Rebuttal Adjustments	As Adjusted	Adjustments to Company Direct	As Adjusted	Adjustments to Company Direct	As Adjusted
1	**Revenues**							
2	Water Revenues	$ 10,103,166	$ 44,365	$ 10,147,531	$ 30,110	$ 10,133,276	$ 233,245	$ 10,336,411
3	Other Revenues	162,387	-	162,387		162,387		162,387
4				-		-		-
5		$ 10,265,553	$ 44,365	$ 10,309,919	$ 30,110	$ 10,295,663	$ 233,245	$ 10,498,798
6	**Operating Expenses**							
7	Labor	$ 1,711,461	(9,305)	$ 1,702,156	(93,051)	$ 1,618,410		$ 1,711,461
8	Purchased Water	-	-	-		-	549,527	549,527
9	Fuel & Power	1,557,580	3,419	1,560,999		1,557,580	(17,438)	1,540,142
10	Chemicals	34,119	75	34,194		34,120	887	35,006
11	Waste Disposal	4,661	-	4,661		4,661		4,661
12	Intercompany Support Services	1,396	-	1,396		1,396		1,396
13	Corporate Allocation	510,069	(36,653)	473,416	(115,615)	394,454	(190,111)	319,958
14	Outside Services	280,698	-	280,698	(7,778)	272,920		280,698
15	Group Insurance	490,722	-	490,722		490,722		490,722
16	Pensions	6,298	-	6,298	(6,298)	0		6,298
17	Regulatory Expense	101,188	-	101,188	(2,867)	98,321	(43,684)	57,504
18	Insurance Other Than Group	288,791	-	288,791		288,791		288,791
19	Customer Accounting	834,153	(19,633)	814,520	(30,875)	803,278	12,480	846,633
20	Rents	45,805	-	45,805		45,805		45,805
21	General Office Expense	212,603	(6,432)	206,172	(31,950)	180,653		212,603
22	Miscellaneous	462,692	(5,853)	456,839	(5,853)	456,839		462,692
23	Maintenance Expense	205,746	-	205,746		205,746		205,746
24	Depreciation & Amortization	1,916,821	(231,098)	1,685,724	(237,803)	1,679,018	(1,015,921)	900,900
25	General Taxes-Property	434,142	1,875	436,016	1,276	435,418	(153)	433,989
26	General Taxes-Other	218,906	-	218,906		218,906		218,906
27	Income Taxes	104,004	128,692	232,696	224,001	328,005	394,111	498,115
28								
29	**Total Operating Expenses**	$ 9,421,857	$ (174,913)	$ 9,246,944	$ (306,813)	$ 9,115,045	$ (310,302)	$ 9,111,555
30	Utility Operating Income	$ 843,696	$ 219,279	$ 1,062,975	$ 336,923	$ 1,180,618	$ 543,547	$ 1,387,243
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-		-		-
33	Interest Expense	676,078	-	676,078		676,078		676,078
34	Other Expense	-	-	-		-		-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-		-		-
36	**Total Other Income & Deductions**	$ (676,078)	$ -	$ (676,078)	$ -	$ (676,078)	$ -	$ (676,078)
37	**Net Profit (Loss)**	$ 167,618	$ 219,279	$ 386,897	$ 336,923	$ 504,540	$ 543,547	$ 711,165

EPCOR WATER ARIZONA - TUBAC WATER
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal: Rebuttal Adjustments	[C] Company Rebuttal: As Adjusted	[D] Staff Direct: Adjustments to Company Direct	[E] Staff Direct: As Adjusted	[F] RUCO Direct: Adjustments to Company Direct	[G] RUCO Direct: As Adjusted
1	**Revenues**							
2	Water Revenues	$ 574,204	$ -	$ 574,204		$ 574,204	$ (41,806)	$ 532,398
3	Other Revenues	4,990	-	4,990		4,990		4,990
4				-		-		-
5		$ 579,194	$ -	$ 579,194	$ -	$ 579,194	$ (41,806)	$ 537,388
6	**Operating Expenses**							
7	Labor	$ 179,440	(635)	$ 178,805	(6,351)	$ 173,089		$ 179,440
8	Purchased Water	-	-	-		-		-
9	Fuel & Power	33,324	-	33,324		33,324	1,316	34,640
10	Chemicals	98,934	(50,856)	48,078	(98,934)	(0)	(50,732)	48,202
11	Waste Disposal	811	-	811		811		811
12	Intercompany Support Services	95	-	95		95		95
13	Corporate Allocation	34,814	(2,502)	32,313	(7,891)	26,923	(14,980)	19,834
14	Outside Services	26,870	-	26,870	(531)	26,339		26,870
15	Group Insurance	37,821	-	37,821		37,821		37,821
16	Pensions	430	-	430	(430)	(0)		430
17	Regulatory Expense	7,261	-	7,261	(196)	7,065	(2,982)	4,279
18	Insurance Other Than Group	12,198	-	12,198		12,198		12,198
19	Customer Accounting	20,561	1,364	21,926	(2,107)	18,454	3,046	23,607
20	Rents	7,566	-	7,566		7,566		7,566
21	General Office Expense	28,204	(2,443)	25,761	(2,181)	26,023		28,204
22	Miscellaneous	6,577	16	6,593	83	6,660 (a)		6,577
23	Maintenance Expense	38,435	-	38,435		38,435		38,435
24	Depreciation & Amortization	238,395	(55,118)	183,277	(58,003)	180,392	(90,770)	147,625
25	General Taxes-Property	30,506	0	30,506	(268)	30,238	(2,821)	27,685
26	General Taxes-Other	16,157	-	16,157		16,157		16,157
27	Income Taxes	(107,414)	43,379	(64,034)	71,951	(35,463)	55,788	(51,626)
28								
29	**Total Operating Expenses**	$ 710,987	$ (66,795)	$ 644,192	$ (104,858)	$ 606,129	$ (102,135)	$ 608,852
30	Utility Operating Income	$ (131,793)	$ 66,795	$ (64,998)	$ 104,858	$ (26,935)	$ 60,329	$ (71,464)
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-		-		-
33	Interest Expense	41,320	(1,664)	39,656		41,320		41,320
34	Other Expense	-	-	-		-		-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-		-		-
36	**Total Other Income & Deductions**	$ (41,320)	$ 1,664	$ (39,656)	$ -	$ (41,320)	$ -	$ (41,320)
37	**Net Profit (Loss)**	$ (173,113)	$ 68,458	$ (104,655)	$ 104,858	$ (68,255)	$ 60,329	$ (112,784)

(a) ACC Staff's Miscellaneous Expense Adjustment does not use the Company's October 14, 2014 filed amount of $6,577 for Tubac, so Revenue Increase is slightly different than their filing.

EPCOR WATER ARIZONA - MOHAVE WASTEWATER
Rebuttal Summary of Schedule C-1s
Calculation of Operating Income
Test Year Ended June 30, 2013

Line No.		[A] Company Direct	[B] Company Rebuttal: Rebuttal Adjustments	[C] Company Rebuttal: As Adjusted	[D] Staff Direct: Adjustments to Company Direct	[E] Staff Direct: As Adjusted	[F] RUCO Direct: Adjustments to Company Direct	[G] RUCO Direct: As Adjusted
1	**Revenues**							
2	Water Revenues	$ 1,052,210	$ -	$ 1,052,210		$ 1,052,210		$ 1,052,210
3	Other Revenues	3,629	-	3,629		3,629		3,629
4				-		-		-
5		$ 1,055,839	$ -	$ 1,055,839	$ -	$ 1,055,839	$ -	$ 1,055,839
6	**Operating Expenses**							
7	Labor	$ 268,572	(1,071)	$ 267,501	(10,707)	$ 257,865		$ 268,572
8	Purchased Water	(0)	-	(0)		(0)		(0)
9	Fuel & Power	46,241	-	46,241		46,241	(22)	46,219
10	Chemicals	12,000	-	12,000		12,000		12,000
11	Waste Disposal	34,306	-	34,306		34,306		34,306
12	Intercompany Support Services	161	-	161		161		161
13	Corporate Allocation	58,694	(4,218)	54,476	(13,304)	45,390	(21,553)	37,141
14	Outside Services	34,425	-	34,425	(895)	33,530		34,425
15	Group Insurance	53,082	-	53,082		53,082		53,082
16	Pensions	725	-	725	(725)	(0)		725
17	Regulatory Expense	11,993	-	11,993	(2,650)	9,343	(5,027)	6,966
18	Insurance Other Than Group	14,658	-	14,658		14,658		14,658
19	Customer Accounting	53,827	895	54,723	(3,553)	50,274		53,827
20	Rents	8,199	-	8,199		8,199		8,199
21	General Office Expense	20,902	(417)	20,485	(3,677)	17,225		20,902
22	Miscellaneous	84	(87)	(2)	(87)	(3)		84
23	Maintenance Expense	51,102	-	51,102		51,102		51,102
24	Depreciation & Amortization	257,946	(535)	257,411	(12,208)	245,738	(24,120)	233,826
25	General Taxes-Property	53,660	-	53,660		53,660	(1,209)	52,451
26	General Taxes-Other	12,392	-	12,392		12,392		12,392
27	Income Taxes	(27,928)	1,714	(26,214)	24,191	(3,737)	28,236	308
28								
29	**Total Operating Expenses**	$ 965,040	$ (3,718)	$ 961,322	$ (23,614)	$ 941,425	$ (23,695)	$ 941,345
30	Utility Operating Income	$ 90,799	$ 3,718	$ 94,517	$ 23,614	$ 114,414	$ 23,695	$ 114,494
31	**Other Income & Deductions**							
32	Other Income & Deductions	-	-	-		-		-
33	Interest Expense	135,810	1,550	137,360		135,810		135,810
34	Other Expense	-	-	-		-		-
35	Gain/(Loss) Sale of Fixed Assets	-	-	-		-		-
36	**Total Other Income & Deductions**	$ (135,810)	$ (1,550)	$ (137,360)	$ -	$ (135,810)	$ -	$ (135,810)
37	**Net Profit (Loss)**	$ (45,011)	$ 2,168	$ (42,843)	$ 23,614	$ (21,396)	$ 23,695	$ (21,316)

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
SHAWN BRADFORD
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
SHAWN BRADFORD
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Shawn Bradford testifies that:

EPCOR Water Arizona Inc. ("EWAZ") has reviewed the testimony provided by ACC Staff and RUCO and has revised its requested recovery for arsenic media costs in Tubac. The Company agrees with ACC Staff's recommendation for additional storage in Tubac but wishes to conduct a hydraulic analysis to determine the volume of storage that is needed. The Company also agrees with ACC Staff's recommended changes associated with miscellaneous service charges.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Shawn Bradford. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, Arizona 85027, and my business phone is (623) 815-3136.

Q. ARE YOU THE SAME SHAWN BRADFORD WHO SUBMITTED DIRECT TESTIMONY IN THIS CASE?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. **PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.**

A. The purpose of my testimony is to respond to recommendations of the Arizona Corporation Commission Staff ("ACC Staff") and the Residential Utility Consumer Office ("RUCO") related to the Arsenic Treatment System in EPCOR Water Arizona, Inc.'s ("EWAZ" or "Company") Tubac Water District, storage capacity in Tubac, and the Company's proposed changes to miscellaneous services charges in all of the districts involved in this rate filing.

III. TUBAC WATER DISTRICT

Q. **HAVE YOU REVIEWED ACC STAFF'S AND RUCO'S RECOMMENDATIONS REGARDING THE TUBAC ARSENIC PLANT?**

A. Yes, I have. ACC Staff through its witness, Ms. Christine L. Payne, recommends $0 in Chemical Expense for Tubac. RUCO's witness, Mr. Jeffrey M. Michlik, is recommending $48,202 of Chemical Expense.

Q. PLEASE SUMMARIZE THE COMPANY'S REQUEST AS IT RELATES TO CHEMICAL EXPENSE FOR THE TUBAC WATER DISTRICT.

A. Chemical Expense for the Tubac Water District of $98,934 was comprised of the components in the Company's revised schedules filed October 14, 2014:

• Test Year expenses	$	3,030
• Customer Annualization Adjustment (SM-3)		(37)
• Declining Usage Adjustment (SM-19)		(105)
• Amortize Arsenic Media Replacement		96,045
Total Chemical Expense – Tubac	$	98,934

The $96,045 figure is comprised of the $46,000 of on-going arsenic media replacement costs and $50,856 to recover the arsenic media replacement costs deferred pursuant to the Company's Arsenic Cost Recovery Mechanism ("ACRM") less $811 of test year costs. The deferred costs totaled $101,712 and the Company proposed a two-year recovery period resulting in an annual cost of $50,856. The Company realized through the course of responding to data requests that the $50,856 amortization cost had been double counted and noted in its revised response to data request number RUCO 23.5 attached as Exhibit SB-1 that an adjustment would be made in its rebuttal case filing to remove the double counted costs.

Q. WHAT IS THE BASIS OF THE ACC STAFF'S RECOMMENDATION TO ELIMINATE ALL CHEMICAL EXPENSE FOR THE TUBAC WATER DISTRICT?

A. ACC Staff asserts that the on-going expense requested by the Company should be depreciated because it lasts for two years. ACC Staff's understanding of the media replacement is incorrect. Yes, the media lasts two years, however, there are two vessels and one is replaced each year at a cost of $46,000 each. Instead of requesting $92,000

and amortizing the cost over 2 years, the Company requested the annual expense for one vessel.

Regarding the recovery of the deferred arsenic media replacement costs of $101,712, ACC Staff witness, Ms. Mary J. Rimback discusses ACC Staff's recommendation.

Q. WHAT IS MS. RIMBACK'S RECOMMENDATION REGARDING THE TREATMENT OF THE ARSENIC MEDIA REPLACEMENT COSTS?

A. Ms. Rimback recommends inclusion of the media replacement cost in rate base, however, she does not provide an amount or an adjustment for the recovery of that cost in the ACC Staff's revenue requirement calculations. Rather, she states that an adjustment to the media balance and associated depreciation will be forthcoming in ACC Staff's surrebuttal testimony.

Q. HAS THE COMPANY REVISED ITS REQUEST REGARDING THE TREATMENT OF THE DEFERRED ARSENIC MEDIA REPLACEMENT COSTS?

A. Yes. The Company has heard the concerns expressed by the ACC Staff and RUCO regarding an amortization of the deferred arsenic media replacement costs in Tubac's base rates and would now recommend that the $101,712 of deferred charges be recovered via a surcharge that ceases upon completion of the recovery of the charges.

Q. HAS THE COMPANY IDENTIFIED A RECOVERY PERIOD OVER WHICH THIS SURCHARGE SHOULD BE COLLECTED?

A. Yes. Although the ACRM contemplated a one-year recovery period of deferred O&M charges such as the arsenic media replacement costs, the Company would propose a 3-year recovery period to reduce the impact of the surcharge on customers.

Q. HAS THE COMPANY QUANTIFIED THE SURCHARGE AMOUNTS THAT IT IS PROPOSING?

A. Yes. Consistent with the surcharge calculations in the ACRM, the Company has calculated an annual charge of $33,904 to be collected 50 percent via the basic service charge and 50 percent via the commodity charge. The resulting rate design is included on the H-Schedules sponsored by Mr. Bourassa.

Q. HAS THE COMPANY REVIEWED THE RECOMMENDATION OF RUCO'S WITNESS MR. MICHLIK AS IT RELATES TO THE DEFERRED ARSENIC MEDIA REPLACEMENTS COSTS WHICH YOU HAVE BEEN DISCUSSING ABOVE?

A. Yes.

Q. IS THE COMPANY OPPOSED TO TREATING THE DEFERRED ARSENIC MEDIA REPLACEMENTS COSTS AS A REGULATORY ASSET WITH A 5-YEAR RECOVERY PERIOD?

A. The only problem the Company sees with RUCO's recommendation is that the recovery period is rather long, and when the Commission authorized the deferral of this O&M expense, it specifically denied inclusion of the regulatory asset in rate base. Because of this, the Company believes a shorter recovery period is more reasonable to the Company and its customers. Also, including the amortization of this deferred expense in Tubac's base rates will create the same concerns that a 2-year amortization period raises regarding the expense remaining in rates after the expense has been fully recovered. The Company believes that its recommendation in its rebuttal testimony for a surcharge that ends upon recovery as discussed above will address all potential concerns with the recovery of this Commission-authorized deferral.

Q. WHAT IS RUCO'S POSITION REGARDING THE ON-GOING COSTS FOR MEDIA REPLACEMENT REQUESTED BY THE COMPANY?

A. Mr. Michlik supports the Company's request to include the $46,000 of on-going media replacement costs in Chemical Expense and has made the appropriate adjustment to remove the $50,856 that was inadvertently double counted in the Chemical Expenses requested by the Company in its revised filing of October 14, 2014.

Q. ACC STAFF RECOMMENDS THAT THE COMPANY INSTALL ADDITIONAL STORAGE CAPACITY IN THE TUBAC SYSTEM. IS THIS ADDITIONAL STORAGE CAPACITY NECESSARY?

A. The Company has reviewed the ACC Staff Engineering Report submitted by Mr. Michael Thompson and agrees with his recommendation that additional storage is needed in the Tubac system. Given the cost of additional storage and the potential impact this investment will have on rates the Company recommends that a hydraulic analysis of the Tubac distribution system be conducted to determine the volume of additional storage that is needed. The Company will share the findings of this analysis with ACC Staff. The Company also agrees to begin design on a new storage tank by the end of 2015 with construction scheduled to start in 2016.

Q. BASED ON ACC STAFF'S RECOMMENDATION THAT THE COMPANY INSTALL ADDITIONAL STORAGE CAPACITY IN THE TUBAC SYSTEM, WHAT IS THE COMPANY'S POSITION ON RECOVERING THIS INVESTMENT IN RATES?

A. As previously stated, the Company agrees with the recommendation that additional storage is needed in the Tubac system. Given the cost of additional storage and the potential impact this investment will have on rates the Company wishes to seek a cost

recovery mechanism similar to the Commission-approved APS Four Corners rate adjustor that will pay for costs associated with APS's investment and expenses for the purchase of existing capacity and to cover costs associated with the retirement of existing infrastructure. The Company proposes to work with Staff on a plan to develop an adjustor mechanism that would be filed at a later day that would permit an increase in rates to cover this needed investment but with the understanding that the additional storage must be completed within a year of the new rates being in effect in Tubac.

IV. SERVICE CHARGES (ALL DISTRICTS)

Q. HAVE YOU REVIEWED ACC STAFF'S RECOMMENDATIONS REGARDING SERVICE CHARGES?

A. Yes, the Company has reviewed the ACC Staff testimony of Ms. Phan Tsan and supports her proposed changes regarding service charges.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

COMPANY: EPCOR Water Arizona Inc.
DOCKET NO: WS-01303A-14-0010

Response provided by: Sandy Murrey
Title: Rate Analyst

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 23.5 REVISED

Q: Tubac Deferred Debits – The Company has recorded $55,412 as deferred debits in its filing. Please identify the unknown amount of $4,556, and cite the Commission Decision No. it was approved in, as presented below:

$ 50,856	(i.e. $101,712/2) Deferral of ACRM O&M Costs
4,556	Unknown Amount (Possible Y2K?)

A. The Company is uncertain of the source of the $4,556 amount referred to in this data request. The total annual amortization of regulatory assets of $51,140 is displayed on Schedule C-2, page 17, IS Adjustment SM-13, line 35. This $51,140 is comprised of the following amounts

$50,855.96	Arsenic Media ($101,712 / 2)
$ 283.59	Y2K amortization allocated to Tubac
$51,139.55	

The annual amortization for Y2K costs for Tubac of $283.59 is reflected on workpaper "Test Year Adjustments 12-19.xlsx", tab "Amortization".

In reexamining the supporting documentation, it appears that the arsenic amortization was double counted in Adjustment SM-13 Depreciation & Amortization Expense and Adjustment SM-31 Amortize Arsenic Media Replacement. In its Rebuttal filing, the Company will correct Adjustment SM-31 Amortize Arsenic Media Replacement by removing the $50,856 applicable to the proposed 2-year amortization of the deferred arsenic media costs currently adjusting test year Chemical Expenses. The Company's rebuttal adjustment will retain the portion of Adjustment SM-31 associated with the on-going annual arsenic media replacement expense of $46,000 in its Chemical Expense.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
JEFFREY W. STUCK
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
JEFFREY W. STUCK
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Jeffrey W. Stuck testifies that:

EPCOR Water Arizona Inc. ("EWAZ" or "Company") continues to support inclusion of tank maintenance expense. Based on its review of Staff's testimony and further analysis, EWAZ has adjusted its requested tank maintenance expense to $135,151 annually, a reduction of $50,700 per year. Mr. Stuck also responds to the arguments made by RUCO against tank maintenance expense—arguments that the Commission has rejected in recent Commission decisions.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Jeffrey W. Stuck. My business address is 6215 N. Cattletrack Road, Scottsdale, Arizona, and my business phone is 623-815-3125.

Q. ARE YOU THE SAME JEFFREY W. STUCK WHO PROVIDED DIRECT TESTIMONY IN THIS CASE?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. **PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

A. The primary purpose of my rebuttal testimony is to respond to the Residential Utility Consumer Office ("RUCO") and the Arizona Corporation Commission Staff ("ACC Staff") on the issue of the tank maintenance expense in the Paradise Valley Water District.

Q. ACC STAFF HAS ADJUSTED THE AMOUNT OF TANK MAINTENANCE EXPENSE THAT IT BELIEVES IS APPROPRIATE. DOES THE COMPANY AGREE WITH THIS ADJUSTMENT?

A. No, I believe some of the line items for which ACC Staff ascribed a unit price are too low. Specifically, ACC Staff excluded exterior coating of the Stone Canyon tank which requires recoating, ACC Staff excluded replacement of exterior ladders which are needed at all tanks, and ACC Staff estimated the cost of other items such as exterior ladder safety climbing devices, roof safety railing, vandal deterrent safety cages, and clog resistant vents to be less than they have cost on prior tank projects. Following receipt of the ACC

Staff's estimates, I consulted with a professional tank maintenance contractor and have made adjustments to the pricing list that ACC Staff provided. The prices and the effect on the Company's requested level of tank maintenance are shown on Exhibit JWS-1 attached to this testimony.

Q. WHAT IS THE EFFECT OF THE REVISED PRICING ON THE COMPANY'S ORIGINAL REQUEST FOR TANK MAINTENANCE IN THE REVISED SCHEDULES FILED OCTOBER 14, 2014?

A. The Company's request in the revised schedules filed October 14, 2014 totaled $2,601,914 for a fourteen-year period, or $185,851 annually. The total revised cost for the fourteen year period is $1,892,108 or $135,151 annually, a reduction of $50,700 per year. These revised estimates were provided to Company witness Ms. Sandy Murrey and she has included a pro forma adjustment, SM-58R, on Schedule C-2 Rebuttal.

Q. ACC STAFF ALSO RECOMMENDS THAT THE COMPANY MAKE AN ANNUAL COMPLIANCE FILING IN RELATION TO TANK MAINTENANCE. DOES THE COMPANY AGREE WITH THIS APPROACH?

A. The Company has no objection to this approach.

Q. HOW DOES THE COMPANY RESPOND TO RUCO'S CONTINUED OPPOSITION TO TANK MAINTENANCE EXPENSE IN THIS DOCKET?

A. We note that RUCO makes the same argument that they made in the Chaparral City Water Company case that resulted in Decision 74568. We continue to disagree with RUCO's position on tank maintenance and believe the approach the Company is proposing for the Paradise Valley District, which is the same tank maintenance program that has been approved in decisions 72047, 73145 and 74568, is appropriate. These approvals have allowed the Company to perform necessary maintenance of these very

critical pieces of infrastructure in a timely and systematic fashion which is serving to ensure their reliability, increase their useful life and preserve their sanitary condition. In previous testimony for the cases referenced here, I have explained that tank maintenance is a very large expense and when not specifically funded it is deferred at the expense of other required system maintenance. Providing a specific source of revenue ensures these important maintenance projects can be completed without being deferred for competing critical maintenance projects in the budget year. If this maintenance is not performed regularly, it will ultimately lead to a deterioration in the tanks, which results in system disruption, loss of water to customers, and increased cost of repairs or replacement.

Q. RUCO ALSO NOTES THAT THE COMPANY HAS NOT EXPENDED THE FULL AMOUNT OF TANK MAINTENANCE EXPENSE IN OTHER DISTRICTS IN WHICH IT HAS BEEN AUTHORIZED. HOW DOES THE COMPANY RESPOND?

A. The Company has spent the amounts summarized in Table 1 on tank maintenance in the districts identified.

Table 1. Tank Maintenance Spend by District

Tank Maintenance spend by District			
Year	Sun City	Havasu	Mohave
2011	$362,149	N/A	N/A
2012	$356,150	N/A	N/A
2013	$367,500	$74,000	$199,951
2014	$399,287	$41,891	$199,628

The figures for years 2013 and 2014 are reflected in the Company's income statement as a specific line item. Future tank maintenance expenses by district will also be reflected in this same manner in the Company's income statements. Prior to 2013, the Company did

not have a specific income statement line item and those expenditures were combined with other maintenance expenses in the Maintenance Expense account. You will note that the amount spent in each year does not exactly match the amount of revenue the Company receives for this maintenance. The plans that were submitted and approved were an annual average of the total cost of the program over the term of the program. Larger tanks cost more to maintain than smaller tanks and that is reflected in the above table. This table shows that the annual average cost over the first four years of the program for Sun City currently exceeds the annual average cost of the approved program. That rolling annual average will move up and down as it coincides with the different sizes of tanks that are maintained in a given year. This same pattern is reflected in the Havasu and Mohave Districts where smaller tanks were maintained in the first part of the program and larger tanks will be maintained in the coming years. For example, the Havasu program calls for a larger tank to be maintained in 2018 at an estimated cost of $432,000 which will exceed the annual average revenue of $76,000 from the Havasu program.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

EXHIBIT JWS – 1R

EPCOR Water Arizona Inc. - Paradise Valley Water District

	Tank Name	60th Street	Clearwater Hills #1	Clearwater Hills #2	Clearwater Hills #3	Club Estates	Country Club #1	Country Club #2	Racquet Club	Stone Canyon	Total
	Tank Capacity (Gallons) and Size	200,000 38x24	102,000 27X24	100,000 27X24	20,000 13X20	30,000 16X20	500,000 60X24	360,000 50X24	102,000 27X24	90000 26X24	
No.	Item										
	Clean & Paint Exterior										
1	Epoxy/Polyurethane System	$ 24,100	$ 15,800	$ 15,000	$ 8,000	$ 7,300	$ 43,700	$ 35,000	$ 15,800	$ 15,000	$ 179,700
2	Containment (lead)	$ 40,100	$ 26,200	$ -	$ 10,200	$ 12,200	$ 72,800	$ 58,300	$ 26,200	$ -	$ 246,000
	Clean & Paint Interior										
3	3 - Coat Epoxy System	$ 92,800	$ 37,200	$ 55,800	$ 13,000	$ 24,100	$ 126,000	$ 96,700	$ 37,200	$ 35,200	$ 518,000
4	Cathodic Protection	$ 10,000	$ 9,000	$ 9,000	$ 6,000	$ 6,000	$ 12,000	$ 11,000	$ 9,000	$ 8,000	$ 80,000
5	Miscellaneous Chipping & Grinding	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	Seam Sealing	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	Pit Repair	$ 17,100	$ 5,800	$ 8,700	$ 2,300	$ 3,100	$ 28,000	$ 20,100	$ 5,800	$ 5,400	$ 96,300
8	Exterior Flexible Piping Connections (2)	$ 12,000	$ 6,120	$ 6,000	$ 1,200	$ 1,800	$ 30,000	$ 21,600	$ 6,120	$ 5,400	$ 90,240
9	Overflow Pipe & Install Check Valve	$ 12,000	$ 6,120	$ 6,000	$ 1,200	$ 1,800	$ 30,000	$ 21,600	$ 6,120	$ 5,400	$ 90,240
10	External Ladder Well Removal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Exterior Ladder Replacement	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 90,000
12	Exterior Ladder Safe-Climbing Device	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 31,500
13	Vandal Deterent - Safety Cage Door	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 18,000
14	Additional Roof Safety Railing Installation	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 36,000
15	Existing Roof Safety Railing Modifications	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 18,000
16	Additional Shell Manhole	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 135,000
17	Additional Roof Manhole	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	Clog Resistant Vent	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 108,000
19	Contingency Items	$ 23,960	$ 13,774	$ 11,700	$ 7,150	$ 8,780	$ 37,400	$ 29,500	$ 13,774	$ 9,090	$ 155,128
20	Total cost (Each Storage)	$ 280,560	$ 168,514	$ 160,700	$ 97,550	$ 113,580	$ 428,400	$ 342,300	$ 168,514	$ 131,990	$ 1,892,108

Annual Tank Maintenance Expense (14 Year Plan) $ 135,151

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
JAKE LENDERKING
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
JAKE LENDERKING
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Jake Lenderking responds to the testimony of the Residential Utility Consumer Office ("RUCO") in relation to EPCOR Water Arizona Inc.'s ("EWAZ" or "Company") proposal to continue its GSF surcharge in the Sun City Water District and its CAP surcharge in the Paradise Valley Water District. Mr. Lenderking discusses the continued rising prices of CAP water and the policy reasons in favor of the continued use of these mechanisms. Mr. Lenderking also discusses concerns raised regarding the Company's compliance with prior decisions in relation to these surcharges.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Jake Lenderking. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, Arizona 85027, and my business phone is (623) 445 - 2410.

Q. ARE YOU THE SAME JAKE LENDERKING WHO PROVIDED DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. **PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

A. The primary purpose of my testimony is to respond to testimony by Arizona Corporation Commission ("ACC", or "Commission") Staff and the Residential Utility Consumer Office ("RUCO") relating to the Company's request to continue its Groundwater Savings Fee ("GSF") Mechanism in the Sun City Water District and its CAP Surcharge in the Paradise Valley Water District.

III. RETENTION OF THE SUN CITY GSF MECHANISM

Q. RUCO RECOMMENDS THAT THE COMMISSION NOT ALLOW THE COMPANY TO CONTINUE ITS GSF MECHANISM IN THE SUN CITY DISTRICT. HOW DO YOU RESPOND?

A. RUCO's recommendation misses the details and the benefits of the Sun City GSF mechanism. There are multiple benefits to both the customers and the Company by allowing the Company to retain its Sun City GSF mechanism, among them: the

appropriate and exact recovery of an essential expense for a valuable resource, the ability to send the proper and timely pricing signals to customers, and the extension and continuation of the Commission policy of rate gradualism.

Q. PLEASE EXPLAIN FURTHER.

A. Certainly. Central Arizona Project ("CAP") water pricing has increased at a much faster pace than other expenses and the GSF mechanism captures these price increases each and every year. Capturing any CAP water price increases on an annual basis not only helps to guard against rate shock, but it also provides timely and appropriate price signals to customers.

Q. PLEASE EXPLAIN THE CAP WATER PRICING INCREASES FURTHER.

A. The Central Arizona Water Conservation District ("CAWCD") board sets CAP rates based on projected costs for the year in question. The actual costs and the projections have risen dramatically over the last ten years. In fact, these costs have risen so much that the CAWCD board has increased rates by an annual average rate of 6.03%[1].

Q. DOES CAWCD PROVIDE ANY INDICATION THAT RATES WILL CONTINUE TO RISE?

A. Yes. In my direct testimony I outlined the projected CAP rates. I have also attached the latest projected rates in Exhibit JCL – 1 showing a year over year increase in CAP rates.

Q. HAS CAP RATES INCREASED AS PROJECTED?

A. Yes and no. CAP rates have increased, however they have increased faster than previously projected. I have attached them in Exhibit JCL – 1.

[1] The 10-year (2006 – 2015) average price change of 6.03 percent can be viewed through a review of CAP rates for 2006 – 2015 and are provided in Exhibit JCL -1 to my direct testimony.

Q. ARE THERE ANY UNKNOWNS WITH REGARD TO CAP RATES?

A. Yes. In addition to ever increasing costs to CAWCD there is the possibility of a shortage declaration by the Secretary of the Interior on the Colorado River. A shortage declaration would reduce CAP water supplies by approximately 20%. CAWCD estimates that a 20% reduction in its water supplies will result in an increase of 25% to the Operation, Maintenance & Repair ("OM&R") portion of CAP water rates to customers. Considering the present water storage in the Colorado River system, a shortage declaration may occur as soon as 2016 or 2017 causing a significant increase to CAP rates.

Q. ARE THERE ANY OTHER UNKNOWNS IN REGARDS TO CAP PRICES?

A. Yes. As I mentioned earlier, CAWCD sets rates based on projected costs and often those projected costs are incorrect, sometimes lower and sometimes higher than actual costs. At the close of each year, the CAWCD board reconciles the projected (and collected) costs with the actual costs and revenues collected. CAWCD can then either bill its customers for the shortfall or credit its customers for the overpayment. The GSF mechanism provides the perfect tool for the Company to account for these types of increased costs and/or credits from CAWCD as the GSF mechanism trues up or reduces CAP-related expenses each and every year.

Q. RUCO SPECIFICALLY TAKES ISSUE WITH THE COMPANY'S ACCOUNTING FOR THIS SURCHARGE. WHAT IS THE COMPANY'S RESPONSE?

A. RUCO disagrees with the Company's accounting treatment of the CAP related expenses. Please see the rebuttal testimony of Ms. Sheryl L. Hubbard for more on this.

Q. WHAT OTHER ACCOUNTING ISSUE DOES RUCO TAKE ISSUE WITH?

A. RUCO completely dismisses the surcharge and attempts to make an adjustment to include CAP related expenses in base rates.

Q. IF THE COMMISSION DISALLOWS THE SURCHARGE MECHANISM SHOULD IT USE RUCO'S ADJUSTMENT?

A. No. Mr. Michlik makes an adjustment of $549,527 in CAP-related expenses, one which is based on 2013 costs. This estimate is inconsistent with his proposal of calculating CAP expense in prior cases.[2] It is now 2015 and the Company is currently paying higher known and measurable costs. Further, CAP is again publishing advisory rates. While the Company firmly disagrees with Mr. Michlik's proposed methodology[3] of averaging published CAP advisory rates and continues to strongly support the continued use of the surcharge mechanism, I have worked through his methodology to arrive at a correct CAP expense of $762,398 (attached as Exhibit JCL – 2).

Q. WHY CAN'T THE COMPANY JUST RECOVER THE COSTS THROUGH BASE RATES AS RUCO HAS PROPOSED?

A. Base rates are able to reflect costs at a point in time, but CAP water rates change annually.

Q. DID COMMISSION STAFF HAVE AN OPINION REGARDING THE SUN CITY GSF MECHANISM?

A. Yes. Staff, "recommends retaining the GSF surcharge for the Sun City District for the same reasons as the Paradise Valley Water District's CAP surcharge."

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[2] Direct testimony of Mr. Michlik, Docket No. W-02113A-13-0118, at 49–50.
[3] *Id.*

IV. RETENTION OF PARADISE VALLEY CAP SURCHARGE MECHANISM

Q. RUCO ALSO RECOMMENDS THAT THE COMMISSION NOT ALLOW THE COMPANY TO CONTINUE ITS CAP SURCHARGE IN THE PARADISE VALLEY WATER DISTRICT. WHAT IS THE COMPANY'S RESPONSE?

A. The Company firmly disagrees with RUCO's recommendation regarding the Paradise Valley CAP Surcharge mechanism. The Paradise Valley CAP Surcharge mechanism works in the same manner as the Sun City GSF mechanism and the reasons for retaining it are the same. Please see my testimony above for the reasoning in retaining the Paradise Valley CAP Surcharge mechanism.

Q. IF THE COMMISSION DISALLOWS THE PARADISE VALLEY CAP SURCHARGE MECHANISM SHOULD IT USE RUCO'S ADJUSTMENT?

A. No. Mr. Michlik makes an adjustment of $133,345 in CAP-related expenses, one which is based on 2013 costs. This estimate is inconsistent with his proposal of calculating CAP expense in prior cases.[4] It is now 2015 and the Company is currently paying higher known and measurable costs. Further, CAP is again publishing advisory rates. While the Company firmly disagrees with Mr. Michlik's proposed methodology[5] of averaging published CAP advisory rates and continues to strongly support the continued use of the surcharge mechanism, I have worked through his methodology to arrive at a correct CAP expense of $588,042 (attached as Exhibit JCL – 2).

Q. DID COMMISSION STAFF HAVE AN OPINION REGARDING THE PARADISE VALLEY WATER DISTRICT'S CAP SURCHARGE MECHANISM?

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[4] Direct testimony of Mr. Michlik, Docket No. W-02113A-13-0118, at 49–50.
[5] *Id.*

A. Yes. ACC Staff recognized that "the cost of CAP water changes every year. Staff believes it is more appropriate to keep the surcharge the way it is, i.e., retaining the CAP surcharge for the Paradise Valley Water District."

V. COMPLIANCE WITH PRIOR COMMISSION DECISIONS

Q. IT APPEARS THAT RUCO'S RECOMMENDATION AGAINST BOTH OF THESE SURCHARGES IS BASED IN PART ON THE COMPANY'S COMPLIANCE WITH PRIOR COMMISSION DECISIONS. PLEASE EXPLAIN.

A. In my Direct Testimony, I explained the Company's failure to file adjustments to the GSF and CAP surcharge mechanisms, which led to the Commission's issuance of Decision Nos. 72046 and 71481. For both the GSF and the CAP surcharges, EWAZ has improved its process for calculating and filing the annual adjustment to the surcharge, and has made the filings on time each year since the issuance of Decisions No. 72046 and 71841, both of which the Commission issued in 2010. The Company takes these compliance issues very seriously. Although the Commission did order the Company to include a proposal to include these costs in base rates, the Company is asking the Commission to allow the Company to continue these surcharges given the many benefits of continuing these surcharges and the issues with including these costs in base rates, both of which are discussed in detail in my Direct Testimony. Since the issuance of Decision Nos. 72046 and 71841, CAP rates have continued to increase and the Commission's policy in favor of the use of these surcharges has become more certain. As such, the Company is requesting that the Commission allow the Company to continue these surcharges, which is good public policy. Commission Staff, which made the initial recommendations adopted by the Commission in Decision Nos. 72046 and 71841, in apparent recognition of the change in circumstances and the policy reasons in favor of

these surcharges, has recommended a continuation of these surcharges as part of its Direct Testimony.

As noted above, if these expenses are to be included in base rates, the amounts set forth in Exhibit JCL-2 should be utilized.

Q. STAFF INDICATES IN ITS TESTIMONY THAT THE NON-COMPLIANCE ISSUE NEEDS TO BE ADDRESSED. WHAT IS THE COMPANY'S POSITION?

A. The Company will of course abide by the Commission's decision in relation to compliance. However, the Company has been very forthcoming about the issues surrounding its recommendations in this case in relation to the GSF surcharge and the CAP surcharge. Although the Company does not support the inclusion of these amounts as part of base rates, the Company has provided a corrected figure as part of Exhibit JCL-2. The Company takes compliance very seriously and has put processes in place to ensure that the issues that led to the prior non-compliance will not occur again.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

EXHIBIT JCL – 1R

CENTRAL ARIZONA PROJECT
FINAL 2015-2016 RATE SCHEDULE

DELIVERY RATES FOR VARIOUS CLASSES OF WATER SERVICE

Units = $/ acre-foot

(The Letter Designations in the Formulas Refer to the Rate Components Shown Below)

		Firm	Provi-sional	Advisory			
	2014	2015	2016	2017	2018	2019	2020
Municipal and Industrial							
Long Term Subcontract (B+C) [1]	$ 146	$ 157	$ 161	$ 166	$ 171	$ 174	$ 196
Non-Subcontract (A+B+C)[2]	166	179	184	190	196	199	221
Recharge (A+B+C) [3]	166	179	184	190	196	199	221
AWBA Interstate Recharge (A+B+C+D) [4]	189	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Federal (B+C)[5]	$ 146	$ 157	$ 161	$ 166	$ 171	$ 174	$ 196
Agricultural							
Settlement Pool (C) [6]	$ 67	$ 75	$ 76	$ 79	$ 81	$ 82	$ 99
Agricultural Incentives [6]							
Meet Settlement Pool Goals	(14)	(18)	(15)	(14)	(12)	(9)	(22)
Meet AWBA/CAGRD GSF Goals	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Meet Recovery Goals	(2)	(2)	(2)	(2)	(2)	(2)	(2)

RATE COMPONENTS

Units = $/acre-foot

		Firm	Provi-sional	Advisory			
	2014	2015	2016	2017	2018	2019	2020
Capital Charges							
(A) Municipal and Industrial - Long Term Subcontract [7]	$ 20	$ 22	$ 23	$ 24	$ 25	$ 25	$ 25
Delivery Charges							
(B) Fixed OM&R [8]	$ 79	$ 82	$ 85	$ 87	$ 90	$ 92	$ 97
(C) Pumping Energy Rate 1 [9]	67	75	76	79	81	82	99
(D) Property Tax Equivalency [10]	23	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

DIRECT UNDERGROUND WATER STORAGE

Units = $/acre-foot

		Firm	Provi-sional	Advisory			
	2014	2015	2016	2017	2018	2019	2020
Underground Water Storage O&M [11]							
Phoenix AMA	$ 8	$ 9	$ 10	$ 12	$ 13	$ 14	$ 15
Tucson AMA	15	15	15	15	15	15	15
Underground Water Storage Capital Charge [12]							
Phoenix AMA	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15	$ 15
Tucson AMA	9	9	9	9	9	9	9

CENTRAL ARIZONA PROJECT
FINAL 2015-2016 RATE SCHEDULE

NOTES:

1) Long-Term Municipal and Industrial (M&I) Subcontract include those users that hold a M&I subcontract.
2) Non-Subcontract includes M&I users that are taking water under an agreement other than a subcontract and may also be referred to as "Excess" water. It is administered according to CAP's Access to Excess policy.
3) Recharge includes the Arizona Water Banking Authority, CAGRD, BOR and M&I subcontract holders and other Arizona entities who have valid Arizona Department of Water Resources water storage permits and accrue long-term storage credits. It is administered according to CAP's Access to Excess policy.
4) The AWBA Interstate Recharge rate is currently not published (n.p.) and will be provided upon request as there is not any anticipation of water available for this class.
5) Federal water may also be referred to as "Indian" water.
6) Rate is the Pumping Energy Rate 1 component. Incentives may be earned for meeting delivery goals in three areas. Any incentives earned are applied to Settlement Pool deliveries.
7) For M&I subcontract water, the Capital Charge is paid on full allocation regardless of amount delivered and not included in delivery rates.
8) Fixed O&M costs divided by projected total water volumes plus components to fund capital replacements and a rate stabilization reserve. This amount is collected on all ordered water whether delivered or not.
9) The energy rate applies to all actual water volumes as opposed to scheduled. The calculation is pumping energy costs divided by projected volumes.
10) The rate is based upon the tax levy for the previous elapsed tax year divided by the average water deliveries (excluding Federal deliveries and water storage credits) for the three previous completed delivery years (e.g., for 2012, the tax equivalency is the levy for the 2010-2011 tax year divided by the average water deliveries for 2008, 2009 and 2010). This rate is currently not published (n.p.) and is available upon request, although it is not anticipated there will be water available for this class.
11) Underground Water Storage O&M is paid by all direct recharge customers using CAP recharge sites.
12) Underground Water Storage Capital Charge is paid by all direct recharge customers except AWBA for M&I firming, the CAGRD, municipal providers within the CAP service area and co-owners of CAWCD recharge facilities using no more than their share of capacity.

EXHIBIT JCL – 2R

Projected CAP-Related Expense

	Projected CAP and MWD Rates					
1	Year	**2016**	**2017**	**2018**	**2019**	**2020**
2	M&I*	$ 161	$ 166	$ 171	$ 174	$ 196
3	Capital*	$ 23	$ 24	$ 25	$ 25	$ 25
4	MWD Credit	$ (16)	$ (16)	$ (16)	$ (16)	$ (16)
5	Total Expense per Acre Foot	$ 168	$ 174	$ 180	$ 183	$ 205
6						
7						
8	**Sun City Projected Expense**					
9	CAP Allocation (in Acre Feet)	4,189	4,189	4,189	4,189	4,189
10	Projected CAP-Related Expense	$ 703,752	$ 728,886	$ 754,020	$ 766,587	$ 858,745
11						
12	Five Year Average CAP-Related Expense	$ 762,398				
13						
14						
15	**Paradise Valley Projected Expense**					
16	CAP Allocation (in Acre Feet)	3,231	3,231	3,231	3,231	3,231
17	Projected CAP-Related Expense	$ 542,808	$ 562,194	$ 581,580	$ 591,273	$ 662,355
18						
19	Five Year Average CAP-Related Expense	$ 588,042				

* From the CAP rate schedule attached to testimony as Exhibit JCL-1

Additional Calculation Notes

Line 5 equals the sum of lines 2, 3 and 4.

Lines 9 and 16 are the CAP allocations for the Sun City and Paradise Valley districts respectively

Line 10 equals the product of lines 5 and 9

Line 12 equals the average of values in line 10

Line 17 equals the product of lines 5 and 16

Line 19 equals the average of values in line 17

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
MIKE WORLTON, P.E.
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
MIKE WORLTON, P.E.
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Mike Worlton testifies that:

The post-test year plant additions included in the filing are vital to providing continued reliable, safe and efficient service to our customers. All investment projects included in the filing were completed within 12 months from the end of the test year. The recurring projects included in the filing are a significant investment for the Company needed to continue to provide uninterrupted service to existing customers.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Mike Worlton. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, AZ 85027. My business phone is 623-445-2404.

Q. ARE YOU THE SAME MIKE WORLTON WHO PROVIDED DIRECT TESTIMONY IN THIS CASE?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. **PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.**

A. The primary purpose of my rebuttal is to address issues relating to post-test year plant raised in the direct testimony of Mr. Frank Radigan on the behalf of the Residential Utility Consumer Office ("RUCO").

III. POST TEST YEAR PLANT

Q. AS AN INITIAL MATTER, CAN YOU DESCRIBE THE DIFFERENCE BETWEEN INVESTMENT PROJECTS AND RECURRING PROJECTS?

A. Investment Projects ("IPs") are defined as non-routine projects that have definitive start and stop dates, typically requiring total funding greater than $100,000, and involving engineering design and management.

Recurring Projects ("RPs") are projects which are more routine in nature or involve the replacement of existing assets required for normal business operation. These typically consist of smaller projects, less than $100,000 per project.

Q. SINCE THE FILING OF YOUR DIRECT TESTIMONY, ARE THERE POST TEST YEAR PLANT ADDITIONS THAT THE COMPANY INCLUDED IN ITS OCTOBER 14, 2014 FILING ("OCTOBER 14TH FILING")?

A. Yes.

Q. PLEASE DESCRIBE THOSE ITEMS.

A. Post-test year plant additions found in my direct testimony were estimated for any work that was not completed before the March 10th filing of my direct testimony. The October 14th Filing provides updated schedules based on final accounting for projects completed and in service by June 30, 2014 which is the post-test year period.

There were no additional IPs added to the October 14th Filing, although costs for Sun City Well #8.3 were removed. EPCOR Water Arizona, Inc. ("Company" or "EWAZ") made an internal decision to include this project in a subsequent rate case application for the Sun City Water District. There were several additions and deletions among the RPs, and those changes are documented in the revised Schedule B-2 exhibits. Table 1 below provides a key for locating the appropriate pages in the revised schedules submitted with the October 14th Filing:

Table 1. Reference to Revised Schedule B-2 (October 14th Filing)

District	Revised Schedule B (October 14th Filing)	Net Change ($)
Mohave Wastewater	Pages 8-10	(62,129)
Mohave Water	Pages 10-12	(782,554)
Paradise Valley Water	Pages 10-11	(200,391)
Sun City Water	Pages 10-11	(2,023,689)
Tubac Water	Pages 10-11	(28,497)

Q. MR. RADIGAN HAS RECOMMENDED THE DISALLOWANCE OF CERTAIN POST TEST YEAR PLANT INVESTMENT PROJECTS. WHAT IS THE BASIS FOR HIS RECOMMENDATION?

A. Mr. Radigan's recommendation is based on using a cutoff date of December 31, 2013 which is six months after the end of the test year. Any projects not completed and in service by December 31, 2013 have been disallowed by RUCO.

Q. WHICH IP PROJECTS WERE NOT COMPLETED WITHIN SIX MONTHS OF THE END OF THE TEST YEAR AND DISALLOWED BY RUCO'S WITNESS MR. RADIGAN?

A. Mr. Radigan recommends disallowance of the Laredo Vista Well #2, Mohave Water Well #16.4, the interconnection of Mohave Water and North Mohave Valley Corporation (NMVC) in the Mohave Water District, and the Sun City Well #8.3 which the Company has already excluded in the revised Schedule B-2 in the Company's October 14th Filing.

Q. DOES THE COMPANY AGREE WITH HIS RECOMMENDATIONS?

A. No. The post-test year period requested in the Company's filing covers the period from July 1, 2013 to June 30, 2014 which provided ample time for the parties to satisfy themselves that the projects were, in fact, completed and providing service to test year customers. All post-test year plant requested for inclusion in rate base in this proceeding

was completed by June 30, 2014. This 12-month period is the same length of time allowed in the recent Chaparral City Water Company rate application for the inclusion of post-test year plant additions in rate base. It is my understanding that the Commission has used this time period in other rate cases as well.

Q. ARE THERE SPECIFIC INVESTMENT PROJECTS MENTIONED IN MR. RADIGAN'S TESTIMONY THAT YOU WOULD LIKE TO ADDRESS?

A. Yes. Specifically, I would like to respond to Mr. Radigan's disallowances of the three IP projects in the Mohave Water District. The only reason Mr. Radigan provides for disallowing the three Mohave Water District investment projects is that they were not completed by December 31, 2013. Table 2 presents the in-service month for each of the investment projects included in our filing:

Table 2. In-Service Dates of Investment Projects (IPs)

Project	In Service
Laredo Vista Well #2	June 2014
Mohave Water Well #16.4	February 2014
Mohave Water / NMVC Interconnect	June 2014

Q. MR. RADIGAN ALSO RECOMMENDS A DISALLOWANCE OF ALL RECURRING PROJECTS. WHAT IS THE COMPANY'S RESPONSE?

A. Mr. Radigan argues that about half of the post-test year plant does not constitute a significant investment and that the remaining recurring projects are being done to reduce water losses. He references criteria from Commission Decision No. 71410 to justify these arguments.

As noted in Mr. Radigan's testimony, recurring projects account for a total of $6.1M, of the Company's requested post-test year plant which he characterizes as insignificant. Contrary to Mr. Radigan's arguments, I would argue that this magnitude of investment constitutes a significant investment by the Company and represents 45 percent of the total post-test year plant additions requested in this proceeding. In addition, these projects play a vital role in providing safe and reliable water service to our customers.

EWAZ has actively engaged in replacing meters that are well beyond their lifecycle, are inaccurate, are stuck, are blocked and are broken. The Company is replacing service lines that are leaking and is replacing valves that are broken and/or inoperable. These are activities of a responsible water utility and the replacement of aged and failing infrastructure is critical to ensuring the provision of reliable water service that meets safety standards for our customers. There are many outcomes from making these critical infrastructure replacements. These outcomes include preventing excessive property damage and risk to human health by ensuring main line valves operate when they are needed, providing sufficient fire flow capacity, ensuring leaking service lines do not allow entry of contaminants into the water supply network and ensuring that broken, stuck, blocked and inaccurate-registering meters operate properly and accurately measure water deliveries throughout the service territory. Furthermore, making the replacements at the right time prevents additional infrastructure failure from occurring and thereby preserves the life of other critical infrastructure components.

The assumption that all planned meter, service, and valve replacements are being done to decrease lost and unaccounted for water is not correct. Although controlling lost and unaccounted for water is a priority, this is not typically the driver for these projects. Planned replacement of aging infrastructure ensures continued reliable service to our

customers, and that is what drives our meter, service, and valve replacement program. Replacing failing infrastructure components is a best management practice that is an important part of any responsible utility's work.

Recurring projects completed in the post-test year period consist of either repairs or replacements of existing assets serving existing customer and are a significant investment needed to continue uninterrupted service.

Mr. Radigan uses the example of tools, vehicles and maps to establish that the recurring projects are not vitally necessary. He questions how vital these items are to the continued provision of service. Maps provide data about, and locations of, pipelines and valves that allow our field staff to effectively respond to customer needs and emergency situations. The vehicles and tools provide our employees with what they need to maintain our assets and respond to emergencies in a safe and efficient manner to control costs of the Company. All of this equipment is required to complete these replacements. To replace service lines, valves, and meters you need backhoes, hole hogs, pulling tools, saws, and pipe cutters to name a few. Without these tools it is not possible to make these infrastructure replacements.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
CANDACE COLEMAN, P.E.
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
CANDACE COLEMAN, P.E.
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Candace Coleman testifies that:

EPCOR Water Arizona Inc. ("EWAZ" or "Company") qualifies for a SIB for its Mohave, Paradise Valley, and Sun City districts based on the SIB eligibility requirements established by Commission. A SIB is intended to benefit the ratepayer by reducing the rate shock typically seen due to the frequency and processing time of rate cases. The Company has no intention of replacing assets that are not in need of replacement due to an increase in failures and repairs.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Candace Coleman. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, Arizona 85027, and my business phone is (623) 445-2498.

Q. ARE YOU THE SAME CANDACE COLEMAN WHO PROVIDED DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The primary purpose of my testimony is to respond to the direct testimony of Mr. Robert Mease and Mr. Frank W. Radigan on behalf of the Residential Utility Consumer Office ("RUCO") and the direct testimony of Mr. John S. Thornton, Jr. on behalf of the Sanctuary Camelback Mountain Resort & Spa, JW Marriott Camelback Inn, and Omni Scottsdale Resort & Spa at Montelucia ("The Resorts") on the issue of the Company's proposed System Improvement Benefit ("SIB") Mechanism.

III. RESPONSE TO INTERVENORS

Q. PLEASE DESCRIBE GENERALLY THE INFORMATION SUBMITTED IN SUPPORT OF THE COMPANY'S REQUEST FOR A SIB.

A. For each district, Paradise Valley Water, Mohave Water, and Sun City Water, a detailed engineering report was submitted in support of a SIB. These reports contained an investigation and analysis of the condition of the distribution system assets and a justification for each SIB project.

Q. WAS THIS INFORMATION REVIEWED BY THE ARIZONA CORPORATION COMMISSION STAFF ("ACC STAFF")?

A. Yes.

Q. WAS THE INFORMATION PROVIDED CONSISTENT WITH PRIOR ARIZONA CORPORATION COMMISSION ("COMMISSION") DECISIONS APPROVING A SIB?

A. Yes.

Q. WHAT DID ACC STAFF CONCLUDE REGARDING A SIB?

A. ACC Staff, based on its review of all of the information submitted by the Company, concluded that implementing SIB mechanisms in the Paradise Valley Water, Mohave Water, and Sun City Water districts is reasonable and appropriate.

1. <u>Response to RUCO</u>

Q. MR. MEASE, ON BEHALF OR RUCO, RECOMMENDS THAT THE COMMISSION REJECT THE COMPANY'S REQUEST FOR A SIB MECHANISM FOR ANY OF THE COMPANY'S WATER DISTRICTS. ON WHAT BASIS DOES MR. MEASE OBJECT TO THE SIB?

A. Mr. Mease opposes the SIB mechanism for the following reasons: (1) in his opinion the SIB inappropriately shifts risk from the Company to the ratepayer without adequate financial compensation to the ratepayer; (2) the SIB is not an adjustor mechanism; (3) the SIB will increase the Company's fair value rate base without any determination of fair value; (4) the Company has not requested interim rates; (5) the SIB is not in the public interest; (6) individual circumstances of the case; and (7) the Company does not set aside depreciation expense.

Q. MR. MEASE CLAIMS A SIB SHIFTS RISK FROM THE COMPANY TO THE RATEPAYER WITHOUT ADEQUATE FINANCIAL COMPENSATION TO THE RATEPAYER. PLEASE COMMENT.

A. A SIB actually reduces risk for the ratepayer. The reduction in regulatory lag benefits the ratepayer as it reduces larger increases typically implemented through a regular rate case. Additionally, replacement of high risk assets, those with potential for failure, reduces the potential for emergency replacements, which tend to cost much more than systematic replacements.

Q. HOW DO YOU RESPOND TO MR. MEASE'S ARGUMENT THAT A SIB IS NOT AN ADJUSTOR MECHANISM?

A. I am not an attorney, but I do note that the Commission has approved a SIB mechanism for several other water and wastewater companies, including EPCOR Water's Chaparral City Water Company in Decision No. 74568, Liberty Water's Litchfield Park Water and Wastewater in Decision No. 74437, and Arizona Water's Eastern Group in Decision No. 73938.

Q. MR. MEASE ARGUES A SIB WOULD INCREASE THE COMPANY'S FAIR VALUE RATE BASE WITHOUT DETERMINATION OF FAIR VALUE. WHAT IS THE COMPANY'S RESPONSE TO THIS CLAIM?

A. The SIB Surcharge Request Filing Requirements delineated in the Chaparral City Water Company's decision authorizing a SIB mechanism contemplate the provision of sufficient information to enable the Commission to conduct a fair value analysis. The requirements of the SIB surcharge requests are the following:

1. All SIB surcharge requests must include the most current balance sheet at the time of the filing;
2. Its most current income statement;

3. An earnings test schedule;
4. A rate review schedule (including the incremental pro forma effects of the proposed increase);
5. A revenue requirement calculation;
6. A surcharge calculation;
7. An adjusted rate base schedule;
8. A CWIP ledger (for each project showing accumulation of charges by month and paid vendor invoices);
9. Excel schedules with formulae intact supporting the revenue requirements approved in this Decision and the same Excel schedules incorporating the effects of SIB-eligible plant for the current SIB surcharge request and any previously approved surcharge and true-up requests; and
10. A typical residential bill analysis showing the effect of the SIB surcharge.
11. The company must also provide current bill determinants.

These are the same requirements that the Company intends to follow if the Commission approves its request for SIB mechanisms for its Paradise Valley Water, Sun City Water and Mohave Water districts. Based on these requirements, a fair value analysis will be conducted, contrary to Mr. Mease's concern.

Q. MR. MEASE CLAIMS THE SIB DOES NOT COMPENSATE RATEPAYERS FOR REDUCTIONS IN O&M EXPENSES OR TAKE INTO CONSIDERATION ADDITIONAL REVENUES GENERATED FROM A SIB. PLEASE RESPOND.

A. O&M expenses fluctuate continually for a variety of reasons. It would be impossible to quantify what these O&M expenses would be as they are neither known nor measurable. Furthermore, the additional revenue that a SIB surcharge will generate is intended to compensate the Company with a return on and a return of its net investment in SIB-

eligible infrastructure but only after the investment is in service and providing a benefit to the Company's customers. The SIB mechanism is intended to ensure the replacement of high risk and aging infrastructure which, if not addressed in the present, has the likely potential to become a very expensive and cumbersome problem to both the Company and to customers in the future. If reductions in O&M expenses do occur, the Commission will have sufficient information in the SIB Surcharge request filing to make a determination if some additional adjustment is necessary. However, the SIB mechanism includes an Efficiency Credit which is included to account for an improvement in O&M efficiency and automatically returns five percent of the SIB surcharge back to the customers whether O&M reductions (i.e. efficiencies) are realized or not. This Efficiency Credit provides a reduction to customers that transfers the risk that efficiencies will materialize onto the Company.

Q. MR. MEASE CLAIMS THAT THE SIB DOES NOT CONSIDER SYSTEM GROWTH THAT PRODUCES ADDITIONAL INCOME. WHAT IS THE COMPANY'S RESPONSE?

A. This allegation is not true. The SIB Surcharge request filing requires the Company to file updated billing determinants over which to spread the SIB revenue requirement. It is not necessary for the Company's growth to be considered a factor in the relevance of a SIB. As with post-test year plant additions that are revenue neutral, the assets that are subject to replacement and recovery pursuant to a SIB mechanism are intended to provide safe and reliable water service to existing customers. However, as the system grows, as demonstrated through the billing determinants required with the filing, the SIB-related revenue requirement can be spread over that growth.

Q. MR. MEASE ARGUES THAT THE SIB CREATES A DISINCENTIVE FOR THE COMPANY TO OPERATE THE SYSTEM EFFICIENTLY. DO YOU AGREE?

A. No. On the contrary, a SIB allows the Company to operate more efficiently. Company time is better spent operating the system as opposed to responding to emergency breaks and repairs. Furthermore, planned replacement projects (like those in the SIB) allow for better planning and coordination of labor and materials.

Q. HOW DO YOU RESPOND TO MR. MEASE'S CLAIMS THAT THE COMPANY DOES NOT QUALIFY FOR A SIB BASED ON REQUIREMENT 2 OF THE POA WHICH QUALIFIES AN ASSET FOR A SIB BASED ON ITS USEFUL SERVICE LIFE AND ITS WORN OUT OR DETERIORATING CONDITION?

A. All projects in the SIB were identified because their condition is known or strongly believed (based on actual data) to have failed or are at high risk for failure. The engineering justification for these projects does not necessarily consider an asset's useful life as being its approved depreciation rate, but rather its actual condition. For example, if a pipe has no history of breaking, it may remain in service for 100 years, even if it has a depreciable life of only 50 years.

Q. DO YOU AGREE WITH MR. MEASE CLAIMS THAT THE THIRD SIB ELIGIBILITY CRITERIA IN THE POA IS A CATCH ALL AND CAN BE USED TO JUSTIFY REPLACEMENT OF ANY ASSET INCLUDING OFFICE FURNITURE. PLEASE COMMENT.

A. No. Replacement of every single asset included in a SIB is scrutinized for validity by ACC Staff. The POA clearly states that only specific NARUC accounts can be included in the SIB. SIB Eligible NARUC accounts are:

- NARUC Account No. 309 – Supply Mains
- NARUC Account No. 331 – Transmission and Distribution Mains
- NARUC Account No. 333 – Services
- NARUC Account No. 334 - Meters and Meter Installations

- NARUC Account No. 335 – Hydrants
- NARUC Account No. 360 – Collection Mains (Forced)
- NARUC Account No. 361 – Collection Mains (Gravity)
- NARUC Account No. 363 – Services, Manholes, Clean-outs

There are no assets included in the Company's SIB that do not fall under one of these NARUC accounts. In fact, Mr. Mease confirms this on page 11 of his testimony.

Q. DO YOU AGREE WITH MR. MEASE'S CLAIM THAT THE COMPANY'S SIB PROPOSAL FAILS TO MEET THE CRITERIA IN ITS POA?

A. No. Each asset identified for the SIB is eligible for the SIB according to at least one of the three criteria, which are:

1. Water loss greater than 10%,
2. Assets have been in service beyond their useful service lives (based on authorized depreciation rates) and are deteriorating by no fault of the Company,
3. Other engineering, operational, or financial reason (other than negligence or improper maintenance) such as documented increase in failures/repairs, or
4. Assets that must be moved, replaced, or abandoned mandated by a government agency.

Qualifying factors are detailed in each district's SIB Engineering Report.

Q. DO YOU HAVE A RESPONSE FOR CONCERNS NOTED BY MR. MEASE ABOUT ACCUMULATED DEPRECIATION?

A. No. My expertise is in engineering, not accounting. Please see the rebuttal testimony of Company witness Ms. Hubbard regarding Mr. Mease's concerns about Accumulated Depreciation and the SIB mechanism.

Q. DO YOU HAVE A RESPONSE FOR CONCERNS ABOUT THE COMPANY'S GOOD FINANCIAL STANDING?

A. No. My expertise is in engineering, not finance. Please see the rebuttal testimony of Company witness Ms. Hubbard regarding good financial standing and the SIB mechanism.

Q. MR. MEASE CONTINUES TO MAKE AN ISSUE OF YOUR TESTIMONY IN THE CHAPARRAL CITY WATER COMPANY RATE CASE ABOUT THE COMPANY'S ABILITY TO CONTINUE TO PROVIDE SAFE AND RELIABLE WATER SERVICE WITHOUT A SIB. HOW DO YOU RESPOND?

A. While the Company can and will continue to replace failing assets with or without a SIB, we believe a SIB is beneficial to our customers and the Company. A SIB mechanism will reduce rate shock to the customer and it incentivizes the Company to replace high risk assets before they fail; the failure to do this makes repair and replacement costs more costly and inefficient, causes more water outages and ultimately is a detriment to the service provided to customers.

Q. MR. RADIGAN, ON BEHALF OF RUCO, INDICATES IN HIS TESTIMONY THAT THE SIB PROVIDES AN INCENTIVE TO REPLACE ELIGIBLE PLANT ITEMS PREMATURELY. HOW DOES THE COMPANY RESPOND?

A. All assets will need to be replaced eventually. However, the Company has no intention of replacing assets that are in good condition. Unfortunately, it is impossible to know the exact condition of all buried assets. Therefore, the method for determining which assets to replace must vary between asset types. These are the general methods that were used to determine which assets of each type would be included in the SIB:

1. Mains should be replaced when they have a clear history of breaks and repairs. It is prudent to replace these mains to avoid the higher cost of many future repairs.

2. Valves should be replaced when they are found to be broken and/or inoperable.

3. Services should be replaced when there have been frequent failures and consequent replacements of services with the same age, material, soil type, location, and any other pertinent condition or quality.

4. Meters should be replaced when they do not read accurately. EPCOR has a meter testing program that ensures a reasonable number of meters from a meter route are tested for accuracy and these meters are only replaced if a significant number of meters are found to be inaccurate.

Q. MR. RADIGAN STATES THAT THE COMPANY HAS USED THE NESSIE CURVE AS JUSTIFICATION FOR PIPE REPLACEMENT AS OPPOSED TO PIPE CONDITION ANALYSIS, AND THAT THE EPA STATES THAT THE NESSIE CURVE IS INTENDED FOR USE FOR LONG-TERM CAPITAL PLANNING. PLEASE RESPOND.

A. Indeed the Nessie curve is intended for long-term planning, and it was used in the Company's engineering report to show that the Company must invest in aging infrastructure now in order to keep up with the rate at which infrastructure will fail; the Company should avoid waiting until failing infrastructure becomes a significant burden on the customers and the Company's financial health. The Nessie curve is not intended to justify individual pipe replacements, nor was it used in this manner to justify SIB eligibility. The determination of which pipes need to be replaced was done through an investigation of pipes that had a history of breaks and were found, during subsequent repairs, to be in poor condition.

Q. MR. RADIGAN STATES THAT REPLACING METERS INCREASES METER ACCURACY AND INCREASES REVENUE FOR THE COMPANY WITH NO BENEFIT TO THE CUSTOMERS. WHAT IS THE COMPANY'S RESPONSE?

A. Mr. Radigan's comment suggests that it is normal practice for a company to knowingly give customers something for free. However, this is not normal practice in any industry. Improving meter accuracy allows the Company to operate more efficiently by reducing water loss, unnecessary water production, and energy and chemical use.

2. <u>Response to Mr. Thornton on behalf of the Resorts</u>

Q. MR. THORNTON ALSO RECOMMENDS THAT THE COMMISSION NOT APPROVE A SIB FOR PARADISE VALLEY. HE CLAIMS THAT ARIZONA WATER COMPANY RECEIVED A SIB BECAUSE THEY NEEDED FINANCIAL HELP, BUT THAT EPCOR IS IN GOOD FINANCIAL STANDING AND THEREFORE DOES NOT NEED A SIB. HOW DOES THE COMPANY RESPOND?

A. Qualification for a SIB has nothing to do with a company's financial standing. A SIB is intended to provide timely rate relief for water utilities to systematically replace failing infrastructure to avoid catastrophic failures in the future by implementing small and systematic rate increases that prevent rate shock to the customers.

Q. MR. THORNTON STATES THAT IF THE COMPANY'S INFRASTRUCTURE WAS FAILING, THIS WOULD BE APPARENT IN HIGH WATER LOSS, WHICH IS NOT THE CASE IN PARADISE VALLEY. HOW DO YOU RESPOND?

A. Water loss is not the only indication of failing assets. For example, water main breaks tend to cause water to surface, alerting the Company to an immediate need for repair. An

inoperable valve will not necessarily contribute to current water loss, but it will prevent the shut-down of mains during emergencies and routine maintenance.

Q. MR. THORNTON STATES THAT YOU ARE UNCLEAR IN YOUR TESTIMONY WHETHER OR NOT THE NESSIE CURVE PREDICATIONS ARE LIMITED TO FULLY DEPRECIATED ASSETS. PLEASE CLARIFY.

A. I stated in my direct testimony that the districts in which we are applying for a SIB "require investment in infrastructure as many assets are nearing or have surpassed their useful lifetimes". I had no intention of implying whether or not an asset is fully depreciated. Rather, I was making a statement about an asset's physical lifetime; my intention was to say that an asset is not useful if it has physically failed.

Q. CAN YOU COMMENT ON MR. THORNTON'S CONCERN ABOUT ACCUMULATED DEPRECIATION?

A. No, this is outside of my expertise. Please see the rebuttal testimony of Company witness Ms. Hubbard regarding Mr. Thornton's concerns about Accumulated Depreciation and the SIB mechanism.

Q. CAN YOU COMMENT ON MR. THORNTON'S CONCERN ABOUT ACCUMULATED DEFERRED INCOME TAX?

A. No, this is also outside of my expertise. Please see the rebuttal testimony of Company witness Ms. Hubbard regarding Mr. Thornton's concerns about Accumulated Deferred Income Tax and the SIB mechanism.

Q. PLEASE COMMENT ON MR. THORNTON'S CONCERN THAT THE COST ESTIMATES DOUBLE COUNT LABOR AND OVERHEAD EXPENSES.

A. The cost estimates were prepared to include all expenses related to the project. Labor included in these projects will not be charged as O&M but rather as capital expenditures

related to each SIB project. Additionally, ACC Staff agreed to the format of these cost estimates, limiting overhead expenses to 10%, even if overhead expenses are typically more than 10%.

Q. MR. THORNTON STATES THAT THE RESORTS IN THE PARADISE VALLEY WATER DISTRICT WOULD PREFER FULLY-LITIGATED CASES OPEN TO FULL AND TRANSPARENT REVIEW AND ANALYSIS RATHER THAN SMALLER INCREMENTS AUTOMATICALLY ADDED TO BILLS WITH MINIMAL NOTICE. WHAT IS YOUR RESPONSE?

A. As an engineer, I am not involved in the notification process. As for the small increments that will be added to customers' bills, all SIB projects must be approved by the Commission both before they begin and after they are complete. No rate increases are implemented "automatically".

Q. MR. THORNTON IS CONCERNED THAT THE SIB TRUE-UP REMOVES RISK FROM THE COMPANY. CAN YOU COMMENT ON THIS?

A. I am not an expert in financial risk. However, it may be worth pointing out that a true-up works both ways, and can also decrease the SIB surcharge. Any under- or over-collected SIB authorized revenues will be recovered or refunded, without interest, over a 12-month period by means of a SIB true-up surcharge or true-up credit.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
SANDRA L. MURREY
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
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SANDRA L. MURREY
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EXECUTIVE SUMMARY

Sandra L. Murrey testifies as follows:

Sponsored Rebuttal Schedules

Ms. Murrey sponsors the following schedules in this case:

- Schedule C-1 Rebuttal: Adjusted Test Year Income Statement
- Schedule C-2 Rebuttal: Income Statement Pro Forma Adjustments
- Schedule C-3 Rebuttal: Computation of Gross Revenue Conversion Factor

Adjusted Operating Income and Operating Expense

EPCOR Water Arizona Inc.'s rebuttal position for Adjusted Operating Income and Expense is:

	EPCOR Water Arizona, Inc.
Adjusted TY Operating Income	$ 3,840,767
Adjusted TY Operating Expense	$ 24,151,356

Operating Income Adjustments

The Company's position on ACC Staff's proposed adjustments. These adjustments apply to all districts unless noted:

- Accept Water Revenue (ACC Staff Adj #1. Mohave Water & Sun City Water only),
- Revised Depreciation Expense (ACC Staff Adj #2),
- Revised Property Tax (ACC Staff Adj #3),
- Revised Income Tax (ACC Staff Adj #4),
- Revised Corporate Allocation (ACC Staff Adj #5),
- Accept Water Testing (ACC Staff Adj #6),
- Revised Rate Case Expense (ACC Staff Adj #7),
- Revised Chemicals (ACC Staff Adj #8. Tubac Water only)

The Company's position on RUCO's proposed adjustments. These adjustments apply to all districts unless noted:

- Oppose Annualization (RUCO Adj #1),
- Oppose Reverse Declining Usage Expense (RUCO Adj #2),
- Oppose Include CAP charges in Base Rates (RUCO Adj #3,Paradise Valley Only),
- Oppose Remove APS Estimated Power Costs (RUCO Adj #4),
- Accept Remove ACRM Surcharge and Deferred O&M Costs (RUCO Adj #5),
- Revised Corporate Allocations (RUCO Adj #6),
- Revised Rate Case Expense (RUCO Adj #7),
- Oppose Tank Maintenance Expense (RUCO Adj #8, Paradise Valley Only),
- Revised Depreciation Expense (RUCO Adj #9),
- Revised Property Tax Expense (RUCO Adj #10),
- Revised Income Tax Expense (RUCO Adj #11)

Company Rebuttal Income Statement Adjustments

- Adj SM – 1R Water Revenue (Mohave Water and Sun City Water only)
- Adj SLH– 2R Depreciation Expense
- Adj SM – 3R Property Tax
- Adj SM – 4R Federal and State Income Tax
- Adj SM – 5R Arizona Corporate
- Adj SM – 6R Water Testing (Water districts only)
- Adj SM – 7R Chemical Expense (Tubac Only)
- Adj SM – 8R Interest Synchronization
- Adj SM – 9R Tank Maintenance
- Adj SM – 10R Promotions, Donations,
- Adj SLH – 11R Corporate Allocations
- Adj SLH– 12R 24-Month Deferral Request
- Adj SM – 13R New Large Customer Annualization
- Adj SM – 14R Customer Accounting / Postage Annualization
- Adj SLH – 15R Arizona Labor Allocation

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is Sandra L. Murrey. My business address is 2355 W. Pinnacle Peak Road, Suite 300, Phoenix, Arizona 85027, and my business phone is 623-445-2490.

Q. ARE YOU THE SAME SANDRA L. MURREY WHO PROVIDED DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

A. I will respond to the Arizona Corporation Commission Staff's ("ACC Staff") and the Residential Utility Consumer Office's ("RUCO") testimony concerning adjustments to the Company's proposed operating expenses.

III. REBUTTAL SCHEDULES AND EXHIBITS (ALL DISTRICTS)

Q. PLEASE IDENTIFY THE REBUTTAL SCHEDULES YOU ARE SPONSORING.

A. I am sponsoring the following rebuttal schedules for each of the districts:

- Schedule C-1 Rebuttal – Adjusted Test Year Income Statement
- Schedule C-2 Rebuttal – Income Statement Pro Forma Adjustments
- Schedule C-3 Rebuttal – Gross Revenue Conversion Factor

Q. DOES YOUR TESTIMONY IN THIS PROCEEDING INCORPORATE RECOMMENDATIONS OF OTHER COMPANY WITNESSES?

A. Yes, it does. I have incorporated recommendations sponsored by Company witnesses Ms. Sheryl L. Hubbard, Mr. Jeffrey Stuck, and Mr. Shawn Bradford, resulting in revised *pro forma* adjustments to test-year expenses where applicable.

IV. OPERATING EXPENSES ADJUSTMENTS

Q. HAVE YOU REVIEWED ACC STAFF'S AND RUCO'S RECOMMENDED ADJUSTMENTS TO OPERATING EXPENSES?

A. Yes, I have. The Company will be proposing several rebuttal Income Statement adjustments, as outlined below, in response to ACC Staff's and RUCO's recommended adjustments. In the next few pages of my testimony, I will address the recommendations made by ACC Staff and then move on to RUCO's recommendations.

- Adj SM – 1R Water Revenue
- Adj SLH – 2R Depreciation Expense
- Adj SM – 3R Property Tax
- Adj SM – 4R Federal and State Income Tax
- Adj SM – 5R Corporate Allocations
- Adj SM – 6R Water Testing
- Adj SM – 7R Chemical Expense
- Adj SM – 8R Interest Synchronization
- Adj SM – 9R Tank Maintenance
- Adj SM– 10R Promotions, Donations,
- Adj SLH – 11R Corporate Allocations
- Adj SLH – 12R 24-Month Deferral Request
- Adj SM – 13R New Customer Annualization
- Adj SM – 14R Customer Accounting / Postage Annualization
- Adj SLH – 15R Arizona Labor Allocation

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 1 RECOMMENDS AN INCREASE TO REVENUES FOR BOTH MOHAVE WATER AND SUN CITY WATER DISTRICTS FOR OVERCOLLECTION OF REVENUES FROM THE LOW INCOME PROGRAMS. PLEASE DESCRIBE THEIR ADJUSTMENTS AND WHETHER THE COMPANY ACCEPTS THEIR RECOMMENDATIONS.

A. The Company has low income programs available in Mohave Water and Sun City Water districts. These programs are funded via a surcharge which is added to the highest tier rate commodity rate for residential and commercial customers. The funding began as soon as the rates were effective per the decision that authorized the low income programs. However, since the programs are relatively new, it has taken some time to build up the low income recipient base which has contributed to the over collection of revenue. ACC Staff is recommending a pro forma adjustment for Mohave Water of $35,483 to increase water revenue by normalizing and refunding the $106, 450 over collection in that district over a three year period. A similar pro forma adjustment for Sun City Water of $30,110 increasing water revenue to normalize and refund the $90,330 over collection over a three-year period is proposed. The Company accepts ACC Staff's proposed income statement adjustment #1 for both Mohave Water District and Sun City Water District, however, the Company plans to continue to administer the program as currently approved and implemented. Please see Company's rebuttal adjustment SM-1R on Schedule C-2 Rebuttal for each of the districts.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 2 RECOMMENDS A DECREASE TO DEPRECIATION EXPENSE IN ALL DISTRICTS. ARE YOU THE COMPANY WITNESS THAT WILL YOU BE ADDRESSING THE COMPANY'S POSITION?

A. No, Company witness Ms. Sheryl L. Hubbard will sponsor the Company's positions on depreciation and amortization expense.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO.3 ADJUSTS PROPERTY TAX EXPENSE. PLEASE DESCRIBE THEIR ADJUSTMENT AND WHETHER THE COMPANY ACCEPTS THEIR RECOMMENDATION.

A. Changes in Property Tax Expense are typical due to the inclusion of recommended revenues and the need to reflect the conforming changes that result. ACC Staff has made conforming adjustments to property tax expense for Mohave Water and Sun City Water related to adjustment # 1, which increases the revenue in these districts.

In reviewing the calculations for property tax expense, the Company noticed an error in ACC Staff's calculation of property tax expense for the Tubac Water District. The Company believes the failure of ACC Staff to exclude 10% of outstanding CWIP balances in calculating Tubac Water's annual property tax expense is an oversight by ACC Staff. Ten percent of the outstanding CWIP at the end of the test year is $9,880.

The Company accepts the conforming adjustment to property tax expense in Mohave Water and Sun City Water, as we have accepted the adjustment to revenues (please see response to ACC Staff adjustment #1). However, the Company does not agree with the adjustment for the Tubac Water District as it appears to be an error. Please see the Company's rebuttal adjustment SM-3R on Schedule C-2 Rebuttal for all districts which use the same assessment ratios and tax rates as the ACC Staff's calculations with conforming changes based on the Company's rebuttal adjusted test year revenues.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO.4 ADJUSTS INCOME TAX EXPENSE. PLEASE DESCRIBE THEIR ADJUSTMENT AND WHETHER THE COMPANY ACCEPTS THEIR POSITION.

A. ACC Staff applied a tax rate of 6.0% as obtained from the Arizona Department of Revenue for the taxable years beginning from and after December 31, 2014 through December 31, 2015. The Company is in agreement with their position and will update the tax rate to 6.0% in the calculation of proposed state income tax expense in all districts. Please see the Company's rebuttal adjustment SM-4R on Schedule C-2 Rebuttal for all districts.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 5 RECOMMENDS A DECREASE TO CORPORATE ALLOCATION EXPENSE IN ALL DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. This adjustment to the corporate allocation cost pool impacts many different expense categories including the Corporate Allocation line item on Schedules C-1 and C-2. ACC Staff Adjustments 5a and 5b will be discussed in the testimony of Ms. Sheryl L. Hubbard and my rebuttal testimony will discuss ACC Staff Adjustments 5c through 5h. I will address each expense category at the corporate level which will then be allocated to the districts based on their appropriate 4-factor allocator. Please see the Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts.

<u>Outside Services (ACC Staff Adj 5c)</u> – ACC Staff recommended that $67,011 of outside services costs be disallowed. ACC Staff is proposing the removal of costs related to lobbying expense as well as a charge to accrue unbilled legal expenses related to Thunder Mountain. The Company requested clarification from Staff in our Data Request number 1-20. We attempted to work with ACC Staff but given the information provided, we are still unable to determine the source of their adjustment. We therefore must reject this proposed adjustment.

Pensions (ACC Staff Adj 5d) – ACC Staff recommended that $54,262 be disallowed from pension costs for relocation costs that were charged to pension expense in error. The Company requested clarification from Staff in our Data Request number 1-20. We attempted to work with ACC Staff but given the information provided, we are still unable to determine the source of their adjustment. We therefore must reject this proposed adjustment.

Regulatory Expense (ACC Staff Adj 5e) – ACC Staff recommended that $24,699 of regulatory expense related to the amortization of year 2000 (Y2K) software costs be disallowed. The Company accepts adjusting this amortization from the regulatory expense account, however, this amortization should be added to depreciation and amortization expense. Please see the regulatory expense adjustment on Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts.

Customer Accounting (ACC Staff Adj 5f) – ACC Staff recommends that $266,016 of customer accounting expenses be removed for the EWAZ bad debt expense that should not have been included in the corporate cost pool because EWAZ already charges bad debts directly to the districts. In its original calculation, the Company included $266,016 in bad debt expense for the period July 2012 to December 2012 on a consolidated basis for its Arizona (business unit 7A) operations. This consolidated bad debt was then allocated to each of the five districts involved in the current case filing using the 4-factor allocation methodology. For the remaining months of the test year, the period from January 2013 to June 2013, the Company recorded $256,213 in bad debt expense on a consolidated basis for its Arizona operations. However, the bad debt expense for this period was allocated to the districts directly through the accounting system using a factor

based on the percentage of connections and was also included in the Company's request for bad debt expense.

After reviewing the allocation methods for both six month periods, the Company has determined that calculating bad debt expense on a per district basis is a more accurate and reasonable method and our pro forma adjustment shown on adjustment SM-5R is based on that methodology. The Company compiled write-off data by district for the test year, the twelve months ended June 30, 2013, and determined a slight increase was necessary to reflect actual bad debt expense by district for the test year. Please see the customer accounting expense pro forma on Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts.

General Office Expense (ACC Staff Adj 5g) – ACC Staff recommends that $275,278 of general office expense be removed. ACC Staff had provided a listing of the categories and amounts they proposed to be excluded on Exhibit CLP-16. The Company requested clarification from Staff in our Data Request number 1-20. From the information provided, we are still unable to determine the source of ACC Staff's adjustment. We therefore must reject this proposed adjustment. The Company believes ACC Staff is concerned with Promotions, Advertising and Donations expense included in the test year general office expense category but given the lack of information provided we are not certain. The Company has identified the total direct and Arizona allocated costs associated with Promotions, Advertising, and Donations. The Company does not object to the adjustment of some of these items, however, several categories listed by ACC Staff, had already been excluded by the Company in the Company's direct case presentation as ADJ SM-10. The Company partially accepts the ACC Staff's Adj 5g including the removal of the duplicate IT invoice and the promotions, advertising, and donations in excess of the

amount already removed by the Company. Please see the general office expense pro forma on Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts.

Miscellaneous Expense (ACC Staff Adj 5h) – ACC Staff recommends that $6,485 of miscellaneous expenses be disallowed. The Company accepts ACC Staff's adjustment. Please see the miscellaneous expense pro forma on Company's rebuttal adjustment SM-5R on Schedule C-2 Rebuttal for all districts.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 6 RECOMMENDS AN ADJUSTMENT TO WATER TESTING EXPENSE IN ALL WATER DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. The Company accepts ACC Staff's proposed water testing expenses as outlined in each district's Engineering Report included in the testimony of ACC Staff witness Mr. Michael Thompson. Please see Company's rebuttal adjustment SM-6R on Schedule C-2 Rebuttal for all districts.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 7 (EXCLUDING PARADISE VALLEY WATER DISTRICT) RECOMMENDS A DECREASE TO RATE CASE EXPENSE IN ALL DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. ACC Staff is recommending a reduction to the Company's rate case expense of $650,000 citing several unwarranted claims. The Company is not seeking to recover any more than the amount of expenses actually incurred and will update ACC Staff on the amounts spent through closing briefs. The Company contracted with outside agencies to supplement its abbreviated workforce on an hourly basis. The issue that the Company originally filed for a nine district case is irrelevant as the Company has contracted on an

hourly basis and has only been billed for work done on the five districts currently submitted for consideration. The Company does not agree with these claims and believes the $650,000 is still a valid amount of rate case expense for this proceeding. As of December 31, 2014 the Company has spent $542,820, which does not include costs for consultants participating in the rebuttal/rejoinder phases of this case.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 7 FOR PARADISE VALLEY WATER DISTRICT RECOMMENDS A DECREASE TO TANK MAINTENANCE EXPENSE. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. ACC Staff is recommending annual tank maintenance for Paradise Valley Water District of $121,943, a reduction of $63,908 in the Company's requested annual tank maintenance expense of $185,851. As discussed in the rebuttal testimony of Mr. Jeffrey W. Stuck, the Company's revised tank maintenance program proposed for Paradise Valley Water District uses an updated professional tank maintenance pricing list and the revised estimate is similar to ACC Staff's total cost of $1,707,208, or $121,943 per year. The Company's revised request is a total cost of $1,892,108 over a 14-year period or $135,151. The reduction in the Company's request of $50,700 is reflected on Adj SM - 9R for Paradise Valley Water District. Please refer to the rebuttal testimony of Mr. Stuck for more details on the Company's proposed tank maintenance program for Paradise Valley Water District.

Q. ACC STAFF'S INCOME STATEMENT ADJUSTMENT NO. 8 RECOMMENDS A DECREASE TO CHEMICAL EXPENSE IN TUBAC WATER DISTRICT ONLY. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. Not in its entirety. ACC Staff is recommending a total reduction of $98,934 to chemical expense which is comprised of $46,000 in on-going media replacement costs, $2,078 in

other chemical costs and $50,856 in deferred costs (2-year amortization of deferred arsenic media replacement costs of $101,712). The Company agrees to remove the amortization of arsenic media costs of $50,856 and now proposes to recover the deferred charges of $101,712 via a separate surcharge over a 3-year period, or $33,904 per year as discussed in the rebuttal testimony of Mr. Shawn Bradford. However, the Company requests that $48,078 of actual on-going media replacement costs and chemicals be accepted in this proceeding.

Q. HAVE YOU COMPLETED ADDRESSING ACC STAFF'S INCOME STATEMENT ADJUSTMENTS?

A. Yes. I will now move on to the Company's response to RUCO's income statement adjustments.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 1 RECOMMENDS AN ANNUALIZATION ADJUSTMENT IN ALL WATER DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. RUCO discusses that the Company's witness, Mr. Thomas Bourassa, used the average number of customers in each district rather than test year-end number of customers to annualize revenues. In service areas such as are included in this rate application, seasonal variations in customer count is not unusual. Using an average number of customers during the test year provides a more accurate determination of the change in customers that should be included in a calculation of the customer annualization adjustment for rate making purposes. The use of average number of customers has been an accepted practice for EPCOR's predecessor by the Commission in the past and provides a more accurate basis upon which to annualize additional revenue.

Q, HAS THE COMPANY ADDED OR LOST ANY LARGE COMMERCIAL CUSTOMERS IN ANY OF THE DISTRICTS INCLUDED IN THIS RATE INCREASE APPLICATION?

A. Yes. In the Paradise Valley Water District, as well as the Sun City Water District, one large customer has been added in each. In the Paradise Valley Water District, Motorola Solutions added a 6" meter which that customer uses to backwash its own water treatment process once or twice per year. In the Sun City Water District, Banner Boswell Medical installed a new 6" meter. The Company is proposing an adjustment labeled Adj SM-13R to annualize the revenues and increased expenses associated with these two new customers.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 2 RECOMMENDS A DECLINING USAGE ADJUSTMENT IN ALL WATER DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. RUCO recommends the reversal of the Company's declining usage adjustment. The Company refers to ACC Staff's acceptance of the declining usage adjustments as well as ACC Staff's consistent acknowledgement of the existence of declining usage in the Company's service territories.

Q. RUCO STATED THAT IF THE COMMISSION DOES APPROVE A DECLINING USAGE ADJUSTMENT, IT WOULD RECOMMEND ADDITIONAL FILING REQUIREMENTS UPON THE COMPANY. WHAT ARE THESE REPORTS?

A. RUCO recommends the Company file an annual report by March 30th of each year showing the increase/decrease in water usage for each customer class and meter size using a calendar year. Also, RUCO recommends that the Company file a Plan of Administration (POA) to explain how customers will be refunded if there is an increase in customer usage in future years.

Q. HOW DOES THE COMPANY RESPOND TO THESE ADDITIONAL REQUIRED REPORTS?

A. The Company is opposed to certain aspects of the annual report as discussed in greater detail in the rebuttal testimony of Mr. Thomas J. Bourassa. Mr. Bourassa also addresses the POA in his rebuttal testimony.

Q. DOES RUCO ADJUSTMENT NO. 2 ALSO NOTE AN ERROR IN THE CALCULATION OF THE COMPANY'S ANNUALIZATION OF EXPENSES ASSOCIATED WITH THE CUSTOMER ANNUALIZATION ADJUSTMENT SM-2?

A. Yes. The Company has reviewed the original calculations and is proposing an adjustment to postage and customer accounting expenses to incorporate the number of bills analysis as recommended by RUCO. The Company's proposed adjustment is SM-14R.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 3 RECOMMENDS THAT CAP COSTS BE INCLUDED IN BASE RATES FOR PARADISE VALLEY AND SUN CITY WATER DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. The Company currently has surcharge mechanisms in place in both of these districts and ACC Staff has accepted the Company's proposal to retain the surcharges due to the difficulty in unwinding them and the future uncertainties facing the CAP costs in general. The Company requests that the Commission continues to authorize these mechanisms to remain in effect as proposed in the Company's direct case. Please refer to the testimony of Mr. Jake Lenderking for additional justification to maintain the existing surcharges with the minor modifications proposed to update them to today's cost environment.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 4 RECOMMENDS AN ADJUSTMENT TO REMOVE APS ESTIMATED POWER COSTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. The Company prepared a pro forma increase to power costs based on an APS forecast of 3.65%. RUCO argues to exclude APS's study of projected costs because it is not known and measurable. The Company communicated with APS and obtained a forecasted 3.56% increase in power costs for 2014. APS has numerous adjustor mechanisms that are designed to pass through changes in their power costs on a regular basis. It is only reasonable to allow water companies an opportunity to recover these cost changes as well. Some of the adjustors that APS includes in their business and water pumping tariffs include the following:

- Four Corners Generation stations purchase adjustor
- Power Supply Adjustor
- Lost Fixed Cost Recovery adjustor
- Environmental Improvement Surcharge
- Renewal Energy Standard Adjustment Schedule
- Water Pumping Service – Time of Use

The Company calculated the actual increase to power costs for the operating year ended December 31, 2014 as compared to the year ended December 31, 2013 for the three districts affected by the APS increase, (Mohave Water, Paradise Valley Water, and Sun City Water) and identified an average 4.16% increase in power costs for that period which more than supports the Company's request for a 3.65 percent increase in power expenses.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 5 RECOMMENDS THE REMOVAL OF ACRM SURCHARGE REVENUE AND DEFERRED O&M COSTS FOR TUBAC WATER DISTRICT. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. The Company has already adjusted the Tubac deferred arsenic media replacement costs consistent with the ACC Staff's proposal to remove the arsenic media amortization. Please see Company ADJ SM-7R on Schedule C-2 Rebuttal. The Company is proposing a 3-year recovery of the deferred O&M costs through a surcharge which will contain a 50% fixed component and 50% variable component to be segregated among current billing determinants. This is further discussed in the Rebuttal Testimony of Mr. Shawn Bradford and Mr. Thomas Bourassa for the rate design component.

Q. IS THE ADJUSTMENT THAT RUCO PROPOSES TO REMOVE THE ACRM SURCHARGE REVENUE APPROPRIATE IN THIS CASE?

A. No. Although the Company intends to eliminate the ACRM Step 1 surcharge, the customers are paying the surcharge and the revenue should remain in the test year revenue. When the revenue requirement is determined, the new rates will be designed to recover the entire revenue requirement without a surcharge. If the surcharge revenue is

eliminated, the revenue increase is overstated and misleading to customers because they are currently paying the base rates plus the surcharge.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 6 RECOMMENDS AN ADJUSTMENT TO CORPORATE ALLOCATION EXPENSE IN ALL DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. Not entirely. This adjustment to the corporate allocation expense, like ACC Staff's Adjustment 5 discussed above, impacts many different expense categories including the Corporate Allocation line item on Schedules C-1 and C-2. RUCO's Adjustments 6a and 6b will be discussed in the testimony of Ms. Sheryl L. Hubbard and my rebuttal testimony will discuss RUCO's Adjustments 6c and 6d. I will address each expense category at the corporate level which will then be allocated to the districts based on their appropriate 4-factor allocator.

<u>IT Charges (RUCO Adjustment 6c)</u> – RUCO inquired in DR 17.16 about corporate IT affiliated charges. The Company identified $11,010.36 in duplicate license fee billings and accepts the proposed total adjustment before allocation of ($3,169).

Advertising, Promotions, and Donations (RUCO Adjustment 6d) – RUCO identified and proposes to disallow district direct-charged Advertising, Promotions, and Donations expenses for each of the districts. The Company is not opposed to this adjustment, however, the adjustment removes some of the Donations already removed by the Company for each District totaling $1,169 in costs. The Company has accepted RUCO's Adjustment 6d excluding removals that are duplicates. The Company' proposed adjustment is SM-15R.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 7 RECOMMENDS AN ADJUSTMENT TO RATE CASE EXPENSE. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. RUCO states that the Company's proposed rate case expense of $650,000 is out of the range of reasonableness citing examples of three other utilities. It is difficult to address costs of the other utilities as the rate case costs across different organizations, districts, and circumstances are not easily comparable. For example, if one were to attempt comparison, Chaparral City Water Company's approved rate case expense of $275,000 (RUCO's cited example) and declare that expense to be the standard per district cost, the Company could argue a five district case should amount to $1.375 million dollars. The Company's proposed $650,000 in rate case expense is comprised of the best known estimate of costs at this time. As of December 31, 2014, the Company has spent $542,820.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 8 RECOMMENDS AN ADJUSTMENT TO TANK MAINTENANCE EXPENSE IN PARADISE VALLEY WATER DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. Please refer to the rebuttal testimony of Mr. Stuck as he addresses the Company's position on Tank Maintenance for Paradise Valley Water District. The adjustment that Mr. Stuck proposes is shown as Adj SM-9R on Schedule C-2 Rebuttal.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 9 RECOMMENDS AN ADJUSTMENT TO DEPRECIATION EXPENSE IN ALL DISTRICTS. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. No. Please refer to the rebuttal testimonies of Ms. Sheryl L. Hubbard and Mr. John Guastella as they address the Company's position on all matters related to plant accounting and depreciation.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 10 RECOMMENDS AN ADJUSTMENT TO PROPERTY TAX EXPENSE. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. RUCO has calculated an average property tax assessment ratio of 18.056 percent. This is based on a December 31, 2014 property tax assessment ratio of 18.5 percent and a December 31, 2015 property tax assessment ratio of 18.0 percent. RUCO calculated the average using 4 months at 18.5 percent and 32 months of 18.0 percent. The Company argues that the January 1, 2013 to December 31, 2013 property tax assessment ratio was 19% and those tax expenses payable in 2014 should also be used to calculate an average assessment ratio. The Company calculates an adjusted assessment ratio of 18.33% using 6 months of the 2013 rate for the last 6 months of the test year, 12 months of the 2014 rate, and 18 months of the 2015 rate. Because this difference is immaterial when compared to the company's filing of 18.5%, the company feels no adjustment to property tax expense is necessary at this time. Any conforming adjustment to the Company's property tax expense is reflected on Adj SM-3R on Schedule C-2 Rebuttal.

Q. RUCO'S INCOME STATEMENT ADJUSTMENT NO. 11 RECOMMENDS AN ADJUSTMENT TO INCOME TAX EXPENSE. DOES THE COMPANY ACCEPT THIS ADJUSTMENT?

A. Income tax adjustments typically reflect conforming changes necessitated by virtue of different revenue or expense items. However, in this case, the adjustment also includes a correction in the Arizona state income tax rate. The Company's direct case filing used an Arizona state income tax rate of 6.5% and this rate has changed to 6.0% effective January 1, 2015. The Company agrees that the Arizona state income tax rate for purposes of calculating the state income taxes should be 6% and also agrees that any conforming changes to taxable income due to proposed changes in revenue and expenses are appropriate. The correcting and conforming adjustment to the Company's income tax expense is reflected on Adj SM-4R on Schedule C-2 Rebuttal.

Q. HAS THE COMPANY MADE CONFORMING CHANGES TO THE INTEREST SYNCHRONIZATION CALCULATION?

A. Yes. The Company has a conforming adjustment to interest synchronization based on rate base rebuttal adjustments. Please see Company's rebuttal adjustment SM-8R on Schedule C-2 Rebuttal.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
THOMAS J. BOURASSA
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY

Thomas J. Bourassa testifies as follows:

Mr. Bourassa responds to the RUCO testimony on the declining usage adjustment. He explains that the differences in methods used between the Chaparral City Water Company case and the instant case do not mean the method proposed in the instant case is any less reasonable or appropriate. Each method has its own ways of estimating declining usage from conservation. Mr. Bourassa explains that the method used in the instant case removes weather related changes in usage and recognizes non-weather related changes in usage (conservation, demographics, and structural changes in the commercial sector).

Mr. Bourassa reports on the results of his rebuttal cost of service studies (G Schedules) for the Mohave Water District, Paradise Valley Water District, Sun City Water District, Tubac Water District and the Mohave Wastewater District. He also reports that the Staff has accepted the allocation factors used in his study. He summarizes the rebuttal cost of service results and explains what the indicated monthly minimums and single tier commodity rates should be for each district and their respective customer classes.

Mr. Bourassa also discusses the proposed rates portions of the H Schedules. He explains the proposed rate designs for each district and the impact on customers. He discusses how the Company's rate design compares to the ACC Staff's and RUCO's rate designs. He compares the proposed rates to the results of his cost of service study. Generally, the Company's proposed monthly minimums continue to be less than the indicated monthly minimums and below actual cost for the monthly minimum. The proposed lower tier commodity rates continue to be discounted below the indicated commodity cost of water.

Mr. Bourassa reports that the Company has adopted ACC Staff's recommendation to eliminate Establishment Fees – After Hours and Reconnection fees – After hours and adopted an After Hours charge which applies to all services performed after hours at the customer's request and/or convenience in addition to the service charge.

I INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE NUMBER.

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

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

A. I am testifying in this proceeding on behalf of EPCOR Water Arizona, Inc. ("EWAZ" or the "Company") for the Mohave Water District, Paradise Valley Water District, Sun City Water District, Tubac Water District, and Mohave Wastewater District.

Q. ARE YOU THE SAME THOMAS J. BOURASSA WHO SUBMITTED DIRECT TESTIMONY IN THIS CASE?

A. Yes, my direct testimony on the cost of service, rates and rate design for each district was submitted in support of the initial application in this docket.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will provide testimony on EWAZ's rebuttal cost of service study results for each district and EWAZ's rebuttal proposed rates and rate design for each district as well as provide a response to the direct testimonies of Staff, RUCO, and the other Intervenors, as appropriate.

II DECLINING USAGE

A Response to RUCO Testimony

Q. PLEASE COMMENT ON THE RUCO TESTIMONY THAT THE COMPANY HAS CHANGED ITS CALCULATION OF DECLINING USAGE.

A. It is true that the method for estimating declining usage revenue amount used by the Company in the instant case is different than the method used in the Chaparral City Water

Company rate case.[1] However, that does not make the method used in the current case any less reasonable than the method used in the Chaparral City Water Company case. Each method has its own way of estimating declining usage. In the instant case, the method compares revenues per customer between the two test years and quantifies the revenue loss due to changes in the underlying customer usage patterns between the test years. The Company first identifies the revenue loss or revenue that the Company would have otherwise collected had the underlying usage remained the same between test years. The Company then only proposes a fraction of the computed revenue loss (25 percent) to recognize that changes in customer usage could be the result of both weather and non-weather (i.e. conservation, demographic changes, and structural changes in commercial sector). In other words, by recognizing only 25 percent of the revenue loss, the Company is attributing 75 percent of the revenue loss to differences in weather.

Q. ARE THERE MAJOR DIFFERENCES IN WEATHER BETWEEN THE TWO TEST YEARS AND DID EACH OF THE TWO TEST YEARS DIFFER SIGNIFICANTLY FROM THE LONG TERM AVERAGES?

A. No.

Q. ARE WEATHER RELATED FACTORS (E.G. PRECIPITATION, MEAN TEMPERATURE) HIGHLY CORRELATED TO WATER SALES VOLUME?

A. Yes. Based on the average adjusted R squared statistic from a multiple regression analysis for all districts using precipitation and mean temperature, these weather factors explains 67.5 percent of the variability in average water usage. This suggests that attributing 75 percent to weather related factors in the Company's method may be overstating the weather related factors and understating the non-weather related factors. In fact, mean temperature explains nearly all the variability in average water usage.[2]

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[1] Direct Testimony of Jeffery M. Michlik ("Michlik Dt.") p. 23.
[2] Mean temperature explains 65.5 percent of the variability in sales volume on average while

Q. IS THERE MUCH DIFFERENCE IN MEAN TEMPERATURE BETWEEN THE TEST YEAR AND THE INTERVENING YEARS?

A. No. In my view whatever differences there were between test years (upward or downward) has been addressed by excluding 75 percent of the revenue loss. In other words, the Company's estimates are conservative.

Q. WHY DID YOU INCLUDE NON-RESIDENTIAL CUSTOMERS IN YOUR ANALYSIS OF DECLINING USAGE IN THE INSTANT CASE?

A. Because both residential and non-residential customer classes show trends in declining usage. The trends in declining usage for each district are illustrated in the charts included in Rebuttal Exhibit TJB-1R.

Q. PLEASE COMMENT ON THE RUCO TESTIMONY THAT THE MEHODOLOGY USED IN THE INSTANT CASE CAN BE MANIPULATED.

A. RUCO suggests that the method can be manipulated by pointing to an overall increase in water usage for Paradise Valley that is greater in 2013 than 2008. I would note that all of the other districts in RUCO's exhibit show the opposite.[3] Regardless, it is possible for total usage to increase due to customer growth. However, if the revenue per customer declines, then the added customers do not contribute to revenue growth because of the accompanying reduced average demand for water. In other words, overall revenues could increase, but they would be below that which the Company would otherwise collect had the underlying usage remained the same. Either way, a decline in the revenue per customer from declining usage contributes to higher rate increases in the future. It also is one of the factors which lead to a utility's inability to actually earn their authorized return.

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precipitation explains only 3.9 percent on average.

[3] Michlik Dt., Attachment G.

Q. DOES THE COMPANY OBJECT TO ANNUAL REPORTING OF THE INCREASE/DECREASE IN CUSTOMER USAGE FOR EACH CUSTOMER CLASS AND METER SIZE?

A. No. However, the reporting should show the average usage and the increase/decrease in revenues per customer (computed similarly to the method used in the instant case) so that the impact on revenues can be identified and not just the change in average use.

Q. WHAT ABOUT A PLAN OF ADMINISTRATION FOR REFUNDING OF REVENUES IF CUSTOMER USAGE INCREASES IN FUTURE YEARS?

A. The Company does not believe RUCO's recommendation is warranted. The declining usage adjustment is similar to a revenue annualization adjustment in which revenues are adjusted (typically upward) based upon the year end number of customers. It is assumed that the year-end number of customers is the number of customers expected on a going forward basis. Generally, revenue annualizations result in an increase in revenues, but to my knowledge the Commission has never ordered a utility to track future revenues to see if the utility actually realized those revenues. The declining usage adjustment is also similar to any other expense adjustment to normalize the test year expenses, particularly those based upon a historical average. This Commission has adopted such adjustments in numerous cases in the past. By using an average to normalize expenses, the assumption is the utility's future expenses will be on average at the level of the historical average. Again, we do not track whether the utility actual incurred expenses at the average or may have under- (or over-) collected the expense. In my view, there is no basis to single out a declining usage revenue adjustment and make a so-called over-collection subject to future refunds.

If a Plan of Administration ("POA") were to be adopted, then it should work in both directions. In other words, if the revenue loss is greater than the declining usage

allowed in the instant case, the Company would be allowed to collect the short-fall though a surcharge. This would be a reasonable and fairer approach than restricting the Company with only the downside risk.

III COST OF SERVICE STUDY (G SCHEDULES)

Q. HAVE YOU UPDATED YOUR COST OF SERVICE STUDY?

A. Yes. I have updated my cost of service studies for each district to reflect the changes to rate base, revenues and expenses contained in the Company's rebuttal filing.

Q. ARE THERE ANY DISAGREEMENTS BETWEEN ACC STAFF ON THE DEVELOPMENT OF THE ALLOCATION FACTORS USED IN THE STUDY?

A. No. It appears Staff uses the same allocation factors as does the Company.

Q. WHAT ARE THE CAUSES OF THE DIFFERENCES BETWEEN EACH OF THE COST OF SERVICE STUDY RESULTS?

A. The differences are due to each party's recommended rate bases, revenues and operating expenses, as well as the revenue recovery from each of the customer classes (from the proposed rates).

Q. DO THE ACC STAFF'S PROPOSED RATES PRODUCE ITS PROPOSED RATE OF RETURN FOR EACH CLASS?

A. No. Like the Company, the returns provided by the respective parties' rates vary considerably by customer class for each district.

A Cost of Service Study Results by District

1 Mohave Water District

Q. WHAT IS THE RANGE OF THE RETURNS FOR THE VARIOUS CUSTOMER CLASSES AT PRESENT RATES?

A. As shown on Rebuttal Schedule G-1, the returns vary substantially between the customer classes at the present rates. The largest customer class, the residential class, provides the lowest return under the present rates or -0.12 percent. The apartment, commercial, and other public authority classes are providing much higher returns at 8.85 percent, 7.34 percent and 2.54 percent, respectively.

Q. WHAT ARE THE RETURNS FOR THE CUSTOMER CLASSES AT PROPOSED RATES?

A. As shown on Rebuttal Schedule G-2, the returns at proposed rates also vary substantially between the customer classes. The largest customer class, the residential class, continues to provide the lowest return under the present rates at 5.01 percent. This is below the overall required return of 6.81 percent and indicates the residential class is not paying its full cost of service. The apartment, commercial, and other public authority classes continue to provide much higher returns at 13.68 percent, 11.40 percent and 7.12 percent, respectively. These results indicate that the apartment, commercial, and other public authority customer classes pay more than their respective cost of service and continue to subsidize the residential class under the Company's proposed rates.

Q. WHAT WOULD BE A SINGLE TIERED RATE DESIGN ASSUMING A PORTION OF THE DEMAND, CUSTOMER, SERVICES, AND METER COSTS ARE RECOVERED VIA THE COMMODITY RATES?

A. On Rebuttal Schedule G-8, page 4A (all customer classes), I set forth a

computation of a single tiered rate design which assumes a portion of the demand, customer, services, and meters costs (the "fixed costs") are recovered via the commodity rate. As shown, the 5/8x3/4 inch monthly minimum would be $16.02 and the commodity rate $2.378. My computation contemplates 40 percent of the demand costs and 40 percent of the customer, services and meters costs are recovered via the commodity rate. The overall revenue recovery from the monthly minimums translates to about 48 percent of total revenues.

As shown on Rebuttal Schedule G-8, page 4B (residential class), the 5/8x3/4 inch monthly minimum would be $15.98 and the commodity rate $2.493.

As shown on Rebuttal Schedule G-8, page 4C (apartment class), the 5/8x3/4 inch monthly minimum would be $13.17 and the commodity rate $2.188.

As shown on Rebuttal Schedule G-8, page 4D (commercial class), the 5/8x3/4 inch monthly minimum would be $16.69 and the commodity rate $2.133.

As shown on Rebuttal Schedule G-8, page 4E (other public authority class), the 5/8x3/4 inch monthly minimum would be $21.42 and the commodity rate $2.080.

Q. HOW DO THE COMPUTED SINGLE TIER RATES COMPARE TO THE COMPANY'S PROPOSED RATES?

A. Referring to Rebuttal Schedule G-8, page 4A, the computed monthly minimum of $16.02 is higher than the proposed monthly minimum of $15.35 for a 5/8x3/4 inch metered customer; below the indicated monthly minimum. The computed commodity rate of $2.378 is well above the proposed first commodity rate of $1.530. The proposed second tier rate of $2.480 is approximately 4 percent higher than the computed commodity rate, and the third tier rate of $3.205 is approximately 54 percent higher than the computed commodity rate.

2 Paradise Valley Water District

Q. WHAT IS THE RANGE OF THE RETURNS FOR THE VARIOUS CUSTOMER CLASSES AT PRESENT RATES?

A. As shown on Rebuttal Schedule G-1, the returns vary substantially between the customer classes at the present rates. The largest customer class, the residential class, provides a return under the present rates of 6.49 percent. The turf, commercial, and other public authority classes are providing returns of 0.48 percent, 6.26 percent, and 8.76 percent, respectively.

Q. WHAT ARE THE RETURNS FOR THE CUSTOMER CLASSES AT PROPOSED RATES?

A. As shown on Rebuttal Schedule G-2, the returns at proposed rates also vary substantially between the customer classes. The largest customer class, the residential class provides a return under the present rates at 7.43 percent. This is above the overall required return of 6.81 percent and indicates the residential class is paying more than its full cost of service. The turf, commercial, and other public authority classes provide returns of 1.48 percent and 7.09 percent and 9.77 percent, respectively. These results indicate that the turf class pays less than its cost of service and the commercial and other public authority customer classes pay more than their respective cost of service.

Q. WHAT WOULD BE A SINGLE TIERED RATE DESIGN ASSUMING A PORTION OF THE DEMAND, CUSTOMER, SERVICES, AND METER COSTS ARE RECOVERED VIA THE COMMODITY RATES?

A. On Schedule G-8, page 4A (all customer classes), I set forth a computation of a single tiered rate design which assumes a portion of the demand, customer, services, and meters costs (the "fixed costs") are recovered via the commodity rate.

As shown, the 5/8x3/4 inch monthly minimum would be $31.36 and the commodity rate $1.889. My computation contemplates 40 percent of the demand costs and 40 percent of the customer, services and meters costs are recovered via the commodity rate. The overall revenue recovery from the monthly minimums translates to about 48 percent of total revenues.

As shown on Schedule G-8, page 4B (residential class), the 5/8x3/4 inch monthly minimum would be $29.48 and the commodity rate $1.965.

As shown on Schedule G-8, page 4C (turf class), the 5/8x3/4 inch monthly minimum would be $230.31 and the commodity rate $1.638.

As shown on Schedule G-8, page 4D (commercial class), the 5/8x3/4 inch monthly minimum would be $31.10 and the commodity rate $1.731.

As shown on Schedule G-8, page 4E (other public authority class), the 5/8x3/4 inch monthly minimum would be $13.87 and the commodity rate $2.414.

Q. HOW DO THE COMPUTED SINGLE TIER RATES COMPARE TO THE COMPANY'S PROPOSED RATES?

A. Referring to Schedule G-8, page 4A, the computed monthly minimum of $31.36 is higher than the proposed monthly minimum of $26.58 for a 5/8x3/4 inch metered customer; well below the indicated monthly minimum. The computed commodity rate of $1.889 is well above the proposed first and second tier commodity rate of $1.1116 and $1.3234, respectively. The proposed third tier rate of $2.3292 is approximately 23 percent higher than the computed commodity rate, the fourth tier rate of $2.9115 is approximately 54 percent higher than the computed commodity rate, and the fifth tier rate of $3.4153 is approximately 81 percent higher than the computed commodity rate.

3 Sun City Water District

Q. WHAT IS THE RANGE OF THE RETURNS FOR THE VARIOUS CUSTOMER CLASSES AT PRESENT RATES?

A. As shown on Rebuttal Schedule G-1, the returns vary substantially between the customer classes at the present rates. The largest customer class, the residential class, provides the lowest return under the present rates or 2.94 percent. The commercial class is providing much higher returns at 12.58 percent. The remaining other class provides a -6.22 percent return.

Q. WHAT ARE THE RETURNS FOR THE CUSTOMER CLASSES AT PROPOSED RATES?

A. As shown on Rebuttal Schedule G-2, the returns at proposed rates also vary substantially between the customer classes. The largest customer class, the residential class, continues to provide the lowest return under the present rates at 5.78 percent. This is below the overall required return of 6.81 percent and indicates the residential class is not paying its full cost of service. The commercial class continues to provide much higher returns at 16.07 percent. The remaining other class provides a -6.14 percent return. These results indicate that the commercial customer class pays more than their respective cost of service and continue to subsidize the residential class under the Company's proposed rates

Q. WHAT WOULD BE A SINGLE TIERED RATE DESIGN ASSUMING A PORTION OF THE DEMAND, CUSTOMER, SERVICES, AND METER COSTS ARE RECOVERED VIA THE COMMODITY RATES?

A. On Rebuttal Schedule G-8, page 4A (all customer classes), I set forth a computation of a single tiered rate design which assumes a portion of the demand, customer, services, and meters costs (the "fixed costs") are recovered via the

commodity rate. As shown, the 5/8x3/4 inch monthly minimum would be $10.78 and the commodity rate $1.634. My computation contemplates 40 percent of the demand costs and 40 percent of the customer, services and meters costs are recovered via the commodity rate. The overall revenue recovery from the monthly minimums translates to about 48 percent of total revenues.

As shown on Rebuttal Schedule G-8, page 4B (residential class), the 5/8x3/4 inch monthly minimum would be $11.39 and the commodity rate $1.600.

As shown on Rebuttal Schedule G-8, page 4C (commercial class), the 5/8x3/4 inch monthly minimum would be $12.48 and the commodity rate $1.304.

As shown on Rebuttal Schedule G-8, page 4D (other class), the 5/8x3/4 inch monthly minimum would be $118.48 and the commodity rate $1.684.

Q. HOW DO THE COMPUTED SINGLE TIER RATES COMPARE TO THE COMPANY'S PROPOSED RATES?

A. Referring to Rebuttal Schedule G-8, page 4A, the computed monthly minimum of $10.78 is higher than the proposed monthly minimum of $10.42 for a 5/8x3/4 inch metered customer; somewhat below the indicated monthly minimum. The computed commodity rate of $1.634 is well above the proposed first, second, third tier rates of $0.7336 and $1.3602, respectively. The proposed third tier rate of $1.6302 is approximately the same as the computed commodity rate, the fourth tier rate of $1.8002 is approximately 10 percent higher than the computed commodity rate, and the fifth tier rate of $2.0102 is approximately 23 percent higher than the computed commodity rate. In other words, the proposed first and second tier commodity rates are below cost while the proposed fourth and fifth tier rates are above cost.

4 Tubac Water District

Q. WHAT IS THE RANGE OF THE RETURNS FOR THE VARIOUS CUSTOMER CLASSES AT PRESENT RATES?

A. As shown on Rebuttal Schedule G-1, the returns vary substantially between the customer classes at the present rates. The largest customer class, the residential class, provides the lowest return under the present rates or -7.58 percent. The commercial class is providing a higher return of 6.92 percent.

Q. WHAT ARE THE RETURNS FOR THE CUSTOMER CLASSES AT PROPOSED RATES?

A. As shown on Rebuttal Schedule G-2, the returns at proposed rates also vary substantially between the customer classes. The largest customer class, the residential class, continues to provide the lowest return under the present rates at 3.18 percent. This is below the overall required return of 6.81 percent and indicates the residential class is not paying its full cost of service. The commercial class continues to provide a much higher return at 18.79 percent. These results indicate that the commercial customer class pays more than its respective cost of service and continue to subsidize the residential class under the Company's proposed rates.

Q. WHAT WOULD BE A SINGLE TIERED RATE DESIGN ASSUMING A PORTION OF THE DEMAND, CUSTOMER, SERVICES, AND METER COSTS ARE RECOVERED VIA THE COMMODITY RATES?

A. On Schedule G-8, page 4A (all customer classes), I set forth a computation of a single tiered rate design which assumes a portion of the demand, customer, services, and meters costs (the "fixed costs") are recovered via the commodity rate. As shown, the 5/8x3/4 inch monthly minimum would be $41.80 and the

commodity rate $6.059. My computation contemplates 40 percent of the demand costs and 40 percent of the customer, services and meters costs are recovered via the commodity rate. The overall revenue recovery from the monthly minimums translates to about 48 percent of total revenues.

As shown on Schedule G-8, page 4B (residential class), the 5/8x3/4 inch monthly minimum would be $44.61 and the commodity rate $6.278.

As shown on Schedule G-8, page 4C (commercial class), the 5/8x3/4 inch monthly minimum would be $34.66 and the commodity rate $5.493.

Q. HOW DO THE COMPUTED SINGLE TIER RATES COMPARE TO THE COMPANY'S PROPOSED RATES?

A. Referring to Schedule G-8, page 4A, the computed monthly minimum of $41.80 is somewhat lower than the proposed monthly minimum of $42.36 for a 5/8x3/4 inch metered customer. The computed commodity rate of $6.059 is just below the proposed first tier commodity rate of $6.10. The proposed second tier rate of $7.15 is approximately 18 percent higher than the computed commodity rate and the fourth tier rate of $7.95 is approximately 31 percent higher than the computed commodity rate. In other words, the proposed first tier commodity rate is below cost while the proposed third and fourth tier rates are above cost.

5 <u>Mohave Wastewater District</u>

Q. WHAT IS THE RANGE OF THE RETURNS FOR THE VARIOUS CUSTOMER CLASSES AT PRESENT RATES?

A. As shown on Schedule G-1, the returns vary substantially between the customer classes at the present rates. The largest customer class, the residential class, provides the lowest return under the present rates or 1.52 percent. The commercial and other public authority classes are providing much higher returns at 30.43

percent and 8.30 percent, respectively.

Q. WHAT ARE THE RETURNS FOR THE CUSTOMER CLASSES AT PROPOSED RATES?

A. As shown on Rebuttal Schedule G-2, the returns at proposed rates also vary substantially between the customer classes. The largest customer class, the residential class, continues to provide the lowest return under the present rates at 6.47 percent. This is less than the overall required return of 6.81 percent and indicates the residential class is not paying its full cost of service. The commercial and other public authority classes continue to provide much higher returns at 47.67 percent and 14.63 percent, respectively. These results indicate that the commercial and other public authority customer classes pay more than their respective cost of service and continue to subsidize the residential class under the Company's proposed rates.

IV <u>REBUTTAL PROPOSED RATES (H SCHEDULES)</u>

Q. BRIEFLY DESCRIBE THE H SCHEDULES?

A. The Company's rebuttal filing includes H Schedules for all districts. Rebuttal Schedule H-1 is a summary of the revenue billed under present rates and the amount that would be generated by the proposed increase in metered water rates. Schedule H-2 is an analysis of revenue at present and proposed rates by class and meter size in dollar amount and percentage. The average number of customers derived from the bill count is also shown by meter size and in total. Rebuttal Schedule H-3 shows the present and proposed rate and presents a comparison of rates. Exhibit TJB-2R provides the revenue recovery by customer class for all districts under the Company, Staff, and RUCO proposed rates.

A Rebuttal Rate Design

Q. PLEASE DESCRIBE THE RATE DESIGN OF THE PROPOSED RATE STRUCTURE FOR THE DISTRICTS.

A. The rebuttal proposed rate structures as shown on Rebuttal Schedule H-3 continue to balance the objectives of promoting water conservation through inverted tier rates, providing rates which are cost of service based, and providing revenue stability through increased revenue recovery from the monthly minimums and balanced commodity rates.

1 Comments on Magruder's Rate Design Testimony

Q. PLEASE COMMENT ON THE TESTIMONY OF MR. MAGRUDER REGARDING RATE DESIGN.

A. Mr. Magruder makes several recommendations including among other things: 1) consolidating rates for all districts; 2) Rates designs which include at least five tiers and preferably ten tiers; 3) Incorporate a low rate for the smaller residential and commercial customers; and 4) the Company should provide a rate design incorporating the foregoing parameters in its rebuttal filing.[4] Respectfully, rate consolidation is a process that can take a long period of time and is not contemplated in this proceeding. In addition it would require input from multiple parties, not just those involved in the instant case. While some of Mr. Magruder's recommendations may have merit, a combined or consolidated rate design would have to address a number of important factors, not the least of which is the impact on the various customer classes and the potential cross-subsidization between systems. Rate consolidation is more an issue of policy.

[4] Direct Testimony of Marshall Magruder ("Magruder Dt.") p. 8.

2 Mohave Water District

Q. HAVE YOU MADE ANY CHANGES TO THE PROPOSED RATE DESIGN FOR THE MOHAVE WATER DISTRICT?

A. No. The rebuttal proposed rate design uses the same number to tiers and break-over points as was proposed in the Company's direct testimony and schedules. Further, the percentage of revenue recovery from the monthly minimums and the commodity rates are similar to those proposed in the direct testimony and schedules. The rebuttal proposed rates are set forth on Rebuttal Schedule H-3, pages 1 through 3.

Q. WHAT WILL BE THE AVERAGE 5/8X3/4 INCH RESIDENTIAL CUSTOMER AVERAGE MONTHLY BILL UNDER THE NEW RATES?

A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8x3/4 inch residential customer using an average 6,800 gallons is $29.36 – a $8.73 increase over the present monthly bill or a 42.3 percent increase.

a Comments on ACC Staff's Proposed Rate Design

Q. PLEASE COMMENT ON THE ACC STAFF'S PROPOSED RATE DESIGN.

A. Before I comment on the rate design, I should note that the ACC Staff's proposed rates do not produce the revenue requirement and fall short by approximately $104,000. That said, the ACC Staff's proposed rate design employs the same tiers and break-over points as does the Company's rate design. The difference in the rate designs is in the percentage of recovery from the monthly minimums and commodity rates. The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does ACC Staff's. Recovering greater

proportions of water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

The Company's proposed rate design recovers approximately 45.4 percent of the metered revenues from the monthly minimums whereas the ACC Staff's proposed rate design recovers approximately 41.8 percent of the metered revenues from the monthly minimums.[5] With regard to the commodity rates, Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 24 percent of the metered revenues from the highest cost commodity rate whereas the ACC Staff's proposed rate design recovers approximately 29.9 percent of the metered revenues from the highest cost commodity rates.[6]

b Comments on RUCO's Proposed Rate Design

Q. PLEASE COMMENT ON RUCO'S PROPOSED RATE DESIGN.

A. RUCO's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design. The difference in rate design is in the percentage of recovery from the monthly minimums and commodity rates. The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does RUCO's. Recovering greater proportions of water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

The Company's proposed rate design recovers approximately 45.4 percent of the metered revenues from the monthly minimums whereas RUCO's proposed rate design recovers approximately 42.4 percent of the metered revenues from the

[5] *See* Rebuttal Exhibit TJB-2R, pages 1 and 2.
[6] *See* Rebuttal Exhibit TJB-2R, pages 1 and 2.

monthly minimums.[7] With regard to the commodity rates, Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 24 percent of the metered revenues from the highest cost commodity rates whereas RUCO's proposed rate design recovers approximately 29.4 percent of the metered revenues from the highest cost commodity rates.[8]

3 Paradise Valley Water District

Q. HAVE YOU MADE ANY CHANGES TO THE RATE DESIGN PROPOSED IN THE COMPANY'S DIRECT CASE FILING FOR THE PARADISE VALLEY WATER DISTRICT?

A. No. The rebuttal proposed rate design uses the same number of tiers and break-over points as was proposed in the direct filing. Further, the percentage of revenue recovery from the monthly minimums and the commodity rates are similar to those proposed in the direct filing. The rebuttal proposed rates are set forth on Rebuttal Schedule H-3, pages 1 through 3.

Q. WHAT WILL BE THE AVERAGE 5/8X3/4-INCH AND 1-INCH RESIDENTIAL CUSTOMER AVERAGE MONTHLY BILL UNDER THE NEW RATES?

A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8x3/4 inch residential customer using an average 19,271 gallons is $55.32 – a $3.03 increase over the present monthly bill, or a 5.79 percent increase. The average monthly bill under proposed rates for a 1-inch residential customer, the second largest class, using an average 55,400 gallons is $175.03 – a $9.62 increase over the present monthly bill, or a 5.82 percent increase.

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[7] *See* Rebuttal Exhibit TJB-2R, pages 1 and 3.
[8] *See* Rebuttal Exhibit TJB-2R, pages 1 and 3.

a Comments on ACC Staff's Proposed Rate Design

Q. PLEASE COMMENT ON THE ACC STAFF'S PROPOSED RATE DESIGN.

A. Before I comment on the ACC Staff's proposed rate design, I should note that the ACC Staff's rates do not produce the revenue requirement and is short by approximately $63,000. That said, the ACC Staff's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design. The rate designs are similar in terms of the proportions of revenue recovered from the monthly minimums and the commodity rates.[9]

b Comments on RUCO's Proposed Rate Design

Q. PLEASE COMMENT ON RUCO'S PROPOSED RATE DESIGN.

A. RUCO's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design except for the 3-inch and larger residential meters and the all sizes of commercial meter. RUCO's proposed rate design extends the 5 tier design of the 2-inch and smaller residential customers to the 3-inch and larger residential customers. The Company's proposed rate design retains the two tier design for the 3-inch and larger residential meters. With respect to the commercial class, RUCO proposes a two-tier design like the Company's but proposes a much lower break-over point for the commercial meters of 70,000 gallons. The Company proposes to retain the 400,000 gallons break-over point. There are further differences in the rate designs in terms of revenue recovery (percentage of recovery from the monthly minimums and commodity rates). The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does RUCO's proposed rate design. Recovering greater proportions of

[9] *See* Rebuttal Exhibit TJB-2R, pages 4 and 5.

water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

Q. PLEASE COMMENT ON A 5-TIER RATE DESIGN FOR THE 3-INCH AND LARGER RESIDENTIAL METERS.

A. A 5-tier design for the 3-inch and larger residential customers will not be very effective and doesn't fit this type of customer class. These are large water users (typically apartments and condominiums), and they are unlikely to be incentivized to conserve based upon a 5-tier. In other words, for all practical purposes these users are unlikely to be able to reduce their water usage below any of the lower tier break-over points.

Q. PLEASE COMMENT ON LOWERING THE FIRST TIER BREAK-OVER POINT FOR THE COMMERCIAL METERED CUSTOMERS OF 70,000 GALLONS AS RUCO RECOMMENDS.

A. A 70,000 gallon break-over point does not fit this customer class and I believe will not incentivize these users to conserve. Just as with the 3-inch and larger residential customers, for all practical purposes these users are unlikely to be able to reduce their water usage below 70,000 gallons.

Q. DOES THE PARADISE VALLEY RATE DESIGN SUFFER FROM BILLING CROSS-OVER; THAT IS WHERE DIFFERENT CLASSES OF CUSTOMERS COULD PAY LESS THAN THE OTHERS FOR THE SAME METER SIZE?

A. Yes. At high levels of usage this can happen due to where the break-over points are set and whether the customers are on a 5-tier design or a 2-tier design. The RUCO's proposed rate design has not eliminated the issue although the potential occurrences are fewer.

Q. WHY DOES THE COMPANY PROPOSE TO RETAIN THE SAME BASIS DESIGN ADOPTED IN ITS LAST RATE CASE?

A. The Company sees no reason to change it at this point. In the view of the Company, the rate design is encouraging conservation, has been accepted by our customers and it has not encountered any issues with potential billing cross-over.

Q. THANK YOU. PLEASE CONTINUE.

A. The Company's rate design recovers approximately 28.5 percent of the metered revenues from the monthly minimums whereas the RUCO's proposed rate design recovers approximately 27.2 percent of the metered revenues from the monthly minimums.[10] With regard to the commodity rates, Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 35 percent of the metered revenues from the two highest cost commodity rates whereas the Staff's proposed rate design recovers approximately 47.5 percent of the metered revenues from the two highest cost commodity rates.[11]

4 <u>Sun City Water District</u>

Q. HAVE YOU MADE ANY CHANGES TO THE PROPOSED RATE DESIGN IN THE COMPANY'S DIRECT CASE FILING FOR THE SUN CITY WATER DISTRICT?

A. No. The rebuttal proposed rate design uses the same number of tiers and break-over points as were proposed in the direct filing. Further, the percentage of revenue recovery from the monthly minimums and the commodity rates are similar to those proposed in the direct filing. The rebuttal proposed rates are set forth on Rebuttal Schedule H-3, pages 1 through 3.

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[10] *See* Rebuttal Exhibit TJB-2R, pages 4 and 6.
[11] *See* Rebuttal Exhibit TJB-2R, pages 4 and 6.

Q. WHAT WILL BE THE AVERAGE 5/8X3/4-INCH RESIDENTIAL CUSTOMER AVERAGE MONTHLY BILL UNDER THE NEW RATES?

A. As shown on Rebuttal Schedule H-2, page 1, the average monthly bill under the Company's proposed rates for a 5/8x3/4-inch residential customer using an average 7,203 gallons is $20.73, a $3.38 increase over the present monthly bill, or a 19.45 percent increase.

a Comments on ACC Staff's proposed Rate Design

Q. PLEASE COMMENT ON THE ACC STAFF'S PROPOSED RATE DESIGN.

A. Before I comment on the ACC Staff's proposed rate design, I should note that the ACC Staff's rates do not produce the revenue requirement and is short by approximately $139,000. That said, the ACC Staff's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design.

The Company's proposed rate design recovers approximately 38.9 percent of the metered revenues from the monthly minimums whereas the ACC Staff's rate design recovers approximately 38.3 percent of the metered revenues from the monthly minimums.[12] With regard to the commodity rates, Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 14.6 percent of the metered revenues from the two highest cost commodity rates whereas the ACC Staff's rate design recovers approximately 16.6 percent of the metered revenues from the two highest cost commodity rates.[13]

b Comments on RUCO Rate Design

Q. PLEASE COMMENT ON RUCO'S PROPOSED RATE DESIGN.

[12] *See* Rebuttal Exhibit TJB-2R, pages 7 and 8.
[13] *See* Rebuttal Exhibit TJB-2R, pages 7 and 8.

A. RUCO's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design. The difference in rate design is in the percentage of recovery from the monthly minimums and commodity rates. The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does RUCO's. Recovering greater proportions of water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

The Company's proposed rate design recovers approximately 38.9 percent of the metered revenues from the monthly minimums whereas RUCO's proposed rate design recovers approximately 36.5 percent of the metered revenues from the monthly minimums.[14] With regard to the commodity rates Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 14.6 percent of the metered revenues from the two highest cost commodity rates whereas RUCO's proposed rate design recovers approximately 15.9 percent of the metered revenues from the two highest cost commodity rates.[15]

5 Tubac Water District

Q. HAVE YOU MADE ANY CHANGES TO THE PROPOSED RATE DESIGN FOR THE TUBAC WATER DISTRICT?

A. No. The rebuttal proposed rate design uses the same number of tiers and break-over points as was proposed in the direct filing. Further, the percentage of revenue recovery from the monthly minimums and the commodity rates are similar to those proposed in the direct filing. The rebuttal proposed rates are set forth on Rebuttal Schedule H-3, pages 1 through 3.

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[14] *See* Rebuttal Exhibit TJB-2R, pages 7 and 9.
[15] *See* Rebuttal Exhibit TJB-2R, pages 7 and 9.

Q. WHAT WILL BE THE AVERAGE 5/8X3/4-INCH RESIDENTIAL CUSTOMER AVERAGE MONTHLY BILL UNDER THE NEW RATES?

A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8x3/4 inch residential customer using an average 8,348 gallons is $89.23 – a $35.66 increase over the present monthly bill or a 66.57 percent increase.

Q. IS THE COMPANY CONTINUING TO PROPOSE INCORPORATING THE EXISTING STEP 1 ARSENIC COST RECOVERY SURCHARGE INTO THE BASE RATES?

A. Yes. As shown on Rebuttal Schedule H-3, page 5, the Company is proposing zero Step 1 arsenic cost recovery surcharge as these charges are incorporated into the base rates.

Q. IS THE COMPANY PROPOSING A DEFERRED ARSENIC MEDIA REPLACEMENT O&M SURCHARGE?

A. Yes. The Company proposes to recover $101,712 over three years and proposes to recover 50 percent of the annual amount through a commodity based surcharge and 50 percent through a fixed charge. Mr. Shawn Bradford discusses the basis for the surcharge in his rebuttal testimony. Based upon the test year data, the commodity portion of the surcharge will be $0.22607 and the fixed portion for an equivalent 5/8 inch meter will be $1.7692. Rebuttal Exhibit TJB-3R shows the computation of the proposed surcharge and the rates by meter size.

a <u>Comments on ACC Staff's Proposed Rate Design</u>

Q. PLEASE COMMENT ON THE ACC STAFF'S PROPOSED RATE DESIGN.

A. Before I comment on the rate design, I should note that the ACC Staff's proposed rates do not produce the revenue requirement and is short by approximately $34,000. That said, the Staff's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design. The difference in the rate designs is in the percentage of recovery from the monthly minimums and commodity rates. The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does Staff. Recovering greater proportions of water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

The Company's proposed rate design recovers approximately 45.8 percent of the metered revenues from the monthly minimums whereas the Staff's proposed rate design recovers approximately 38.1 percent of the metered revenues from the monthly minimums.[16] With regard to the commodity rates Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 34.8 percent of the metered revenues from the two highest cost commodity rates whereas the Staff's proposed rate design recovers approximately 44.4 percent of the metered revenues from the two highest cost commodity rates.[17]

b <u>Comments on RUCO's Proposed Rate Design</u>

Q. PLEASE COMMENT ON RUCO'S PROPOSED RATE DESIGN.

[16] *See* Rebuttal Exhibit TJB-2R, pages 9 and 10.
[17] *See* Rebuttal Exhibit TJB-2R, pages 9 and 10.

A. RUCO's proposed rate design employs the same tiers and break-over points as does the Company's proposed rate design. The difference in rate design is in the percentage of recovery from the monthly minimums and commodity rates. The Company derives a greater proportion of revenues from the monthly minimums as well as derives a greater proportion of revenues from the lower tier commodity rates than does RUCO's. Recovering greater proportions of water revenues from the monthly minimums and from the lower tier commodity rates provides greater revenue stability.

The Company's proposed rate design recovers approximately 45.8 percent of the metered revenues from the monthly minimums whereas RUCO's proposed rate design recovers approximately 41.6 percent of the metered revenues from the monthly minimums.[18] With regard to the commodity rates Exhibit TJB-2R shows that the Company's proposed rate design recovers approximately 34.8 percent of the metered revenues from the two highest cost commodity rates whereas the RUCO's proposed rate design recovers approximately 41.0 percent of the metered revenues from the two highest cost commodity rates.[19]

6 <u>Mohave Wastewater District</u>

Q. HAVE YOU MADE ANY CHANGES TO THE PROPOSED RATE DESIGN FOR THE MOHAVE WASTEWATER DISTRICT?

A. No. The rebuttal proposed rate design uses the same flat rate design as was proposed in the direct filing. The rebuttal proposed rates are set forth on Rebuttal Schedule H-3, pages 1 through 3.

Q. WHAT WILL BE THE RESIDENTIAL CUSTOMER MONTHLY BILL UNDER THE NEW RATES?

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[18] *See* Rebuttal Exhibit TJB-2R, pages 10 and 12.
[19] *See* Rebuttal Exhibit TJB-2R, pages 10 and 12.

A. As shown on Schedule H-2, page 1, the monthly bill under proposed rates for a residential customer is $81.60 – a $25.05 increase over the present monthly bill or a 44.30 percent increase.

Q. DO ACC STAFF AND RUCO ALSO PROPOSE FLAT RATE DESIGNS?

A. Yes.

B Miscellaneous Charges

Q. PLEASE DISCUSS CHANGES TO THE PROPOSED MISCELLANEOUS CHARGES.

A. The Company is adopting the ACC Staff's recommendation to eliminate the Establishment – After Hours and Reconnection – After Hours service charges and add an After Hours Service charge which applies to all services provided after hours and at the customer's request.

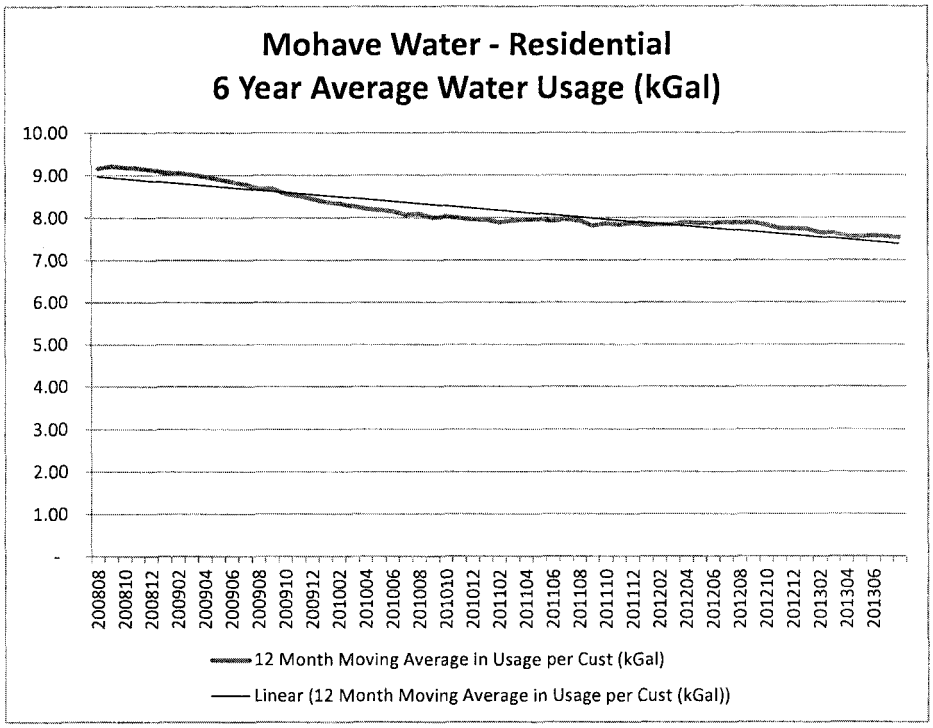
Q. ARE THERE ANY DISPUTES BETWEEN THE COMPANY AND ACC STAFF ON THE MISCELLANEOUS SERVICE CHARGES?

A. No.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY IN THIS CASE?

A. Yes.

EXHIBIT TJB – 1R


Mohave Water - Residential
6 Year Average Water Usage (kGal)
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
-
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
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201110
201112
201202
201204
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201210
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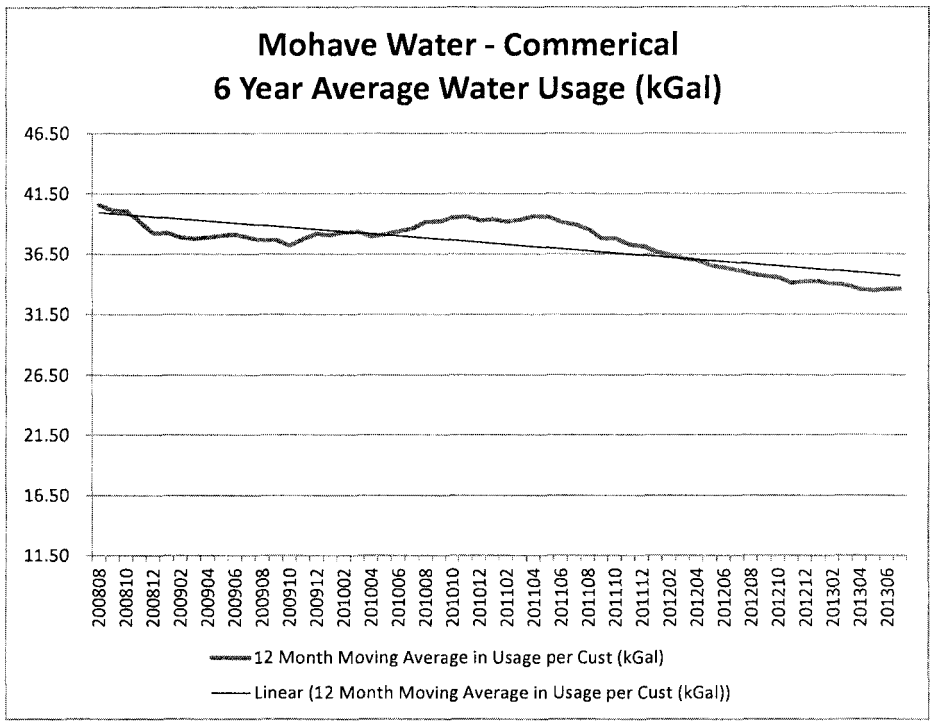
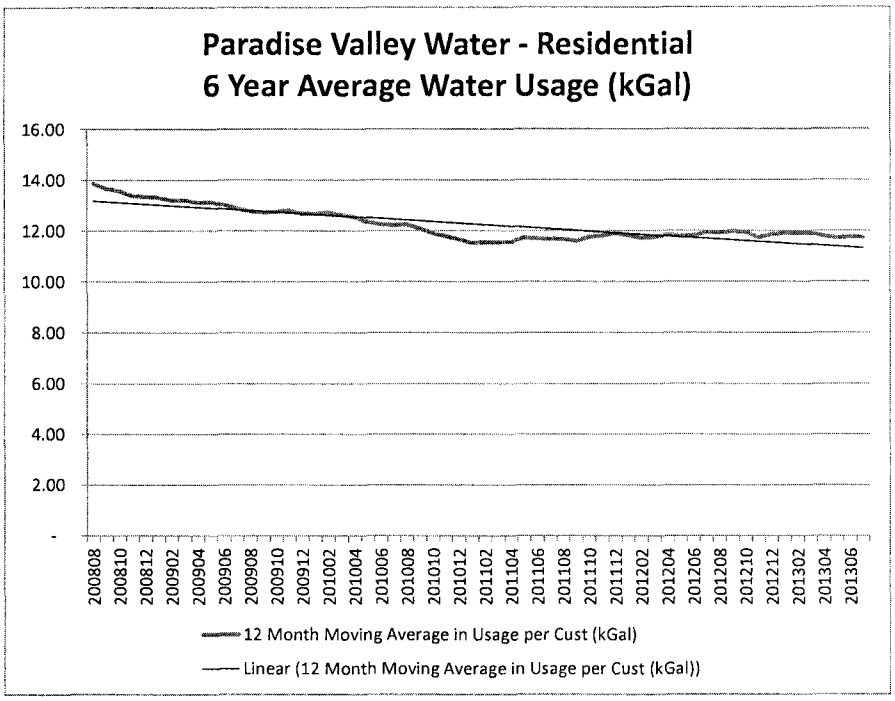
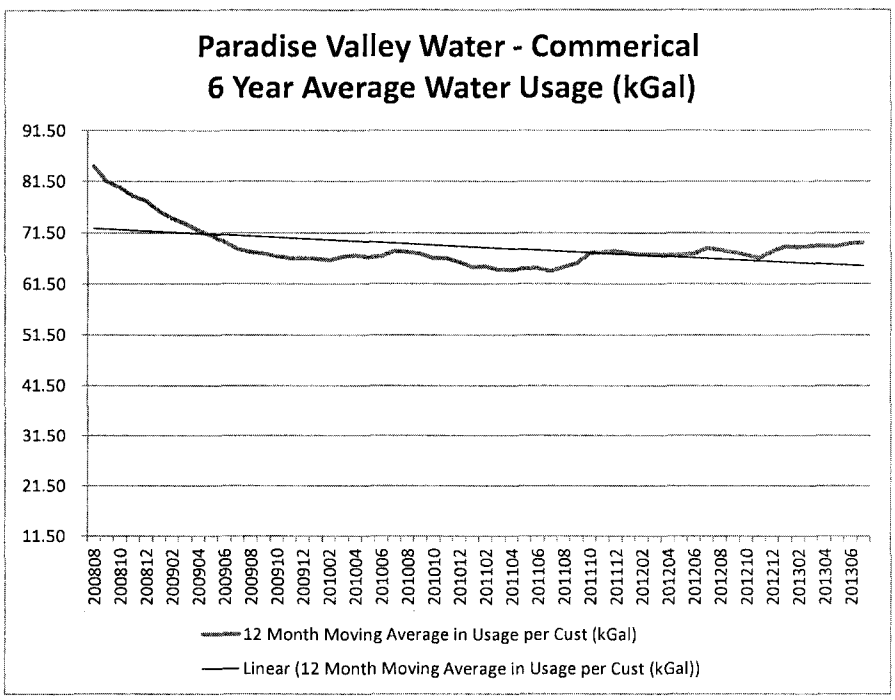
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Mohave Water - Commerical
6 Year Average Water Usage (kGal)
46.50
41.50
36.50
31.50
26.50
21.50
16.50
11.50
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
201206
201208
201210
201212
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Paradise Valley Water - Residential
6 Year Average Water Usage (kGal)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
-
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
201206
201208
201210
201212
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Paradise Valley Water - Commerical
6 Year Average Water Usage (kGal)
91.50
81.50
71.50
61.50
51.50
41.50
31.50
21.50
11.50
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
201206
201208
201210
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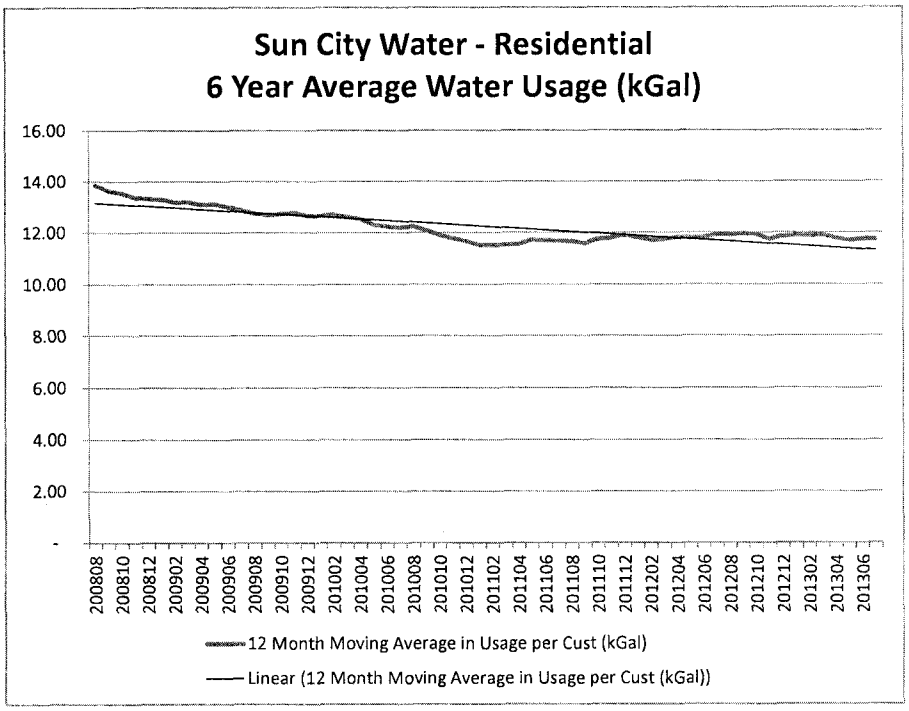
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Sun City Water - Residential
6 Year Average Water Usage (kGal)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
-
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
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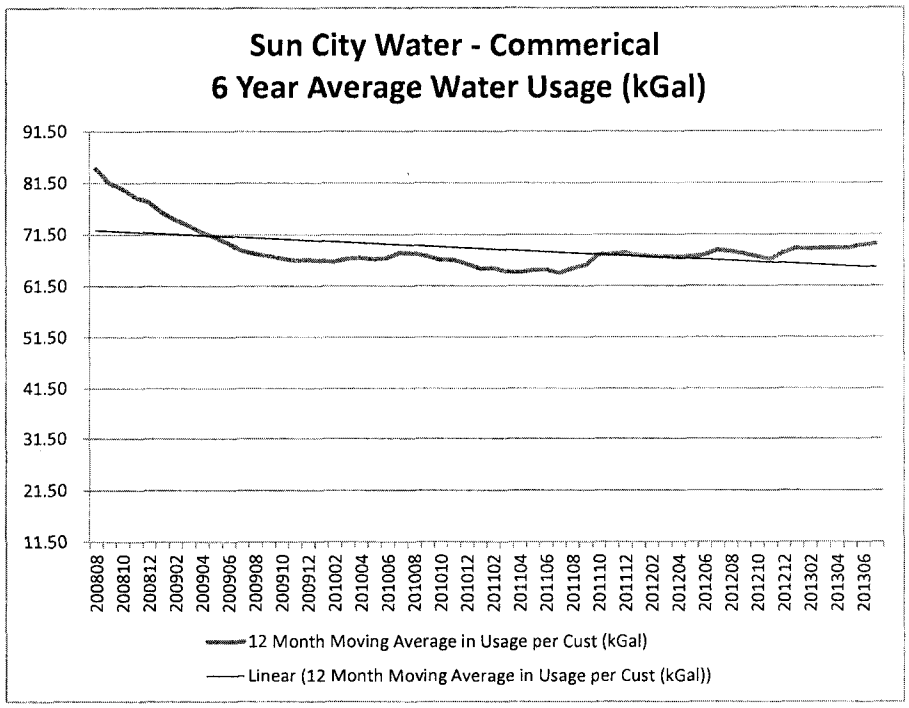
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Sun City Water - Commerical
6 Year Average Water Usage (kGal)
91.50
81.50
71.50
61.50
51.50
41.50
31.50
21.50
11.50
200808
200810
200812
200902
200904
200906
200908
200910
200912
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201006
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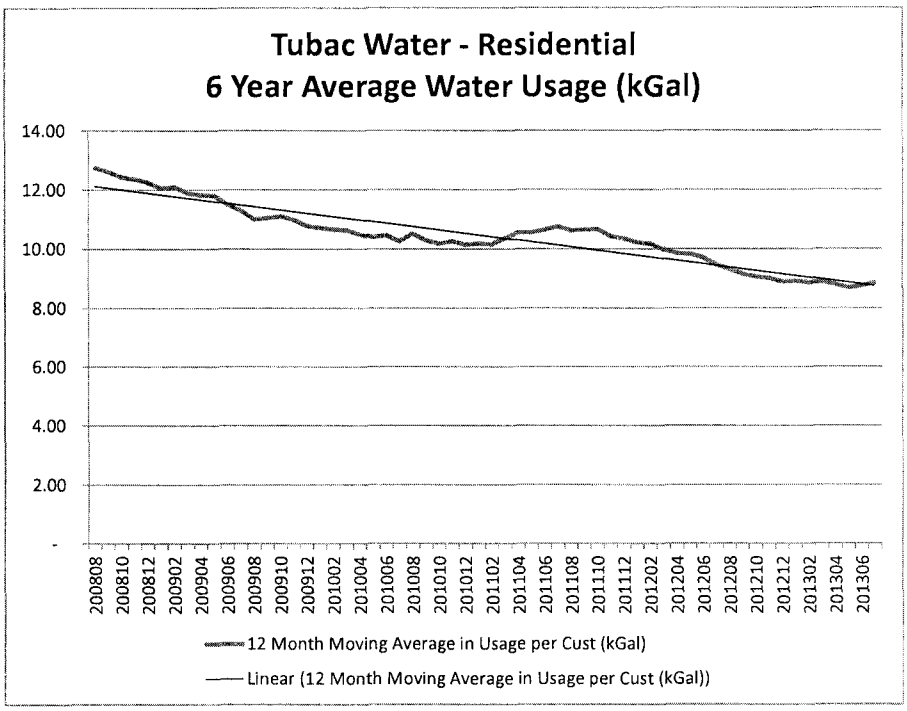
201210
201212
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))


Tubac Water - Residential
6 Year Average Water Usage (kGal)
14.00
12.00
10.00
8.00
6.00
4.00
2.00
-
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
201206
201208
201210
201212
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))

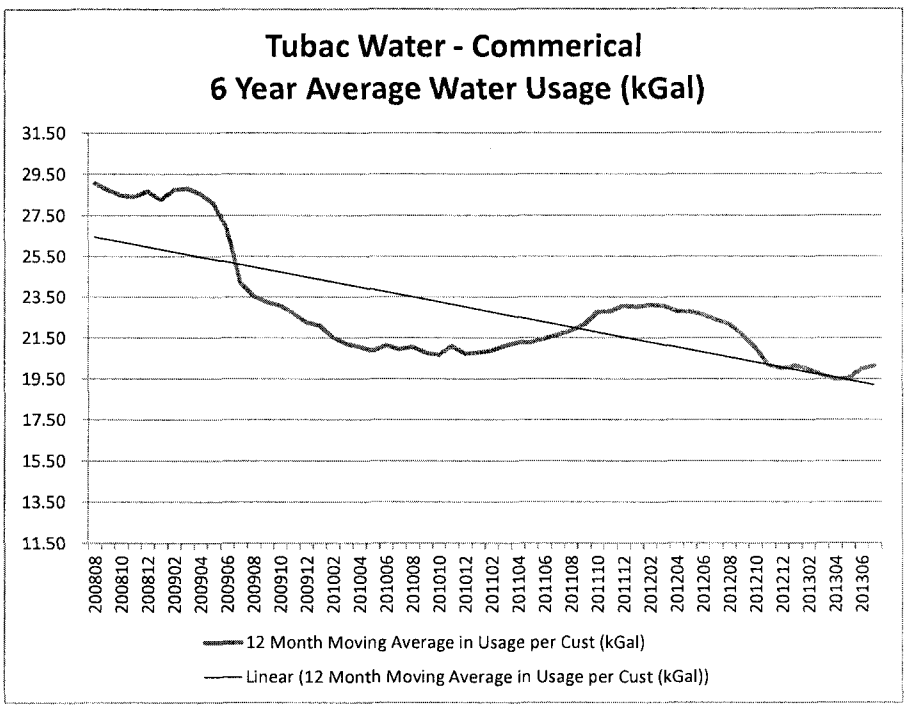

Tubac Water - Commerical
6 Year Average Water Usage (kGal)
31.50
29.50
27.50
25.50
23.50
21.50
19.50
17.50
15.50
13.50
11.50
200808
200810
200812
200902
200904
200906
200908
200910
200912
201002
201004
201006
201008
201010
201012
201102
201104
201106
201108
201110
201112
201202
201204
201206
201208
201210
201212
201302
201304
201306
12 Month Moving Average in Usage per Cust (kGal)
Linear (12 Month Moving Average in Usage per Cust (kGal))

EXHIBIT TJB – 2R

Mohave Water District
Company Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 2,694,720	$ 626,809	$ 1,148,739	$ 1,028,004	$ -	$ -	$ 5,498,272
3/4 Inch	Residential	737	193	632	1,112	-	-	2,674
1 Inch	Residential	35,639	21,757	42,075	-	-	-	99,470
1.5 Inch	Residential	-	-	-	-	-	-	-
2 Inch	Residential	35,723	23,617	27,338	-	-	-	86,678
6 Inch	Residential	-	-	-	-	-	-	-
5/8x3/4 Inch	Apartment	$ 12,168.59	$ 12,904.36	$ 12,527.84	$ -	$ -	$ -	$ 37,601
3/4 Inch	Apartment	184	-	-	-	-	-	184
1 Inch	Apartment	24,399	15,101	21,047	-	-	-	60,547
1.5 Inch	Apartment	1,841	1,619	1,990	-	-	-	5,451
2 Inch	Apartment	210,902	102,703	125,873	-	-	-	439,477
4 Inch	Apartment	9,207	5,590	5,910	-	-	-	20,707
6 Inch	Apartment	9,207	8,928	35,688	-	-	-	53,823
5/8 Inch	Commercial	$ 70,755.80	$ 44,322.49	$ 59,490.74	$ -	$ -	$ -	$ 174,569
3/4 Inch	Commercial	-	-	-	-	-	-	-
1 Inch	Commercial	91,533	51,695	100,979	-	-	-	244,208
1.5 Inch	Commercial	2,762	1,530	231	-	-	-	4,523
2 Inch	Commercial	303,585	178,066	374,327	-	-	-	855,979
3 Inch	Commercial	37,319	12,336	21,625	-	-	-	71,280
4 Inch	Commercial	9,207	5,426	7,032	-	-	-	21,665
6 Inch	Commercial	27,621	18,129	88,625	-	-	-	134,374
5/8x3/4 Inch	Other Public Authority	$ 3,314.52	$ 5,091.44	$ -	$ -	$ -	$ -	$ 8,406
1 Inch	Other Public Authority	5,064	5,959	-	-	-	-	11,023
1.5 Inch	Other Public Authority	921	126	-	-	-	-	1,047
2 Inch	Other Public Authority	67,764	127,408	-	-	-	-	195,171
3 Inch	Other Public Authority	5,892	34,502	-	-	-	-	40,394
4 Inch	Other Public Authority	4,604	9,082	-	-	-	-	13,685
6 Inch	Other Public Authority	9,207	38,596	-	-	-	-	47,803
2 Inch	Fire	$ 467	$ 652	$ -	$ -	$ -	$ -	$ 1,119
4 Inch	Fire	7,820	2,366	-	-	-	-	10,186
6 Inch	Fire	7,760	1,104	-	-	-	-	8,863
8 Inch	Fire	3,808	394	-	-	-	-	4,202
Public Hydrant		12,821	6,904	-	-	-	-	19,725
	TOTALS	$ 3,706,951	$ 1,362,911	$ 2,074,129	$ 1,029,116	$ -	$ -	$ 8,173,107
	Percent of Total	45.36%	16.68%	25.38%	12.59%	0.00%	0.00%	100.00%
	Cummulative %	45.36%	62.03%	87.41%	100.00%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 3,706,951	45.36%	45.36%
Lowest Cost Commodity rate	627,002	7.67%	53.03%
2nd Lowest Cost Commodity rate	1,885,281	23.07%	76.09%
Highest Cost Commodity rate	1,953,874	23.91%	100.00%
	$ 8,173,107		

Mohave Water District - Staff Proof
Staff Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 2,282,917	$ 458,840	$ 1,019,043	$ 1,183,375	$ -	$ -	$ 4,944,175
3/4 Inch	Residential	936	141	561	1,280	-	-	2,918
1 Inch	Residential	30,193	19,301	48,434	-	-	-	97,927
1.5 Inch	Residential	-	-	-	-	-	-	-
2 Inch	Residential	30,264	20,950	31,470	-	-	-	82,684
6 Inch	Residential	-	-	-	-	-	-	-
5/8x3/4 Inch	Apartment	$ 10,309.00	$ 11,447.41	$ 14,421.29	$ -	$ -	$ -	$ 36,178
3/4 Inch	Apartment	234	-	-	-	-	-	234
1 Inch	Apartment	20,670	13,396	24,228	-	-	-	58,294
1.5 Inch	Apartment	1,560	1,437	2,291	-	-	-	5,288
2 Inch	Apartment	178,672	91,107	144,897	-	-	-	414,676
4 Inch	Apartment	7,800	4,959	6,803	-	-	-	19,562
6 Inch	Apartment	7,800	7,920	41,081	-	-	-	56,801
5/8 Inch	Commercial	$ 59,943.00	$ 39,318.34	$ 68,482.10	$ -	$ -	$ -	$ 167,743
3/4 Inch	Commercial	-	-	-	-	-	-	-
1 Inch	Commercial	77,545	45,859	116,241	-	-	-	239,645
1.5 Inch	Commercial	2,340	1,357	266	-	-	-	3,963
2 Inch	Commercial	257,192	157,962	430,902	-	-	-	846,057
3 Inch	Commercial	31,616	10,944	24,893	-	-	-	67,453
4 Inch	Commercial	7,800	4,814	8,095	-	-	-	20,708
6 Inch	Commercial	23,400	16,082	102,019	-	-	-	141,501
5/8x3/4 Inch	Other Public Authority	$ 2,808.00	$ 4,516.60	$ -	$ -	$ -	$ -	$ 7,325
1 Inch	Other Public Authority	4,290	5,287	-	-	-	-	9,577
1.5 Inch	Other Public Authority	780	112	-	-	-	-	892
2 Inch	Other Public Authority	57,408	113,023	-	-	-	-	170,431
3 Inch	Other Public Authority	4,992	30,606	-	-	-	-	35,598
4 Inch	Other Public Authority	3,900	8,056	-	-	-	-	11,956
6 Inch	Other Public Authority	7,800	34,239	-	-	-	-	42,039
2 Inch	Fire	$ 471	$ 578	$ -	$ -	$ -	$ -	$ 1,049
4 Inch	Fire	7,878	2,099	-	-	-	-	9,977
6 Inch	Fire	7,818	979	-	-	-	-	8,797
8 Inch	Fire	3,837	350	-	-	-	-	4,186
Public Hydrant		12,917	6,125	-	-	-	-	19,042
	TOTALS	$ 3,146,089	$ 1,111,805	$ 2,084,128	$ 1,184,655	$ -	$ -	$ 7,526,677
	Percent of Total	41.80%	14.77%	27.69%	15.74%	0.00%	0.00%	100.00%
	Cummulative %	41.80%	56.57%	84.26%	100.00%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 3,146,089	41.80%	41.80%
Lowest Cost Commodity rate	458,982	6.10%	47.90%
2nd Lowest Cost Commodity rate	1,672,426	22.22%	70.12%
Highest Cost Commodity rate	2,249,180	29.88%	100.00%
	$ 7,526,677		

Mohave Water District - RUCO Proof
RUCO Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 2,001,943	$ 376,905	$ 889,346	$ 1,013,570	$ -	$ -	$ 4,281,764
3/4 Inch	Residential	547	116	477	1,097	-	-	2,236
1 Inch	Residential	26,477	16,844	34,723	-	-	-	78,044
1.5 Inch	Residential	-	-	-	-	-	-	-
2 Inch	Residential	26,539	18,284	22,561	-	-	-	67,384
6 Inch	Residential	-	-	-	-	-	-	-
5/8x3/4 Inch	Apartment	$ 9,040.20	$ 9,990.47	$ 12,351.95	$ -	$ -	$ -	$ 31,383
3/4 Inch	Apartment	137	-	-	-	-	-	137
1 Inch	Apartment	18,126	11,691	20,752	-	-	-	50,569
1.5 Inch	Apartment	1,368	1,254	1,962	-	-	-	4,584
2 Inch	Apartment	156,682	79,512	124,105	-	-	-	360,299
4 Inch	Apartment	6,840	4,328	5,827	-	-	-	16,995
6 Inch	Apartment	6,840	6,912	35,187	-	-	-	48,939
5/8 Inch	Commercial	$ 52,565.40	$ 34,314.18	$ 58,655.46	$ -	$ -	$ -	$ 145,535
3/4 Inch	Commercial	-	-	-	-	-	-	-
1 Inch	Commercial	68,001	40,022	99,562	-	-	-	207,585
1.5 Inch	Commercial	2,052	1,185	228	-	-	-	3,464
2 Inch	Commercial	225,538	137,858	369,071	-	-	-	732,467
3 Inch	Commercial	27,725	9,551	21,321	-	-	-	58,597
4 Inch	Commercial	6,840	4,201	6,933	-	-	-	17,974
6 Inch	Commercial	20,520	14,035	87,380	-	-	-	121,936
5/8x3/4 Inch	Other Public Authority	$ 2,462.40	$ 3,941.76	$ -	$ -	$ -	$ -	$ 6,404
1 Inch	Other Public Authority	3,762	4,614	-	-	-	-	8,376
1.5 Inch	Other Public Authority	684	98	-	-	-	-	782
2 Inch	Other Public Authority	50,342	98,638	-	-	-	-	148,980
3 Inch	Other Public Authority	4,378	26,711	-	-	-	-	31,089
4 Inch	Other Public Authority	3,420	7,031	-	-	-	-	10,451
6 Inch	Other Public Authority	6,840	29,881	-	-	-	-	36,721
2 Inch	Fire	$ 404	$ 505	$ -	$ -	$ -	$ -	$ 909
4 Inch	Fire	6,765	1,832	-	-	-	-	8,597
6 Inch	Fire	6,718	854	-	-	-	-	7,572
8 Inch	Fire	3,296	305	-	-	-	-	3,601
Public Hydrant		11,097	5,345	-	-	-	-	16,443
	TOTALS	$ 2,757,947	$ 946,757	$ 1,790,443	$ 1,014,667	$ -	$ -	$ 6,509,814
	Percent of Total	42.37%	14.54%	27.50%	15.59%	0.00%	0.00%	100.00%
	Cummulative %	42.37%	56.91%	84.41%	100.00%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 2,757,947	42.37%	42.37%
Lowest Cost Commodity rate	377,021	5.79%	48.16%
2nd Lowest Cost Commodity rate	1,459,559	22.42%	70.58%
Highest Cost Commodity rate	1,915,287	29.42%	100.00%
	$ 6,509,814		

Paradise Valley Water District
Company Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Commodity Sixth Tier	Total
5/8 Inch	Residential	$ 676,605	$ 117,890	$ 170,260	$ 332,466	$ 220,985	$ 126,048	$ -	$ 1,644,254
3/4 Inch	Residential	8,958	1,401	1,555	4,267	4,524	1,882	-	22,587
1 Inch	Residential	1,263,888	127,901	269,247	844,549	936,142	1,074,953	-	4,516,681
1.5 Inch	Residential	184,894	10,417	21,490	68,314	90,059	208,388	-	583,563
2 Inch	Residential	280,467	10,165	22,998	86,351	125,607	492,362	-	1,017,951
6 Inch	Residential	-	-	-	-	-	-	-	-
5/8 Inch	Commercial	$ 21,054.17	$ 11,189.51	$ -	$ -	$ -	$ -	$ -	$ 32,244
3/4 Inch	Commercial	-	-	-	-	-	-	-	-
1 Inch	Commercial	45,298	116,617	13,782	-	-	-	-	175,698
1.5 Inch	Commercial	31,007	64,871	6,825	-	-	-	-	102,703
2 Inch	Commercial	269,749	663,136	261,966	-	-	-	-	1,194,850
3 Inch	Commercial	35,090	29,513	82,734	-	-	-	-	147,337
4 Inch	Commercial	5,870	9,910	7,924	-	-	-	-	23,703
6 Inch	Commercial	47,184	26,603	145,991	-	-	-	-	219,778
5/8x3/4 Inc	Other Public Authority	$ 957.01	$ 103.22	$ -	$ -	$ -	$ -	$ -	$ 1,060
1 Inch	Other Public Authority	1,276	4,387	-	-	-	-	-	5,663
2 Inch	Other Public Authority	10,718	4,703	-	-	-	-	-	15,421
3 Inch	Turf	3,509	26,089	-	-	-	-	-	$ 29,598
4 Inch	Turf	5,870	121,742	-	-	-	-	-	127,611
6 Inch	Paradise Valley Country Club	10,027	335,609	-	-	-	-	-	345,636
Private Fire		8,520	933	-	-	-	-	-	9,453
	TOTALS	$ 2,910,941	$ 1,683,178	$ 1,004,773	$ 1,335,948	$ 1,377,318	$ 1,903,634	$ -	$ 10,215,791
	Percent of Total	28.49%	16.48%	9.84%	13.08%	13.48%	18.63%	0.00%	100.00%
	Cummulative %	28.49%	44.97%	54.81%	67.88%	81.37%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 0	0.00%	0.00%
Lowest Cost Commodity rate	$ 149,884	1.47%	1.47%
2nd Lowest Cost Commodity rate	$ 315,291	3.09%	4.55%
3rd Lowest Commodity Rates	$ 2,381,503	23.31%	27.87%
2nd Highest Commodity Rates	$ 1,675,555	16.40%	44.27%
Highest Cost Commodity rate	$ 1,903,634	18.63%	62.90%
	$ 6,425,867		

Paradise Valley Water District - Staff Proof
Staff Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Commodity Sixth Tier	Total
5/8 Inch	Residential	$ 640,118	$ 111,353	$ 160,819	$ 328,304	$ 208,731	$ 118,984	$ -	$ 1,568,307
3/4 Inch	Residential	8,475	1,323	1,469	4,214	4,274	1,776	-	21,530
1 Inch	Residential	1,195,732	120,809	254,316	833,975	884,229	1,014,713	-	4,303,773
1.5 Inch	Residential	174,923	9,840	20,299	67,458	85,065	196,710	-	554,295
2 Inch	Residential	265,343	9,601	21,723	85,270	118,642	464,771	-	965,349
6 Inch	Residential	-	-	-	-	-	-	-	-
5/8 Inch	Commercial	$ 19,918.80	$ 10,569.00	$ -	$ -	$ -	$ -	$ -	$ 30,488
3/4 Inch	Commercial	-	-	-	-	-	-	-	-
1 Inch	Commercial	42,856	110,150	13,018	-	-	-	-	166,024
1.5 Inch	Commercial	29,335	61,273	6,447	-	-	-	-	97,055
2 Inch	Commercial	255,202	626,362	247,439	-	-	-	-	1,129,003
3 Inch	Commercial	33,198	27,876	78,146	-	-	-	-	139,220
4 Inch	Commercial	5,553	9,360	7,484	-	-	-	-	22,397
6 Inch	Commercial	44,640	25,128	137,895	-	-	-	-	207,663
5/8x3/4 Inc	Other Public Authority	$ 905.40	$ 97.50	$ -	$ -	$ -	$ -	$ -	$ 1,003
1 Inch	Other Public Authority	1,207	4,144	-	-	-	-	-	5,351
2 Inch	Other Public Authority	10,140	4,442	-	-	-	-	-	14,583
3 Inch	Turf	3,320	22,885	-	-	-	-	-	$ 26,205
4 Inch	Turf	5,553	106,791	-	-	-	-	-	112,344
6 Inch	Paradise Valley Country Club	10,286	294,394	-	-	-	-	-	304,680
Private Fire		8,520	818	-	-	-	-	-	9,338
	TOTALS	$ 2,755,224	$ 1,557,214	$ 949,054	$ 1,319,221	$ 1,300,939	$ 1,796,955	$ -	$ 9,678,607
	Percent of Total	28.47%	16.09%	9.81%	13.63%	13.44%	18.57%	0.00%	100.00%
	Cummulative %	28.47%	44.56%	54.36%	67.99%	81.43%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 2,755,224	28.47%	28.47%
Lowest Cost Commodity rate	$ 252,925	2.61%	31.08%
2nd Lowest Cost Commodity rate	$ 458,625	4.74%	35.82%
3rd Lowest Commodity Rates	$ 2,623,510	27.11%	62.93%
2nd Highest Commodity Rates	$ 1,791,369	18.51%	81.43%
Highest Cost Commodity rate	$ 1,796,955	18.57%	100.00%
	$ 9,678,607		

Paradise Valley Water District - RUCO Proof
RUCO Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Commodity Sixth Tier	Total
5/8 Inch	Residential	$ 559,944	$ 84,840	$ 128,655	$ 256,933	$ 176,093	$ 110,721	$ -	$ 1,317,186
3/4 Inch	Residential	7,452	1,008	1,175	3,298	3,605	1,653	-	18,191
1 Inch	Residential	1,069,740	92,045	203,453	652,676	745,968	944,241	-	3,708,123
1.5 Inch	Residential	154,560	7,497	16,239	52,793	71,764	183,049	-	485,902
2 Inch	Residential	235,500	7,315	17,378	66,733	100,090	432,492	-	859,509
6 Inch	Residential	-	-	-	-	-	-	-	-
5/8 Inch	Commercial	$ 17,424.00	$ 9,685.80	$ 117.00	$ -	$ -	$ -	$ -	$ 27,227
3/4 Inch	Commercial	-	-	-	-	-	-	-	-
1 Inch	Commercial	38,340	51,373	100,820	-	-	-	-	190,533
1.5 Inch	Commercial	25,920	25,076	60,883	-	-	-	-	111,878
2 Inch	Commercial	226,500	179,300	987,547	-	-	-	-	1,393,346
3 Inch	Commercial	30,000	7,490	132,333	-	-	-	-	169,823
4 Inch	Commercial	5,040	1,512	21,642	-	-	-	-	28,194
6 Inch	Commercial	40,800	5,704	209,014	-	-	-	-	255,518
5/8x3/4 Inc	Other Public Authority	$ 792.00	$ 90.00	$ -	$ -	$ -	$ -	$ -	$ 882
1 Inch	Other Public Authority	1,080	3,825	-	-	-	-	-	4,905
2 Inch	Other Public Authority	9,000	4,100	-	-	-	-	-	13,100
3 Inch	Turf	3,000	21,387	-	-	-	-	-	$ 24,387
4 Inch	Turf	5,040	99,799	-	-	-	-	-	104,839
6 Inch	Paradise Valley Country Club	10,286	275,522	-	-	-	-	-	285,808
Private Fire		8,520	766	-	-	-	-	-	9,286
	TOTALS	$ 2,448,938	$ 878,334	$ 1,879,255	$ 1,032,434	$ 1,097,520	$ 1,672,156	$ -	$ 9,008,637
	Percent of Total	27.18%	9.75%	20.86%	11.46%	12.18%	18.56%	0.00%	100.00%
	Cummulative %	27.18%	36.93%	57.79%	69.26%	81.44%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 2,448,938	27.18%	27.18%
Lowest Cost Commodity rate	$ 192,705	2.14%	29.32%
2nd Lowest Cost Commodity rate	$ 366,900	4.07%	33.40%
3rd Lowest Commodity Rates	$ 1,718,063	19.07%	52.47%
2nd Highest Commodity Rates	$ 2,609,875	28.97%	81.44%
Highest Cost Commodity rate	$ 1,672,156	18.56%	100.00%
	$ 9,008,637		

Sun City Water District
Company Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 2,349,785	$ 162,465	$ 546,433	$ 1,114,712	$ 227,011	$ 383,144	$ 4,783,549
3/4 Inch	Residential	121,215	8,317	27,801	58,993	13,494	22,757	$ 252,578
1 Inch	Residential	126,083	3,450	11,194	25,707	9,021	77,690	$ 253,146
1.5 Inch	Residential	815,397	953,211	915,943	-	-	-	$ 2,684,551
2 Inch	Residential	431,737	437,269	354,232	-	-	-	$ 1,223,237
3 Inch	Residential	4,003	5,660	7,862	-	-	-	$ 17,525
6 Inch	Residential	12,509	15,140	766	-	-	-	$ 28,415
5/8 Inch	Commercial	$ 27,687.21	$ 12,861.61	$ 14,310.61	$ -	$ -	$ -	$ 54,859
3/4 Inch	Commercial	2,001	1,744	5,608	-	-	-	$ 9,354
1 Inch	Commercial	48,083	35,846	57,751	-	-	-	$ 141,680
1.5 Inch	Commercial	178,101	123,598	159,436	-	-	-	$ 461,136
2 Inch	Commercial	209,072	186,195	264,359	-	-	-	$ 659,626
3 Inch	Commercial	49,870	38,997	71,614	-	-	-	$ 160,482
4 Inch	Commercial	15,637	21,291	104,400	-	-	-	$ 141,327
4 Inch	Commercial	45,346	55,831	344,921	-	-	-	$ 446,099
	2 Inch Irrigation	$ 2,216	$ 4,049	$ -	$ -	$ -	$ -	$ 6,265
	Raw	-	129,768	-	-	-	-	$ 129,768
	Peoria - Public Interruptible	39	-	-	-	-	-	$ 39
3 Inch	Fire	$ 128	$ -	$ -	$ -	$ -	$ -	$ 128
4 Inch	Fire	7,405	-	-	-	-	-	$ 7,405
6 Inch	Fire	8,950	-	-	-	-	-	$ 8,950
8 Inch	Fire	1,841	-	-	-	-	-	$ 1,841
	Private Hydrant - Peoria	4,752	-	-	-	-	-	$ 4,752
	TOTALS	$ 4,461,856	$ 2,195,693	$ 2,886,633	$ 1,199,412	$ 249,525	$ 483,592	$ 11,476,711
	Percent of Total	38.88%	19.13%	25.15%	10.45%	2.17%	4.21%	100.00%
	Cummulative %	38.88%	58.01%	83.16%	93.61%	95.79%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 4,461,856	38.88%	38.88%
Lowest Cost Commodity rate	$ 1,719,328	14.98%	53.86%
2nd Lowest Cost Commodity rate	$ 1,864,232	16.24%	70.10%
3rd Lowest Cost Commodity rate	$ 1,675,777	14.60%	84.70%
2nd Highest Cost Commodity rate	$ 240,504	2.10%	86.80%
Highest Cost Commodity rate	$ 1,428,302	12.45%	97.15%
	$ 11,390,000		

Sun City Water District - Staff Proof
Staff Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 2,141,414	$ 166,106	$ 470,024	$ 977,817	$ 232,030	$ 413,221	$ 4,400,612
3/4 Inch	Residential	165,699	8,504	23,914	51,748	13,792	24,544	$ 288,201
1 Inch	Residential	114,903	3,527	9,629	22,550	9,220	83,789	$ 243,618
1.5 Inch	Residential	743,090	761,955	987,845	-	-	-	$ 2,492,890
2 Inch	Residential	393,452	349,533	382,039	-	-	-	$ 1,125,024
3 Inch	Residential	3,648	4,524	8,479	-	-	-	$ 16,651
6 Inch	Residential	11,400	12,102	826	-	-	-	$ 24,328
5/8 Inch	Commercial	$ 25,232.00	$ 10,281.00	$ 15,433.99	$ -	$ -	$ -	$ 50,947
3/4 Inch	Commercial	2,736	1,394	6,049	-	-	-	$ 10,179
1 Inch	Commercial	43,819	28,654	62,284	-	-	-	$ 134,757
1.5 Inch	Commercial	162,308	98,799	171,952	-	-	-	$ 433,059
2 Inch	Commercial	190,532	148,836	285,111	-	-	-	$ 624,479
3 Inch	Commercial	45,448	31,173	77,236	-	-	-	$ 153,856
4 Inch	Commercial	14,250	17,019	112,595	-	-	-	$ 143,864
4 Inch	Commercial	41,325	44,629	371,998	-	-	-	$ 457,952
	2 Inch Irrigation	$ 2,040	$ 4,589	$ -	$ -	$ -	$ -	$ 6,629
	Raw	-	154,332	-	-	-	-	$ 154,332
	Peoria - Public Interruptible	40	-	-	-	-	-	$ 40
3 Inch	Fire	$ 130	$ -	$ -	$ -	$ -	$ -	$ 130
4 Inch	Fire	7,513	-	-	-	-	-	$ 7,513
6 Inch	Fire	9,080	-	-	-	-	-	$ 9,080
8 Inch	Fire	1,868	-	-	-	-	-	$ 1,868
	Private Hydrant - Peoria	4,822	-	-	-	-	-	$ 4,822
	TOTALS	$ 4,124,748	$ 1,845,957	$ 2,985,414	$ 1,052,116	$ 255,042	$ 521,553	$ 10,784,831
	Percent of Total	38.25%	17.12%	27.68%	9.76%	2.36%	4.84%	100.00%
	Cummulative %	38.25%	55.36%	83.04%	92.80%	95.16%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 4,124,748	38.25%	38.25%
Lowest Cost Commodity rate	$ 1,465,172	13.59%	51.83%
2nd Lowest Cost Commodity rate	$ 1,882,755	17.46%	69.29%
3rd Lowest Cost Commodity rate	$ 1,432,901	13.29%	82.58%
2nd Highest Cost Commodity rate	$ 245,822	2.28%	84.85%
Highest Cost Commodity rate	$ 1,540,424	14.28%	96.86%
	$ 10,691,822		

Sun City Water District - RUCO Direct
RUCO Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 1,974,609	$ 161,610	$ 429,931	$ 931,388	$ 208,562	$ 379,218	$ 4,085,319
3/4 Inch	Residential	101,861	8,273	21,874	49,291	12,397	22,524	$ 216,221
1 Inch	Residential	105,904	3,432	8,808	21,480	8,288	76,894	$ 224,804
1.5 Inch	Residential	684,894	11,408	33,456	126,643	75,209	1,591,294	$ 2,522,904
2 Inch	Residential	362,649	3,758	11,010	41,807	24,840	712,212	$ 1,156,276
3 Inch	Residential	3,362	18	51	196	119	13,464	$ 17,210
6 Inch	Residential	10,507	18	51	196	119	16,918	$ 27,809
5/8 Inch	Commercial	$ 23,266.56	$ 9,731.58	$ 14,163.96	$ -	$ -	$ -	$ 47,162
3/4 Inch	Commercial	1,682	1,320	5,551	-	-	-	$ 8,553
1 Inch	Commercial	40,387	27,123	57,159	-	-	-	$ 124,669
1.5 Inch	Commercial	149,596	93,519	157,803	-	-	-	$ 400,918
2 Inch	Commercial	175,615	140,882	261,650	-	-	-	$ 578,147
3 Inch	Commercial	41,890	29,507	70,880	-	-	-	$ 142,277
4 Inch	Commercial	13,134	16,110	103,330	-	-	-	$ 132,573
4 Inch	Commercial	38,089	42,244	341,387	-	-	-	$ 421,720
	2 Inch Irrigation	$ 1,862	$ 4,028	$ -	$ -	$ -	$ -	$ 5,890
	Raw	-	129,086	-	-	-	-	$ 129,086
	Peoria - Public Interruptible	33	-	-	-	-	-	$ 33
3 Inch	Fire	$ 117	$ -	$ -	$ -	$ -	$ -	$ 117
4 Inch	Fire	6,762	-	-	-	-	-	$ 6,762
6 Inch	Fire	8,173	-	-	-	-	-	$ 8,173
8 Inch	Fire	1,681	-	-	-	-	-	$ 1,681
	Private Hydrant - Peoria	4,340	-	-	-	-	-	$ 4,340
	TOTALS	$ 3,750,416	$ 682,066	$ 1,517,105	$ 1,171,001	$ 329,534	$ 2,812,523	$ 10,262,645
	Percent of Total	36.54%	6.65%	14.78%	11.41%	3.21%	27.41%	100.00%
	Cummulative %	36.54%	43.19%	57.97%	69.38%	72.59%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 3,750,416	36.54%	36.54%
Lowest Cost Commodity rate	$ 321,630	3.13%	39.68%
2nd Lowest Cost Commodity rate	$ 505,181	4.92%	44.60%
3rd Lowest Cost Commodity rate	$ 1,531,437	14.92%	59.52%
2nd Highest Cost Commodity rate	$ 220,959	2.15%	61.68%
Highest Cost Commodity rate	$ 1,413,665	13.77%	73.30%
	$ 7,743,289		

Tubac Water District
Company Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 244,759	$ 65,887	$ 106,403	$ 71,074	$ 55,435	$ -	$ 543,559
3/4 Inch	Residential	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1 Inch	Residential	30,288	23,210	3,975	-	-	-	$ 57,473
1.5 Inch	Residential	-	-	-	-	-	-	$ -
2 Inch	Residential	16,266	12,308	628	-	-	-	$ 29,202
6 Inch	Residential	-	-	-	-	-	-	$ -
5/8 Inch	Commercial	$ 26,306	$ 22,919	$ 7,958	$ -	$ -	$ -	$ 57,182
3/4 Inch	Commercial	-	-	-	-	-	-	$ -
1 Inch	Commercial	22,875	15,611	24,899	-	-	-	$ 63,385
1.5 Inch	Commercial	5,083	3,330	-	-	-	-	$ 8,413
2 Inch	Commercial	56,933	49,399	14,501	-	-	-	$ 120,832
3 Inch	Commercial	3,389	1,887	791	-	-	-	$ 6,066
4 Inch	Commercial	-	-	-	-	-	-	$ -
4 Inch	Commercial	-	-	-	-	-	-	$ -
TOTALS		$ 405,898	$ 194,551	$ 159,155	$ 71,074	$ 55,435	$ -	$ 886,113
Percent of Total		45.81%	21.96%	17.96%	8.02%	6.26%	0.00%	100.00%
Cummulative %		45.81%	67.76%	85.72%	93.74%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 405,898	45.81%	45.81%
Lowest Cost Commodity rate	$ 65,887	7.44%	53.24%
2nd Lowest Cost Commodity rate	$ 106,403	12.01%	65.25%
2nd Highest Cost Commodity rate	$ 199,737	22.54%	87.79%
Highest Cost Commodity rate	$ 108,187	12.21%	100.00%
	$ 886,113		

Tubac Water District - Staff Proof
Staff Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 173,340	$ 45,081	$ 86,693	$ 69,881	$ 66,446	$ -	$ 441,440
3/4 Inch	Residential	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1 Inch	Residential	21,450	24,354	4,765	-	-	-	$ 50,568
1.5 Inch	Residential	-	-	-	-	-	-	$ -
2 Inch	Residential	11,520	12,914	753	-	-	-	$ 25,187
6 Inch	Residential	-	-	-	-	-	-	$ -
5/8 Inch	Commercial	$ 18,630	$ 24,047	$ 9,539	$ -	$ -	$ -	$ 52,216
3/4 Inch	Commercial	-	-	-	-	-	-	$ -
1 Inch	Commercial	16,200	16,380	29,845	-	-	-	$ 62,425
1.5 Inch	Commercial	3,600	3,494	-	-	-	-	$ 7,094
2 Inch	Commercial	40,320	51,832	17,381	-	-	-	$ 109,533
3 Inch	Commercial	2,400	1,980	948	-	-	-	$ 5,327
4 Inch	Commercial	-	-	-	-	-	-	$ -
4 Inch	Commercial	-	-	-	-	-	-	$ -
TOTALS		$ 287,460	$ 180,081	$ 149,922	$ 69,881	$ 66,446	$ -	$ 753,790
Percent of Total		38.14%	23.89%	19.89%	9.27%	8.81%	0.00%	100.00%
Cummulative %		38.14%	62.03%	81.91%	91.19%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 287,460	38.14%	38.14%
Lowest Cost Commodity rate	$ 45,081	5.98%	44.12%
2nd Lowest Cost Commodity rate	$ 86,693	11.50%	55.62%
2nd Highest Cost Commodity rate	$ 204,882	27.18%	82.80%
Highest Cost Commodity rate	$ 129,675	17.20%	100.00%
	$ 753,790		

Tubac Water District - RUCO Proof
RUCO Proposed Rates
Revenue Breakdown Summary

		Monthly Mins	Commodity First Tier	Commodity Second Tier	Commodity Third Tier	Commodity Fourth Tier	Commodity Fifth Tier	Total
5/8 Inch	Residential	$ 190,674	$ 47,161	$ 85,472	$ 65,606	$ 61,362	$ -	$ 450,276
3/4 Inch	Residential	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1 Inch	Residential	23,595	22,864	4,400	-	-	-	$ 50,859
1.5 Inch	Residential	-	-	-	-	-	-	$ -
2 Inch	Residential	12,672	12,124	695	-	-	-	$ 25,491
6 Inch	Residential	-	-	-	-	-	-	$ -
5/8 Inch	Commercial	$ 20,493	$ 22,577	$ 8,809	$ -	$ -	$ -	$ 51,878
3/4 Inch	Commercial	-	-	-	-	-	-	$ -
1 Inch	Commercial	17,820	15,378	27,562	-	-	-	$ 60,760
1.5 Inch	Commercial	3,960	3,280	-	-	-	-	$ 7,240
2 Inch	Commercial	44,352	48,662	16,051	-	-	-	$ 109,065
3 Inch	Commercial	2,640	1,858	875	-	-	-	$ 5,374
4 Inch	Commercial	-	-	-	-	-	-	$ -
4 Inch	Commercial	-	-	-	-	-	-	$ -
TOTALS		$ 316,206	$ 173,905	$ 143,864	$ 65,606	$ 61,362	$ -	$ 760,943
Percent of Total		41.55%	22.85%	18.91%	8.62%	8.06%	0.00%	100.00%
Cummulative %		41.55%	64.41%	83.31%	91.94%	100.00%	100.00%	

Category	Revenue	%	Cummulative
Minimum	$ 316,206	41.55%	41.55%
Lowest Cost Commodity rate	$ 47,161	6.20%	47.75%
2nd Lowest Cost Commodity rate	$ 85,472	11.23%	58.98%
2nd Highest Cost Commodity rate	$ 192,350	25.28%	84.26%
Highest Cost Commodity rate	$ 119,754	15.74%	100.00%
	$ 760,943		

EXHIBIT TJB – 3R

Tubac Water District

Computation of Deferred Arsenic Media Replacement O&M Surcharge

[1]	Total Amount to be Recovered	$ 101,712
[2]	Amortization Period (years)	3
[3]	Annual Amount to be Collected	$ 33,904
[4]	50% of Annual Amount to be Recovered via Commodity Surcharge = [3] x .5	$ 16,952
[5]	Gallons Sold in Test Year (in 1,000s)	74,984
[6]	Commodity Surcharge = [2] / [3]	$ 0.22607
[7]	50% of Annual Amount to be Recovered as Fixed Charge = [3] x .5	$ 16,952
[8]	Number of Equivalent 5/8 inch meters	799
[9]	Annual Charge for an Equivalent 5/8 inch meter = [5] / [6]	$ 21.23
[10]	Monthly Charge for an Equivalent 5/8 Inch meter = [7] / 12	$ 1.77

Meter Size	5/8" Fixed Charge	Meter Ratio	Monthly Fixed Charge
5/8 Inch Meter	$ 1.77	1.0	$ 1.77
3/4 Inch Meter	1.77	1.5	2.65
1 Inch Meter	1.77	2.5	4.42
1 1/2 Inch Meter	1.77	5.0	8.85
2 Inch Meter	1.77	8.0	14.15
3 Inch Meter	1.77	16.0	28.31
4 Inch Meter	1.77	25.0	44.23
6 Inch Meter	1.77	50.0	88.46
8 Inch Meter	1.77	80.0	141.53
10 Inch Meter	1.77	115.0	203.45
12 Inch Meter	1.77	215.0	380.37

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
PAULINE M. AHERN, CRRA
ON BEHALF OF
EPCOR WATER ARIZONA, INC.

COST OF CAPITAL
FEBRUARY 9, 2015

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EXECUTIVE SUMMARY
EPCOR WATER ARIZONA, INC.
DOCKET NO. W-01303A-14-0010

Ms. Ahern's rebuttal testimony responds to certain aspects of the direct testimony of ACC Staff Witness John A. Cassidy, RUCO Witness Robert B. Mease, SCVVC Witness James S. Patterson, and The Resorts Witness John S. Thornton, Jr. on the following issues:

Common Equity Cost Rate

Ms. Ahern also provides evidence that both Mr. Cassidy's and Mr. Mease's single-stage Discounted Cash Flow model results, 8.6% and 8.74%, respectively, significantly understate the investors' required return when applied to an original cost less depreciation rate base, i.e., book value. In addition, Ms. Ahern's rebuttal testimony provides evidence in support of the exclusive reliance upon security analysts' forecasts of growth in earnings per share ("EPS") in contrast to the various historical and projected growth rates used by both Mr. Cassidy and Mr. Mease. As noted in Ms. Ahern's testimony, these forecasts are reasonable indicators of investor expectations and are more accurate than forecasts that rely on historical growth. Mr. Cassidy's and Mr. Mease's cost of common equity analyses will be discussed in further detail below.

Ms. Ahern also points out that Mr. Patterson's comments regarding a small size premium should be disregarded. Finally, Ms. Ahern demonstrates that Mr. Thornton's discussion of expected returns on the market of 8.8% - 9.1% are not consistent with the expected returns on the market of 12.05%, 10.24% and 14.35% relied upon by Ms. Ahern in her updated common equity cost rate analysis.

Credit Risk Adjustment

As noted in her rebuttal testimony, Ms. Ahern explains that neither Mr. Cassidy nor Mr. Mease included an adjustment to reflect the greater credit risk of the Company, as evidenced by its likely bond rating of Moody's A3 / S&P A- as indicated by EPCOR Utilities upgraded S&P bond / credit rating of A-, notwithstanding the level of common equity. An indication of the magnitude of such an adjustment is 0.24 basis points.

Business Risk Adjustment

Ms. Ahern also explains that neither Mr. Cassidy nor Mr. Mease included an adjustment to reflect the greater business risk of the Company, as evidenced by its smaller size relative to the water utilities upon whose market data their respective recommended common equity cost rates were based. Based upon her analysis, Ms. Ahern supports a conservative adjustment of 30 basis points based upon the size of the Company.

Mr. Cassidy's Common Equity Cost Rate

Ms. Ahern provides evidence that Mr. Cassidy's exclusive reliance upon the common equity cost rate Discounted Cash Flow Model ("DCF") is inconsistent with the Efficient Market Hypothesis ("EMH") upon which the DCF is predicated. Consistent with the EMH, multiple cost of common equity models should be relied upon.

Thus, Mr. Cassidy's exclusion of the Capital Asset Pricing Model ("CAPM") in this proceeding is not only inconsistent with Staff's previous position but with the EMH upon which his DCF analysis is predicated. Ms. Ahern provides evidence that the rationale Mr. Cassidy used for not relying upon a CAPM analysis in this proceeding is applicable as well to the DCF model when he stated that "forecasted dividend yields [are] continuing to remain at low levels" resulting in abnormally low DCF cost of common equity estimates.

Likewise, Mr. Cassidy's rationale for using a group of sample utilities, that a group of utilities can reduce the sampling error in the estimation of common equity cost rate, can also be applied to the use of multiple models which also reduces the sampling error from the application of a single cost of common equity model, e.g. the DCF.

Ms. Ahern's testimony, both this rebuttal and her direct, provide evidence that upward credit risk and business risk adjustments to the common equity cost rate based upon and small size as discussed below. Mr. Cassidy did not include such adjustments.

Properly including these adjustments, coupled with a properly applied CAPM analysis and a properly applied DCF analysis based upon Mr. Cassidy's DCF results in a 10.34% common equity cost rate, only slightly higher than her updated common equity cost rate of 10.25% discussed below. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment to the risk-adjusted corrected common equity cost rate of 10.34% results in a 10.94% common equity cost rate, for a range of 10.34% - 10.94% with a midpoint of 10.64%.

<u>Mr. Mease's Common Equity Cost Rate</u>

Ms. Ahern's rebuttal testimony also provides evidence which indicates that Mr. Mease's application of the Capital Asset Pricing Model ("CAPM") is flawed in several respects and therefore should not be relied upon. Mr. Mease's CAPM is flawed because:

1) He has incorrectly relied upon an historical risk-free rate despite the fact that both ratemaking and the cost of capital are prospective;
2) He has incorrectly calculated his market equity risk premium by relying upon:
    a. The historical <u>total</u> return on U.S. Treasury securities; and,
    b. Not employing a prospective or forward-looking equity risk premium. EWAZ' likely bond rating and small size as discussed below. Mr. Mease did not include such adjustments.

Properly including these adjustments, coupled with a properly applied CAPM analysis as well as Mr. Mease's DCF and Comparable Earnings ("CE") analyses results in a 10.33% common equity cost rate, only slightly higher than her updated common equity cost rate of 10.25% discussed below. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment to the risk-adjusted corrected common equity cost

rate of 9.79% results in a 10.39% common equity cost rate, for a range of 9.79% - 10.39% with a midpoint of 10.09%.

Updated Common Equity Cost Rate

Finally, Ms. Ahern's rebuttal testimony provides an updated common equity cost rate of 10.25%. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment to the updated common equity cost rate of 10.25% results in a 10.85% common equity cost rate, for a range of 10.25% - 10.85% with a midpoint of 10.55%, which Ms. Ahern opines is a reasonable common equity cost rate for EWAZ in the current economic and capital market environment.

EPCOR WATER ARIZONA, INC.

INTRODUCTION

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

A. My name is Pauline M. Ahern. I am a Partner with Sussex Economic Advisors, LLC. My business address is 161 Worcester Road, Suite 503, Framingham, MA, 01701[1].

Q. Are you the same Pauline M. Ahern who provided direct testimony in this case?

A. Yes.

PURPOSE

Q. What is the purpose of your testimony?

A. The purpose is to provide testimony on behalf of EPCOR Water Arizona, Inc. ("EWAZ" or "the Company") in rebuttal to certain aspects of the direct testimony of John A. Cassidy, Witness for the Staff of the Arizona Corporation Commission (the "ACC" or "the Commission"); the direct testimony of Robert B. Mease, witness for the Residential Utility Consumer Office ("RUCO"); the direct testimony of James S. Patterson, witness for the Santa Cruz valley Citizens' Council ("SCVVC"); and, the direct testimony of John S. Thornton, Jr. witness for Sanctuary Camelback Mountain Resort & Spa, JW Marriott Camelback Inn, and Omni Scottsdale resort & Spa at Montelucia ("The Resorts"). With regard to Mr. Cassidy's testimony, I will address his application of the Discounted Cash Flow

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[1] I joined Sussex Economic Advisors, LLC in January 2015.

Model ("DCF"). With regard to Mr. Mease's testimony, I will address his applications of the DCF, the Capital Asset Pricing Model ("CAPM") and Comparable Earnings Analysis ("CE"). I will also address the failure of both Mr. Cassidy and Mr. Mease to reflect the greater business risk faced by the Company due to its small size relative to their respective proxy water utilities. Next, I will respond to comments on the Company's testimony by Messrs. Cassidy, Mease, Patterson and Thornton. Finally, I will provide an update of my original rate of return analysis

Q. Have you prepared an exhibit which supports your rebuttal testimony?

A. Yes. It has been designated as Exhibit PMA-RT 1 and consists of Schedules 1 through 9. Unless otherwise specified all schedule references will be to schedules in Exhibit PMA-RT 1.

REVIEW OF ANALYSIS OF ACC STAFF WITNESS JOHN A. CASSIDY

COMMON EQUITY COST RATE

GENERAL COMMENTS

Q. On pages 29 – 33 and 46 – 52 of his direct testimony, Mr. Cassidy spends a great deal of time discussing market-to-book ratios and their relationship to the cost of capital as well as commenting upon your discussion of market-to-ratios relative to the results of the DCF model when such ratios differ from 1.0. Please comment.

A. Mr. Cassidy's discussion on pages 29 – 33 makes it clear that he believes that there is a direct relationship between earned returns on book common equity, the

allowed return on book common equity and market-to-book ratios. The empirical research does not bear that out as will be discussed below.

Second, on pages 46 – 52, Mr. Cassidy mischaracterizes my direct testimony. My direct testimony does not suggest that "cost of equity estimates derived from the DCF model should not be relied upon due to the market value of utility company common stock exceeding book value . . . and the prospect that they will continue to do so" as implied by the question posed by Mr. Cassidy on lines 18 – 21 on page 46 of his direct testimony. Rather, my direct testimony states that because the DCF model has a tendency to mis-specify the investor required return when market-to-book values are higher / less than 1.0, it is necessary to rely upon the results of multiple cost of common equity models to enhance the reliability and accuracy of the analysis. (see page 5, lines 25 – 26 and page 22, line 10 through page 26, line 15).

Q. What does the academic literature say about the relationship between allowed regulatory rates of return on common equity and utility market-to-book ratios?

A. It is very clear from the academic literature that there is no such relationship. Phillips[2] states the following:

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[2] Charles F. Phillips, Jr., The Regulation of Public Utilities – Theory and Practice, 1993, Public Utilities Reports, Inc., Arlington, VA, p. 395.

> Many question the assumption that market price should equal book value, believing that 'the earnings of utilities should be sufficiently high to achieve market-to-book ratios which are consistent with those prevailing for stocks of unregulated companies.

While earnings per share ("EPS") is a significant factor influencing market prices, it is by no means the only factor that affects market prices. Bonbright[3] recognizes as much when he states:

> In the first place, commissions cannot forecast, except within wide limits, the effect their rate orders will have on the market prices of the stocks of the companies they regulate. In the second place, *whatever the initial market prices may be, they are sure to change not only with the changing prospects for earnings, but with the changing outlook of an inherently volatile stock market.* Moreover, even if a commission did possess the power of control, any attempt to exercise it . . . would result in harmful, uneconomic shifts in public utility rate levels.

Q. Have you performed an analysis to determine the existence of a direct relationship between the market-to-book ratios of unregulated companies and their earned rates of return on book common equity?

A. Yes. Since regulation acts as a surrogate for competition, it is reasonable to look to the competitive environment for evidence of a direct relationship between market-to-book ratios and earned returns on common equity ("ROE"). To determine if Mr. Cassidy's implicit assumption of such a direct relationship has any merit, I observed the market-to-book ratios and the ROEs of the S&P Industrial Index and the S&P 500 Composite Index over a long period of time. On Schedule 1, I have shown the market-to-book ratios, rates of return on book common equity (earnings/book ratios), annual inflation rates, and the

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[3] James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, Principles of Public Utility Rates, 1988, Public Utilities Reports, Inc., Arlington, VA, p. 334.

earnings/book ratios net of inflation (real rate of earnings) annually for the years 1947 through 2013. In each and every year, the market-to-book ratios of the S&P Industrial Index equaled or exceeded 1.00 times. In 1949, the only year in which the market-to-book ratio was 1.00 (or 100%), the real rate of earnings on book equity, adjusted for deflation, was 18.1% (16.3% + 1.8%). In contrast, in 1961, when the S&P Industrial Index experienced a market-to-book ratio of 2.01 times, the real rate of earnings on book equity for the Index was only 9.1% (9.8% - 0.7%). In 1997, the market-to-book ratio for the Index was 5.88 times, while the average real rate of earnings on book equity was 22.9% (24.6% - 1.7%).

This analysis clearly demonstrates that competitive, unregulated companies have never sold below book value, on average, and have sold at book value in only one year since 1947. The data show that there is no relationship between earnings/book ratios and market-to-book ratios.

Because this lack of a relationship between earnings/book ratios and market-to-book ratios covers a 68-year period, 1947 through 2013, it cannot be validly argued that going forward a relationship would exist between earnings/book ratios and market-to-book ratios. The analysis shown on Schedule 1 coupled with the supportive academic literature, demonstrate the following:

1. That while regulation is a substitute for marketplace competition, it can influence but not directly control market prices, and, hence, market-to-book ratios; and,

2. that the rates of return investors expect to achieve and which influence their willingness to pay market prices well in excess of book values have no meaningful, direct relationship to rates of earnings on book equity.

Q. Mr. Cassidy states that it is "reasonable" to conclude that you have "intentionally" tried to keep my "DCF estimated cost of equity low to enhance" your "assertion that cost of equity estimates derived from the DCF model not be relied upon in this proceeding." Please comment.

A. Such a contention is seriously flawed. First, as stated previously, I do not state in my testimony that the results of a DCF analysis should not be relied upon. In fact, if my DCF estimate of 8.37% shown on page 1 of Schedule 1 of Exhibit PMA-DT 2 were not relied upon, the average and median cost of common equity result would be 10.59% and my recommendation would then become 10.80%. It is because the 8.37% DCF estimate is part of the calculation of the median of 9.93% that my recommendation is 10.70% and not 10.80%. Second, even if any of Mr. Cassidy's restatements of my DCF results using D_1, or the full growth rate instead of one-half the growth rate, as derived on Exhibits JAC-A and JAC-B, which range from 8.45% to 8.95%, were to have been included on Schedule 1 of Exhibit PMA-DT 2 as my DCF estimate, the median would still be 9.95% and my recommended common equity cost rate would be 10.70% because the DCF results are the low-end outliers. In addition, using the average of the DCF, RPM and CAPM, but substituting Mr. Cassidy's range of restated DCF estimates would result in a range of indicated common equity cost rates of 9.87% - 10.04%, with a midpoint of 9.96%. And, my range of risk-adjusted common equity cost rate would have been 10.61% - 10.78%, with a midpoint of 10.69%, which when

rounded to 10.70% equates to my original recommended common equity cost rate. Even an 8.95% DCF estimate underestimates the investor required return because the market-to-book ratios of water utilities are greater than 1.0.

Q. You previously mentioned the DCF's tendency to understate the investors' true required return in a market environment where market-to-book ratios significantly exceed one. Why does the DCF model mis-specify investors' required return rates when the market value of common stock differs significantly from its book value?

A. Market prices form the basis of investment decisions and investors' expected rates of return. Nonetheless, in most jurisdictions, including Arizona[4], a regulated utility is limited to earning a return on its net book value (depreciated original cost) rate base. When the market value of assets diverges significantly from their book value, a market-based DCF cost rate applied to the book value of common equity, *i.e.,* rate base, will not produce investors' expected returns.[5] In this regard, I agree with Dr. Morin's explanation in New Regulatory Finance, (2006):[6]

> The third reason and perhaps most important for caution and skepticism is that application of the DCF model produces estimates of common equity cost that are consistent with investors' expected return only when stock price and book value are reasonably similar, that is when the M/B is close to unity. As shown below, application of the standard DCF model to utility stocks understates the

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[4] Although Arizona is a fair-value rate base state, in this proceeding EWAZ is maintaining that its book value rate base is equal to its fair value rate base. Therefore, the authorized return on common equity will be applied to EWAZ's book value rate base.

[5] Market values can diverge from book values for a myriad of reasons including, but not limited to, EPS and DPS expectations, merger / acquisition expectations, interest rates, etc.

[6] Roger A. Morin, New Regulatory Finance (Public Utility Reports, Inc., 2006) 434.

> investor's expected return when the market-to-book (M/B) ratio of a given stock exceeds unity. This was particularly relevant in the capital market environment of the 1990s and 2000s where utility stocks were trading at M/B ratios well above unity and have been for nearly two decades. The converse is also true, that is, the DCF model overstates that investor's return when the stock's M/B ratio is less than unity. The reason for the distortion is that the DCF market return is applied to a book value rate base by the regulator, that is, a utility's earnings are limited to earnings on a book value rate base.

Despite the turmoil in capital markets over the last several years, utility stocks continue to trade at market-to-book ratios well above unity. Indeed, as shown on page 2 of Schedule 5 of Exhibit PMA-DT-2, *i.e.,* the average market-to-book ratios of water utilities ranged from 139% to 166% from 2008- 2013.

Mathematically, the DCF model understates investors' required return rate when market value exceeds book value and overstates them when market value is less than book value because, in many instances, market prices reflect investors' assessments of long-range market price growth potentials (consistent with the infinite investment horizon implicit in the standard regulatory version of the DCF model) not fully reflected in analysts' shorter range forecasts of future growth for earnings per share (EPS) and dividends per share (DPS) and other accounting proxies. This indicates the need to better match market prices with investors' longer range growth expectations which are embedded in those prices. The understatement/overstatement of investors' required return rate associated with the application of the market price-based DCF model to the book value of common equity clearly illustrates why reliance upon a single common equity cost rate model should be avoided.

Thus, a mismatch results in the application of the DCF model as market prices reflect long range expectations of growth in market prices (consistent with the presumed infinite investment horizon of the standard DCF model), while the short range forecasts of growth in accounting proxies, *i.e.,* EPS and DPS, do not reflect the full measure of growth (market price appreciation) expected in per share market value.

Therefore, in an attempt to emulate investor behavior, neither the DCF nor any single common equity cost rate model should be relied upon exclusively in determining a cost rate of common equity and the results of multiple costs of common equity models should be evaluated. Moreover, as previously discussed, the use of multiple cost of common equity models adds reliability to the estimation of the investor-required cost of common equity by moderating potentially abnormal results from any single model.

Q. Can the understatement of the high end of the range of Mr. Cassidy's restatement of your DCF results of 8.95% be demonstrated mathematically when applied to a depreciated original cost rate base or book value?

A. Yes. The high end of Mr. Cassidy's restatement of my single-stage DCF result of 8.95% equity cost rate is based upon an average dividend yield for his sample water utilities of 3.20%[7] plus a growth rate of 5.75% as shown on Exhibit JAC-B. However, as demonstrated on Schedule 1, EWAZ would have no opportunity to earn the 8.95% market-based rate of return. In this example, the average market price per share is $26.99 and the average book value per share is $13.57.

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[7] Does not equal the 3.19% dividend yield shown on Exhibit JAC-B, likely due to rounding.

Under these circumstances, the 8.95%, market-based cost rate implies an annual return of $2.416 consisting of $0.864 in dividends and $1.552 in growth (market-price appreciation). However, application of the 8.95% return rate to book value ($13.57), produces an opportunity to earn a total annual return of just $1.215. With annual dividends of $0.864, the utility could reasonably expect market-price appreciation of $0.351, or only 1.26%. In other words, there is no possible way to achieve the expected growth of $1.552 (5.75%) related to an average market price of $26.99 absent a huge cut in annual cash dividends. If the converse situation exists (market prices substantially below their book values), a market-based DCF cost rate applied to the book value of common equity would overstate the cost rate.

Q. Do you agree with Mr. Cassidy's recommended common equity cost rate of 9.2%?

A. No. Mr. Cassidy's common equity cost rate of 9.2% relies upon the results of his DCF analyses. Mr. Cassidy did not use the CAPM in this proceeding. Mr. Cassidy discusses his reasons for not using a CAPM analysis on page 4, line 25 through page 6, line 5, concluding that because the "low interest rate environment engineered by the Fed has compelled investors to seek out higher yields on investment wherever they may be found, resulting in the equity markets having recently achieved new all-time highs[5] (footnote omitted) and "forecasted dividend yields continuing to remain at low levels.[6" (footnote omitted) . . . have led to unusually low cost of equity estimates being obtained from the CAPM model" which in Staff's judgment "should not be given their traditional weighting for purposes of setting rates until such time that market conditions change.[7] (footnote

omitted)" However, because forecasted dividend yields have fallen to new lows due to high market valuations, the same can be said for the DCF, namely that it should not be relied upon exclusively in today's capital market and economic environment. However, using informed expert judgment relative to the CAPM's components, it is possible to use a properly applied CAPM analysis which reflects more normal economic and capital market conditions as I have done in both my direct testimony and updated common equity cost rate analysis discussed at the end of this testimony.

In addition, as stated in my direct testimony at page 5, lines 23 – 26, just as "the use of the of the market data for the proxy group adds reliability to the informed expert judgment used in arriving at a recommended common equity cost rate, the use of multiple common equity cost rate models also adds reliability when arriving at a recommended common equity cost rate." This is another way of saying that sampling error from the application of a single cost of common equity model, *e.g.*, the DCF, can be reduced through the use of multiple models. Mr. Cassidy agrees at lines 19 and 20 on page 23 of his direct testimony that the use of a proxy or sample group reduces "the sample error resulting from random fluctuations in the market at the time the information is gathered", yet he did not apply this concept when relying exclusively upon the DCF model, albeit, two versions of the DCF.

Moreover, by placing exclusive weight on the results of the application of the DCF, Mr. Cassidy's methodology is inconsistent with the Efficient Market Hypothesis ("EMH") upon which the DCF is predicated. Giving exclusive weight

to a DCF derived cost rate also exacerbates the DCF's tendency to understate the investors' true required return in the current market environment where market-to-book ratios significantly exceed one. In addition, such a cost rate does not adequately reflect the additional risk experienced by EWAZ due its implied lower credit / bond rating and to its smaller size relative to the companies in Staff's proxy group.

Q. Why is placing exclusive weight on the DCF inconsistent with the EMH?

A. The DCF model utilized by Mr. Cassidy is market-based and therefore based upon the EMH since market prices are employed in its application. Both the CAPM and Risk Premium Model ("RPM") are also based upon the EMH, pioneered by Eugene F. Fama[8] in 1970 and the foundation of modern investment theory. According to the EMH, an efficient market is one in which security prices reflect all relevant information all the time. This implies that prices adjust instantaneously to new information, thus reflecting the intrinsic fundamental economic value of a security.[9]

The "semistrong" form of the EMH is generally held to be true because the use of insider information often enables investors to "outperform the market" and earn excessive returns in the short-run. The generally-accepted "semistrong" form of the EMH means that all perceived risks, based upon publicly available

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8 Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work" (Journal of Finance, May 1970) 383-417.

9 Brigham, Eugene F., Financial Management – Theory and Practice, 5th Ed. (The Dryden Press, 1985) 225.

information, are taken into account by investors in the prices they pay for securities. In addition, investors are aware of such information, including bond ratings, discussions about companies by bond rating agencies and investment analysts, as well as the various cost of common equity methodologies (models) discussed in the financial literature and utilized in ratemaking. This means that no single common equity cost rate model should be relied upon exclusively in determining a common equity cost rate and that the results of multiple cost of common equity cost rate models should be taken into account.

In addition, the academic literature indicates the need to rely upon multiple, independent cost of common equity models in arriving at a recommended common equity cost rate.

Q. Please describe this academic literature.

A. Representative academic literature states the following. For example, Morin[10] states:

> Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. *The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company.* Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use. (Italics added)
>
> No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible

[10] Roger A. Morin, New Regulatory Finance (Public Utility Reports, Inc., 2006) 428-431.

measurement difficulties and vagaries in individual companies' market data.

* * *

The financial literature supports the use of multiple methods. Professor Eugene Brigham, a widely respected scholar and finance academician, asserts:[1](footnote omitted)

> Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) method, and (3) the bond-yield-plus-risk-premium approach. These methods are not mutually exclusive – no method dominates the others, and all are subject to error when used in practice. Therefore, when faced with the task of estimating a company's cost of equity, we generally use all three methods and then choose among them on the basis of our confidence in the data used for each in the specific case at hand.

Another prominent finance scholar, Professor Stewart Myers, in an early pioneering article on regulatory finance, stated:[2](footnote omitted)

> Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, only a fool throws away useful information. That means you should not use any one model or measure mechanically and exclusively. Beta is helpful as one tool in a kit, to be used in parallel with DCF models or other techniques for interpreting capital market data.

Reliance on multiple tests recognizes that no single methodology produces a precise definitive estimate of the cost of equity. As stated in Bonbright, Danielsen, and Kamerschen (1988), '*no single or group test or technique is conclusive.*' Only a fool discards relevant evidence. (Italics in original) (Morin, p. 430)

* * *

While it is certainly appropriate to use the DCF methodology to estimate the cost of equity, there is no proof that the DCF produces a more accurate estimate of the cost of equity than other methodologies. Sole reliance on the DCF model ignores the capital market evidence and financial theory formalized in the CAPM and other risk premium methods. The DCF model is one of many tools to be employed in conjunction with other methods to estimate the cost of equity. *It is not a superior methodology that supplants other financial theory and market evidence. The broad usage of the DCF*

> *methodology in regulatory proceedings in contrast to its virtual disappearance in academic textbooks does not make it superior to other methods. The same is true of the Risk Premium and CAPM methodologies.* (Italics added)

Brigham and Gapenski[11] state:

> In *practical* work, *it is often best to use all three methods* – CAPM, bond yield plus risk premium, and DCF – and then apply judgment when the methods produce different results. People experienced in estimating equity capital costs recognize that both careful analysis and some very fine judgments are required. It would be nice to pretend that these judgments are unnecessary and to specify an easy, precise way of determining the exact cost of equity capital. Unfortunately, this is not possible. Finance is in large part a matter of judgment, and we simply must face this fact. (Italics in original)

Finally, Brigham and Daves[12] reiterate Brigham and Gapenski's comments when they state:

> Recent surveys found that the CAPM approach is by far the most widely used method. Although most firms use more than one method, almost 74 percent of respondents in one survey, and 85 percent in the other, used the CAPM.[12] (footnote omitted)
>
> * * *
>
> Approximately 16 percent now use the DCF approach, down from 31 percent in 1982. The bond-yield-plus-risk-premium is used primarily by companies that are not publicly traded.
>
> People experienced in estimating the cost of equity recognize that both careful analysis and sound judgment are required. It would be nice to pretend that judgment is unnecessary and to specify an easy, precise way of determining the exact cost of equity capital. Unfortunately, this is not possible – finance is in large part a matter of judgment, and we simply must face this fact.

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[11] Brigham, Eugene F. and Gapenski, Louis C., Financial Management – Theory and Practice 4th Edition, (The Dryden Press, 1985) 256.

[12] Brigham, Eugene F. and Daves, Phillip R., Intermediate Financial Management, (Thomson-Southwestern, 2007) 332-333.

In view of all of the foregoing, it is clear that investors are or should be aware of all of the models available for use in determining a common equity cost rate. Thus, implicit in the EMH is the assumption that, collectively, investors consider them all. Hence, Mr. Cassidy's exclusive reliance upon the DCF model is at odds with the very foundation, *i.e.*, the EMH, upon which the DCF is predicated. In addition, absent empirical evidence to the contrary, there is no evidence, under the EMH, that investors place exclusive weight upon the DCF to the exclusion of other models such as the CAPM and RPM.

Q. Can the understatement of Mr. Cassidy's single-stage DCF results of 8.6% be demonstrated mathematically when applied to a depreciated original cost rate base or book value?

A. Yes. Mr. Cassidy's single-stage DCF result of 8.6% equity cost rate is based upon an average dividend yield for his sample water utilities of 2.8% plus a growth rate of 5.8%. However, as demonstrated on Schedule 2, EWAZ would have no opportunity to earn Mr. Cassidy's market-based rate of return. Mr. Cassidy's 8.6%, market-based cost rate implies an annual return of $2.399 consisting of $0.781 in dividends and $1.618 in growth. However, application of the 8.6% return rate to book value ($18.96), produces an opportunity to earn a total annual return of just $1.631. With annual dividends of $0.781, the utility could reasonably expect market-price appreciation of $0.850, or only 3.05%, 203 basis points below Mr. Cassidy's 5.8% growth rate.

The DCF mis-specifies, specifically understating investors' required return. Therefore, consideration must be given to multiple cost of common equity

models. As discussed previously, coupled with the added reliability and accuracy that the use of multiple cost of common equity models provides in the estimation of the cost of common equity, it is more imperative than ever to not give exclusive, primary or even simply greater reliance to the DCF analysis at this time

Q. Do you have any comments upon Mr. Cassidy's applications of the single-stage and multi-stage DCF?

A. Yes. My comments relate specifically to Mr. Cassidy's development of the growth rate for his single-stage DCF and the first stage of his multi-stage DCF.

Although I do not agree with the need to apply a multi-stage DCF for reasons given in my prepared direct testimony at page 20, lines 3 - 6, given my updated common equity cost rate analysis presented in Schedule 9, Mr. Cassidy's multi-stage DCF result of 9.2% is a reasonable DCF result at this time. It is slightly greater than my average DCF result shown on page 2 and within the range of the results of my cost of common equity models. Although reasonable relative to my DCF analysis, a DCF cost rate of 9.2% still mis-specifies the investor required return as discussed above. Consistent with the *Hope*[13] decision, it is not the methodology, but rather the end result which must not be unjust or unreasonable. As *Hope* states:

> Nor is it important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at. For we are of the view that the end result in this case cannot be condemned under the Act as unjust and unreasonable from the investor or company viewpoint.

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[13] Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

Therefore, although I do not agree with the application of a multi-stage DCF model, at this time, Mr. Cassidy's multi-stage DCF results cannot be said to be unreasonable based upon *Hope* and the range of the results of my updated common equity cost rate analysis.

Q. Please comment on Mr. Cassidy's development of his single-stage DCF growth rate.

A. On Schedule JAC-5, Mr. Cassidy presents 10-year historical growth rates in dividends per share ("DPS") and earnings per share ("EPS") as well as projected growth in DPS and EPS, all sourced as coming from *Value Line*[14], while Schedule JAC-6 presents Mr. Cassidy's derivation of his sustainable growth. Ultimately, Mr. Cassidy relied upon an average of historical and projected DPS growth, historical and projected EPS growth, and historical and projected sustainable growth. More correctly, Mr. Cassidy should have relied exclusively upon projected EPS growth.

Q. Please comment on Mr. Cassidy's use of DPS and sustainable growth.

A. DCF theory indicates that an investor buys a stock for an expected total return rate composed of cash flows received in the form of dividends plus appreciation in market price, or as Morin[15] states: "dividends, rather than earnings, constitute the source of value." Even Mr. Cassidy notes that "[i]n the long term, dividend

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[14] Although sourced as coming from *Value Line,* Mr. Cassidy did not use the historical and projected growth rates published for each water company in its *Value Line* Ratings & Report, but rather calculated the growth rates himself.

[15] Morin 252.

distributions are dependent on earnings" on line 25, page 26 of his direct testimony.

Over the long run, there can be no growth in DPS without growth in EPS. Security analysts' earnings expectations have a more significant, but not sole, influence on market prices than dividend expectations. Thus, the use of earnings growth rates in a DCF analysis provides a better matching between investors' market appreciation expectations and the growth rate component of the DCF. Earnings expectations have a significant influence on market prices and their appreciation or the "growth" experienced by investors.[16]

Morin corroborates this concept when he states[17]:

> This does not mean that earnings are unimportant for they provide the basis for paying dividends.

In fact, Morin states the following as well[18]:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of g. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations. As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for only one year, let alone for longer time periods. This objection is unfounded, however, because it is present investor expectations that are being priced; it is the consensus

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16 Morin 298-303
17 Morin 252
18 Morin 298

> forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.
>
> * * *
>
> Published studies in the academic literature demonstrate that growth forecasts made by security analysts represent an appropriate source of DCF growth rates, are reasonable indicators of investor expectations and are more accurate than forecasts based on historical growth. These studies show that investors rely on analysts' forecasts to a greater extent than on historic data only.

Myron Gordon, who first introduced the DCF model adapted for utility ratemaking, came to recognize long after his book, The Cost of Capital to a Public Utility, was published in 1974 that the growth component of his original "Gordon Model" which relied upon the sustainable growth method had a serious limitation. Dr. Gordon, in a presentation on March 27, 1990 (some 16 years after the publication of his 1974 book), before the Institute for Quantitative Research In Finance, in Palm Beach, Florida, entitled The Pricing of Common Stocks, stated that analysts' growth rate projections were superior to the sustainable or earnings retention growth method:

> The most serious limitation of the Gordon Model is the assumption that the dividend expectation can be represented with just two parameters, D and br ... We have seen that earnings and growth estimates by security analysts were found by Malkiel and Cragg to be superior to data obtained from financial statements for the explanation of variation in price among common stocks. That is, better estimates are obtained for the coefficient of the various explanatory variables. ...*estimates by security analysts available from sources such as IBES are far superior to the data available to Malkiel and Cragg. Secondly, the estimates by security analysts must be superior to the estimates derived solely from financial statements.* (italics added)

In addition, studies performed by Cragg and Malkiel[19] demonstrate that analysts' forecasts are superior to historical growth rate extrapolations.

Finally, notwithstanding Mr. Cassidy's citation on page 45, lines 9 – 15 of his direct testimony from Jeremy Siegel's book "Stocks For the Long Run", Dr. Siegel actually supports the use of earnings growth forecasts when valuing stocks when he states[20]:

> For the equity holder, the source of future cash flows is the earnings of firms.
>
> * * *
>
> Some people argue that shareholders most value stocks' cash dividends. But this is not necessarily true.
>
> * * *
>
> Since the price of a stock depends primarily on the present discounted value of all expected future dividends, it appears that dividend policy is crucial to determining the value of the stock. However this is not generally true.
>
> * * *
>
> Since stock prices are the present value of future dividends, it would seem natural to assume that economic growth would be an important factor influencing future dividends and hence stock prices. However, this is not necessarily so. The determinants of stock prices are earnings and dividends on a *per-share* basis. Although economic growth may influence *aggregate* earnings and dividends favorably, economic growth does not necessarily increase the growth of per-share earnings of dividends. It is earnings per share (EPS) that is important to Wall Street because per-share data, not aggregate earnings or dividends, are the basis of investor returns. (Italics in original)

Mr. Cassidy's citation from Dr. Siegel on page 45 of his direct testimony is relative to the use of dividends as the cash flows which are discounted to present

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[19] John G. Cragg and Burton G. Malkiel, Expectations and the Structure of Share Prices (University of Chicago Press, 1982) Chapter 4.

[20] Jeremy J. Siegel. Stocks for the Long Run, (McGraw-Hill 2002) 90 – 94.

value at the discount rate to determine stock prices and not the use of earnings. The paragraph cited by Mr. Cassidy is silent about what growth rate should be used in determining that discount rate (cost of common equity). Thus, Mr. Cassidy's use of Dr. Siegel's citation as support for the use of DPS growth in a DCF analysis is not appropriate.

Moreover, there is no empirical evidence that investors would discount or disregard analysts' estimates of growth in earnings per share. "Do Analyst Conflicts Matter? Evidence From Stock Recommendations,"[21] provided in Schedule 3, examined whether conflicts of interest with investment banking [IB] and brokerage businesses induced sell-side analysts to issue optimistic stock recommendations and whether investors were misled by such biases. They conclude:

> Overall, our findings do not support the view that conflicted analysts are able to systematically mislead investors with optimistic stock recommendations.

Hence, since investors have such security analysts' EPS growth rate projections available to them, investors are aware of the accuracy of such projections and investors are aware of the literature supporting the superiority of such projections, security analysts' earnings projections including those from *Value Line* should be used in a cost of common equity analysis.

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[21] Anup Agrawal and Mark A. Chen, "Do Analysts' Conflicts Matter? Evidence from Stock Recommendations", (Journal of Law and Economics, August 2008), Vol. 51.

In view of all of the foregoing, Mr. Cassidy should have relied upon earnings per share growth projections in his DCF analyses.

Q. Do you agree with Mr. Cassidy's inclusion of sustainable growth in determining the growth rate component of his DCF analysis?

A. No. Mr. Cassidy's partial reliance upon the sustainable growth methodology for determining the growth rate component for his DCF analyses is based upon historical and expected retention of earnings as well as the historical and projected increase in common share balances as discussed on page 28, line 1 through page 33, line 23 of his direct testimony and derived in Schedule JAC-6.

The sustainable growth methodology is inherently circular because it relies upon either a historical or an expected return on book common equity which is then used in a DCF analysis to establish a common equity cost rate related to the market value of common stock which, if authorized as the allowed return in a regulatory proceeding, will become the expected return on book common equity. The DCF derived return on book common equity prior to the addition of his Mr. Cassidy's economic assessment adjustment, 8.9%, if authorized, is significantly lower than the average expected *Value Line* ROE of 10.93% for his sample water utilities (as derived from his electronic workpapers), used to derive that very same DCF cost rate of 8.9% based upon the sample water utilities' market data. I again agree with Morin[22] who states the following:

> There are three problems in the practical application of the sustainable growth method. The first is that it may be even more difficult to estimate what b, r, s and v investors have in mind than it

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[22] Morin 306 - 307

> is to estimate what g is they envisage. It would appear far more economical and expeditious to use available growth forecasts and obtain g directly instead of relying on four individual forecasts of the determinants of such growth. *It seems only logical that the measurement and forecasting errors inherent in using four different variables to predict growth far exceed the forecasting error inherent in the direct forecast of growth itself.*
>
> *Second,* there *is a potential element of circularity in estimating g by a forecast of b and ROE for the utility being regulated, since ROE is determined in large part by regulation. To estimate what ROE resides in the minds of investors is equivalent to estimating the market's assessment of the outcome of regulatory hearings.* Expected ROE is exactly what regulatory commissions set in determining an allowed rate of return. In other words, the method requires an estimate of return on equity before it can even be implemented. *Common sense would dictate the inconsistency of a return on equity recommendation that is different than the expected ROE that the method assumes the utility will earn forever.* For example, using an expected return on equity of 11% to determine the growth rate and using the growth rate to recommend a return on equity of 9% is inconsistent. *It is not reasonable to assume that this regulatory utility company is expected to earn 11% forever, but recommend a 9% return on equity. The only way this utility can earn 11% is that rates be set by the regulator so that the utility will, in fact, earn 11%....*
>
> Third, the *empirical* finance literature discussed earlier demonstrates that the sustainable growth method of determining growth is not as significantly correlated to measures of value, such as stock price and price/earnings ratios, as other historical measures or analysts' growth forecasts. *Other proxies for growth such as historical growth rates and analysts' growth forecasts outperform retention growth estimates.* (Italics added)

In view of the foregoing, it is clear that Mr. Cassidy's use of sustainable growth in his application of the DCF is circular and ignores the basic principle of rate base / rate of return regulation, namely, that the cost of equity which will be authorized in this proceeding will be applied to the jurisdictional <u>book value</u> rate base of EWAZ and become the allowed future earned return on book common

equity, *i.e.*, the expected return on equity component of the sustainable growth method.

Q. Do you have any further comments regarding Mr. Cassidy's derivation of growth for his DCF analysis?

A. Yes. A review of his electronic workpapers reveals that Mr. Cassidy calculated his DPS, EPS and sustainable growth rates, rather than using the comparable DPS and EPS growth rates published by *Value Line* in each water company's *Ratings & Report.* It is unnecessary for Mr. Cassidy to calculate such growth rates as they are readily available from *Value Line* which is investor influencing and publicly available online; by print subscription; and / or, free in public libraries throughout the U.S. *Value Line* calculates its growth rates from one 3-year base period to another 3-year base period in order to mitigate possible aberrations in the accounting data by relying upon single years as Mr. Cassidy has done in calculating his own growth rates. *Value Line*[23] states:

> In an attempt to eliminate short-term fluctuations that may distort results, Value Line uses a three-year base period and an ending period when calculating growth rates. Investors often try to calculate a growth rate from one starting year to one ending year, and then can't understand why the number they get is not the same as the one published by Value Line. If they used a three-year base period (2099-2011) and three-year ending period, (2015-2017), they would get the same results we do.

In view of all of the foregoing, Mr. Cassidy should more correctly have relied upon the projected 5-year EPS growth rates as published in *Value Line*'s *Ratings & Reports* for each of his sample water utilities.

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[23] *Complete Overview – The Value Line Investment Survey*, Value Line Inc., 2013 12.

Q. What would Mr. Cassidy's DCF (single-stage and multi-stage) results be had he correctly relied exclusively upon *Value Line*'s published 5-year projected growth in EPS for his sample water utilities.

A. As shown on page 1 of Schedule 3, in his single, or constant, growth DCF result would have been 9.9% and his multi-stage growth DCF result would 9.7%, for an average DCF result of 9.8%. When Mr. Cassidy's "economic assessment adjustment" of 60 basis points is added, a common equity cost rate of 10.4% results. However, this 10.4% common equity cost rate is still understated because it does not reflect any additional risk of the Company due to its greater credit risk and smaller relative size as will be discussed below.

<u>CREDIT RISK</u>

Q. Does your correction to Mr. Cassidy's common equity cost rate analysis adequately reflect the greater credit risk of the Company relative to the water utilities?

A. No. Although Standard & Poor's (S&P) upgraded EPCOR Utilities' bond and credit rating to A- on September 14, 2014, an S&P bond / credit rating of A- (analogous to a Moody's rating of A3) is still lower than the average S&P / Moody's bond ratings of the proxy group of nine water companies; A1/A2 / A+ as shown on page 6 of Schedule 9. Based upon my discussion in my direct testimony on page 16, lines 7 - 12, if EWAZ's bonds were rated, it is my opinion that they would now be rated A- by S&P and A3 by Moody's. Therefore, an indication of the magnitude of such an adjustment is one-sixth (0.01%) of a recent spread of 0.06% between Moody's A and Aa rated bonds plus one-third

(0.24%) of a recent spread of 0.68% between Moody's A and Baa rated bonds shown on page 8 of Schedule 8 (0.24% = (0.06% * (1/6)) + (0.68% * (1/3)).

BUSINESS RISK ADJUSTMENT

Q. Does your correction to Mr. Cassidy's common equity cost rate analysis adequately reflect the risk implications of the Company's small size relative to the water utilities?

A. No. As discussed in my direct testimony at page 13, line 7 through page 14, line 9 and in detail below, company size is a significant element of business risk for which investors expect to be compensated through greater returns. Smaller companies are simply less able to cope with significant events which affect sales, revenues and earnings. For example, smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small company than on a much larger company with a larger, more diverse, customer base. Also, smaller companies are generally less diverse in their operations and have less financial flexibility. In addition, extreme weather conditions, i.e., prolonged droughts or extremely wet weather, will have a greater affect upon a small operating water utility than upon the much larger, more geographically diverse holding companies.

Further evidence of the risk effects of size include the fact that investors demand greater returns to compensate for the lack of marketability and liquidity of the securities of smaller firms. It is a generally-accepted financial principle that the risk of any investment is directly related to the assets in which the capital is

invested. The Commission should focus on the risk and return on the common equity investment in the Company's jurisdictional rate base because it is the Company's rates which will be set in this proceeding. The fair rate of return must relate to where capital is invested. In other words, that it is the use of funds invested and not the source of those funds which gives rise to the risk of any investment. Therefore, the relevant risk reflected in the cost of capital must be that of the Company, including the impact of its small size on common equity cost rate. As noted above, the Company is significantly smaller than the average water group company based upon total capitalization.

Consistent with the financial principle of risk and return discussed above, such increased risk due to small size must be taken into account in the allowed rate of return on common equity.

Q. Does the financial literature support the basic financial principle that it is the use of the funds invested which gives rise to the risk of the investment, not the source of the funds?

A. Yes. As Richard A. Brealey and Stewart C. Myers state in Principles of Corporate Finance[24]:

> *But the company cost of capital rule can also get a firm into trouble if the new* projects *are more or less risky than its existing business. Each project should be evaluated at its own opportunity cost of capital.* This is a clear implication of the value-additivity principle introduced in Chapter 7. For a firm composed of assets A and B, the firm value is

[24] Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance (McGraw-Hill Book Company, 1996) 204-205.

> Firm Value = PV (AB) = PV (A) + PV(B) = sum of separate asset values
>
> Here PV(A) and PV(B) are valued just as if they were mini-firms in which stockholders could invest directly ...If the firm considers investing in a third project C, it should also value C as if C were a mini-firm. *That* is, the firm should discount the cash flows of C at the expected rate of return that investors would demand to make a separate investment in C. *The true cost of capital depends on the use to which the capital is put.* (Italics added to first paragraph, italics in original text in last paragraph)

In addition, Haim Levy and Marshall Sarnat[25] state:

> The cost of capital and the discount rate are two concepts which are used throughout the book interchangeably. However, there is a distinction between the *firm's* cost of capital and specific *project's* cost of capital. (Italics contained in original text.)
>
> In any case where the risk profile of the individual projects differ from that of the firm, an adjustment should be made in the required discount rate, to reflect this deviation in the risk profile.

It is fundamental that individual investors expect a return commensurate with the risk associated with where their capital is invested. Hence, the Company must be viewed on its own merits. As *Bluefield* so clearly states:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; . . .

Bluefield is clear, then, that it is the "risks and uncertainties" surrounding the property employed for the "convenience of the public" which determines the appropriate level of rates and not the source of the capital financing that property. In this proceeding, the property employed "for the convenience of the public" is

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[25] Haim Levy and Marshall Sarnat, Capital Investments and Decisions, 5th Ed. (Prentice/Hall International, 1986) 464-465.

the rate base of the Company. Therefore, it is the total investment risk of the Company and its rate base alone that is relevant.

Q. Please compare the size of the Company with that of the companies with Mr. Cassidy's water utilities.

A. As a part of my updated common equity cost rate analysis, Mr. Cassidy's sample water utilities are shown on Schedule 4. Page 1 contains a summary of an indicated small size risk adjustment based upon the Ibbotson® SBBI® Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926-2013 (SBBI – 2014) size premium study, while page 2 contains a summary of the market capitalizations based upon each water company's market prices at December 31, 2014. As shown, the Company is significantly smaller than the average water utility based upon market capitalization as shown below:

Table 1

	Market Capitalization (1) ($ millions)	Times Greater than Town of Hampton ($ Millions)
ACC Witness Mr. Cassidy's Sample Water Utilities	$1,295.733	5.3x
EPCOR Arizona Water, Inc.	391.981	

(1) From page 1 of Schedule 4.

The Company has no common stock which is publicly traded. Consequently, I have assumed that if it did, its common shares would be selling at the same market-to-book value as Mr. Cassidy's average sample water utility. Hence, the Company's market capitalization is estimated to be $391.981 million, based upon the sample water utilities as shown in Table 1 above. In contrast, the

market capitalization of the average sample water utility was $1.296 billion, or 5.3 times larger than the Company's estimated market capitalization.

Because of the Company's extremely small estimated market capitalization, relative to the estimated average market capitalization of the sample water utilities, a 2.64% small size risk premium, or the difference between the average size premium applicable to the 9th and 10th deciles between which the Company falls and the 7th decile in which the average sample water utility falls, is justified. In my opinion, although an adjustment of 2.64% is indicated by the SBBI – 2014 size premium study, an adjustment to common equity cost rate of 30 basis points, represents an extremely conservative and reasonable size premium applicable to the Company based upon its smaller relative size.

In view of the foregoing, an upward adjustments of 24 basis points for credit risk and 30 basis points to reflect the Company's greater relative business risk due to its smaller size is necessary. When added to the corrected Mr. Cassidy's cost rate of 9.8%, a risk-adjusted common equity cost rate of 10.34% results, slightly higher than my updated recommended common equity cost rate of 10.25% discussed below. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment to the risk-adjusted corrected common equity cost rate of 10.34% results in a 10.94% common equity cost rate, for a range of 10.34% - 10.94% with a midpoint of 10.64%.

REVIEW OF ANALYSIS OF RUCO WITNESS ROBERT B. MEASE

DISCOUNTED CASH FLOW MODEL

Q. Please comment upon the applicability of the DCF model in establishing a cost of common equity for the Company.

A. As discussed previously, the extent to which the DCF is relied upon should depend upon the extent to which the cost rate results differ from those resulting from the use of other cost of common equity models. As discussed previously, the DCF model has a tendency to mis-specify investors' required return rate when the market value of common stock differs significantly from its book value. The market-based DCF model will result in a total annual dollar return on book common equity equal to the total annual dollar return expected by investors only when market and book values are equal, but market values and book values of common stocks are rarely at unity.

Q. Can the understatement of Mr. Mease's DCF results of 8.74%, when applied to a depreciated original cost rate base, be demonstrated mathematically?

A. Yes. Mr. Mease's single-stage DCF result of 8.74% equity cost rate is based upon an implicit average dividend yield for his water utilities of 3.11% plus an growth rate of 5.63%. However, as demonstrated on Schedule 2, EWAZ would have no opportunity to earn Mr. Mease's market-based rate of return. Mr. Mease's 8.74%, market-based cost rate implies an annual return of $2.433 consisting of $0.866 in dividends and $1.567 in growth. However, application of the 8.74% return rate to book value ($14.39), i.e., the equivalent of a utility's depreciated original cost rate base, produces an opportunity to earn a total

annual return of just $1.258. With annual dividends of $0.866, the utility could reasonably expect market-price appreciation of $0.392, or only 1.41%, 422 basis points below Mr. Mease's 5.63% growth rate.

Once again, the DCF mis-specifies, specifically understates, the investor required return. Thus, it is more imperative than ever to not give exclusive, primary or even simply greater reliance to the DCF analysis at this time.

CAPITAL ASSET PRICING MODEL

Q. Please comment upon Mr. Mease's CAPM analysis.

A. Mr. Mease's CAPM analysis is flawed in three respects. First, Mr. Mease has incorrectly relied upon an historical risk-free rate despite the fact that both ratemaking and the cost of capital are prospective. Second, Mr. Mease has incorrectly calculated the market equity risk premium by relying upon: the historical total return on U.S. Treasury securities; and, by not employing a prospective, or forward-looking equity risk premium. Third, Mr. Mease has not incorporated an empirical CAPM (ECAPM) analysis despite the fact that empirical evidence indicates that the low-beta securities earn returns higher than the CAPM predicts and high-beta securities earn less.

Q. Please comment upon Mr. Mease's use of historical, i.e., a recent three-month average, yields on 20-year U.S. Treasury Bonds.

A. Mr. Mease's use of historical yields on 20-year U.S. Treasury bonds ignores the fact that both the cost of capital and ratemaking are prospective, which Mr. Mease acknowledges himself when he states on page 5, lines 14 -15 that "[t]he cost of capital is determined in part by the current and future economic and

financial conditions." (emphasis added) The cost of capital, including the cost rate of common equity, is expectational in that it reflects investors' expectations of future capital markets, including an expectation of interest rate levels, as well as risks. In addition, ratemaking is prospective in that the rates set in this proceeding will be in effect for a period of time in the future. In addition, Mr. Mease explicitly states that one of the strengths of the CAPM is that "it is a forward looking concept" on line 23 on page 13 of his direct testimony. Therefore Mr. Mease's failure to use forecasted interest rates in his CAPM is clearly inconsistent with one of the strengths of the CAPM identified by Mr. Mease himself.

Similar to forecasts of EPS growth rates; investors are also aware of the accuracy of past forecasts, whether for earnings or dividends growth or for interest rates. However, investors do not have prior knowledge of the accuracy of the forecasts available to them at the time they make their investment decisions. The accuracy of any forecast only becomes known after some future period of time has elapsed. For example, the accuracy of the current *Blue Chip Financial Forecasts* (*Blue* Chip) January 1, 2015 consensus forecast of the 30-Year U.S. Treasury Bond of 4.00% for the second quarter 2016 (as shown from page 15 of Schedule 9), cannot be known until the end of the second quarter 2016, more than one year into the future. Therefore, consistent with the previously discussed EMH, since investors have such interest rate projections available to them and are aware of the past accuracy of such projections, prospective and not current interest rate projections should be used in cost of

common equity analyses. Therefore, an appropriate risk-free rate is the average of the consensus forecasts of approximately 50 economists from Blue Chip Financial Forecasts for the six quarters ending with the second quarter 2016 from the January 1, 2015 issue and the long-range forecasts from the December 1, 2014 issue for 2016-2020 and 2021-2025, or 3.94%, derived in Note 2 on page 15 of Schedule 9.

Q. Please comment upon Mr. Mease's estimation of the market equity risk premium for his CAPM analysis.

A. Mr. Mease's derivation of the market equity risk premium for his CAPM analysis is flawed for the following reasons. First, Mr. Mease incorrectly relied upon the historical mean total return on U.S. Treasury securities. Second, Mr. Mease did not employ a prospective equity risk premium.

Q. Please comment upon Mr. Mease's use of the historical mean total return on U.S. Treasury securities.

A. Although relying upon Morningstar's (i.e., Ibbotson & Associates) historical returns in his CAPM analysis, Mr. Mease has ignored Ibbotson Associates' recommendations regarding the use of the income return and not the total return on U.S. Treasury securities in deriving an equity risk premium. As indicated on page 153 of the SBBI – 2014:

> Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation.
>
> The total return is comprised of three return components: the income return, the capital appreciation return, and the reinvestment return. The income return is defined as the portion

> of the total return that results from a periodic cash flow or, in this case, the bond coupon payment. The capital appreciation return results from the price change of a bond over a specific period. Bond prices generally change in reaction to unexpected fluctuations in yields. Reinvestment return is the return on a given month's investment income when reinvested into the same asset class in the subsequent months of the year. The income return is thus used in the estimation of the equity risk premium because it represents the truly riskless portion of the return.[2] (footnote omitted)

In addition, a comparison of the standard deviation (a standard measure of volatility, i.e., risk) between the total return on long-term U.S. government bonds of 9.8% and that of the income return on long-term U.S. government bonds of 2.6%[26] demonstrates the nearly riskless nature of the income return, corroborating the appropriateness of using the income return as the risk-free rate.

Hence, it is appropriate to use the income return and not the total return on long-term U.S. government bonds when calculating a market equity risk premium. Therefore, the correct derivation of the historical market equity risk premium is the difference between the arithmetic mean monthly[27] total return on large company common stocks of 12.05% and the arithmetic mean 1926-2013 income return on long-term government bonds of 5.26% which results in a monthly market equity risk premium of 6.70% as derived in note 1 on page 15 of Schedule 9 which, when averaged with the 6.86% equity risk premium relied

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26 SBBI – 2014 91

27 Monthly arithmetic mean to be consistent with the Predictive Risk Premium Model™ ("PRPM™") use of monthly risk premiums as detailed in Ms. Ahern's direct testimony.

upon by Mr. Mease and derived on Schedule RBM-4, results in an average historical market equity risk premium of 6.83%.

Q. Please comment upon Mr. Mease's failure to use a prospective, or forward-looking market equity risk premium?

A. As noted above, in addition to page 5, lines 14 - 15 of his direct testimony, Mr. Mease clearly states on page 9, lines 18 – 19 that the DCF model "maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows" (emphasis added) and defines the growth component of the DCF as the "expected growth in dividends" (emphasis added) on page 16, lines 9 – 16 of his direct testimony. And, relative to the beta component of the CAPM, Mr. Mease states on page 13, lines 8 – 10 that beta "is a measures of the expected amount of change in a security's variability of return relative to the return variability of the overall capital market." (emphasis added) On page 14, lines 12 – 22 of his direct testimony, Mr. Mease notes that the "market risk premium component . . . represents the investor-expected premium." (emphasis added) Relative to his CE analysis, he states on page 16, lines 8 – 9 that the "CE method is designed to measure the returns expected to be earned on the original cost book value of similar risk enterprises." (emphasis added)

Therefore, it is both consistent with Mr. Mease's own testimony and appropriate to give weight to expected market returns. One way to do so is to use the forecasted market risk premium derived from *Value Line's* average median price appreciation potential and average median expected dividend yield 3-5 years hence of 6.30% as derived in note 1 on page 15 of Schedule 9,

coupled with a PRPM™-derived market risk premium of 10.41% also shown in Note 1 on page 15 of Schedule 9. When the Value Line-derived market equity risk premium of 6.30% and the PRPM™-derived market equity risk premium of 10.41%, averaged with the properly derived historical arithmetic mean monthly equity risk premium of 6.83%, a properly calculated arithmetic mean historical market equity risk premium and prospective market equity risk premiums results in a market equity risk premium of 7.85%.

Q. Did Mr. Mease incorporate an empirical or ECAPM analysis?

A. No. Mr. Mease failed to consider that, although numerous tests of the CAPM have confirmed its validity, it has been determined that the empirical Security Market Line (SML) described by the traditional CAPM is not as steeply sloped as the predicted SML.

As discussed in my direct testimony on page 36, lines 17 - 22, numerous tests of the CAPM have measured the extent to which security returns and betas are related as predicted by the CAPM confirming its validity. However, Morin observes that while the results of these tests support the notion that beta is related to security returns, the empirical Security Market Line (SML) described by the CAPM formula is not as steeply sloped as the predicted SML. Morin[28] states:

> With few exceptions, the empirical studies agree that ... low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.

* * *

[28] Morin 175.

> Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:
>
> $$K = R_F + x\,\beta(R_M - R_F) + (1-x)\ \beta(R_M - R_F)$$
>
> where x is a fraction to be determined empirically. The value of x that best explains the observed relationship Return = 0.0829 + 0.0520 β is between 0.25 and 0.30. If x = 0.25, the equation becomes:
>
> $$K = R_F + 0.25(R_M - R_F) + 0.75\,\beta(R_M - R_F)$$ [29]

In view of theory and practical research, both the traditional CAPM and the ECAPM should be used.

Q. Some critics of the ECAPM model claim that using adjusted betas in a traditional CAPM amounts to using an ECAPM. Is such a claim valid?

A. Using adjusted betas in a CAPM analysis is not equivalent to the ECAPM. Betas are adjusted because of the general regression tendency of betas to converge toward 1.0 <u>over time</u>, i.e., over successive calculations of beta. As noted above, numerous studies have determined that the Security Market Line (SML) described by the CAPM formula at <u>any given moment</u> in time is not as steeply sloped as the predicted SML. Morin[30] states:

> Some have argued that the use of the ECAPM is inconsistent with the use of adjusted betas, such as those supplied by Value Line and Bloomberg. This is because the reason for using the ECAPM is to allow for the tendency of betas to regress toward the mean value of 1.00 over time, and, since Value Line betas are already adjusted for such trend [sic], an ECAPM analysis results in double-counting. This argument is erroneous. Fundamentally, the ECAPM is not an adjustment, increase or decrease, in beta.

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[29] Morin 190.

[30] Morin 191.

> This is obvious from the fact that the expected return on high beta securities is actually lower than that produced by the CAPM estimate. The ECAPM is a formal recognition that the observed risk-return tradeoff is flatter than predicted by the CAPM based on myriad empirical evidence. The ECAPM and the use of adjusted betas comprised two separate features of asset pricing. Even if a company's beta is estimated accurately, the CAPM still understates the return for low-beta stocks. Even if the ECAPM is used, the return for low-beta securities is understated if the betas are understated. Referring back to Figure 6-1, the ECAPM is a return (vertical axis) adjustment and not a beta (horizontal axis) adjustment. Both adjustments are necessary.

Moreover, the slope of the Security Market Line (SML) should not be confused with beta. As Eugene F. Brigham, finance professor emeritus and the author of many financial textbooks states[31] :

> The slope of the SML reflects the degree of risk aversion in the economy – the greater the average investor's aversion to risk, then (1) the steeper is the slope of the line, (2) the greater is the risk premium for any risky asset, and (3) the higher is the required rate of return on risky assets.[12]
>
> [12]Students sometimes confuse beta with the slope of the SML. This is a mistake. As we saw earlier in connection with Figure 6-8, and as is developed further in Appendix 6A, beta does represent the slope of a line, but *not* the Security Market Line. This confusion arises partly because the SML equation is generally written, in this book and throughout the finance literature, as $k_i = R_F + b_i(k_M - R_F)$, and in this form b_i looks like the slope coefficient and $(k_M - R_F)$ the variable. It would perhaps be less confusing if the second term were written $(k_M - R_F)b_i$, but this is not generally done.

Hence, the traditional CAPM understates the cost rate for common equity for companies with betas less than 1.0 and overstates the cost rate for

[31] Brigham and Gapenski (1985) 203.

companies with betas greater than 1.0. Consequently, Mr. Mease erred by not employing the Empirical CAPM (ECAPM).

Q. What would Mr. Mease's CAPM results be had he utilized the prospective yield on long-term U.S. Treasury bonds; correctly estimated the market equity risk premium based upon correctly derived arithmetic mean historical returns using the correct income return on long-term government bonds; and, a prospective market equity risk premiums as well as the ECAPM?

A. Schedule 5 presents the results of the correct application of both the traditional CAPM and the ECAPM for Mr. Mease's water utilities. Page 1 shows the mean / median traditional CAPM results are both 9.44%, while page 2 shows the mean / median ECAPM results are both 10.02%. The mean / median traditional CAPM and ECAPM results both average 9.73% for the proxy water companies. Thus, the corrected CAPM-derived indicated result is 9.73% for the water group. However, this cost rate is still understated because it does not reflect any additional risk of the Company due to its greater business risk relative to its smaller size compared with that of the proxy water companies as will be discussed below.

Mr. Mease's original conclusion of 7.48% is understated by 2.25%.

<u>COMPARABLE EARNINGS ANALYSIS (CE)</u>

Q. Do you have any comments regarding Mr. Mease's application of the CE?

A. Yes. Mr. Mease evaluated the historical and projected earned returns on book common equity for his proxy group of water companies. As discussed in detail

previously, Mr. Mease agrees that the cost of capital and ratemaking are prospective in nature. Therefore, the only returns on book common equity evaluated by Mr. Mease on Schedule RBM-5 are the projected 2017-2018 (really 2019) returns which average 10.9%.

While I do not necessarily agree with Mr. Mease's CE analysis and it may be flawed, as noted in *Hope,* it is not the methodology, but rather the end results which must not be unjust or unreasonable. Hence, at this time, the upper end of his range of CE results, 10.9%, cannot be said to be unreasonable based upon *Hope.*

CORRECTED CONCLUSION OF MR. MEASE'S COST OF COMMON EQUITY

Q. What would Mr. Mease's conclusion of common equity cost rate be based upon the corrections to his analyses discussed above?

A. Based upon the corrections to Mr. Mease's CAPM results discussed above, his three analyses produce the following:

	Water Group
DCF	8.74%
CAPM	9.73%
CE	10.9%

Based upon an average of these three cost of common equity results (consistent with Mr. Mease's direct testimony at page 3, lines 18 – 20 and Schedule RBM-2) a common equity cost rate of 9.79% is indicated. However,

this 9.79% still understates the Company's common equity cost rate because it does not reflect any adjustment for the Company's greater business risk due to its smaller size relative to the water utilities as will be discussed below.

ADJUSTMENT TO REFLECT COMPANY-SPECIFIC RISK

CREDIT RISK

Q. Does your correction to Mr. Mease's common equity cost rate analysis adequately reflect the greater credit risk of the Company relative to the water utilities?

A. No. As discussed previously, although EPCOR Utilities' bond / credit rating has been upgraded to A- by S&P, EWAZ' credit risk is still lower than that of the proxy water utilities. Therefore, an upward adjustment for credit risk is still warranted. As derived above such an adjustment is 0.24%.

BUSINESS RISK ADJUSTMENT

Q. Does your correction to Mr. Mease's common equity cost rate analysis adequately reflect the risk implications of the Company's small size relative to the water utilities?

A. No. As discussed previously, company size is a significant element of business risk which must be reflected in the common equity cost rate applicable to EWAZ.

Q. Please compare the size of the Company with that of the companies with Mr. Mease's water utilities.

A. As a part of my updated common equity cost rate analysis, I updated my business risk adjustment based upon EWAZ's smaller size. Page 1 of Schedule 4 contains a summary of an indicated small size risk adjustment based upon the

SBBI – 2014 size premium study, while page 2 contains a summary of the market capitalizations based upon each water company's[32] market prices at December 31, 2043. As shown, the Company is significantly smaller than the average water utility based upon market capitalization as shown below:

Table 2

	Market Capitalization (1) ($ millions)	Times Greater than Town of Hampton ($ Millions)
RUCO Witness Mr. Mease's Water Utilities	$2,084.144	5.7x
EPCOR Arizona Water Inc.	367.776	

(1) From page 1 of Schedule 4.

Based upon the water utilities' market-to-book ratio at December 31, 2014, the Company's market capitalization is estimated to be $367.776 million, as shown in Table 2 above. In contrast, the market capitalization of the average water company in the water group was $2.084 billion, or 5.7 times larger than the Company's estimated market capitalization.

Because of the Company's extremely small estimated market capitalization, relative to the estimated average market capitalization of the water group, a 2.64% small size risk premium, or the difference between the average size premium applicable to the 9th and 10th deciles between which the Company falls and the 6th decile in which the average company in the water group falls, is justified. In my opinion, although an adjustment of 2.64% is

[32] My proxy group of nine water companies is identical to Mr. Mease's water utilities.

indicated by the SBBI – 2014 size premium study, an adjustment to common equity cost rate of 30 basis points, represents an extremely conservative and reasonable size premium which would be applicable to the Company based upon its smaller relative size.

In view of the foregoing, an upward adjustments of 24 basis points for credit risk and 30 basis points to reflect the Company's greater relative business risk due to its smaller size is necessary. When added to the corrected RUCO cost rate of 9.79%, a risk-adjusted common equity cost rate of 10.33% results, slightly higher than my updated common equity cost rate of 10.25% discussed below. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment to the risk-adjusted corrected common equity cost rate of 9.79% results in a 10.39% common equity cost rate, for a range of 9.79% - 10.39% with a midpoint of 10.09%.

RESPONSE TO COMMENTS ON COMPANY TESTIMONY

ACC WITNESS CASSIDY'S COMMENTS

GENERAL COMMENTS

Q. Do you have any general comments upon Mr. Cassidy's response to your direct testimony?

A. Yes. On page 42, lines 6 – 12 of his direct testimony, Mr. Cassidy discusses why he believes my indicated common equity cost rate of 9.95% before any risk adjustments is overstated by 10 basis points. He believes it is overstated because I relied upon the median of the results of the DCF, RPM and CAPM

models and not the arithmetic average. I did so because, as discussed on page 22, lines 2 – 17 of my direct testimony and reiterated in response to STF JAC 13.1 (Attachment JAC-E) in my opinion, the median is a better measurement of the central tendency of a series of widely ranged results which does not give undue weight to outliers on either the high or the low side. Mr. Cassidy believes that this is non-responsive because specific weightings of individual observations is not given in calculating a median.

DISCOUNTED CASH FLOW MODEL

Q. Mr. Cassidy criticizes your "sole reliance on analysts' forecasts of EPS growth to estimate the dividend growth rate (g) in your single-stage growth DCF analysis on page 43, line 2 through page 45, line 19. Please comment.

A. I have previously addressed the superiority of analysts' forecasts of EPS growth for use in a DCF analysis, the relevance of the accuracy of such forecasts which is not known until well after the fact, and the fact that Mr. Cassidy's citation from Dr. Siegel is misplaced with Dr. Siegel actually endorsing the use of analysts' forecasts of EPS in a DCF analysis.

Q. Mr. Cassidy also criticizes your use of a 60-day average stock price in your constant growth DCF analysis on page 45, line 24 through page 46, line 2. Please comment.

A. Use of an average stock price smoothes out and reduces the effects of any temporary market aberrations reducing the "sample error resulting from random fluctuations in the market" as Mr. Cassidy notes on page 23, lines 19 – 20 relative to his use of a sample group of water utilities for his DCF analyses.

RISK PREMIUM MODEL ("RPM"), CAPITAL ASSET PRICING MODEL ("CAPM") AND PREDICTIVE RISK PREMIUM MODEL™ ("PRPM™")

Q. On page 54, lines 1 – 11 of his direct testimony, Mr. Cassidy maintains that your Risk Premium analysis is inconsistent with your use of median values because you weigh PRPM™ result more heavily than the total adjusted market approach result. Please comment.

A. Mr. Cassidy is correct. I weigh the results of the PRPM™ more heavily because in my opinion that the model is more robust than other models, as described on pages 27 and 28 of my direct testimony. In addition, it does not rely upon the subjective judgments as to its inputs as other cost of equity models. Rather, it relies upon the actual results of investors' pricing decisions which reflect their risk expectations. This is not inconsistent treatment.

Q. Mr. Cassidy attempts to discredit your PRPM™ model because some of the critical data (GARCH Coefficients and GARCH Variance Series) were hard keyed into Excel. Please comment.

A. In response to STF JAC 13.9 (Attachment JAC-I), I made myself available in person or by webinar to demonstrate how the data were used to generate equity risk premiums using the GARCH methodology through EViews. From the submission of the response up until the day of this filing, Mr. Cassidy has not reached out to EWAZ or to me to make arrangements for such a demonstration.

Q. Mr. Cassidy also attempts to discredit the results of the PRPM™ by saying that the full trading histories of some proxy companies (most notably York Water Company) are not used in your analysis. Please respond.

A. The historical price and dividend data used in the PRPM™ were provided by the Center for Research in Securities Prices (CRSP®), a well-known and well respected data source widely used in peer-reviewed academic financial research. This historical data were provided for approximately eighty utility stocks and, to the best of my knowledge, covered the trading history which CRSP® deemed appropriate. Being as highly regarded in academia as CRSP® is, I chose not to second guess its data. According to Mr. Cassidy's Exhibit JAC-D, several companies have been publicly-traded for longer than what was provided by CRSP®. I made an investigation into the return data of York Water Company, which was one of Mr. Cassidy's examples. As stated in Mr. Cassidy's testimony, Yahoo! Finance had historical return data back to May, 1999, but if one looked closely at that return data, it would show that York Water was not traded every day, and sometimes not traded for several days in a row. It is my understanding that the CRSP® return data only contained data on continuously publicly traded stocks. Since the PRPM™ is a predicted variance model, equities that are not frequently traded produce distorted volatility because of the infrequency of trading. This distorted actual volatility would translate into distorted predicted volatility, which would produce inaccurate predicted equity risk premiums. Thus, the lack of the entire trading histories of the stocks when they were infrequently traded would not adversely affect the results of the PRPM™. In fact, a more accurate estimate of the cost of equity is produced than if a very thinly trading history were included.

Q. Mr. Cassidy criticizes your use of forecasted interest rates in your RPM, CAPM and PRPM™. Please comment.

A. As discussed previously, since the cost of capital and ratemaking are both prospective, it is imperative that forecasted interest rates be used in the RPM, CAPM and PRPM™.

Q. At page 80, lines 8 - 19, of his direct testimony, Mr. Cassidy criticizes your use of the ECAPM. Please comment.

A. Mr. Cassidy claims that "because *Value Line* betas have already been adjusted[77] (footnote omitted) the ECAPM beta adjustment is a redundancy which overstates the cost of equity." This is an incorrect understanding of the ECAPM. I have previously discussed in detail in this testimony why there is no redundancy in using adjusted betas and an ECAPM. Therefore, I will not repeat the entire discussion here. However, I will reiterate that using adjusted betas does not address the empirical issues with the CAPM. As noted by Morin, previously cited in this testimony, the ECAPM is a return adjustment and not a risk or beta adjustment.

CREDIT AND BUSINESS RISK ADJUSTMENTS

Q. Mr. Cassidy also criticizes both your credit and business risk adjustments. Please comment.

A. As stated previously, even with S&P's upgrade to EPCOR Utilities' bond / credit rating to A-, an upward adjustment for credit risk of 24 basis points is warranted.

Q. Mr. Cassidy cites a study by Annie Wong in his criticism of your business risk adjustment. Please comment.

A. Professor Wong's study is flawed because she attempts to relate a change in size to beta, while beta accounts for only a small percentage of diversifiable company-specific risk. Size is company-specific and therefore diversifiable. For example, as discussed previously the average R-squared, or coefficient of determination for the proxy group of nine water companies is 0.1830 as shown on Schedule 6. An R-squared of 0.1830 means that 81.70% (1.0000 – 0.1830) of total risk is *unexplained* by beta.

Q. Is there any published response to Professor Wong's article?

A. Yes. In response to Professor Wong's article, *The Quarterly Review of Economics and Finance* published an article in 2003 authored by Thomas M. Zepp which commented upon the Annie Wong article cited by Mr. Cassidy. Relative to Ms. Wong's results, he concluded in the Abstract on page 1 of Dr. Zepp's article [33]: "Her weak results, however, do not rule out the possibility of a small firm effect for utilities." Dr. Zepp also noted on page 5 that: "Two other studies discussed here support a conclusion that smaller water utility stocks are more risky than larger ones. To the extent that water utilities are representative of all utilities, there is support for smaller utilities being more risky than larger ones." Note that Professor Wong's study, while relying upon a large group of gas and electric utilities, used <u>no</u> water utilities. Professor Wong's study is flawed because she attempts to relate a change in size to beta, while beta accounts for only a small percentage of diversifiable company-specific risk. Moreover size is company-specific and therefore diversifiable.

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[33] Zepp, Thomas M. "Utility Stocks and the Size Effect --- Revisited", *The Quarterly Review of Economics and Finance*, 43 (2003) 578-582.

Q. Please comment upon the Paschall and Hawkins article, "Do Smaller Companies Warrant a Higher Discount Rate for Risk?"[34]

A. Mr. Cassidy has cited the one portion in the article which suggests that for valuation purposes, and not cost of capital purposes, it might be valid not to make a size adjustment due to other risk factors which make a small private company less risky. As my direct testimony makes clear at page 13, lines 8 – 23 as well as the remainder of Paschall and Hawkins' article, all else equal, size is a risk factor which must be taken into account when setting the cost of capital or capitalization (discount) rate. In this proceeding, all else is presumed to be equal in terms of the risk differential between EWAZ and the proxy water companies by both Mr. Cassidy and Mr. Mease as neither witness added any risk adjustments to the costs of equity they derived based upon the market data of their respective proxy groups. To understand the full message of the Paschall and Hawkins article, I have included it as Schedule 8. They state in their conclusion on page 4:

> The current challenge to traditional thinking about a small stock premium is a very real and potentially troublesome issue. The challenge comes from bright and articulate people and has already been incorporated into some court cases, providing further ammunition for the IRS. Failing to consider the additional risk associated with most smaller companies, however, is to fail to acknowledge reality. Measured properly, small company stocks have proven to be more risky over a long period of time than have larger company stocks. This makes sense due to the various advantages that larger companies have over smaller companies. Investors looking to purchase a riskier company will require a greater return on investment to compensate for that risk. There are

[34] Michael A. Paschall, ASA, CFA and George B. Hawkins ASA, CFA, "Do Smaller Companies Warrant a Higher Discount Rate for Risk?", *CCH Business Valuation Alert,* Vol. 1, Issue No. 2, December 1999.

> numerous other risks affecting a particular company, yet the use of a size premium is one way to quantify the risk associat4d with smaller companies.

Hence, contrary to Mr. Cassidy's assertion that the article underscores the point of Professor Wong's article, it does just the opposite, corroborating the need to a small size adjustment, all else equal.

RUCO WITNESS MEASE'S COMMENTS

Q. On page 18, line 11 through page 19, line 24 his direct testimony, Mr. Mease briefly discusses your application of the PRPM™. Please comment.

A. Mr. Mease's comments are limited to commenting that the PRPM™ is "a relatively new approach and untried" and that it "is just a way to increase the cost of equity by presenting a model that is untried and untested." (page 19, line 9 and lines 19 – 20 of Mr. Mease's direct testimony) While the PRPM™ is new relative to the DCF and CAPM, as discussed in my direct testimony at page 27, line 14 through page 28, line 10, the PRPM™ is based upon the work of Robert F. Engle who shared the Nobel Prize[35] in Economics in 2003 "for methods of analyzing economic time series with time-varying volatility," based, in part, upon Engle's research which culminated in "Estimating Time Varying Risk Premia in the Term Structure: The ARCH-M Model", *Econometrica*, (Engle, R.F., Lilein, D., & Robins, R) (1987). Hence, the methodology underlying the PRPM™ is not "relatively new." In addition, the

[35] Note that one of the developers of the CAPM, William Sharpe, shared the Nobel Prize in Economic Sciences in 1990 (www.nobelprize.org) with Harry Markowitz for the research upon which the CAPM is based. Robert Engle upon whose research the PRPM™ is based shared the Nobel Prize in 2003, while the researchers behind the DCF have never won the Nobel Prize.

GARCH methodology has been tested by academia, since Engle's, et al research was originally published in 1987, nearly thirty (30) years ago. In addition, the PRPM™ has been published twice in academically peer reviewed journals, *The Journal of Regulatory Economics* (December 2011) and *The Electricity Journal* (May 2013) without rebuttal.

The PRPM™ has also been presented to a number of utility industry / regulatory / academic groups including the following as noted in Appendix A to my direct testimony: The Edison Electric Institute Cost of Capital Working Group; The NARUC Staff Subcommittee on Accounting and Finance; The National Association of Water Companies Finance/Accounting/Taxation and Rates and Regulations Committees; the NARUC Water Committee; The Wall Street Utility Group; the Indiana Utility Regulatory Commission Cost of Capital Task Force; the Financial Research Institute of the University of Missouri Hot Topic Hotline Webinar; and the Center for Research and Regulated Industries Annual Eastern Conference on two occasions. The PRPM™ also formed the basis of "Comparative Evaluation of the Predictive Risk Premium Model™" (co-authored with Richard A. Michelfelder, Ph.D., Pauline M. Ahern, Dylan W. D'Ascendis and Frank J. Hanley The Electricity Journal, May 2013), a follow-up article to the original "A New Approach for Estimating the Equity Risk Premium for Public Utilities".

In addition, the PRPM™ has been presented in forty-six (46) rate cases before twenty (20) regulatory commissions during the last two years.

Q. Mr. Mease discusses why he believes "that the PRPM™ distorts the cost of equity and is just as way to increase the cost of equity on page 19, lines 17 – 24 of his direct testimony. Please comment.

A. Mr. Mease may have misunderstood the basics of the PRPM™. First he states that it "is clearly a results oriented model" based upon the fact that its results are higher than those of either the DCF or the CAPM. Mr. Mease has not read "Comparative Evaluation of the Predictive Risk Premium Model, the Discounted Cash Flow Model and the Capital Asset Pricing Model for Estimating the Cost of Common Equity."[36] Figure 2 – Figure 4 show that the results of the PRPM™ are not always greater than the results of the DCF or the CAPM. Mr. Mease is correct that the cost of equity is a function of risk. The PRPM™ directly measures investors' assessment of risk by evaluating the returns and equity risk premiums based upon the pricing decisions investors make based upon their risk expectations. In contrast, the DCF and CAPM estimate how investors make those decisions based upon various sets of restrictive assumptions that may or may not hold in reality and controversial inputs, e.g., arithmetic v. geometric mean equity risk premiums, to estimate investor behavior. The PRPM™ directly assesses the outcomes of investor behavior

Q. At lines 2 – 10 on page 20 of his direct testimony, Mr. Mease criticizes your use of the holding period returns published in <u>SBBI – 2013</u>. Please comment.

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[36] "Comparative Evaluation of the Predictive Risk Premium Model™, the Discounted Cash Flow Model and the Capital Asset Pricing Model", Pauline M. Ahern, Richard A. Michelfelder, Ph.D., Rutgers University, Dylan W. D'Ascendis, and Frank J. Hanley, <u>The Electricity Journal</u> (May, 2013).

A. Mr. Mease's criticism of the long-term average holding period returns for the period 1926-2013 is unnecessary for the reasons given by Ibbotson Associates in its SBBI – 2014. Mr. Mease himself relied in part upon the arithmetic mean historical return on large company common stocks in developing his market risk premium for his CAPM model which he then averaged with a higher equity risk premium.

Mr. Mease states on lines 3 - 5 on page 20 of his direct testimony that the "use of total stock returns over the 1926-2012 period, in connection with bond yields over the same period, implies that investors in 2013 would expect the same type of relationships." More than ever, given the recent deep recession experienced by the U.S. and international markets, unprecedented unemployment, continuing stock market volatility, etc., an appreciation of what can occur over the long historical period of 1926-2013 is necessary for investors in formulating their expectations. At the present time, it is still unclear how rapidly, smoothly or persistently the continued slow economic recovery will be. Hence, SBBI – 2013 Valuation's words are more relevant than ever[37]:

> Some analysts estimate the expected equity risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future; furthermore, they believe that the 1920s, 1930s, and 1940s contain too many unusual events. This view is suspect because all periods contain "unusual" events. Some of the most unusual events of the last hundred years took place quite recently, including the inflation of the late 1970s and early 1980s, the October 1987 stock market crash, the collapse of the high-yield bond market, the major contraction and consolidation of the thrift industry, the collapse of the Soviet Union,

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[37] SBBI - 2013 Valuation 59.

> the development of the European Economic Community, the attacks of September 11, 2001 and the more recent liquidity crisis of 2008 and 2009.
>
> It is even difficult for economists to predict the economic environment of the future. For example, if one were analyzing the stock market in 1987 before the crash, it would be statistically improbable to predict the impending short-term volatility without considering the stock market crash and market volatility of the 1929-1931 period.
>
> Without an appreciation of the 1920s and 1930s, no one would believe that such events could happen. The 87-year period starting with 1926 is representative of what can happen: it includes high and low returns, volatile and quiet markets, war and peace, inflation and deflation, and prosperity an depression. Restricting attention to a shorter historical period underestimate the amount of change that could occur in a long future period. Finally, because historical event-types (not specific events) tend to repeat themselves, long-run capital market return studies can reveal a great deal about the future. Investors probably expect "unusual" events to occur from time to time and their expectations reflect this.

In addition, the use of the long-term arithmetic mean, by both myself and Mr. Mease in part, is consistent with the long-term investment horizon of utilities' common stock. The typical application of the DCF model used in regulation presumes an infinite, i.e., long-term, investment horizon and a constant growth rate. This presumption of a constant growth rate is no different than the presumption of a constant equity risk premium based upon long-term historical holding period returns. Both must be expectationally constant.

As stated above, the foregoing confirms that the CAPM and RPM are similar to the DCF model. The use of a very long-term historic mean equity risk premium does not mean that it is actually constant from year to year in order for

the model to be valid, because the equity risk premium may vary randomly around some average expected value.

Q. On line 15 on page 20 through line 2 on page 21 of his prepared direct testimony, Mr. Mease criticizes your use of the ECAPM and projected interest rates in your CAPM analysis. Please comment.

A. I have previously addressed both the validity of the ECAPM and the use of projected interest rates, consistent with the prospective nature of both the cost of capital and ratemaking.

Q. On lines 4 - 21 on page 21 of his direct testimony, Mr. Mease cites your direct testimony as stating that you "averaged the prospective and historical yields of U.S. Treasury Securities because the Federal Bank is artificially and indefinitely keeping interest rates low until certain economic thresholds are met." Please comment.

A. The citation Mr. Mease uses is not found in my direct testimony in this proceeding. I averaged the consensus interest rate forecasts for the six quarters ending with the first quarter 2015 from the November 1, 2013 *Blue Chip*, the 2015 – 2019 and the 2020 – 2024 consensus interest rate forecasts from the June 1, 2013 *Blue Chip*.

<u>BUSINESS RISK ADJUSTMENT</u>

Q. At line 14 on page 22 through line 19 on page 25 of his direct testimony, Mr. Mease "disagrees" with the business risk adjustment to your recommended common equity cost rate based upon EWAZ's small size. Do you agree?

A. No. As stated previously in both this testimony and my direct testimony, EWAZ's size is a risk factor which must be taken into account in developing a common equity cost rate for EWAZ. To reiterate, the rate of return established by the Commission in this proceeding will be applied to EWAZ's jurisdictional rate base. Also, as discussed previously, it is a generally-accepted financial principle that the risk of any investment is directly related to the assets in which the capital is invested. The Commission must focus on the risk and return of an investment in EWAZ's jurisdictional rate base alone because it is only EWAZ's rates which will be set in this proceeding and it is only EWAZ's rate base which serves its customers.

CREDIT RISK ADJUSTMENT

Q. On page 26, line 1 through page 28, line 17 of his direct testimony, Mr. Mease "disagrees" with your credit risk adjustment. Please comment.

A. Despite Mr. Mease's disagreement, based upon the rationale provided in my direct testimony at page 16, lines 7 – 12 is still applicable, since EPCOR Utilities' upgraded S&P bond / credit rating of A- is still lower than the S&P / Moody's bond ratings of his sample water utilities, A+ / A1/A2 as shown on page 6 of Schedule 9, indicating greater credit risk for EWAZ. Therefore, an upward credit risk adjustment of 24 basis points as previously discussed is warranted.

RESPONSE TO MR. PATTERSON CRITICISMS

Q. Mr. Patterson opposes a small company risk premium. Please respond.

A. The reasonableness of a small company risk premium has been addressed at length in this testimony and in my direct testimony.

RESPONSE TO MR. THORNTON CRITICISMS

Q. Please respond to Mr. Thornton's expected real returns on the market from 6.4% to 6.7% from Jeremy Siegel's "Stocks for the Long Run"

A. Even though Mr. Thornton did not provide any analysis of his own, he volunteered "real returns" on stocks ranging from 6.4% to 6.7%, and adding an inflation rate of 2.4% resulting in an expected total market return of between 8.8% - 9.1%. A review of the excerpt from Chapter 5 from Jeremy Siegel's "Stocks for the Long Run" provided in response to EPCOR 1-1 indicates in a note to Table 5-1 referenced by Mr. Thornton, that the 6.4% real return on stocks from 1926 – 2012 is a compound annual return, i.e., geometric return, which is not appropriate for cost of capital purposes. The appropriate arithmetic mean historical total returns of the market from 1926-2013 from SBBI is 12.05% (on a monthly basis) and 12.1% on an annual basis and prospective returns on the market are 10.24% and 14.35% based upon Value Line and the PRPM™, respectively as shown in note 1 on page 15 of Schedule 9. In view of this evidence, Mr. Thornton's use of Dr. Siegel's return on the market to criticize my initial recommended common equity cost rate of 10.7% should be dismissed.

<u>UPDATED OVERALL COST OF CAPITAL AND RATE OF RETURN ON COMMON EQUITY</u>

Q. Have you updated you recommended overall rate of return and rate of return on common equity for EWAZ?

A. Yes. Page 1 of Schedule 9 shows my updated common equity cost rate recommendation of 10.25%. In arriving at my updated common equity cost rate

recommendation, I have applied the same three cost of common equity models in a manner identical to their application in my direct testimony, with the exception that I relied exclusively upon forecasted interest rates in my risk premium and CAPM analyses. Adding Mr. Cassidy's 60 basis points upward economic assessment adjustment "[i]n consideration of the relatively uncertain status of the economy and the market that currently exists"[38] to the updated common equity cost rate of 10.25% results in a 10.85% common equity cost rate, for a range of 10.25% - 10.85% with a midpoint of 10.55%, which in my opinion is a reasonable common equity cost rate for EWAZ in the current economic and capital market environment.

Q. Does that conclude your rebuttal testimony?

A. Yes.

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[38] Mr. Cassidy's direct testimony, page 39, lines 11 – 12.

EXHIBIT A
SCHEDULES

EPCOR Arizona Water Inc.
Market-to-Book Ratios, Earnings / Book Ratios and
Inflation for Standard & Poor's Industrial Index and
the Standard & Poor's 500 Composite Index
from 1947 through 2013

Year	Market-to-Book Ratio (1)		Earnings/ Book Ratio (2)				
	S&P Industrial Index (3)	S&P 500 Composite Index (3)	S&P Industrial Index (3)	S&P 500 Composite Index (3)	Inflation (4)	Earnings / Book Ratio - Net of Inflation	
1947	1.23	NA	13.0 %	NA	9.0 %	4.0 %	NA
1948	1.13	NA	17.3	NA	2.7	14.6	NA
1949	1.00	NA	16.3	NA	(1.8)	18.1	NA
1950	1.16	NA	18.3	NA	5.8	12.5	NA
1951	1.27	NA	14.4	NA	5.9	8.5	NA
1952	1.29	NA	12.7	NA	0.9	11.8	NA
1953	1.21	NA	12.7	NA	0.6	12.1	NA
1954	1.45	NA	13.5	NA	(0.5)	14.0	NA
1955	1.81	NA	16.0	NA	0.4	15.6	NA
1956	1.92	NA	13.7	NA	2.9	10.8	NA
1957	1.71	NA	12.5	NA	3.0	9.5	NA
1958	1.70	NA	9.8	NA	1.8	8.0	NA
1959	1.94	NA	11.2	NA	1.5	9.7	NA
1960	1.82	NA	10.3	NA	1.5	8.8	NA
1961	2.01	NA	9.8	NA	0.7	9.1	NA
1962	1.83	NA	10.9	NA	1.2	9.7	NA
1963	1.94	NA	11.4	NA	1.7	9.7	NA
1964	2.18	NA	12.3	NA	1.2	11.1	NA
1965	2.21	NA	13.2	NA	1.9	11.3	NA
1966	2.00	NA	13.2	NA	3.4	9.8	NA
1967	2.05	NA	12.1	NA	3.0	9.1	NA
1968	2.17	NA	12.6	NA	4.7	7.9	NA
1969	2.10	NA	12.1	NA	6.1	6.0	NA
1970	1.71	NA	10.4	NA	5.5	4.9	NA
1971	1.99	NA	11.2	NA	3.4	7.8	NA
1972	2.16	NA	12.0	NA	3.4	8.6	NA
1973	1.96	NA	14.6	NA	8.8	5.8	NA
1974	1.39	NA	14.8	NA	12.2	2.6	NA
1975	1.34	NA	12.3	NA	7.0	5.3	NA
1976	1.51	NA	14.5	NA	4.8	9.7	NA
1977	1.38	NA	14.6	NA	6.8	7.8	NA
1978	1.25	NA	15.3	NA	9.0	6.3	NA
1979	1.23	NA	17.2	NA	13.3	3.9	NA
1980	1.31	NA	15.6	NA	12.4	3.2	NA
1981	1.24	NA	14.9	NA	8.9	6.0	NA
1982	1.17	NA	11.3	NA	3.9	7.4	NA
1983	1.45	NA	12.2	NA	3.8	8.4	NA
1984	1.46	NA	14.6	NA	4.0	10.6	NA
1985	1.67	NA	12.2	NA	3.8	8.4	NA
1986	2.02	NA	11.5	NA	1.1	10.4	NA
1987	2.50	NA	15.7	NA	4.4	11.3	NA
1988	2.13	NA	19.0	NA	4.4	14.6	NA
1989	2.56	NA	18.5	NA	4.7	13.8	NA
1990	2.63	NA	16.3	NA	6.1	10.2	NA
1991	2.77	NA	10.8	NA	3.1	7.7	NA
1992	3.29	NA	13.0	NA	2.9	10.1	NA
1993	3.72	NA	15.7	NA	2.8	12.9	NA
1994	3.73	NA	23.0	NA	2.7	20.3	NA
1995	4.06	2.64	22.9	16.0 %	2.5	20.4	13.5 %
1996	4.79	3.00	24.8	16.8	3.3	21.5	13.5
1997	5.88	3.53	24.6	16.3	1.7	22.9	14.6
1998	7.13	4.16	21.3	14.5	1.6	19.7	12.9
1999	8.27	4.76	25.2	17.1	2.7	22.5	14.4
2000	7.51	4.51	23.9	16.2	3.4	20.5	12.8
2001	NA	3.50	NA	7.4	1.6	NA	5.8
2002	NA	2.93	NA	8.3	2.4	NA	5.9
2003	NA	2.78	NA	14.1	1.9	NA	12.2
2004	NA	2.91	NA	15.3	3.3	NA	12.0
2005	NA	2.78	NA	16.4	3.4	NA	13.0
2006	NA	2.77	NA	17.0	2.5	NA	14.5
2007	NA	2.84	NA	12.8	4.1	NA	8.7
2008	NA	2.24	NA	3.0	0.1	NA	2.9
2009	NA	1.87	NA	10.6	2.7	NA	7.9
2010	NA	2.09	NA	14.2	1.5	NA	12.7
2011	NA	2.07	NA	14.6	3.0	NA	11.6
2012	NA	2.58	NA	13.5	1.7	NA	11.8
2013	NA	2.10	NA	14.5	1.5	NA	13.0
Average	2.34	2.95	14.9 %	13.6 %	2.4 %	10.9 %	11.2 %

Notes: (1) Market-to-Book Ratio equals average of the high and low market price for the year divided by the average book value.

(2) Earnings/Book equals earnings per share for the year divided by the average book value.

(3) On January 2, 2001 Standard & Poor's released Global Industry Classification Standard (GICS) price indexes for all Standard & Poor's U.S. indexes. As a result, all S&P Indexes have been calculated with a common base of 100 at a start date of December 31, 1994. Also, the GICS industrial sector is not comparable to the former S&P Industrial Index and data for the former S&P Industrial Index was discontinued.

(4) As measured by the Consumer Price Index (CPI).

Source of Information: Standard & Poor's Security Price Index Record, 2000 Edition, p. 40
Standard & Poor's Statistical Service, Current Statistics, March 2013, p. 30
Standard & Poor's Compustat Services, Inc. PC Plus Research Insight Database
Ibbotson SBBI 2014 Classic Yearbook
sp 500 eps est.xlsx. http://www.spindices.com/indices/equity/sp-500
finance.yahoo.com

EPCOR Water Arizona Inc.
Example of the Inadequacy of
DCF Return Rate Related to Book Value
When Market Value Exceeds Book Value

Line No.		Based on ACC Staff Witness Cassidy's Restatement of Ms. Ahern's DCF		Based on ACC Staff Witness Cassidy's Sample Water Utilities		Based upon RUCO Witness Mease's Water Utilities	
		(1) Market Value	(2) Book Value	(3) Market Value	(4) Book Value	(5) Market Value	(6) Book Value
1.	Per Share	$ 26.99 (1)	$ 13.57 (1)	$ 27.89 (2)	$ 18.96 (2)	$ 27.84 (3)	$ 14.39 (4)
2.	DCF Cost Rate (3)	8.95%	8.95%	8.60%	8.60%	8.74%	8.74%
3.	Return in Dollars	$ 2.416	$ 1.215	$ 2.399	$ 1.631	$ 2.433	$ 1.258
4.	Dividends	$ 0.864 (5)	$ 0.864 (5)	$ 0.781 (6)	$ 0.781 (6)	$ 0.866 (7)	$ 0.866 (7)
5.	Growth in Dollars	$ 1.552	$ 0.351	$ 1.618	$ 0.850	$ 1.567	$ 0.392
6.	Return on Market Value (8)	8.95%	4.50%	8.60%	5.85%	8.72%	4.51%
7.	Rate of Growth on Market Value (9)	5.75%	1.26%	5.80%	3.05%	5.63%	1.41%

Notes:
(1) From page 2 on Schedule 9, Exhibit PMA-DT 2.
(2) Derived from From Schedule JAC-7.
(3) Derived from Schedule RMB-3, page 1.
(4) From page 2 of Schedule 4 of this Exhibit.
(5) Dividends per share based upon a 3.20% dividend yield. $0.864 = $26.99 * 3.20%. (Dividend yield does not match Exhibit JAC-B due to rounding.)
(6) Dividends per share based upon a 2.8% dividend yield. $0.781 = $27.89 * 2.8%.
(7) Dividends per share based upon a 3.11% dividend yield. $0.866 = $27.84 * 3.11%.
(8) Line 3 / market value per share (line 1 column (a)).
(9) Line 6 - average dividend yield.

EPCOR Water Arizona, Inc. Cost of Capital Calculation
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]		[E]
DCF Method		D_1/P_0 [1]	+ g [2]	=	**k**
Constant Growth DCF Estimate		3.2%	+ 6.7%	=	9.9%
Multi-Stage DCF Estimate				=	9.7%
Average DCF Estimate					**9.8%**
		Staff's Estimated Cost of Equity			**9.8%**
		Economic Assessment Adjustment			0.6%
		Sub-Total			**10.4%**
		Financial Risk Adjustment			0.0%
		Total			**10.4%**

1 From page 3 of this Schedule.

2 Earnings per share 5-year growth rate projections from Value Line Investment Survey, October 17, 2014:

American States Water	5.5 %
California Water	7.5
Aqua America	8.5
Connecticut Water	6.5
Middlesex Water	5.0
SJW Corp	7.0
York Water	7.0
Average Sample Water Utilities	6.7 %

EPCOR Water Arizona, Inc. Cost of Capital Calculation
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Company	Current Mkt. Price (P_o)[1] 12/17/2014	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	34.4	0.85	0.90	0.95	1.00	6.5%	8.9%
California Water	23.5	0.87	0.93	1.00	1.08	6.5%	10.2%
Aqua America	25.9	0.87	0.95	1.03	1.11	6.5%	10.0%
Connecticut Water	34.9	0.86	0.92	0.98	1.04	6.5%	8.9%
Middlesex Water	22.2	0.85	0.89	0.94	0.98	6.5%	10.2%
SJW Corp	32.3	0.86	0.92	0.99	1.06	6.5%	9.2%
York Water	21.9	0.86	0.92	0.99	1.06	6.5%	10.5%
						Average	**9.7%**

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

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

1 [B] see Schedule JAC-7

2 D_1 from page 3 of this Scheduled. D_2, D_3 and D_4 derived using the Value Line Investment Survey 5-year forecasted growth in dividends derived in note 2 on page 1 of this Schedule.

3 Average annual growth in GDP 1929 - 2012 in current dollars. Page 35, lines 14 - 15 of ACC Witness Cassidy's direct tesitmony identify this as 1929 - 2013.

4 Internal Rate of Return of Projected Dividends

3 http://www.bea.doc.gov/

Calculation of Expected Dividend Yield

	Company	P_0 Current[1]	D_1[2]	D_1/P_0
1	American States Water	$ 34.440	**0.85**	2.48%
2	California Water	$ 23.540	**0.87**	3.68%
3	Aqua America	$ 25.870	**0.87**	3.37%
4	Connecticut Water	$ 34.930	**0.86**	2.46%
5	Middlesex Water	$ 22.160	**0.85**	3.84%
6	SJW Corp	$ 32.250	**0.86**	2.68%
7	York Water	$ 21.940	**0.86**	3.93%
	AVERAGE			**3.2%**

1 From Schedule JAC-7.

2 Derived from ACC Witness Cassidy's dividend yield workpaper using the Value Line Investment Survey 5-year forecasted growth in dividends derived in note 2 on page 1 of this Schedule.

AMER. STATES WATER NYSE-AWR

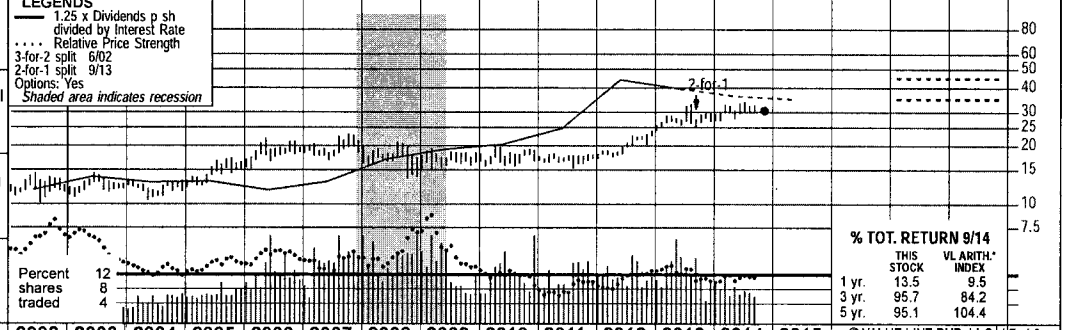
RECENT PRICE 30.52 | P/E RATIO 20.8 (Trailing: 20.3 Median: 21.0) | RELATIVE P/E RATIO 1.20 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Lowered 5/16/14
SAFETY 2 Raised 7/20/12
TECHNICAL 3 Lowered 10/10/14
BETA .70 (1.00 = Market)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
High:	14.5	13.4	17.3	21.9	23.1	21.0	19.4	19.8	18.2	24.1	33.1	34.0
Low:	10.8	10.4	12.2	15.1	16.8	13.5	14.9	15.6	15.3	17.0	24.0	27.0

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 6/02
2-for-1 split 9/13
Options: Yes
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+45%)	12%
Low	35	(+15%)	6%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	1	0	0	0	1	0	0	0	0
to Sell	2	0	0	0	2	0	0	1	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	79	79	96
to Sell	72	72	68
Hld's(000)	23188	23233	23236

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	13.5	9.5
3 yr.	95.7	84.2
5 yr.	95.1	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.51	6.45	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	*12.30*	*12.95*	Revenues per sh	*14.95*
1.02	1.13	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	*2.60*	*2.75*	"Cash Flow" per sh	*3.15*
.54	.60	.64	.67	.67	.39	.53	.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	*1.45*	*1.60*	Earnings per sh A	*1.90*
.42	.43	.43	.43	.44	.44	.44	.45	.46	.48	.50	.51	.52	.55	.64	.76	*.83*	*.87*	Div'd Decl'd per sh B■	*1.10*
1.56	2.15	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	*2.25*	*2.40*	Cap'l Spending per sh	*2.40*
5.74	5.91	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	*12.60*	*13.05*	Book Value per sh	*15.20*
26.87	26.87	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	*38.00*	*37.50*	Common Shs Outst'g C	*37.50*
15.5	17.1	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	*Bold figures are*		Avg Ann'l P/E Ratio	*20.0*
.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	*Value Line*		Relative P/E Ratio	*1.25*
5.0%	4.2%	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%	*estimates*		Avg Ann'l Div'd Yield	*2.8%*
						228.0	236.2	268.6	301.4	318.7	361.0	398.9	419.3	466.9	472.1	*455*	*485*	Revenues ($mill)	*560*
						16.5	22.5	23.1	28.0	26.8	29.5	41.4	42.0	54.1	62.7	*56.0*	*60.0*	Net Profit ($mill)	*71.0*
						37.4%	47.0%	40.5%	42.6%	37.8%	38.9%	43.2%	41.7%	39.9%	36.3%	*37.0%*	*39.0%*	Income Tax Rate	*39.0%*
						--	--	12.2%	8.5%	6.9%	3.2%	5.8%	2.0%	2.5%	.5%	*.5%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
						47.7%	50.4%	48.6%	46.9%	46.2%	45.9%	44.3%	45.4%	42.2%	39.8%	*40.0%*	*41.0%*	Long-Term Debt Ratio	*42.0%*
						52.3%	49.6%	51.4%	53.1%	53.8%	54.1%	55.7%	54.6%	57.8%	60.2%	*60.0%*	*59.0%*	Common Equity Ratio	*58.0%*
						480.4	532.5	551.6	569.4	577.0	665.0	677.4	749.1	787.0	818.4	*800*	*825*	Total Capital ($mill)	*980*
						664.2	713.2	750.6	776.4	825.3	866.4	855.0	896.5	917.8	981.5	*1010*	*1040*	Net Plant ($mill)	*1160*
						5.2%	5.4%	6.0%	6.7%	6.4%	5.9%	7.6%	7.1%	8.3%	8.9%	*8.5%*	*8.5%*	Return on Total Cap'l	*8.5%*
						6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	*11.5%*	*12.5%*	Return on Shr. Equity	*12.5%*
						6.6%	8.5%	8.1%	9.3%	8.6%	8.2%	11.0%	10.3%	11.9%	12.7%	*11.5%*	*12.5%*	Return on Com Equity	*12.5%*
						1.0%	2.8%	2.7%	3.9%	3.1%	3.2%	5.8%	5.3%	6.6%	6.8%	*6.0%*	*5.0%*	Retained to Com Eq	*5.5%*
						84%	67%	67%	58%	64%	61%	47%	49%	45%	47%	*57%*	*54%*	All Div'ds to Net Prof	*58%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $332.2 mill. **Due in 5 Yrs** $7.6 mill.
LT Debt $310.9 mill. **LT Interest** $22.0 mill.
(LT interest earned: 5.7 x: total interest coverage: 5.4 x) (39% of Cap'l)
Leases, Uncapitalized: Annual rentals $2.2 mill.
Pension Assets-12/13 $127.5 mill. **Oblig.** $152.7 mill.
Pfd Stock None.

Common Stock 38,709,657 shs. **as of 8/4/14**

MARKET CAP: $1.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	23.5	38.2	77.9
Other	160.5	153.4	120.0
Current Assets	184.0	191.6	197.9
Accts Payable	40.6	49.8	45.4
Debt Due	3.3	6.3	21.3
Other	49.8	44.8	60.8
Current Liab.	93.7	100.9	127.5
Fix. Chg. Cov.	488%	531%	533%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	5.5%	6.5%	*4.0%*
"Cash Flow"	7.5%	8.5%	*4.5%*
Earnings	9.0%	13.0%	*5.5%*
Dividends	4.0%	6.5%	*9.0%*
Book Value	5.5%	6.5%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	94.3	109.8	119.9	95.3	419.3
2012	107.6	114.3	133.5	111.5	466.9
2013	110.6	120.7	130.9	109.9	472.1
2014	101.9	115.6	*127.5*	*110*	*455*
2015	*115*	*120*	*135*	*115*	*485*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.19	.34	.42	.17	1.12
2012	.27	.40	.49	.26	1.41
2013	.35	.43	.53	.30	1.61
2014	.28	.39	*.50*	*.28*	*1.45*
2015	*.30*	*.45*	*.55*	*.30*	*1.60*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.13	.13	.13	.13	.52
2011	.13	.14	.14	.14	.55
2012	.14	.14	.1775	.1775	.64
2013	.1775	.1775	.2025	.2025	.76
2014	.2025	.2025	.213		

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Sold Chaparral City Water of Arizona (6/11). Has 728 employees. Officers & directors own 2.9% of common stock (4/12 Proxy). Chairman: Lloyd Ross. President & CEO: Robert J. Sprowls. Inc: CA. Addr: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel: 909-394-3600. Internet: www.aswater.com.

American States Water's earnings will likely decline this year. Share earnings were down 13% for the first half of 2014 as the noncore businesses' contribution fell to $0.12, or 50% less than in the similar 2013 period. Results at the main water utility operations also decreased, more than 8%, as last year's bottom line was aided by a one-time recovery of costs. To reflect this, we have lowered our per-share estimate for the company by $0.15, to $1.45.

The outlook for 2015 is only marginally better. Profits from Golden Gate Water Co. (GGWC), American States' main subsidiary, will be restrained as the utility is bumping up to its allowed return on equity. Overall, we think share net can recover to $1.60 for the full year.

A favorable regulatory climate augurs well for the GGWC's long-term prospects. To the surprise of many utility investors, the California Public Utility Commission (CPUC) has been very constructive in dealing with water utilities. Perhaps realizing the difficult conditions facing the state, as a result of the prolonged drought, the CPUC permits rates to be calculated using a "forward-looking test year". This allows for faster recovery of any higher-than-projected costs. Since utilities file for rate relief every three years in California, we are optimistic that GGWC will receive fair treatment on the rate case filed in July for the years 2016, 2017, and 2018.

Nonregulated businesses have solid prospects. Through its ASUS subsidiary, the company operates the water systems at nine U.S. Army bases. As can be seen from this year, earnings can be choppy and unpredictable. Nevertheless, with 50-60 military bases expected to privatize their systems over the next five to 10 years, we estimate that ASUS can obtain a fair share of this business. Since the returns on these operations are higher than those from the regulated sector, they should provide a boost to earnings.

Long-term, income-seeking investors may like this equity. For starters, the company has a solid balance sheet. In addition, a 1.25 million share-buyback program was recently initiated. Furthermore, dividend growth prospects through 2017-2019 are above average for a water utility.

James A. Flood *October 17, 2014*

(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. 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 splits.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	65
Earnings Predictability	90

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AMERICAN WATER NYSE-AWK

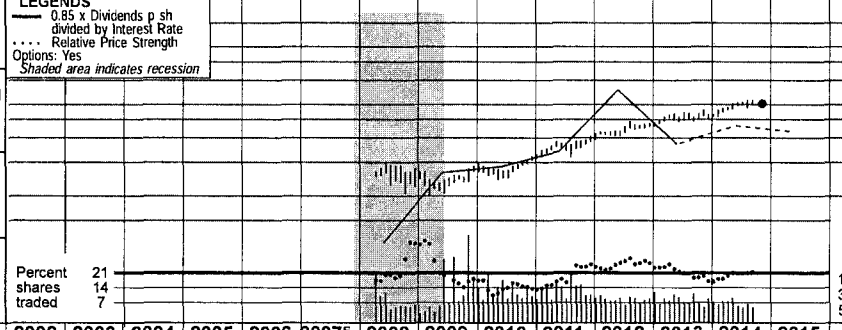
RECENT PRICE 48.40 | P/E RATIO 20.0 (Trailing: 22.4 Median: NMF) | RELATIVE P/E RATIO 1.16 | DIV'D YLD 2.7% | VALUE LINE

TIMELINESS 2 Lowered 8/15/14
SAFETY 3 New 7/25/08
TECHNICAL 3 Lowered 8/8/14
BETA .70 (1.00 = Market)

High:	23.7	23.0	25.8	32.8	39.4	45.1	50.7
Low:	16.5	16.2	19.4	25.2	31.3	37.0	41.1

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 0.85 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	70	(+45%)	12%
Low	50	(+5%)	6%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	1	0	0	0	0
Options	2	0	0	0	10	0	3	0	0
to Sell	2	0	0	0	9	0	3	0	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	204	220	208
to Sell	176	177	194
Hld's(000)	143986	144603	146101

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	20.0	9.5
3 yr.	73.4	84.2
5 yr.	182.2	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007E	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
--	--	--	--	--	--	--	--	13.08	13.84	14.61	13.98	15.49	15.18	16.25	16.28	*17.05*	*17.65*	Revenues per sh	*20.65*
--	--	--	--	--	--	--	--	.65	d.47	2.87	2.89	3.56	3.73	4.27	4.36	*4.60*	*5.05*	"Cash Flow" per sh	*5.65*
--	--	--	--	--	--	--	--	d.97	d2.14	1.10	1.25	1.53	1.72	2.11	2.06	*2.35*	*2.60*	Earnings per sh A	*3.05*
--	--	--	--	--	--	--	--	--	--	.40	.82	.86	.91	1.21	.84	*1.18*	*1.30*	Div'd Decl'd per sh B■	*1.55*
--	--	--	--	--	--	--	--	4.31	4.74	6.31	4.50	4.38	5.27	5.25	5.50	*6.10*	*6.00*	Cap'l Spending per sh	*5.80*
--	--	--	--	--	--	--	--	23.86	28.39	25.64	22.91	23.59	24.11	25.11	26.52	*26.55*	*26.85*	Book Value per sh D	*28.40*
--	--	--	--	--	--	--	--	160.00	160.00	160.00	174.63	175.00	175.66	176.99	178.25	*180.00*	*182.50*	Common Shs Outst'g C	*190.00*
--	--	--	--	--	--	--	--	--	--	18.9	15.6	14.6	16.8	16.7	19.9	*Bold figures are*		Avg Ann'l P/E Ratio	*19.5*
--	--	--	--	--	--	--	--	--	--	1.14	1.04	.93	1.05	1.06	1.12	*Value Line*		Relative P/E Ratio	*1.20*
--	--	--	--	--	--	--	--	--	--	1.9%	4.2%	3.8%	3.1%	3.4%	2.0%	*estimates*		Avg Ann'l Div'd Yield	*2.6%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $5935.0 mil. **Due in 5 Yrs** $1034.0 mil.
LT Debt $5217.5 mil. **LT Interest** $274.0 mil.
(Total interest coverage: 3.0x) (52% of Cap'l)

Leases, Uncapitalized: Annual rentals $15.9 mill.
Pension Assets 12/13 $1383.6 mill **Oblig.** $1494.1 mill.
Pfd Stock $16.0 mill. **Pfd Div'd** $.7 mill

Common Stock 179,148,915 shs. as of 7/31/2014

MARKET CAP: $8.7 billion (Large Cap)

2004	2005	2006	2007E	2008	2009	2010	2011	2012	2013	2014	2015		17-19
--	--	2093.1	2214.2	2336.9	2440.7	2710.7	2666.2	2876.9	2901.9	*3065*	*3250*	Revenues ($mill)	*3920*
--	--	d155.8	d342.3	187.2	209.9	267.8	304.9	374.3	369.3	*420*	*465*	Net Profit ($mill)	*580*
--	--	--	--	37.4%	37.9%	40.4%	39.5%	40.7%	39.1%	*39.0%*	*38.5%*	Income Tax Rate	*37.0%*
--	--	--	--	--	--	--	--	6.2%	5.1%	*5.5%*	*6.0%*	AFUDC % to Net Profit	*8.0%*
--	--	56.1%	50.9%	53.1%	56.9%	56.8%	55.7%	53.9%	52.4%	*54.0%*	*53.5%*	Long-Term Debt Ratio	*55.0%*
--	--	43.9%	49.1%	46.9%	43.1%	43.2%	44.2%	46.1%	47.6%	*46.0%*	*46.5%*	Common Equity Ratio	*45.0%*
--	--	8692.8	9245.7	8750.2	9289.0	9561.3	9580.3	9635.5	9940.7	*10390*	*10600*	Total Capital ($mill)	*12000*
--	--	8720.6	9318.0	9991.8	10524	11059	11021	11739	12391	*12800*	*13200*	Net Plant ($mill)	*14650*
--	--	NMF	NMF	3.7%	3.8%	4.4%	4.8%	5.4%	5.1%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
--	--	NMF	NMF	4.6%	5.2%	6.5%	7.2%	8.4%	7.8%	*9.0%*	*9.5%*	Return on Shr. Equity	*10.5%*
--	--	NMF	NMF	4.6%	5.2%	6.5%	7.2%	8.4%	7.8%	*9.0%*	*9.5%*	Return on Com Equity	*10.5%*
--	--	NMF	NMF	3.0%	1.8%	2.8%	3.5%	3.6%	4.7%	*4.0%*	*4.5%*	Retained to Com Eq	*5.5%*
--	--	--	--	34%	65%	56%	52%	57%	40%	*50%*	*51%*	All Div'ds to Net Prof	*51%*

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	24.4	27.0	32.1
Other	475.0	523.3	675.5
Current Assets	499.4	550.3	707.6
Accts Payable	279.6	14.2	192.4
Debt Due	385.9	644.5	717.5
Other	329.3	576.8	325.0
Current Liab.	994.8	1235.5	1234.9
Fix. Chg. Cov.	297%	307%	305%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	--	3.0%	*4.5%*
"Cash Flow"	--	32.5%	*5.0%*
Earnings	--	--	*7.5%*
Dividends	--	--	*7.5%*
Book Value	--	-.5%	*2.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	596.7	668.8	760.9	639.8	2666.2
2012	618.5	745.6	831.8	681.0	2876.9
2013	636.1	724.3	829.2	712.3	2901.9
2014	681.9	759.2	*875*	*748.9*	*3065*
2015	*705*	*810*	*940*	*795*	*3250*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.23	.42	.73	.34	1.72
2012	.28	.66	.87	.30	2.11
2013	.32	.57	.84	.33	2.06
2014	.38	.61	*.97*	*.39*	*2.35*
2015	*.45*	*.70*	*1.00*	*.45*	*2.60*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.21	.21	.22	.22	.86
2011	.22	.23	.23	.23	.91
2012	.23	.23	.25	.50	1.21
2013	--	.28	.28	.28	.84
2014	.28	.31	.31		

BUSINESS: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to over 14 million people in over 30 states and Canada. It's nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 89.1% of 2013 revenues. New Jersey is its biggest market accounting for 24.6% of revenues. Has roughly 6,600 employees. Depreciation rate, 3.1% in '13. BlackRock, Inc., owns 10.5% of the common stock outstanding. Officers & directors own 2.8%. (3/14 Proxy). President & CEO; Susan Story. Chairman; George Mackenzie. Address: 1025 Laurel Oak Road, Voorhees, NJ 08043. Telephone: 856-346-8200. Internet: www.amwater.com.

Controlling costs remains one of American Water Works' main strategies. Every quarter, the utility highlights its operating expenses as a percent of revenues. Currently, the rate is less than 38%, compared to 40.7% at this time last year. The company's growth-through-acquisition policy is helping to keep this ratio low. American Water purchases many smaller utilities every year and increases their margins substantially using economies of scale. Successfully managing costs also makes it harder for regulators to hand down harsh rulings.

Planned capital expenditures are large but manageable. American Water is scheduled to spend $1.1 billion annually through 2017-2019. Most of this will be used to replace and modernize aging pipelines and waste treatment facilities. Additional debt and equity will most likely be required to fund this budget. Some of the company's financial metrics will slide as a result. Still, the balance sheet should remain adequate.

Contributions from the nonregulated businesses should continue to grow. Though not meaningful at this time, we expect this to change in the years ahead. Profits from these operations are attractive because they are not capped, as is the case with regulated utilities. The most promising subsidiary extends water pipelines to reach energy companies that use vast amounts of water to explore for oil and natural gas.

American Water is an excellent way for investors to participate in the domestic water utility market. The company stands out for a couple of reasons. For example, with a market capitalization of $8.7 billion, it represents half of the market capitalization of the nine stocks that *Value Line* follows. Also, by doing business in over 30 states, the utility is well diversified and not subject to much regulatory risk.

We continue to believe that American Water shares offer value. For starters, they are ranked to outperform the market in the year ahead. Second, compared to other equities in this group, investors don't have to forfeit much current income for a holding that has well above-average dividend growth prospects.

James A. Flood *October 17, 2014*

(A) Diluted earnings. Excludes nonrecurring losses: '08, $4.62; '09, $2.63; '11, $0.07. Discontinued operations: '06, (4¢); '11, 3¢; '12, (10¢). Next earnings report due early Nov. Quarterly earnings may not sum due to rounding. (B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available. Two payments made in 4th quarter of 2012. (C) In millions. (D) Includes intangibles. In 2013: $1.21 billion, $6.78/share. (E) Pro forma numbers for '06 & '07.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	70
Earnings Predictability	20

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AQUA AMERICA NYSE-WTR

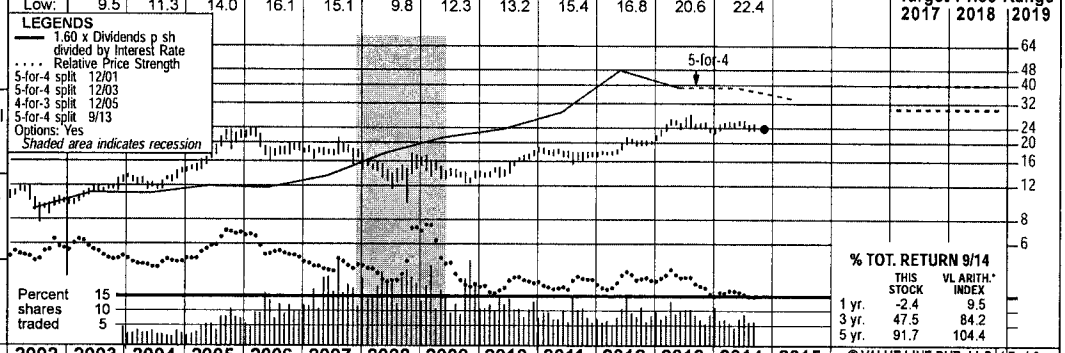
RECENT PRICE 23.77 | P/E RATIO 19.3 (Trailing: 20.7 Median: 24.0) | RELATIVE P/E RATIO 1.12 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Lowered 5/24/13
SAFETY 2 Raised 4/20/12
TECHNICAL 2 Raised 10/3/14
BETA .70 (1.00 = Market)

High:	13.4	14.8	23.4	23.8	21.3	17.6	17.2	18.4	19.0	21.5	28.1	26.3
Low:	9.5	11.3	14.0	16.1	15.1	9.8	12.3	13.2	15.4	16.8	20.6	22.4

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.60 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
5-for-4 split 12/01
5-for-4 split 12/03
4-for-3 split 12/05
5-for-4 split 9/13
Options: Yes
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+70%)	16%
Low	30	(+25%)	9%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	2	0	3	2	0	2	1	0
to Sell	3	1	1	1	4	1	3	1	1

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	140	130	127
to Sell	149	145	133
Hld's(000)	83710	82758	81999

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-2.4	9.5
3 yr.	47.5	84.2
5 yr.	91.7	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
1.67	1.93	1.97	2.16	2.28	2.38	2.78	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	*4.55*	*4.90*	Revenues per sh	*5.60*
.49	.58	.61	.69	.76	.77	.87	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	*1.95*	*2.00*	"Cash Flow" per sh	*2.90*
.32	.33	.37	.41	.43	.46	.51	.57	.56	.57	.58	.62	.72	.83	.87	1.16	*1.20*	*1.30*	Earnings per sh A	*1.55*
.20	.22	.23	.24	.26	.28	.29	.32	.35	.38	.41	.44	.47	.50	.54	.58	*.63*	*.69*	Div'd Decl'd per sh B■	*.90*
.65	.72	.93	.87	.96	1.06	1.23	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	*1.85*	*1.95*	Cap'l Spending per sh	*1.95*
2.57	2.74	3.08	3.32	3.49	4.27	4.71	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	*8.85*	*9.05*	Book Value per sh	*11.00*
90.25	133.50	139.78	142.47	141.49	154.31	158.97	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	*174.00*	*171.00*	Common Shs Outst'g C	*170.00*
22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	*Bold figures are*		Avg Ann'l P/E Ratio	*21.5*
1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	*Value Line*		Relative P/E Ratio	*1.35*
2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	*estimates*		Avg Ann'l Div'd Yield	*2.6%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $1639.9 mill. **Due in 5 Yrs** $324.6 mill.
LT Debt $1481.4 mill. **LT Interest** $70.0 mill.
(Total interest coverage: 3.9x) (48% of Cap'l)

Pension Assets-12/13 $232.4 mill. **Oblig.** $281.2 mill.

Pfd Stock None
Common Stock 177,180,169 shares as of 7/25/14

MARKET CAP: $4.2 billion (Mid Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
442.0	496.8	533.5	602.5	627.0	670.5	726.1	712.0	757.8	768.6	*790*	*835*	Revenues ($mill)	*950*
80.0	91.2	92.0	95.0	97.9	104.4	124.0	144.8	153.1	205.0	*210*	*225*	Net Profit ($mill)	*265*
39.4%	38.4%	39.6%	38.9%	39.7%	39.4%	39.2%	32.9%	39.0%	10.0%	*30.0%*	*30.0%*	Income Tax Rate	*30.0%*
--	--	--	--	--	--	--	--	2.9%	1.1%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
50.0%	52.0%	51.6%	55.4%	54.1%	55.6%	56.6%	52.7%	52.7%	48.9%	*51.0%*	*51.0%*	Long-Term Debt Ratio	*52.0%*
50.0%	48.0%	48.4%	44.6%	45.9%	44.4%	43.4%	47.3%	47.3%	51.1%	*49.0%*	*49.0%*	Common Equity Ratio	*48.0%*
1497.3	1690.4	1904.4	2191.4	2306.6	2495.5	2706.2	2646.8	2929.7	3003.6	*3150*	*3325*	Total Capital ($mill)	*3950*
2069.8	2280.0	2506.0	2792.8	2997.4	3227.3	3469.3	3612.9	3936.2	4167.3	*4300*	*4400*	Net Plant ($mill)	*5000*
6.7%	6.9%	6.4%	5.9%	5.7%	5.6%	5.9%	6.9%	6.6%	8.0%	*8.5%*	*9.0%*	Return on Total Cap'l	*8.5%*
10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	*13.5%*	*14.5%*	Return on Shr. Equity	*14.0%*
10.7%	11.2%	10.0%	9.7%	9.3%	9.4%	10.6%	11.6%	11.0%	13.4%	*13.5%*	*14.5%*	Return on Com Equity	*14.0%*
4.6%	4.9%	3.7%	3.2%	2.8%	2.7%	3.7%	4.6%	4.3%	6.7%	*6.5%*	*7.0%*	Retained to Com Eq	*6.0%*
57%	56%	63%	67%	70%	72%	65%	60%	61%	50%	*53%*	*53%*	All Div'ds to Net Prof	*58%*

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	5.5	5.1	3.9
Receivables	92.9	95.4	100.5
Inventory (AvgCst)	11.8	11.4	12.3
Other	150.7	59.8	85.1
Current Assets	260.9	171.7	201.8
Accts Payable	55.5	65.8	38.1
Debt Due	125.4	123.0	158.5
Other	93.3	78.1	81.4
Current Liab.	274.2	266.9	278.0
Fix. Chg. Cov.	413%	388%	389%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	6.5%	4.0%	*4.5%*
"Cash Flow"	8.0%	8.0%	*10.0%*
Earnings	8.5%	11.0%	*8.5%*
Dividends	7.5%	7.0%	*9.0%*
Book Value	8.0%	6.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	163.6	178.3	197.3	172.7	712.0
2012	164.0	191.7	214.6	187.5	757.8
2013	180.0	195.7	204.3	188.6	768.6
2014	182.7	195.3	*210*	*202*	*790*
2015	*195*	*210*	*220*	*210*	*835*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.18	.22	.24	.19	.83
2012	.15	.24	.29	.19	.87
2013	.26	.30	.36	.24	1.16
2014	.24	.31	*.40*	*.25*	*1.20*
2015	*.27*	*.32*	*.40*	*.31*	*1.30*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.116	.116	.116	.124	.47
2011	.124	.124	.124	.132	.50
2012	.132	.132	.132	.14	.54
2013	.14	.14	.152	.152	.58
2014	.152	.152	.165		

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. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '13: residential, 60.3%; commercial, 15.8%; industrial & other, 23.9%. Officers and directors own .8% of the common stock; Vangurad Group, 6.6%; State Street Capital Corp., 6.3%; Blackrock, Inc, 6.1% (4/14 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America recently raised its quarterly payout a hefty 8.6%. As we expected, the company increased the dividend from $0.152 to $0.165, an above-average rate for a water utility. What's more, thanks to the company's strong cash generation, annual dividend increases should remain in the 8%-10% range through 2017-2019, despite the company's large construction program.

Tuck-in acquisitions will remain a key element in Aqua's expansion strategy. The company states that it has purchased 300 companies since it was founded. This year, eight small water systems have been purchased, and another 12 deals are likely to be completed by yearend. We wouldn't be surprised if the pace picked up in the years ahead as many municipally- owned water utilities don't have the funds required to upgrade their aging infrastructures. With its expertise and size, Aqua is able to integrate the new companies and squeeze more profits out of them.

The profit outlook is encouraging. Share earnings should improve only marginally this year, but that would be a relatively good showing considering that 2013 was an incredibly successful year. Moreover, the unusually wet weather in the second quarter held back demand, and Aqua's promising nonregulated business is posting losses due to, what we believe, is a temporary problem. Indeed, for 2015 through late decade, we expect earnings per share to increase about 8% annually.

The balance sheet is strong enough to handle the company's ambitious construction program. Aqua plans on spending $1 billion over the next three years to modernize its pipelines and facilities. Internally generated funds should cover a large portion of the expenditures, so the company's finances should remain in solid shape.

These shares have a lot to offer income-oriented investors. Compared to other water utilities, the current yield is slightly subpar. This is a small premium to pay, however, for Aqua's strong dividend growth prospects. In addition, the stock's total return potential is attractive considering its low Beta (.70), and high grades for Stock Price Stability (100) and Earnings Predictability (95).

James A. Flood *October 17, 2014*

(A) Diluted egs. Excl. nonrec. gains (losses): '99, (9¢); '00, 2¢; '01, 2¢; '02, 4¢; '03, 3¢; '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢. May not sum due to rounding. Next earnings report due early November.
(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).
(C) In millions, adjusted for stock splits.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	95

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ARTESIAN RES. CORP. NDQ--ARTNA

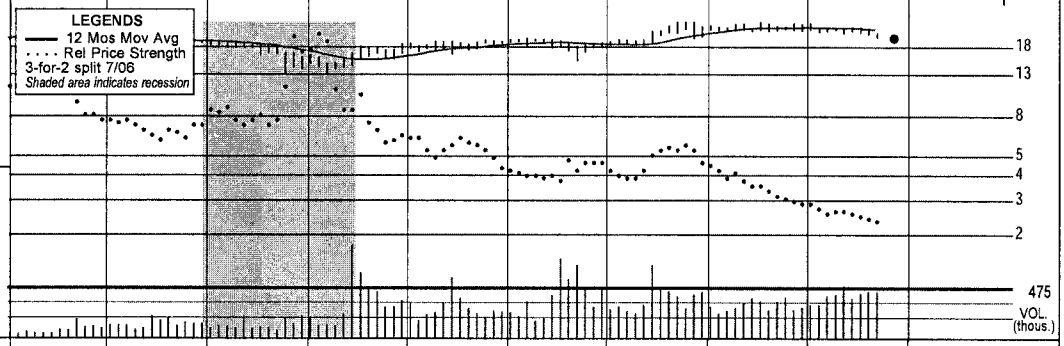
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	
19.93	21.9	1.14	4.3%	VALUE LINE

RANKS

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 3 Average
BETA .60 (1.00 = Market)

Financial Strength B
Price Stability 90
Price Growth Persistence 40
Earnings Predictability 85

High	22.33	20.67	19.31	18.73	19.59	19.99	24.43	24.27	23.82
Low	17.90	18.26	13.00	12.81	16.43	15.16	18.20	21.52	19.85



© VALUE LINE PUBLISHING LLC	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015/2016
SALES PER SH	7.77	7.20	7.59	8.11	8.48	7.56	8.10	7.82	--	
"CASH FLOW" PER SH	1.75	1.57	1.65	1.84	1.92	1.64	2.04	1.87	--	
EARNINGS PER SH	.97	.90	.86	.97	1.00	.83	1.13	.94	*1.05* A,B	*1.23* C/NA
DIV'DS DECL'D PER SH	.61	.66	.71	.72	.75	.76	.79	.82	--	
CAP'L SPENDING PER SH	5.08	3.66	6.09	2.32	2.57	1.83	2.36	2.40	--	
BOOK VALUE PER SH	10.15	11.66	11.86	12.15	12.44	13.12	13.57	13.80	--	
COMMON SHS OUTST'G (MILL)	6.09	7.30	7.40	7.51	7.65	8.61	8.71	8.83	--	
AVG ANN'L P/E RATIO	20.3	21.5	20.1	16.4	18.2	22.5	18.3	23.9	*19.0*	*16.2/NA*
RELATIVE P/E RATIO	1.10	1.14	1.21	1.09	1.16	1.41	1.17	1.34	--	
AVG ANN'L DIV'D YIELD	3.1%	3.4%	4.1%	4.5%	4.1%	4.1%	3.8%	3.7%	--	
SALES ($MILL)	47.3	52.5	56.2	60.9	64.9	65.1	70.6	69.1	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	45.6%	45.6%	45.1%	46.9%	46.5%	45.5%	48.7%	47.0%	--	
DEPRECIATION ($MILL)	4.6	5.2	5.8	6.6	7.0	7.4	7.9	8.3	--	
NET PROFIT ($MILL)	6.1	6.3	6.4	7.3	7.6	6.7	9.8	8.3	--	
INCOME TAX RATE	39.0%	39.8%	40.8%	40.1%	40.0%	40.8%	40.2%	40.2%	--	
NET PROFIT MARGIN	12.8%	11.9%	11.4%	11.9%	11.7%	10.4%	14.0%	12.0%	--	
WORKING CAP'L ($MILL)	d8.8	2.5	d20.9	d23.3	d27.9	d11.4	d11.4	d12.3	--	
LONG-TERM DEBT ($MILL)	92.1	91.8	107.6	106.0	105.1	106.5	106.3	105.5	--	
SHR. EQUITY ($MILL)	61.8	85.1	87.8	91.2	95.1	113.0	118.2	121.8	--	
RETURN ON TOTAL CAP'L	5.8%	5.3%	4.7%	5.2%	5.6%	4.6%	5.9%	5.1%	--	
RETURN ON SHR. EQUITY	9.8%	7.4%	7.3%	8.0%	8.0%	6.0%	8.3%	6.8%	--	
RETAINED TO COM EQ	3.8%	2.1%	1.4%	2.1%	2.0%	.5%	2.5%	.9%	--	
ALL DIV'DS TO NET PROF	61%	71%	81%	74%	75%	92%	70%	87%	--	

A No. of analysts changing earn. est. in last 3 days: 0 up, 0 down, consensus 5-year earnings growth not available. B Based upon 4 analysts' estimates. C Based upon 3 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	1.0%	-3.5%
"Cash Flow"	2.5%	-8.0%
Earnings	1.0%	-17.0%
Dividends	3.5%	4.0%
Book Value	4.0%	1.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/12	16.7	17.9	19.0	17.0	70.6
12/31/13	16.3	17.8	18.1	16.9	69.1
12/31/14	16.9	17.9			
12/31/15					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/11	.14	.23	.26	.20	.83
12/31/12	.28	.32	.33	.20	1.13
12/31/13	.20	.28	.29	.17	.94
12/31/14	.23	.22	*.34*	*.23*	
12/31/15	*.26*				

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2011	.19	.19	.19	.193	.76
2012	.193	.198	.198	.203	.79
2013	.203	.206	.206	.209	.82
2014	.209	.212	.212		

INSTITUTIONAL DECISIONS

	4Q'13	1Q'14	2Q'14
to Buy	17	28	36
to Sell	34	25	20
Hld's(000)	2952	3092	3132

ASSETS ($mill.)	2012	2013	6/30/14
Cash Assets	.6	.4	.4
Receivables	8.7	8.1	8.4
Inventory	1.4	1.5	1.7
Other	2.8	3.3	1.9
Current Assets	13.5	13.3	12.4
Property, Plant & Equip, at cost	454.4	472.9	--
Accum Depreciation	83.8	89.8	--
Net Property	370.6	383.1	387.9
Other	7.6	7.4	7.6
Total Assets	391.7	403.8	407.9
LIABILITIES ($mill.)			
Accts Payable	3.5	4.1	3.3
Debt Due	12.6	12.2	12.7
Other	8.8	9.3	9.9
Current Liab	24.9	25.6	25.9

LONG-TERM DEBT AND EQUITY as of 6/30/14

Total Debt $118.1 mill. Due in 5 Yrs. NA
LT Debt $105.5 mill.
Including Cap. Leases NA
(46% of Cap'l)
Leases, Uncapitalized Annual rentals NA

Pension Liability $.3 mill. in '13 vs. $.4 mill. in '12

Pfd Stock None Pfd Div'd Paid None

Common Stock 8,891,643 shares
(54% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Artesian Resources Corporation, through its eight wholly owned subsidiaries, provides water, wastewater, and other services on the Delmarva Peninsula. It distributes and sells water to residential, commercial, industrial, municipal, and utility customers in Delaware, Maryland, and Pennsylvania. Artesian Water Company, Inc., or Artesian Water, the company's principal subsidiary, is the oldest and largest public water utility in Delaware and has been providing water service within the state since 1905. Artesian Resources offers water for public and private fire protection to customers in its service territories. In addition, it provides contract water and wastewater services, water and sewer service line protection plans, and wastewater management services, as well as design, construction, and engineering services. As of June 30, 2014, the company served approximately 80,200 metered water customers. Has 237 employees. Chairman, C.E.O. & President: Dian C. Taylor. Address: 664 Churchmans Rd., Newark, DE 19702. Tel.: (302) 453-6900. Internet: http://www.artesianwater.com.

J.V.

October 17, 2014

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 9/30/2014

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-9.52%	-8.55%	-5.93%	29.00%	45.87%

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CALIFORNIA WATER NYSE-CWT

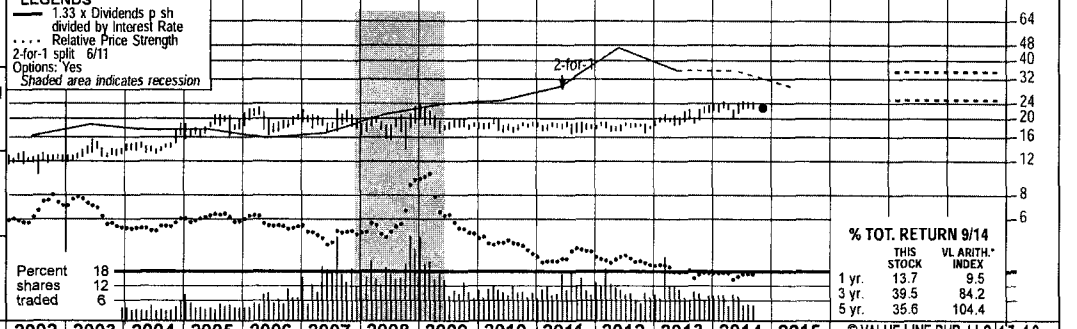
RECENT PRICE 22.74 | P/E RATIO 19.1 (Trailing: 23.2 Median: 20.0) | RELATIVE P/E RATIO 1.10 | DIV'D YLD 2.9% | VALUE LINE

TIMELINESS 3 Raised 6/20/14
SAFETY 3 Lowered 7/27/07
TECHNICAL 3 Lowered 10/3/14
BETA .70 (1.00 = Market)

High:	15.7	19.0	21.1	22.9	22.7	23.3	24.1	19.8	19.4	19.3	23.4	24.8	
Low:	11.8	13.0	15.6	16.4	17.1	13.8	16.7	16.9	16.7	16.8	18.4	20.3	

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.33 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 6/11
Options: Yes
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+55%)	14%
Low	25	(+10%)	5%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	1	0	0	0	0
to Sell	0	0	0	0	0	0	1	0	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	74	64	57
to Sell	52	58	56
Hld's(000)	27908	29389	30279

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	13.7	9.5
3 yr.	39.5	84.2
5 yr.	35.6	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
7.38	7.98	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	12.60	13.25	Revenues per sh	16.50
1.30	1.37	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	2.20	2.40	"Cash Flow" per sh	3.00
.73	.77	.66	.47	.63	.61	.73	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.05	1.20	Earnings per sh A	1.50
.54	.54	.55	.56	.56	.56	.57	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.68	Div'd Decl'd per sh B ■	.94
1.37	1.72	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	2.65	3.35	Cap'l Spending per sh	3.20
6.69	6.71	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	12.90	13.30	Book Value per sh C	15.10
25.24	25.87	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	48.00	48.00	Common Shs Outst'g D	50.00
17.8	17.8	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	Bold figures are		Avg Ann'l P/E Ratio	20.0
.93	1.01	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	Value Line		Relative P/E Ratio	1.25
4.2%	4.0%	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%	estimates		Avg Ann'l Div'd Yield	3.1%

CAPITAL STRUCTURE as of 6/30/14
Total Debt $511.1 mill. **Due in 5 Yrs** $89.3 mill.
LT Debt $423.3 mill. **LT Interest** $28.0 mill.
(LT interest earned: 3.4x; total int. cov.: 3.2x)
(42% of Cap'l)
Pension Assets-12/13 $266.2 mill.
Oblig. $383.2 mill.
Pfd Stock None
Common Stock 47,803,849 shs.
as of 7/25/14
MARKET CAP: $1.1 billion (Mid Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
315.6	320.7	334.7	367.1	410.3	449.4	460.4	501.8	560.0	584.1	605	635	Revenues ($mill) E	825
26.0	27.2	25.6	31.2	39.8	40.6	37.7	36.1	42.6	47.3	48.0	58.0	Net Profit ($mill)	75.0
39.6%	42.4%	37.4%	39.9%	37.7%	40.3%	39.5%	40.5%	37.5%	30.3%	34.5%	38.0%	Income Tax Rate	39.0%
3.2%	3.3%	10.6%	8.3%	8.6%	7.6%	4.2%	7.6%	8.0%	4.3%	7.0%	8.5%	AFUDC % to Net Profit	7.0%
48.6%	48.3%	43.5%	42.9%	41.6%	47.1%	52.4%	51.7%	47.8%	41.6%	43.0%	45.5%	Long-Term Debt Ratio	49.0%
50.8%	51.1%	55.9%	56.6%	58.4%	52.9%	47.6%	48.3%	52.2%	58.4%	57.0%	54.5%	Common Equity Ratio	51.0%
565.9	568.1	670.1	674.9	690.4	794.9	914.7	931.5	908.2	1024.9	1030	1185	Total Capital ($mill)	1435
800.3	862.7	941.5	1010.2	1112.4	1198.1	1294.3	1381.1	1457.1	1515.8	1570	1600	Net Plant ($mill)	1850
6.1%	6.3%	5.2%	5.9%	7.1%	6.5%	5.5%	5.5%	6.3%	6.0%	6.0%	7.5%	Return on Total Cap'l	6.5%
8.9%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	8.0%	9.0%	Return on Shr. Equity	10.0%
9.0%	9.3%	6.8%	8.1%	9.9%	9.6%	8.6%	8.0%	9.0%	7.9%	8.0%	9.0%	Return on Com Equity	10.0%
2.1%	2.1%	1.0%	1.8%	3.8%	3.8%	3.0%	2.3%	3.4%	3.4%	3.0%	5.0%	Retained to Com Eq	4.0%
77%	78%	86%	77%	61%	60%	66%	71%	62%	56%	65%	57%	All Div'ds to Net Prof	63%

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	38.8	27.5	29.7
Other	107.8	112.0	121.1
Current Assets	146.6	139.5	150.8
Accts Payable	46.8	55.1	70.9
Debt Due	136.3	54.7	87.8
Other	59.7	56.8	63.4
Current Liab.	242.8	166.6	222.1
Fix. Chg. Cov.	296%	301%	299%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.0%	7.0%	4.5%
"Cash Flow"	6.0%	6.5%	5.5%
Earnings	5.5%	4.0%	7.5%
Dividends	1.0%	1.5%	7.0%
Book Value	5.5%	4.5%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	98.1	131.4	169.3	103.0	501.8
2012	116.8	143.6	178.1	121.5	560.0
2013	111.4	154.6	184.4	133.7	584.1
2014	110.5	158.4	195	141.1	605
2015	125	160	200	150	635

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2011	.03	.29	.50	.04	.86
2012	.03	.31	.56	.12	1.02
2013	.01	.28	.61	.12	1.02
2014	d.11	.36	.64	.16	1.05
2015	.03	.32	.68	.17	1.20

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.149	.149	.149	.149	.60
2011	.154	.154	.154	.154	.62
2012	.1575	.1575	.1575	.1575	.63
2013	.16	.16	.16	.16	.64
2014	.1625	.1625	.1625		

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 471,900 customers in 83 communities in California, 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, '13: residential, 70%; business, 19%; public authorities, 5%; industrial, 5%; other 1%. '13 reported depreciation rate: 3.8%. Has 1,131 employees. President, Chairman, and Chief Executive Officer: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

A final ruling has been made on California Water Service Group's rate case. After a 25-month process, the California Public Utility Commission (CPUC) issued a decision in mid-August. The utility was allowed to raise rates by $45 million this year, and an additional $10 million in both 2015 and 2016.

We believe that this is good news for the company. Although the decision was anticipated, regulatory rulings always carry risks until they are completely finalized. This is especially true in states that have not always been reasonable with utilities seeking higher rates. Also, since petitions to increase tariffs are only filed every three years in California, a harsh ruling can have a negative impact on a utility for quite some time.

We are increasing our earnings estimates. The rate hikes will start to benefit the company in the fourth quarter, enabling California Water to top last year's earnings per share by a few cents. And, with these rates in effect for all of 2015, we look for earnings to rise a strong 14%, to $1.20.

How is the ongoing drought affecting California Water? In the short term, the impact appears to be minimal. Management is optimistic that the combination of the utility's own wells along with a dependable supplier of bulk water, should result in the service area's needs being met. The CPUC's recent decision also augurs well for future regulation. So, should the price of purchased water increase, California Water will probably be allowed to pass the higher costs along to its ratepayers.

Dividend growth prospects are much improved. Over the past five- and 10-year period, the company's average annual payout has been a paltry 1.0% and 1.5%, respectively, well below the industry norms. Through 2017-2019, this trend should change as we expect the annual dividend increase to average 7%, a higher rate than most of its peers. Part of our forecast is based on the assumption that the regulatory climate will remain constructive as the utility's next rate case should be decided before 2018.

These neutrally ranked shares have modestly above-average, long-term total return potential for a water utility.

James A. Flood *October 17, 2014*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (4¢); '01, 2¢; '02, 4¢; '11, 4¢. Next earnings report due mid-November. (B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available. (C) Incl. intangible assets. In '13: $18.2 mill., $0.38/sh. (D) In millions, adjusted for splits. (E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	90

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CONNECTICUT WATER NDQ-CTWS

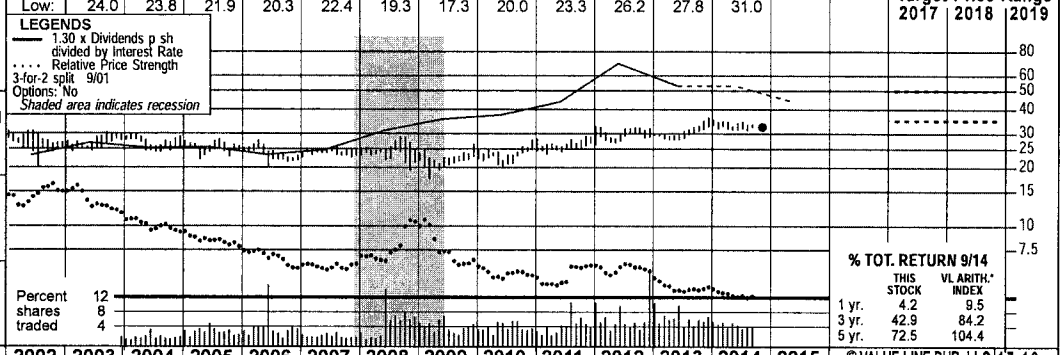
RECENT PRICE 32.43 | P/E RATIO 16.8 (Trailing: 16.5 Median: 22.0) | RELATIVE P/E RATIO 0.97 | DIV'D YLD 3.2% | VALUE LINE

TIMELINESS 2 Raised 12/13/13
SAFETY 3 New 1/18/13
TECHNICAL 3 Raised 8/22/14
BETA .65 (1.00 = Market)

High:	30.4	29.8	28.2	27.7	25.6	29.0	26.4	27.9	29.1	32.8	36.4	35.5
Low:	24.0	23.8	21.9	20.3	22.4	19.3	17.3	20.0	23.3	26.2	27.8	31.0

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.30 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 9/01
Options: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+55%)	14%
Low	35	(+10%)	6%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	0	0	0	0	0	0	0
Options	2	0	0	0	0	0	0	0	0
to Sell	2	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	41	44	40
to Sell	35	27	32
Hld's(000)	4350	4324	4304

Percent shares traded 12 8 4

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	4.2	9.5
3 yr.	42.9	84.2
5 yr.	72.5	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.58	5.87	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*	*8.70*	Revenues per sh	*12.10*
1.59	1.65	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	*2.85*	*2.85*	"Cash Flow" per sh	*3.25*
1.02	1.03	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	*1.85*	*1.95*	Earnings per sh A	*2.10*
.78	.79	.79	.80	.81	.83	.84	.85	.86	.87	.88	.90	.92	.94	.96	.98	*1.01*	*1.05*	Div'd Decl'd per sh B■	*1.20*
1.12	1.42	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	*2.95*	*2.80*	Cap'l Spending per sh	*2.75*
8.52	8.61	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	*18.15*	*19.50*	Book Value per sh D	*21.25*
6.80	7.26	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	*11.25*	*11.50*	Common Shs Outst'g C	*12.00*
15.5	18.2	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	*Bold figures are*		Avg Ann'l P/E Ratio	*20.0*
.81	1.04	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	*Value Line*		Relative P/E Ratio	*1.25*
4.9%	4.2%	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%	*estimates*		Avg Ann'l Div'd Yield	*2.8%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $178.1 mill. **Due in 5 Yrs** $18.6 mill.
LT Debt $173.9 mill. **LT Interest** $7.0 mill.
(Total interest coverage: 4.4x)
(47% of Cap'l)
Leases, Uncapitalized: Annual rentals $.1 mill.
Pension Assets $56.8 mill.
Oblig. $64.2 mill.
Pfd Stock $0.8 mill. **Pfd Divd** NMF
Common Stock 11,099,574 shs.
as of 7/31/14
MARKET CAP: $350 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
48.5	47.5	46.9	59.0	61.3	59.4	66.4	69.4	83.8	91.5	*95.0*	*100*	Revenues ($mill)	*145*
9.4	7.2	6.7	8.8	9.4	10.2	9.8	9.9	13.6	18.3	*20.5*	*22.0*	Net Profit ($mill)	*25.0*
22.9%	--	23.5%	32.4%	27.2%	19.5%	35.2%	41.3%	32.0%	28.0%	*18.0%*	*20.0%*	Income Tax Rate	*30.0%*
--	--	--	--	1.7%	--	--	--	1.7%	2.0%	*2.5%*	*2.0%*	AFUDC % to Net Profit	*2.5%*
42.8%	44.9%	44.4%	47.8%	46.9%	50.6%	49.5%	53.2%	49.0%	46.9%	*47.5%*	*43.5%*	Long-Term Debt Ratio	*48.5%*
56.7%	54.6%	55.1%	51.8%	52.7%	49.1%	50.2%	46.5%	50.8%	52.9%	*52.5%*	*56.5%*	Common Equity Ratio	*51.5%*
155.1	172.3	174.1	193.2	196.5	221.3	225.6	254.2	364.6	373.6	*400*	*430*	Total Capital ($mill)	*495*
246.1	247.7	268.1	284.3	302.3	325.2	344.2	362.4	447.9	471.9	*490*	*505*	Net Plant ($mill)	*575*
7.0%	5.0%	4.9%	5.5%	5.9%	5.5%	5.4%	4.9%	4.8%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
10.6%	7.5%	6.9%	8.7%	9.0%	9.3%	8.6%	8.3%	7.3%	9.2%	*9.5%*	*10.0%*	Return on Shr. Equity	*10.0%*
10.6%	7.6%	7.0%	8.7%	9.1%	9.4%	8.7%	8.3%	7.3%	9.2%	*9.5%*	*10.0%*	Return on Com Equity	*10.0%*
3.1%	.3%	NMF	1.6%	1.9%	2.3%	1.6%	1.4%	2.8%	3.8%	*4.5%*	*4.5%*	Retained to Com Eq	*4.0%*
71%	95%	105%	82%	79%	76%	81%	83%	62%	59%	*55%*	*54%*	All Div'ds to Net Prof	*57%*

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	13.2	18.4	10.6
Accounts Receivable	11.5	12.3	12.1
Other	11.7	16.2	19.5
Current Assets	36.4	46.9	42.2
Accts Payable	10.0	10.8	9.2
Debt Due	3.0	4.1	4.2
Other	2.9	7.8	9.5
Current Liab.	15.9	22.7	22.9
Fix. Chg. Cov.	408%	375%	375%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.0%	5.0%	*6.0%*
"Cash Flow"	3.0%	6.5%	*5.0%*
Earnings	2.5%	8.0%	*6.5%*
Dividends	1.5%	2.0%	*4.0%*
Book Value	6.0%	8.0%	*3.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	16.0	17.4	20.6	15.4	69.4
2012	18.5	21.3	24.5	19.5	83.8
2013	19.7	22.6	27.6	21.6	91.5
2014	20.3	27.3	*25.4*	*22.0*	*95.0*
2015	*22.0*	*25.0*	*30.0*	*23.0*	*100*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.26	.37	.39	.11	1.13
2012	.22	.47	.67	.17	1.53
2013	.24	.39	.86	.17	1.66
2014	.27	.67	*.70*	*.21*	*1.85*
2015	*.35*	*.55*	*.80*	*.25*	*1.95*

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.228	.228	.233	.233	.922
2011	.233	.233	.238	.238	.942
2012	.238	.238	.2425	.2425	.962
2013	.2425	.2425	.2475	.2475	.98
2014	.2475	.2475	.2575		

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). Its largest subsidiary, Connecticut Water, accounted for about 85% of the holding company's net income in 2012, and provides water services to 400,000 people in 55 towns throughout Connecticut and Maine. Acquired The Maine Water Co., 1/12; Biddeford and Saco Water, 12/12. Inc.: CT. Has about 260 employees. Chairman/President/CEO: Eric W. Thornburg. Officers and directors own 2.4% of the common stock; BlackRock, Inc. 7.3%; The Vanguard Group, 3.8% (4/14 proxy). Address: 93 West Main Street, Clinton, CT 06413. Telephone: (860) 669-8636. Internet: www.ctwater.com.

Connecticut Water Service's dividend policy has recently become more generous. In August, the utility increased the quarterly payout by $0.04 a share on an annual basis, or 4.0%. For the previous five years, the annual increase had only been $0.02, or about 2%.

Earnings prospects through 2015 are encouraging. Last year, Connecticut Water allowed the proceeds of a tax refund to flow through to its ratepayers. In exchange for doing so, the Connecticut Public Regulatory Authority (CPRA) allowed the utility to keep the benefits accrued from this source in 2014 and beyond. Thus far, the situation appears to be a win-win, as ratepayers' bills have declined, while the utility's profits have gone up. Indeed, we have raised our estimates for the company's share earnings by $0.10 for both this year and next, to $1.85 and $1.95, respectively.

Connecticut Water is trying to increase its rate base. Utilities make money by earning a return on their assets. By enlarging the customer base, the company hopes to see revenues and profits rise. Currently, its pipeline system is being expanded to include the town of Mansfield, and Storrs, the home of the University of Connecticut's main campus, which is the size of a small city.

Consolidation of operations should lower costs. Roughly 20% of the utility's revenues come from the state of Maine. Connecticut is merging Biddleford and Saco, which was acquired in early 2012, into its other utility in the state. This should reduce many redundant administrative costs.

The regulatory climate in Connecticut appears to be improving. *Value Line* currently rates the CPRA as Below Average, compared to the regulatory bodies in other states. However, the recent rulings with the water utility have been very reasonable. This augurs well for Connecticut Water in the long term.

These shares continue to be ranked to outperform the market averages in the year ahead. However, even though we have raised our earnings and dividend projections for the company through 2017-2019, the equity's total return potential is only about average for a water utility.

James A. Flood *October 17, 2014*

(A) Diluted earnings. Next earnings report due late October. Quarterly earnings do no add in '12 due to rounding.
(B) Dividends historically paid in mid-March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. In '13: $31.7 million/$2.87 a share.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	50
Earnings Predictability	85

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MIDDLESEX WATER NDQ-MSEX

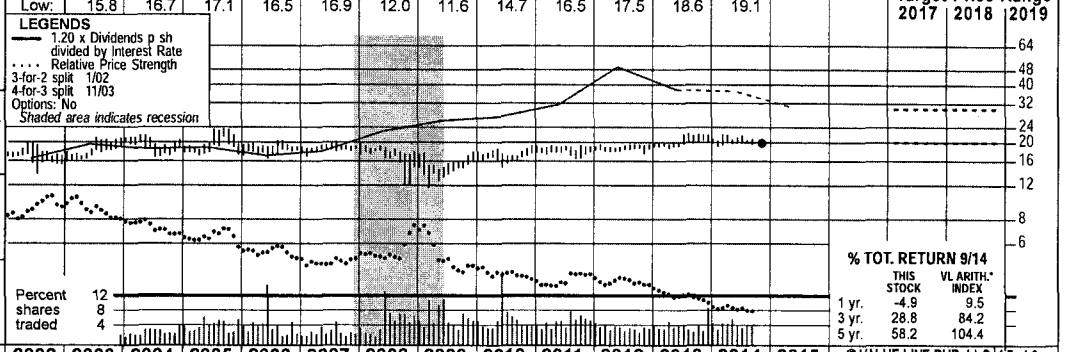
RECENT PRICE 19.91 | P/E RATIO 18.1 (Trailing: 19.1 Median: 21.0) | RELATIVE P/E RATIO 1.05 | DIV'D YLD 3.9% | VALUE LINE

TIMELINESS 3 Lowered 4/11/14
SAFETY 2 New 10/21/11
TECHNICAL 3 Lowered 9/26/14
BETA .70 (1.00 = Market)

High:	21.2	21.8	23.5	20.5	20.2	19.8	17.9	19.3	19.4	19.6	22.5	22.1
Low:	15.8	16.7	17.1	16.5	16.9	12.0	11.6	14.7	16.5	17.5	18.6	19.1

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.20 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 1/02
4-for-3 split 11/03
Options: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+50%)	14%
Low	20	(Nil)	4%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	1	0	0	0	0	2	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	2	0	0	0	0	1	0	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	43	37	41
to Sell	32	34	34
Hld's(000)	6384	6432	6463

Percent shares traded 12 8 4

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-4.9	9.5
3 yr.	28.8	84.2
5 yr.	58.2	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
4.39	5.35	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	*7.45*	*8.00*	Revenues per sh	*9.10*
1.02	1.19	.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	*1.85*	*1.90*	"Cash Flow" per sh	*2.25*
.71	.76	.51	.66	.73	.61	.73	.71	.82	.87	.89	.72	.96	.84	.90	1.03	*1.10*	*1.15*	Earnings per sh A	*1.25*
.58	.60	.61	.62	.63	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	*.76*	*.77*	Div'd Decl'd per sh B■	*.83*
2.68	2.33	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	*1.25*	*2.00*	Cap'l Spending per sh	*2.00*
6.80	6.95	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	*12.10*	*12.30*	Book Value per sh D	*13.25*
9.82	10.00	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	*16.10*	*16.25*	Common Shs Outst'g C	*17.00*
15.2	17.6	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	*Bold figures are*		Avg Ann'l P/E Ratio	*21.0*
.79	1.00	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	*Value Line*		Relative P/E Ratio	*1.30*
5.4%	4.4%	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%	*estimates*		Avg Ann'l Div'd Yield	*3.3%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $165.7 mill. **Due in 5 Yrs** $56.4 mill.
LT Debt $132.2 mill. **LT Interest** $4.2 mill.
(LT interest earned: 6.0x)
(40% of Cap'l)

Pension Assets-12/13 $46.4 mill.
Oblig. $56.0 mill.
Pfd Stock $2.4 mill. **Pfd Div'd:** $.1 mill.

Common Stock 16,056,825 shs.
as of 7/31/14

MARKET CAP: $325 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
71.0	74.6	81.1	86.1	91.0	91.2	102.7	102.1	110.4	114.8	*120*	*130*	Revenues ($mill)	*155*
8.4	8.5	10.0	11.8	12.2	10.0	14.3	13.4	14.4	16.6	*17.5*	*18.5*	Net Profit ($mill)	*21.0*
31.1%	27.6%	33.4%	32.6%	33.2%	34.1%	32.1%	32.7%	33.9%	34.1%	*35.5%*	*35.0%*	Income Tax Rate	*35.0%*
--	--	--	--	--	--	6.8%	6.1%	3.4%	1.9%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*2.5%*
53.8%	55.3%	49.5%	49.0%	45.6%	46.6%	43.1%	42.3%	41.5%	40.4%	*40.5%*	*42.5%*	Long-Term Debt Ratio	*43.5%*
42.5%	41.3%	47.5%	49.6%	51.8%	52.1%	55.8%	56.6%	57.4%	58.7%	*59.0%*	*57.0%*	Common Equity Ratio	*56.0%*
214.5	231.7	264.0	268.8	259.4	267.9	310.5	312.5	316.5	321.4	*335*	*350*	Total Capital ($mill)	*400*
262.9	288.0	317.1	333.9	366.3	376.5	405.9	422.2	435.2	446.5	*460*	*470*	Net Plant ($mill)	*500*
5.1%	5.0%	5.1%	5.6%	5.8%	5.0%	5.7%	5.2%	5.4%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.5%*
8.5%	8.2%	7.5%	8.6%	8.6%	7.0%	8.1%	7.5%	7.8%	8.7%	*9.0%*	*9.5%*	Return on Shr. Equity	*9.5%*
9.0%	8.6%	7.8%	8.7%	8.9%	7.0%	8.2%	7.5%	7.8%	8.7%	*9.0%*	*9.5%*	Return on Com Equity	*9.5%*
.9%	.6%	1.3%	1.8%	2.0%	.1%	2.1%	1.0%	1.4%	2.4%	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*
90%	94%	84%	79%	78%	98%	75%	87%	83%	73%	*69%*	*67%*	All Div'ds to Net Prof	*66%*

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	3.0	4.8	5.1
Other	21.6	21.0	23.5
Current Assets	24.6	25.8	28.6
Accts Payable	3.8	6.3	6.7
Debt Due	11.1	33.8	33.5
Other	41.1	12.6	14.3
Current Liab.	56.0	52.7	54.5
Fix. Chg. Cov.	554%	697%	695%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	1.5%	1.0%	*4.5%*
"Cash Flow"	3.0%	1.5%	*6.0%*
Earnings	3.5%	1.5%	*5.0%*
Dividends	1.5%	1.5%	*2.0%*
Book Value	4.5%	3.0%	*2.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	24.0	26.1	28.7	23.3	102.1
2012	23.5	27.4	32.4	27.1	110.4
2013	27.0	29.1	31.3	27.4	114.8
2014	27.1	29.2	*33.0*	*30.7*	*120*
2015	*30.0*	*32.0*	*36.0*	*32.0*	*130*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.11	.23	.32	.12	.84
2012	.11	.23	.38	.17	.90
2013	.20	.28	.36	.19	1.03
2014	.20	.29	*.40*	*.21*	*1.10*
2015	*.20*	*.32*	*.43*	*.20*	*1.15*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.180	.180	.180	.183	.72
2011	.183	.183	.183	.185	.73
2012	.185	.185	.185	.1875	.74
2013	.1875	.1875	.1875	.19	.75
2014	.19	.19	.19		

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 2013, the Middlesex System accounted for 60% of operating revenues. At 12/31/13, the company had 279 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 3.3% of the common stock; BlackRock, 7.4%; Vanguard 3.3%. (4/14 proxy). Add.: 1500 Ronson Road, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: www.middlesexwater.com.

Middlesex Water's stock price has been weak of late. Since our last report three months ago, the shares have declined 7% in value, while the market averages have remained flat.

Will Middlesex's 10-year streak remain intact? Every year since 2004, the utility has raised its annual payout by $0.01 a share. This average rate of 1.5% is very low when compared to the yearly payout hikes made by others in the industry. Probably sometime during the week of November 10th, the company will announce the new dividend for the year ahead. We are being conservative and estimating that the payout will only be raised another $0.0025 a quarter, to $0.1925, or an annualized rate of $0.01. A larger dividend increase would not shock us, though, as Middlesex's percentage of dividends to net profit has dropped to the low 70s, providing it with some flexibility.

Earnings growth is decent. Last year, the bottom line experienced a solid improvement as earnings per share rose over 14%. In 2014, the implementation of rate relief in Delaware is helping to offset the loss of a major customer, the borough of Sayreville. Still, we are expecting the increase in share net to decline to a still fairly healthy 7% level. Next year, we are looking for a more modest increase of 5%, which will be more representative of the company's future earnings potential.

Middlesex is getting more involved in nonregulated markets. The utility recently took over the water operations at Dover Air Force Base in Delaware. More and more, U.S. military posts are looking to privatize these systems. Competition in this sector is strong as there are other utilities that are better capitalized and have greater expertise in this field. Predicting whether this is a one-time occurrence or the company can increase its presence here is difficult.

Middlesex has the highest yield of any stock in *Value Line's* water utility industry. Investors should not be overly impressed by this, however. That's because the equity's dividend growth and total return potential through 2017-2019 are subpar compared to those of its peers. Indeed, the yield on the equity is not high enough to compensate for this, in our opinion.

James A. Flood *October 17, 2014*

(A) Diluted earnings. May not sum due to rounding. Next earnings report due mid-November.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	40
Earnings Predictability	80

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SJW CORP. NYSE-SJW

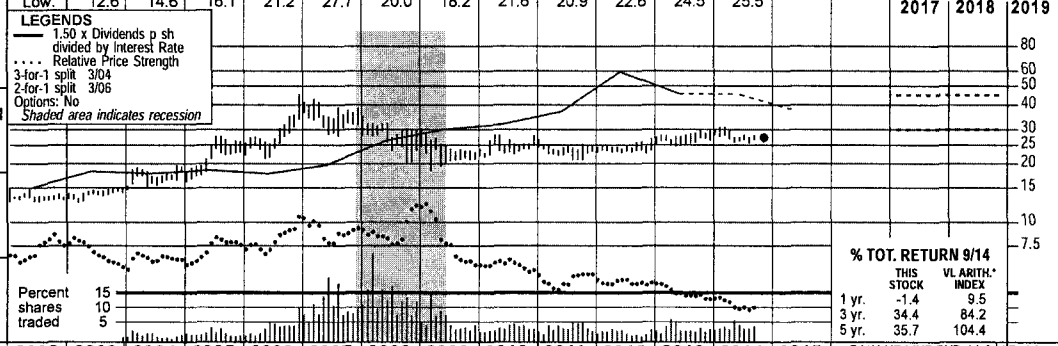
RECENT PRICE 27.23 | P/E RATIO 20.8 (Trailing: 25.9 Median: 24.0) | RELATIVE P/E RATIO 1.20 | DIV'D YLD 2.9% | VALUE LINE

TIMELINESS 3 Raised 6/20/14
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 10/10/14
BETA .85 (1.00 = Market)

High:	15.0	19.6	27.8	45.3	43.0	35.1	30.4	28.2	26.8	26.9	30.1	30.9
Low:	12.6	14.6	16.1	21.2	27.7	20.0	18.2	21.6	20.9	22.6	24.5	25.5

Target Price Range 2017 | 2018 | 2019

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: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+65%)	16%
Low	30	(+10%)	6%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	1	0	0	0	0	0	1	1	0
Options	1	1	0	0	0	0	0	0	0
to Sell	1	1	0	0	0	0	0	0	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	43	32	45
to Sell	30	39	40
Hld's(000)	10770	10980	10965

Percent shares traded 15 10 5

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-1.4	9.5
3 yr.	34.4	84.2
5 yr.	35.7	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
5.58	6.40	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	14.05	14.55	Revenues per sh	16.95
1.26	1.43	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	3.10	3.25	"Cash Flow" per sh	3.80
.76	.87	.58	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	1.25	1.40	Earnings per sh A	1.70
.39	.40	.41	.43	.46	.49	.51	.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.79	Div'd Decl'd per sh B■	1.00
1.81	1.77	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	5.00	5.00	Cap'l Spending per sh	5.00
7.53	7.88	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	16.65	17.75	Book Value per sh	20.65
19.01	18.27	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	21.00	22.00	Common Shs Outst'g C	23.00
13.1	15.5	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	Bold figures are		Avg Ann'l P/E Ratio	22.0
.68	.88	2.15	.95	.94	.88	1.04	1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.36	Value Line		Relative P/E Ratio	1.40
3.9%	3.0%	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%	estimates		Avg Ann'l Div'd Yield	2.7%

CAPITAL STRUCTURE as of 6/30/14
Total Debt $387.3 mill. Due in 5 Yrs $21.2 mill.
LT Debt $334.7 mill. LT Interest $18.1 mill.
(Total interest coverage: 2.9x) (51% of Cap'l)

Leases, Uncapitalized: Annual rentals $5.5 mill.

Pension Assets $91.4 mill. **Oblig.** $128.7 mill.

Pfd Stock None.

Common Stock 20,218,534 shs. as of 7/25/14

MARKET CAP: $550 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
166.9	180.1	189.2	206.6	220.3	216.1	215.6	239.0	261.5	276.9	295	320	Revenues ($mill)	390
16.0	20.7	22.2	19.3	20.2	15.2	15.8	20.9	22.3	23.5	26.0	31.0	Net Profit ($mill)	39.0
42.1%	41.6%	40.8%	39.4%	39.5%	40.4%	38.8%	41.1%	41.1%	38.7%	33.0%	39.0%	Income Tax Rate	38.0%
2.1%	1.6%	2.1%	2.7%	2.3%	2.0%	--	--	2.0%	--	1.0%	1.5%	AFUDC % to Net Profit	2.5%
43.7%	42.6%	41.8%	47.7%	46.0%	49.4%	53.7%	56.6%	55.0%	51.1%	50.5%	51.0%	Long-Term Debt Ratio	53.5%
56.3%	57.4%	58.2%	52.3%	54.0%	50.6%	46.3%	43.4%	45.0%	48.9%	49.5%	49.0%	Common Equity Ratio	46.5%
328.3	341.2	391.8	453.2	470.9	499.6	550.7	607.9	610.2	656.2	710	800	Total Capital ($mill)	1020
456.8	484.8	541.7	645.5	684.2	718.5	785.5	756.2	831.6	898.7	970	1010	Net Plant ($mill)	1200
6.5%	7.6%	7.0%	5.7%	5.8%	4.4%	4.3%	4.9%	5.0%	5.0%	4.5%	4.5%	Return on Total Cap'l	5.5%
8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	7.5%	8.0%	Return on Shr. Equity	8.0%
8.7%	10.6%	9.7%	8.2%	8.0%	6.0%	6.2%	7.9%	8.1%	7.3%	7.5%	8.0%	Return on Com Equity	8.0%
3.6%	5.6%	5.2%	3.5%	3.3%	1.2%	1.2%	3.1%	3.3%	2.8%	3.0%	3.5%	Retained to Com Eq	3.5%
58%	47%	46%	57%	59%	80%	80%	61%	59%	62%	60%	56%	All Div'ds to Net Prof	59%

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	2.5	2.3	6.0
Other	40.4	37.4	41.0
Current Assets	42.9	39.7	47.0
Accts Payable	8.5	12.6	12.6
Debt Due	20.7	23.0	52.6
Other	19.9	23.6	26.9
Current Liab.	49.1	59.2	92.1
Fix. Chg. Cov.	317%	268%	270%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	5.5%	4.0%	4.0%
"Cash Flow"	6.0%	4.0%	4.5%
Earnings	3.5%	.5%	7.0%
Dividends	4.5%	3.5%	5.0%
Book Value	5.5%	2.5%	5.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	43.7	59.0	73.9	62.4	239.0
2012	51.1	65.6	82.4	62.4	261.5
2013	50.1	74.2	85.2	67.4	276.9
2014	54.6	70.4	95.0	75.0	295
2015	60.0	80.0	100	80.0	320

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.03	.29	.44	.35	1.11
2012	.06	.28	.53	.31	1.18
2013	.07	.37	.44	.24	1.12
2014	.04	.34	.52	.35	1.25
2015	.10	.43	.55	.32	1.40

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.17	.17	.17	.17	.68
2011	.173	.173	.173	.173	.69
2012	.1775	.1775	.1775	.1775	.71
2013	.1825	.1825	.1825	.1825	.73
2014	.1875	.1875	.1875		

BUSINESS: SJW Corporation engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 228,000 connections that serve a population of approximately one million people in the San Jose area and 11,000 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns and operates commercial real estate investments. Has about 379 employees. Chrm.: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Int: www.sjwater.com.

Regulatory lag has been hurting SJW's bottom line. There is a period of time between when a utility incurs higher costs and when it recovers these expenses. San Jose Water, the principal subsidiary of SJW, filed for higher rates two years ago, and the California Public Utility Commission (CPUC) only made a final decision on the petition two months ago. In San Jose's case, this time lag has resulted in four consecutive negative quarterly share-earnings comparisons.

California's drought has not helped, either. San Jose is being hurt twofold by the lack of precipitation. First, the cost of buying and extracting water has increased. Second, the mandatory conservation rules put in place have caused a sharp drop in the demand for water.

State regulators recently made an important ruling on a San Jose Water request for higher rates. The highlights of the decision include permission to raise customers bills 9.8% in 2013, and 5.2% in 2014. The increase in 2015 has yet to finalized as a new forecast for inflation rate needs to be set. On balance, we view the decision as relatively reasonable.

Earnings should start to pick up. San Jose will now be able to add a surcharge to customers bills to retroactively recover the higher-than-expected outlays it had to make over the past 20 months or so. This should lead to a strong gain in share net of almost 21% in the second half of this year. In 2015, with an additional rate hike being implemented, we think the bottom line can rise a solid 12%.

Our outlook for SJW's dividend growth has improved. Previously, for 2015, we had been predicting a dividend increase of 2.7%, or $0.02 a share, to $0.77. With the rate decision concluded, we now think the company will increase the dividend by $0.04 a share, or 5.3%, a level more in line with the industry norm.

We are more optimistic regarding the equity's long-term prospects. With the regulatory ruling concluded, SJW has more clearly defined earnings prospects. Moreover, the utility's service area is the home of Silicon Valley, a very prosperous and growing region. All told, on a risk-adjusted basis, the stock has decent total return potential to 2017-2019.

James A. Flood *October 17, 2014*

(A) Diluted earnings. Excludes nonrecurring losses : '03, $1.97; '04, $3.78; '05, $1.09; '06, $16.36; '08, $1.22; '10, 46¢. Next earnings report due early November. Quarterly egs. 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	30
Earnings Predictability	80

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YORK WATER NDQ-YORW

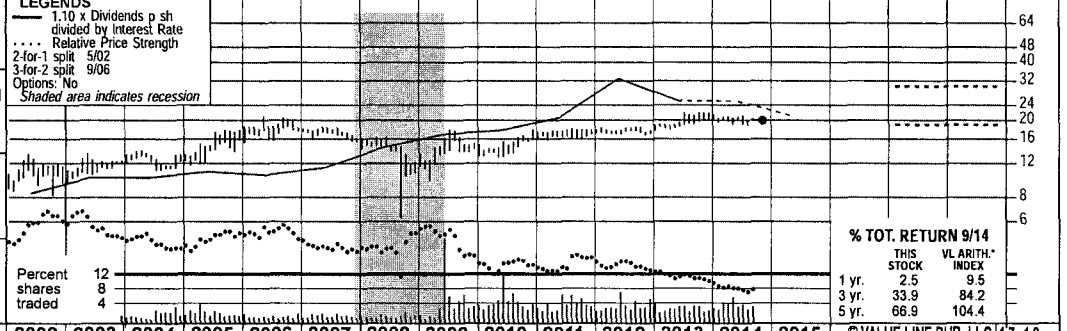
RECENT PRICE 19.95 | P/E RATIO 22.4 (Trailing: 25.6 Median: 25.0) | RELATIVE P/E RATIO 1.29 | DIV'D YLD 3.0% | VALUE LINE

TIMELINESS 4 Raised 3/28/14
SAFETY 2 New 7/19/13
TECHNICAL 3 Lowered 10/10/14
BETA .70 (1.00 = Market)

High:	13.5	14.0	17.9	21.0	18.5	16.5	18.0	18.0	18.1	18.5	22.0	21.5
Low:	9.3	11.0	11.7	15.3	15.5	6.2	9.7	12.8	15.8	16.8	17.6	18.8

Target Price Range 2017 | 2018 | 2019

LEGENDS
— 1.10 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/02
3-for-2 split 9/06
Options: No
Shaded area indicates recession



2017-19 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+50%)	13%
Low	19	(-5%)	2%

Insider Decisions

	N	D	J	F	M	A	M	J	J
to Buy	0	0	6	0	1	4	1	0	4
Options	0	0	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	0	0	1	0

Institutional Decisions

	4Q2013	1Q2014	2Q2014
to Buy	29	30	29
to Sell	24	21	28
Hld's(000)	3528	3634	3603

Percent shares traded 12 8 4

% TOT. RETURN 9/14

	THIS STOCK	VL ARITH.* INDEX
1 yr.	2.5	9.5
3 yr.	33.9	84.2
5 yr.	66.9	104.4

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	© VALUE LINE PUB. LLC	17-19
--	--	--	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	*3.65*	*3.95*	Revenues per sh	*4.65*
--	--	--	.59	.57	.65	.65	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	*1.35*	*1.50*	"Cash Flow" per sh	*1.70*
--	--	--	.43	.40	.47	.49	.56	.58	.57	.57	.64	.71	.71	.72	.75	*.85*	*.95*	Earnings per sh A	*1.10*
--	--	--	.34	.35	.37	.39	.42	.45	.48	.49	.51	.52	.53	.54	.55	*.57*	*.59*	Div'd Decl'd per sh B	*.75*
--	--	--	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	*.85*	*.85*	Cap'l Spending per sh	*1.00*
--	--	--	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	*7.95*	*7.95*	Book Value per sh	*8.90*
--	--	--	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	*12.60*	*12.20*	Common Shs Outst'g C	*11.80*
--	--	--	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	*Bold figures are*		Avg Ann'l P/E Ratio	*22.0*
--	--	--	.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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	*3.0%*

CAPITAL STRUCTURE as of 6/30/14
Total Debt $84.9 mill. **Due in 5 Yrs** $19.5 mill.
LT Debt $84.9 mill. **LT Interest** $5.2 mill.
(Total interest coverage: 4.0x)
(45% of Cap'l)
Pension Assets 12/13 $27.1 mill.
Oblig. $32.1 mill.

Pfd Stock None

Common Stock 12,831,171 shs.
as of 8/5/14

MARKET CAP: $250 million (Small Cap)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		17-19
22.5	26.8	28.7	31.4	32.8	37.0	39.0	40.6	41.4	42.4	*46.0*	*48.0*	Revenues ($mill)	*55.0*
4.8	5.8	6.1	6.4	6.4	7.5	8.9	9.1	9.3	9.7	*11.0*	*12.0*	Net Profit ($mill)	*13.0*
36.7%	36.7%	34.4%	36.5%	36.1%	37.9%	38.5%	35.3%	37.6%	37.6%	*38.0%*	*37.0%*	Income Tax Rate	*38.0%*
--	--	7.2%	3.6%	10.1%	--	1.2%	1.1%	1.1%	.8%	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
42.5%	44.1%	48.3%	46.5%	54.5%	45.7%	48.3%	47.1%	46.0%	45.1%	*46.0%*	*46.0%*	Long-Term Debt Ratio	*50.0%*
57.5%	55.9%	51.7%	53.5%	45.5%	54.3%	51.7%	52.9%	54.0%	54.9%	*54.0%*	*54.0%*	Common Equity Ratio	*50.0%*
83.6	90.3	126.5	125.7	153.4	160.1	176.4	180.2	184.8	188.4	*185*	*180*	Total Capital ($mill)	*210*
140.0	155.3	174.4	191.6	211.4	222.0	228.4	233.0	240.3	244.2	*250*	*255*	Net Plant ($mill)	*270*
7.6%	8.4%	6.2%	6.7%	5.7%	6.2%	6.5%	6.4%	6.4%	6.5%	*7.5%*	*8.0%*	Return on Total Cap'l	*7.5%*
10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	*11.0%*	*12.5%*	Return on Shr. Equity	*12.5%*
10.0%	11.6%	9.3%	9.5%	9.2%	8.6%	9.8%	9.5%	9.3%	9.3%	*11.0%*	*12.5%*	Return on Com Equity	*12.5%*
2.1%	3.0%	2.2%	1.7%	1.4%	1.9%	2.7%	2.5%	2.4%	2.4%	*3.5%*	*3.5%*	Retained to Com Eq	*4.0%*
79%	74%	77%	82%	85%	78%	72%	73%	74%	74%	*67%*	*62%*	All Div'ds to Net Prof	*68%*

CURRENT POSITION ($MILL.)	2012	2013	6/30/14
Cash Assets	4.0	7.6	2.1
Accounts Receivable	6.4	3.8	4.0
Other	1.2	3.8	4.1
Current Assets	11.6	15.2	10.2
Accts Payable	1.1	1.8	1.7
Debt Due	.1	--	--
Other	4.3	6.0	7.1
Current Liab.	5.5	7.8	8.8
Fix. Chg. Cov.	414%	417%	417%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '11-'13 to '17-'19
Revenues	4.5%	3.0%	*6.5%*
"Cash Flow"	6.5%	6.5%	*7.0%*
Earnings	5.5%	5.0%	*7.0%*
Dividends	4.5%	2.5%	*5.5%*
Book Value	7.0%	5.0%	*2.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	9.6	10.5	10.5	10.0	40.6
2012	9.6	10.4	11.0	10.4	41.4
2013	10.1	10.7	10.9	10.7	42.4
2014	10.6	11.8	*12.0*	*11.6*	*46.0*
2015	*11.0*	*12.0*	*12.5*	*12.5*	*48.0*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2011	.17	.19	.19	.16	.71
2012	.15	.17	.22	.18	.72
2013	.17	.18	.19	.21	.75
2014	.16	.22	*.25*	*.22*	*.85*
2015	*.20*	*.25*	*.25*	*.25*	*.95*

Cal-endar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2010	.128	.128	.128	.128	.512
2011	.131	.131	.131	.131	.524
2012	.134	.134	.134	.134	.535
2013	.138	.138	.138	.138	.552
2014	.1431	.1431	.1431		

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, 2013, the company's average daily availability was 35.0 million gallons and its service territory had an estimated population of 190,000. Has more than 63,000 customers. Residential customers accounted for 63% of 2013 revenues; commercial and industrial (29%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 105 full-time employees at 12/31/13. President/CEO: Jeffrey R. Hines. Officers/directors own 1.1% of the common stock (3/14 proxy). Address: 130 East Market Street York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

Higher rates should help boost The York Water Company's bottom line this year. Pennsylvania regulators allowed the utility to implement rate relief effective as of February 28th. Although the hike wasn't in time to enable a positive earnings comparison in the first quarter, the June period benefited as earnings per share rose 14%. And, while we are shaving a nickel off of our 2014 estimate, we think that share net will still increase 13%. This is especially good news considering profits over the past four years were stuck in a range of $0.71 to $0.75 a share.

We expect the trend to continue through 2015. With its combination of higher rates and successful cost controls, we expect York Water to enjoy its second-consecutive successful year, as share net could increase 12% to $0.95.

Dividend growth is also improving. True, the payout was only increased by $0.02 a share, or 3.6%, earlier this year. However, this broke a four-year streak, in which the annual dividend was only raised $0.01 annually, or less than 2%. Still, despite the higher growth rate, York Water's long-term dividend growth prospects are below average for a company in this industry.

The share-buyback program has finally kicked in. Eighteen months after declaring a 1.2 million share buyback program, the number of the company's shares outstanding fell almost 1% last quarter. Our earnings presentation assumes the utility will continue to gradually implement this program and conclude it sometime in early 2016.

York Water has the financial wherewithal to fund the capital expenditure program. Like many of its peers, the utility is upgrading its aging infrastructure. With a healthy equity-to-total capital ratio of 55%, the company can take on additional debt and maintain an adequate balance sheet.

York Water shares are ranked to underperform the broader market averages in the coming six- to 12-month period. Moreover, despite the improved earnings and dividend growth prospects, the stock's total return potential to 2017-2019 does not particularly stand out for a water utility.

James A. Flood *October 17, 2014*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in mid-January, April, July, and October.
(C) In millions, adjusted for splits.

Company's Financial Strength	B+
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	100

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EPCOR Water Arizona Inc.
Derivation of Investment Risk Adjustment Based upon
Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.		1 Market Capitalization on December 31, 2014 (1) (millions)	(times larger)	2 Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	3 Applicable Size Premium (3)	4 Spread from Applicable Size Premium for (4)
1.	EPCOR Water Arizona Inc.					
a.	Based Upon the Proxy Group of Nine Water Companies	$ 367.776		9 - 10	4.39%	
b.	Based Upon ACC Staff Witness Cassidy's Water Sample Utilities	$ 391.981		9 - 10	4.39%	
2.	Proxy Group of Nine Water Companies	$ 2,084.144	5.7 x	6	1.75%	2.64%
3.	ACC Staff Witness Cassidy's Water Samle Utilities	$ 1,295.733	5.3 x	7	1.75%	2.64%

	(A) Decile	(B) Number of Companies (millions)	(C) Recent Total Market Capitalization (millions)	(D) Recent Average Market Capitalization (millions)	(E) Size Premium (Return in Excess of CAPM) (2)
Largest	1	176	$ 12,939,309.384	$ 73,518.803	-0.33%
	2	198	2,936,607.824	$ 14,831.353	0.80%
	3	183	1,378,245.670	$ 7,531.397	0.93%
	4	215	997,079.979	$ 4,637.581	1.19%
	5	212	664,007.040	$ 3,132.109	1.72%
	6	248	538,281.004	$ 2,170.488	1.75%
	7	304	423,620.780	$ 1,393.489	1.75%
	8	351	319,123.801	$ 909.185	2.48%
	9	402	205,722.385	$ 511.747	2.76%
Smallest	10	1015	156,980.396	$ 154.660	6.01%

*From Ibbotson 2014 Yearbook

Notes:

(1) From Page 2 of this Schedule.
(2) Gleaned from Column (D) on the bottom of this page. The appropriate decile (Column (A)) corresponds to the market capitalization of the proxy group, which is found in Column 1.
(3) Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.
(4) Line No. 1a Column 3 – Line No. 2 Column 3 and Line No. 1b, Column 3 – Line No. 3 of Column 3 etc.. For example, the 2.64% in Column 4, Line No. 2 is derived as follows 2.64% = 4.39% - 1.75%.

EPCOR Water Arizona Inc.
Market Capitalization of EPCOR Water Arizona Inc. and
the Proxy Group of Nine Water Companies and ACC Staff Witness Cassidy's Sample Water Utiliites

Company	Exchange	1 Common Stock Shares Outstanding at Fiscal Year End 2013 (millions)	2 Book Value per Share at Fiscal Year End 2013 (1)	3 Total Common Equity at Fiscal Year End 2013 (millions)	4 Closing Stock Market Price on December 31, 2014	5 Market-to-Book Ratio on December 31, 2014 (2)	6 Market Capitalization on December 31, 2014 (3) (millions)
EPCOR Water Arizona Inc		NA	NA	$ 162.445 (4)	NA		
Based Upon the Proxy Group of Nine Water Companies						226.4 % (5)	$ 367.776 (6)
Based Upon ACC Staff Witness Cassidy's Sample Water Utilities						241.3 % (7)	$ 391.981 (8)
Proxy Group of Nine Water Companies							
American States Water Co.		38.721	$ 12.717	$ 492.404	$ 37.660	296.1 %	$ 1,458.221
American Water Works Co., Inc.		178.379	$ 26.504	$ 4,727.804	$ 53.300	201.1	$ 9,507.601
Aqua America, Inc.		176.751	$ 8.684	$ 1,534.835	$ 26.700	307.5	$ 4,719.241
Artesian Resources Corp.		7.949	$ 15.328	$ 121.836	$ 22.590	147.4	$ 179.558
California Water Service Group		47.741	$ 12.542	$ 598.756	$ 24.610	196.2	$ 1,174.906
Connecticut Water Service, Inc.		11.038	$ 17.985	$ 198.525	$ 36.290	201.8	$ 400.577
Middlesex Water Company		15.963	$ 11.824	$ 188.745	$ 23.060	195.0	$ 368.107
SJW Corporation		20.169	$ 15.924	$ 321.175	$ 32.120	201.7	$ 647.832
York Water Company		12.979	$ 7.975	$ 103.511	$ 23.210	291.0	$ 301.249
Average		56.632	$ 14.387	$ 920.843	$ 31.060	226.4 %	$ 2,084.144
ACC Staff Witness Cassidy's Sample Water Utilities		46.195	$ 12.522	$ 491.136	$ 29.093	241.3	$ 1,295.733

NA= Not Available

Notes: (1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) From Financial Statements of EPCOR Water Arizona Inc. for Fiscal Year End 2014.
(5) The market-to-book ratio of EPCOR Water Arizona Inc. on December 31, 2014 is assumed to be equal to the market-to-book ratio of the Proxy Group of Nine Water Companies at December 31, 2014.
(6) EPCOR Water Arizona Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at December 31, 2014 of the Proxy Group of Nine Water Companies, 226.4%, and EPCOR Water Arizona Inc.'s market capitalization on December 31, 2014 would therefo have been $367.776 million.
(7) The market-to-book ratio of EPCOR Water Arizona Inc. on December 31, 2014 is assumed to be equal to the market-to-book ratio of ACC Staff Witness Cassidy's Sample Water Utilities at December 31, 2014.
(8) EPCOR Water Arizona Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at December 31, 2014 of ACC Staff Witness Cassidy's Sample Water Utilities, 241.3%, and EPCOR Water Arizona Inc.'s market capitalization on December 31, 2014 would therefore have been $391.981 million.

Source of Information: Company provided

EPCOR Water Arizona, Inc.
RUCO Witness Mease's CAPM Cost Rates
Corrected to Reflect a Prospective Risk-Free Rate. Prospective Market Equity Risk Premium and
Properly Calculated Historical Market Equity Risk Premium

	Traditional Capital Asset Pricing Model (1)				ECAPM Results	Average of Traditional CAPM & ECAPM Results
	1	2	3	4	5	6
Company	Risk-Free Rate (2)	Beta (3)	Market Premium (4)	CAPM Rates	ECAPM Rates	
RUCO Witness Mease's Proxy Group Companies						
American States Water Co.	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
Ameican Water Works Co., Inc.	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
Aqua America, Inc.	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
Artesian Resources Corp.	3.94%	0.60	7.85%	8.65%	9.44%	9.05%
California Water Service Group	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
Connecticut Water Service, Inc.	3.94%	0.65	7.85%	9.04%	9.73%	9.39%
Middlesex Water Company	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
SJW Corporation	3.94%	0.85	7.85%	10.61%	10.91%	10.76%
York Water Company	3.94%	0.70	7.85%	9.44%	10.02%	9.73%
Mean				9.44%	10.02%	9.73%
Median				9.44%	10.02%	9.73%

Notes: (1) Derived using the formula shown in note 3 on page 15 of Schedule 9 of t his Exhibit.

(2) Derived in note 2 on page 15 of Schedule 9 of this Exhibit.

(3) From page 14 of Schedule 9 of this Exhibit.

(4) As discussed in Ms. Ahern's accompanying rebuttal testimony.

EPCOR Water Arizona, Inc.
RUCO Witness Mease's CAPM Cost Rates
Corrected to Reflect a Prospective Risk-Free Rate. Prospective Market Equity Risk Premium and
Properly Calculated Historical Market Equity Risk Premium

Empirical Capital Asset Pricing Model (1)

	1	2	3	4
Company	Risk-Free Rate (2)	Beta (3)	Market Premium (4)	CAPM Rates
RUCO Witness Mease's Proxy Group Companies				
American States Water Co.	3.94%	0.70	7.85%	10.02%
American Water Works Co., Inc.	3.94%	0.70	7.85%	10.02%
Aqua America, Inc.	3.94%	0.70	7.85%	10.02%
Artesian Resources Corp.	3.94%	0.60	7.85%	9.44%
California Water Service Group	3.94%	0.70	7.85%	10.02%
Connecticut Water Service, Inc.	3.94%	0.65	7.85%	9.73%
Middlesex Water Company	3.94%	0.70	7.85%	10.02%
SJW Corporation	3.94%	0.85	7.85%	10.91%
York Water Company	3.94%	0.70	7.85%	10.02%
Mean				10.02%
Median				10.02%

Notes:
(1) Derived using the formula shown in note 4 on page 15 of Schedule 9 of thi Exhibit.
(2) Derived in note 2 on page 15 of Schedule 9 of this Exhibi
(3) From page 14 of Schedule 9 of this Exhibit.
(4) As discussed in Ms. Ahern's accompanying rebuttal testimon

Richard A. Michelfelder *is Clinical Associate Professor of Finance at Rutgers University, School of Business, Camden, New Jersey. He earlier held a number of entrepreneurial and executive positions in the public utility industry, some of them involving the application of renewable and energy efficiency resources in utility planning and regulation. He was CEO and chairperson of the board of Quantum Consulting, Inc., a national energy efficiency and utility consulting firm, and Quantum Energy Services and Technologies, LLC, an energy services company that he co-founded. He also helped to co-found and build Comverge, Inc., currently one of the largest demand-response firms in the world that went public in 2006 on the NASDAQ. He was also an executive at Atlantic Energy, Inc. and Chief Economist at Associated Utilities Services, where he testified on the cost of capital for public utilities in a number of state jurisdictions and before the Federal Energy Regulatory Commission. He holds a Ph.D. in Economics from Fordham University and has published numerous articles in academic journals.*

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Frank J. Hanley *is a Principal of AUS Consultants located in Mt. Laurel, New Jersey. He joined the firm in 1971 as Vice President, was elected Senior Vice President in 1975, and President of the Utility Services Group in 1989. Mr. Hanley has testified on cost-of-capital and related financial issues in more than 300 cases before 33 state regulatory commissions, the District of Columbia Public Service Commission, the Public Services Commission of the U.S. Virgin Islands, the Federal Energy Regulatory Commission, a U.S. District Court, a U.S. Bankruptcy Court and the U.S. Tax Court. He is a graduate of Drexel University and is a Certified Rate of Return Analyst. He is an Associate Member of the American Gas Association as well as a member of its Rate Committee. Also, he is a member of the Executive Advisory Council of the Rutgers University School of Business at Camden as well as a member of the Advisory Council of New Mexico State University's Center for Public Utilities.*

The authors wish to thank Selby P. Jones, III, Associate, AUS Consultants, for his technical assistance.

Comparative Evaluation of the Predictive Risk Premium Model, the Discounted Cash Flow Model and the Capital Asset Pricing Model for Estimating the Cost of Common Equity

The regulatory process for setting a utility's allowed rate of return on common equity has generally relied upon the Gordon Discounted Cash Flow Model and Capital Asset Pricing Model. The Predictive Risk Premium Model, introduced a year ago, resolves several of the widely known problems with these models. Further testing since its introduction a year ago suggests that it produces stable results which are consistent over time.

Richard A. Michelfelder, Pauline M. Ahern, Dylan W. D'Ascendis and Frank J. Hanley

I. Introduction

The lead article in the July 2008 issue of this *Journal*, "Integrating Renewables into the US Grid: Is it Sustainable," by Professors Peter Mark Jansson and Richard A. Michelfelder,[1] called for the reregulation of the electric utility industry and putting the planning of generation assets, whether renewable or not, back in the hands of the experts and those ultimately responsible for reliability, the electric utilities. During the last 10 years or so,

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states have been backpedaling on deregulation and therefore methods for estimating the cost of common equity and the allowed rate of return have generated new interest as regulating rate of return is not going away as once thought.

The regulatory process for setting a public utility's allowed rate of return on common equity has generally relied upon the familiar Gordon Discounted Cash Flow Model (DCF) and Capital Asset Pricing Model (CAPM). Despite the widely known problems with these models, there has been little initiative to adopt more recently developed asset pricing models with fewer limiting assumptions and requiring less subjective judgment than these traditional models. In December 2011, the article "New Approach to Estimating the Cost of Common Equity Capital for Public Utilities,"[2] published in *The Journal of Regulatory Economics,* introduced the Predictive Risk Premium Model (PRPM). The PRPM trademark refers to a general, yet simple, consumption-based asset pricing model of the risk/return relationship for common stocks which can be used to estimate the cost rate of common equity (ROE). The stability and consistency of the results of PRPM and the ex ante, i.e., expectational, nature of those results indicate that the model should be used to provide additional input into the process of determining an allowed rate of return on common equity for public utilities.

Since publication, more exhaustive empirical testing of the PRPM was conducted for the four utility industry groups which comprise the AUS Utility Reports[3] universe of publicly traded utilities: an electric utility group; a combination electric and natural gas distribution utility group; a natural gas distribution utility group, and a water utility group. The empirical testing confirms the conclusion of the original *Journal of Regulatory Economics* article: the PRPM produces stable results which are consistent over time.

Despite the widely known problems with these models, there has been little initiative to adopt more recently developed asset pricing models with fewer limiting assumptions and requiring less subjective judgment.

II. Development of the PRPM

The cost rate of common equity is not directly observable in the capital markets and must be inferred using various financial models. The most commonly used cost of common equity models in the regulatory arena are the aforementioned DCF and the CAPM. Since these models are based upon many restrictive assumptions, they involve a significant amount of analyst subjectivity in their application, resulting in much debate over the application and results of these models.

The empirical approach to the PRPM is based upon the work of Robert F. Engle, Ph.D.,[4] who shared the Nobel Prize in Economics in 2003 "for methods of analyzing economic *time series* with time-varying volatility (*ARCH*),"[5] with "ARCH" standing for autoregressive conditional heteroskedasticity. In other words, volatility (variance) changes over time and is related to itself from one period to the next, especially in financial markets. Engle discovered that the volatility (usually measured by variance) in prices and returns clusters over time. Therefore, volatility is highly predictable and can be used to predict future levels of risk. The theoretical asset pricing model was recently developed in the *Journal of Economics and Business* in December 2011 by Rutgers University professors Richard Michelfelder and Eugene Pilotte.[6]

In this study, the PRPM estimates the risk/return relationship directly using the outcomes of investors' historical pricing decisions and actual long-term U.S. Treasury security yields, with the predicted equity risk premium generated by the prediction of volatility, i.e., the risk, based upon the volatility of past equity risk premiums for the AUS Utility Reports universe of companies.

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III. Estimation Method

The statistical details of the estimation method of the PRPM can be found in the original article in the *Journal of Regulatory Economics*, "New Approach to Estimating the Cost of Common Equity Capital for Public Utilities." Essentially, there are two steps to the application of the PRPM. First, predicted volatility, i.e., risk, is derived based upon previous volatility plus previous prediction error, because volatility is highly predictable and correlated over time. Second, the predicted volatility can then be used to generate the predicted equity risk premium (ERP) by multiplying it by the GARCH coefficient, i.e., the slope of the predicted volatility. A risk-free rate is then added to the ERP to estimate the ROE, i.e., the market based cost of common equity.

IV. Application of the PRPM to Publicly Traded Utility Companies

The PRPM was applied to the companies comprising the AUS Utility Reports' utility industry groups: the electric, combination electric and natural gas distribution, natural gas distribution, and water groups. The PRPM variances were calculated monthly for each individual utility beginning with the first available monthly data included for each individual utility in the University of Chicago Booth School of Business' Center for Research in Security Prices (CRSP) and corresponding monthly long-term U.S. Treasury bond yields from Morningstar's *Ibbotson SBBI – 2012 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926–2011 (SBBI)* through 72-month ending periods, i.e., January 2006 through December 2011.

Using EViews Version 7.2, the PRPM coefficients and predicted monthly variances were estimated as described in the *JRE* article for each time series of equity risk premiums. Consistent with the conclusion drawn in the *JRE* article, the predicted equity risk premiums were calculated using the averaged predicted volatilities (variances) over the entire time period for which CRSP data were available for each utility, multiplied by the GARCH, or slope, coefficient generated through EViews for each time series. To calculate the PRPM cost rate of common equity for each utility, the average predicted utility specific equity risk premium through each month ending from January 2006 through December 2011 was then added to the projected consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the next six quarters by the reporting economists in the concurrent *Blue Chip Financial Forecasts (Blue Chip)*.

The DCF was applied in a simple manner, using a dividend yield, D_0/P_0, derived by dividing the month-end indicated dividend per share (D_0) by the month-end closing market price (P_0) for each utility. The dividend yield was then grown by the month-end I/B/E/S consensus five-year projected earnings per share (EPS) growth rate (g) to derive $(D_0\ (1 + g)/P_0)$. The one-month predicted dividend yield was then added to the concurrent month's I/B/E/S consensus

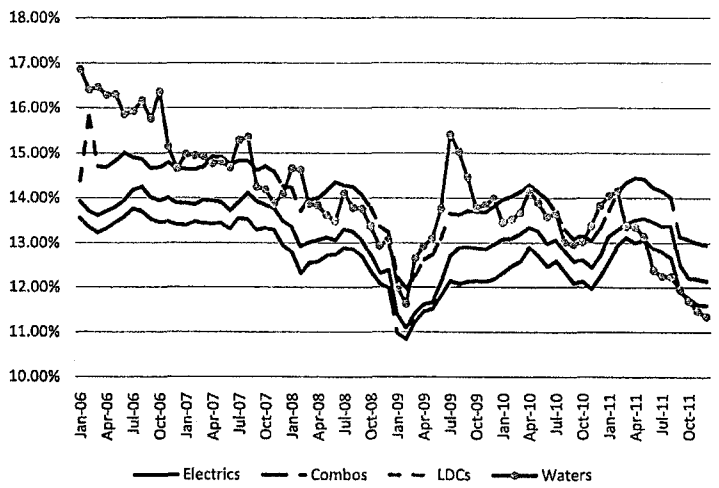

Figure 1: Indicated Return on Common Equity Based upon the PRPM for the AUS Utility Reports Companies

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five-year average projected EPS growth rate to obtain the DCF estimate of the cost of common equity capital, k. The DCF estimates were also calculated for each month from January 2006 through December 2011.

The CAPM was applied by multiplying Value Line Inc.'s beta (β),[7] for each utility, by the long-term historical arithmetic mean market equity risk premium ($R_m - R_f$) through the previous year. ($R_m - R_f$) was derived as the spread of the total return of large company common stocks over the income return on long-term government bonds from the annual *SBBI Valuation Yearbooks* for the years ending 2005 through 2010. The resulting utility-specific equity risk premium was then added to the same projected consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the next six quarters by the reporting economists in the concurrent *Blue Chip* discussed above, to obtain the CAPM estimate of the cost of common equity capital, k. The CAPM estimates were also calculated for each month from January 2006 through December 2011.

Finally, the results for each of the models, the PRPM, DCF, and CAPM, were averaged for each utility group.[8] **Figure 1** presents the average PRPM results for each of the AUS Utility Reports utility groups for each month from January 2006 through December 2011.

Figure 1 shows that indicated ROEs derived from the PRPM were stable for all utility groups until the global financial crisis of 2008–2009. During 2008 and 2009, the PRPM-derived ROEs decline, which in the authors' opinion, was a result of a "flight to quality" by investors, i.e., the willingness of an investor to accept a lower, but more certain, return during financial downturns. Figure 1 also indicates that the PRPM-derived ROEs for the electric, combination electric and natural gas distribution, and natural gas distribution utility groups follow a nearly identical pattern throughout the 72-month period, with the water utility group following a similar, but more volatile pattern.

Figures 2–5 present a comparison of the average PRPM, DCF, and CAPM cost of common equity estimates for each AUS

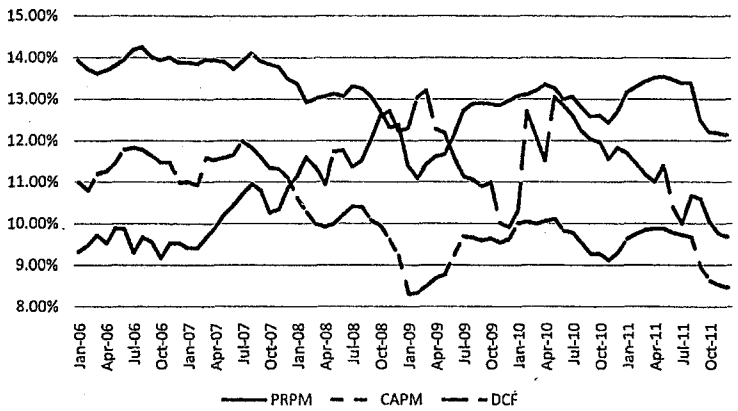

Figure 2: Indicated Return on Common Equity Based upon the PRPM, CAPM and DCF Methodologies for the AUS Utility Reports Electric Companies

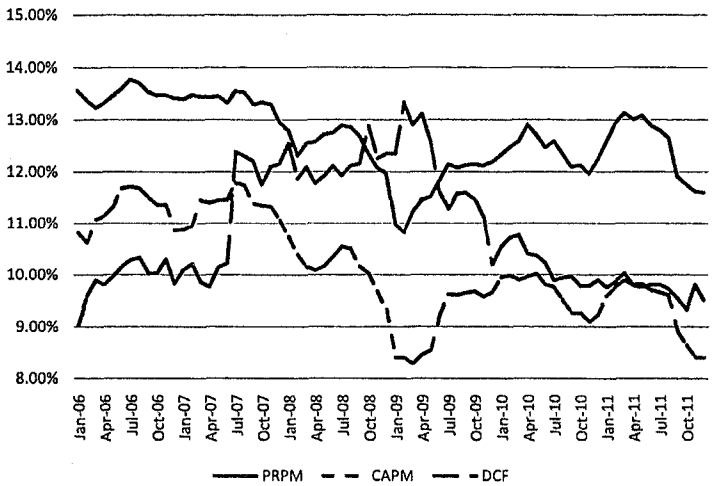

Figure 3: Indicated Return on Common Equity Based upon the PRPM, CAPM, and DCF Methodologies for the AUS Utility Reports Combination Companies

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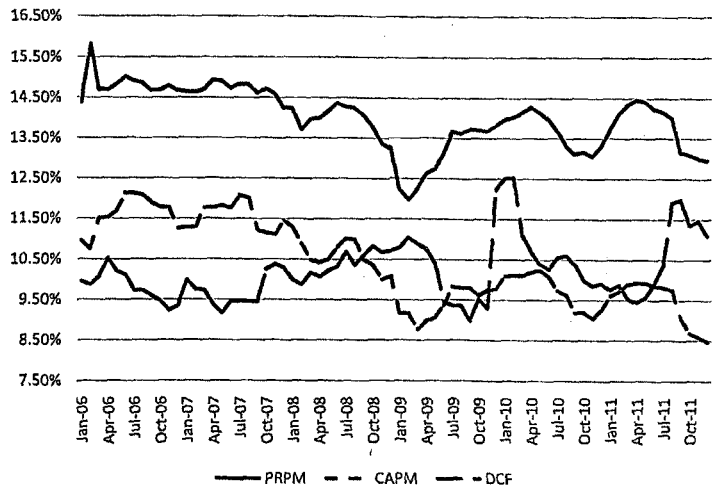

Figure 4: Indicated Return on Common Equity Based upon the PRPM, CAPM and DCF Methodologies for the AUS Utility Reports Gas Companies

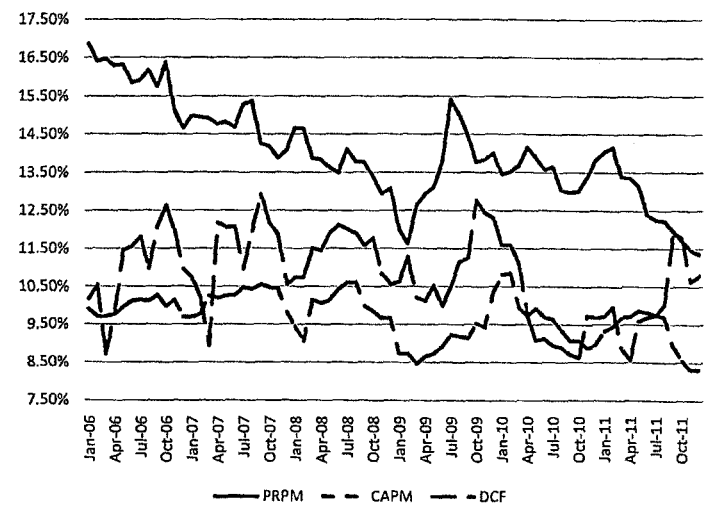

Figure 5: Indicated Return on Common Equity Based upon the PRPM, CAPM and DCF Methodologies for the AUS Utility Reports Water Companies

Utility Reports utility industry group, i.e., the electric utility group; the combination electric and natural gas distribution utility group; the natural gas distribution utility group; and, the water utility group for each month from January 2006 through December 2011.

Figures 2–5 clearly show that, for the most part, the PRPM produces a higher average indicated ROE than both the DCF and CAPM. This is due to the fact that the PRPM prices *all* of the risk that investors actually face collectively. In contrast, the CAPM prices systematic risk (that investors face only if they have a perfectly diversified portfolio, which does not exist) and the DCF uses accounting-based, not market-based, I/B/E/S consensus five-year projected EPS growth rates.

V. Conclusion

In the authors' opinion, the PRPM benefits ratemaking with an additional model to estimate ROE. To that end, the authors have been including the PRPM in their rate-of-return testimonies and the model has been presented publicly in several venues.[9]

Its results are stable and consistent over time. It is not based upon restrictive assumptions, as are the DCF and CAPM. The PRPM is also not based upon an *estimate* of investor behavior, but rather, upon a statistical analysis of *actual* investor behavior by evaluating the results of that behavior, i.e., the volatility (variance) of historical equity risk premiums. In contrast, subjective decisions surround the choice of the inputs to both the DCF and CAPM, from the choice of the time period over which to measure the dividend yield for the DCF, the choice of the DCF growth rate (e.g., historical or projected, earnings per share or dividends per share, and the like), to the selection of the appropriate beta (e.g., adjusted or unadjusted), market equity risk premium (e.g., historical or projected) and the appropriate

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risk-free rate (e.g., historical or projected and/or long vs. short term) for the CAPM. In addition, as previously discussed, the CAPM exclusively prices systematic risk. In contrast, the PRPM prices *all* of the risk actually faced collectively by investors, because the model does not assume that investors' portfolios are perfectly diversified containing no unsystematic risk.

In addition, the inputs to the PRPM are widely available. The GARCH coefficient is calculated with the relatively inexpensive EViews, or other statistical, software, based upon the realized ERP, i.e., total returns minus the risk-free rate. The only subjective decisions to be made when applying the PRPM relate to which risk-free rate to use, e.g., long-term or short-term, and over what time period to estimate the PRPM-derived ROEs.

For all of these reasons, the authors conclude that the PRPM should be considered as appropriate additional evidence to measure the cost of common equity in regulatory rate setting for public utilities.■

Endnotes:

1. Peter Mark Jansson and Richard A. Michelfelder, *Integrating Renewables into the US Grid: Is It Sustainable?* ELEC. J.July 2008, at 9–21.

2. Pauline M. Ahern, Frank J. Hanley and Richard A. Michelfelder, *New Approach to Estimating the Cost of Common Equity Capital for Public Utilities*, J. REG. ECON.(2011) 40, at 261–78.

3. AUS Monthly Utility Reports is a monthly pocket reference book covering the electricity, combination electricity & natural gas distribution, natural gas distribution, and water companies which have publicly traded common stock. The monthly reports provide comprehensive information on key ratios and industry rankings based upon the financial statistics presented in the report.

4. Professor Emeritus, University of California, San Diego, and currently the Michael Armellino Professor in Management of Financial Services at New York University's Stern School of Business.

5. See www.nobelprize.org.

6. Richard Michelfelder and Eugene Pilotte, *Treasury Bond Risk and Return, the Implications for the Hedging of Consumption and Lessons for Asset Pricing*, J. ECON. & BUS.(2011) 63, at 605–37.

7. Using a proprietary data base available at mid-March, June, September, and December at the end of each year, from 2006–2011 from Value Line, Inc.

8. The results shown in the accompanying figures represent AUS Utility group averages of only those utilities in each group for which it was possible to estimate all three models in any given month. For example, if ABC Utility did not have the I/B/E/S consensus growth rate necessary to calculate the DCF in a given month, that utility's PRPM and CAPM were not included in the group average for that month.

9. Edison Electric Institute Cost of Capital Working Group (Webinar Oct. 2012); NARUC Staff Subcommittee on Accounting & Finance (Sept. 2012 and Mar. 2010); National Association of Water Companies Finance/ Accounting/Taxation and Rates & Regulations Committees (Mar. 2012); NARUC Water Committee (Feb. 2012); Wall St. Utility Group (Dec. 2011); IN Utility Regulatory Commission Cost of Capital Task Force (Sept. 2010); Financial Research Inst. of the Univ. of Missouri Hot Topic Hotline Webinar (Dec. 2010); and Center for Research in Regulated Industries Annual Eastern Conference (May 2010 & May 2009).

Subjective decisions surround the choice of the inputs to both the DCF and CAPM.

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EPCOR Water Arizona Inc.
R-Squared or Correlation Coefficeint for
the Proxy Group of Nine Water Companies

Proxy Group of Nine Water Companies	Value Line Adjusted Beta	Unadjusted Beta	R- Factor	R-Squared
American States Water Co.	0.65	0.44	0.3562	0.1269
American Water Works Co., Inc.	0.65	0.44	0.4230	0.1789
Aqua America, Inc.	0.60	0.35	0.3842	0.1476
Artesian Resources Corp.	0.55	0.31	0.3083	0.0950
California Water Service Group	0.60	0.36	0.4019	0.1615
Connecticut Water Service, Inc.	0.75	0.55	0.4714	0.2222
Middlesex Water Company	0.75	0.56	0.5211	0.2715
SJW Corporation	0.85	0.73	0.5306	0.2815
York Water Company	0.70	0.47	0.4025	0.1620
Average	0.68	0.47	0.4221	0.1830
Average for ACC Witness Cassidy's Sample Water Utilities	0.70	0.49	0.4383	0.1962

Source of Information:
Value Line, Inc. December 15, 2014

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Do Smaller Companies Warrant a Higher Discount Rate for Risk?

The "Size Effect" Debate

by Michael A. Paschall, ASA, CFA, and George B. Hawkins, ASA, CFA, both Managing Directors at Banister Financial, Inc., in Charlotte, North Carolina.

One of the critical issues facing business appraisers today is the so-called "small stock" issue. That is, should the discount or capitalization rate used to value the smaller private held company be higher based on its smaller size? Should a smaller company's earnings or cash flow be discounted or capitalized at a higher rate (which results in a lower value) just because the company is small (as measured by earnings, assets, market value, or whatever)? Should larger public company multiples be adjusted downward for comparison with smaller private companies based on size differences alone? This article will outline the current debate in the industry and will explore some possible resolutions to this issue.

The size debate has very real implications to the valuation of companies for purchase or sale, estate planning, divorce, minority shareholder litigation, ESOPs, and other purposes. In some locales (as well as in some pending Tax Court cases) the IRS is beginning to challenge business valuations where a size impact is taken into account. While it is almost universally accepted in the valuation field that small companies are generally riskier, recent attacks are forcing the profession to respond.

Illustration of the Risk Premium

Most business appraisers use some form of the Capital Asset Pricing Model (CAPM) to develop a discount or capitalization rate. Appraisers may use a CAPM formula that incorporates a measure called "beta,"[1] or alternatively, a build-up method whereby a discount or capitalization rate is developed by use of various components. Under the use of the build-up method, an appraiser first determines a risk-free rate (usually utilizing rates of risk-free government securities) that represents the return from a total riskless investment. Since a company's stock is more risky than a riskless investment, this then necessitates the addition of various equity risk premiums depending on the perceived risk of an investment in the common stock of the subject company, over and above a risk-free rate. A simplified example is shown in Table 1.

Assuming the Company's annual income or cash flow stream to be capitalized is $1,000,000, the estimated value of the Company (before minority or marketability considerations) is calculated as $1,000,000 ÷ 10% = $10,000,000. The equity risk premium represents the amount necessary to add to the risk-free rate to recognize the fact that returns on common equity are not risk-free and buyers should be compensated for bearing that additional risk by earning a higher return.

Ibbotson and PricewaterhouseCoopers each author studies that have stratified the equity risk premium by firm size, finding a direct relationship between firm size and return (discussed in more detail below). In general, these studies show that smaller companies are more risky and investors therefore require a greater return, on average, over longer periods of time for bearing this risk. Mathematically speaking, this equates to a higher equity risk premium and lower value for the smaller company. This is the crux of the size premium argument.

Table 1
Example of the Build-Up Method

Risk-Free Rate	6.0%
Equity Risk Premium	7.0%
Specific Company Risk Premium	2.0%
Discount Rate	15.0%
Less: Growth Rate	(5.0)%
Capitalization Rate	10.0%

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Traditional Thinking

It has long been observed in the finance field that there exists a so-called "small stock" effect. This refers to the observation that over long periods of time, small public company stocks have been shown to have significantly higher average annual rates of total returns than have larger public companies. The size issue has been one of the most disputed findings of corporate finance since being identified by Banz in 1981.[2] Also, Fama and French published a study that calls into doubt the ability of CAPM to forecast expected rates of return due to inaccuracies in the consideration of company size.[3] Finally, there are at least two published studies that demonstrate a clear risk premium based on company size.

Grabowski and King Studies. A study[4] by Roger Grabowski, ASA, and David King, CFA, finds a clear and strong statistical relationship between company size and rates of return. In short, the study finds that the smaller the public company (note that public companies are used since rates of return are not observable in private company shares), the higher the average rate of return required annually by investors. In their first published study, encompassing the period from 1963 to 1996, they separated stocks into 25 distinct groupings by size and found this relationship regardless of whether size is defined by annual sales revenues, number of employees, book value of shareholders' equity, or other measures.

According to the study, the smallest public companies (with average revenues of $47 million (much larger than many of the typical privately held companies)) had an average annual return (between dividends and capital appreciation) of 13.6% above the returns on U.S. Treasury bonds (i.e., 13.6% higher than a risk-free U.S. Treasury bond investment). This is in contrast to the largest public companies (with average revenues of $4.86 billion) that had an average annual return of 5.9% above the returns on U.S. Treasury bonds. In other words, on average, investors required an additional return of 7.7% (13.6% equity risk premium for small companies, less 5.9% for large companies) annually to invest in the stocks of small companies. This is referred to as the small stock premium and illustrates the "small stock effect."

Ibbotson Associates Data. Another highly respected resource, the *SBBI Yearbook,* prepared annually by Ibbotson Associates, finds similar clear indications that smaller companies require much higher average annual rates of return. Ibbotson data differs in various respects, most notably in how it defines size (in terms of a public company's market value of its shares outstanding) and in the measurement period used.

The Case Made Against the Size Effect

Despite this evidence of a size premium, there have been challenges made to this traditional thinking since its discovery. These challenges are along the following lines:

- **Excess Returns Occur in Only a Few Trading Days.** Early 1980s research shows that all of the excess return for small publicly traded stocks occurs in the first few trading days in January, and is not a generalized phenomena over the entire year.

- **Research Alleged to Be Flawed.** The excess returns of small stocks may really be related to high transaction costs and poor liquidity, factors that were not appropriately considered in prior research demonstrating the small stock effect. Additionally, allegations have been made that there are problems in the public company stock data used by Ibbotson, including a "delisting" bias, that when corrected for, causes the small stock effect to disappear.

- **No Demonstrated Ability to Earn Excess Returns in Reality.** Investment professionals have not shown any evidence that investing in small common stocks over long periods of time has actually yielded an excess return.

- **Recent Years Fail to Exhibit a Small Stock Effect.** From the 1980s through the 1990s, small stocks have actually returned less, on average, than large stocks. If the small stock effect existed the reverse would be true.

Other Arguments. Others have suggested that the small or specific company risk is irrelevant in the context of CAPM. This is because CAPM assumes all investors are well diversified and that specific company risk (called "non-systematic" risk in the language of CAPM) is eliminated by holding a diversified portfolio. The investor is only left with "systematic," or general market risk.

Complicating the small stock issue further is a study recently published in *Business Valuation Review* that claims to contradict the small stock effect noted in the Ibbotson data, PricewaterhouseCoopers research and other studies.[5] Many business appraisers define rates of return by looking at long-term averages from those studies, although another option would be to use the so-called compound (or geometric) rate of return. This recent study maintains that if compound annual rates of return of public companies are used, the small stock effect goes away completely and there is no discernable difference in returns based on company size. This study was only recently published, so whether or not there are flaws in its methodology or logic that would render its findings invalid will need to be followed closely, particularly since it is almost sure to be cited in future valuation challenges by the government. The general question of whether or not to use average or compound rates of return to develop a company's discount rate has been long-debated and still has its advocates in both camps periodically publishing new articles favoring one or the other.

Legal Precedent Challenging the Size Premium

In *Estate of Jung v. Commissioner*,[6] the Tax Court addressed the issue of whether an incremental risk premium is applicable due solely to a company's size. The *Jung* Court ultimately held that a company's discount rate does not warrant an incremental risk premium due solely to its size. The *Jung* Court reached its decision despite a statement to the contrary by the IRS in its own internal training manuals. The Court sided with the IRS experts' position that companies are risky because they are in risky industries, not because of their size. The Court noted that the taxpayer's expert presented no evidence on why the size of the corporation affects the appropriateness of a minority discount (or an incremental risk premium).

The careful business appraiser should come away from the *Jung* case with the lesson that courts want to see a specific analysis of the risks of a company, not just a showing that the company is smaller and therefore demands a size premium as a result. Although, as a general proposition, smaller companies are riskier than larger companies, it is safer to agree with the *Jung* court that a specific analysis of the particular risk of a company must be examined in each valuation situation. A size premium does not automatically apply in every case. Each privately held company should be analyzed to determine if a size premium is appropriate in its particular case. There can be unusual circumstances where a small company has risk characteristics that make it far less risky than the average company, warranting the use of a very low equity risk premium. One possible example of this is a private water utility (monopoly situation, very low risk, near-guarantee of payments). The use of a size premium without consideration of the risk of the specific company may subject the appraisal to challenge and rejection on down the road.

Data Now Allows for Analysis Other Than Based on Size

Grabowski and King, via the PricewaterhouseCoopers study, have recently broadened the way they measure public company rates of return that go beyond mere size. In the 1999 version of their study, rates of return are also calculated based on the five-year average operating profit margins of the public companies, as well as the covariance (a measure of its variability) of the operating profit margin, and a measure of return on equity.

Interestingly, the study shows a clear relationship between these measures and rate of return. In particular, the higher the five-year average operating profit margin of the average public company, the lower the rate of return on its stock, and vice versa. In other words, companies with higher average operating profit margins (separate and apart from their size) may be seen as less risky by investors than companies with thin operating profit margins. Of great interest is the statistical underpinning for this finding, which showed the five-year average operating profit margin to explain a substantial 76% of the variation observed in the rate of return of a public company's stock. Thus, a valuator can now see how measures other than size might affect a company's rate of return.

Two Main Reasons for a Size Premium

As a general proposition, a size premium is usually appropriate. The support for the size premium falls into two main categories: first, a time horizon viewpoint, and second, a common sense viewpoint. Following is a discussion of why each explanation suggests that valuators should not abandon the additional risk premium associated with size.

Time Horizon Analysis. It is general knowledge that publicly traded common stock returns exhibit wide degrees of volatility from one year to the next. Therefore, in the context of shorter time horizons, it is quite possible that returns for small or large stocks might differ, and in some years, even show negative returns. For example, a valuator is preparing a discounted cash flow valuation forecast for five years, then capitalizing the final year cash flow into perpetuity based on a capitalization rate (a cap rate is simply a discount rate minus the long term annual growth rate).

To compute the present values of each year's cash flows, a discount rate must be developed that takes into account risk. The valuator decides to use a shorter-term measure of the discount rate, basing it on the small stock rate of return for a five-year period. It is entirely possible that a five-year period could be cherry-picked from rate of return data that shows an average rate of return even below the risk-free rate, or in some cases, a negative return. From a rational point of view, it certainly does not make sense that prudent investors would require a return less than the risk-free rate on a longer-term series of inherently more risky cash flows. Rational investors would always sell the stock and buy risk-free treasuries where they could earn a higher return with no risk.

Therein lies the problem of using a short-term time horizon (such as recent years, where no small stock effect is alleged to exist) to discount a longer-term income stream. In any particular short-term period, any variety of return patterns might be observed due to the inherent volatility of stock market returns in general, whether for small or large stocks. A significant portion of the value in the discounted cash flow model comes from the terminal year value. That terminal year value is based on a perpetuity assumption, i.e., that earnings or cash flows continue indefinitely into the future, growing at the annual growth rate. If the terminal value drives a significant portion of the total value, should the valuator use short-term oscillations in returns as the basis for discounting longer-term earnings or cash flows? Of course not. Even if the investor only intends to hold the security for three or five years, rational investors pricing the security in the market are certainly taking this longer term cash flow into account since it drives so much of a stock's total

return. Thus, even the investor with a shorter-term time horizon is forced by market forces to consider the long term.

Michael Annin, CFA, and Dominic Falaschetti, CFA, of Ibbotson Associates, have also examined the attack against assigning an additional small company equity risk premium.[7] They found there is a short-term phenomena of small company stocks under-performing large company stocks in 10 of the 20 years during the 1977 to 1996 time frame. However, they found that this is not true in any longer-term time frame that might be selected. Regardless of any rolling 20-year time frame from 1926 to 1996, in no single period have average 20-year small company stocks had average returns equal to or less than those of large companies. In all but a few periods, the stocks of small public companies have actually realized returns that are substantially in excess of those of large companies. These findings support the earlier comments that a longer-term time horizon is appropriate.

While the foregoing analysis might seem convincing, this study data is based on average annual public company rates of return. As noted previously, a recent study suggests that using a compound rate of return eliminates the small stock premium even if the measurement period is long-term in nature.

Common Sense Analysis. To this point, this article has only dealt with the "numbers" of academic studies. It is also important to consider the common sense aspect of the issue and forget momentarily the academic theory and studies. Is it reasonable to expect small companies to be more risky than large ones? There can certainly be cases where a particular small company has a unique aspect that reduces its risk beyond what is normally seen. It is the job of the valuator to spot these situations and take them into account in making adjustments to the discount rate. However, most smaller companies have very real aspects of risk that are not present (or at least not to the same degree) in larger companies. Regardless of whether CAPM, the build-up method or some other mathematical proxy for risk does or does not capture this risk, it is very real indeed for the buyer. This includes key person risks, customer and supplier concentrations, a tenuous dependence on less certain bank financing, a nondiversified product line, poor financial information and information systems to track the business, and a whole host of other risks. Does the small three-store retail chain in one locality have the same risk as Wal-Mart? Unless there is something extremely unusual about the chain, the answer is a resounding "no." Yet the view of the opponents of a small company equity risk premium, if taken to its logical extension, would make no such distinction.

Conclusion

The current challenge to traditional thinking about a small stock premium is a very real and potentially troublesome issue. The challenge comes from bright and articulate people and has already been incorporated into some court cases, providing further ammunition for the IRS. Failing to consider the additional risk associated with most smaller companies, however, is to fail to acknowledge reality. Measured properly, small company stocks have proven to be more risky over a long period of time than have larger company stocks. This makes sense due to the various advantages that larger companies have over smaller companies. Investors looking to purchase a riskier company will require a greater return on investment to compensate for that risk. There are numerous other risks affecting a particular company, yet the use of a size premium is one way to quantify the risk associated with smaller companies. However, business appraisers must focus on what drives the risk in each specific company valuation and articulate it, rather than falling into the complacency of relying on the small stock issue alone.

END NOTES

[1] Beta is a measure of risk based on a stock's variance with the overall market, and is incorporated in the Capital Asset Pricing Model. This measure will not be explored in this article, but is discussed at length in Chapter 17 of the *CCH Business Valuation Guide*.

[2] R.F. Banz, "The Relation Between Return and Market Value of Common Stocks," *Journal of Financial Economics* (1981, vol. 9) 3-18.

[3] Kenneth French and Eugene Fama, "Common Risk Factors in the Returns on Stocks and Bonds," *Journal of Financial Economics* (January 1993).

[4] The study was later published and sold in subsequent updates by their employer, PricewaterhouseCoopers.

[5] Brian Becker, Ph.D., and Ian Gray, "Does a Small Firm Effect Exist When Using the CAPM? Not Since 1980 and Not When Using Geometric Means of Historical Returns," *Business Valuation Review (September 1999)* 104-111. *Business Valuation Review* is a publication of the Business Valuation Committee of the American Society of Appraisers.

[6] *Estate of Jung*, 101 TC 412, Dec. 49,387 (1993).

[7] Michael Annin and Dominic Falaschetti, "Is There Still a Size Premium?" *CPA Expert* (Winter 1998).

EPCOR Water Arizona, Inc.
Derivation of Investment Risk Adjustment Based upon
Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.		1 Market Capitalization on October 31, 2013 (1) (millions)	(times larger)	2 Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	3 Applicable Size Premium (3)	4 Spread from Applicable Size Premium for (4)
1.	EPCOR Water Arizona, Inc.					
a.	Based Upon the Proxy Group of Nine Water Companies	$ 339.890		9	2.70%	
2.	Proxy Group of Nine Water Companies	$ 1,740.082	5.1 x	6	1.72%	0.98%

	(A) Decile	(B) Number of Companies (millions)	(C) Recent Total Market Capitalization (millions)	(D) Recent Average Market Capitalization (millions)	(E) Size Premium (Return in Excess of CAPM) (2)
Largest	1	173	$ 10,255,341.469	$ 59,279.430	-0.37%
	2	193	2,219,118.548	$ 11,498.024	0.76%
	3	187	1,072,861.025	$ 5,737.225	0.92%
	4	202	695,897.336	$ 3,445.036	1.14%
	5	205	473,139.360	$ 2,307.997	1.70%
	6	234	377,485.205	$ 1,613.185	1.72%
	7	317	329,504.738	$ 1,039.447	1.73%
	8	329	214,084.258	$ 650.712	2.46%
	9	466	166,708.095	$ 357.743	2.70%
Smallest	10	1068	107,517.520	$ 100.672	6.03%

*From Ibbotson 2013 Yearbook

Notes:

(1) From Page 2 of this Schedule.
(2) Gleaned from Column (D) on the bottom of this page. The appropriate decile (Column (A)) corresponds to the market capitalization of the proxy group, which is found in Column 1.
(3) Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.
(4) Line No. 1a Column 3 – Line No. 2 Column 3 and Line No. 1b, Column 3 – Line No. 3 of Column 3 etc.. For example, the 0.98% in Column 4, Line No. 2 is derived as follows 0.98% = 2.7% - 1.72%.

EPCOR Water Arizona, Inc.
Market Capitalization of EPCOR Water Arizona, Inc. and
the Proxy Group of Nine Water Companies

Company	Exchange	1 Common Stock Shares Outstanding at Fiscal Year End 2012 (millions)	2 Book Value per Share at Fiscal Year End 2012 (1)	3 Total Common Equity at Fiscal Year End 2012 (millions)	4 Closing Stock Market Price on October 31, 2013	5 Market-to-Book Ratio on October 31, 2013 (2)	6 Market Capitalization on October 31, 2013 (3) (millions)
EPCOR Water Arizona, Inc.		NA	NA	$ 160.704 (4)	NA		
Based Upon the Proxy Group of Nine Water Companies						211.5 % (5)	$ 339.890 (6)
Proxy Group of Nine Water Companies							
American States Water Co.		38.474	$ 11.815	$ 454.579	$ 28.480	241.0 %	$ 1,095.752
American Water Works Co., Inc.		176.988	$ 25.115	$ 4,444.988	$ 42.870	170.7	$ 7,587.476
Aqua America, Inc.		175.209	$ 7.909	$ 1,385.704	$ 25.180	318.4	$ 4,411.765
Artesian Resources Corp.		7.838	$ 15.078	$ 118.180	$ 22.900	151.9	$ 179.492
California Water Service Group		41.908	$ 11.304	$ 473.712	$ 21.800	192.9	$ 913.599
Connecticut Water Service, Inc.		10.939	$ 17.014	$ 186.121	$ 32.050	188.4	$ 350.611
Middlesex Water Company		15.795	$ 11.499	$ 181.632	$ 20.730	180.3	$ 327.430
SJW Corporation		18.671	$ 14.708	$ 274.604	$ 28.230	191.9	$ 527.070
York Water Company		12.919	$ 7.727	$ 99.825	$ 20.710	268.0	$ 267.545
Average		55.416	$ 13.574	$ 846.594	$ 26.994	211.5 %	$ 1,740.082

NA= Not Available

Notes:
(1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) From Financial Statements of EPCOR Water Arizona, Inc. for Fiscal Year End 2012.
(5) The market-to-book ratio of EPCOR Water Arizona, Inc. on October 31, 2013 is assumed to be equal to the market-to-book ratio of the Proxy Group of Nine Water Companies at October 31, 2013.
(6) EPCOR Water Arizona, Inc.'s common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at October 31, 2013 of the Proxy Group of Nine Water Companies, 211.5%, and EPCOR Water Arizona, Inc.'s market capitalization on October 31, 2013 would therefore have been $339.89 million.

Source of Information: 2012 Annual Forms 10K
yahoo.finance.com

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
BOB STUMP
BOB BURNS
DOUG LITTLE
TOM FORESE

IN THE MATTER OF THE APPLICATION OF EPCOR WATER ARIZONA INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WATER DISTRICT, TUBAC WATER DISTRICT, AND MOHAVE WASTEWATER DISTRICT	DOCKET NO: WS-01303A-14-0010

REBUTTAL TESTIMONY
OF
JOHN F. GUASTELLA
ON BEHALF OF
EPCOR WATER ARIZONA, INC.
FEBRUARY 9, 2015

REBUTTAL TESTIMONY
OF
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EXECUTIVE SUMMARY

EPCOR Water Arizona Inc. ("EWAZ" or "Company") filed an application for rate increases for its Mohave Water, Paradise Valley Water, Sun City Water, Tubac Water and Mohave Wastewater districts on the basis of a test year ended June 30, 2013.

I have reviewed certain testimony of the Arizona Corporation Commission ("ACC" or "Commission") Staff and the Residential Utility Consumer Office ("RUCO") witnesses regarding depreciation issues. On the basis of my review, I recommend that the following proposed ACC Staff and RUCO adjustments to the Company's rate filing be rejected by the Commission:

RUCO

Mohave Water:

RUCO's proposal to reduce rate base by $1,265,114 for "Regulatory Liability - Over-Collected Dep. Exp". RUCO's proposal to reduce depreciation expense by $253,023 for the "Amortization of Regulatory Liability over 5 Years". Note, unlike the other districts, RUCO's schedules for Mohave Water related to this rate base adjustment do not net the first year amortization of its total Regulatory Liability.

Paradise Valley Water:

RUCO's proposal to reduce rate base by $426,346 for "Net Regulatory Liability - Over-Collected Dep. Exp". RUCO's proposal to reduce depreciation expense by $106,586 for the "Amortization of Regulatory Liability over 5 Years".

Sun City Water:

RUCO's proposal to reduce rate base by $2,732,719 for "Net Regulatory Liability - Over-Collected Dep. Exp". RUCO's proposal to reduce depreciation expense by $883,180 for the "Amortization of Regulatory Liability over 5 Years".

Tubac Water:

RUCO's proposal to reduce rate base by $55,990 for "Net Regulatory Liability - Over-Collected Dep. Exp". RUCO's proposal to reduce depreciation expense by $13,997 for the "Amortization of Regulatory Liability over 5 Years".

Mohave Wastewater:

RUCO's proposal to reduce rate base by $31,559 for "Net Regulatory Liability - Over-Collected Dep. Exp". RUCO's proposal to reduce depreciation expense by $7,889.82 for the "Amortization of Regulatory Liability over 5 Years".

RUCO's recommendation that debit balances in accumulated depreciation be eliminated by increasing the acquisition premium associated with the purchase of Arizona American Water Company by EPCOR Water USA.

ACC STAFF

ACC Staff's proposal to decrease rate base by increasing accumulated depreciation for "Phantom Assets" on accounts with debit accumulated balances, as follows:

Mohave Water - $279,644

Paradise Valley Water - $1,416,273

Sun City Water - $715,283

Tubac Water - $1,877

Mohave Wastewater - $413,326.

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TELEPHONE NUMBER.

A. My name is John F. Guastella; I am President of Guastella Associates, LLC. My business address is 775 N. Highway A1A, Suite B103, Jupiter, Florida 33477. My telephone number is (561) 747-9867.

Q. BRIEFLY DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I graduated from Steven Institute of Technology with a degree in Mechanical Engineering. My professional career began with employment by the New York State Public Service Commission where I worked for 16 years. When I left the Commission to form my own consulting firm I was Director of the Water Division responsible for the regulation of some 450 water utilities, involving all aspects of rate and valuation, and the service provided by the water utilities. While with the Commission I served as Chairman of the Staff Committee of the Water Committee of the National Association of Regulatory Utility Commissioners, ("NARUC"), and I was one of the founders and faculty of the NARUC Water Rate Seminar. I have continued, to date, as a faculty member of this rate seminar and have taught the basics of rate setting and utility regulation to some 7,000 students over the last 40 years. As a consultant, I have been involved in the preparation of rate analyses, valuations, appraisals, depreciation studies, and various studies regarding utility regulatory issues. I have testified as an expert in some 23 states with respect to rate setting, valuation, depreciation, appraisals and condemnation cases, before either regulatory agencies, courts or municipal hearings. A detailed statement of my qualifications and experience is attached as Exhibit JFG-1R.

II. PURPOSE OF TESTIMONY

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR REBUTTAL TESTIMONY.

A. The purpose of my testimony is to examine specific issues regarding depreciation and, if necessary, prepare related rebuttal testimony.

III. RESPONSE TO ACC STAFF AND RUCO

Q. HAVE YOU REVIEWED THE TESTIMONY OF WITNESSES ON BEHALF OF RUCO AND THE ACC STAFF, FOCUSING ON DEPRECIATION ISSUES?

A. Yes. I have reviewed the testimony and exhibits of RUCO's witnesses Mr. Timothy J. Coley, Mr. Jeffrey M. Michlik and Mr. Frank W. Radigan, and ACC Staff witness Ms. Mary J. Rimback.

Q. WHAT ARE THE SPECIFIC DEPRECIATION ISSUES ABOUT WHICH YOU HAVE FOCUSED YOUR REVIEW?

A. Both RUCO and ACC Staff propose adjustments to rate base with respect to the Company's debit balances in accumulated depreciation for certain accounts. RUCO also proposes adjustments to depreciation expense.

Q. HAS THE COMPANY PROVIDED AN EXPLANATION OF THE DEBIT BALANCES IN ACCUMULATED DEPRECIATION?

A. Yes. The Company provides an explanation in its response number STFMJR19.1, attached as Exhibit JFG-2R.

Q. IS THE COMPANY'S EXPLANATION REASONABLE?

A. Yes. In accordance with the NARUC Uniform System of Accounts ("NARUC USOA"), the accounting for a retirement is to credit Utility Plant in Service and debit Accumulated Depreciation both with the original cost of the retired asset. If an asset is retired before the average service life that was used to establish its depreciation rate, the accumulated depreciation that was booked for the asset is less than the original cost. Accordingly, the

net effect is a debit balance for that asset. If, on the other hand, the asset had not been retired until after the related average service life, there would have been more depreciation than its original cost. The result of this routine and required accounting is not only common but expected. The Company's explanation is also obviously correct that the booking of depreciation expense is a credit, or increase, to accumulated depreciation.

Q. THE RUCO WITNESSES REFER TO THE DEBIT BALANCES IN ACCUMULATED DEPRECIATION FOR CERTAIN ASSET GROUPS AS "PHANTOM ASSETS." IS THAT DESCRIPTION CORRECT?

A. No. The debit balances in accumulated depreciation for those asset groups, which were caused by early retirements, represent the under recovery of the cost of the assets. The debit balances were created because, as required under the NARUC USOA, the accumulated depreciation was reduced by the original cost of the retired assets, which was greater than the respective accumulated depreciation that had been booked for those assets up to the time of the retirements. Thus, the debit balances in accumulated depreciation represent an under-recovery or shortfall in the recovery of the original cost of the assets.

Q. RUCO'S WITNESS, MR. COLEY, PROPOSES THAT THE COMPANY REMOVE THE DEBIT BALANCES FROM ACCUMULATED DEPRECIATION WITH THE OFFSETTING ENTRY TO THE ACQUISITION PREMIUM. HOW DOES THE COMPANY RESPOND TO THIS RECOMMENDATION?

A. When EPCOR purchased these systems from Arizona-American Water Company, the authorized rate base for each district was included in the determination of the purchase price. If these debit balances existed on the records of Arizona-American Water

Company in their last rate cases, the only appropriate treatment would be to 1) leave the balances as they exist until the group depreciation provides the recovery of the unrecovered amounts, or 2) to establish a regulatory asset and amortize the unrecovered amounts to expense over some period of time with average unamortized balances included in rate base.

Q. DO YOU AGREE WITH MS. RIMBACK'S DESCRIPTION OF THE DEBIT BALANCES IN ACCUMULATED DEPRECIATION AS "PHANTOM ASSETS?"

A. No. The retirement of an asset earlier than its average service life is a common occurrence for groups of assets, creating an undepreciated balance for that asset. The debit balance simply means that the total original cost was not recovered through depreciation accruals because of the early retirement. Accordingly, the debit balances in accumulated depreciation are, in fact, undepreciated balances or unrecovered costs, not Phantom Assets. As a further explanation, depreciation rates are based on average service lives that reflect the *average* anticipated life span of assets, some of which will be retired before the average and some after the average. The undepreciated balance in accumulated depreciation does not represent some mysteriously created "Phantom Asset" but, instead, represents the unrecovered portion of the cost of the assets that were retired before reaching their average service lives. The acceptance by the Commission of Ms. Rimback's proposal to remove the debit balances from accumulated depreciation and effectively increase accumulated depreciation and, thereby, reduce rate base by the undepreciated portion of the cost of the retired assets would result in a failure to recognize the net investment on which a return should be allowed.

Q. ALTHOUGH ACKNOWLEDGING THAT DEBIT BALANCES IN ACCUMULATED DEPRECIATION WERE APPROVED IN PRIOR CASES FOR THESE DISTRICTS, MS. RIMBACK ESSENTIALLY ARGUES THAT THOSE APPROVALS MAY BE AMENDED. DO YOU AGREE?

A. No. The rates approved in prior cases must be charged by the Company whether or not they generate the revenue requirement that formed the basis for those rates. If, after the new rates become effective, the actual earned return on investment turns out to be either less or more than allowed, because revenues, expenses and investment turned out to be more or less than reflected in the ACC's determination of the allowed revenue requirement, the next rate determination cannot be increased in order to compensate for past under earnings or be reduced to offset past over earnings. The principle of retroactive rate making prohibits such adjustments and such an action by the Commission would clearly constitute retroactive rate making.

Q. DID THE COMMISSION HAVE AN ALTERNATIVE IN THE PRIOR CASES WITH RESPECT TO DEBIT ACCUMULATED DEPRECIATION ACCOUNTS?

A. Yes. The Commission's prior decisions simply reflect the normal accounting for retirements, as required by the NARUC USOA, even though the early retirements resulted in debit accumulated depreciation balances and a shortfall in the recovery of the total original cost of the assets. As an alternative, if it was recognized that significant early retirements would eliminate or severely deplete the total depreciation reserve, the Commission could have treated the retirements as extra-ordinary, and allowed the recovery of the undepreciated balances (less any tax savings) through an amortization and include average unrecovered balances in rate base. Under that treatment, the Company would have been made whole by recovering the total original cost over time and earn a return on the average unrecovered cost in the interim.

Q. WHAT WOULD HAVE BEEN THE IMPACT ON RATES HAD THE COMMISSION APPROVED THIS ALTERNATIVE IN THE PRIOR RATE CASE?

A. The rates would have been higher because they would have included both the recovery of the cost, and a return on the unrecovered balance, not just a return on the undepreciated balance or debit balance in accumulated depreciation. Accordingly, the Commission's treatment of simply allowing the routine accounting for retirements in the prior cases resulted in lower rates.

Depreciation Expense

Q. MS. RIMBACK RECOMMENDS THAT THE COMPANY NO LONGER DEPRECIATE PRIMARY PLANT ACCOUNTS THAT IN TOTAL ARE FULLY DEPRECIATED. DO YOU AGREE WITH THAT RECOMMENDATION?

A. Yes, on a prospective basis.

Q. WHAT WAS THE IMPACT OF THE COMPANY'S CONTINUING TO DEPRECIATE FULLY DEPRECIATED ACCOUNTS AS ALLOWANCE IN PRIOR CASES?

A. The booked depreciation expense on fully depreciation accounts was a credit to accumulated depreciation and, therefore, a reduction of the debit balances. In addition, because the depreciation expense was higher than otherwise had the depreciation been ceased, the net income was lower. Accordingly, there was less equity earnings available to the stockholder, and more internally generated funds (depreciation allowances) were available to pay for plant additions and replacements. Thus, there was no adverse impact on the customers – they paid the rates approved by the Commission, no more and no less

and they will receive an additional benefit through the reduction in rate base that the additional accumulated depreciation provides.

Q. IN ADDITION TO PROPOSING A REDUCTION OF RATE BASE FOR A "REGULATORY LIABILITY FOR OVER-COLLECTED DEPRECIATION EXPENSE," RUCO WITNESSES ALSO PROPOSE A REDUCTION TO DEPRECIATION EXPENSE FOR THE SAME REASON. WOULD YOU PLEASE COMMENT ON THEIR PROPOSAL?

A. Regardless of whether the depreciation expense or any other expense was higher or lower than reflected in the Commission's prior decisions, RUCO's adjustment should not be accepted because it would constitute retroactive rate making. Moreover, the reduction to depreciation expense makes no sense in terms of long standing depreciation practices, cost recovery or rate making principles. While I agree with Ms. Rimback's recommendation to stop depreciating fully depreciated accounts on a prospective basis, RUCO's proposed depreciation adjustments are contrary to the basis on which depreciation rates are determined. Depreciation rates reflect the fact that retirements occur prior to and after the average service lives of groups of similar assets. The principle of intergenerational equity requires the use of average service lives so that current and future customers pay their respective share of the cost of utility facilities over the average life of the facilities. RUCO's proposal to treat the depreciation of retirement units of assets that have survived longer than the average service life of the group as a regulatory liability, ignores the early retirement of other retirement units in the group. The result is a distortion of the principles of full cost recovery and intergenerational equity.

Q. MS. RIMBACK HAS RECOMMENDED THAT THE COMPANY TRACK PLANT ASSETS BY VINTAGE YEAR OF PURCHASE IN ORDER TO ASSURE THAT THE COMPANY IS NOT OVER DEPRECIATING OR EXPENSING DEPRECIATION ON FULLY DEPRECIATED ASSETS. WOULD YOU COMMENT ON HER RECOMMENDATION?

A. Yes. On a positive note, I am assuming that this recommendation is consistent with Ms. Rimback's recommendation that the Company stop depreciating primary plant accounts once the entire account is fully depreciated, with which I have agreed. On the other hand, I am also assuming that she is not suggesting that depreciation expense be based on an asset-by-asset calculation, which would be incorrect for the reasons I just discussed above in addressing RUCO's improper proposal to adjust depreciation expense for the depreciation accruals on individual retirement units of plant that have survived longer than the average service life applicable to the primary plant account as a group.

Q. DO YOU AGREE WITH MR. RADIGAN'S RECOMMENDATION FOR THE COMPANY TO PERFORM A DEPRECIATION STUDY FOR ALL ACCOUNTS?

A. No. Mr. Radigan relies on Mr. Coley's conclusion that there was an over-recovery of depreciation expense. He also states that the existing depreciation rates resulted in large over recoveries of certain assets. Mr. Coley's conclusion is erroneous because, as I previously explained, there was no over-recovery of the cost of assets; instead there was a short-fall because of the early retirements. Mr. Radigan blames depreciation rates for an over recovery that does not exist while providing no analysis that the depreciation rates approved by the Commission in prior cases are unreasonable. In 2010, I prepared a depreciation study for EWAZ's predecessor on the basis of a detailed comparative analysis, because there was insufficient specific retirement experience for an actuarial study. I would also note that the inability to perform actuarial studies for small individual

water systems is invariably the case. I would estimate that of the thousands of investor-owned utilities in the country, less than one percent are large enough and old enough to have sufficient retirement data with which to perform a reliable actuarial study. Moreover, in my opinion the use of comparative data produces reasonable depreciation rates, as has been recognized by regulatory agencies around the country. The Commission previously authorized depreciation rates in the Company's last rate case on the basis of comparative data, Docket No. W-01303A-10-0448, by approval of a settlement agreement. The Company has requested the same rates in this case and ACC Staff witness, Mr. Michael Thompson is recommending adoption of those rates.

Q. **WOULD YOU BRIEFLY SUMMARIZE YOUR FINDINGS?**

A. The ACC Staff's proposal would penalize the Company for assets that were retired before the applicable average service lives and RUCO's proposed adjustments would penalize the Company for assets surviving longer than the applicable average service lives. In combination, the effect would essentially deny the full recovery of the cost and return on investments, unless every retirement unit of assets is retired at exactly the average service life. Their proposals are contrary to depreciation practices that have been used by utilities around the country and generally accepted by their regulators. The Company's accounting for retirements was proper and consistent with the accounting required by the NARUC USOA, and consistent with the Commission's prior rate cases. Although I agree that the depreciation should no longer be taken on fully depreciated accounts, the depreciation expense taken since the last case on those accounts did not have any adverse impact on the customers, but actually reduced the debit balances in accumulated depreciation and, therefore, reduced rate base to the benefit of the customers. For the five districts in this case, these reductions to rate base total $4.1 million. Debit balances in accumulated depreciation for the accounts in question do not

represent any over-recovery of the cost of the retired assets or "Phantom Assets" but, rather, an under-recovery of the cost. The credit balances in accumulated depreciation do not represent an over-recovery or a regulatory liability but, instead, the accounting that is required in order to properly account for the depreciation of all assets over time. RUCO's and ACC Staff's proposed adjustments to rate base and RUCO's proposed adjustments to depreciation expense to "refund" over-collected depreciation expense are not supported by proper analysis, widely used and accepted depreciation practices or rate making principles, and should be rejected.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

EXHIBIT JFG – 1R

Guastella Associates, LLC

Qualifications & Experience

Rate Setting
Valuation
Management
Consulting

...SERVING REGULATED AND UNREGULATED WATER AND WASTEWATER UTILITIES SINCE 1978

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INTRODUCTION
GUASTELLA ASSOCIATES, LLC

Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") is a consulting firm that specializes in providing utility rate setting, valuation and management services for public and privately-owned water and wastewater utilities.

John F. Guastella established Guastella Associates in 1978. Previously, Mr. Guastella was Director of the Water Division of the New York Public Service Commission. The Water Division provided the New York Commission with technical assistance in regulating the rates and service provided by approximately 450 privately-owned utilities. During the period from 1987 through 1991, Mr. Guastella also managed a 5,500 customer water utility in New York State. In 1989, Guastella Associates acquired the rates and valuation section of Coffin & Richardson, Inc., a general consulting firm that also provided a full range of services to water and wastewater utilities. Since 2009, Guastella Associates has served as the general manager of Daufuskie Island Utility Company, Inc. ("DIUC"), responsible for its day-to-day operations, billing, bookkeeping, financing, capital improvement projects and regulatory relations. DIUC provides water and wastewater service to some 550 connected customers and 600 availability customers located on Daufuskie Island South, Carolina.

As can be seen from the following qualifications and experience, key staff members have many years of combined experience in virtually every aspect of utility rate setting and valuation. The technical expertise of key staff, combined with their former employment by real estate and utility companies, a regulatory agency, and the management of water utilities, provides a total perspective towards addressing the rates and valuation needs of today's water and wastewater utilities.

Guastella Associates has assisted the largest privately-owned utilities with respect to the most challenging issues, performing complex studies and providing expert testimony in administrative hearings as well as court proceedings. In addition, our client base has included hundreds of small water and wastewater utilities - - obtaining rate increases that turn operating losses into profits, posturing them for financing, correcting record keeping errors and, for some, negotiating their sale at multiples of their original cost net investment rate base. Some of our most successful assignments have been to help establish new developer-related water and wastewater utilities, applying the correct principles at the outset in order to develop fully compensatory initial rates, record keeping procedures and asset management, so they are structured to become self-sustaining utilities that will achieve the highest possible profit and ultimate market value.

Our wide-range of experience and expertise has enabled us to successfully address the special needs of large investor-owned utilities in rate cases and condemnation proceedings.

OUTLINE OF SERVICES
GUASTELLA ASSOCIATES, LLC

Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") is a consulting firm specializing in utility management, valuation, appraisals and rate determinations. Guastella Associates has been providing professional services to regulated and unregulated utilities since 1978.

Specific areas of expertise includes:

I. RATE ANALYSIS

A. Revenue Requirements

1. Examination of books and records -- revenues, expenses and capital investment.

2. Determination of the cost of providing service (revenue requirement) -- normalize historical data, establish known changes and perform projections.

B. Rate Design

1. Perform cost allocation studies to establish cost of service for residential, commercial, industrial, wholesale and fire protection customers, and for other special users.

2. Develop rate structures -- combine billing analyses and cost allocations to form usage rates, flat rates, minimum service and facilities charges, and such other special charges as connection fees, availability rates, etc.

C. Reports

1. Investor-owned utilities -- prepare complete rate filings for submission to regulatory agencies; prepare testimony, exhibits, and assist in all aspects of adjudication process.

2. Municipal utilities -- prepare detailed rate reports in support of rate increases for use by municipal officials and presentation at municipal hearings.

OUTLINE OF SERVICES
GUASTELLA ASSOCIATES, LLC

II. **VALUATIONS**

A. Appraisals

1. Eminent domain condemnation proceedings, negotiations for sale of utilities, damage claims for insurance and ad valorem tax and management purposes.

2. Determinations of original cost, replacement cost, reproduction cost and market value, including going concern value.

3. Calculation of the present value of cash flow under the income approach to market value determinations.

4. Analyses of market data under the sales comparison approach.

B. Depreciation

1. Actuarial studies using retirement rate or simulated plant balances methods to determine average service lives of physical property, theoretical depreciation reserve requirements and depreciation rates.

2. Establish affordable depreciation rates on the basis of comparative analyses of similar property of other utilities and practices of regulatory agencies and association

C. Feasibility Studies

1. Utility acquisitions by investors and municipalities.

2. Economic studies to establish extension of service costs and policy -- inside and outside service area.

3. Main extension agreements, guaranteed revenue contracts, refund provisions.

D. Financial Planning

1. Establish financing requirements for capital improvements.

2. Determine revenue and rate needs for various combinations of debt and equity financing.

3. Assist certain utilities in securing financing.

4. Establish financing needs, initial rates and regulatory approval of proposed new utilities.

III. MANAGEMENT

A. Operations

1. Assist in day-to-day decisions as to utility accounting and related impact on rates.

2. Solve problems as to record keeping in accordance with regulatory requirements and prescribed systems of accounts.

3. Establish general policy and tariff provisions for customer service, billing, collecting, meter testing, complaint handling, and customer and regulatory relations.

B. Administrative

1. Coordinate activities with regulatory agencies to assure compliance with rules, regulations and orders.

2. Negotiations for purchase or sale of utility property and special contracts.

C. Training

1. On-the-job training for employees while working on various projects.

2. Special educational seminars on all aspects of utility rate settings, financing, valuation and rules.

PROFESSIONAL QUALIFICATIONS AND EXPERIENCE
of
JOHN F. GUASTELLA

B.S., Mechanical Engineering, Stevens Institute of Technology, 1962

Member:

American Water Works Association, Lifetime Member
National Association of Water Companies
New England Water Works Association, Lifetime Member

Committees:

AWWA, Water Rates Committee (Manual M-1, 1983 Edition)
National Association of Regulatory Utility Commissioners (NARUC) and NAWC, Joint-Committee on Rate Design
NAWC, Rates and Revenues Committee
NAWC, Small Water Company Committee

Mr. Guastella is President of Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") which provides management, valuation and rate consulting services for municipal and investor-owned utilities, as well as regulatory agencies. His clients include utilities in the states of Alaska, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Maine, Maryland, Massachusetts, Missouri, Michigan, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Pennsylvania, South Carolina, Texas, Rhode Island and Virginia. He has provided consulting services that include all aspects of utility regulation and rate setting, encompassing revenue requirements, revenues, operation and maintenance expenses, depreciation, taxes, return on investment, cost allocation and rate design. He has performed depreciation studies for the establishment of average service lives of utility property. He has performed appraisals of utility companies for management purposes and in connection with condemnation proceedings. He has also negotiated the sale of utility companies.

Mr. Guastella served for more than four years as President of Country Knolls Water Works, Inc., a water utility that served some 5,500 customers in Saratoga County, New York. He also served as a member of the Board of Directors of the National Association of Water Companies.

Mr. Guastella has qualified and testified as an expert witness before regulatory agencies and municipal jurisdictions in the states of Alaska, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maryland, Massachusetts, Missouri, Montana, Nevada, New Hampshire, New Mexico, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas and Virginia.

Prior to establishing his own firm, Mr. Guastella was employed by the New York State Public Service Commission for sixteen years. For two years he was involved in the regulation of electric and gas utilities, with the remaining years devoted to the regulation of water utilities. In 1970, he was promoted to Chief of Rates and Finance in the Commission's Water Division. In 1972, he was made Assistant Director of the Water Division. In 1974, he was appointed by Alfred E. Kahn, then Chairman of the Commission, to be Director of the Water Division, a position he held until he resigned from the Commission in August 1978.

At the Commission, his duties included the performance and supervision of engineering and economic studies concerning rates and service of many public utilities. As Director of the Water Division, he was responsible for the regulation of more than 450 water companies in New York State and headed a professional staff of 32 engineers and three technicians. A primary duty was to attend Commission sessions and advise the Commission during its decision making process. In the course of that process, an average of about fifty applications per year would be reviewed and analyzed. The applications included testimony, exhibits and briefs

involving all aspects of utility valuation and rate setting. He also made legislative proposals and participated in drafting Bills that were enacted into law: one expanded the N.Y. Public Service Commission's jurisdiction over small water companies and another dealt specifically with rate regulation and financing of developer-related water systems.

In addition to his employment and client experience, Mr. Guastella served as Vice-Chairman of the Staff-Committee on Water of the National Association of Regulatory Utility Commissioners (NARUC). This activity included the preparation of the "Model Record-Keeping Manual for Small Water Companies," which was published by the NARUC. This manual provides detailed instruction on the kinds of operation and accounting records that should be kept by small water utilities, and on how to use those records.

Each year since 1974 he has prepared study material, assisted in program coordination and served as an instructor at the Eastern Annual Seminar on Water Rate Regulation sponsored over the years by the NARUC in conjunction with the University of South Florida, Florida Atlantic University, the University of Utah, Florida State University, the University of Florida and currently Michigan State University. In 1980 he was instrumental in the establishment of the Western NARUC Rate Seminar and has annually served as an instructor since that time. This course is recognized as one of the best available for teaching rate-setting principles and methodology. More than 7,000 students have attended this course, including regulatory staff, utility personnel and members of accounting, engineering, legal and consulting firms throughout the country.

Mr. Guastella served as an instructor and panelist in a seminar on water and wastewater regulation conducted by the Independent Water and Sewer Companies of Texas. In 1998, he prepared and conducted a seminar on basic rate regulation on behalf of the New England Chapter of the National Association of Water Companies. In 2000 and 2001, Mr. Guastella developed and conducted a special seminar for developer related water and wastewater utilities in conjunction with Florida State University, and again in 2003 in conjunction with the University of Florida. It provided essential training for the financial structuring of small water and wastewater utilities, rate setting, financing and the establishment of their market value in the event of a negotiated sale or condemnation. In 2004, he prepared and conducted a special workshop seminar on behalf of the Office of Regulatory Staff of South Carolina, covering rate setting, valuation and general regulation of water and wastewater utilities. In 2006, he participated in an expert workshop on full cost pricing conducted by the U. S. Environmental Protection Agency in coordination with the Institute of Public Utilities, Michigan State University. In 2006, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New York Chapter of the NAWC. In 2007, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New England Chapter of NAWC. In 2013, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New York Chapter of NAWC

Mr. Guastella has made presentations on a wide variety of rate, valuation and regulatory issues at meetings of the National Association of Regulatory Utility Commissioners, the American Water Works Association, the New England Water Works Association, the National Association of Water Companies, the New England Conference of Public Utilities Commissioners, the Florida, New England, New Jersey and New York Chapters of NAWC, the Mid-America Regulatory Conference, the Southeastern Association of Regulatory Utility Commissioners, the Pennsylvania Environmental Conference, the Public Utility Law Section of the New Jersey Bar Association, and the NAWC Water Utility Executive Council.

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
1966	Sunhill Water Corporation	New York	23968
1967	Amagansett Water Company	New York	24210
1967	Worley Homes, Inc.	New York	24466
1968	Amagansett Water Company	New York	24718
1968	Amagansett Water Company	New York	24883
1968	Sunhill Water Corporation	New York	23968
1968	Worley Homes, Inc.	New York	Supreme Court
1969	Amagansett Water Supply	New York	24883
1969	Citizens Water Supply Co.	New York	25049
1969	Worley Homes, Inc.	New York	24466/24992
1970	Brooklyn Union Gas Company	New York	25448
1970	Consolidated Edison of New York	New York	25185
1971	Hudson Valley Water Companies	New York	26093
1971	Jamaica Water Supply Company	New York	26094
1971	Port Chester Water Works, Inc.	New York	25797
1971	U & I Corp. - Merrick District	New York	26143
1971	Wanakah Water Company	New York	25873
1972	Spring Valley Water Company	New York	26226
1972	U & I Corp. - Woodhaven District	New York	26232
1973	Citizens Water Supply Company	New York	26366
1978	Rhode Island DPU&C (Bristol County)	Rhode Island	1367A
1979	Candlewick Lake Utilities Co.	Illinois	76-0218
1979	Candlewick Lake Utilities Co.	Illinois	76-0347
1979	Candlewick Lake Utilities Co.	Illinois	78-0151
1979	Jacksonville Suburban Utilities	Florida	770316-WS
1979	New York Water Service Corporation	New York	27594
1979	Salem Hills Sewerage Disposal Corp. v. V. of Voorheesville	New York	Supreme Court

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
1979	Seabrook Water Corporation	New Jersey	7910-846
1979	Southern Utilities Corporation	Florida	770317-WS
1979	Township of South Brunswick	New Jersey	Municipal
1979	Westchester Joint Water Works	New York	Municipal
1979	Woodhaven Utilities Corporation	Illinois	77-0109
1980	Crestwood Village Sewer Company	New Jersey	BPU 802-78
1980	Crestwood Village Water Company	New Jersey	BPU 802-77
1980	Gateway Water Supply Corporation	Texas	Municipal
1980	GWW-Central Florida District	Florida	800004-WS
1980	Jamaica Water Supply Company	New York	27587
1980	Rhode Island DPU&C (Newport Water)	Rhode Island	1480
1981	Briarcliff Utilities, Inc.	Texas	3620
1981	Candlewick Lake Utilities Co.	Illinois	81-0011
1981	Caroline Water Company, Inc.	Virginia	810065
1981	GDU, Inc. - Northport	Florida	Municipal
1981	GDU, Inc. - Port Charlotte	Florida	Municipal
1981	GDU, Inc. - Port Malabar	Florida	80-2192
1981	Hobe Sound Water Company	Florida	8000776
1981	Lake Buckhorn Utilities, Inc.	Ohio	80-999
1981	Lake Kiowa Utilities, Inc.	Texas	3621
1981	Lakengren Utilities, Inc.	Ohio	80-1001
1981	Lorelei Utilities, Inc.	Ohio	80-1000
1981	New York Water Service Corporation	New York	28042
1981	Rhode Island DPU&C (Newport Water)	Rhode Island	1581
1981	Shawnee Hills Utility Company	Ohio	80-1002
1981	Smithville Water Company, Inc.	New Jersey	808-541
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Sunhill Water Corporation	New York	27903

John F. Guastella
List of Proceedings in which
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Year	Client	State	Regulatory Docket/Case Number
1981	Swan Lake Water Corporation	New York	27904
1982	Chesterfield Commons Sewer Company	New Jersey	822-84
1982	Chesterfield Commons Water Company	New Jersey	822-83
1982	Crescent Waste Treatment Corp.	New York	Municipal
1982	Crestwood Village Sewer Company	New Jersey	821-33
1982	Crestwood Village Water Company	New Jersey	821-38
1982	Salem Hills Sewerage Disposal Corp.	New York	Municipal
1982	Township of South Brunswick	New Jersey	Municipal
1982	Woodhaven Utilities Corporation	Illinois	82-0167
1983	Country Knolls Water Works, Inc.	New York	28194
1983	Heritage Hills Water Works Corp.	New York	28453
1984	Crestwood Village Sewer Company	New Jersey	8310-861
1984	Crestwood Village Water Company	New Jersey	8310-860
1984	Environmental Disposal Corp.	New Jersey	816-552
1984	GDU, Inc. - Port St. Lucie	Florida	830421
1984	Heritage Village Water (water/sewer)	Connecticut	84-08-03
1984	Hurley Water Company, Inc.	New York	28820
1984	New York Water Service Corporation	New York	28901
1985	Deltona Utilities (water/sewer)	Florida	830281
1985	J. Filiberto Sanitation, Inc.	New Jersey	8411-1213
1985	Sterling Forest Pollution Control	New York	Municipal
1985	Water Works Enterprise, Grand Forks	North Dakota	Municipal
1986	GDU, Inc. - Port Charlotte	Florida	Municipal
1986	GDU, Inc. - Sebastian Highlands	Florida	Municipal
1986	Kings Grant Water/Sewer Companies (settled)	New Jersey	WR8508-868
1986	Mt. Ebo Sewage Works, Inc.	New York	Municipal
1986	Sterling Forest Pollution Control	New York	Municipal
1987	Country Knolls Water Works, Inc.	New York	29443
1987	Crestwood Village Sewer Co. (settled)	New Jersey	WR8701-38

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Year	Client	State	Regulatory Docket/Case Number
1987	Deltona Utilities – Marco Island	Florida	85151-WS
1987	Deltona Utilities, Inc. - Citrus Springs (settled)	Florida	870092-WS
1987	First Brewster Water Corp. v. Town of Southeast (settled)	New York	Supreme Court
1987	GDU, Inc. - Silver Springs Shores	Florida	870239-WS
1987	Ocean County Landfill Corporation	New Jersey	SR-8703117
1987	Palm Coast Utility Corporation	Florida	870166-WS
1987	Sanlando Utilities Corp. (settled)	Florida	860683-WS
1987	Township of South Brunswick	New Jersey	Municipal
1987	Woodhaven Utilities Corp. (settled)	Illinois	87-0047
1988	Crescent Estates Water Co., Inc.	New York	88-W-035
1988	Elizabethtown Water Co.	New Jersey	OAL PUC3464-88
1988	Heritage Village Water Company	Connecticut	87-10-02
1988	Instant Disposal Service, Inc.	New Jersey	SR-87080864
1988	J. Filiberto Sanitation v. Morris County Transfer Station	New Jersey	01487-88
1988	Ohio Water Service Co.	Ohio	86-1887-WW-CO1
1988	St. Augustine Shores Utilities	Florida	870980-WS
1989	Elizabethtown Water Co.	New Jersey	BPU WR89020132J
1989	GDU (FPSC generic proceeding as to rate setting procedures)	Florida	880883-WS
1989	Gordon's Corner Water Co.	New Jersey	OAL PUC479-89
1989	Heritage Hills Sewage Works	Connecticut	Municipal
1989	Heritage Village Water Company	Connecticut	87-10-02
1989	Palm Coast Utility Corporation	Florida	890277-WS
1989	Southbridge Water Supply Co.	Massachusetts	DPU 89-25
1989	Sterling Forest Water Co.	New York	PSC 88-W-263
1990	American Utilities, Inc. - United States Bankruptcy Court	New Jersey	85-00316
1990	City of Carson City	Nevada	Municipal
1990	Country Knolls Water Works, Inc.	New York	90-W-0458
1990	Elizabethtown Water Company	New Jersey	WR900050497J

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Year	Client	State	Regulatory Docket/Case Number
1990	Kent County Water Authority	Rhode Island	1952
1990	Palm Coast Utility Corporation	Florida	871395-WS
1990	Southern States Utilities, Inc.	Florida	Workshop
1990	Trenton Water Works	New Jersey	WR90020077J
1990	Waste Management of New Jersey	New Jersey	SE 87070552
1990	Waste Management of New Jersey	New Jersey	SE 87070566
1991	City of Grand Forks	North Dakota	Municipal
1991	Gordon's Corner Water Co.	New Jersey	OAL PUC8329-90
1991	Southern States Utilities, Inc.	Florida	900329-WS
1992	Elizabethtown Water Co.	New Jersey	WR 91081293J
1992	General Development Utilities, Inc. - Port Malabar Division	Florida	911030-WS
1992	General Development Utilities, Inc. - West Coast Division	Florida	911067-WS
1992	Heritage Hills Water Works, Inc.	New York	92-2-0576
1993	General Development Utilities, Inc. - Port LaBelle Division	Florida	911737-WS
1993	General Development Utilities, Inc. - Silver Springs Shores	Florida	911733-WS
1993	General Waterworks of Pennsylvania - Dauphin Cons. Water Supply	Pennsylvania	R-00932604
1993	Kent County Water Authority	Rhode Island	2098
1993	Southern States Utilities - FPSC Rulemaking	Florida	911082-WS
1993	Southern States Utilities - Marco Island	Florida	920655-WS
1994	Capital City Water Company	Missouri	WR-94-297
1994	Capital City Water Company	Missouri	WR-94-297
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Environmental Disposal Corp.	New Jersey	WR94070319
1994	General Development Utilities - Port Charlotte	Florida	940000-WS
1994	General Waterworks of Pennsylvania	Pennsylvania	R-00943152

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
1994	Hoosier Water Company - Mooresville Division	Indiana	39839
1994	Hoosier Water Company - Warsaw Division	Indiana	39838
1994	Hoosier Water Company - Winchester Division	Indiana	39840
1994	West Lafayette Water Company	Indiana	39841
1994	Wilmington Suburban Water Corporation	Delaware	94-149 (stld)
1995	Butte Water Company	Montana	Cause 90-C-90
1995	Heritage Hills Sewage Works Corporation	New York	Municipal
1996	Consumers Illinois Water Company	Illinois	95-0342
1996	Elizabethtown Water Company	New Jersey	WR95110557
1996	Palm Coast Utility Corporation	Florida	951056-WS
1996	PenPac, Inc.	New Jersey	OAL-00788-93N
1996	Southern States Utilities, Marco Island	Florida	950495-WS
1997	Crestwood Village Water Company	New Jersey	BPU 96100739
1997	Indiana American Water Co., Inc.	Indiana	IURC 40703
1997	Missouri-American Water Company	Missouri	WR-97-237
1997	South County Water Corp	New York	97-W-0667
1997	United Water Florida	Florida	960451-WS
1998	Consumer Illinois Water Company	Illinois	98-0632
1998	Consumers Illinois Water Company	Illinois	97-0351
1998	Heritage Hills Water Company	New York	97-W-1561
1998	Missouri-American Wastewater Company	Missouri	SR-97-238
1999	Consumers Illinois Water Company	Illinois	99-0288
1999	Environmental Disposal Corp.	New Jersey	WR99040249
1999	Indiana American Water Co., Inc.	Indiana	IURC 41320
2000	South Haven Sewer Works, Inc.	Indiana	Cause: 41410
2000	Utilities Inc. of Maryland	Maryland	CAL 97-17811
2001	Artesian Water Company	Delaware	00-649
2001	Citizens Utilities Company	Illinois	01-0001
2001	Elizabethtown Water Company	New Jersey	WR-0104205

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
2001	Kiawah Island Utility, Inc.	South Carolina	2001-164-W/S
2001	Placid Lakes Water Company	Florida	011621-WU
2001	South Haven Sewer Works, Inc.	Indiana	41903
2001	Southlake Utilities, Inc.	Florida	981609-WS
2002	Artesian Water Company	Delaware	02-109
2002	Consumers Illinois Water- Grant Park	Illinois	02-0480
2002	Consumers Illinois Water- Village Woods	Illinois	02-0539
2002	Valencia Water Company	California	02-05-013
2003	Consumers Illinois Water - Indianola	Illinois	03-0069
2003	Elizabethtown Water Company	New Jersey	WR-030-70510
2003	Golden Heart Utilities, Inc.	Alaska	U-02-13, 14 & 15
2003	Utilities, Inc. – Georgia	Georgia	CV02-0495-AB
2004	Aquarion Water Company	Connecticut	04-02-14
2004	Artesian Water Company	Delaware	04-42
2004	El Dorado Utilities, Inc.	New Mexico	D-101-CU-2004-
2004	Environmental Disposal Corp.	New Jersey	DPU WR 03 070509
2004	Heritage Hills Water Company	New York	03-W-1182
2004	Sun Valley Water & Washoe County Dept. of Water Revenues	Nevada	TMWA Municipal
2004	Jersey City MUA	New Jersey	Municipal
2004	Rockland Electric Company	New Jersey	EF02110852
2005	Aquarion Water Company	New Hampshire	DW 05-119
2005	Intercoastal Utilities, Inc.	Florida	04-0007-0011-0001
2005	Haig Point Utility Company, Inc.	South Carolina	2005-34-W/S
2005	South Central Connecticut Regional Water Auth.	Connecticut	Municipal
2006	Pennichuck Water Works, Inc.	New Hampshire	DW-04048
2006	Village of Williston Park	New York	Municipal
2006	Jersey City MUA	New Jersey	Municipal

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
2006	Groton Utilities	Connecticut	Municipal
2006	Connecticut Water Company	Connecticut	06-07-08
2006	Birmingham Utilities, Inc.	Connecticut	06-05-10
2006	Aqua Florida Utilities, Inc.	Florida	060368-WS
2007	Aquarion Water Company of CT	Connecticut	07-05-19
2007	Pennichuck Water Works, Inc.	New Hampshire	DW 04-048
2007	Aqua Indiana - Utility Center	Indiana	43331
2007	Environmental Disposal Corp.	New Jersey	WR 04 080760
2007	Aqua Florida Utilities, Inc.	Florida	07-0183
2007	Aqua Illinois, Inc. - Hawthorn Woods, Willowbrook & Vermilion	Illinois	07-0620/07-0621/08-0067
2008	Aqua Florida Utilities, Inc.	Florida	080121-WS
2008	Aquarion Water Company of MA	Massachusetts	D.P.U. 08-27
2008	Haig Point Utility Company, Inc.	South Carolina	2007-414-WS
2009	R.M.V. Land & C.M. Livestock, L.C.C.	New Jersey	EM02050313
2010	City of Griffin	Georgia	Civil Action No. 09V-2866
2010	Connecticut Water Company	Connecticut	09-12-11
2010	Montville WPCA	Connecticut	1400012464
2010	Milford Water Company	Massachusetts	DPU 10-78
2010	Arizona American Water Company	Arizona	W-01303A-10-0448
2011	Aqua Illinois	Illinois	ICC Docket (Consolidated)
2011	Artesian Water Company	Maryland	MPSC Case 9252
2011	Artesian Water Company	Delaware	PSC 11-207
2011	Kiawah Island Utility, Inc.	South Carolina	2011-317-WS
2012	Washington Gas Light	Maryland	Senate SB541
2012	Washington Gas Light	Maryland	House HB662
2012	Daufuskie Island Utility	South Carolina	2011-229-W/S
2012	Milford Water Company	Massachusetts	DPU 12-86
2013	Artesian Water Company	Pennsylvania	2:10-CV-07453-JP

John F. Guastella
List of Proceedings in which
Expert Testimony
was Presented

Year	Client	State	Regulatory Docket/Case Number
2013	Aquarion Water Company	Massachusetts	CA 09-00592E
2013	Water Management Services	Florida	110200-WU
2013	City of Fernandina Beach	Florida	Civil Action No. 13CA000485AXYX
2013	City of Elizabeth	New Jersey	Docket Nos. UNN-L-0556-10 and UNN-L-2608-11
2014	Daufuskie Island Utility Company, Inc.	South Carolina	Case No. 2013-CP-7-02255
2014	Artesian Water Company	Delaware	Docket No. PSC 14-132

Papers and Presentations
By
John F. Guastella

Year	Title	Forum
1974 through 2014	1. Basics of Rate Setting 2. Cost Allocation and Rate Design 3. Revenue Requirements	Semi-annual seminars on utility rate regulation, National Association of Regulatory Utility Commissioners, sponsored by the University of South Florida, the University of Utah, Florida State University, The University of Florida and currently Michigan State University
1974	Rate Design Studies: A Regulatory Point-of- View	Annual convention of the National Association of Water Companies, New Haven, Connecticut
1976	Lifeline Rates	Annual convention of the National Association of Water Companies, Chattanooga, Tennessee
1977	Regulating Water Utilities: The Customers' Best Interest	Annual symposium of the New England Conference of Public Utilities Commissioners, Mystic Seaport, Connecticut
1978	Rate Design: Preaching v. Practice	Annual convention of the National Association of Water Companies, Baton Rouge, Louisiana
1979	Small Water Companies	Annual symposium of the New England Conference of Public Utilities Commissioners, Newport, Rhode Island
1979	Rate Making Problems Peculiar to Private Water and Sewer Companies	Special educational program sponsored by Independent Water and Sewer Companies of Texas, Austin, Texas
1980	Water Utility Regulation	Annual meeting of the National Association of Regulatory Utility Commissioners, Houston, Texas
1981	The Impact of Water Rates on Water Usage	Annual Pennsylvania Environmental Conference, Harrisburg, Pennsylvania
1981	A Realistic Approach to Regulating Water Utilities	Mid-America Regulatory Conference, Clarksville, Indiana
1982	Issues in Water Utility Regulation	Annual symposium of the New England Conference of Public Utilities Commissioners, Rockport, Maine
1982	New Approaches to the Regulation of Water Utilities	Southeastern Association of Regulatory Utility Commissioners, Asheville, North Carolina
1983	Allocating Costs and Revenues Fairly and Effectively	Maryland Water and Sewer Finance Conference, Westminster, Maryland
1983	Lifeline and Social Policy Pricing	Annual conference of the American Water Works Association, Las Vegas, Nevada (published)
1984	The Real Cost of Service: Some Special Considerations	Annual New Jersey Section AWWA Spring Meeting, Atlantic City, New Jersey
1987	Margin Reserve: It's Not the Issue	Florida Waterworks Association Newsletter, April/May/June 1987 issue

Papers and Presentations
By
John F. Guastella

Year	Title	Forum
1987	A "Current" Issue: CIAC	NAWC - New England Chapter November 6, 1987 meeting
1988	Small Water Company rate Setting: Take It or Leave It	NAWC - New York Chapter June 14, 1988 meeting Leave It
1989	The Solution to all the Problems of Good Small Water Companies	NAWC Quarterly magazine, Winter issue
1989	Current Issues Workshop - Panel	New England Conference of Public Utilities Commissioners, Kennebunkport, Maine
1991	Alternative Rate Structures	New Jersey Section 1991 Annual Conference, AWWA, Atlantic City, New Jersey
1994	Conservation Impact on Water Rates	New England NAWC and New England AWWA, Sturbridge, Massachusetts
1996	Utility Regulation - 21st Century	NAWC Annual Meeting, Orlando, Florida
1997	Current Status Drinking Water State Revolving Fund	NAWC Annual Meeting, San Diego, California
1998	Small Water Companies - Problems and Solutions	NAWC Annual Meeting, Indianapolis, Indiana
1998	Basic Rate Regulation Seminar	New England Chapter - NAWC, Rockport, Maine
2000	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2001	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2002	Regulatory Cooperation - Small Company Education	New England Chapter - NAWC, Annual Meeting
2003	Developer Related Water and Sewer Utilities Seminar	University of Florida, Orlando, Florida
2004	Basic Regulation & Rate Setting Training Seminar	Office of Regulatory Staff, Columbia, South Carolina
2005	Municipal Water Rates	Nassua-Suffolk Water Commissioners Association, Franklin Square, New York
2005	Innovations in Rate Setting and Procedures	NAWC New York Chapter, West Point, New York

Papers and Presentations
By
John F. Guastella

Year	Title	Forum
2006	Basics of Rate Setting	The Connecticut Water Company, Clinton, Connecticut
2006	Innovations in Rate Setting and Procedures	NAWC New York Chapter, Catskill, New York
2006	Best Practices as Regulatory Policy	NAWC New England Chapter, Ogunquit, Maine
2006	Rate and Valuation Seminar	NAWC New York Chapter
2006	Full Cost Pricing	U.S. Environmental Protection Agency Expert Workshop, Lansing, Michigan
2006	Innovations in Rate Setting	NAWC New England Chapter, Portsmouth, New Hampshire
2007	Weather Sensitive Customer Demands	NAWC Water Utility Executive Council, Half Moon Bay, California
2007	Basics of Rate Setting and Valuation Seminar	NAWC New England Chapter, Ogunquit, Maine
2007	Small Company Characteristics	National Drinking Water Symposium, La Jolla, California
2013	Rate and Valuation Seminar	NAWC New York Chapter

EXHIBIT JFG – 2R

COMPANY: EPCOR Water Arizona Inc.
DOCKET NO: WS-01303A-14-0010

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: STF MJR 19.1

Q: **Company Debit Accumulated Balances.** The attached schedule Debit Accumulated Depreciation reflects plant balances provided by the Company. The balances were provided by District, by NARUC account in the Company Revised Schedules dated October 14, 2014 for the test year ended 6/30/2013. The total accumulated depreciation debit balances are $5,878,329. The usual balance to accumulated depreciation is a credit balance and it decreases the net book value. The debit balances increase the rate base used for ratemaking from $7,688,752 to $13,567,081. This is creating a phantom increase to assets. Please explain how the accumulated depreciation balances were calculated for these accounts.

A: The accumulated depreciation balances are increased as plant accounts are depreciated and decreased when plant assets are retired or otherwise removed from service in accordance with the plant accounting instructions included in the NARUC Uniform System of Accounts. When plant assets are retired or otherwise removed from service before the end of their useful lives or are otherwise not fully depreciated, this may contribute to a debit balance in an accumulated depreciation account. This is contemplated by the group method of depreciation for which depreciation continues on assets in a group until the group is fully depreciated resulting in a net book value of the group of $0.

Specific retirements that have contributed to some of the accumulated depreciation balances were identified in response to other ACC Staff data requests. See specifically the following responses to data requests:

STF MJR 16.2
STF MJR 16.4
STF MJR 16.5
STF MJR 16.6
STF MJR 16.8

Also, response to data request number RUCO 13.2 has some discussion of factors contributing to debit accumulated depreciation balances.

Mohave Wastewater
Test Year Ended June 30, 2013
Computation of Increase in Gross Revenue Requirement

Exhibit
Schedule A-1 Rebuttal
Page 1
Witness:

Line No.			
1	Original Cost Rate Base	$	5,365,614
2			
3	Adjusted Operating Income	$	94,517
4			
5	Current Rate of Return		1.76%
6			
7	Required Operating Income	$	365,398
8			
9	Required Rate of Return		6.81%
10			
11	Operating Income Deficiency	$	270,881
12			
13	Gross Revenue Conversion Factor		1.6489
14			
15	Increase in Gross Revenue		
16	Requirement	$	446,643
17			

18 Customer Classification	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
21 Residential	$ 974,526	$ 1,406,241	$ 431,715	44.3%
22 Commercial	24,477	35,320	10,843	44.3%
23 Other Public Authority	8,822	12,730	3,908	44.3%
24 Effluent	44,578	44,578	-	0.0%
25 Other	(193)	(16)	177	-91.7%
26				
27 Total Water Revenues	$ 1,052,210	$ 1,498,853	$ 446,643	42.4%
28				
29 Other Revenues	$ 3,629	$ 3,629	$ -	0.0%
30				
31 Total Revenues	$ 1,055,840	$ 1,502,483	$ 446,643	42.3%

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46 Supporting Schedules:
47 B-1 Rebuttal
48 C-1 Rebuttal
49 H-1 Rebuttal
50 \2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls

Mohave Wastewater
Test Year Ended June 30, 2013
Summary of Fair Value Rate Base

Exhibit
Schedule B-1 Rebuttal
Page 1
Witness: Hubbard

Line No.			Original Cost Rate Base
1			
2	Gross Utility Plant in Service	$	8,866,427
3			
4	Less:		
5			
6	Accumulated Depreciation		693,460
7			
8	Net Utility Plant in Service	$	8,172,966
9			
10	Less:		
11			
12	Advances in Aid of Construction	$	1,916,421
13			
14	Contribution in Aid of Construction -		
15	Net of Amortization		935,072
16			
17	Customer Meter Deposits		5
18	Deferred Income Taxes & Credits		62,236
19	Investment Tax Credits		-
20			
21			
22	Plus:		
23	Deferred Debits		89,523
24	Working Capital Allowance		16,860
25	Utility Plant Acquisition Adjustment		-
26			
27			
28	Total Rate Base	$	5,365,614
29			
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41	Supporting Schedules:		
42	B-2 Rebuttal		
43	B-5 Rebuttal		
44	B-3		
45	E-1		
46			
47			
48			
49			
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Recap Schedules:
A-1 Rebuttal

Mohave Wastewater
Test Year Ended June 30, 2013
Original Cost Rate Base Pro Forma Adjustments

Exhibit
Schedule B-2 Rebuttal
Page 1
Witness: Hubbard

Line No.		Company Rebuttal						
		[A] Adjusted End of Test Year	[B] ADJ SLH-1R Working Capital Adjustment	[C] ADJ SLH-2R *Not Used*	[D] ADJ SLH-3R 24 Month Deferral AFUDC Adjustment	[E] ADJ SLH-4R Regulatory Liability Adjustment	[F] Total Rebuttal Pro Forma Adjustments	[G] Rebuttal Adjusted End of Test Year
1	Gross Utility							
2	Plant in Service	$ 8,866,427						$ 8,866,427
3		-						
4	**Less:**	-						
5		-						
6	Accumulated Depreciation	693,460					-	693,460
7								
8	Net Utility Plant							
9	in Service	$ 8,172,966	$ -	$ -	$ -	$ -	$ -	$ 8,172,966
10								
11	**Less:**							
12	Advances in Aid of							
13	Construction	1,916,421					-	1,916,421
14	Contributions in Aid of	-						
15	Construction - Net	935,072					-	935,072
16		-						
17		-						
18	Customer Meter Deposits	5					-	5
19	Deferred Income Taxes	62,236					-	62,236
20	Investment Tax Credits	-					-	-
21	Regulatory Liabilities	-					-	-
22		-						
23	**Plus:**	-						
24	Deferred Debits	28,717			60,806		60,806	89,523
25	Working Capital Allowance	17,130	(274)				(274)	16,856
26	Utility Plant Acquisition Adjustment	-					-	-
27								
28	Total	$ 5,305,079	$ (274)	$ -	$ 60,806	$ -	$ 60,532	$ 5,365,611
29								
30	Supporting Schedules:							
31	B-3, B-5 Revised							
32	E-1							
33								
34								
35	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls							

Mohave Wastewater
Test Year Ended June 30, 2013
Rate Base Adjustment SLH-2R

Exhibit
Schedule B-2
Page 2
Witness: Hubbard

Line No.			
1	**24-Month Deferral Request**		
2	On October 14, 2012, Mohave Wastewater Water filed Docket No. W-01303A-12-0427 seeking approval		
3	of an accounting order to defer Post-in-Service AFUDC and Depreciation on investment between rate		
4	filings. This filing was withdrawn June 27, 2013 to enable the Company to pursue those deferrals on an		
5	individual district basis.		
6			
7	Pro Forma 24-Month Deferral Balance	$	89,523
8	Test Year filed 24-Month Deferral Balance	$	28,717
9			
10	Increase / (Decrease) in Deferred Debits	$	60,806
11			
12			
13			
14			
15			
16	Removal of Deferred Debits other than 24-Month AFUDC		0
17			
18			
19	Increase / (Decrease) to Rate Base	$	60,806
20			
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44			
45	Workpapers and Supporting Documents		
46	\2-yr Deferral Request & Recovery		
47	\Rate Impact for Public Notices.xls		
48	\Test Year Adjustments 12-19.xlsx		
49			
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Mohave Wastewater
Test Year Ended June 30, 2013
Computation of Working Capital Allowance

Exhibit
Schedule B-5 Rebuttal
Page 1
Witness: Hubbard

Line No.			
1			
2	Cash Working Capital Requirement	$	(28,369)
3	Required Bank Balances[1]		-
4	Material and Supplies Inventories[1]		37,363
5	Prepayments[1]		7,866
6			
7	Total Working Capital Allowance	$	16,860
8			
9	Less Company amount in Original Filing	$	17,134
10			
11	Increase / (Decrease) to Working Capital Allowance	$	(274)
12			
13			
14	Increase / (Decrease) to Rate Base	$	(274)
15			
16			
17			
18			
19	[1] Calculated using thirteen-month averages.		
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43	Supporting Schedules:	Recap Schedules:	
44	E-1	B-1 Revised	
45			
46	Workpapers & Supporting Documents		
47	\ #9 B - Materials and Supplies Prepayments & Deferred Cost.xlsx		
48	\ Lead-Lag Workpapers		
49			
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Mohave Wastewater
Test Year Ended June 30, 2013
Lead/Lag Study - Working Cash Requirement

Exhibit
Schedule B-6 Rebuttal
Page 1
Witness: Hubbard

Line No.	Description	Test Year Adjusted Results	Revenue Lag Days	Expense Lag Days	Net Lag Days	Lead/ Lag Factor	Cash Working Capital Required
	[a]	[b]	[c]	[d]	[e] = [c] - [d]	[f] = [e] / 365	[g] = [b] x [f]
1	OPERATING EXPENSES						
2	Labor	$ 267,501	41.140	30.633	10.507	0.029	$ 7,700
3	Fuel & Power	46,241	41.140	50.509	(9.369)	(0.026)	(1,187)
4	Chemicals	12,000	41.140	7.000	34.140	0.094	1,122
5	Waste Disposal	34,306	41.140	45.456	(4.316)	(0.012)	(406)
6	Intercompany Support Services	161	41.140	30.417	10.723	0.029	5
7	Corporate Allocation	54,476	41.140	30.420	10.720	0.029	1,600
8	Outside Services	34,425	41.140	42.457	(1.317)	(0.004)	(124)
9	Group Insurance	53,807	41.140	(10.716)	51.856	0.142	7,644
10	Regulatory Expense	11,993	41.140	-	41.140	0.113	1,352
11	Insurance Other Than Group	14,658	41.140	64.818	(23.678)	(0.065)	(951)
12	Customer Accounting	57,252	41.140	49.695	(8.555)	(0.023)	(1,342)
13	Rents	8,199	41.140	16.481	24.659	0.068	554
14	General Office Expense	20,485	41.140	29.563	11.577	0.032	650
15	Miscellaneous	(2)	41.140	25.018	16.122	0.044	(0)
16	Maintenance Expense	51,102	41.140	49.773	(8.633)	(0.024)	(1,209)
17							
18							
19	TAXES						
20	Property Taxes	61,151	41.140	213.250	(172.110)	(0.472)	(28,835)
21	Taxes - Payroll	18,540	41.140	26.402	14.738	0.040	749
22	Taxes -Other	(6,148)	41.140	(131.290)	172.430	0.472	(2,904)
23	Income Tax	139,528	41.140	41.750	(0.610)	(0.002)	(233)
24							
25	Interest	$ 137,360	41.140	74.500	(33.360)	(0.091)	(12,554)
26							
27							
28							
29							
30	WORKING CASH REQUIREMENT	$ 1,017,034					$ (28,369)
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40							
41							
42							
43	Supporting Schedules:		Recap Schedules:				
44	C-1 Rebuttal		B-5 Rebuttal				
45							
46	Workpapers & Supporting Documents						
47							
48							
49							
50	\2013 Mohave WasteWater Sch. A-F Rebuttal (Oct2014 Direct).xls						

Mohave Wastewater
Test Year Ended June 30, 2013
Adjusted Test Year Income Statement

Exhibit
Schedule C-1 Rebuttal
Page 1
Witness: Murrey

Line No.		[A] Adjusted Test Year Results	[B] Total Rebuttal Pro Forma Adjustments	[C] Test Year Adjusted Results	[D] Proposed Rate Increase	[E] Adjusted with Rate Increase
1	**Revenues**					
2	Sewer Revenues	$ 1,052,210	$ -	$ 1,052,210	$ 446,643	$ 1,498,853
3	Other Revenues	3,629	-	3,629		3,629
4		$ 1,055,839	$ -	$ 1,055,839	$ 446,643	$ 1,502,483
5						
6	**Operating Expenses**					
7	Labor	$ 268,572	$ (1,071)	$ 267,501	-	$ 267,501
8	Purchased Water	(0)	-	(0)	-	(0)
9	Fuel & Power	46,241	-	46,241	-	46,241
10	Chemicals	12,000	-	12,000	-	12,000
11	Waste Disposal	34,306	-	34,306	-	34,306
12	Intercompany Support Services	161	-	161	-	161
13	Corporate Allocation	58,694	(4,218)	54,476	-	54,476
14	Outside Services	34,425	-	34,425	-	34,425
15	Group Insurance	53,082	-	53,082	-	53,082
16	Pensions	725	-	725	-	725
17	Regulatory Expense	11,993	-	11,993	-	11,993
18	Insurance Other Than Group	14,658	-	14,658	-	14,658
19	Customer Accounting	53,827	895	54,723	2,529	57,252
20	Rents	8,199	-	8,199	-	8,199
21	General Office Expense	20,902	(417)	20,485	-	20,485
22	Miscellaneous	84	(87)	(2)	-	(2)
23	Maintenance Expense	51,102	-	51,102	-	51,102
24	Depreciation & Amortization	257,946	(535)	257,411	-	257,411
25	General Taxes-Property	53,660	-	53,660	7,490	61,151
26	General Taxes-Other	12,392	-	12,392	-	12,392
27	Income Taxes	(27,928)	1,714	(26,214)	165,742	139,528
28						
29	**Total Operating Expenses**	$ 965,040	$ (3,718)	$ 961,322	$ 175,762	$ 1,137,085
30	**Utility Operating Income**	$ 90,799	$ 3,718	$ 94,517	$ 270,881	$ 365,398
31	**Other Income & Deductions**					
32	Other Income & Deductions	$ -	$ -	$ -		$ -
33	Interest Expense	135,810	1,550	137,360		137,360
34	Other Expense	-	-	-		-
35	Gain/Loss Sale of Fixed Assets	-	-	-		-
36	**Total Other Income & Deductions**	$ (135,810)	$ (1,550)	$ (137,360)	$ -	$ (137,360)
37	**Net Profit (Loss)**	$ (45,011)	$ 2,168	$ (42,843)	$ 270,881	$ 228,039
38						
39						
40						
41						
42						
43						
44	Supporting Schedules:					Recap Schedules:
45	E-2 Revised					A-1 Rebuttal
46	C-2 Rebuttal					
47						
48						
49						
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls					

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Pro Forma Adjustments

Exhibit
Schedule C-2 Rebuttal
Page 1
Witness: Murrey

Line No.		[A] Adjusted Test Year Results	*Not used* [B] ADJ SM-1R *Accept STF ADJ #1* Water Revenue (Sun City and Mohave Water only)	Page 3 [C] ADJ SLH-2R *Revised STF ADJ #2* Depreciation Expense	Page 4 [D] ADJ SM-3R *Revised STF ADJ #3* Property Tax	Page 5 [E] ADJ SM-4R *Revised STF ADJ #4* Federal and State Income Tax	Page 6 [F] ADJ SM-5R *Revised STF ADJ #5* Arizona Corporate Allocations	*Not used* [G] ADJ SM-6R *Revised STF ADJ #6* Water Testing	*Not used* [H] ADJ SM-7R *Revised Staff Adj #8* Chemical Expense (Tubac only)	Page 7 [I] ADJ SM-8R Interest Synchronization	*Not used* [J] ADJ SM-9R *Ruco Adj #8* Tank Maintenance
1	**Revenues**										
2	Sewer Revenues	$ 1,052,210									
3	Other Revenues	3,629									
4		$ 1,055,839	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
5											
6	**Operating Expenses**										
7	Labor	$ 268,572									
8	Purchased Water	(0)									
9	Fuel & Power	46,241									
10	Chemicals	12,000									
11	Waste Disposal & Other Utilities	34,306									
12	Intercompany Support Services	161									
13	Corporate Allocation	58,694									
14	Outside Services	34,425									
15	Group Insurance	53,082									
16	Pensions	725									
17	Regulatory Expense	11,993									
18	Insurance Other Than Group	14,658									
19	Customer Accounting	53,827									
20	Rents	8,199					483				
21	General Office Expense	20,902									
22	Miscellaneous	84									
23	Maintenance Expense	51,102									
24	*Depreciation & Amortization*	257,946		(1,871)							
25	General Taxes-Property	53,660					(330)				
26	General Taxes-Other	12,392			-						
27	Income Taxes	(27,928)				1,714					
28											
29	**Total Operating Expenses**	$ 965,040	$ -	$ (1,871)	$ -	$ 1,714	$ 153	$ -	$ -	$ -	
30	**Utility Operating Income**	$ 90,799	$ -	$ 1,871	$ -	$ (1,714)	$ (153)	$ -	$ -	$ -	
31	***Other Income & Deductions***										
32	Other Income & Deductions	$ -									
33	Interest Expense	135,810									
34	Other Expense	-								1,550	
35	Gain/Loss Sale of Fixed Assets	-									
36	**Total Other Income & Deductions**	$ (135,810)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,550)	
37	**Net Profit (Loss)**	$ (45,011)	$ -	$ 1,871	$ -	$ (1,714)	$ (153)	$ -	$ -	$ (1,550)	
38											
39											
40	Supporting Schedules:										
41	E-6										
42	Workpapers & Supporting Documents:										
43	\2013 Mohave Wastewater Sch. A-F F										

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Pro Forma Adjustments

Exhibit
Schedule C-2 Rebuttal
Page 2
Witness: Murrey

Line No.		Page 8 [K] ADJ SM-10R *Revised RUCO Adj # 6 Staff Adj # 5a*	Page 9 [I] ADJ SLH-11R *Revised Ruco Adj # 6, Staff Adj # 5*	Page 10 [M] ADJ SLH-12R	*Not used* [N] ADJ SM-13R *Revised RUCO Adj #1*	Page 11 [O] ADJ SM-14R *Revised RUCO Adj #2*	Page 12 [P] ADJ SLH-15R *Revised Ruco Adj # 6, Staff Adj # 5*	[Q] Total Pro Forma Adjustments	[R] Test Year Adjusted Results	[S] Proposed Rate Increase	[T] Adjusted with Rate Increase
		General Office Expense	Corporate Allocations	24 Month Deferral AFUDC Ammortization	6" New Meter Annualization	Customer Accounting	Arizona Labor				
1	**Revenues**										
2	Sewer Revenues							$ -	$ 1,052,210	$ 446,643	$ 1,498,853
3	Other Revenues							-	3,629		3,629
4						$ -		$ -	$ 1,055,839	$ 446,643	$ 1,502,483
5											
6	**Operating Expenses**										
7	Labor						(1,071)	$ (1,071)	$ 267,501		$ 267,501
8	Purchased Water							-	(0)		(0)
9	Fuel & Power							-	46,241		46,241
10	Chemicals							-	12,000		12,000
11	Waste Disposal & Other Utilities							-	34,306		34,306
12	Intercompany Support Services							-	161		161
13	Corporate Allocation		(4,218)					(4,218)	54,476		54,476
14	Outside Services							-	34,425		34,425
15	Group Insurance							-	53,082		53,082
16	Pensions							-	725		725
17	Regulatory Expense							-	11,993		11,993
18	Insurance Other Than Group							-	14,658		14,658
19	Customer Accounting					412		895	54,723	2,529	57,252
20	Rents							-	8,199		8,199
21	General Office Expense	(417)						(417)	20,485		20,485
22	Miscellaneous	(87)						(87)	(2)		(2)
23	Maintenance Expense							-	51,102		51,102
24	Depreciation & Amortization			1,665				(535)	257,411		257,411
25	General Taxes-Property							-	53,660	7,490	61,151
26	General Taxes-Other							-	12,392		12,392
27	Income Taxes							1,714	(26,214)	165,742	139,528
28											
29	**Total Operating Expenses**					$ 412		$ (3,718)	$ 961,322	$ 175,762	$ 1,137,085
30	**Utility Operating Income**					$ (412)		$ 3,718	$ 94,517	$ 270,881	$ 365,398
31	**Other Income & Deductions**										
32	Other Income & Deductions							$ -	$ -		$ -
33	Interest Expense							1,550	137,360		137,360
34	Other Expense							-	-		-
35	Gain/Loss Sale of Fixed Assets								-		-
36	**Total Other Income & Deductions**					$ -		$ (1,550)	$ (137,360)	$ -	$ (137,360)
37	**Net Profit (Loss)**					$ (412)		$ 2,168	$ (42,843)	$ 270,881	$ 228,039
38											
39											
40	Supporting Schedules:										
41	E-6										
42	Workpapers & Supporting Documents:										
43	\2013 Mohave Wastewater Sch. A-F F										

Recap Schedules:
C-1 Rebuttal

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SLH-2R

Exhibit
Schedule C-2 Rebuttal
Page 3
Witness: Hubbard

Line No.		EPCOR	Staff Proposed	Difference STF ADJ #2
		Mohave Wastewater	Mohave Wastewater	Mohave Wastewater
8	Depreciation Expense	$ 257,946	$ 245,738	$ (12,208)
13	Staff Adjustment # 2 Depreciation Expense			$ (12,208)
16	Amounts Company Rejected			
17	24 Month Deferral Disallowance		$ (922)	
18	CIAC Depreciation Difference		(8,939)	
19	Regulatory Asset Ammortization		$ (476)	
20	Total Amount Rejected			$ (10,337)
22	Amounts Company Accepted			
23	Difference from Calculated Depreciation Exp		(1,871)	
24	Difference from Over Depreciated Assets		-	
25	Total Amount Accepted			$ (1,871)
30	Increase / (Decrease) in Depreciation and Amortization Expense			$ (1,871)
32	Rebuttal Adjustment to Revenue and/or Expense			$ (1,871)

48 Workpapers & Schedules
49 \Depreciation Expense Adjustments - Staff vs Company.xlxs
50 \2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SM-3R

Exhibit
Schedule C-2 Rebuttal
Page 4
Witness: Murrey

Line No.		[A] Property Tax Expense	[B] Property Tax Expense For Conversion Factor
1			
2	Adjust Property Taxes to Reflect Proposed Revenues:		
3			
4	Adjusted Revenues in Year Ended June 2013	$ 1,055,839	$ 1,055,839
5	Adjusted Revenues in Year Ended June 2013	1,055,839	1,055,839
6	Proposed Revenues	1,055,839	1,502,483
7	Average of Three Year's of Revenue	$ 1,055,839	$ 1,204,721
8	Average of Three Year's of Revenue, times 2	$2,111,679	$2,409,441
9	Add:		
10	Construction Work in Progress at 10%	21,457	21,457
11	Deduct:		
12	Net Book Value of Transportation Equipment	$ -	$ -
13			
14	Full Cash Value	$ 2,133,136	$ 2,430,898
15	Assessment Ratio (For 2011 per HB 2784)	18.5%	18.5%
16	Assessed Value	$ 394,630	$ 449,716
17	Property Tax Rate	13.60%	13.60%
18			
19	Property Tax	53,660	61,151
20	Tax on Parcels	-	-
21			
22	Adjusted Test Year Property Taxes at Present Rates (Line 19+Line 20, Col [A])	$ 53,660	
23	AdjustedTest Year Property Taxes, Rebuttal	53,660	
24	Adjustment to Revenue and/or Expense (To Sch C-2 Rebuttal)	$ -	
25			
26	Adjusted Test Year Property Taxes at Proposed Rates (Line 19+Line 20, Col [B])		$ 61,151
27	Adjusted Test Year Property Taxes at Present Rates (Line 22, Col [A])		53,660
28	Additional Property Taxes on Proposed Revenues (To Sch C-2 Rebuttal)		$ 7,490
29			
30			
31			
32	CALCULATION OF PROPERTY TAX FACTOR TO COMPUTE GROSS REVENUE CONVERSION FACTOR (SCH C-3):		
33			
34	Increase in Property Tax Due to Increase in Revenue Requirement (Line 28)		$ 7,490
35			
36	Increase in Revenue Requirement (From Sch. A1)		$ 446,643
37			
38	Increase in Property Tax Per Dollar Increase in Revenue (Line 34/Line 36)		1.68%
39			
40			
41			
42			
43			
44			
45			
46			
47			
48	Workpapers & Supporting Documents:		
49			
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SM-4R

Exhibit
Schedule C-2 Rebuttal
Page 5
Witness: Murrey

Line No.			Test Year Adjusted Results	Adjusted with Rate Increase
1				
2	Calculation of Income Taxes at Proposed Rates			
3				
4				
5	Operating Income Before Inc. Taxes		$ 68,303	$ 504,927
6	Interest Expense		137,360	137,360
7	Arizona Taxable Income		$ (69,057)	$ 367,567
8				
9	Less Arizona Income Tax		$ (4,143)	$ 22,054
10	Arizona Income Tax Rate =	6.000%		
11				
12	Federal Income Before Taxes		$ (69,057)	$ 367,567
13	Less Arizona Income Taxes		(4,143)	22,054
14	Federal Taxable Income		$ (64,913)	$ 345,513
15				
16	FEDERAL INCOME TAXES:			
17				
18				
19				
20				
21				
22				
23	Federal Income Taxes	34.000%	$ (22,070)	$ 117,474
24				
25				
26	Total Income Tax		$ (26,214)	$ 139,528
27				
28	Tax Rate		37.96%	37.96%
29				
30	Effective Income Tax Rates			
31	State		6.000%	6.000%
32	Federal		31.96%	31.96%
33				
34				
35	Adjusted Test Year Income Taxes		$ (27,928)	
36	Increase in Income Taxes, Rebuttal		$ 1,714	
37				
38	Adjustment to Revenues and/or Expense		$ 1,714	
39				
40	Test Year Income Taxes, Rebuttal			$ (26,214)
41	Increase in Income Taxes			165,742
42				
43	Adjustment to Revenue and/or Expense			$ 165,742
44				
45				
46				
47				
48	Workpapers & Supporting Documents:			
49				
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls			

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SM-5R

Exhibit
Schedule C-2 Rebuttal
Page 6
Witness: Murrey

Line No.							
1	**Depreciation Expense Pro Forma**			Mohave Wastewater 4 Factor		1.336%	
2							
3							
4	The Company accepts Staff's proposal to remove Year 2000 software costs.						
5							
6	Decpreciation Expense in cost pool				$	24,699	
7	Remove: Year 2000 Software costs				$	(24,699)	
8	Depreciation Expense to be allocated				$	-	
9			Mohave Wastewater 4 Factor			1.336%	
10							
11			Total Pro Forma Regulatory Expense allocated				$ -
12							
13	Test Year Depreciatin Expense in cost pool				$	24,699	
14			Mohave Wastewater 4 Factor			1.336%	
15							
16			Test Year Regulatory Expense allocated				$ 330
17							
18	Increase / (Decrease) in Regulatory Expense						$ (330)
19							
20	Rebuttal Adjustment to Revenue and/or Expense						$ (330)
21							
22	**Customer Accounting Pro Forma**						
23	The Company recalculates bad debt expense on a district basis						
24						Mohave Water	
25	Actual bad debt by district/business unit		Jul-12		$	364	
26			Aug-12			897	
27			Sep-12			77	
28			Oct-12			155	
29			Nov-12			1,190	
30			Dec-12			2,132	
31			Jan-13			113	
32			Feb-13			147	
33			Mar-13			319	
34			Apr-13			293	
35			May-13			177	
36			Jun-13			468	$ 6,333
37							
38	Test Year Bad Debt Expense			4 Factor	Connection Count		
39	Jul to Dec 2012 Months Bad Debt Expense	$	266,016	1.336%		$ 3,553	
40	Jan to Jun 2013 Bad Debt Expense	$	256,213		0.90%	$ 2,297	$ 5,850
41							
42							
43							
44	Increase / (Decrease) in Customer Accounting						$ 483
45							
46	Rebuttal Adjustment to Revenue and/or Expense						$ 483
47	Workpapers & Supporting Documents:						
48	\A-1 SummarizeChanges1.27.15.xlsx						
49	\CorporateAllocationandIncentiveComp (EUI).xlxs						
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls						

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SM-8R

Exhibit
Schedule C-2 Rebuttal
Page 7
Witness: Murrey

Line No.			
1	Interest Synchronization with Rate Base		
2			
3	Original Cost Rate Base (Sch. B-1 Rebuttal, Ln. 28)		$ 5,365,614
4	Weighted Cost of Debt from Schedule D-1 Rebuttal		2.56%
5	Synchronized Interest Expense		$ 137,360
6			
7	Test Year Interest Expense	$ 135,810	
8			
9	Adjusted Test Year Interest Expense		$ 135,810
10			
11	Increase/(Decrease) in Interest Expense		$ 1,550
12			
13	Rebuttal Adjustment to Revenue and/or Expense		$ 1,550
14			
15			
16			
17			
18			
19			
20			
21			
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47			
48	Workpapers & Supporting Documents:		
49			
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SM-10R

Exhibit
Schedule C-2 Rebuttal
Page 8
Witness: Murrey

Line No.					
1	**General Office Expense Pro Forma**	Mohave Wastewater 4 Factor	1.336%		
2					
3					
4	The Company identified a duplicate I/T expense related to license fees of $11,010				
5					
6					
7	I/T Costs in Corporate Allocation and General Office Expense		$ (11,010)		
8					
9		Mohave Wastewater 4 Factor	1.336%		
10					
11		Pro Forma General Office Expense allocated		$	(147)
12					
13	Income Statement - Donations, Promotions, Advertising		$ (2,471)		
14	Plus: Donations, Promotions, Advertising Removed in proforma adjustment # SM10		$ 2,201		
15					
16				$	(270)
17		Test Year General Office Expense Adjustment			
18					
19					
20					
21	Increase / (Decrease) in General Office Expense			$	(417)
22					
23	Rebuttal Adjustment to Revenue and/or Expense			$	(417)
24					
25					
26	**Miscellaneous Pro Forma**				
27	The Company accepts Staff's proposed adjusment .				
28					
29	Miscellaneous Expense in cost pool		$ 6,485		
30					
31	Remove: Items such as food, flowers, linen, etc		$ (6,485)		
32					
33	Miscellaneous Expense to be allocated		$ -		
34		Mohave Wastewater 4 Factor	1.336%		
35					
36		Total Pro Forma Miscellaneous Expense allocated		$	-
37					
38	Test Year Miscellaneous Expense cost pool		$ 6,485		
39		Mohave Wastewater 4 Factor	1.336%		
40					
41		Test Year Miscellaneous Expense allocated		$	87
42					
43					
44	Increase / (Decrease) in Miscellaneous Expense			$	(87)
45					
46	Rebuttal Adjustment to Revenue and/or Expense			$	(87)
47					
48	Workpapers & Supporting Documents:				
49	\SummaryofRebuttalAdjustments2-9.xlxs				
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls				

Line No.					
1	**Corporate Allocation Pro Forma**				
2	The Company is voluntarily removing of the financial component of the incentive compensation metrics which represents 10% of the award.				
3					
4	Actual At-Risk Compensation		$ 597,657		
5					
6	Less: Financial & Other Component		$ 315,792		
7					
8	Incentive Compensation to be allocated		$ 281,865		
9		Mohave Wastewater 4 Factor	1.336%		
10					
11		Total Pro Forma incentive compensation allocated		$	3,765
12					
13	Test Year Incentive Compensation in cost pool		$ 597,657		
14		Mohave Wastewater 4 Factor	1.336%		
15					
16		Test Year incentive compensation allocated		$	7,982
17					
18					
19	Increase / (Decrease) in Corporate Allocation Expense			$	(4,218)
20					
21	Rebuttal Adjustment to Revenue and/or Expense			$	(4,218)
22					
23					
24					
25					
26					
27					
28					
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32					
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35					
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37					
38					
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40					
41					
42	Workpapers & Supporting Documents:				
43	\A-1SummarizeChanges1.27.15				
44	\Corporate Allocation ADJ 60R basic Data.xlxs				
45	\CorporateAllocationandIncentiveComp (EUI).xlxs				
46	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls				

Line No.			
1	**24-Month Deferral Request**		
2	On October 14, 2012, Paradise Valley Water filed Docket No. W-01303A-12-0427 seeking		
3	approval of an accounting order to defer Post-in-Service AFUDC and Depreciation on investment		
4	between rate filings. This filing was withdrawn June 27, 2013 to enable the Company to pursue		
5	those deferrals on an individual district basis.		
6			
7	Pro Forma 24-Month Deferral Balance	$	89,523
8			
9			
10	Increase / (Decrease) in Deferred Debits	$	89,523
11			
12			
13	Increase / (Decrease) to Rate Base	$	89,523
14			
15			
16			
17	In addition to the deferral request, in this application Paradise Valley Water Company requests		
18	authority to begin the amortization of the deferred balance associated with the 24-Month	Current	
19	Deferral Request using the composite depreciation rate (See Adj SM-13, page 2 of 3).		2.89%
20			
21			
22	Pro Forma adjustment for Amortization of Balance of 24-Month Deferral Request		
23	associated with Docket No. W-01303A-12-0427 at composite depreciation rate.	$	2,587
24			
25	Original AFUDC Ask	$	922
26			
27	Difference	$	1,665
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
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39			
40			
41			
42			
43			
44			
45			
46			
47	Workpapers & Supporting Documents:		
48	\Test Year Rebuttal Adjustments 02-09.xlsx		
49	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls		

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Adjustment SM-14R

Exhibit
Schedule C-2
Page 11
Witness: Murrey

Line No.	RESIDENTIAL	ORIGINAL CALC	
	Increase / (Decrease) in Operating Expenses:	Postage	Other Customer Accounting
1			
2			
3	Test Year Adjusted Expense from Sch C-2	$ 1,188	$ 52,640
4	Avg Customers times 12 bills	17,375	17,375
5	Cost per Unit	$ 0.07	$ 3.03
6			
7	Customer Growth by Volume	-	-
8	Customer Growth by Count		
9			
10	Additional Expense	$0	$0
11			
12	**Total Original Calculation - Residential**		**$ -**
13			
14			

Line No.	COMMERCIAL	ORIGINAL CALC		REVISED CALC	
15					
16	***Increase / (Decrease) in Operating Expenses:***				
17		Postage	Other Customer Accounting	Postage	Other Customer Accounting
18					
19	Test Year Adjusted Expense from Sch C-2	$ 1,188	$ (1,188)	$ 1,188	$ 52,640
20	Year-End Number of Customers times 12 bills			17,508	17,508
21	Avg Customers times 12 bills	17,375	17,375	17,375	17,375
22	Cost per Unit	$ 0.07	$ (0.07)	$ 0.07	$ 3.03
23					
24	Customer Growth by Volume	-	-		
25	Customer Growth by Count			133	133
26					
27	Additional Expense	$0	$0	$9	$403
28					$412
29	**Total Original Calculation - Commercial**		**$ -**		
30					
31					
32	Total Original Revision		$ -		
33					
34	Reverse original Adjustment		$ -		
35	Revised Customer Accounting Adjustment		$ 412		
36	Total Adjustment		$ 412		
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47	Workpapers & Schedules				
48	\2013 Mohave Wastewater Sch. H.xls				
49	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls				

Mohave Wastewater
Test Year Ended June 30, 2013
Income Statement Rebuttal Adjustment SLH-15R

Exhibit
Schedule C-2 Rebuttal
Page 12
Witness: Hubbard

Line No.					
1	**Labor Expense Pro Forma**	Mohave Wastewater 4 Factor	1.336%		
2					
3	The Company is voluntarily removing of the financial component of the incentive compensation				
4	metrics which represents 10% of the award.				
5	Incentive Compensation in cost pool		$ 801,710		
6					
7	Removal 10% attributable to the financial component		$ (80,171)		
8					
9	Incentive Compensation to be allocated		$ 721,539		
10		Mohave Wastewater 4 Factor	1.336%		
11					
12		Total Pro Forma incentive compensation allocated		$	9,637
13					
14	Test Year Incentive Compensation in cost pool		$ 801,710		
15		Mohave Wastewater 4 Factor	1.336%		
16					
17		Test Year incentive compensation allocated		$	10,707
18					
19					
20	Increase / (Decrease) in Labor Expense			$	(1,071)
21					
22	Rebuttal Adjustment to Revenue and/or Expense			$	(1,071)
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
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41					
42					
43					
44					
45					
46					
47					
48	Workpapers & Supporting Documents:				
49	\CorporateAllocationandIncentiveComp (EUI).xlxs				
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls				

Mohave Wastewater
Test Year Ended June 30, 2013
Computation of Gross Revenue Conversion Factor

Exhibit
Schedule C-3 Rebuttal
Page 1
Witness: Murrey

Line No.	Description					Percentage of Incremental Gross Revenues
1	Federal Income Taxes					31.96%
2						
3	State Income Taxes					6.00%
4				Combined	37.96%	
5	Property Taxes	Effective Rate =	1.68%	One Minus Combined	62.04%	1.04%
6						
7	Bad Debt Expense	Effective Rate =	0.57%	One Minus Combined	62.04%	0.35%
8						
9	Total Tax Percentage					39.35%
10						
11	Operating Income % = 100% - Tax Percentage					60.65%
12						
13						
14						
15	1 = Gross Revenue Conversion Factor					
16						
17						
18	Operating Income %					1.6489
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
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39						
40						
41						
42						
43	Supporting Schedules:				Recap Schedules:	
44					A-1 Rebuttal	
45						
46						
47						
48						
49						
50	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls					

Mohave Wastewater
Test Year Ended June 30, 2013
Summary of Cost of Capital
Total Company - EPCOR Water Arizona

Exhibit
Schedule D-1 Rebuttal
Page 1
Witness: Hubbard

Line No.	Item of Capital	End of Test Year Dollar Amount	End of Test Year Percent of Total	End of Test Year Cost Rate	End of Test Year Weighted Cost	End of Projected Year Dollar Amount	End of Projected Year Percent of Total	End of Projected Year Cost Rate	End of Projected Year Weighted Cost
1	Long-Term Debt	$ 231,000,000	58.47%	4.29%	2.51%	$ 231,000,000	59.76%	4.29%	2.56%
2									
3	Short-Term Debt	$ 8,560,000	2.17%	0.31%	0.01%	$ -	0.00%	0.31%	0.00%
4									
5	Stockholder's Equity	$ 155,533,624	39.37%	10.55%	4.15%	$ 155,533,624	40.24%	10.55%	4.25%
6									
7	Totals	$ 395,093,624	100.00%		6.67%	$ 386,533,624	100.00%		6.81%
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30	Supporting Schedules:		Recap Schedules:						
31	D-2		A-1						
32									
33									
34									
35	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls								

Mohave Wastewater
Test Year Ended June 30, 2013
Summary of Cost of Capital
Total Company - EPCOR Water Arizona
District Level - Mohave WasteWater - Proposed

Exhibit
Schedule D-1 Rebuttal
Page 2
Witness: Hubbard

Line No.	Item of Capital	End of Test Year Dollar Amount	Percent of Total	Cost Rate	Weighted Cost	End of Projected Year Dollar Amount	Percent of Total	Cost Rate	Weighted Cost
1	Long-Term Debt	$ 3,101,731	58.47%	4.29%	2.51%	$ 3,206,595	59.76%	4.29%	2.56%
2									
3	Short-Term Debt	$ 114,939	2.17%	0.31%	0.01%	$ -	0.00%	0.31%	0.00%
4									
5	Stockholder's Equity	$ 2,088,413	39.37%	10.55%	4.15%	$ 2,159,019	40.24%	10.55%	4.25%
6									
7	Totals	$ 5,305,082	100.00%		6.67%	$ 5,365,614	100.00%		6.81%
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30	Supporting Schedules:		Recap Schedules:						
31	D-2		A-1 Revised						
32									
33									
34									
35	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls								

Mohave Wastewater
Test Year Ended June 30, 2013
Cost of Long Term Debt
Test Year - Mohave Wastewater - Proposed

Exhibit
Schedule D-2 Rebuttal
Page 1
Witness: Hubbard

At Parent Level

Line No.		End of Test Year Amount Outstanding	End of Test Year Annual Cost	End of Test Year Interest Rate	End of Projected Year Amount Outstanding	End of Projected Year Annual Cost	End of Projected Year Interest Rate
1	Long-Term Debt						
2	10-Year EPCOR Water USA Note	133,000,000	5,004,790	3.77%	133,000,000	5,004,790	3.77%
3	30-Year EPCOR Water USA Note	98,000,000	4,907,513	5.02%	98,000,000	4,907,513	5.02%
4							
5							
6	Totals	$ 231,000,000	$ 9,912,303	4.29%	$ 231,000,000	$ 9,912,303	4.29%
7							
8							
9	Common Equity						
10	Common Stock	$ 522,880			$ 522,880		
11	Paid in Capital	184,882,920			184,882,920		
12	Retained Earnings	(29,872,177)			(29,872,177)		
13		$ 155,533,624		10.55%	$ 155,533,624		10.55%
14							
15							
16							
17	Short-Term Debt						
18	S-T Debt from EPCOR Utilities, Inc	$ 8,560,000	$ 26,536	0.31%	$ 8,560,000	$ 26,536	0.31%
19							
20							
21	Totals	$ 8,560,000	$ 26,536	0.31%	$ 8,560,000	$ 26,536	0.31%
22							
23							
24							
25	Supporting Schedules:		Recap Schedules:				
26	E-1		D-1				
27							
28							
29	\EUSA TB By BU_131101_Sch E.xlsx						
30	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls						

Mohave Wastewater
Test Year Ended June 30, 2013
Cost of Long Term Debt

Exhibit
Schedule D-2
Page 2

Test Year - Mohave Wastewater - Proposed

Witness: Hubbard

Line No.		End of Test Year			End of Projected Year		
		Amount Outstanding	Annual Cost	Interest Rate	Amount Outstanding	Annual Cost	Interest Rate
1	Long-Term Debt						
2	10-Year EPCOR Water USA Note	$ 133,000,000	$ 5,004,790	3.77%	$ 133,000,000	$ 5,004,790	3.77%
3	30-Year EPCOR Water USA Note	98,000,000	4,907,513	5.02%	98,000,000	4,907,513	5.02%
4							
5							
6	Totals	$ 231,000,000	$ 9,912,303	4.29%	$ 231,000,000	$ 9,912,303	4.29%
7							
8							
9	Common Equity						
10	Common Stock	$ 522,880			$ 522,880		
11	Paid in Capital	184,882,920			184,882,920		
12	Retained Earnings	(29,872,177)			(29,872,177)		
13		$ 155,533,624		10.55%	$ 155,533,624		10.55%
14							
15							
16							
17	Short-Term Debt						
18	Intercompany Payable	$ 8,560,000	$ 26,536	0.31%	$ 8,560,000	$ 26,536	0.31%
19							
20							
21	Totals	$ 8,560,000	$ 26,536	0.31%	$ 8,560,000	$ 26,536	0.31%
22							
23							
24							
25	Supporting Schedules:		Recap Schedules:				
26	E-1		D-1				
27							
28							
29	\EUSA TB By BU_131101_Sch E.xlsx						
30	\2013 Mohave Wastewater Sch. A-F Rebuttal (Oct2014 Direct).xls						

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Returns at Present Rates by Class

Exhibit
Rebuttal Schedule G-1
Page 1
Witness: Bourassa

Line No.		Totals	Residential	Commercial	Other Public Auth.
1	Sewer Revenues	$ 1,007,825	$ 974,526	$ 24,477	$ 8,822
2	Effluent Revenues	44,578	43,547	637	394
3	Revenue Annualizations	-	-	-	-
4					
5	Misc. Revenues[1]	3,629	3,602	25	3
6	Reconciliation H-1 to C-1[1]	(193)	(192)	(1)	(0)
7	Total Revenues	$ 1,055,840	$ 1,021,484	$ 25,137	$ 9,218
8					
9	Operating Expenses[2]	$ 676,466	$ 669,028	$ 4,433	$ 3,005
10	Depreciation and				
11	Amortization[2]	257,411	253,929	1,779	1,703
12	Property Tax[3]	53,660	51,914	1,278	468
13	Income Tax[4]	(26,214)	(33,754)	6,338	1,202
14	Total Operating Expenses	$ 961,322	$ 941,117	$ 13,827	$ 6,378
15	Operating Income	$ 94,517	$ 80,367	$ 11,310	$ 2,840
16	Interest Expense[5]	137,360	135,532	951	876
17	Net Income	$ (42,843)	$ (55,165)	$ 10,359	$ 1,964
18	Rate Base[6]	$ 5,365,614	$ 5,294,226	$ 37,165	$ 34,223
19	Return on Rate Base[7]	1.76%	1.52%	30.43%	8.30%
20					
21	**Percent of Total Customers**		99.24%	0.69%	0.07%
22					
23					
24					
25					
26					
27					

28 [1] Allocated based on customer counts.
29 [2] Operating Expenses and Depreciation computations are shown on Schedule G-4, Page 1.
30 [3] Property Taxes allocation based on Revenues.
31 [4] Income Tax from Schedule C-1, at present rates. Income Taxes allocated based on taxable income.
32 [5] Interest Synchronized Interest Expense. Allocation based on Rate Base
33 [6] Rate Base computations are shown on Schedule G-3, Page 1
34 [7] Operating Income Divided by Rate Base
35
36

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Returns at Proposed Rates by Class

Rebuttal Schedule G-2
Page 1
Witness: Bourassa

Line No.		Totals	Residential	Commercial	Other Public Auth.
1	Sewer Revenues	$ 1,454,291	$ 1,406,241	$ 35,320	$ 12,730
2	Effluent Revenues	44,578	44,240	308	31
3	Revenue Annualizations	-	-	-	-
4					
5	Misc. Revenues[1]	3,629	3,602	25	3
6	Reconciliation H-1 to C-1[1]	(16)	(16)	(0)	(0)
7	Total Revenues	$ 1,502,483	$ 1,454,067	$ 35,653	$ 12,763
8					
9	Operating Expenses[2]	$ 678,995	$ 671,538	$ 4,450	$ 3,007
10	Depreciation and				
11	Amortization[2]	257,411	253,929	1,779	1,703
12	Property Tax[3]	61,151	59,180	1,451	519
13	Income Tax[4]	139,528	126,744	10,257	2,527
14	Total Operating Expenses	$ 1,137,085	$ 1,111,391	$ 17,937	$ 7,757
15	Operating Income	$ 365,398	$ 342,676	$ 17,716	$ 5,007
16	Interest Expense[5]	137,360	135,532	951	876
17	Net Income	$ 228,039	$ 207,144	$ 16,764	$ 4,131
18	Rate Base[6]	$ 5,365,614	$ 5,294,226	$ 37,165	$ 34,223
19	Return on Rate Base[7]	6.81%	6.47%	47.67%	14.63%
20					
21	**Percent of Total Customers**		99.24%	0.69%	0.07%
22					
23					
24					
25					
26					
27					
28					
29					

30 [1] Allocated based on customer counts.
31 [2] Operating Expenses and Depreciation computations are shown on Schedule G-4, Page 2.
32 [3] Property Taxes allocation based on Revenues
33 [4] Income Tax from Schedule C-1, at proposed rates. Income Taxes allocated based on taxable income
34 [5] Interest Synchronized Interest Expense. Allocation based on Rate Base
35 [6] Rate Base computations are shown on Schedule G-3, Page 1
36 [7] Operating Income Divided by Rate Base
37

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study Using Commodity / Demand Method
Allocation of Assets to Customer Classes

Exhibit
Rebuttal Schedule G-3
Page 1
Witness: Bourassa

Line No.		Totals	Residential	Commercial	Other Public Auth.
1					
2					
3					
4	Plant, Minus Accumulated Depreciation, Advances and Contributions in Aid, Meter Deposits, and Deferred Income Tax (from Schedule G-5, Page 1)				
5	Commodity	$ 2,057,702	$ 2,010,112	$ 29,394	$ 18,196
6	Demand	2,749,207	2,729,657	3,910	15,641
7	Customer	558,704	554,457	3,861	386
8	Service	-	-	-	-
9	Meter	-	-	-	-
10	Total	$ 5,365,614	$ 5,294,226	$ 37,165	$ 34,223
11					
12					
13					
14	**Summary**				
15	Net Rate Base	$ 5,365,614	$ 5,294,226	$ 37,165	$ 34,223
16	% of Net Rate Base	100.00%	98.67%	0.69%	0.64%
17					
18					
19					
20					

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes - Present Rates

Exhibit
Rebuttal Schedule G-4
Page 1
Witness: Bourassa

Line No.		Adjusted Per C-1	Residential	Commercial	Other Public Auth.	Totals
	Operation and Maintenance Expense (from Schedule G-6, Page 1)					
1	Commodity	$ 155,866	$ 152,261	$ 2,227	$ 1,378	$ 155,866
2	Demand	253,545	251,742	361	1,442	253,545
3	Customer	267,055	265,025	1,845	185	267,055
4	Service	-	-	-	-	-
5	Meter	-	-	-	-	-
6	Totals	$ 676,466	$ 669,028	$ 4,433	$ 3,005	$ 676,466
7						
8	Depreciaton Expense on Plant (from Schedule G-6, Page 2)					
9	Commodity	102,552	$ 100,180	$ 1,465	$ 907	$ 102,552
10	Demand	137,816	136,836	196	784	137,816
11	Customer	17,043	16,913	118	12	17,043
12	Service	-	-	-	-	-
13	Meter	-	-	-	-	-
14	Totals	$ 257,411	$ 253,929	$ 1,779	$ 1,703	$ 257,411
15						
16	Operation and Maintenance Expense and Depreciation Expense					
17	Commodity	$ 258,418	$ 252,441	$ 3,691	$ 2,285	$ 258,418
18	Demand	391,361	388,578	557	2,226	391,361
19	Customer	284,098	281,938	1,963	196	284,098
20	Service	-	-	-	-	-
21	Meter	-	-	-	-	-
22	Total	$ 933,876	$ 922,957	$ 6,211	$ 4,708	$ 933,876
23						
24	Total Expenses (excluding Income Tax and					
25	Property Taxes)	$ 933,876	$ 922,957	$ 6,211	$ 4,708	$ 933,876
26						
27	Property Taxes, Allocated on Schedules G-1 & G-2	$ 53,660				
28	Income Tax, Allocated on Schedules G-1 & G-2	(26,214)				
29	Total Expenses	**$ 961,322**				
30						

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity Demand Method
Allocation of Expenses to Customer Classes - Proposed Rates

Exhibit
Rebuttal Schedule G-4
Page 2
Witness: Bourassa

Line No.		At Proposed C-1	Residential	Commercial	Other Public Auth.	Totals
1						
2	Operation and Maintenance Expense (from Schedule G-6, Page 1)					
3	Commodity	$ 155,866	$ 152,261	$ 2,227	$ 1,378	$ 155,866
4	Demand	253,545	251,742	361	1,442	253,545
5	Customer	269,584	267,535	1,863	186	269,584
6	Service	-	-	-	-	-
7	Meter	-	-	-	-	-
8	Totals	$ 678,995	$ 671,538	$ 4,450	$ 3,007	$ 678,995
9						
10	Depreciaton Expense on Plant (from Schedule G-6, Page 3.2)					
11	Commodity	$ 102,552	$ 100,180	$ 1,465	$ 907	$ 102,552
12	Demand	137,816	136,836	196	784	137,816
13	Customer	17,043	16,913	118	12	17,043
14	Service	-	-	-	-	-
15	Meter	-	-	-	-	-
16	Totals	$ 257,411	$ 253,929	$ 1,779	$ 1,703	$ 257,411
17						
18	Operation and Maintenance Expense and Depreciation Expense					
19	Commodity	$ 258,418	$ 252,441	$ 3,691	$ 2,285	$ 258,418
20	Demand	391,361	388,578	557	2,226	391,361
21	Customer	286,627	284,448	1,981	198	286,627
22	Service	-	-	-	-	-
23	Meter	-	-	-	-	-
24	Total	$ 936,406	$ 925,467	$ 6,229	$ 4,710	$ 936,406
25						
26	Total Expenses (excluding Income Tax and					
27	Property Taxes)	$ 936,406	$ 925,467	$ 6,229	$ 4,710	$ 936,406
28						
29	Property Taxes, Allocated on Schedules G-1 & G-2	$ 61,151				
30	Income Tax, Allocated on Schedules G-1 & G-2	139,528				
31	Total Expenses	**$ 1,137,085**				
32						
33						
34						

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity Demand Method
Allocation of Rate Base by Function

Exhibit
Rebuttal Schedule G-5
Page 1
Witness: Bourassa

Line No.		Adjusted Per B-2	Demand	Commodity	Customer
1					
2	**Rate Base**				
3	Plant minus (Accumulated Depreciation	$ 5,365,614	$ 2,749,207	$ 2,057,702	$ 558,704
4	Contributions in Aid of Construction				
5	Advances in Aid of Construction,				
6	Meter Deposits and Deferred Income Tax)				
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Mohave Wastewater District
Test Year Ended June 30, 2013
Allocation of Plant, Less Contributions and Advances in Aid of
Construction , Meter Deposits and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2.1
Witness: Bourassa

Line No.	Account No.	Description	Adjusted Original Cost Plant	Accumulated Depreciation	Total Net Plant Values	Allocation Factor Ref.	Demand	Commodity	Customer
1		**Intangible**							
2	351000	Organization	$ -	$ -	$ -	F-1	-	-	-
3	352000	Franchise	364	-	364	F-1	207	156	-
4	353000	Land	-	-	-	F-1	-	-	-
5		**Subtotal Intangible**	364		364		207	156	-
6									
7		**Collection Plant**							
8	353200	Land and Land Rights - Collection	$ -	$ -	$ -	F-1	$ -	$ -	$ -
9	354200	Structures and Improvements - Collection	196,581	7,259	189,323	F-1	107,914	81,409	-
10	360000	Collection Sewer Forced	5,385	(15,840)	21,224	F-1	12,098	9,127	-
11	361100	Collection Sewers Gravity	2,721,870	401,695	2,320,175	F-1	1,322,500	997,675	-
12	362000	Special Collecting Structures	138,063	18,829	119,234	F-1	67,963	51,271	-
13	363000	Customer Services	530,251	59,874	470,377	F-3	-	-	470,377
14	364000	Flow Measuring Devices	218,748	52,164	166,584	F-1	94,953	71,631	-
15		**Subtotal Collection Plant**	$ 3,810,898	$ 523,980	$ 3,286,918		$ 1,605,428	$ 1,211,112	$ 470,377
16									
17		**System Pumping Plant**							
18	355300	WW Power Generation Equipment Pumping	-	-	-	F-1	-	-	-
19	370000	Receiving Wells	-	-	-	F-1	-	-	-
20	371100	WW Pumping Equipment Electric	82,445	51,888	30,557	F-1	17,417	13,139	-
21	371200	Manholes	-	-	-	F-1	-	-	-
22		**Subtotal System Plumping Plant**	$ 82,445	$ 51,888	$ 30,557		$ 17,417	$ 13,139	$ -
23									
24		**Reclaimed Water Distrbution Plant**							
25	366000	Reuse Services	$ -	$ -	$ -	F-1	$ -	$ -	$ -
26	367000	Reuse Meters And Installation	-	-	-	F-1	-	-	-
27	370000	Receiving Wells	-	-	-	F-1	-	-	-
28	374000	Reuse Distribution Reservoirs	-	-	-	F-1	-	-	-
29	375000	Reuse Trans. and Dist. System	-	-	-	F-1	-	-	-
30		**Subtotal Recalimed Water Dist Plant**	$ -	$ -	$ -		$ -	$ -	$ -
31									
32		**Treatment & Disposal Plant**							
33	354400	WW Structures & Improvements Treatment	$ 1,047,352	$ 153,109	$ 894,244	F-1	$ 509,719	$ 384,525	$ -
34	355400	WW Power Generation Equipment Treatme	142,907	(14,910)	157,817	F-1	89,956	67,861	-
35	380000	WW Treatment and Disposal Equipment	1,013,753	41,021	972,732	F-1	554,457	418,275	-
36	380050	WW TD Equipment Grit Removal	135,165	29,400	105,765	F-1	60,286	45,479	-
37	380100	WW TD Equipment Sed Tanks/Acc	336,115	(371,356)	707,471	F-1	403,258	304,212	-
38	380300	WW TD Equipment Sldge Dry/Filt	39,113	6,258	32,854	F-1	18,727	14,127	-
39	380500	WW TD Equipment Chemical Treatment Pl:	232,909	50,934	181,976	F-1	103,726	78,250	-
40	380600	WW TD Equipment Other Disp	28,914	(1,235)	30,149	F-1	17,185	12,964	-
41	380625	WW TD Equipment Gen Treatment	1,818,565	168,530	1,650,035	F-1	940,520	709,515	-
42	380650	WW TD Equipment Influent Lift Station	-	-	-	F-1	-	-	-
43	381000	Plant Sewers	-	-	-	F-1	-	-	-
44	382000	Outfall Sewer Lines	-	-	-	F-2	-	-	-

Mohave Wastewater District
Test Year Ended June 30, 2013
Allocation of Plant, Less Contributions and Advances in Aid of
Construction , Meter Deposits and Accumulated Depreciation to Functions

Exhibit
Rebuttal Schedule G-5
Page 2.2
Witness: Bourassa

Line No.	Account No.	Description	Adjusted Original Cost Plant	Accumulated Depreciation	Total Net Plant Values	Allocation Factor Ref.	Demand	Commodity	Customer
1	389100	WW Oth Plt & Misc Equip Intang	-	-	-	F-3	-	-	-
2	389600	WW Other P/E - CPS	3,549	59	3,490	F-4	873	-	2,618
3	**Subtotal Transmission and Distribution Plant**		$ 4,798,344	$ 61,810	$ 4,736,534		$ 2,698,707	$ 2,035,209	$ 2,618
4									
5	**General Plant**								
6	354500	WW Structures & Improvements General	$ -	$ -	$ -	F-1	$ -	$ -	$ -
7	335000	Hydrants	-	-	-	F-1	-	-	-
8	390000	Office Furniture & Equipment	-	-	-	F-4	-	-	-
9	390200	Computers and Software	10,496	1,961	8,535	F-4	2,134	-	6,401
10	391000	Transportation Equipment	-	-	-	F-4	-	-	-
11	392000	Stores Equipment	-	-	-	F-4	-	-	-
12	393000	Tools, Shop And Garage Equip	71,567	23,374	48,193	F-4	12,048	-	36,145
13	394000	Laboratory Equip	14,336	994	13,342	F-1	7,605	5,737	-
14	395000	Power Operated Equipment	16,703	3,916	12,787	F-4	3,197	-	9,590
15	396000	Communication Equip	26,322	22,930	3,391	F-4	848	-	2,544
16	397000	Miscellaneous Equipment	-	(9,824)	9,824	F-4	2,456	-	7,368
17	398000	Other Tangible Plant	-	-	-	F-4	-	-	-
18	**Subtotal General Plant**		$ 139,424	$ 43,351	$ 96,073		$ 28,288	$ 5,737	$ 62,048
19	**Total Direct Plant**		$ 8,831,474	$ 681,029	$ 8,150,445		$ 4,350,048	$ 3,265,354	$ 535,043
20									
21	**Allocated General Plant**								
22	399000	Allocated Corporate General Plant	34,952	11,286	23,666	F-3	-	-	23,666
23	399000	Reconcilation to PIS Balance	-	1,145	(1,145)	F-1	(653)	(492)	-
24	**Test Year Ended June 30, 2013**		$ 34,952	$ 12,431	$ 22,521		$ (653)	$ (492)	$ 23,666
25	Total Plant		$ 8,866,427	$ 693,460	$ 8,172,966		$ 4,349,395	$ 3,264,862	$ 558,710
26									
27	Contributions in Aid of Construction		(1,242,321)	307,248	(935,072)	F-1	(532,991)	(402,081)	-
28	Advances in Aid of Construction		(1,916,421)		(1,916,421)	F-1	(1,092,360)	(824,061)	-
29	Meter Deposits		(5)		(5)	F-3	-	-	(5)
30	Deferred Income Tax		(62,236)		(62,236)	F-1	(35,475)	(26,762)	-
31	Working Capital		16,860		16,860	F-1	9,610	7,250	-
32	Deferred Reg Assets/Liabilities		89,523		89,523	F-1	51,028	38,495	-
33									
34	Rounding								
35	Totals		$ 5,751,826	$ 1,000,709	$ 5,365,614		$ 2,749,207	$ 2,057,702	$ 558,704
36	Rate Bases (Plant -(AIAC, CIAC, Meter Deposits & Accum. Depr.)				$ 5,365,614		$ 2,749,207	$ 2,057,702	$ 558,704
37	Fair Value Rate Base								
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Allocation of Expenses to Functions
At Present Rates

Exhibit
Rebuttal Schedule G-6
Page 1
Witness: Bourassa

Line No.	Description	Adjusted per C-1	Demand	Commodity	Customer		
1	Labor	$ 267,501	$ 107,000	$ 53,500	$ 107,000		
2	Purchased Water	(0)	-	(0)	-		
3	Fuel & Power	46,241	-	46,241	-		
4	Chemicals	12,000	-	12,000	-		
5	Waste Disposal & Other Utilities	34,306	34,306	-	-		
6	Intercompany Support Services	161	64	32	64		
7	Corporate Allocation	54,476	21,791	10,895	21,791		
8	Outside Services	34,425	27,540	6,885	-		
9	Group Insurance	53,082	21,233	10,616	21,233		
10	Pensions	725	290	145	290		
11	Regulatory Expense	11,993	4,797	2,399	4,797		
12	Insurance Other Than Group	14,658	5,863	2,932	5,863		
13	Customer Accounting	54,723	-	-	54,723		
14	Rents	8,199	-	-	8,199		
15	General Office Expense	20,485	-	-	20,485		
16	Miscellaneous	(2)	-	-	(2)		
17	Maintenance Expense	51,102	30,661	10,220	10,220		
18	Depreciation & Amortization[1]	257,411	137,816	102,552	17,043		
19	General Taxes-Other	12,392	-	-	12,392		
20							
21							
22	Property Taxes, Allocated on Schedules G-1 & G-2						
23	Income Tax, Allocated on Schedules G-1 & G-2						
24							
25	Total	$ 933,876	$ 391,361	$ 258,418	$ 284,098	$ -	$ -
26							
27	**By Class[2]**						
28	Residential						
29	Commercial						
30	Irrigation						
31	Hydrant						
32	Totals						
33							
34	See Schedule G-7, page 2.2 for allocation factors.						
35	[1] Depreciation allocation computed on Schedule G-6, Page 3.1 and 3.2						
36	[2] See Schedule G-5, page 1 for allocations by class.						
37							
38							

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Allocation of Expenses to Functions
At Proposed Rates

Exhibit
Rebuttal Schedule G-6
Page 2
Witness: Bourassa

Line No.	Description	At Proposed Per C-1	Demand	Commodity	Customer		
1	Labor	$ 267,501	$ 107,000	$ 53,500	$ 107,000		
2	Purchased Water	(0)	-	(0)	-		
3	Fuel & Power	46,241	-	46,241	-		
4	Chemicals	12,000	-	12,000	-		
5	Waste Disposal & Other Utilities	34,306	34,306	-	-		
6	Intercompany Support Services	161	64	32	64		
7	Corporate Allocation	54,476	21,791	10,895	21,791		
8	Outside Services	34,425	27,540	6,885	-		
9	Group Insurance	53,082	21,233	10,616	21,233		
10	Pensions	725	290	145	290		
11	Regulatory Expense	11,993	4,797	2,399	4,797		
12	Insurance Other Than Group	14,658	5,863	2,932	5,863		
13	Customer Accounting	57,252	-	-	57,252		
14	Rents	8,199	-	-	8,199		
15	General Office Expense	20,485	-	-	20,485		
16	Miscellaneous	(2)	-	-	(2)		
17	Maintenance Expense	51,102	30,661	10,220	10,220		
18	Depreciation & Amortization[1]	257,411	137,816	102,552	17,043		
19	General Taxes-Other	12,392	-	-	12,392		
20							
21							
22	Property Taxes, Allocated on Schedules G-1 & G-2						
23	Income Tax, Allocated on Schedules G-1 & G-2						
24							
25	Total	$ 936,406	$ 391,361	$ 258,418	$ 286,627	$ -	$ -
26							
27	**By Class[2]**						
28	Residential						
29	Commercial						
30	Irrigation						
31	Hydrant						
32	Totals						
33							
34	See Schedule G-7, page 2.2 for allocation factors.						
35	[1] Depreciation allocation computed on Schedule G-6, Page 3.1 and 3.2						
36	[2] See Schedule G-4, page 2 for allocations by class.						
37							
38							

Mohave Wastewater District
Test Year Ended June 30, 2013
Allocation of Depreciation Expense to Functions

Exhibit
Rebuttal Schedule G-6
Page 3.1
Witness: Bourassa

Line No.	Account No.	Description	Adjusted Original Cost	Depreciation Rate	Depr./Amort. Expense	Allocation Factor Ref.	Demand	Commodity	Customer
1	**Intangible**								
2	351000	Organization	$ -	0.000%	$ -	F-1	$ -	$ -	$ -
3	352000	Franchise	364	0.000%	-	F-1	-	-	-
4	353000	Land	-	0.000%	-	F-1	-	-	-
5	**Subtotal Intangible**		$ 364		$ -		$ -	$ -	$ -
6									
7	**Collection Plant**								
8	353200	Land and Land Rights - Collection	$ -	0.000%	$ -	F-1	$ -	$ -	$ -
9	354200	Structures and Improvements - Collection	196,581	3.333%	6,553	F-1	3,735	2,818	-
10	360000	Collection Sewer Forced	5,385	1.429%	77	F-1	44	33	-
11	361100	Collection Sewers Gravity	2,721,870	1.429%	38,884	F-1	22,164	16,720	-
12	362000	Special Collecting Structures	138,063	3.333%	4,602	F-1	2,623	1,979	-
13	363000	Customer Services	530,251	2.000%	10,605	F-3	-	-	10,605
14	364000	Flow Measuring Devices	218,748	6.667%	14,583	F-1	8,312	6,271	-
15	**Subtotal Collection Plant**		$ 3,810,898		$ 75,304	$ -	$ 36,878	$ 27,820	$ 10,605
16									
17	**System Pumping Plant**								
18	355300	WW Power Generation Equipment Pumping	-	0.000%	-	F-1	-	-	-
19	370000	Receiving Wells	-	0.000%	-	F-1	-	-	-
20	371100	WW Pumping Equipment Electric	82,445	5.000%	4,122	F-1	2,350	1,773	-
21	371200	Manholes	-	0.000%	-	F-1	-	-	-
22	**Subtotal System Plumping Plant**		$ 82,445		$ 4,122		$ 2,350	$ 1,773	$ -
23									
24	**Reclaimed Water Distrbution Plant**								
25	366000	Reuse Services	$ -	0.000%	$ -	F-1	$ -	$ -	$ -
26	367000	Reuse Meters And Installation	-	0.000%	-	F-1	-	-	-
27	370000	Receiving Wells	-	0.000%	-	F-1	-	-	-
28	374000	Reuse Distribution Reservoirs	-	0.000%	-	F-1	-	-	-
29	375000	Reuse Trans. and Dist. System	-	0.000%	-	F-1	-	-	-
30	**Subtotal Recalimed Water Dist Plant**		$ -		$ -		$ -	$ -	$ -
31									
32	**Treatment & Disposal Plant**								
33	354400	WW Structures & Improvements Treatment	$ 1,047,352	2.000%	$ 20,947	F-1	$ 11,940	$ 9,007	$ -
34	355400	WW Power Generation Equipment Treatment	142,907	3.333%	4,764	F-1	2,715	2,048	-
35	380000	WW Treatment and Disposal Equipment	1,013,753	5.000%	50,688	F-1	28,892	21,796	-
36	380050	WW TD Equipment Grit Removal	135,165	5.000%	6,758	F-1	3,852	2,906	-
37	380100	WW TD Equipment Sed Tanks/Acc	336,115	5.000%	16,806	F-1	9,579	7,226	-
38	380300	WW TD Equipment Sldge Dry/Filt	39,113	5.000%	1,956	F-1	1,115	841	-
39	380500	WW TD Equipment Chemical Treatment Plant	232,909	5.000%	11,645	F-1	6,638	5,008	-
40	380600	WW TD Equipment Other Disp	28,914	5.000%	1,446	F-1	824	622	-
41	380625	WW TD Equipment Gen Treatment	1,818,565	5.000%	90,928	F-1	51,829	39,099	-
42	380650	WW TD Equipment Influent Lift Station	-	0.000%	-	F-1	-	-	-
43	381000	Plant Sewers	-	0.000%	-	F-1	-	-	-
44	382000	Outfall Sewer Lines	-	0.000%	-	F-2	-	-	-

Mohave Wastewater District
Test Year Ended June 30, 2013
Allocation of Depreciation Expense to Functions

Exhibit
Rebuttal Schedule G-6
Page 3.2
Witness: Bourassa

Line No.	Account No.	Description	Adjusted Original Cost	Depreciation Rate	Depr./Amort. Expense	Allocation Factor Ref.	Demand	Commodity	Customer
1	389100	WW Oth Plt & Misc Equip Intang	$ -	0.000%	$ -	F-3	$ -	$ -	$ -
2	389600	WW Other P/E - CPS	3,549	3.333%	118	F-4	30	-	89
3	**Subtotal Transmission and Distribution Plant**		$ 4,798,344		$ 206,056		$ 117,414	$ 88,553	$ 89
4									
5	**General Plant**								
6	354500	WW Structures & Improvements General	$ -	0.000%	$ -	F-1	$ -	$ -	$ -
7	335000	Hydrants	-	0.000%	-	F-1	-	-	-
8	390000	Office Furniture & Equipment	-	0.000%	-	F-4	-	-	-
9	390200	Computers and Software	10,496	10.000%	1,050	F-4	262	-	787
10	391000	Transportation Equipment	-	0.000%	-	F-4	-	-	-
11	392000	Stores Equipment	-	0.000%	-	F-4	-	-	-
12	393000	Tools, Shop And Garage Equip	71,567	4.000%	2,863	F-4	716	-	2,147
13	394000	Laboratory Equip	14,336	4.000%	573	F-1	327	247	-
14	395000	Power Operated Equipment	16,703	5.000%	835	F-4	209	-	626
15	396000	Communication Equip	26,322	10.000%	2,632	F-4	658	-	1,974
16	397000	Miscellaneous Equipment	-	0.000%	-	F-4	-	-	-
17	398000	Other Tangible Plant	-	0.000%	-	F-4	-	-	-
18	**Subtotal General Plant**		$ 139,424		$ 7,953		$ 2,172	$ 247	$ 5,535
19	**Total Direct Plant**		$ 8,831,474		$ 293,435		$ 158,814	$ 118,393	$ 16,228
20	**Allocated General Plant**								
21	399000	Allocated Corporate General Plant	34,952		814	F-3	-	-	814
22	399000	Reconcilation to PIS Balance	-		-	F-1	-	-	-
23	**Test Year Ended June 30, 2013**		$ 34,952		$ 814		$ -	$ -	$ 814
24	**Total Plant**		$ 8,866,427		$ 294,249		$ 158,814	$ 118,393	$ 17,043
25									
26									
27	Less:	Contributions in Aid of Construction	$ (1,242,321)	3.21%	$ (39,902)	F-1	(22,744)	(17,158)	-
28		Advances in Aid of Construction	$ (1,916,421)			F-1	-	-	-
29		Meter Deposits	(5)			F-3	-	-	-
30		Deferred Income Tax	(62,236)			F-1	-	-	-
31		Working Capital	16,860			F-1	-	-	-
32		Deferred Reg Assets/Liabilities	89,523		3,064	F-1	1,746	1,317	-
33	Total		$ 5,751,826		$ 257,411		$ 137,816	$ 102,552	$ 17,043
34									
35									
36									
37									
38									

Mohave Wastewater District
Test Year Ended June 30, 2013
Summary of Commodity - Demand Method Functions Factors

Exhibit
Rebuttal Schedule G-7
Page 1
Witness: Bourassa

Line No.	Class	Demand	Commodity	Customer
1				
2	Class	Demand	Commodity	Customer
3	Residential	0.993	0.977	0.992
4	Apartment	-	-	-
5	Commercial	0.001	0.014	0.007
6	Other Public Authority	0.006	0.009	0.001
7				
8	Total	1.000	1.000	1.000
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34	SUPPORTING SCHEDULES			
35	G-7, page 3			

Mohave Wastewater District
Test Year Ended June 30, 2013
COMMODITY - DEMAND METHOD FUNCTION FACTORS
Plant-in-Service. Accumulated Depreciation and Depreciation Expense Allocations Functions

Exhibit
Rebuttal Schedule G-7
Page 2.1
Witness: Bourassa

Line No.	Factor	Demand	Commodity	Customer
1				
2	Factor	Demand	Commodity	Customer
3	F-1	0.57	0.43	
4	F-2	1.00		
5	F-3			1.00
6	F-4	0.25		0.75
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25	Development of F-1 Allocation Factor			
26		MG	RATIO	DEMAND FACTOR
27		(a)	(b)	(c)
28	(1) Avg day	0.000215 G-7, page 3	1.00	1.00 1/(b)
29	(2) Max day	0.000374 G-7, page 3	1.74 Max day/Avg day	0.57 1/(b)
30				
31				

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Expense Allocation Factors

Exhibit
Rebuttal Schedule G-7
Page 2.2
Witness: Bourassa

Line No.	Expense Type	Demand	Commodity	Customer
1				
2	Labor	0.40	0.20	0.40
3	Purchased Water	-	1.00	-
4	Fuel & Power	-	1.00	-
5	Chemicals	-	1.00	-
6	Waste Disposal & Other Utilities	1.00	-	-
7	Intercompany Support Services	0.40	0.20	0.40
8	Corporate Allocation	0.40	0.20	0.40
9	Outside Services	0.80	0.20	-
10	Group Insurance	0.40	0.20	0.40
11	Pensions	0.40	0.20	0.40
12	Regulatory Expense	0.40	0.20	0.40
13	Insurance Other Than Group	0.40	0.20	0.40
14	Customer Accounting	-	-	1.00
15	Rents	-	-	1.00
16	General Office Expense	-	-	1.00
17	Miscellaneous	-	-	1.00
18	Maintenance Expense	0.60	0.20	0.20
19	Depreciation & Amortization		See Schedule G-7, page 2.1	
20	General Taxes-Other	-	-	1.00
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

Mohave Wastewater District
Test Year Ended June 30, 2013
Cost of Service Study, Using Commodity-Demand Method
Development of Class Allocation Factors

Exhibit
Rebuttal Schedule G-7
Page 3
Witness: Bourassa

COMMODITY ALLOCATION FACTOR

	Class	(a) Total Gallons (MG) In Test Year	Percent Total
	Residential	77.5485	97.69%
	Commercial	1.1340	1.43%
	Other Public Authority	0.7020	0.88%
Totals		79.3845	100.00%

DEMAND ALLOCATION FACTOR

Class	Average Daily Gallons (MG)	Demand Factor	Avg. Peak Day Demand (MG)	Percent of Total
Residential	0.21246	1.75	0.37181	99.29%
Commercial	0.00044	1.20	0.00053	0.14%
Other Public Authority	0.00178	1.20	0.00213	0.57%
Totals	0.21468		0.37447	100.00%

CUSTOMER ALLOCATION FACTOR

	Class	Number of Customers	Percent of Total
	Residential	1,436	99.24%
	Commercial	10	0.69%
	Other Public Authority	1	0.07%
Totals		1,447	100.00%

Mohave Wastewater District
Test Year Ended June 30, 2013
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Bourassa

Line No.	Meter Size	Class	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues
1	Residential		$ 974,526	$ 1,406,241	$ 431,715	44.30%	92.30%	93.59%
2	Commercial (1 ERU)		2,036	2,938	902	44.30%	0.19%	0.20%
3	Commercial (3 ERU)		8,143	11,751	3,607	44.30%	0.77%	0.78%
4	Other Public Authority		8,822	12,730	3,908	44.30%	0.84%	0.85%
5	Large Commercial/Industrial		14,298	20,631	6,334	44.30%	1.35%	1.37%
6								
7	Effluent		44,578	44,578	-	0.00%	4.22%	2.97%
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38	Total Revenues Before Annualization		$ 1,052,403	1,498,869	$ 446,466	42.42%	99.67%	99.76%
39								
40								

Mohave Wastewater District
Test Year Ended June 30, 2013
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Rebuttal Schedule H-1
Page 2
Witness: Bourassa

Line No.	Meter Size	Class	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Additional Bills	Additional Gallons to be Pumped (In 1,000's)	Schedule
			Revenue Annualization						
5	Residential		$ -	$ -	-	0.00%	(0)	-	See Work Papers
6	Commercial (1 ERU)		-	-	-	0.00%	-	-	See Work Papers
7	Commercial (3 ERU)		-	-	-	0.00%	-	-	See Work Papers
8	Other Public Authority		-	-	-	0.00%	-	-	See Work Papers
9	Large Commercial/Industrial		-	-	-	0.00%	-	-	See Work Papers
41	Total Revenue Annualization		$ -	$ -	$ -	0.00%	(0)	-	

Mohave Wastewater District
Test Year Ended June 30, 2013
Revenue Summary
With Annualized Revenues to Year End Number of Customers

Exhibit
Rebuttal Schedule H-1
Page 3
Witness: Bourassa

Line No.		Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Water Revenues	Percent of Proposed Water Revenues	Schedule
1	Subtotal Sewer Revenues	$ 1,052,403	$ 1,498,869	$ 446,466	42.42%	99.67%	99.76%	
2								
3								
4			-					
5	Subtotal Revenue Annualization	-	-	-	0.00%	0.00%	0.00%	
6	Total Sewer Revenues	$ 1,052,403	$ 1,498,869	$ 446,466.29	42.42%	99.67%	99.76%	
7	Misc. Revenues	$ 3,629	$ 3,629	-	0.00%	0.34%	0.24%	
8								
9	Reconciling Amount to GL	(193)	(16)	177	-91.71%	-0.02%	0.00%	
10	Total Sewer Revenues	$ 1,055,840	$ 1,502,483	$ 446,643	42.30%	100.00%	100.00%	
11								
12								
13								
14								
15								

Mohave Wastewater District
Test Year Ended June 30, 2013
Customer Summary

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 6/30/2013	Average Consumption	Average Bill Present Rates	Average Bill Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential	1,436	-	$ 56.55	$ 81.60	25.05	44.30%
2	Commercial (1 ERU)	3	-	$ 56.55	$ 81.60	25.05	44.30%
3	Commercial (3 ERU)	4	-	$ 169.65	$ 244.80	75.15	44.30%
4	Other Public Authority	1	-	$ 735.15	$ 1,060.82	325.67	44.30%
5	Large Commercial/Industrial	3	142,222	$ 397.16	$ 573.10	175.94	44.30%
6	Effluent	1	6,376,938	4,457.85	4,457.85	-	0.00%
7							
8	Subtotal	1,448					
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34	Total	1,448					
35							

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

Mohave Wastewater District
Test Year Ended June 30, 2013
Customer Summary

Exhibit
Rebuttal Schedule H-2
Page 2
Witness: Bourassa

Line No.	Meter Size, Class	(a) Average Number of Customers at 6/30/2013	Median Consumption	Median Bill Present Rates	Median Bill Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential	1,436	-	$ 56.55	$ 81.60	25.05	44.30%
2	Commercial (1 ERU)	3	-	$ 56.55	$ 81.60	25.05	44.30%
3	Commercial (3 ERU)	4	-	$ 169.65	$ 244.80	75.15	44.30%
4	Other Public Authority	1	-	$ 735.15	$ 1,060.82	325.67	44.30%
5	Large Commercial/Industrial	3	162,000	$ 442.25	$ 638.17	195.92	44.30%
6	Effluent	1	6,614,816	$ 4,624.14	$ 4,624.14	-	0.00%
7							
8	Subtotal	1,448					
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34	Total	1,448					
35							

36 **(a)** Average number of customers of less than one (1), indicates that less than 12 bills were issued during the year.
37

Mohave Wastewater District
Test Year Ended June 30, 2013
Present and Proposed Rates

Exhibit
Rebuttal Schedule H-3
Page 1
Witness: Bourassa

Line No.	Monthly Service Charge for:	Present Rates	Proposed Rates	Dollar Change
1				
2	Residential (per ERU)	$ 56.55	$ 81.60	$ 25.05
3	Commercial (per ERU)	56.55	81.60	25.05
4	Public Authority (per ERU)	56.55	81.60	25.05
5	Large Commercial	72.89	105.18	32.29
6				
7				
8				
9				

Line No.	Commodity Rates (per 1,000 gallons)	Block	Present Rate	Proposed Rate	Dollar Change
10					
11					
12	Residential (per ERU)	All gallons	$ -	$ -	$ -
13	Commercial (per ERU)	All gallons	$ -	$ -	$ -
14	Public Authority (per ERU)	All gallons	$ -	$ -	$ -
15	Large Commercial	All gallons	$ 2.2800	$ 3.29	$ 1.01
16					
17					
18	Effluent (per acre foot)		See Mohave Water	$ 227.79	
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

Mohave Wastewater District
Changes in Representative Rate Schedules
Test Year Ended June 30, 2013

Exhibit
Rebuttal Schedule H-3
Page 2
Witness: Bourassa

Line No.	Service Charges	Present Rates	Proposed Rates
1			
2			
3			
4	Establishment of Service		$ 35.00
5	Regular Hours	$ 20.00	Remove
6	After Hours	$ 30.00	Remove
7	Re-establishment of Service (within 12 months)	(a)	(a)
8	Reconnection of Service (Delinquent)		$ 35.00
9	Regular Hours	$ 30.00	Remove
10	After Hours		Remove
11	NSF Check	$ 25.00	$ 25.00
12	Late Fee Charge, per month	(c)	1.50%
13	Deferred Payment, Per Month		1.50%
14	Deposit Requirements	(b)	(b)
15	Deposit Interest	(b)	(b)
16	After Hours Service Charge(d)	NT	$ 30.00
17			
18			
19			
20	(a) Months off system times minimum per ACC Rules R-14-603(D).		
21	(b) Per ACC Rules R14-2-603(B)		
22	(c) Per ACC Rules R14-2-608(F)		
23	(d) After hours service charge: After regular working hours, Saturdays, Sundays, and holidays if at the customer's		
24	request or for the customer's convenience.		
25			
26			
27			
28			
29			
30			
31	IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM		
32	ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE		
33	TAX. PER COMMISSION RULE 14-2-608(D).		
34			
35			
36			
37			

Mohave Wastewater District
Test Year Ended June 30, 2013
Meter and Service Line Charges

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Bourassa

Line No.			
1			
2	**Non-refundable Service Line Charges**		
3			
4		Present	Proposed
5		Charge	Charge
6	Residential	Cost	Cost
7	Commercial	Cost	Cost
8	School	Cost	Cost
9	Muliple Dwelling	Cost	Cost
10	Mobile Home Park	Cost	Cost
11	Effluent	Cost	Cost
12			
13			
14	**Treatment Plant Availability Fee**		
15		Present	Proposed
16	Per New Connection	Charge	Charge
17	4 Inch	$ 785	$ 785
18	6 Inch	1,570	1,570
19	8 Inch	2,748	2,748
20			
21			
22			