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BEFORE THE ARIZONA CORPORATION COMMISSION

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KRISTIN K. MAYES
CHAIRMAN
GARY PIERCE
COMMISSIONER
SANDRA D. KENNEDY
COMMISSIONER
PAUL NEWMAN
COMMISSIONER
BOB STUMP
COMMISSIONER

2009 AUG -7 P 12: 34
AZ CORP COMMISSION
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION OF
ARIZONA WATER COMPANY, AN ARIZONA
CORPORATION, FOR A DETERMINATION
OF THE FAIR VALUE OF ITS UTILITY
PLANT AND PROPERTY, AND FOR
ADJUSTMENTS TO ITS RATES AND
CHARGES FOR UTILITY SERVICE AND
FOR CERTAIN RELATED APPROVALS
BASED THEREON.

Docket No. W-01445A-08-0440

NOTICE OF FILING SURREBUTTAL TESTIMONY

The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the
Surrebuttal Required Revenue Testimony of William A. Rigsby and Timothy J. Coley, and the
Surrebuttal Cost of Capital Testimony of William A. Rigsby in the above-referenced matter.

RESPECTFULLY SUBMITTED this 7th day of August, 2009.

Arizona Corporation Commission
RECEIVED

AUG 7 2009



Michelle L. Wood
Counsel

1 An Original and Thirteen (13) Copies of
2 the foregoing were filed this 7th day
of August, 2009 with:

3 Docket Control
4 Arizona Corporation Commission
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6 Phoenix, Arizona 85007

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mailed this 7th day of August, 2009 to:

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ARIZONA WATER COMPANY

DOCKET NO. W-01445A-08-0440

**SURREBUTTAL TESTIMONY
ON REQUIRED REVENUE**

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

AUGUST 7, 2009

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ATTACHMENT A – Letter of Former ACC Commissioner William A. Mundell

ATTACHMENT B – NASUCA Resolution on Automatic Adjustment Charges

ABBREVIATED NORTHERN GROUP SCHEDULES

1 **INTRODUCTION**

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

3 A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed
4 by the Residential Utility Consumer Office, located at 1110 W.
5 Washington, Suite 220, Phoenix, Arizona 85007.

6
7 Q. Have you filed any prior testimony in this case on behalf of RUCO?

8 A. Yes. On June 12, 2009, I filed direct testimony with the ACC. My direct
9 testimony on revenue requirement addressed the operating revenue and
10 expense issues associated with the case. I also filed direct testimony on
11 cost of capital issues.

12
13 Q. Please state the purpose of your surrebuttal testimony.

14 A. The purpose of my surrebuttal testimony is to respond to AWC's rebuttal
15 testimony on RUCO's recommended levels of operating revenue and
16 expense (i.e. operating income) for the Company's seventeen operating
17 systems in Arizona and on RUCO's position on various adjustor
18 mechanisms being proposed by AWC.

19
20 Q. Will your surrebuttal testimony address any of the rate base issues in the
21 case?

22 A. No. Those issues will be addressed in the surrebuttal testimony of RUCO
23 Witness Timothy J. Coley.

1 Q. Are you also filing surrebuttal testimony on the cost of capital issues in this
2 case?

3 A. Yes. I have also filed a separate piece of surrebuttal testimony on
4 RUCO's cost of capital recommendations.
5

6 Q. How is your surrebuttal testimony organized?

7 A. My surrebuttal testimony contains four parts: the introduction that I have
8 just presented; a summary of AWC's rebuttal testimony; a section that
9 addresses the operating income adjustments that are in dispute between
10 the Company and RUCO; and a section on RUCO's surrebuttal position
11 on the various adjustor mechanisms being proposed by the Company. My
12 surrebuttal testimony also contains an abbreviated set of Northern Group
13 schedules that will present RUCO's revised required revenue
14 recommendations for each of AWC's seventeen operating systems
15 (RUCO witness Coley's Surrebuttal testimony will include a similar set of
16 schedules for the Company's Eastern and Western Groups).
17

18 Q. Will RUCO be filing surrebuttal testimony on rate design that takes your
19 revised level of revenue into consideration?

20 A. Yes. RUCO will file surrebuttal testimony on rate design on August 12,
21 2009. RUCO's recommended rate design will take into account the
22 revised level of revenue that I will be recommending in my surrebuttal
23 testimony.

1 **SUMMARY OF ARIZONA WATER COMPANY'S REBUTTAL TESTIMONY**

2 Q. Have you reviewed AWC'S rebuttal testimony?

3 A. Yes. I have reviewed the rebuttal testimonies of Company witnesses
4 William M. Garfield, Joseph D. Harris, Joel M. Reiker, and Fredrick K.
5 Schneider, which were filed on July 10, 2009.

6
7 Q. Briefly summarize the rebuttal testimony of each of the aforementioned
8 witnesses.

9 A. Mr. Garfield's rebuttal testimony addresses the points of disagreement
10 that the Company has with ACC Staff and RUCO on the various adjustor
11 mechanisms that AWC has proposed in this proceeding. Mr. Harris'
12 rebuttal testimony focuses on the issues of water loss and the ACRM and
13 MAP surcharges. Mr. Reiker's rebuttal testimony takes issue with a
14 number of rate base and operating income adjustment recommendations
15 being made by ACC Staff and RUCO. Mr. Schneider's rebuttal testimony
16 deals with Arizona Department of Water Resources compliance, lost
17 water, plant held for future use, and post test year plant.

18

19 Q. Which Company witnesses will your surrebuttal testimony focus on?

20 A. My surrebuttal testimony will focus on the issues addressed in the rebuttal
21 testimony of Mr. Reiker, on operating income, and the rebuttal testimony
22 of Mr. Garfield, on adjustor mechanisms.

23

1 **OPERATING INCOME**

2 Q. What operating revenue and expense adjustments are AWC and RUCO in
3 disagreement over?

4 A. RUCO and AWC are in disagreement over the following three operating
5 income adjustments: (1) RUCO's four related adjustments to normalize
6 overtime hours that were incurred during the Test Year; (2) RUCO's
7 reversal of a Company adjustment designed to recover revenues that may
8 be lost as a result of implementing a conservation-oriented, three-tiered
9 inverted block rate design for the AWC's Northern Group; and, (3)
10 RUCO's decision to remove revenues pursuant to AWC's PPAM that is
11 currently in effect for all five of the Company's Northern Group systems.
12 Company Witness Joel M. Reiker also takes issue with RUCO's
13 calculation of income tax.

14
15 Q. Does RUCO agree with Mr. Reiker's position regarding normalization of
16 test year expenses and RUCO Operating Adjustment No.'s 1, 2, 3 and 6?

17 A. Yes, in part. RUCO agrees that the portion of overtime expense that was
18 capitalized should not be included in RUCO's normalization calculation.
19 RUCO disagrees with Mr. Reiker's other normalization arguments.

20
21
22 ...
23

1 Q. Are the revisions to RUCO Operating Adjustments #1, 2, 3 and 6 reflected
2 in RUCO's revised revenue figure?

3 A. Yes. RUCO has recalculated the aforementioned adjustments based on
4 information obtained in the Company's response to RUCO data request
5 4.01. The revised adjustments are approximately one-half of the dollar
6 amounts that were presented in direct testimony.

7

8 Q. Has RUCO revised its Operating Adjustment #4 which reversed the
9 Company's adjustment to recover revenues that may be lost as a result of
10 implementing a conservation-oriented, three-tiered inverted block rate
11 design for the AWC's Northern Group?

12 A. No. RUCO has not revised its adjustment and has not changed its
13 position on this issue despite the testimony of a RUCO witness that
14 provided testimony almost two decades ago in AWC's 1991 rate case
15 proceeding. RUCO's current position is more in line with the
16 Commission's recent concerns regarding adjustor mechanisms and their
17 propensity to shift risk from utilities to ratepayers. This situation was
18 addressed in a letter by former ACC Commissioner William A. Mundell
19 (Attachment A) which was filed in a generic docket on the investigation of
20 regulatory and rate incentives¹.

21

¹ Docket Numbers E-00000J-08-0314 and G-00000C-08-0314.

1 Q. Is RUCO in agreement with the Company on RUCO Operating Adjustment
2 #5, which removes revenues pursuant to AWC's PPAM that is currently in
3 effect for all five of the Company's Northern Group systems?

4 A. Yes. RUCO accepts the Company's rebuttal argument on this issue, and
5 has reversed its adjustment for the Company's Northern Group systems.
6

7 Q. Is RUCO still advocating a separate gross revenue conversion factor for
8 each individual system?

9 A. No. Consistent with a prior Decision for the Company's Northern Group
10 and RUCO's position on rate consolidation, which will be addressed in
11 RUCO's surrebuttal testimony on rate design to be filed on August 12,
12 2009, RUCO is recommending a single gross revenue conversion factor
13 for each of the Company's seventeen operating systems.
14

15 Q. Will RUCO have a final recommendation on rate case expense at the
16 conclusion of the evidentiary hearing?

17 A. Yes. As noted in Mr. Reiker's rebuttal testimony, the Company is
18 providing RUCO with updated rate case expense figures. RUCO's final
19 recommended level of rate case expense will be presented in its final
20 schedules.
21

22

23 ...

1 Q. What increases/decreases in operating revenue is RUCO recommending
2 as a result of the revisions to operating revenue and expense adjustments
3 described above?

4 A. RUCO is recommending the following increases/decreases in operating
5 revenue:

	RUCO's Recommended	Percentage
Eastern Group	Increase/(Decrease)	Increase/
<u>Systems</u>	<u>In Operating Revenue</u>	<u>(Decrease)</u>
10 Superstition	\$1,952,703	16.35%
11 Bisbee	\$255,980	14.85%
12 Sierra Vista	(\$157,931)	(10.80%)
13 San Manuel	\$312,445	38.46%
14 Oracle	(\$63,798)	(5.66%)
15 Winkleman	\$20,259	20.80%
16 Miami	<u>\$626,319</u>	33.84%
17 Total Eastern Group	\$2,945,977	

	RUCO's Recommended	Percentage
Western Group	Increase/(Decrease)	Increase/
<u>Systems</u>	<u>In Operating Revenue</u>	<u>(Decrease)</u>
22 Casa Grande	\$3,487,828	31.90%
23 Stanfield	\$143,784	108.99%
24 White Tank	\$302,576	24.31%
25 Ajo	\$47,989	10.19%
26 Coolidge	<u>(\$71,427)</u>	(3.22%)
27 Total Western Group	\$3,910,750	

28
29

	RUCO's Recommended	Percentage
	Increase/(Decrease)	Increase/
	<u>In Operating Revenue</u>	<u>(Decrease)</u>
1		
2	Western Group	
3	<u>Systems</u>	
4	Lakeside	(5.16%)
5	Overgaard	(16.15%)
6	Sedona	25.80%
7	Pinewood	0.70%
8	Rimrock	73.52%
9	Total Northern Group	\$883,363
10	Total Company	\$7,740,090
11		

12 RUCO's recommended increase in operating revenue is \$7,701,200 lower
13 than the \$15,441,290 level of increase requested by AWC. The
14 recommendations listed above are summarized on Schedule WAR-1 for
15 the Northern Group systems in my surrebuttal testimony and Schedule
16 TJC-1 for the Eastern and Western Group systems that are included in the
17 surrebuttal testimony of RUCO witness Tim Coley.

18

19 **ADJUSTOR MECHANISMS**

20 Q. Has RUCO changed its position on the various adjustor mechanisms
21 addressed in the rebuttal testimony of Company witness William M.
22 Garfield?

23 A. No. RUCO has not changed its position and continues to recommend that
24 the Commission reject AWC's requests to restore PPAM's for the
25 Company's Eastern and Western Groups, to continue the PPAM that is
26 currently in place for the Company's Northern Group, to establish a PFAM

1 for all of the Company's operating systems (in order to pass the costs of
2 fuel through to ratepayers), and to establish an AAM as an alternative to
3 the aforementioned PPAM and PFAM pass through mechanisms.

4
5 Q. Please address Mr. Garfield's position that the Company-proposed AAM
6 could be patterned on the existing ACRM, which includes an earnings test,
7 that allows for the recovery of costs associated with meeting the
8 requirements of the U.S. Environmental Protection Agency's ("EPA")
9 arsenic standard?

10 A. RUCO has addressed this issue a number of times in the past and has not
11 changed its position since. RUCO is opposed to ACRM-like mechanisms,
12 such as the one being proposed by Mr. Garfield, to be used for anything
13 other than for what it was originally intended for. The ACRM adjustor
14 mechanism was specifically designed to address a one-time federally
15 mandated event that impacted dozens of Arizona water companies
16 simultaneously. The original ACRM was approved by the Commission to
17 give water providers in Arizona the ability to recover the costs associated
18 with meeting the EPA's revised drinking water arsenic standard of 10 parts
19 per billion. The EPA's requirement that water providers comply with the
20 more stringent standard was in effect an unfunded mandate from the
21 federal government. Multiple Arizona water providers, including AWC,
22 had no choice but to either comply with the EPA's rule or face the
23 consequences of being in violation of it. This being the case,

1 representatives from the state's investor owned water companies, ACC
2 Staff, and RUCO developed the present ACRM which allows water utilities
3 to comply with the new EPA standard through a surcharge that was
4 established within the context of a rate case proceeding where a
5 constitutional finding of a utility's fair value has been established. The key
6 point here is that the EPA's revised arsenic standard represented an
7 extraordinary circumstance that neither Arizona's government, which
8 includes the Commission, nor the state's water companies, either investor
9 owned or municipal, had any control over. The AAM being proposed by
10 Mr. Garfield has nothing in common with the circumstances that merited
11 the approval of the ACRM. Unlike the ACRM, the AAM is not in reaction
12 to extraordinary circumstances involving the health of Arizonans. Instead,
13 the AAM is an attempt to pass through everyday, ordinary business
14 expenses in order to relieve the Company from the burden of managing
15 these fluctuating costs. In fact the implementation of such a mechanism in
16 RUCO's view only creates a disincentive for utilities to keep costs under
17 control because they would be able to pass them through to ratepayers.
18 In short, the AAM is just one more way that risk is shifted from the utility to
19 the ratepayer.

20
21 ...
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1 Q. Does RUCO have any comments on Mr. Garfield's remarks that the
2 implementation of adjustor mechanisms, such as those proposed by the
3 Company, would be beneficial in light of the current economic downturn
4 resulting in budget cuts and the lack of adequate ACC Staff to handle rate
5 cases?

6 A. I would submit that the implementation of adjustor mechanisms that allow
7 the pass through of costs, without a formal rate case proceeding, could
8 only make conditions during an economic downturn, such as the recession
9 we are currently experiencing, only worse by facilitating increases in rates
10 at a time when households and businesses are already struggling to make
11 ends meet. Such pass through mechanisms would effectively shield
12 utilities from harsh economic conditions with which their customers have
13 to deal. The point that rate cases may take longer because of staffing
14 shortages is an economic reality with which utilities such as AWC will just
15 have to deal. Quite frankly, I'm somewhat disappointed that Mr. Garfield
16 would even raise this issue given the fact that regulated monopolies such
17 as AWC have near certain chances of surviving periods of economic
18 distress than businesses that have to operate in a competitive
19 environment.

20

21

22 ...

23

1 Q. Do you have any comments regarding the NARUC and NRRI documents
2 that Mr. Garfield presents in support of his position on adjustor
3 mechanisms?

4 A. Both NARUC and NRRI state that they support the **consideration** of such
5 mechanisms but not the **adoption** of such mechanisms. Both talk about
6 other alternatives, such as consolidation. In light of RUCO's support of a
7 modified consolidation plan, adjustor mechanisms are not necessary here.
8 Moreover, the National Association of State Utility Consumer Advocates
9 has long opposed the use of adjustor mechanisms for all of the same
10 reasons stated by Commissioner Mundell (Attachment A), and reiterated
11 herein (Attachment B).

12
13 Q. Does your silence on any of the issues or positions addressed in the
14 rebuttal testimony of the Company's witnesses constitute acceptance?

15 A. No, it does not.

16
17 Q. Does this conclude your surrebuttal testimony on AWC?

18 A. Yes, it does.

ATTACHMENT A

COMMISSIONERS
MIKE GLEASON - Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE



ARIZONA CORPORATION COMMISSION

RECEIVED
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Executive Director

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ORIGINAL

2008 JUN 24 12:12
AZ CORP COMMISSION
DOCKET CONTROL

May 9, 2008

Ernest Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Investigation of Regulatory & Rate
Incentives for Gas & Electric Utilities;
Docket No. E-00000J-08-0314,
Docket No. G-00000C-08-0314

Dear Mr. Johnson:

As you may know, the Colorado Public Utilities Commission has opened an investigatory docket to look at incentives for gas and electric utilities under current rate-of-return regulation to see if these incentives are producing behavior consistent with the Commission's policy goals. The investigation would also examine alternative forms of regulation and explore whether alternative incentives could potentially achieve better results.

Some of the issues to be addressed in the Colorado PUC's investigation are: how adjustment clauses affect utility incentives, whether regulatory incentives could be changed to align a utility's financial incentives with energy efficient investment, and the incentives involved in competitive bidding and utilities' buy-or-build decisions.

These are questions this Commission should also consider; therefore, I request that a generic docket be opened to investigate these issues. I have attached the Colorado PUC's order so that it may serve as a template for our own inquiry into utility incentives. I particularly look forward to a discussion on adjustor mechanisms and surcharges which can increase customers' bills outside of a rate case. These have become common in recent years. This was not always the case: For example, APS did not have a power supply adjustor from 1989 to 2005 and TEP does not currently have one. Prior to the proliferation of such adjustor mechanisms and surcharges, utilities would have to bear the risk of increased fuel and purchased power costs between rate cases. With an adjustor mechanism, most of this risk is shifted to utility customers.

Given the phenomenal growth that our state has been experiencing as well as the series of rate increases that customers have had to bear, I believe that the time has come to seek creative solutions. We need to take a look at Commission policies and explore alternatives.

Thank you for your attention to this matter.

Sincerely,

William A. Mundell, Commissioner
Arizona Corporation Commission

Arizona Corporation Commission
DOCKETED

JUN 24 2008

DOCKETED BY

Ernest Johnson
May 9, 2008
Page 2 of 2

cc: Chairman Gleason
Commissioner Hatch-Miller
Commissioner Mayes
Commissioner Pierce
Brian McNeil
Janice Alward
Lyn Farmer
Rebecca Wilder

Decision No. C08-0448

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 08I-113EG

IN THE MATTER OF THE INVESTIGATION OF REGULATORY AND RATE INCENTIVES
FOR GAS AND ELECTRIC UTILITIES.

**ORDER OPENING INVESTIGATORY
DOCKET AND NOTICE OF INQUIRY**

Mailed Date: April 29, 2008
Adopted Date: March 26, 2008

I. BY THE COMMISSION

A. Statement

1. On February 21, 2008, the Commission held a deliberations meeting in which we identified and discussed a set of policy initiatives that we intend to pursue over the next year or more. One of those initiatives concerns incentives faced by the energy companies we regulate. We find that there is a need for greater understanding, by the Commission and its Staff, of the following: (1) the manner in which the existing regulatory structures and incentives influence energy utilities' behaviors; (2) the extent to which these incentives align results with Commission policy goals; (3) the manner in which alternative regulatory structures and incentives for these utilities may impact their actions; and (4) the extent to which these alternative regulatory structures may achieve results consistent with Commission policy goals.

2. As part of our deliberations on March 26, 2008, we began with a discussion of the purpose of such an investigation. We clarified that the purpose of such an investigation is to focus on utility incentives, with the goal of addressing customer-side incentives in a separate forum as part of other Commission initiatives. We also found that the scope of our investigation

should be broad enough to assess both the existing incentives for utilities inherent as part of the current regulatory paradigm (*e.g.*, rate-of-return/cost of service with varying adjustment clauses) as well as an understanding of other regulatory paradigms (*e.g.*, alternative forms of regulation, price-cap index regulation). We also discussed our vision of the process that includes participatory conversations about these issues with all stakeholders interested in these issues.

3. In addition, we discussed our expectations as to the likely outcomes of the investigation. While we cannot predict what the specific outcomes will be, possible outcomes include any or all of the following: a report from Commission Staff (Staff) summarizing the conclusions from the investigations; recommendations for rule changes; recommendations for possible legislative policy changes; and a formal record that could be included in other Commission proceedings.

4. We also discussed the priority and timing of the investigation, noting that a reasonable time for conclusion of the investigation was the end of 2008, prior to the next legislative session and contemporaneous with the expected filing of a general rate case by Public Service Company of Colorado.

5. An initial list of questions and issues were identified to assist in defining the scope of the proceeding. The questions include:

- i. What basic incentives does today's regulatory structure (*e.g.*, rate-of-return regulatory structure, adjustment clauses, test year determination, depreciation policies) provide to Colorado electric and gas utilities?
- ii. What are the alternatives to the Rate Base-Rate of Return model?
- iii. How do adjustment clauses affect utility incentives?
- iv. What are the alternatives to adjustment clauses?
- v. Can the regulatory incentive structure be changed to align a utility's financial incentives with energy efficiency investment?
- vi. Can the incentive structure be modified to heighten the utility's incentives for management efficiency?

- vii. Should the Commission consider an electric "decoupling" mechanism?
- viii. Can the regulatory incentive structure be altered to change the stakes for a utility making a build-or-buy decision?
- ix. What impact does the current regulatory structure regarding the buy-or-build scenario have on competitive bidding as a tool in resource selection?
- x. What is the state of the art across the nation?

The Commission understands that the outcomes of the investigation should apply prospectively, and not affect related issues that are addressed by current proceedings.

6. Additional impetus for this investigation has been provided by Governor Ritter's Executive Order D 004 08, issued on April 28, 2008. In relevant part, the Executive Order provides:

Greenhouse Gas Emissions from the Utility Sector:

I hereby request that the PUC require from each utility within its jurisdiction an ERP for achieving a 20% reduction in its greenhouse gas emissions from 2005 levels by 2020.

I hereby direct GEO and the Department of Regulatory Agencies to identify regulatory and legislative changes that may be needed to provide the investor-owned utility with the appropriate incentives to reduce greenhouse gas emissions, and to reduce the financial barriers to investments in renewable energy sources, energy efficiency, carbon credits and clean coal technologies. The Executive Directors of these agencies will provide their suggestions to my office within 12 months of the date of this Executive Order.

We think that the assignment to the Department of Regulatory Agencies will be substantially assisted by our proposed investigation of utility incentives.

7. At the March 26, 2008 meeting we discussed a Staff recommendation to keep the methods used in the proceeding as flexible as possible including, but not limited to: Staff research, expert consultant research, Commission orders seeking comments, workshop presentations, and, to the extent allowable, individual discussions with parties of interest, as long as those discussions are fully disclosed to all interested parties. Since this proceeding is investigatory in nature, primarily focused on gathering information and will not impact any

current docket, the "permit, but disclose" approach is reasonable. In addition, Staff explained that the "permit, but disclose" discussions are often used by the Federal Energy Regulatory Commission and the Federal Communications Commission when investigating non-adjudicatory matters of interest before them.

8. We agree with Staff's recommendation, and direct Staff to promptly begin the research phase (both Staff research and external resource research).

9. In addition, we invite interested parties to file comments in response to this order that address the appropriate scope of this inquiry, suggesting specific topics not covered in paragraph 5 above, and methods of inquiry. We are not seeking comments on the substance of the inquiry at this point; we anticipate that the Commission will issue subsequent orders in this docket requesting replies to specific questions we pose to interested parties.

10. Once Staff has an opportunity to review comments filed by interested persons, we direct Staff to initiate a dialogue involving the Commission, Staff, and all parties in interest addressing questions related to the impact of incentives on utility decision-making; and to schedule workshops and roundtable discussions as appropriate.

II. ORDER

A. The Commission Orders That:

1. An investigatory docket is opened concerning regulatory structures and incentives that influence electric and gas utility actions under existing regulatory structures in Colorado and concerning alternative incentives and alternative regulatory and rate structures that may alter or influence utility actions.

2. Staff of the Commission shall conduct this investigation pursuant to the authority vested in the Commission pursuant to Title 40, Articles 1 through 7 of the Colorado Revised Statutes.

3. Notice of this Order shall be provided to the public and to all interested parties.

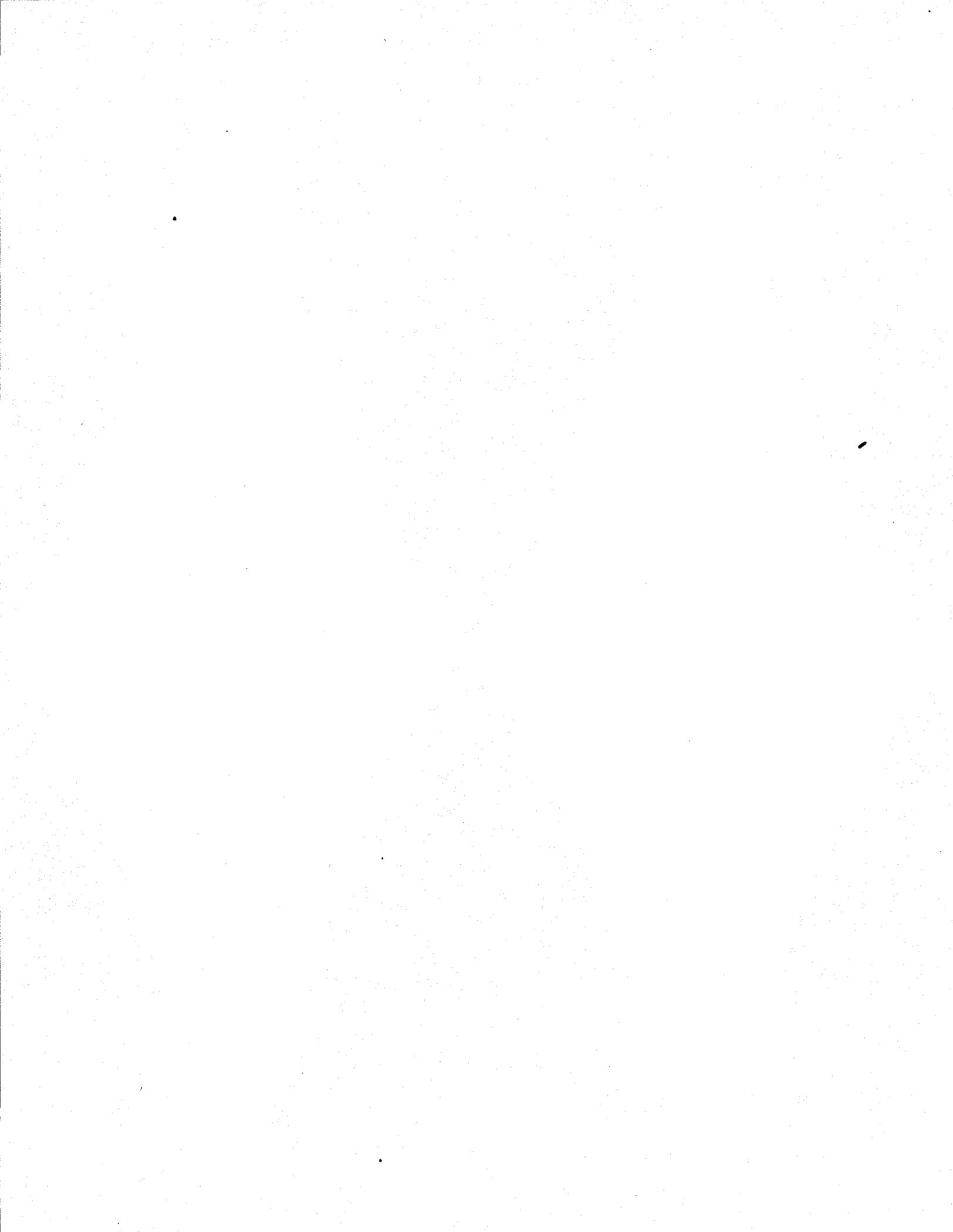
4. Interested persons are encouraged to submit comments on the scope of the proceeding within 30 days of the Mailed Date of this Order. In addition to the filing of written comments, interested persons may submit comments electronically by compact disk (CD), or e-mail to puc@dora.state.co.us.

5. This Order is effective upon its Mailed Date.

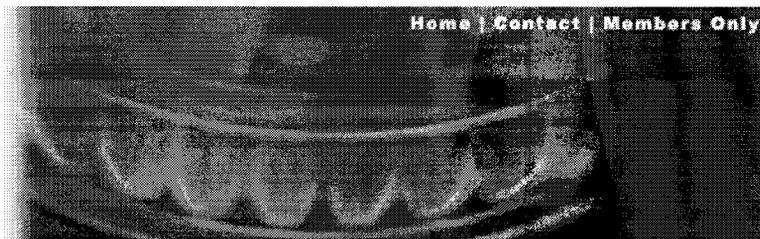
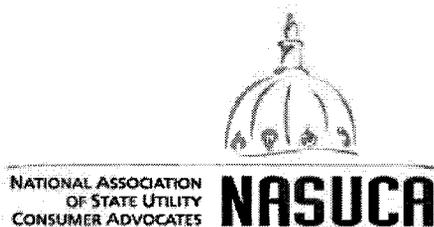
B. **ADOPTED IN COMMISSIONERS' WEEKLY MEETING**
March 26, 2008.

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

Commissioners



ATTACHMENT B



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[Home](#) > [Resolutions](#) > Water Company Infrastructure Costs

National Association of State Utility Consumer Advocates

RESOLUTION

Discouraging State Regulatory Commissions from Adopting Automatic Adjustment Charges for Water Company Infrastructure Costs

WHEREAS, certain regulated water companies have recently proposed mechanisms for automatically increasing water rates, prior to regulatory review, based upon isolated items of expense related to infrastructure projects; and WHEREAS, the National Association of State Utility Consumer Advocates (NASUCA) believes that public interest is still best served by rate of return regulation of investor-owned water companies and that such automatic adjustment mechanisms contradict several sound rate of return ratemaking principles, including the matching principle, because increases to items of rate base are recognized far outside of the test year from which all other rate base, as well as revenues, expenses, and cost of capital items that are used when calculating rates, allowing 'piecemeal ratemaking' and preventing the recognition of any simultaneous offsetting reductions in other items; and

WHEREAS, automatic adjustment mechanisms also circumvent regulatory review of increases to rate base for prudence and reasonableness; and

WHEREAS, automatic adjustment mechanisms further create bad public policy by eliminating the built-in regulatory incentive to control costs between rate cases and, generates incentives to increase spending in order to avoid reduction of the surcharge which occurs if the water company's authorized return is reached; and

WHEREAS, when an automatic adjustment clause is adopted, rate stability is reduced and proper price signals are distorted by frequent rate increases, and no convincing evidence has been shown to support the claim that the frequency of rate case proceedings is reduced by such clauses; and

WHEREAS, special incentives are not needed in order ensure adequate water quality, pressure, and a proper reduction of service interruptions; and

WHEREAS, automatic adjustment mechanisms can inappropriately reward water companies that have imprudently fallen behind in infrastructure improvements; and

WHEREAS, it is inappropriate to tilt the regulatory balance against consumers and shift business risk away from water companies simply for the purpose of creating an incentive for these companies to fulfill their basic obligation to provide safe and adequate service;

THEREFORE, BE IT RESOLVED, that NASUCA strongly recommends state legislatures and state public utility commissions avoid the implementation of automatic adjustments charges for water company infrastructure costs; and

BE IT FURTHER RESOLVED, that NASUCA authorizes its Executive Committee to develop specific positions and to take appropriate actions consistent with the terms of this resolution. The Executive Committee shall notify the membership of any action taken pursuant to this resolution.

Approved by NASUCA:

June, 1999, Baltimore, Maryland

Submitted By:

NASUCA Ad Hoc Water Committee

Christine Maloni Hoover, PA, Chair
Wes Blakley, IN
Robert Brabston, NJ
John Coffman, MO
Brian Gallagher, DE
Donald Rogers, MD
Dale Stransky, NV
James Warden, Jr., NY

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TABLE OF CONTENTS TO WAR SURREBUTTAL SCHEDULES (ABBREVIATED)

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WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 7,169,218	\$ 7,030,054
2	Adjusted Operating Income (Loss)	\$ 517,717	\$ 597,356
3	Current Rate of Return (L2 / L1)	7.22%	8.50%
4	Required Operating Income (L5 X L1)	\$ 703,606	\$ 515,303
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 185,889	\$ (82,053)
7	Gross Revenue Conversion Factor (WAR-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 302,745	\$ (133,634)
9	Adjusted Test Year Revenue	\$ 2,588,849	\$ 2,588,943
10	Proposed Annual Revenue (L8 + L9)	\$ 2,891,594	\$ 2,455,309
11	Required Percentage Increase in Revenue (L8 / L9)	11.69%	-5.16%
12	Consolidated Revenue Adjustment	\$ (23,271)	\$ 27,137
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 279,355	\$ (106,497)
14	Required Revenue Under Proposed Consolidation	\$ 2,868,204	\$ 2,482,446
15	Required Percentage Increase in Revenue Under Proposed Consolidation	10.79%	-4.11%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule WAR-2, WAR-7, and WAR-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. WAR-1, Pg 1, C (B), L4)	\$ 515,303			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. WAR-1, Pg 1, C (B), L2)	597,356			
13	Required Increase In Operating Income (L11 - L12)		\$ (82,053)		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 168,819			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	220,400			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ (51,581)		
17	Total Required Increase In Revenue (L13 + L16)		\$ (133,634)		
RUCO					
Recommended					
18	Revenue (Sch. WAR-1, Pg 1, Col. (B), L12)			\$ 2,455,309	
19	Operating Expense Excluding Income Tax (WAR-7, Col. (E), L27 - L22 - L23)			1,771,187	
20	Synchronized Interest (Col. (C), L37)			246,755	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 437,367	
22	Arizona State Income Tax Rate			6.9680%	
23	Arizona Income Tax (L21 X L22)				\$ 30,476
24	Fed. Taxable Income (L21 - L23)			\$ 406,891	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ 7,500	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ 6,250	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ 8,500	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ 91,650	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 24,443	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 138,343
31	Combined Federal and State Income Tax (L23 + L30)				\$ 168,819
32	Test Year Combined Income Tax, RUCO as Adjusted (WAR-7, Col. (C), L22 + L23)				\$ 220,400
33	RUCO Adjustment (L31 - L32) (See WAR-6, Col. (D), L23)				\$ (51,581)
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 7,030,054	
36	Weighted Avg. Cost of Debt (Sch. WAR-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 246,755	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) RUCO OCR/B/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCR/B/FVRB
	Plant Classification			
1	Intangible Plant	\$ 1,767	\$ -	\$ 1,767
2	Source of Supply Plant	1,730,757	(313,824)	1,416,933
3	Pumping Plant	2,184,518	-	2,184,518
4	Water Treatment Plant	72,344	-	72,344
5	Transmission & Distribution Plant	11,151,870	-	11,151,870
6	General Plant	903,362	-	903,362
7	Total Gross Plant in Service	\$ 16,044,619	\$ (313,824)	\$ 15,730,795
8	Accumulated Depreciation	(4,088,030)	209,049	(3,878,981)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 11,956,589	\$ (104,775)	\$ 11,851,814
10	Advances In Aid Of Const.	\$ (2,366,968)	\$ -	\$ (2,366,968)
11	Contribution In Aid of Const.	\$ (1,691,940)	\$ -	\$ (1,691,940)
12	Accumulated Amortization of CIAC	370,501	-	370,501
13	NET CIAC (L5 + L6)	\$ (1,321,439)	\$ -	\$ (1,321,439)
14	Deferred Income Tax	\$ (1,188,230)	\$ -	\$ (1,188,230)
15	Customer Deposits	\$ -	\$ (8,300)	\$ (8,300)
16	Allowance for Working Capital	\$ 89,266	\$ (26,088)	\$ 63,178
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 7,169,218	\$ (139,163)	\$ 7,030,054

References:

Column (A): Company Schedule B-1
Column (B): Schedule WAR-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 1,767	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,767
3	Source of Supply Plant	1,730,757	-	-	(313,824)	-	-	-	1,416,933
4	Pumping Plant	2,184,518	-	-	-	-	-	-	2,184,518
5	Water Treatment Plant	72,344	-	-	-	-	-	-	72,344
6	Transmission & Distribution Plant	11,151,870	-	-	-	-	-	-	11,151,870
7	General Plant	903,362	-	-	-	-	-	-	903,362
7	Total Gross Plant in Service	\$ 16,044,619	\$ -	\$ -	\$ (313,824)	\$ -	\$ -	\$ -	\$ 15,730,795
8	Accumulated Depreciation	\$ (4,088,030)	1,784	-	207,265	-	-	-	(3,878,981)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 11,956,589	\$ 1,784	\$ -	\$ (106,559)	\$ -	\$ -	\$ -	\$ 11,851,814
10	Advances In Aid Of Const.	\$ (2,366,968)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,366,968)
11	Contribution In Aid of Const.	\$ (1,691,940)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,691,940)
12	Accumulated Amortization of CIAC	370,501	-	-	-	-	-	-	370,501
13	NET CIAC (L5 + L6)	\$ (1,321,439)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,321,439)
14	Deferred Income Tax	\$ (1,188,230)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,188,230)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,300)	\$ -	\$ (8,300)
16	Allowance for Working Capital	\$ 89,266	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (26,088)	\$ 63,178
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 7,169,218	\$ 1,784	\$ -	\$ (106,559)	\$ -	\$ (8,300)	\$ (26,088)	\$ 7,030,054

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See WAR-4 Total, WAR-4 Direct, WAR-4 PHX OFF and WAR-4 MS Schedules and WAR Te
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 2,158,058	\$ -	\$ 2,158,058	\$ (133,634)	\$ 2,024,424
2	Commercial	374,740	-	374,740	-	374,740
3	Industrial	5,354	-	5,354	-	5,354
4	Private Fire Service	1,557	-	1,557	-	1,557
5	Other Water Revenues	23,656	-	23,656	-	23,656
6	Total Water Revenues	\$ 2,563,364	\$ -	\$ 2,563,364	\$ (133,634)	\$ 2,429,730
7	Miscellaneous	\$ 25,579	\$ -	\$ 25,579	\$ -	\$ 25,579
8	Total Operating Revenues	\$ 2,588,943	\$ -	\$ 2,588,943	\$ (133,634)	\$ 2,455,309
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 1,233	\$ -	\$ 1,233	\$ -	\$ 1,233
10	Other	5,184	-	5,184	-	5,184
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	181,940	-	181,940	-	181,940
13	Purchased Gas	-	-	-	-	-
14	Other	53,677	-	53,677	-	53,677
15	Water Treatment Expenses	28,463	-	28,463	-	28,463
16	Transmission & Distribution Expenses	290,447	-	290,447	-	290,447
17	Customer Accounting Expenses	275,893	-	275,893	-	275,893
18	Sales Expense	686	-	686	-	686
19	Administrative & General Expenses	506,659	(111,280)	395,379	-	395,379
20	Total Operations & Maintenance Expense	\$ 1,344,181	\$ (111,280)	\$ 1,232,901	\$ -	\$ 1,232,901
21	Depreciation & Amortization Expenses	\$ 416,943	\$ (18,378)	\$ 398,565	\$ -	\$ 398,565
	Taxes					
22	Federal Income Taxes	\$ 129,724	\$ 50,889	\$ 180,613	\$ (42,270)	\$ 138,343
23	State Income Taxes	28,577	11,210	39,787	(9,312)	30,476
24	Property Taxes	116,684	(10,581)	106,103	-	106,103
25	Other	35,117	(1,499)	33,618	-	33,618
26	Total Taxes	\$ 310,102	\$ 50,019	\$ 360,121	\$ (51,581)	\$ 308,540
27	Total Operating Expenses	\$ 2,071,226	\$ (79,639)	\$ 1,991,587	\$ (51,581)	\$ 1,940,006
28	Operating Income	\$ 517,717	\$ 79,639	\$ 597,356	\$ (82,053)	\$ 515,303

References:

Column (A): Company Schedule C-1
Column (B): WAR-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): WAR-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
 TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues												
2	Residential	\$ 2,158,058	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,158,058
3	Commercial	374,740	-	-	-	-	-	-	-	-	-	-	374,740
4	Industrial	5,354	-	-	-	-	-	-	-	-	-	-	5,354
5	Private Fire Service	1,557	-	-	-	-	-	-	-	-	-	-	1,557
6	Other Water Revenues	23,856	-	-	-	-	-	-	-	-	-	-	23,856
	Total Water Revenues	\$ 2,563,364	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,563,364
7	Miscellaneous	\$ 25,579	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,579
8	Total Operating Revenues	\$ 2,588,943	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,588,943
	Operating Expenses												
9	Source of Supply Expenses:												
10	Purchased Water	\$ 1,233	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,233
11	Other	5,184	-	-	-	-	-	-	-	-	-	-	5,184
12	Pumping Expenses:												
13	Purchased Power	181,940	-	-	-	-	-	-	-	-	-	-	181,940
14	Purchased Gas	-	-	-	-	-	-	-	-	-	-	-	-
15	Other	53,677	-	-	-	-	-	-	-	-	-	-	53,677
16	Water Treatment Expenses	28,463	-	-	-	-	-	-	-	-	-	-	28,463
17	Transmission & Distribution Expenses	290,447	-	-	-	-	-	-	-	-	-	-	290,447
18	Customer Accounting Expenses	275,883	-	-	-	-	-	-	-	-	-	-	275,883
19	Sales Expense	686	-	-	-	-	-	-	-	-	-	-	686
20	Administrative & General Expenses	503,659	(9,429)	-	(766)	(96,920)	-	(33)	-	-	(4,133)	-	395,379
	Total Operations & Maintenance Expense	\$ 1,344,181	\$ (9,429)	\$ -	\$ (766)	\$ (96,920)	\$ -	\$ (33)	\$ -	\$ -	\$ (4,133)	\$ -	\$ 1,232,801
21	Depreciation & Amortization Expenses	\$ 416,943	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,378)	\$ -	\$ -	\$ -	\$ 398,565
	Taxes												
22	Federal Income Taxes	\$ 128,724	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,888	\$ 180,613
23	State Income Taxes	28,577	-	-	-	-	-	-	-	-	-	11,210	39,787
24	Property Taxes	116,684	-	-	-	-	-	-	(10,581)	-	-	-	106,103
25	Other	35,117	-	(1,489)	-	-	-	-	-	-	-	-	33,618
26	Total Taxes	\$ 310,102	\$ -	\$ (1,489)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,581)	\$ -	\$ 62,098	\$ 360,121
27	Total Operating Expenses	\$ 2,071,226	\$ (9,429)	\$ (1,489)	\$ (766)	\$ (96,920)	\$ -	\$ (33)	\$ (18,378)	\$ (10,581)	\$ (4,133)	\$ 62,098	\$ 1,991,587
28	Operating Income	\$ 517,717	\$ 9,429	\$ 1,489	\$ 766	\$ 96,920	\$ -	\$ 33	\$ 18,378	\$ 10,581	\$ 4,133	\$ (62,098)	\$ 597,356

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- Testimony, WAR And Schedule WAR-9 Page, 1 of 3
- Testimony, WAR And Schedule WAR-9 Page, 2 of 3
- Testimony, WAR And Schedule WAR-9 Page, 3 of 3
- Testimony WAR
- Testimony WAR
- Testimony, WAR And Schedule WAR-10
- Testimony, WAR And Schedule WAR-11
- Testimony, WAR And Schedule WAR-12
- Testimony, WAR And Schedule WAR-13
- Testimony, WAR And Schedule WAR-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
		DOLLAR AMOUNT	CAPITAL RATIO	COST RATE	WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO WAR SURREBUTTAL SCHEDULES (ABBREVIATED)

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WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 3,338,584	\$ 3,318,815
2	Adjusted Operating Income (Loss)	\$ 369,890	\$ 410,455
3	Current Rate of Return (L2 / L1)	11.08%	12.37%
4	Required Operating Income (L5 X L1)	\$ 327,657	\$ 243,269
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ (42,232)	\$ (167,186)
7	Gross Revenue Conversion Factor (WAR-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ (68,781)	\$ (272,285)
9	Adjusted Test Year Revenue	\$ 1,686,342	\$ 1,686,342
10	Proposed Annual Revenue (L8 + L9)	\$ 1,617,561	\$ 1,414,057
11	Required Percentage Increase in Revenue (L8 / L9)	-4.08%	-16.15%
12	Consolidated Revenue Adjustment	\$ 23,271	\$ 21,775
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ (45,030)	\$ (250,510)
14	Required Revenue Under Proposed Consolidation	\$ 1,640,619	\$ 1,435,832
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-2.67%	-14.86%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule WAR-2, WAR-7, and WAR-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	<u>93.0320%</u>			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. WAR-1, Pg 1, C (B), L4)	\$ 243,269			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. WAR-1, Pg 1, C (B), L2)	<u>410,455</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ (167,186)		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 79,698			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>184,797</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ (105,099)		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ (272,285)</u>		
CALCULATION OF INCOME TAX					
RUCO					
Recommended					
18	Revenue (Sch. WAR-1, Pg 1, Col. (B), L12)			\$ 1,414,057	
19	Operating Expense Excluding Income Tax (WAR-7, Col. (E), L27 - L22 - L23)			1,091,090	
20	Synchronized Interest (Col. (C), L37)			116,490	
21	Arizona Taxable Income (L18 - L19 - L20)			<u>\$ 206,476</u>	
22	Arizona State Income Tax Rate			6.9680%	
23	Arizona Income Tax (L21 X L22)				\$ 14,387
24	Fed. Taxable Income (L21 - L23)			<u>\$ 192,089</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 65,310	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 65,310
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 79,698</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (WAR-7, Col. (C), L22 + L23)				\$ 184,797
33	RUCO Adjustment (L31 - L32) (See WAR-6, Col. (D), L23)				<u>\$ (105,099)</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 3,318,815	
36	Weighted Avg. Cost of Debt (Sch. WAR-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			<u>\$ 116,490</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 1,111	\$ -	\$ 1,111
2	Source of Supply Plant	709,152	-	709,152
3	Pumping Plant	588,420	-	588,420
4	Water Treatment Plant	58,991	-	58,991
5	Transmission & Distribution Plant	8,818,945	-	8,818,945
6	General Plant	728,787	-	728,787
7	Total Gross Plant in Service	\$ 10,905,405	\$ -	\$ 10,905,405
8	Accumulated Depreciation	(3,542,894)	629	(3,542,265)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 7,362,511	\$ 629	\$ 7,363,140
10	Advances In Aid Of Const.	\$ (1,420,695)	\$ -	\$ (1,420,695)
11	Contribution In Aid of Const.	\$ (2,543,592)	\$ -	\$ (2,543,592)
12	Accumulated Amortization of CIAC	613,170	-	613,170
13	NET CIAC (L5 + L6)	\$ (1,930,422)	\$ -	\$ (1,930,422)
14	Deferred Income Tax	\$ (764,684)	\$ -	\$ (764,684)
15	Customer Deposits	\$ -	\$ (6,935)	\$ (6,935)
16	Allowance for Working Capital	\$ 91,873	\$ (13,463)	\$ 78,411
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 3,338,584	\$ (19,768)	\$ 3,318,815

References:

Column (A): Company Schedule B-1
Column (B): Schedule WAR-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/BFVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/BFVRB
1	Plant Classification								
2	Intangible Plant	\$ 1,111	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,111
3	Source of Supply Plant	709,152	-	-	-	-	-	-	709,152
4	Pumping Plant	588,420	-	-	-	-	-	-	588,420
5	Water Treatment Plant	58,991	-	-	-	-	-	-	58,991
6	Transmission & Distribution Plant	8,818,945	-	-	-	-	-	-	8,818,945
7	General Plant	728,787	-	-	-	-	-	-	728,787
7	Total Gross Plant in Service	\$ 10,905,405	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,905,405
8	Accumulated Depreciation	\$ (3,542,894)	629	-	-	-	-	-	(3,542,265)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 7,362,511	\$ 629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,363,140
10	Advances In Aid Of Const.	\$ (1,420,695)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,420,695)
11	Contribution In Aid of Const.	\$ (2,543,592)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,543,592)
12	Accumulated Amortization of CIAC	613,170	-	-	-	-	-	-	613,170
13	NET CIAC (L5 + L6)	\$ (1,930,422)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,930,422)
14	Deferred Income Tax	\$ (764,684)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (764,684)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (6,935)	\$ -	\$ (6,935)
16	Allowance for Working Capital	\$ 91,873	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (13,463)	\$ 78,411
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 3,338,584	\$ 629	\$ -	\$ -	\$ -	\$ (6,935)	\$ (13,463)	\$ 3,318,815

References:

- Column (A): Company Schedule B-2
- Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See WAR-4 Total, WAR-4 Direct, WAR-4 PHX OFF and WAR-4 MS Schedules and WAR Test Year)
- Column (C): Adjustment No. 2 - Intentionally Left Blank
- Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
- Column (E): Adjustment No. 4 - Intentionally Left Blank
- Column (F): Adjustment No. 5 - Customer Deposits
- Column (G): Adjustment No. 6 - Working Capital
- Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,521,187	\$ -	\$ 1,521,187	\$ (272,285)	\$ 1,248,902
2	Commercial	129,575	-	129,575	-	129,575
3	Industrial	-	-	-	-	-
4	Private Fire Service	1,195	-	1,195	-	1,195
5	Other Water Revenues	9,963	-	9,963	-	9,963
6	Total Water Revenues	\$ 1,661,920	\$ -	\$ 1,661,920	\$ (272,285)	\$ 1,389,635
7	Miscellaneous	\$ 24,422	\$ -	\$ 24,422	\$ -	\$ 24,422
8	Total Operating Revenues	\$ 1,686,342	\$ -	\$ 1,686,342	\$ (272,285)	\$ 1,414,057
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 58	\$ -	\$ 58	\$ -	\$ 58
10	Other	4,378	-	4,378	-	4,378
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	71,171	-	71,171	-	71,171
13	Purchased Gas	-	-	-	-	-
14	Other	43,941	-	43,941	-	43,941
15	Water Treatment Expenses	14,733	-	14,733	-	14,733
16	Transmission & Distribution Expenses	237,473	-	237,473	-	237,473
17	Customer Accounting Expenses	207,198	-	207,198	-	207,198
18	Sales Expense	446	-	446	-	446
19	Administrative & General Expenses	279,673	(61,225)	218,449	-	218,449
20	Total Operations & Maintenance Expense	\$ 859,072	\$ (61,225)	\$ 797,848	\$ -	\$ 797,848
21	Depreciation & Amortization Expenses	\$ 214,780	\$ (3,477)	\$ 211,304	\$ -	\$ 211,304
	Taxes					
22	Federal Income Taxes	\$ 126,761	\$ 24,676	\$ 151,437	\$ (86,126)	\$ 65,310
23	State Income Taxes	27,924	5,436	33,360	(18,973)	14,387
24	Property Taxes	65,159	(5,012)	60,147	-	60,147
25	Other	22,756	(965)	21,791	-	21,791
26	Total Taxes	\$ 242,600	\$ 24,135	\$ 266,735	\$ (105,099)	\$ 161,636
27	Total Operating Expenses	\$ 1,316,453	\$ (40,566)	\$ 1,275,887	\$ (105,099)	\$ 1,170,788
28	Operating Income	\$ 369,890	\$ 40,566	\$ 410,455	\$ (167,186)	\$ 243,269

References:

- Column (A): Company Schedule C-1
- Column (B): WAR-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): WAR-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
 TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 1,521,187											\$ 1,521,187
3	Commercial	128,575											128,575
4	Industrial	-											-
5	Private Fire Service	1,195											1,195
6	Other Water Revenues	8,963											8,963
7	Total Water Revenues	\$ 1,661,920											\$ 1,661,920
8	Miscellaneous	\$ 24,422											24,422
9	Total Operating Revenues	\$ 1,686,342											\$ 1,686,342
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	\$ 58											58
13	Other	4,378											4,378
14	Pumping Expenses:												
15	Purchased Power	71,171											71,171
16	Purchased Gas	-											-
17	Other	43,941											43,941
18	Water Treatment Expenses	14,733											14,733
19	Transmission & Distribution Expenses	237,473											237,473
20	Customer Accounting Expenses	207,198											207,198
21	Sales Expense	446											446
22	Administrative & General Expenses	279,673	(6,068)		(493)	(51,977)		(28)			(2,660)		215,449
23	Total Operations & Maintenance Expense	\$ 859,072	\$ (6,068)		\$ (493)	\$ (51,977)		\$ (28)			\$ (2,660)		\$ 797,848
24	Depreciation & Amortization Expenses	\$ 214,780							(3,477)				\$ 211,304
25	Taxes												
26	Federal Income Taxes	\$ 128,761										24,676	\$ 151,437
27	State Income Taxes	27,924										5,436	33,360
28	Property Taxes	65,159								(5,012)			60,147
29	Other	22,796		(955)									21,791
30	Total Taxes	\$ 242,600		(955)						(5,012)		30,112	\$ 266,735
31	Total Operating Expenses	\$ 1,316,453	\$ (6,068)	\$ (955)	\$ (493)	\$ (51,977)		\$ (28)	\$ (3,477)	\$ (5,012)	\$ (2,660)	\$ 30,112	\$ 1,275,887
32	Operating Income	\$ 369,889	\$ 6,068	\$ 965	\$ 493	\$ 51,977		\$ 28	\$ 3,477	\$ 5,012	\$ 2,660	\$ (30,112)	\$ 410,455

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- 1- Testimony, WAR And Schedule WAR-9 Page, 1 of 3
- 2- Testimony, WAR And Schedule WAR-9 Page, 2 of 3
- 3- Testimony, WAR And Schedule WAR-9 Page, 3 of 3
- 4- Testimony, WAR
- 5- Testimony, WAR
- 6- Testimony, WAR And Schedule WAR-10
- 7- Testimony, WAR And Schedule WAR-11
- 8- Testimony, WAR And Schedule WAR-12
- 9- Testimony, WAR And Schedule WAR-13
- 10- Testimony, WAR And Schedule WAR-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO WAR SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 18,018,530	\$ 14,833,726
2	Adjusted Operating Income (Loss)	\$ 424,708	\$ 529,456
3	Current Rate of Return (L2 / L1)	2.36%	3.57%
4	Required Operating Income (L5 X L1)	\$ 1,768,386	\$ 1,087,312
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 1,343,679	\$ 557,856
7	Gross Revenue Conversion Factor (WAR-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 2,188,362	\$ 908,544
9	Adjusted Test Year Revenue	\$ 3,521,124	\$ 3,521,124
10	Proposed Annual Revenue (L8 + L9)	\$ 5,709,486	\$ 4,429,669
11	Required Percentage Increase in Revenue (L8 / L9)	62.15%	25.80%
12	Consolidated Revenue Adjustment	\$ 216,885	\$ 44,421
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 2,404,707	\$ 952,966
14	Required Revenue Under Proposed Consolidation	\$ 5,926,065	\$ 4,474,090
15	Required Percentage Increase in Revenue Under Proposed Consolidation	68.29%	27.06%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule WAR-2, WAR-7, and WAR-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. WAR-1, Pg 1, C (B), L4)	\$ 1,087,312			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. WAR-1, Pg 1, C (B), L2)	<u>529,456</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 557,856		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 356,215			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>5,527</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 350,688		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 908,544</u>		
				RUCO	
				Recommended	
18	Revenue (Sch. WAR-1, Pg 1, Col. (B), L12)			\$ 4,429,669	
19	Operating Expense Excluding Income Tax (WAR-7, Col. (E), L27 - L22 - L23)			2,986,142	
20	Synchronized Interest (Col. (C), L37)			<u>520,664</u>	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 922,863	
22	Arizona State Income Tax Rate			<u>6.9680%</u>	
23	Arizona Income Tax (L21 X L22)				\$ 64,305
24	Fed. Taxable Income (L21 - L23)			<u>\$ 858,558</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 291,910	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 291,910
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 356,215</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (WAR-7, Col. (C), L22 + L23)				\$ 5,527
33	RUCO Adjustment (L31 - L32) (See WAR-6, Col. (D), L23)				<u>\$ 350,688</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 14,833,726	
36	Weighted Avg. Cost of Debt (Sch. WAR-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 520,664</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 3,287	\$ -	\$ 3,287
2	Source of Supply Plant	5,917,390	(3,397,718)	2,519,672
3	Pumping Plant	2,266,429	(6,761)	2,259,668
4	Water Treatment Plant	1,297,124	-	1,297,124
5	Transmission & Distribution Plant	23,674,185	(661,738)	23,012,447
6	General Plant	1,166,200	-	1,166,200
7	Total Gross Plant in Service	<u>\$ 34,324,616</u>	<u>\$ (4,066,217)</u>	<u>\$ 30,258,399</u>
8	Accumulated Depreciation	(6,146,140)	948,993	(5,197,147)
9	Net Utility Plant In Service (Sum L1 & L2)	<u>\$ 28,178,476</u>	<u>\$ (3,117,224)</u>	<u>\$ 25,061,252</u>
10	Advances In Aid Of Const.	\$ (3,651,412)	\$ -	\$ (3,651,412)
11	Contribution In Aid of Const.	\$ (6,396,542)	\$ -	\$ (6,396,542)
12	Accumulated Amortization of CIAC	1,279,254	-	1,279,254
13	NET CIAC (L5 + L6)	<u>\$ (5,117,288)</u>	<u>\$ -</u>	<u>\$ (5,117,288)</u>
14	Deferred Income Tax	\$ (1,619,443)	\$ -	\$ (1,619,443)
15	Customer Deposits	\$ -	\$ (18,576)	\$ (18,576)
16	Allowance for Working Capital	\$ 228,197	\$ (49,005)	\$ 179,193
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	<u>\$ 18,018,530</u>	<u>\$ (3,184,804)</u>	<u>\$ 14,833,726</u>

References:

Column (A): Company Schedule B-1
Column (B): Schedule WAR-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4 REMOVE PTY PLANT 11.16	(F) ADJMT NO. 5 REMOVE PTY PLANT	(G) ADJMT NO. 6 CUSTOMER DEPOSITS	(H) ADJMT NO. 7 WORKING CAPITAL	(I) RUCO ADJUSTED OCRB/FVRB
1	Plant Classification									
2	Intangible Plant	\$ 3,287	-	-	-	-	-	-	-	\$ 3,287
3	Source of Supply Plant	5,917,390	-	-	(1,386,142)	(2,011,576)	-	-	-	2,519,672
4	Pumping Plant	2,266,429	-	-	(6,761)	-	-	-	-	2,259,668
5	Water Treatment Plant	1,297,124	-	-	-	-	-	-	-	1,297,124
6	Transmission & Distribution Plant	23,674,185	-	-	-	-	(661,738)	-	-	23,012,447
7	General Plant	1,166,200	-	-	-	-	-	-	-	1,166,200
8	Total Gross Plant in Service	\$ 34,324,616	\$ -	\$ -	\$ (1,392,903)	\$ (2,011,576)	\$ (661,738)	\$ -	\$ -	\$ 30,258,399
9	Accumulated Depreciation	(6,146,140)	(4,975)	-	926,106	21,940	5,923	-	-	(5,197,147)
10	Net Utility Plant In Service (Sum L1 & L2)	\$ 28,178,476	\$ (4,975)	\$ -	\$ (466,797)	\$ (1,989,636)	\$ (655,815)	\$ -	\$ -	\$ 25,061,252
11	Advances In Aid Of Const.	\$ (3,651,412)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,651,412)
12	Contribution In Aid of Const.	\$ (6,396,542)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (6,396,542)
13	Accumulated Amortization of CIAC	1,279,254	-	-	-	-	-	-	-	1,279,254
14	NET CIAC (L5 + L6)	\$ (5,117,288)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,117,288)
15	Deferred Income Tax	\$ (1,619,443)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,619,443)
16	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,576)	\$ -	\$ (18,576)
17	Allowance for Working Capital	\$ 228,197	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (49,005)	\$ 179,193
18	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 18,018,530	\$ (4,975)	\$ -	\$ (466,797)	\$ (1,989,636)	\$ (655,815)	\$ (18,576)	\$ (49,005)	\$ 14,833,726

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See WAR-4 Total, WAR-4 Direct, WAR-4 PHX OFF and WAR-4 MS Schedules and WAR Testimony)
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - To Remove Post Test Year Plant Included in Rate Application
Column (F): Adjustment No. 5 - ADOT Post Test Year Project
Column (G): Adjustment No. 6 - Customer Deposits
Column (H): Adjustment No. 7 - Working Capital

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJ'M'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 2,500,263	\$ -	\$ 2,500,263	\$ 908,544	\$ 3,408,808
2	Commercial	957,571	-	957,571	-	957,571
3	Industrial	315	-	315	-	315
4	Private Fire Service	7,692	-	7,692	-	7,692
5	Other Water Revenues	26,716	-	26,716	-	26,716
6	Total Water Revenues	\$ 3,492,558	\$ -	\$ 3,492,558	\$ 908,544	\$ 4,401,102
7	Miscellaneous	\$ 28,567	\$ -	\$ 28,567	\$ -	\$ 28,567
8	Total Operating Revenues	\$ 3,521,124	\$ -	\$ 3,521,124	\$ 908,544	\$ 4,429,669
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	7,247	-	7,247	-	7,247
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	518,834	-	518,834	-	518,834
13	Purchased Gas	2,626	-	2,626	-	2,626
14	Other	129,182	-	129,182	-	129,182
15	Water Treatment Expenses	319,722	-	319,722	-	319,722
16	Transmission & Distribution Expenses	400,194	-	400,194	-	400,194
17	Customer Accounting Expenses	323,108	-	323,108	-	323,108
18	Sales Expense	2,838	-	2,838	-	2,838
19	Administrative & General Expenses	641,077	(131,202)	509,874	-	509,874
20	Total Operations & Maintenance Expense	\$ 2,344,827	\$ (131,202)	\$ 2,213,624	\$ -	\$ 2,213,624
21	Depreciation & Amortization Expenses	\$ 731,033	\$ (117,285)	\$ 613,748	\$ -	\$ 613,748
	Taxes					
22	Federal Income Taxes	\$ (125,482)	\$ 130,011	\$ 4,529	\$ 287,381	\$ 291,910
23	State Income Taxes	(27,643)	28,640	998	63,307	64,305
24	Property Taxes	125,837	(12,869)	112,968	-	112,968
25	Other	47,845	(2,043)	45,802	-	45,802
26	Total Taxes	\$ 20,557	\$ 143,739	\$ 164,296	\$ 350,688	\$ 514,984
27	Total Operating Expenses	\$ 3,096,417	\$ (104,748)	\$ 2,991,669	\$ 350,688	\$ 3,342,357
28	Operating Income	\$ 424,708	\$ 104,748	\$ 529,456	\$ 557,856	\$ 1,087,312

References:

- Column (A): Company Schedule C-1
- Column (B): WAR-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): WAR-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 2,500,283	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,500,283
3	Commercial	957,571	-	-	-	-	-	-	-	-	-	-	957,571
4	Industrial	315	-	-	-	-	-	-	-	-	-	-	315
5	Private Fire Service	7,692	-	-	-	-	-	-	-	-	-	-	7,692
6	Other Water Revenues	28,716	-	-	-	-	-	-	-	-	-	-	28,716
7	Total Water Revenues	\$ 3,482,588	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,482,588
8	Miscellaneous	28,587	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	28,587
7	Total Operating Revenues	\$ 3,521,124	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,521,124
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	7,247	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	7,247
12	Other	-	-	-	-	-	-	-	-	-	-	-	-
13	Pumping Expenses:	518,834	-	-	-	-	-	-	-	-	-	-	518,834
14	Purchased Power	2,628	-	-	-	-	-	-	-	-	-	-	2,628
15	Purchased Gas	128,182	-	-	-	-	-	-	-	-	-	-	128,182
16	Other	318,722	-	-	-	-	-	-	-	-	-	-	318,722
17	Water Treatment Expenses	400,184	-	-	-	-	-	-	-	-	-	-	400,184
18	Transmission & Distribution Expenses	323,108	-	-	-	-	-	-	-	-	-	-	323,108
19	Customer Accounting Expenses	2,838	-	-	-	-	-	-	-	-	-	-	2,838
20	Sales Expense	641,077	(12,850)	-	(1,043)	(11,634)	-	(42)	-	-	(5,633)	-	506,874
20	Administrative & General Expenses	\$ 2,344,827	\$ (12,850)	\$ (1,043)	\$ (1,043)	\$ (11,634)	\$ -	\$ (42)	\$ -	\$ -	\$ (5,633)	\$ -	\$ 2,213,624
21	Depreciation & Amortization Expenses	731,033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(117,285)	\$ -	\$ -	\$ -	613,748
22	Taxes												
23	Federal Income Taxes	(125,482)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,011	\$ 4,529
24	State Income Taxes	(27,643)	-	-	-	-	-	-	-	-	-	28,640	988
25	Property Taxes	125,837	-	-	-	-	-	-	-	(12,869)	-	-	112,968
26	Other	47,845	-	(2,043)	-	-	-	-	-	-	-	-	45,802
26	Total Taxes	\$ 20,557	\$ -	\$ (2,043)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (12,869)	\$ -	\$ 158,652	\$ 164,296
27	Total Operating Expenses	\$ 3,085,417	\$ (12,850)	\$ (2,043)	\$ (1,043)	\$ (11,634)	\$ -	\$ (42)	\$ (117,285)	\$ (12,869)	\$ (5,633)	\$ 158,652	\$ 2,891,669
28	Operating Income	\$ 424,708	\$ 12,850	\$ 2,043	\$ 1,043	\$ 11,634	\$ -	\$ 42	\$ 117,285	\$ 12,869	\$ 5,633	\$ (158,652)	\$ 529,456

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- Testimony, WAR And Schedule WAR-8 Page, 1 of 3
Testimony, WAR And Schedule WAR-8 Page, 2 of 3
Testimony, WAR And Schedule WAR-8 Page, 3 of 3
Testimony WAR
Testimony WAR
Testimony, WAR And Schedule WAR-10
Testimony, WAR And Schedule WAR-11
Testimony, WAR And Schedule WAR-12
Testimony, WAR And Schedule WAR-13
Testimony, WAR And Schedule WAR-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	69,671,689	45.85%	8.33%	3.82%
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO WAR SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 1,882,836	\$ 1,830,266
2	Adjusted Operating Income (Loss)	\$ 104,677	\$ 129,685
3	Current Rate of Return (L2 / L1)	5.56%	7.09%
4	Required Operating Income (L5 X L1)	\$ 184,787	\$ 134,158
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 80,110	\$ 4,474
7	Gross Revenue Conversion Factor (WAR-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 130,470	\$ 7,286
9	Adjusted Test Year Revenue	\$ 1,047,463	\$ 1,047,463
10	Proposed Annual Revenue (L8 + L9)	\$ 1,177,933	\$ 1,054,749
11	Required Percentage Increase in Revenue (L8 / L9)	12.46%	0.70%
12	Consolidated Revenue Adjustment	\$ 6,107	\$ 14,494
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 136,993	\$ 21,781
14	Required Revenue Under Proposed Consolidation	\$ 1,183,734	\$ 1,069,244
15	Required Percentage Increase in Revenue Under Proposed Consolidation	13.09%	2.08%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule WAR-2, WAR-7, and WAR-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	<u>93.0320%</u>			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. WAR-1, Pg 1, C (B), L4)	\$ 134,158			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. WAR-1, Pg 1, C (B), L2)	<u>129,685</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 4,474		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 43,952			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>41,139</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 2,812		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 7,286</u>		
RUCO					
Recommended					
18	Revenue (Sch. WAR-1, Pg 1, Col. (B), L12)			\$ 1,054,749	
19	Operating Expense Excluding Income Tax (WAR-7, Col. (E), L27 - L22 - L23)			876,639	
20	Synchronized Interest (Col. (C), L37)			<u>64,242</u>	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 113,868	
22	Arizona State Income Tax Rate			<u>6.9680%</u>	
23	Arizona Income Tax (L21 X L22)				\$ 7,934
24	Fed. Taxable Income (L21 - L23)			<u>\$ 105,934</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 36,017	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 36,017
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 43,952</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (WAR-7, Col. (C), L22 + L23)				\$ 41,139
33	RUCO Adjustment (L31 - L32) (See WAR-6, Col. (D), L23)				<u>\$ 2,812</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 1,830,266	
36	Weighted Avg. Cost of Debt (Sch. WAR-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 64,242</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/FVRB	(B) RUCO OCR/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCR/FVRB
	Plant Classification			
1	Intangible Plant	\$ 863	\$ -	\$ 863
2	Source of Supply Plant	1,146,589	(13,512)	1,133,076
3	Pumping Plant	471,603	(40,464)	431,139
4	Water Treatment Plant	32,915	-	32,915
5	Transmission & Distribution Plant	3,563,550	(89)	3,563,461
6	General Plant	239,448	-	239,448
7	Total Gross Plant in Service	\$ 5,454,969	\$ (54,065)	\$ 5,400,904
8	Accumulated Depreciation	(2,349,271)	12,361	(2,336,910)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 3,105,698	\$ (41,704)	\$ 3,063,994
10	Advances In Aid Of Const.	\$ (249,075)	\$ -	\$ (249,075)
11	Contribution In Aid of Const.	\$ (783,751)	\$ -	\$ (783,751)
12	Accumulated Amortization of CIAC	\$ 296,411	-	296,411
13	NET CIAC (L5 + L6)	\$ (487,340)	\$ -	\$ (487,340)
14	Deferred Income Tax	\$ (565,368)	\$ -	\$ (565,368)
15	Customer Deposits	\$ -	\$ (4,330)	\$ (4,330)
16	Allowance for Working Capital	\$ 78,921	\$ (6,536)	\$ 72,385
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 1,882,836	\$ (52,571)	\$ 1,830,266

References:

Column (A): Company Schedule B-1
Column (B): Schedule WAR-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4 REMOVE PTY PLANT	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 863	-	-	-	-	-	-	\$ 863
3	Source of Supply Plant	1,146,589	-	(13,512)	-	-	-	-	1,133,076
4	Pumping Plant	471,603	-	-	-	(40,464)	-	-	431,139
5	Water Treatment Plant	32,915	-	-	-	-	-	-	32,915
6	Transmission & Distribution Plant	3,563,550	-	-	-	(89)	-	-	3,563,461
7	General Plant	239,448	-	-	-	-	-	-	239,448
8	Total Gross Plant in Service	\$ 5,454,969	\$ -	\$ (13,512)	\$ (40,552)	\$ -	\$ -	\$ -	\$ 5,400,904
9	Accumulated Depreciation	(2,349,271)	496	10,674	1,191	-	-	-	(2,336,910)
10	Net Utility Plant In Service (Sum L1 & L2)	\$ 3,105,698	\$ 496	\$ (2,838)	\$ (39,362)	\$ -	\$ -	\$ -	\$ 3,063,994
11	Advances in Aid Of Const.	\$ (249,075)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (249,075)
12	Contribution In Aid of Const.	\$ (783,751)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (783,751)
13	Accumulated Amortization of CIAC	296,411	-	-	-	-	-	-	296,411
14	NET CIAC (L5 + L6)	\$ (487,340)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (487,340)
15	Deferred Income Tax	\$ (565,368)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (565,368)
16	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,330)	\$ -	\$ (4,330)
17	Allowance for Working Capital	78,921	-	-	-	-	-	-(6,536)	72,385
18	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 1,882,836	\$ 496	\$ (2,838)	\$ (39,362)	\$ (4,330)	\$ (6,536)	\$ -	\$ 1,830,266

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See WAR-4 Total, WAR-4 Direct, WAR-4 PHX OFF and WAR-4 MS Schedules and WAR Test
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Remove Company PTY Plant Adjustment JMR-1
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,015,253	\$ -	\$ 1,015,253	\$ 7,286	\$ 1,022,539
2	Commercial	22,880	-	22,880	-	22,880
3	Industrial	507	-	507	-	507
4	Private Fire Service	179	-	179	-	179
5	Other Water Revenues	1,784	-	1,784	-	1,784
6	Total Water Revenues	\$ 1,040,604	\$ -	\$ 1,040,604	\$ 7,286	\$ 1,047,890
7	Miscellaneous	\$ 6,859	\$ -	\$ 6,859	\$ -	\$ 6,859
8	Total Operating Revenues	\$ 1,047,463	\$ -	\$ 1,047,463	\$ 7,286	\$ 1,054,749
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	3,239	-	3,239	-	3,239
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	84,846	-	84,846	-	84,846
13	Purchased Gas	-	-	-	-	-
14	Other	56,303	-	56,303	-	56,303
15	Water Treatment Expenses	33,840	-	33,840	-	33,840
16	Transmission & Distribution Expenses	173,376	-	173,376	-	173,376
17	Customer Accounting Expenses	133,433	-	133,433	-	133,433
18	Sales Expense	1,188	-	1,188	-	1,188
19	Administrative & General Expenses	243,746	(35,187)	208,559	-	208,559
20	Total Operations & Maintenance Expense	\$ 729,970	\$ (35,187)	\$ 694,782	\$ -	\$ 694,782
21	Depreciation & Amortization Expenses	\$ 132,206	\$ (5,405)	\$ 126,801	\$ -	\$ 126,801
	Taxes					
22	Federal Income Taxes	\$ 17,950	\$ 15,763	\$ 33,713	\$ 2,305	\$ 36,017
23	State Income Taxes	3,954	3,472	7,427	508	7,934
24	Property Taxes	41,350	(2,938)	38,412	-	38,412
25	Other	17,357	(713)	16,644	-	16,644
26	Total Taxes	\$ 80,611	\$ 15,584	\$ 96,195	\$ 2,812	\$ 99,007
27	Total Operating Expenses	\$ 942,787	\$ (25,008)	\$ 917,779	\$ 2,812	\$ 920,591
28	Operating Income	\$ 104,677	\$ 25,008	\$ 129,685	\$ 4,474	\$ 134,158

References:

- Column (A): Company Schedule C-1
- Column (B): WAR-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): WAR-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues	\$ 1,015,253											
2	Residential	22,880											\$ 1,015,253
3	Commercial	507											22,880
4	Private Fire Service	179											507
5	Other Water Revenues	1,784											179
6	Total Water Revenues	\$ 1,040,604											\$ 1,040,604
7	Miscellaneous	\$ 6,859											
8	Total Operating Revenues	\$ 1,047,463											\$ 1,047,463
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 3,239											\$ 3,239
12	Other												
13	Pumping Expenses:	84,846											84,846
14	Purchased Power												
15	Purchased Gas												
16	Other	56,303											56,303
17	Water Treatment Expenses	33,840											33,840
18	Transmission & Distribution Expenses	173,376											173,376
19	Customer Accounting Expenses	133,433											133,433
20	Sales Expense	1,188											1,188
21	Administrative & General Expenses	243,746	(4,486)			(28,351)		(19)			(1,867)		208,559
22	Operations & Maintenance Expense	\$ 728,970	(4,486)		(384)	(28,351)		(19)			(1,867)		\$ 684,782
23	Depreciation & Amortization Expenses	\$ 132,206							(5,405)				\$ 126,801
24	Taxes												
25	Federal Income Taxes	\$ 17,850										15,763	\$ 33,713
26	State Income Taxes	3,954										3,472	7,427
27	Property Taxes	41,350							(2,938)				38,412
28	Other	17,357		(713)									16,644
29	Total Taxes	\$ 80,511		(713)					(2,938)			19,235	\$ 96,195
30	Total Operating Expenses	\$ 942,797	(4,486)	(713)	(384)	(28,351)		(19)	(5,405)	(2,938)	(1,867)	19,235	\$ 817,779
31	Operating Income	\$ 104,677	4,486	713	384	28,351		19	5,405	2,938	1,867	(19,235)	\$ 129,685

ADJUSTMENTS:

- Labor Expense - Normalize OT Hours in Test Year
- Payroll Tax Expense Related to Adjustment 1
- 401(K) Expense Related to Adjustment 1
- Reverse Adjustment for Conservation
- Purchased Power Revenues
- Insurance Expense
- Depreciation Expense
- Property Tax Expense
- Rate Case Expense
- Income Tax

REFERENCE:

- Testimony, WAR And Schedule WAR-9 Page, 1 of 3
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Testimony, WAR And Schedule WAR-13
Testimony, WAR And Schedule WAR-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

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SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 2,338,005	\$ 2,319,736
2	Adjusted Operating Income (Loss)	\$ (75,247)	\$ (59,267)
3	Current Rate of Return (L2 / L1)	-3.22%	-2.55%
4	Required Operating Income (L5 X L1)	\$ 229,458	\$ 170,037
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 304,705	\$ 229,304
7	Gross Revenue Conversion Factor (WAR-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 496,253	\$ 373,452
9	Adjusted Test Year Revenue	\$ 507,981	\$ 507,981
10	Proposed Annual Revenue (L8 + L9)	\$ 1,004,234	\$ 881,433
11	Required Percentage Increase in Revenue (L8 / L9)	97.69%	73.52%
12	Consolidated Revenue Adjustment	\$ (222,992)	\$ (10,706)
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 273,068	\$ 362,746
14	Required Revenue Under Proposed Consolidation	\$ 780,936	\$ 870,727
15	Required Percentage Increase in Revenue Under Proposed Consolidation	53.77%	71.41%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule WAR-2, WAR-7, and WAR-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. WAR-1, Pg 1, C (B), L4)	\$ 170,037			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. WAR-1, Pg 1, C (B), L2)	<u>(59,267)</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 229,304		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 55,706			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>(88,442)</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 144,148		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 373,452</u>		
CALCULATION OF INCOME TAX:					
18	Revenue (Sch. WAR-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (WAR-7, Col. (E), L27 - L22 - L23)			\$ 881,433	
20	Synchronized Interest (Col. (C), L37)			655,691	
21	Arizona Taxable Income (L18 - L19 - L20)			<u>81,423</u>	
22	Arizona State Income Tax Rate			\$ 144,320	
23	Arizona Income Tax (L21 X L22)			<u>6.9680%</u>	\$ 10,056
24	Fed. Taxable Income (L21 - L23)			\$ 134,264	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 45,650	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 45,650
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 55,706</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (WAR-7, Col. (C), L22 + L23)				\$ (88,442)
33	RUCO Adjustment (L31 - L32) (See WAR-6, Col. (D), L23)				<u>\$ 144,148</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 2,319,736	
36	Weighted Avg. Cost of Debt (Sch. WAR-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 81,423</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 401	\$ -	\$ 401
2	Source of Supply Plant	597,457	(62,097)	535,360
3	Pumping Plant	419,745	-	419,745
4	Water Treatment Plant	372,768	-	372,768
5	Transmission & Distribution Plant	3,355,961	-	3,355,961
6	General Plant	196,495	-	196,495
7	Total Gross Plant in Service	\$ 4,942,827	\$ (62,097)	\$ 4,880,730
8	Accumulated Depreciation	(1,104,418)	60,799	(1,043,619)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 3,838,409	\$ (1,298)	\$ 3,837,112
10	Advances In Aid Of Const.	\$ (1,080,835)	\$ -	\$ (1,080,835)
11	Contribution In Aid of Const.	\$ (260,411)	\$ -	\$ (260,411)
12	Accumulated Amortization of CIAC	69,153	-	69,153
13	NET CIAC (L5 + L6)	\$ (191,258)	\$ -	\$ (191,258)
14	Deferred Income Tax	\$ (283,642)	\$ -	\$ (283,642)
15	Customer Deposits	\$ -	\$ (7,050)	\$ (7,050)
16	Allowance for Working Capital	\$ 55,331	\$ (9,921)	\$ 45,410
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,338,005	\$ (18,269)	\$ 2,319,736

References:

Column (A): Company Schedule B-1
Column (B): Schedule WAR-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 401	-	-	-	-	-	-	\$ 401
3	Source of Supply Plant	597,457	-	-	(62,097)	-	-	-	535,360
4	Pumping Plant	419,745	-	-	-	-	-	-	419,745
5	Water Treatment Plant	372,768	-	-	-	-	-	-	372,768
6	Transmission & Distribution Plant	3,355,961	-	-	-	-	-	-	3,355,961
7	General Plant	196,495	-	-	-	-	-	-	196,495
7	Total Gross Plant in Service	\$ 4,942,827	\$ -	\$ -	\$ (62,097)	\$ -	\$ -	\$ -	\$ 4,880,730
8	Accumulated Depreciation	(1,104,418)	487	-	60,312	-	-	-	(1,043,619)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 3,838,409	\$ 487	\$ -	\$ (1,785)	\$ -	\$ -	\$ -	\$ 3,837,112
10	Advances In Aid Of Const.	\$ (1,080,835)	-	-	-	-	-	-	\$ (1,080,835)
11	Contribution In Aid of Const.	\$ (260,411)	-	-	-	-	-	-	\$ (260,411)
12	Accumulated Amortization of CIAC	69,153	-	-	-	-	-	-	69,153
13	NET CIAC (L5 + L6)	\$ (191,258)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (191,258)
14	Deferred Income Tax	\$ (283,642)	-	-	-	-	-	-	\$ (283,642)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,050)	\$ -	\$ (7,050)
16	Allowance for Working Capital	\$ 55,331	-	-	-	-	-	\$ (9,921)	\$ 45,410
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	-	-	-	-	-	-	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,338,005	\$ 487	\$ -	\$ (1,785)	\$ -	\$ (7,050)	\$ (9,921)	\$ 2,319,736

References:

- Column (A): Company Schedule B-2
- Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See WAR-4 Total, WAR-4 Direct, WAR-4 PHX OFF and WAR-4 MS Schedules and WAR Test
- Column (C): Adjustment No. 2 - Intentionally Left Blank
- Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
- Column (E): Adjustment No. 4 - Intentionally Left Blank
- Column (F): Adjustment No. 5 - Customer Deposits
- Column (G): Adjustment No. 6 - Working Capital
- Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 471,523	\$ -	\$ 471,523	\$ 373,452	\$ 844,975
2	Commercial	17,845	-	17,845	-	17,845
3	Industrial	-	-	-	-	-
4	Private Fire Service	51	-	51	-	51
5	Other Water Revenues	10,101	-	10,101	-	10,101
6	Total Water Revenues	\$ 499,521	\$ -	\$ 499,521	\$ 373,452	\$ 872,972
7	Miscellaneous	\$ 8,461	\$ -	\$ 8,461	\$ -	\$ 8,461
8	Total Operating Revenues	\$ 507,981	\$ -	\$ 507,981	\$ 373,452	\$ 881,433
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	1,425	-	1,425	-	1,425
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	43,401	-	43,401	-	43,401
13	Purchased Gas	-	-	-	-	-
14	Other	24,368	-	24,368	-	24,368
15	Water Treatment Expenses	201,774	-	201,774	-	201,774
16	Transmission & Distribution Expenses	73,189	-	73,189	-	73,189
17	Customer Accounting Expenses	61,306	-	61,306	-	61,306
18	Sales Expense	537	-	537	-	537
19	Administrative & General Expenses	118,572	(23,248)	95,324	-	95,324
20	Total Operations & Maintenance Expense	\$ 524,571	\$ (23,248)	\$ 501,323	\$ -	\$ 501,323
21	Depreciation & Amortization Expenses	\$ 124,861	\$ (3,234)	\$ 121,627	\$ -	\$ 121,627
	Taxes					
22	Federal Income Taxes	\$ (83,435)	\$ 10,958	\$ (72,476)	\$ 118,126	\$ 45,650
23	State Income Taxes	(18,380)	2,414	(15,966)	26,022	10,056
24	Property Taxes	27,191	(2,512)	24,679	-	24,679
25	Other	8,420	(358)	8,062	-	8,062
26	Total Taxes	\$ (66,204)	\$ 10,502	\$ (55,702)	\$ 144,148	\$ 88,447
27	Total Operating Expenses	\$ 583,228	\$ (15,980)	\$ 567,248	\$ 144,148	\$ 711,396
28	Operating Income	\$ (75,247)	\$ 15,980	\$ (59,267)	\$ 229,304	\$ 170,037

References:

Column (A): Company Schedule C-1
Column (B): WAR-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): WAR-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCC AS ADJTD
1	Operating Revenues												
2	Residential	\$ 471,523	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 471,523
3	Commercial	17,845	-	-	-	-	-	-	-	-	-	-	17,845
4	Industrial	51	-	-	-	-	-	-	-	-	-	-	51
5	Private Fire Service	10,101	-	-	-	-	-	-	-	-	-	-	10,101
6	Other Water Revenues	498,521	-	-	-	-	-	-	-	-	-	-	498,521
7	Total Water Revenues	\$ 1,086,041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,086,041
8	Miscellaneous	8,461	-	-	-	-	-	-	-	-	-	-	8,461
9	Total Operating Revenues	\$ 1,094,502	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,094,502
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	1,425	-	-	-	-	-	-	-	-	-	-	1,425
13	Other	43,401	-	-	-	-	-	-	-	-	-	-	43,401
14	Pumping Expenses:												
15	Purchased Power	24,388	-	-	-	-	-	-	-	-	-	-	24,388
16	Purchased Gas	201,774	-	-	-	-	-	-	-	-	-	-	201,774
17	Water Treatment Expenses	73,189	-	-	-	-	-	-	-	-	-	-	73,189
18	Transmission & Distribution Expenses	61,306	-	-	-	-	-	-	-	-	-	-	61,306
19	Customer Accounting Expenses	537	-	-	-	-	-	-	-	-	-	-	537
20	Sales Expense	118,572	(2,251)	-	(183)	(18,820)	-	(6)	-	-	(887)	-	95,324
21	Administrative & General Expenses	524,571	(2,251)	-	(183)	(18,820)	-	(6)	-	-	(887)	-	501,323
22	Total Operations & Maintenance Expense	\$ 1,248,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,234)	\$ -	\$ -	\$ -	\$ 1,245,627
23	Depreciation & Amortization Expenses												
24	Federal Income Taxes	(63,435)	-	-	-	-	-	-	-	-	-	-	(63,435)
25	State Income Taxes	(18,380)	-	-	-	-	-	-	-	-	-	-	(18,380)
26	Property Taxes	27,191	-	-	-	-	-	-	-	(2,512)	-	-	24,679
27	Other	8,420	-	(358)	-	-	-	-	-	-	-	-	8,062
28	Total Taxes	\$ (66,204)	\$ -	\$ (358)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,512)	\$ -	\$ 13,372	\$ (55,702)
29	Total Operating Expenses	\$ 1,182,657	\$ (2,251)	\$ (358)	\$ (183)	\$ (18,820)	\$ -	\$ (6)	\$ (3,234)	\$ (2,512)	\$ (887)	\$ 13,372	\$ 1,166,248
30	Operating Income	\$ (88,155)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (88,155)

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- 1 of 3 Testimony, WAR And Schedule WAR-9 Page, 1 of 3
- 2 of 3 Testimony, WAR And Schedule WAR-9 Page, 2 of 3
- 3 of 3 Testimony, WAR And Schedule WAR-9 Page, 3 of 3

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

ARIZONA WATER COMPANY

DOCKET NO. W-01445A-08-0440

**SURREBUTTAL TESTIMONY
ON COST OF CAPITAL**

OF

WILLIAM A. RIGSBY, CRRA

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

AUGUST 7, 2009

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ATTACHMENT B – FERC Cost-of-Service Rates Manual

ATTACHMENT C – Excerpt of Direct Testimony of Stephen G. Hill

ATTACHMENT D – Excerpt of Paper by Aswath Damodaran

ATTACHMENT E – Value Line Selected Yields August 7, 2009

ATTACHMENT F – Value Line Water Industry Update July 24, 2009

ATTACHMENT G – Excerpt from New Regulatory Finance

1 **INTRODUCTION**

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

3 A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed
4 by the Residential Utility Consumer Office, located at 1110 W.
5 Washington, Suite 220, Phoenix, Arizona 85007.

6
7 Q. Please state the purpose of your surrebuttal testimony.

8 A. The purpose of my surrebuttal testimony is to respond to AWC's rebuttal
9 testimony on RUCO's recommended rate of return on invested capital
10 (which includes RUCO's recommended cost of debt and cost of common
11 equity) for the Company's water operations in Arizona.

12
13 Q. Have you filed any prior testimony in this case on behalf of RUCO?

14 A. Yes. On June 12, 2009, I filed direct testimony with the ACC. My direct
15 testimony addressed the cost of capital issues that were raised in AWC's
16 Application that was filed on August 22, 2008.

17
18 Q. How is your surrebuttal testimony organized?

19 A. My surrebuttal testimony contains four parts: the introduction that I have
20 just presented; a summary of AWC's rebuttal testimony; a comparison of
21 the cost of capital recommendations being made by the parties to the
22 case; and a section on the cost of equity capital.

23

1 **SUMMARY OF ARIZONA WATER COMPANY'S REBUTTAL TESTIMONY**

2 Q. Have you reviewed AWC'S rebuttal testimony?

3 A. Yes. I have reviewed the rebuttal testimony of Dr. Thomas M. Zepp,
4 which was filed on July 8, 2009.

5

6 Q. Please summarize Dr. Zepp's rebuttal testimony.

7 A. Dr. Zepp continues to advocate an unreasonably high 12.40 percent cost
8 of common equity for AWC. His rebuttal testimony takes issue with the
9 inputs that I have used in both my DCF model and my CAPM model
10 (which used both an arithmetic and geometric mean to arrive at the market
11 risk premium component) and my use of a sample of natural gas
12 distribution companies.

13

14 **COMPARISON OF RECOMMENDATIONS**

15 Q. Are the parties to the case in agreement on the issue of capital structure?

16 A. Yes. The parties to the case are presently in agreement on the issue of
17 capital structure. In AWC's rebuttal testimony, the Company adopted
18 ACC Staff witness David C. Parcell's recommended capital structure
19 which includes short-term debt. RUCO has also adopted the Company's
20 revised capital structure which results in a lower weighted average cost of
21 capital. The Company, ACC Staff, and RUCO are now recommending a
22 capital structure comprised of 4.80 percent short-term debt, 49.35 percent
23 long-term debt and 45.85 percent common equity.

1 Q. Is RUCO also in agreement with the Company's revised costs of debt?

2 A. Yes. RUCO is now recommending that the Commission adopt the
3 Company's revised costs of 3.00 percent short-term debt and 6.83 percent
4 long-term debt.

5
6 Q. Are AWC, ACC Staff and RUCO in agreement on a cost of equity capital
7 for the Company?

8 A. No. As is typical in utility rate cases there is substantial disagreement on
9 a cost of common equity.

10

11 Q. Please summarize the costs of common equity and the weighted average
12 costs of capital ("WACC") that are being recommended by the parties to
13 the case.

14 A. In regard to the cost of common equity, the parties to the case are
15 presently recommending the following estimates:

16

17 AWC 12.40%

18 ACC Staff 10.00%

19 RUCO 8.33%

20

21 As can be seen in the above comparison, the Company-proposed cost of
22 equity capital is 407 basis points higher than my recommended cost of
23 equity capital. The difference between my recommended cost of equity

1 and Mr. Parcell's recommended cost of equity is 167 basis points. The
2 WACC, based on the costs of debt and equity noted above, being
3 recommended by the parties to the case are as follows:

4		
5	AWC	9.20%
6	ACC Staff	8.10%
7	RUCO	7.33%
8		

9 As can be seen above, there is presently a 187 basis point difference
10 between the Company-proposed 9.20 percent WACC and RUCO's
11 recommended WACC of 7.55 percent. RUCO and ACC Staff's
12 recommended WACC are within 77 basis points of each other.

13
14 **COST OF EQUITY CAPITAL**

15 Q. Has there been any recent activity in regard to interest rates?

16 A. Yes. On June 24, 2009, after a two-day meeting, the Federal Reserve
17 chose not to enlarge its program to buy Treasury bonds to spur growth
18 and stated again that its key Federal Funds interest rate will remain near
19 zero "for an extended period." The Fed also announced that it will
20 proceed with its previously announced plans to buy up to \$300 billion in
21 long-term U.S. Treasury bonds by autumn and up to \$1.25 trillion in
22 mortgage-backed securities by year's end. The Fed further stated that it

1 would "continue to evaluate the timing and overall amounts" of the
2 purchases of the aforementioned financial instruments.¹

3

4 Q. Has Value Line published an update on the water and natural gas utility
5 industries since you filed your direct testimony?

6 A. Yes. Value Line published its quarterly updates on the water and natural
7 gas utility industries on July 24, 2009 and June 12, 2009 respectively.

8

9 Q. Have you revised your recommended 8.33 percent cost of common equity
10 for AWC based on more recent information on interest rates and the latest
11 Value Line data on the water and natural gas utility industries?

12 A. No. The updated Value Line data produced no change to my
13 recommended 8.33 percent cost of common equity estimate which is still
14 reasonable given the current state of interest rates and the current state of
15 the economy.

16

17 Q. Please comment on Dr. Zepp's restatements of the results of your DCF
18 and CAPM estimates?

19 A. Dr. Zepp's restatements should not be afforded any weight. As I will
20 explain throughout the remainder of my testimony, there is nothing
21 incorrect with the inputs or assumptions that I have relied on in both my
22 DCF and CAPM models.

¹ Reddy, Sudeep and Geoffrey T. Smith, "Fed on Hold as Slump Eases" The Wall Street Journal,
June 25, 2009.

1 Q. In his direct testimony, Dr. Zepp calculated an average beta of 0.98 for his
2 sample water companies. What is the current average beta for those
3 same companies?

4 A. Based on updated information published by Value Line on July 24, 2009,
5 the average beta for Dr. Zepp's sample water companies has fallen to
6 0.82 indicating that risk (as measured by beta) for water company stocks
7 has declined since he filed his direct testimony.

8

9 Q. Please address Dr. Zepp's criticism that the 5-year Treasury instrument
10 that you used in the risk free component of your CAPM models is not the
11 correct proxy to value common stocks.

12 A. Dr. Zepp argues that a long-term treasury instrument is the appropriate
13 proxy for the risk free rate of return in the CAPM model. But the fact is
14 that regulated utilities typically file for rates within a three to five-year
15 period and the investment community is aware of that fact and
16 understands the effect of rate case proceedings on earnings, dividend and
17 book value growth. Information on rate case proceedings is available to
18 investors through SEC filings, investment research firms such as Value
19 Line, and the mainstream financial press. Any investor who follows
20 utilities would be aware of the impact that rate requests would have on
21 future earnings and would base his or her investment decisions on that
22 information (Attachment A).

23

1 Q. Can you cite another reason why you believe the 5-year treasury
2 instrument used in your CAPM analysis is appropriate?

3 A. Yes. Professional analysts at investment services such as Value Line and
4 Zacks Investment Research typically do not make projections beyond five
5 years. In fact, the Federal Energy Regulatory Commission ("FERC")
6 places more emphasis on short-term projections (i.e. one to five years) in
7 the multi-stage DCF model that Dr. Zepp used to arrive at his 12.40
8 percent cost of equity recommendation.

9 Q. Please explain how the FERC places more emphasis on short-term
10 projections in the multi-stage DCF model.

11 A. The multi-stage DCF model required by the FERC weighs short-term
12 estimates of growth, similar to the one to five-year projections that I relied
13 on to develop the "g" component in my single stage DCF model, by a
14 factor of two-thirds. The FERC's rationale is that short-term estimates of
15 growth are more predictable and deserve more weight than long-term
16 estimates such as the equally-weighted long-term estimates of growth
17 used in the multi-stage DCF model that Dr. Zepp has relied on. This is
18 explained in the following excerpt from the FERC's Cost-of-Service Rates
19 Manual (Attachment B):

20 **"Return on Equity or Cost of Equity:** This is the pipeline's actual profit,
21 or return on its investment. The return on equity is derived from a range
22 of equity returns developed using a Discounted Cash Flow (DCF)
23 analysis of a proxy group of publicly held natural gas companies. The
24 two-stage method projects different rates of growth in projected dividend
25 cash flows for each of the two stages, one stage reflecting short-term
26 growth estimates and the other long-term growth estimates. These
27 estimates are then weighted, two-thirds for the short-term growth
28 projection and one-third on the long-term growth, and utilized in

1 determining a range of reasonable equity returns. Two-thirds is used for
2 the short-term growth rate on the theory that short-term growth rates are
3 more predictable, and thus deserve a higher weighting than long-term
4 growth rate projections. An equity return is then selected within this zone
5 based on an analysis of the company's risk."
6

7 Q. Please explain why Dr. Zepp's criticism regarding the use of a geometric
8 mean in a CAPM analysis is unfounded.

9 A. The information on both the geometric and arithmetic means, published by
10 Morningstar, is widely available to the investment community. For this
11 reason alone I believe that the use of both means in a CAPM analysis is
12 appropriate.

13 The best argument in favor of the geometric mean is that it provides a
14 truer picture of the effects of compounding on the value of an investment
15 when return variability exists. This is particularly relevant in the case of
16 the return on the stock market, which has had its share of ups and downs
17 over the 1926 to 2007 observation period used in my CAPM analysis.

18
19 Q. Can you provide an example to illustrate the difference between arithmetic
20 and geometric means?

21 A. Yes. The following example may help. Suppose you invest \$100 and
22 realize a 20.0 percent return over the course of a year. So at the end of
23 year 1, your original \$100 investment is now worth \$120. Now let's say
24 that over the course of a second year you are not as fortunate and the
25 value of your investment falls by 20.0 percent. As a result of this, the
26 \$120 value of your original \$100 investment falls to \$96. An arithmetic

1 mean of the return on your investment over the two-year period is zero
2 percent calculated as follows:

3

4 (year 1 return + year 2 return) ÷ number of periods =

5 (20.0% + -20.0%) ÷ 2 =

6 (0.0%) ÷ 2 = 0.0%

7

8 The arithmetic mean calculated above would lead you to believe that you
9 didn't gain or lose anything over the two-year investment period and that
10 your original \$100 investment is still worth \$100. But in reality, your
11 original \$100 investment is only worth \$96. A geometric mean on the
12 other hand calculates a compound return of negative 2.02 percent as
13 follows:

14

15 (year 2 value ÷ original value)^{1/number of periods} - 1 =

16 (\$96 ÷ \$100)^{1/2} - 1 =

17 (0.96)^{1/2} - 1 =

18 (0.9798) - 1 =

19 -0.0202 = -2.02%

20

21 The geometric mean calculation illustrated above provides a truer picture
22 of what happened to your original \$100 over the two-year investment
23 period.

1 As can be seen in the preceding example, in a situation where return
2 variability exists, a geometric mean will always be lower than an arithmetic
3 mean, which probably explains why utility consultants typically put up a
4 strenuous argument against the use of a geometric mean.

5

6 Q. Can you cite any other evidence that supports your use of both a
7 geometric and an arithmetic mean?

8 A. Yes. In the third edition of their book, Valuation: Measuring and Managing
9 the Value of Companies, authors Tom Copeland, Tim Koller and Jack
10 Murrin ("CKM") make the point that, while the arithmetic mean has been
11 regarded as being more forward looking in determining market risk
12 premiums, a true market risk premium may lie somewhere between the
13 arithmetic and geometric averages published in Morningstar's SBBI
14 yearbook.

15

16 Q. Please explain.

17 A. In order to believe that the results produced by the arithmetic mean are
18 appropriate, you have to believe that each return possibility included in the
19 calculation is an independent draw. However, research conducted by
20 CKM demonstrates that year-to-year returns are not independent and are
21 actually auto correlated (i.e. a relationship that exists between two or more
22 returns, such that when one return changes, the other, or others, also
23 change), meaning that the arithmetic mean has less credence. CKM also

1 explains two other factors that would make the Morningstar arithmetic
2 mean too high. The first factor deals with the holding period. The
3 arithmetic mean depends on the length of the holding period and there is
4 no "law" that says that holding periods of one year are the "correct"
5 measure. When longer periods (e.g. 2 years, 3 years etc.) are observed,
6 the arithmetic mean drops about 100 basis points. The second factor
7 deals with a situation known as survivor bias. According to CKM, this is a
8 well-documented problem with the Morningstar historical return series in
9 that it only measures the returns of successful firms, that is, those firms
10 that are listed on stock exchanges. The Morningstar historical return
11 series does not measure the failures, of which there are many. Therefore,
12 the return expectations in the future are likely to be lower than the
13 Morningstar historical averages. After conducting their analysis, CKM
14 concluded that 4.00 percent to 5.50 percent is a reasonable forward
15 looking market risk premium. Adding the current 5-year Treasury yield of
16 2.63 percent to these two estimates indicates a cost of equity range of
17 6.63 percent to 8.13 percent. Taking into consideration the fact that
18 utilities generally exhibit less risk than industrials, a return in the low end
19 of this range would be reasonable. In fact, my 8.33 percent cost of
20 common equity estimate is 20 basis points more than the high end of the
21 range exhibited above.

22

1 Q. Has the Commission authorized rates of return that were derived through
2 the use of both arithmetic and geometric means in prior decisions?

3 A. Yes, a case that specifically comes to mind involved UNS Gas Inc., in
4 which Decision No. 70011, dated November 27, 2007, stated the
5 following:

6 "We agree with the Staff and RUCO witnesses that it is appropriate
7 to consider the geometric returns in calculating a comparable
8 company CAPM because to do otherwise would fail to give
9 recognition to the fact that many investors have access to such
10 information for purposes of making investment decisions."
11

12 In the UNS Gas, Inc. case, the ACC Staff witness was Mr. Parcell who, as
13 I do, consistently relies on both arithmetic and geometric means in our
14 CAPM analyses.

15
16 Q. Can you provide further support for the reasonableness of the market risk
17 premiums used in your CAPM models?

18 A. Yes. In his direct testimony in a prior Arizona Public Service Company
19 ("APS") rate case proceeding, RUCO consultant Stephen G. Hill makes
20 the argument for market risk premiums ranging from 4.0 percent to 6.0
21 percent² (Attachment C). On page 46 of his APS testimony, Mr. Hill
22 supports his argument for lower market risk premiums by citing two
23 scholarly articles on the subject published by noted academics. In the first
24 paper titled *The Equity Premium*, published in 2002, Eugene Fama and
25 Kenneth French take the position that Ibbotson Associates' historical

² Lines 25 through 29 of page 45, and lines 1 through 4 of page 46 of the direct testimony of RUCO consultant Stephen G. Hill, Docket No. E-01345A-05-0816 et al.

1 market risk premiums (now published by Morningstar) have overstated
2 investor expectations.

3

4 Q. Can you cite any other sources that support Mr. Hill's views, in his APS
5 rate case testimony, that 4.0 percent to 6.0 percent is a reasonable market
6 risk premium on a forward-looking basis?

7 A. Yes. During the 39th annual Financial Forum of the Society of Utility and
8 Regulatory Financial Analysts, which was held at Georgetown University
9 in Washington D.C. on April 19 and 20, 2007, I had the opportunity to hear
10 the views of Aswath Damodaran, Ph. D. and Felicia C. Marston, Ph. D.,
11 professors of finance from New York University and the University of
12 Virginia respectively, who have conducted empirical research on this
13 subject. Dr. Damodaran and Dr. Marston advocated 4.0 to 5.5 percent
14 estimates during a panel discussion that provided both professors with the
15 opportunity to explain their research on the equity risk premium and to
16 answer questions from other financial analysts in attendance. Each of the
17 panelists stated that they believed that a reasonable market risk premium
18 fell between 4.0 percent and 5.0 percent when asked to provide estimates
19 based on their research.

20

21

22 ...

23

1 Q. What would your CAPM results be if the market risk premiums of 4.0
2 percent to 6.0 percent, advocated by Mr. Hill, were used in your CAPM
3 model?

4 A. Using an updated 2.63 percent yield on a 5-year Treasury instrument (r_f),
5 an updated beta of 0.82 noted earlier in my surrebuttal testimony, and the
6 market risk premiums ($r_m - r_f$) of 4.0 percent to 6.0 percent, advocated by
7 Mr. Hill, in my CAPM model produces the following results for water
8 utilities:

9
10 Using a 4.0% Market Risk Premium

11
$$k = r_f + [\beta (r_m - r_f)]$$

12
$$k = 2.63\% + [0.82 (4.0\%)]$$

13
$$k = 2.63\% + 3.28\%$$

14
$$k = \underline{5.91\%}$$

15
16 Using a 6.0% Market Risk Premium

17
$$k = r_f + [\beta (r_m - r_f)]$$

18
$$k = 2.63\% + [0.82 (6.0\%)]$$

19
$$k = 2.63\% + 4.92\%$$

20
$$k = \underline{7.55\%}$$

21

22 The 6.73 percent average of these results for water utilities are almost
23 identical to the 6.74 percent average (using both arithmetic and geometric
24 means) that I obtained in my CAPM that I used to calculate my

1 recommended 8.33 percent cost of common equity. When the market
2 risk premium information noted above is taken into consideration, it is
3 clear that Dr. Zepp's market risk premium inputs, as opposed to mine,
4 appear to be out of line.

5

6 Q. Do you have any data that supports a 4.00 percent equity risk premium
7 during the market crises which unfolded in September of 2008?

8 A. Yes. In September 2008 Dr. Damodaran, who I noted earlier in my
9 testimony, presented a paper titled Equity Risk Premium (ERP):
10 Determinants, Estimation and Implications (Attachment D), which
11 contained an October update that presented data on the swings in implied
12 equity risk premium that occurred between September 12, 2008 and
13 October 16, 2008. During that time frame, implied equity risk premiums
14 ranged from 4.20 percent to 6.39 percent. The 5.30 percent mean
15 average of that range is 98 basis points lower than the 6.28 percent
16 average of my market risk premium using both geometric and arithmetic
17 means for water and gas companies.

18

19 Q. Do you believe that the results produced by your CAPM models are
20 reflective of the current interest rate environment?

21 A. Yes, when one considers the current state of lower interest rates on low
22 risk investments such as U.S. Treasury instruments and various bank
23 certificates of deposit (Attachment E). The results of my CAPM analyses

1 (using both arithmetic and geometric means) are simply reflecting this
2 situation. From the perspective that public utilities have traditionally been
3 viewed as safe investments, all things being equal it is not reasonable to
4 believe that their costs of equity capital should be at the 12.40 percent
5 level advocated by Dr. Zepp.

6

7 Q. Please address Dr. Zepp's point, regarding the market risk premium, that
8 common shareholders bear a higher risk than bond holders and expect a
9 higher return than the yields of utility debt instruments.

10 A. I do not disagree with Dr. Zepp on this point. The question is how much
11 more of a risk premium is merited for a low risk regulated monopoly such
12 as AWC (Value Line has described the water utility industry as being the
13 last true monopoly in the U.S.). My recommended 8.33 percent cost of
14 common equity capital is 533 basis points higher than AWC's 3.00 percent
15 cost of short-term debt and 150 basis points higher than the Company's
16 6.83 percent cost of long-term debt. It is also 119 basis points higher than
17 the recent 7.14 percent yield on Baa/BBB-rated utility bond and 254 basis
18 points higher than the recent 5.79 percent yield on an A-rated utility bond.

19

20

21

22 ...

23

1 Q. Please comment on the information presented on page 46 of Dr. Zepp's
2 rebuttal testimony, where he cites several recent instances in which
3 certain water companies had to issue debt at 7.76 percent and 8.30
4 percent.

5 A. I disagree that a single debt issuance at a particular point in time should
6 be the sole reason for increasing my recommended cost of equity. In fact
7 if AWC were to issue debt at a higher rate of interest, its cost would be
8 averaged with its existing 6.83 percent cost of long-term debt, which would
9 mitigate the effects of the higher cost issuance.

10

11 Q. Is there another reason why you believe Dr. Zepp's argument does not
12 merit a higher return on common equity.

13 A. Yes. Value Line has consistently taken the position that water utility
14 stocks are attractive to investors given the current economic climate. In
15 the most recent Value Line update on the water utility industry, dated July
16 24, 2009, Value Line analyst Andre J. Costanza had this to say:

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18
19
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21
22

"Water Utility providers have fared pretty well of late, with increasingly favorable regulatory backing boosting revenues and driving strong bottom line advances in the first quarter. Additional improvements are likely to evolve on the regulatory front and should enable most in this space to maintain their recent earnings momentum throughout the remainder of the year."

23
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"Despite the recent spurts of price momentum, the market remains extremely volatile overall. The tough macroeconomic environment creates a difficult backdrop, which ought to favor industries that are perceived as relative safe havens, a trait typically exemplified by water utilities' historically steady dividend growth."

31

1 Mr. Costanza further stated:

2 "Although the stocks in this group do not stand out either for the
3 coming six to 12 months or the 3- to 5-year pull, investors with a
4 cautious bent may want to have a closer look. Water utilities will
5 probably be a far more stable place to be if the market remains
6 volatile, a fair bet given the glum economic indicators that have
7 continued to come out."
8

9 Q. How does your recommended 8.33 percent cost of common equity
10 compare to the most recent Value Line projections for the water utility
11 industry?

12 A. As can be seen in Attachment F, Value Line is currently projecting a 7.00
13 percent rate of return on book common equity for the water utility industry
14 as a whole through 2014. This is 133 basis points lower than my
15 recommended 8.33 percent cost of common equity.

16
17 Q. Please address Dr. Zepp's criticism of your DCF analysis, which takes into
18 consideration the concept that a utility's market-to-book ratio will move
19 toward a value of 1.0 if regulators set a utility's rate of return at a level that
20 is equal to the cost of capital of firms with similar risk.

21 A. A utility's market price should equal its book price over the long run if
22 regulators allow a rate of return that is equal to the utility's cost of capital.
23 *That is assuming that the utility's rate of return ("ROR") is comparable to*
24 *the rates of return of other firms in the same risk class.*³ For example, if a
25 hypothetical utility's book price is \$20.00 per share and regulators adopt a

³ An in-depth discussion of market-to-book ratios can be found in Chapter 10 of Roger A. Morin's text Regulatory Finance, Utilities' Cost of Capital.

1 rate of return that is equal to the utility's cost of capital of 10.0%, the utility
2 will earn \$2.00 per share ("EPS"). With earnings of \$2.00 per share, and a
3 market required rate of return on equity of 10.00%, for firms in the utility's
4 risk class, the market price of the utility's stock will set at \$20.00 per share
5 (\$2.00 EPS ÷ 10.0% ROR = \$20.00 per share price). If the utility records
6 earnings that are higher than the earnings of other firms with similar risk,
7 the market value of the utility's shares will increase accordingly, (e.g.
8 \$2.50 EPS ÷ 10.0% ROR = \$25.00 per share). On the other hand, if the
9 utility posts lower earnings, the stock's market price will fall below book
10 value, (e.g. \$1.50 EPS ÷ 10.0% ROR = \$15.00 per share).

11 Because of economic forces beyond the control of regulators, it is not
12 reasonable to assume that the utility will have earnings that match those
13 of firms of similar risk in every year of operation. In some years, earnings
14 may drop causing the market-to-book ratio to fall below 1.0, while in other
15 years the utility may have earnings that exceed those of other firms in its
16 risk classification. However, over the long run the utility's earnings should
17 average out to the earnings that are expected based on its level of risk.
18 These average earnings over time will result in a market-to-book ratio of
19 1.0. It has been suggested that regulators should set a utility's rate of
20 return at a level that is slightly higher than that of firms in the same risk
21 class of the hypothetical utility. In theory, this will send a message to
22 investors that average long-term earnings will not be less than what is
23 expected. A 1.0 ratio may never be achieved in practice and many

1 investors may not even care what the market-to-book ratio is as long as
2 they receive their required rate of return. In this respect, a utility stock is
3 similar to a corporate bond whose value fluctuates as interest rates move
4 above or below the stated yield on the bond. As long as the bond
5 provides the level of income (i.e. the stated interest payment in the case of
6 a bond or a dividend payment in the case of a utility stock) that the
7 investor expects, the price of the instrument at any given point in time is
8 immaterial (so long as the intent is to hold the bond until maturity or the
9 utility stock over a long-term period).

10
11 Q. Does your recommended cost of equity take into consideration the
12 theoretical concepts that you have just described?

13 A. Yes. As I just explained, in theory, a market-to-book ratio of 1.0 would be
14 achieved if a utility's rate of return equaled the cost of capital that is close
15 to the returns of firms with similar risk. The CAPM analysis that I
16 performed earlier in this testimony (using the current yield on a 5-year U.S
17 treasury note and the revised beta and market risk premium inputs
18 advocated by Mr. Hill) indicates that the rate of return for a firm with
19 AWC's level of risk is 7.63 percent. This being the case, the adoption of
20 my recommended 8.33 percent cost of capital would be consistent with
21 the theory I have presented above since it is 70 basis points higher than
22 the aforementioned average 7.63 percent expected rate of return that
23 theoretically produces a market price that is equal to book value.

1 Q. Are there any other reasons why your market-to-book ratio calculation is
2 valid?

3 A. Yes. The utilities included in my samples, are engaged in unregulated
4 activities to some degree. Because it is difficult to obtain a sample
5 comprised only of "pure play" utilities, the calculation that I have employed
6 in my DCF model helps to eliminate the impact that those unregulated
7 operating segments would have on the market-to-book ratio of the utilities
8 included in my sample.

9

10 Q. Please address Dr. Zepp's position that your internal and external growth
11 rate estimates are subjective.

12 A. My growth rate estimates take into consideration both historic rates of
13 growth as well as an evaluation of analysts' projections of growth for each
14 projected year for the next five years as opposed to simply plugging in a
15 final five-year estimate. As I stated in my direct testimony, it is the same
16 methodology that produced a rate of return that the Commission adopted
17 in a prior Southwest Gas rate case proceeding.

18

19 Q. Can you offer further support for your DCF growth rate estimates?

20 A. Yes. In the same text that Dr. Zepp cites in his rebuttal testimony, New
21 Regulatory Finance, the book's author, Dr. Roger Morin, provides a DCF
22 growth rate check (Attachment G). The reasonableness test offered by
23 Dr. Morin is expressed as follows:

1 Dividend Growth = Risk Free Return + Risk Premium – Dividend Yield

2

3 Under the above formula the dividend yield element of the DCF (“ D_1/P_0 ”) is
4 subtracted from results of a CAPM calculation (“ $r_f + [\beta (r_m - r_f)]$ ”).

5

6 Q. How does your 6.25 percent and 6.44 percent water and natural gas
7 growth estimates compare to the results obtained from the
8 reasonableness test offered by Dr. Morin?

9 A Using the CAPM results presented above using the most recent 0.82
10 average Value Line beta for the water utilities in Dr. Zepp’s sample, his
11 preferred 20-year risk free rate of 4.67 percent, the 4.0 percent to 6.0
12 percent market risk premium (advocated by Mr. Hill in his APS testimony)
13 and the average 3.08 and 4.98 percent dividend yield estimates for water
14 and natural gas presented in my direct testimony, the following growth rate
15 check results are obtained:

16

17 Water - Using a 4.0% Market Risk Premium

18
$$g = r_f + [\beta (r_m - r_f)] - (D_1/P_0)$$

19
$$g = 4.67\% + [0.8.2 (4.0\%)] - 3.08\%$$

20
$$g = 4.67\% + 3.28\% - 3.08\%$$

21
$$g = \underline{4.87\%}$$

22

23

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Water - Using a 6.0% Market Risk Premium

$$g = r_f + [\beta (r_m - r_f)] - (D_1/P_0)$$
$$g = 4.67\% + [0.82 (6.0\%)] - 3.08\%$$
$$g = 4.67\% + 4.92\% - 3.08\%$$
$$g = \underline{6.51\%}$$

Gas - Using a 4.0% Market Risk Premium

$$g = r_f + [\beta (r_m - r_f)] - (D_1/P_0)$$
$$g = 4.67\% + [0.67 (4.0\%)] - 4.98\%$$
$$g = 4.67\% + 2.68\% - 4.98\%$$
$$g = \underline{2.37\%}$$

Gas - Using a 6.0% Market Risk Premium

$$g = r_f + [\beta (r_m - r_f)] - (D_1/P_0)$$
$$g = 4.67\% + [0.67 (6.0\%)] - 4.98\%$$
$$g = 4.67\% + 4.02\% - 4.98\%$$
$$g = \underline{3.71\%}$$

The growth rate check results for water utilities, obtained from Dr. Morin's reasonableness test, range from 4.87 percent to 6.51 percent or an average of 5.69 percent which is 56 basis points lower than my 6.25 percent DCF growth rate estimate for water utilities. The growth rate check results for natural gas utilities, range from 2.37 percent to 3.71 percent or an average of 3.04 percent which is 340 basis points lower than my 6.44 percent DCF growth rate estimate. Clearly my average growth

1 rate estimate of 6.33 percent for water and natural gas companies falls
2 within the range of reasonableness using Dr. Morin's test.

3

4 Q. Please comment on Dr. Zepp's position that the Commission has to be
5 consistent in adopting returns on common equity that are derived from
6 specific methodologies that were used in prior cases.

7 A. I believe that the Commission has broad authority in setting allowed rates
8 of return and can rely on whatever methodologies they choose to rely on
9 as long as their final decision results in rates that are just and reasonable.

10

11 Q. Does your silence on any of the issues or positions addressed in the
12 rebuttal testimony of the Company's witnesses constitute acceptance?

13 A. No, it does not.

14

15 Q. Does this conclude your surrebuttal testimony on AWC?

16 A. Yes, it does.

ATTACHMENT A



Jon Markman

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SuperModels

Invest in the coming global water shortage

Fresh water's getting scarce, and it has no substitutes. For investors in companies that can supply our increasingly thirsty planet, that spells opportunity.

By [Jon D. Markman](#)

Ten years ago next Monday, a massive earthquake rolled under the Japanese city of Kobe at dawn, toppling 140,000 buildings, causing 300 major fires, killing more than 5,000 people and leaving 300,000 homeless.

To help cover the story for the L.A. Times, I left my wife to care for our 10-day-old daughter and 2-year-old son and flew into the city with a small team of Los Angeles-based trauma doctors and nurses. We found a surreal, smoking ruin of a city with roads twisted like coils of rope, high-rises tilted at Dr. Seuss angles and thousands of middle-class families jammed into dingy, ice-cold rooms in the few public buildings left standing.

Just as in the tsunami zone of South Asia this month, the immediate health danger, besides a possible outbreak of disease, was a lack of fresh water. More than 75% of the city's water supply was destroyed when underground pipes fractured. As much as they desired pallets of drugs, food, blankets and tents sent from throughout Japan and abroad, the Kobe survivors coveted -- and needed -- clean, bottled water for cooking, drinking and bathing.

Both incidents are a stark reminder that water is our most precious resource. Because it is seemingly ubiquitous in the United States, it is taken for granted.

Massive snowstorms in California this month have loaded up the snowpack that provides water there, and rains in the Southeast are filling reservoirs in that part of the country.

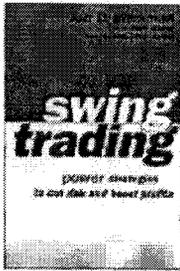
The rest of the world, however, is not so fortunate.

Not making any more water

There is no more fresh water on Earth today than there was a million years ago. Yet today, 6 billion people share it. Since 1950, the world population has doubled, but water use has tripled, notes John Dickerson, an analyst and fund manager based in San Diego. Unlike petroleum, he adds, no technological innovation can ever replace water.

China, which is undergoing a vast rural-to-urban population migration, is emblematic of the places where water has become scarce. It has about as much

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water as Canada but 100 times more people. Per-capita water reserves are only about a fourth the global average, according to experts. Of its 669 cities, 440 regularly suffer moderate to critical water shortages.

Although not widely appreciated, water has been recognized by conservative investors as an investment opportunity -- and it has rewarded them. Over the past 10 years, the Media General water utilities index is up 133%, double the return of the **Dow Jones Utilities Index** (\$UTIL). Over the past five years, water utilities are up 32% -- clobbering the flat returns of both the Dow Jones Utilities and the **Dow Industrials** (\$INDU). One of water's key long-term value drivers as an investment, according to Dickerson: Demand is not affected by inflation, recession, interest rates or changing tastes.

Virtually all of the U.S. water utility stocks are regulated by states and counties, which makes them pretty dull. Governmental entities typically give utilities a monopoly in a geographic region, then set their profit margin a smidge above costs. Just about the only distinguishing factor among them are the growth rates of their regions and their ability to efficiently manage their underground pipe and pumping infrastructure. Among the best are **Aqua America** (WTR, [news](#), [msgs](#)) of Philadelphia, **Southwest Water** (SWWC, [news](#), [msgs](#)) of Los Angeles; **California Water Service Group** (CWT, [news](#), [msgs](#)), based in San Jose, Calif.; and **American States Water** (AWR, [news](#), [msgs](#)) of San Dimas, Calif.

In a moment, I'll offer a couple of potentially more impactful ways to invest in water, but first let's look a little more broadly at world demand.

Aquifers in India are being sucked dry

The tsunami has focused attention on water demand in South Asia -- and it's a good thing, as it was already reaching critical status in rural areas. Several decades ago, farmers in the Indian state of Gujarat used oxen to haul water in buckets from a few feet below the surface. Now they pump it from 1,000 feet below the surface. That may sound good, but they have been drawing water from the earth to feed a mushrooming population at such a terrific rate that ancient aquifers have been sucked dry -- turning once-fertile fields slowly into sand.

According to New Scientist magazine, farmers using crude oilfield technology in India have drilled 21 million "tube wells" into the strata beneath the fields, and every year millions more wells throughout the region -- all the way to Vietnam -- are being dug to service water-needy crops like rice and sugar cane. The magazine quoted research from the annual Stockholm Water Symposium that the pumps that transformed Indian farming are drawing 200 cubic kilometers of water to the surface each year, while only a fraction is replaced by monsoon

rains. At this rate, the research suggested, groundwater supplies in some areas will be exhausted in five to 10 years, and millions of Indians will see their farmland turned to desert.

In China, the magazine reported, 30 cubic kilometers more water is being pumped to the surface each year than is replaced by rain -- one of the reasons that the country has become dependent on grain imports from the West. This is not just an issue for agriculture. Earlier this year, the Indian state of Kerala ordered the **PepsiCo** (PEP, news, msgs) and **Coca-Cola** (KO, news, msgs) bottling plants closed due to water shortages, costing the companies millions of dollars.

In this country, shareholder activists already are lobbying companies to share water-dependency concerns worldwide with their stakeholders in their financial statements.

Water, water everywhere, but . . .

The central problem is that less than 2% of the world's ample store of water is fresh. And that amount is bombarded by industrial pollution, disease and cyclical shifts in rain patterns. Its increasing scarcity has impelled private companies and countries to attempt to lock up rights to key sources. In an article last month, the Christian Science Monitor suggested that the next decade may see a cartel of water-exporting countries rivaling the Organization of Petroleum Exporting Countries for dominance in the world economy.

"Water is blue gold; it's terribly precious," Maude Barlow, chair of the Council of Canadians, told the Monitor. "Not too far in the future, we're going to see a move to surround and commodify the world's fresh water. Just as they've divvied up the world's oil, in the coming century, there's going to be a grab."

Besides the domestic water utilities listed above -- and similarly plodding foreign utilities such as **United Utilities** (UU, news, msgs) of the United Kingdom, which sports a 6.9% dividend yield, and **Suez** (SZE, news, msgs) of France -- investors interested in the sector can consider a number of variant plays. None are extremely exciting, but my guess is that, over the next few years, some more interesting purification technologies will emerge, along with, perhaps, a vibrant attempt at worldwide industry consolidation.

One current idea is Tennessee-based copper pipe and valve maker **Mueller Industries** (MLI, news, msgs), a \$1 billion business with a trailing price/earnings multiple of 15 that is still not expensive despite a 47% run-up in the past year. Its leading outside investor is **Berkshire Hathaway** (BRK.A, news, msgs), the

investment vehicle of legendary investor Warren Buffett.

Another is flow-control products maker **Watts Water Technologies** (WTS, news, msgs), which is a little richer at a \$975 million market cap and a trailing P/E multiple of 19, but is still owned by several leading value managers, including Mario Gabelli.

And possibly the most interesting is **Consolidated Water** (CWCO, news, msgs), a \$160 million company based in the Cayman Islands that specializes in developing and operating ocean-water desalinization plants and water-distribution systems in areas where natural supplies of drinking water are scarce, such as the Caribbean and South America. It currently supplies water to Belize, Barbados, the British Virgin Islands and the Bahamas, and it has expansion plans. It is the most expensive, but it may also have the greatest growth prospects. Of all of these, it is up the most over the past five years, a relatively steady 355%.

Of course, there is one other benefit to water investing: When these companies say they're going to do a dilutive deal, it's not something to worry about.

Fine Print

Dickerson runs a hedge fund in San Diego strictly focused on water investing, the Summit Water Equity Fund. . . To learn more about Southwest Water, [click here](#). . . To learn more about California Water Service Group, which runs systems in New Mexico, Hawaii and Washington State, as well as California, [click here](#). . . To learn more about American States Water, [click here](#). . . To learn more about Mueller, [click here](#), and, for Consolidated Water, [click here](#). . . Seems like talk is cheap. Since mid-December, the value of the company radio personality Howard Stern is leaving, **Viacom** (VIA.B, news, msgs), has risen 9% while the value of the company he's headed to, **Sirius Satellite Radio** (SIRI, news, msgs), is down 13.5%. . . For background on the Kobe earthquake, approaching its 10th anniversary, [click here](#) and [here](#).

Jon D. Markman is publisher of [StockTactics Advisor](#), an independent weekly investment newsletter, as well as senior strategist and portfolio manager at Pinnacle Investment Advisors. While he cannot provide personalized investment advice or recommendations, he welcomes column critiques and comments at jon.markman@gmail.com; put COMMENT in the subject line. At the time of publication he held positions in the following stocks mentioned in this column: Coca-Cola.

ATTACHMENT B

Cost-of-Service Rates Manual

Federal Energy Regulatory Commission
888 North Capitol Street, N.E.
Washington, D.C. 20426
United States of America
www.ferc.gov

June 1999

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\$159,602,000, is equity financed. This means that the owners of Pipeline U.S.A. used their own funds to finance this portion of their investment.

** Pipeline U.S.A. issues its own debt which is not guaranteed by its parent, has its own bond rating and its capital structure is comparable to other equity capitalizations approved by the Commission. Therefore, Pipeline U.S.A. meets the Commission's criteria for using its own capital structure for setting its rates.*

Cost of Debt: This refers to the cost of long term debt incurred by the pipeline to construct or expand the pipeline. For ongoing pipelines that have been issuing debt, we use the actual imbedded cost of debt in the capital structure. The actual imbedded cost of debt is the weighted average of all the debt issued and the cost at which the debt was issued. For new pipelines that have indicated that they would issue debt to finance their investment, but have not yet actually issued the debt, we compute the cost of debt based on a projection, or recent historical debt cost such as historical average Baa utility bonds (Moody's Bond Survey), which is the most prevalent rating for utilities. We also use Moody's to compute the cost of debt if we decide use of a hypothetical capital structure is appropriate.

A-8, column 3, shows the cost of debt of Pipeline U.S.A. of 8.25%. The cost of debt represents a return to Pipeline U.S.A.'s bondholders. The debt return dollars appearing in Column 5 represents the cost to Pipeline U.S.A. to pay the interest on the debt to its bondholders. This debt return, or interest on debt, of \$30,723,000 as shown in column (5) is included in the Return component of the cost-of-service.

Return on Equity or Cost of Equity: This is the pipeline's actual profit, or return on its investment. The return on equity is derived from a range of equity returns developed using a Discounted Cash Flow

(DCF) analysis of a proxy group of publicly held natural gas companies. The Commission currently uses a two-stage Discounted Cash Flow (DCF) methodology. The two-stage method projects different rates of growth in projected dividend cash flows for each of the two stages, one stage reflecting short term growth estimates and the other long term growth estimates. These estimates are then weighted, two-thirds for the short-term growth projection and one-third on the long-term growth, and utilized in determining a range of reasonable equity returns. Two-thirds is used for the short-term growth rate on the theory that short-term growth rates are more predictable, and thus deserve a higher weighting than long term growth rate projections. An equity return is then selected within this zone based on an analysis of the company's risk. It is assumed, that most pipelines face risks that would place them in the middle of the zone of reasonableness. However, a case could be made depending on the facts of the specific pipeline that the return on equity should be outside the zone. As an example, a pipeline with a high debt capitalization ratio is usually considered more risky and thus, a higher return on equity would be expected.

We have determined that a reasonable return on equity for Pipeline U.S.A. is 14.00%. This return was at the high end of our range of equity returns because Pipeline U.S.A. is a relatively new pipeline company with a high debt capitalization ratio. The equity portion of the return permitted to be collected in rates is \$22,344,000 shown in column (5) of A-8.

Pretax Return. Pretax return is the amount earned by a pipeline before income taxes and debt interest payments. Pretax return is often calculated for pipelines and used to further settlement negotiations. Using a pretax return figure can avoid the lengthy discussions and debates that surround the issues of capitalization ratios and ROE calculations and analyses. Use of a pretax return reduces these issues down to one number, a pretax percentage that can easily be compared to other pipeline's pretax returns. The pretax return figure

ATTACHMENT C

ARIZONA PUBLIC SERVICE COMPANY

DOCKET NO. E-01345A-05-0816

DIRECT TESTIMONY

OF

STEPHEN G. HILL

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

AUGUST 18, 2006

1 with a mid-point of 9.40%, only 4 basis points below the DCF result.

2 Therefore, weighing all the evidence presented herein, my best estimate of the
3 cost of equity capital for a company like Arizona Public Service, facing similar risks as
4 this group of electric utilities, ranges from 9.25% to 9.75%, with a mid-point of 9.50%.

5

6 Q. ARE THERE OTHER FACTORS TO BE CONSIDERED BEFORE DETERMINING A
7 POINT-ESTIMATE FOR APS WITHIN A REASONABLE RANGE FOR SIMILAR-
8 RISK FIRMS?

9 A. Yes. First, the electric sample group companies have similar operating risk to APS. The
10 average S&P business risk score of my sample of electric utilities is 6—the same as that
11 for APS. Therefore, on that basis there would be no reason to adjust the equity return
12 from the mid-point of a reasonable range. However, because the capital structure I
13 recommend for ratesetting purposes contains considerably more common equity and less
14 debt than average for the sample group, APS, prospectively will have less financial risk
15 than the sample group and should be awarded an equity return below the mid-point of a
16 reasonable range.

17

18 Q. IS THERE A RECOGNIZED METHOD WITH WHICH DIFFERENCES IN
19 FINANCIAL RISK CAN BE QUANTIFIED?

20 A. Yes. The cost of equity capital is affected by the capital structure a company employs.
21 When a company increases the proportion of debt in its capital structure, it increases the
22 riskiness of its equity. Financial risk (created by the use of debt in the capital structure)
23 causes investors to demand a higher rate of return; that is, financial risk increases the cost
24 of equity capital.

25 The impact of debt leverage on the cost of equity capital can be approximated
26 through an examination of the changes in beta, which occur when leverage is increased
27 or decreased. The Value Line betas for the sample companies used in my cost of capital
28 analysis in this proceeding reflect the market's (investors') perception of both the
29 business risks and the financial risks of a firm. That is, one portion of the beta of a firm is

1 related to the business risk of the firm (the risk inherent in its operations) and one portion
2 of the beta is related to the financial risk of that firm (the risk associated with the use of
3 debt). Therefore, if a firm elects to finance its operations with debt as well as equity, the
4 beta coefficient of that firm will reflect both the business and financial risk. When a firm
5 uses debt to finance its operations, the beta can also be referred to as a “levered” beta
6 (i.e., a beta coefficient that includes the impact of debt leverage).

7 The average beta coefficient of the sample group of utilities can be “unlevered.”
8 That is, the beta-risk related to the level of debt capital used by the firm can be removed.
9 “Unlevering the betas” amounts to estimating what the average beta would be if the
10 companies were financed entirely with equity capital. Equation (2) is used to estimate the
11 unlevered beta for a firm or a group of similar-risk firms.¹⁹

$$\beta_U = \frac{\beta_{\text{Measured}}}{(1+(1-t)D/E)} \quad (2)$$

12
13
14
15 Equation (2) indicates that an estimate of the unlevered beta (β_U) of a firm can be
16 calculated by dividing the measured beta (β_{Measured} , e.g. the beta coefficient reported by
17 investor services such as Value Line) by one plus the average debt-to-equity ratio,
18 adjusted to account for taxes. The debt-to-equity ratio is measured using the average
19 market value of the sample group’s common equity capital. Once the unlevered beta for
20 the firm (or, in this case, for the sample group of market-traded utility companies) is
21 calculated, the beta coefficient is “re-levered” and adjusted to conform to the less
22 leveraged capital structure of APS, which contains 50% common equity. The formula
23 used to “re-lever” the utility betas is shown below.

$$\beta_{\text{Relevered}} = \beta_U (1 + (1-t)D/E) \quad (3)$$

24
25
26

¹⁹Equation (1) is a version of the Hamada equation which combines the Miller-Modigliani theories regarding capital structure and the logic of the CAPM: Hamada, R.S., “Portfolio Analysis, Market equilibrium and Corporation Finance,” *Journal of Finance*, March 1969, pp. 13-31.

1 Equation (3) states that the relevered beta equals the unlevered beta (β_U) multiplied
2 times one plus the target debt-to-equity ratio (in this case APS's ratemaking capital
3 structure—50% equity/50% debt), again adjusted for taxes.

4 Schedule 12 shows that, the average capital structure of the sample group of
5 electric companies used to estimate the cost of equity capital in my direct testimony
6 consists of 45.13% common equity and 54.69% fixed-income capital. That capital
7 structure, adjusted to market levels by an average 1.69 market-to-book ratio and
8 accounting for a 35% tax rate, produces an average value for $(1-t)D/E$ in Equation (2) of
9 0.53.

10 Schedule 12 shows further that the measured (average Value Line) beta
11 coefficient of the sample group of gas utility firms is 0.83, and the unlevered beta
12 coefficient of those firms (i.e., what the average beta would be if those firms were
13 financed entirely with common equity) is 0.54. When that beta is "relevered" using the
14 methodology described above to conform to APS's ratemaking capital structure, the
15 resulting average beta coefficient is 0.75, an decrease in beta of 0.079 due to the sample
16 group's lower average equity capitalization ["measured" beta of 0.83 vs. "relevered" beta
17 of 0.751].

18 Finally, with the increase in beta determined, the CAPM can be used to estimate
19 the impact of that adjustment on the cost of capital. A review of the CAPM equation
20 (Equation (i) in Appendix D) indicates that the beta coefficient is multiplied by the
21 market risk premium ($r_m - r_f$) as a step in the determination of the cost of capital.
22 Therefore, it is possible to measure the impact of an adjustment to beta by multiplying
23 the difference in the measured and relevered betas of the electric companies by the
24 market risk premium.

25 As I noted in my discussion of the CAPM analysis in Appendix D, the long-term
26 historical market risk premium provided by Ibbotson Associates' historical database is
27 5% to 6.6%. I also discuss the fact that the most recent research by Fama and French
28 regarding the market risk premium indicates that the Ibbotson historical risk premium
29 data overstate investor expectations, which are a return of 2.5% to 4.5% over the risk-free

1 rate of interest.²⁰ Ibbotson has also published a paper recently, which indicates that
2 investors can expect returns in the future of from 4% to 6% above the risk-free.²¹
3 Therefore, for purposes of this analysis, I will use a range of market risk premium from
4 4% to 6%.

5 As shown in Schedule 12, an decrease in the average beta coefficient of 0.079,
6 multiplied by a market risk premium ranging from 4% to 6%, indicates an decrease in the
7 cost of equity capital due to reduced leverage at APS of from 32 to 48 basis points (0.079
8 x 4%-6% = 0.317%-0.476%).

9 The mid-point of the cost of common equity for the electric utility sample group,
10 presented previously is 9.50%. Although the equity return decrement indicated is slightly
11 higher, recognizing the decrease in financial risk due to reduced leverage at APS, a cost
12 of equity of 9.25% for ratemaking purposes is reasonable. That represents a decrease in
13 the cost of equity for APS (with a 50% common equity ratio) of 25 basis points below the
14 mid-point of a reasonable range for electric utility operations, which are capitalized on
15 average with about 45% common equity.

16 It is important to emphasize here that if the Commission elects to utilize the
17 Company's requested 54.5% common equity ratio for ratesetting purposes, rather than
18 the 50% I recommend, the equity return decrement due to lower financial risk would
19 have to be greater than the 25 basis points I recommend. If a "target" capital common
20 equity ratio of 54.5% were substituted in Schedule 12, the "relevered" beta would be
21 0.72, rather than the 0.75 used in my analysis. Also the indicated reduction in the cost of
22 equity would range from 0.45% to 0.68%. Those data indicate that if this Commission
23 elects to set rates for APS using its requested capital structure, an equity return decrement
24 of 50 basis points would be reasonable.

25
26 Q. DOES THAT 9.25% EQUITY COST ESTIMATE INCLUDE AN INCREMENT FOR

²⁰ Fama, E., French, K., "The Equity Premium," *The Journal of Finance*, Vol. LVII, No. 2, April 2002, pp. 637-659.

²¹ Ibbotson, R, Chen, P., "Long-Run Stock Returns: Participating in the Real Economy," *Financial Analysts Journal*, January/February 2003, pp. 88-89.

1 FLOTATION COSTS?

2 A. No, it does not.

3

4 Q. CAN YOU PLEASE EXPLAIN WHY AN EXPLICIT ADJUSTMENT TO THE COST
5 OF EQUITY CAPITAL FOR FLOTATION COSTS IS UNNECESSARY?

6 A. An explicit adjustment to “account for” flotation costs is unnecessary for several reasons.

7 First, it is often said that flotation costs associated with common stock issues are exactly
8 like flotation costs associated with bonds. That is not a correct statement because bonds
9 have a fixed cost and common stock does not. Moreover, even if it were true, the current
10 relationship between the electric utility sample group’s stock price and its book value
11 would indicate a flotation cost reduction to the market-based cost of equity, not an
12 increase.

13 When a bond is issued at a price that exceeds its face (book) value, and that
14 difference between market price and the book value is greater than the flotation costs
15 incurred during the issuance, the embedded cost of that debt (the cost to the company) is
16 *lower* than the coupon rate of that debt.

17 In the current economic environment for the electric utility common stocks
18 studied to determine the cost of equity in this proceeding, those stocks are selling at a
19 market price 69% above book value. (Exhibit__ (SGH-1), Schedule 4, p. 1) The
20 difference between the market price of electric utility stock and book value dwarfs any
21 issuance expense the companies might incur. Therefore, if common equity flotation costs
22 were exactly like flotation costs with bonds, then, if an explicit adjustment to the cost of
23 common equity were necessary, it should be downward, not upward.

24 Second, flotation cost adjustments are usually predicated on the prevention of the
25 dilution of stockholder investment. However, the reduction of the book value of
26 stockholder investment due to issuance expenses can occur only when the utility’s stock
27 is selling at a market price at to or below its book value. As noted, the companies under
28 review are selling at a substantial premium to book value. Therefore, every time a new
29 share of that stock is sold, existing shareholders realize an *increase* in the per share book

1 value of their investment. No dilution occurs, even without any explicit flotation cost
2 allowance.

3 Third, the vast majority of the issuance expenses incurred in any public stock
4 offering are “underwriter’s fees” or “discounts”. Underwriter’s discounts are not out-of-
5 pocket expenses for the issuing company. On a per share basis, they represent only the
6 difference between the price the underwriter receives from the public and the price the
7 utility receives from the underwriter for its stock. As a result, underwriter’s fees are not
8 an expense incurred by the issuing utility and recovery of such “costs” should not be
9 included in rates.

10 In addition, the amount of the underwriter’s fees are prominently displayed on the
11 front page of every stock offering prospectus and, as a result, the investors who
12 participate in those offerings (e.g., brokerage firms) are quite aware that a portion of the
13 price they pay does not go to the company but goes, instead, to the underwriters. By
14 electing to buy the stock with that understanding, those investors have effectively
15 accounted for those issuance costs in their risk-return framework by paying the offering
16 price. Therefore, they do not need any additional adjustments to the allowed return of the
17 regulated firm to “account” for those costs.

18 Fourth, my DCF growth rate analysis includes an upward adjustment to equity
19 capital costs which accounts for investor expectations regarding stock sales at market
20 prices in excess of book value, and any further explicit adjustment for issuance expenses
21 related to increases in stock outstanding is unnecessary.

22 Fifth, research has shown that a specific adjustment for issuance expenses is
23 unnecessary²². There are other transaction costs which, when properly considered,
24 eliminate the need for an explicit issuance expense adjustment to equity capital costs. The
25 transaction cost that is improperly ignored by the advocates of issuance expense
26 adjustments is brokerage fees. Issuance expenses occur with an initial issue of stock in a
27 primary market offering. Brokerage fees occur in the much larger secondary market

²² “A Note on Transaction Costs and the Cost of Common Equity for a Public Utility,” Habr, D., National Regulatory Research Institute Quarterly Bulletin, January 1988, pp. 95-103.

1 where pre-existing shares are traded daily. Brokerage fees tend to increase the price of
2 the stock to the investor to levels above that reported in the Wall Street Journal, i.e., the
3 market price analysts use in a DCF analysis. Therefore, if brokerage fees were included
4 in a DCF cost of capital estimate they would raise the effective market price, lower the
5 dividend yield and lower the investors' required return. If one considers transaction costs
6 that, supposedly, raise the required return (issuance expenses), then a symmetrical
7 treatment would require that costs that lower the required return (brokerage fees) should
8 also be considered. As shown by the research noted above, those transaction costs
9 essentially offset each other and no specific equity capital cost adjustment is warranted.
10

11 Q. WHAT IS THE OVERALL COST OF CAPITAL FOR APS'S INTEGRATED UTILITY
12 OPERATIONS, BASED ON AN ALLOWED EQUITY RETURN OF 9.25%?

13 A. Schedule 13 attached to my testimony shows that an equity return of 9.25%, operating
14 through an appropriate ratemaking capital structure of 50% equity and 50% debt, and the
15 Company's requested embedded capital cost rates, produces an overall return of 7.33%
16 for APS. Schedule 13 also shows that a 7.33% overall cost of capital affords the
17 Company an opportunity to achieve a pre-tax interest coverage level of 3.85 times.

18 According to APS's 2005 S.E.C. Form 10-K (Exhibit 12), the pre-tax interest
19 coverage over the past five years has averaged 2.94x and has ranged from 2.81x to 3.17x.
20 The return I recommend would allow the Company the opportunity to improve its
21 historical average interest coverage. Therefore, the equity return I recommend fulfills the
22 legal requirement of Hope and Bluefield of providing the Company the opportunity to
23 earn a return which is commensurate with the risk of the operation and serves to support
24 and maintain the Company's ability to attract capital.
25

26 V. COMPANY COST OF CAPITAL TESTIMONY

27
28 Q. HOW HAS COMPANY WITNESS AVERA ESTIMATED THE COST OF EQUITY
29 CAPITAL IN THIS PROCEEDING?

**ARIZONA PUBLIC SERVICE COMPANY
LEVERAGE/BETA ADJUSTMENT TO THE COST OF EQUITY CAPITAL**

<u>COMPANY</u>	<u>COMMON EQUITY</u>	<u>FIXED INCOME CAPITAL</u>	<u>M/B RATIO</u>	<u>MKT. VALUE DEBT(1-t)/EQ.</u>
Central Vermont P. S.	63.00%	37.00%	1.05	0.36
FirstEnergy Corp.	45.00%	55.00%	1.77	0.45
Green Mountain Power	56.00%	44.00%	1.30	0.39
Progress Energy	41.00%	59.00%	1.29	0.73
Ameren Corp.	50.00%	50.00%	1.58	0.41
Cleco Corporation	52.00%	48.00%	1.52	0.39
DPL, Inc.	35.00%	65.00%	4.51	0.27
Empire District Electric	46.00%	54.00%	1.37	0.56
Entergy Corp.	46.00%	54.00%	1.77	0.43
Hawaiian Electric	37.00%	63.00%	1.77	0.63
PNM Resources	38.00%	62.00%	1.31	0.81
Pinnacle West Capital	48.00%	52.00%	1.11	0.63
Unisource Energy	32.00%	68.00%	1.64	0.84
AVERAGES	45.31%	54.69%	1.69	0.53
TARGET CAP. STRUCTURE	50.00%	50.00%	1.69	0.38

AVERAGE (LEVERED) UTILITY BETA = 0.83

$$\text{Beta (Unlevered)} = \text{Beta (Levered)} / (1 + D(1-t)/E)$$

$$\text{Beta (Unlevered)} = 0.83 / (1 + .53) = \mathbf{0.54}$$

$$\text{Beta (Relevered)} = \text{Beta (Unlevered)} * (1 + D(1-t)/E)$$

$$\text{Beta (Relevered)} = 0.54(1.38) = \mathbf{0.75}$$

IMPACT ON COST OF EQUITY CAPITAL

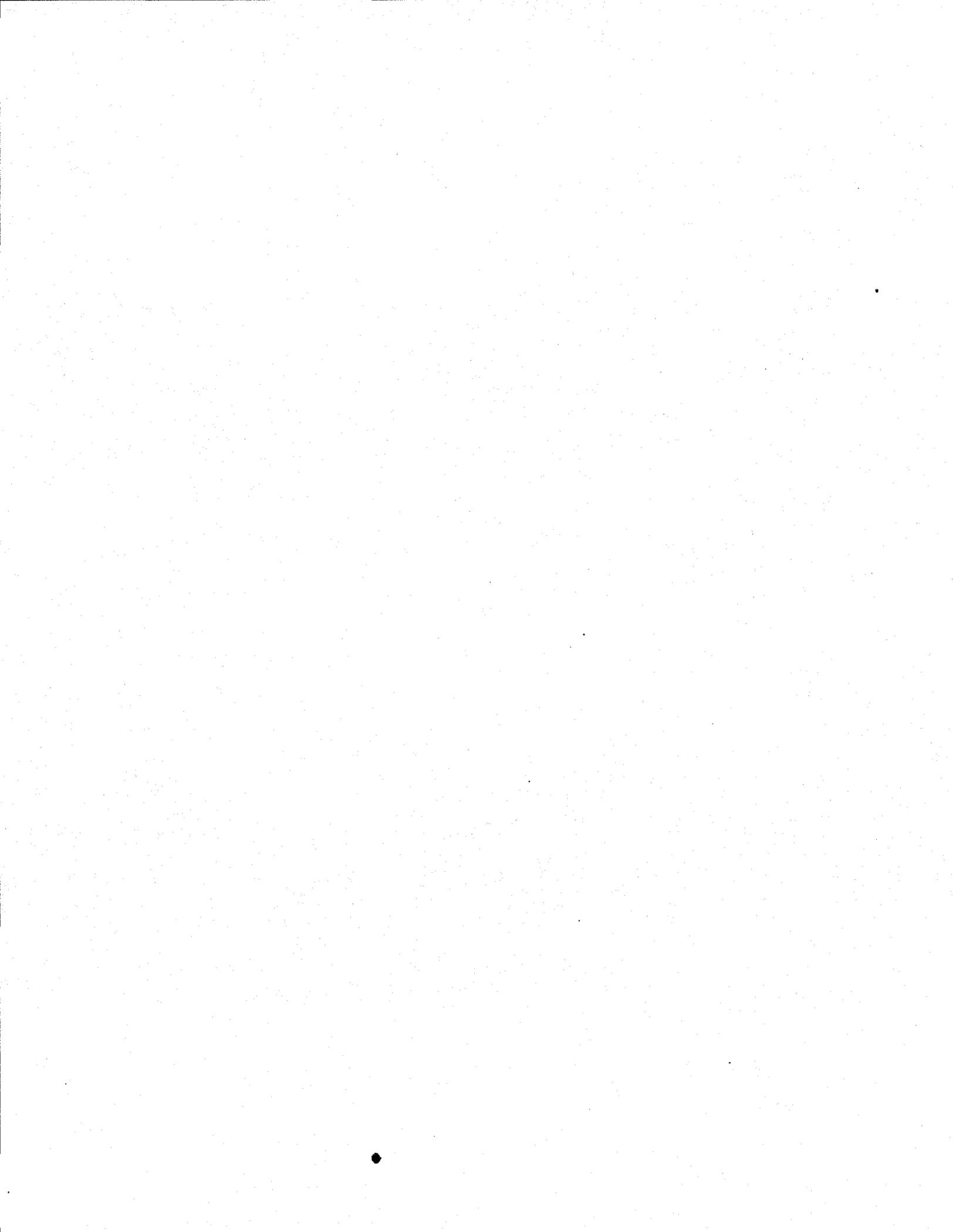
Measured Beta 0.830

Relevered Beta 0.751

[1] Diff. in Beta 0.079

[2] Market Risk Premium (rm-rf) = 4% to 6%

Average Cost of equity impact = [1] x [2] = **0.32% to 0.48%**



ATTACHMENT D

**Equity Risk Premiums (ERP): Determinants, Estimation and
Implications**

September 2008

(with an October update reflecting the market crisis)

Aswath Damodaran

Stern School of Business

adamodar@stern.nyu.edu

Equity Risk Premiums (ERP): Determinants, Estimation and Implications

Equity risk premiums are a central component of every risk and return model in finance and are a key input into estimating costs of equity and capital in both corporate finance and valuation. Given their importance, it is surprising how haphazard the estimation of equity risk premiums remains in practice. In the standard approach to estimating equity risk premiums, historical returns are used, with the difference in annual returns on stocks versus bonds over a long time period comprising the expected risk premium. We note the limitations of this approach, even in markets like the United States, which have long periods of historical data available, and its complete failure in emerging markets, where the historical data tends to be limited and volatile. We look at two other approaches to estimating equity risk premiums – the survey approach, where investors and managers are asked to assess the risk premium and the implied approach, where a forward-looking estimate of the premium is estimated using either current equity prices or risk premiums in non-equity markets. We close the paper by examining why different approaches yield different values for the equity risk premium, and how to choose the “right” number to use in analysis. (In an addendum, we also look at equity risk premiums during the market crisis, starting on September 12, 2008 through October 16, 2008.)

This regression reinforces the view that equity risk premiums should not be constants but should be linked to the level of interest rates, at the minimum, and perhaps even to the slope of the yield curve. In September 2008, for instance, when the 10-year treasury bond rate was 3.55% and the 6-month treasury bill rate was at 2.4%, the implied equity risk premium would have been computed as follows:

$$\text{Implied ERP} = 1.93\% + 0.371 (3.55\%) - .111 (3.55\% - 2.4\%) = 3.12\%$$

This would have been well below the observed implied equity risk premium of about 4.54% and the average implied equity risk premium of 4% between 1960 and 2008.

While we have considered only interest rates in this analysis, it can be expanded to include other fundamental variables including measures of overall economic growth (such as expected growth in the GDP), exchange rates and even measures of risk aversion.

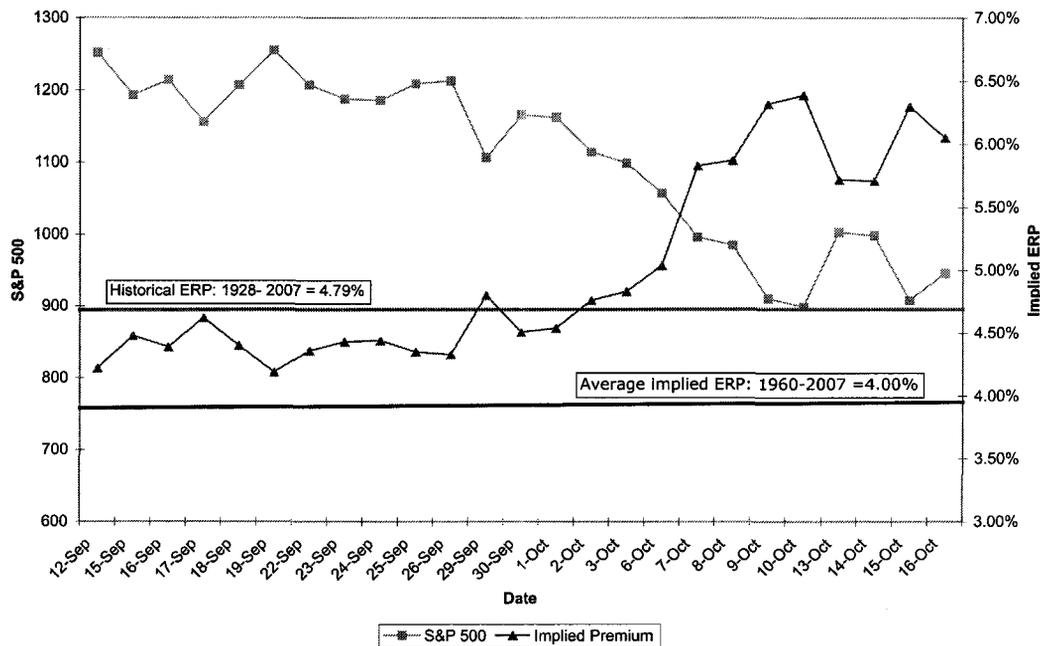
Implied Equity Risk Premiums during a Market Crisis – 9/15/08 to 10/16/08

When we use historical risk premiums, we are, in effect, assuming that equity risk premiums do not change much over short periods and revert back over time to historical averages. This assumption was viewed as reasonable for mature equity markets like the United States, but was put under a severe test during the market crisis that unfolded with the fall of Lehman Brothers on September 15, and the subsequent collapse of equity markets, first in the US, and then globally.

Since implied equity risk premiums reflect the current level of the index, the 22 trading days between September 15, 2008, and October 16, 2008, offer us an unprecedented opportunity to observe how much the price charged for risk can change over short periods. In figure 7A, we depict the S&P 500 on one axis and the implied equity risk premium on the other. To estimate the latter, we used the level of the index and the treasury bond rate at the end of each day and used the total dollar dividends and buybacks over the trailing 12 months to compute the total yield. For example, the total dollar dividends and buybacks on the index for the trailing 12 months of 52.58 resulted in a dividend yield of 4.20% on September 12 (when the index closed at 1252) but jumped to 4.97% on October 6, when the index closed at 1057.⁷¹

⁷¹ It is possible, and maybe even likely, that the banking crisis and resulting economic slowdown was leading some companies to reassess policies on buybacks. Alcoa, for instance, announced that it was terminating stock buybacks. However, other companies stepped up buybacks in response to lower stock prices. If the total cash return was dropping, as the market was, the implied equity risk premiums should be lower than the numbers that we have computed.

Figure 7A: Implied Equity Risk Premium - 9/12- 10/16



In a period of a month, the implied equity risk premium rose from 4.20% on September 12 to 6.39% at the close of trading of October 10. Even more disconcertingly, there were wide swings in the equity risk premium within a day; in the last trading hour just on October 10, the implied equity risk premium ranged from a high of 6.6% to a low of 6.1%.

There are two ways in which we can view this volatility. On the one side, proponents of using historical averages (either of actual or implied premiums) will use the day-to-day volatility in market risk premiums to argue for the stability of historical averages. They are implicitly assuming that when the crisis passes, markets will return to the status quo. On the other hand, there will be many who point to the unprecedented jump in implied premiums over a four-week period and note the danger of sticking with a “fixed” premium. They will argue that there are sometimes structural shifts in markets, i.e. big events that change market risk premiums for long periods, and that we should be therefore modifying the risk premiums that we use in valuation as the market changes around us.

There is one final point to be made about the changes in risk premiums during this crisis. The volatility captured in figure 7A was not restricted to just the US equity markets. Global equity markets gyrated with and sometimes more than the US, default spreads widened considerably in corporate bond markets, commercial paper and LIBOR

rates soared while the 3-month treasury bill rate dropped close to zero and the implied volatility in option markets rose to levels never seen before. Gold surged but other commodities, such as oil and grains, dropped. Not only did we discover how intertwined equity markets are around the globe but also how markets for all risky assets are tied together. We will explicitly consider these linkages as we go through the rest of the paper.

Extensions of Implied Equity Risk Premium

The practice of backing out risk premiums from current prices and expected cashflows is a flexible one. It can be expanded into emerging markets to provide estimates of risk premiums that can replace the country risk premiums we developed in the last section. Within an equity market, it can be used to compute implied equity risk premiums for individual sectors or even classes of companies.

a. Other Equity Markets

The advantage of the implied premium approach is that it is market-driven and current, and does not require any historical data. Thus, it can be used to estimate implied equity premiums in any market, no matter how short its history. It is, however, bounded by whether the model used for the valuation is the right one and the availability and reliability of the inputs to that model. Earlier in this paper, we estimated country risk premiums for Brazil, using default spreads and equity market volatility. To provide a contrast, we estimated the implied equity risk premium for the Brazilian equity market in September 2008, from the following inputs.

- The index (Bovespa) was trading at 48,345 on September 9, 2008, and the dividend yield on the index over the previous 12 months was approximately 2%. While stock buybacks represented negligible cash flows, we did compute the FCFE for companies in the index, and the aggregate FCFE yield across the companies was 5.41%.
- Earnings in companies in the index are expected to grow 9% (in US dollar terms) over the next 5 years, and 3.80% (set equal to the treasury bond rate) thereafter.
- The riskfree rate is the US 10-year treasury bond rate of 3.80%.

The time line of cash flows is shown below:

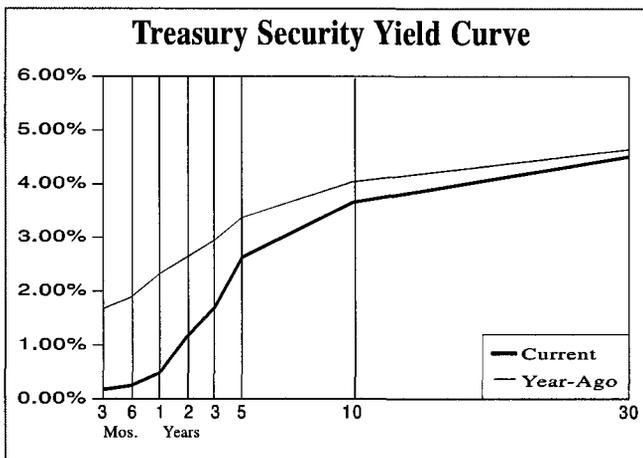
$$48,345 = \frac{2,853}{(1+r)} + \frac{3,109}{(1+r)^2} + \frac{3,389}{(1+r)^3} + \frac{3,694}{(1+r)^4} + \frac{4,027}{(1+r)^5} + \frac{4,027(1.038)}{(r-.038)(1+r)^5}$$

These inputs yield a required return on equity of 10.78%, which when compared to the treasury bond rate of 3.80% on that day results in an implied equity premium of 6.98%.

ATTACHMENT E

Selected Yields

	Recent (7/29/09)	3 Months Ago (4/29/09)	Year Ago (7/30/08)		Recent (7/29/09)	3 Months Ago (4/29/09)	Year Ago (7/30/08)
TAXABLE							
Market Rates							
Discount Rate	0.50	0.50	2.25	Mortgage-Backed Securities			
Federal Funds	0.00-0.25	0.00-0.25	2.00	GNMA 6.5%	3.70	3.30	5.53
Prime Rate	3.25	3.25	5.00	FHLMC 6.5% (Gold)	2.82	2.61	5.68
30-day CP (A1/P1)	0.27	0.40	2.72	FNMA 6.5%	2.64	2.45	5.53
3-month LIBOR	0.49	1.03	2.80	FNMA ARM	2.98	3.15	4.12
Bank CDs							
6-month	0.56	0.79	1.59	Corporate Bonds			
1-year	0.83	0.98	2.11	Financial (10-year) A	6.95	7.84	6.38
5-year	1.90	1.93	4.16	Industrial (25/30-year) A	6.02	6.41	6.32
U.S. Treasury Securities							
3-month	0.18	0.09	1.68	Utility (25/30-year) A	5.79	6.33	6.31
6-month	0.25	0.28	1.89	Utility (25/30-year) Baa/BBB	7.14	7.58	6.78
1-year	0.48	0.46	2.32	Foreign Bonds (10-Year)			
5-year	2.63	2.03	3.37	Canada	3.53	3.08	3.82
10-year	3.66	3.11	4.04	Germany	3.42	3.13	4.42
10-year (inflation-protected)	1.84	1.57	1.63	Japan	1.38	1.42	1.53
30-year	4.51	4.03	4.65	United Kingdom	3.97	3.46	4.85
30-year Zero	4.61	4.05	4.69	Preferred Stocks			
				Utility A	5.71	7.53	6.12
				Financial A	6.30	8.96	7.06
				Financial Adjustable A	5.50	5.50	5.50



TAX-EXEMPT

	Recent (7/29/09)	3 Months Ago (4/29/09)	Year Ago (7/30/08)
Bond Buyer Indexes			
20-Bond Index (GOs)	4.69	4.57	4.77
25-Bond Index (Revs)	5.67	5.49	5.23
General Obligation Bonds (GOs)			
1-year Aaa	0.42	0.54	1.52
1-year A	1.12	1.04	1.62
5-year Aaa	1.77	1.80	3.08
5-year A	3.17	2.23	3.18
10-year Aaa	3.03	3.19	3.82
10-year A	4.55	3.55	4.02
25/30-year Aaa	4.72	4.67	4.78
25/30-year A	6.23	5.11	5.13
Revenue Bonds (Revs) (25/30-Year)			
Education AA	6.10	5.80	4.90
Electric AA	6.15	5.90	4.85
Housing AA	6.55	6.20	5.15
Hospital AA	6.50	6.15	5.25
Toll Road Aaa	6.10	5.95	4.85

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	7/15/09	7/1/09	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	743862	687737	56125	796972	764128	530566
Borrowed Reserves	387829	404097	-16268	482271	534612	488935
Net Free/Borrowed Reserves	356033	283640	72393	314701	229517	41631

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	7/13/09	7/6/09	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1657.7	1653.8	3.9	22.0%	7.0%	17.7%
M2 (M1+savings+small time deposits)	8333.7	8348.7	-15.0	3.4%	2.9%	8.0%

ATTACHMENT F

Water Utility providers have fared pretty well of late, with increasingly favorable regulatory backing boosting revenues and driving strong bottom-line advances in the first quarter. Additional improvements are likely to evolve on the regulatory front and should enable most in this space to maintain their recent earnings momentum throughout the remainder of the year.

Nevertheless, these stocks, although up, have lost some of their luster since our April report. Indeed, the group, as a whole, has fallen from the upper echelon of the *Value Line Investment* universe for Timeliness, as the broader market showed some glimpses of rallying, and now sports an average rank.

But it still may be an area of interest for investors. Despite the recent spurts of price momentum, the market remains extremely volatile overall. The tough macroeconomic environment creates a difficult backdrop, which ought to favor industries that are perceived as relative safe havens, a trait typically exemplified by water utilities' historically steady dividend growth.

Financing issues raise some concerns, longer-term, however, and limit the group's 3- to 5-year appeal. In fact, not a single stock in this industry stands out for 3- to 5-year appreciation potential, as rising infrastructure costs threaten to erase the bulk of future profit advances.

A Swimmily Refreshing Backdrop

There is no way around it, water is a necessity of life. As a result, water providers are vital as well, especially since reports show that the world's fresh water supply is limited and likely to dry up sooner than many were originally anticipating.

Meanwhile, many once antagonistic state regulatory commissions have changed their stances and have become more business friendly in recent times. This is extremely important as these regulatory authorities, which were put in place to help maintain a balance of power between customers and providers and to ensure fair business practices, are responsible for reviewing and ruling on general rate requests made by utilities to help recover costs. Decisions have been more timely and favorable of late and should only get better now that some states have enacted additional mechanisms that reduce outside influences (such as weather) on usage

Composite Statistics: Water Utility Industry							
2005	2006	2007	2008	2009	2010		12-14
1256.9	3454.1	3702.5	3915	4250	4500	Revenues (\$mill)	5425
148.2	d5.8	d183.0	420	435	475	Net Profit (\$mill)	650
40.5%	NMF	NMF	37.0%	38.0%	39.0%	Income Tax Rate	40.0%
1.1%	NMF	NMF	8.0%	10.0%	10.0%	AFUDC % to Net Profit	10.0%
50.4%	54.0%	51.0%	55.0%	53.0%	50.0%	Long-Term Debt Ratio	50.0%
49.5%	45.9%	49.0%	45.0%	47.0%	50.0%	Common Equity Ratio	50.0%
3053.8	12113.9	12985.9	13875	14600	15875	Total Capital (\$mill)	18250
4200.7	13308.3	14315.2	15350	16100	16850	Net Plant (\$mill)	19000
6.3%	1.6%	.2%	4.0%	4.0%	4.0%	Return on Total Cap'l	5.0%
9.8%	NMF	NMF	6.5%	6.5%	6.0%	Return on Shr. Equity	7.0%
9.8%	NMF	NMF	6.5%	6.5%	6.0%	Return on Com Equity	7.0%
3.7%	NMF	NMF	3.0%	3.5%	3.5%	Retained to Com Eq	4.0%
62%	NMF	NMF	65%	65%	62%	All Div'ds to Net Prof	60%
29.4	NMF	NMF				Avg Ann'l P/E Ratio	20.0
1.57	NMF	NMF				Relative P/E Ratio	1.35
2.1%	2.0%	2.3%				Avg Ann'l Div'd Yield	2.3%

Bold figures are Value Line estimates

INDUSTRY TIMELINESS: 45 (of 99)

rates. Such initiatives are likely to enable companies to better recover unforeseen expenses, and thus deliver steadier financial results.

Oceans of Costs

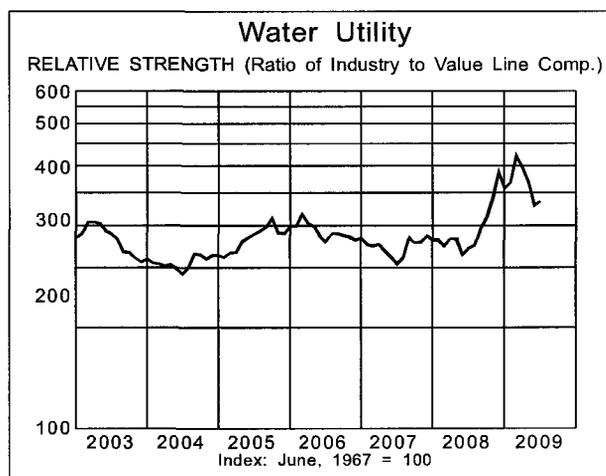
Nevertheless, the water utilities is an increasingly capital intensive industry. Many infrastructures are outdated and will require heavy investment in order to make the necessary repairs. Greater EPA requirements only make things more difficult, as infrastructure costs are estimated at hundreds of millions of dollars over the next decade.

Cash is at a premium in this space, however, with most companies sporting highly leveraged balance sheets and nominal cash reserves. That said, debt and stock issuances have become, and are likely to remain, commonplace as providers struggle to foot the bill. Unfortunately, the increased costs associated with such financial undertakings, i.e. steeper interest rates and higher share counts, are likely to dilute share earnings growth as well as shareholder gains. Those able to raise capital may well benefit from the plethora of acquisition targets that have emerged.

Conclusion

Although the stocks in this group do not stand out either for the coming six to 12 months or the 3- to 5-year pull, investors with a cautious bent may want to have a closer look. Water utilities will probably be a far more stable place to be if the market remains volatile, a fair bet given the glum economic indicators that have continued to come out. The current dividend yield of *California Water Services* is particularly interesting as is the future growth prospects of *Aqua America*, whose aggressive M&A strategy may well prove current projections modest. *American Water Works* is another interesting candidate, although its short trading history and parent company's control issues should scare off the risk averse. That said, as always, we advise investors to carefully review the pages of the individual stocks before making any financial commitments.

Andre J. Costanza



ATTACHMENT G

Roger A. Morin, PhD

NEW FACTORY FINANCE

Public Utilities Reports, Inc.



DCF Growth Rate Check

As a reasonableness check on the DCF growth rate, the growth rate in dividends can be verified using the following relationship:¹⁶

$$\text{Dividend Growth} = \text{Risk-free Return} + \text{Risk Premium} - \text{Dividend Yield}$$

For example, let us say that the yield on Treasury bonds as a proxy for the risk-free return is 5%, the utility risk premium is 5.5% derived from a Capital Asset Pricing Model (CAPM) analysis discussed in earlier chapters, and the expected dividend yield for the utility industry is 4.5%. Substituting these values in the above relationship, we obtain a dividend growth expectation of 6.0% as follows:

$$\text{Dividend Growth} = 5.0\% + 5.5\% - 4.5\% = 6.0\%$$

9.6 Growth in the Non-Constant DCF Model

Although the constant growth DCF model does have a long history, analysts, practitioners, and academics have come to recognize that it is not applicable in many situations. A multiple-stage DCF model that better mirrors the pattern of future dividend growth is preferable. There is a growing consensus and ample empirical support that the best place to start is with security analysts' forecasts, that is, assume that dividend policy is relatively constant and use analyst forecasts of earnings growth as a proxy for dividend forecasts. The problem is that from the standpoint of the DCF model that extends into perpetuity, analysts' horizons are too short, typically five years. It is often unrealistic for such growth to continue into perpetuity. A transition must occur between the first stage of growth forecast by analysts for the first five years and the company's long-term sustainable growth rate. Accordingly, multiple-stage DCF models of this transition are available and were described in Chapter 8. It is useful to remember that eventually all company growth rates, especially utility services growth rates, converge to a level consistent with the growth rate of the aggregate economy.

A reasonable alternative to the constant growth DCF model is to use a multiple-stage DCF model that more appropriately captures the path of future dividend

¹⁶ Equating the expected return from the standard DCF equation and the required return from the CAPM equation:

$$\begin{aligned} K &= D_1/P + g = R_f + \text{Risk Premium} \\ K &= D_1/P + g = R_f + \beta(R_m - R_f) \text{ from the CAPM} \end{aligned}$$

Solving for g:

$$g = R_f + \beta(R_m - R_f) - D_1/P$$

ARIZONA WATER COMPANY

DOCKET NO. W-01445A-08-0440

**SURREBUTTAL TESTIMONY
ON REQUIRED REVENUE**

OF

TIMOTHY J. COLEY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

AUGUST 7, 2009

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1 **INTRODUCTION**

2 Q. Please state your name for the record.

3 A. My name is Timothy J. Coley.

4

5 Q. Have you previously filed testimony regarding this docket?

6 A. Yes, I have. I filed direct testimony in this docket on June 12, 2009.

7

8 Q. What is the purpose of your surrebuttal testimony?

9 A. My surrebuttal testimony will address the Company's rebuttal comments
10 and non-responses pertaining to adjustments I recommended in my direct
11 testimony.

12

13 **SUMMARY OF ADJUSTMENTS**

14 Q. What areas will you address in your surrebuttal testimony?

15 A. My surrebuttal testimony will address RUCO's recommended rate base
16 adjustments and other issues for the following three groups for Arizona
17 Water Company's (hereafter referred to as "AWC" or "Company")
18 seventeen water systems:

19

20

21

22 ...

23

	<u>Eastern Group</u>	<u>Western Group</u>	<u>Northern Group</u>
1			
2	Superstition	Casa Grande	Lakeside
3	Bisbee	Stanfield	Overgaard
4	Sierra Vista	White Tank	Sedona
5	San Manuel	Ajo	Pinewood
6	Oracle	Coolidge	Rimrock
7	Winkleman		
8	Miami		
9			

10 For revenue requirement purposes, RUCO analyzed each system on a
11 stand-alone basis. Mr. William A. Rigsby will address RUCO's surrebuttal
12 operating income adjustments and cost of capital recommendations.
13 RUCO Director, Ms. Jodi A. Jerich, will file testimony regarding RUCO's
14 rate design on August 12, 2009.

15
16 **SURREBUTTAL RATE BASE ADJUSTMENTS TO THE EASTERN,
17 WESTERN, AND NORTHERN GROUPS:**

18 Surrebuttal Adjustment No. 1 – Utility Plant in Service (“UPIS”) and
19 Accumulated Depreciation Manual Reconstruction;

20
21 Surrebuttal Adjustment No. 2 – Remove RUCO's Post Test Year Phoenix
22 Office Plant Direct Adjustment;

23 ...

1 Surrebuttal Adjustment No. 3 – Remove Plant Held for Future Use
2 (“PHFFU”) and Record Certain Retirements;

3
4 Surrebuttal Adjustment No. 4 – Miscellaneous Adjustment for Three
5 Systems (Casa Grande, Pinewood, and Sedona);

6
7 Surrebuttal Adjustment No. 5 – To Account for Customer Deposits in Rate
8 Base (except for the Sedona System, which removed a Post Test Year
9 Arizona Department of Transportation Project);

10
11 Surrebuttal Adjustment No. 6 – Working Capital Adjustment (except for the
12 Sedona System, which accounted for the Customer Deposits in rate
13 base);

14
15 Surrebuttal Adjustment No. 7 – Working Capital Adjustment (unique to the
16 Sedona System only).

17
18 **OTHER ISSUES:**

19 Oracle System Depreciation Expense

20 There is an error in the Company’s depreciation expense calculation for
21 the Oracle System that will be discussed in detail later in this testimony.

22

23

1 **SURREBUTTAL SUPPORTING SCHEDULES**

2 To support the adjustments in my surrebuttal testimony, I am presenting
3 Surrebuttal Schedules numbered SURR TJC & WAR-1, pages 1 and 2,
4 SURR TJC & WAR-2, SURR TJC & WAR-3, SURR TJC & WAR-7, SURR
5 TJC & WAR-8, and SURR TJC & WAR-15, which are filed concurrently in
6 my surrebuttal testimony.

7

8 **ORIGINAL COST RATE BASE (“OCRB”) ADJUSTMENTS**

9 RUCO Surrebuttal OCRB Adjustment No. 1 – Utility Plant in Service
10 (“UPIS”) and Accumulated Depreciation

11 Q. Please briefly summarize your surrebuttal rate base adjustment #1.

12 A. This adjustment is common to all systems and reflects RUCO’s
13 recommended UPIS and accumulated depreciation balances since the
14 last rate case for each Group. I started with the last Commission
15 approved balance and reconstructed all plant additions, retirements, and
16 adjustments at the approved depreciation rates.

17

18 Q. Did the Company respond in rebuttal to RUCO regarding this adjustment?

19 A. No.

20

21

22 ...

23

1 Q. Does RUCO maintain that this adjustment is a proper recommendation?

2 A. Yes. The Company performed the same analysis as RUCO with similar
3 results but did not make the necessary adjustments that resulted from the
4 analysis.

5

6 Q. Does RUCO provide the adjustments in its surrebuttal testimony and
7 schedules?

8 A. Yes. The adjustments are on Schedule TJC-2 and WAR-2. The
9 supporting details are on Schedules TJC-3 and WAR-3.

10

11 RUCO Rate Base Adjustment #2 – Remove Post-Test Year Phoenix
12 Office Plant

13 Q. Please explain RUCO surrebuttal rate base adjustment #2.

14 A. RUCO reversed its direct testimony adjustment #2 pertaining to Phoenix
15 Office post-test year plant.

16

17 Q. Does RUCO no longer recommend removing the post-test year plant
18 associated with the Phoenix Office?

19 A. That is correct.

20

21

22 ...

23

1 Q. What reason(s) does RUCO give in reversing its adjustment to the post-
2 test year Phoenix Office plant?

3 A. RUCO determined that the post-test year plant related to the Phoenix
4 Office went into service two days after the test year.

5

6 Q. Doesn't RUCO normally oppose post-test year plant as creating
7 mismatches with other test year ratemaking elements?

8 A. Yes. RUCO believes mismatches of ratemaking elements do exist when
9 post-test year plant is allowed in the historical test year. However, in this
10 instance, RUCO makes exception because the plant went into service two
11 days after the test year.

12

13 RUCO Rate Base Adjustment #3 – Remove Plant Held for Future Use
14 ("PHFFU") and Record Certain Retirements

15 Q. Please briefly explain the basis of RUCO surrebuttal rate base adjustment
16 #3.

17 A. The basis of this adjustment derived from information the Company
18 provided in Staff data request BKB 11.16, which identified certain PHFFU
19 and retirements that the Company failed to record, which were included in
20 its rate application. This adjustment is simply a conforming adjustment to
21 that data response to properly account for those plant items.

22 ...

1 Q. Does the Company agree with this adjustment to remove PHFFU from
2 UPIS and to account for the retirements accordingly?

3 A. The Company agrees with the appropriate recording to account for the
4 retirements.

5

6 Q. What is the Company's position regarding the PHFFU?

7 A. The Company is requesting the PHFFU be rate based in this proceeding,
8 with the exception of the Carroll Canyon well in the Sedona System.

9

10 Q. What reason does the Company give to support its request that the plant
11 be rate based in this proceeding?

12 A. The Company essentially says that it has definitive plans for the plant in
13 question.

14

15 Q. Is the PHFFU providing service to the existing customers today?

16 A. Not to my knowledge.

17

18 Q. Did the Company provide any time frame as to when the plant in question
19 would be placed into service?

20 A. Yes. A Company engineering witness provided rebuttal testimony
21 indicating that the plant would be placed in service any where from 2010
22 to 2012.

23 ...

1 Q. Isn't 2010 and 2012 three to five years after the test year?

2 A. Yes.

3

4 Q. What reason(s) did the Company engineering witness provide for the long
5 delays in placing the plant in service?

6 A. The Company stated repeatedly "Due to the Company's deteriorated
7 earnings, this project has been temporarily delayed. The Company plans
8 to move forward with this project in the future when earnings and the
9 housing market improve."

10

11 Q. Does RUCO consider that response to be a bit speculative?

12 A. Yes. The Company claims in rebuttal testimony that if either RUCO or
13 Staff's revenue requirement recommendations were adopted by the
14 Commission in this proceeding the Company would essentially be in the
15 same financial position that led it to file this rate application (See Company
16 Exhibit JMR-RB1). Secondly, no one is certain when the housing market
17 will improve. Clearly, the Carroll Canyon well is not used and useful either
18 during the test year or at present.

19

20 Q. Did Staff make a similar adjustment in its direct testimony schedules?

21 A. Yes. The only difference between RUCO and Staff is a slight difference in
22 the amount of the adjustments. The difference is due to some plant
23 RUCO identified as being in service whereas Staff did not.

1 Q. What is RUCO's recommendation regarding the PHFFU?

2 A. Notwithstanding the Company's three to five year "definitive" plans, RUCO
3 recommends the Commission not allow rate base treatment for the
4 PHFFU as shown in RUCO's surrebuttal adjustment #3. The adjustments
5 are on Schedule TJC-2 and WAR-2. The supporting details are on
6 Schedules TJC-3 and WAR-3.

7

8 RUCO Rate Base Adjustment #4 – Remove Other Post Test Year Plant in
9 Pinewood/Sedona Systems and Adjust Net Regulatory Asset in Casa
10 Grande

11

12 Pinewood System

13 Q. Please explain RUCO's surrebuttal rate base adjustment #4 that removes
14 post-test year plant from the Pinewood System?

15 A. This adjustment removes an electrical panel box from the Pinewood
16 System that was not in service, to my knowledge, at the time of this
17 writing.

18

19 Q. Does that mean that this particular post test year plant was not in service
20 clearly one and a half years after the test year ended?

21 A. That is correct.

22

23 ...

1 Q. What is the Company's reason for requesting rate base treatment for plant
2 that was placed into service eighteen months after the test year?

3 A. AWC claims that the Company and Arizona Public Service ("APS") have
4 been in some sort of disagreement or misunderstanding regarding the
5 power connection for the electrical panel in question. In rebuttal
6 testimony, the Company stated that APS continues to delay establishing
7 service. However, "APS has informed the Company that the new panels
8 will be energized by July 20, 2009."

9
10 Q. Does RUCO know if APS has established service for the electrical panels
11 in the Pinewood System as stated above?

12 A. No. Neither would it matter in RUCO's recommendation if the electrical
13 panels have been energized as stated above nor if they have not yet been
14 energized.

15
16 Q. Why wouldn't it matter to RUCO if the electrical panels are now energized
17 and in service?

18 A. Post-test year plant is mismatched with the other historical test year
19 ratemaking elements (i.e. revenues, expenses, and other rate base
20 elements) of the test year. Matching is a fundamental principle of
21 accounting and ratemaking. The absence of matching misrepresents the
22 meaning and usefulness of operating income and rate base for measuring
23 the fairness and reasonableness in setting rates. RUCO recognizes that

1 the Commission has allowed post-test year plant in past decisions. In
2 recognition of that fact, RUCO has allowed post-test year plant additions
3 in special circumstances, unusual circumstances, when public safety and
4 health issues are of concern,¹ and when it is reasonably close to the test
5 year end (i.e. six-months post test year).

6

7 Q. Does the Company recognize any parameters or limitations relating to
8 post-test year plant?

9 A. The Company hasn't explicitly stated what its restrictions are regarding
10 post-test year plant in this case. In past AWC rate cases, the Company
11 usually stated that its post-test year plant is revenue neutral and within
12 one year of the year. It is plain that is no longer the case now.

13

14 Q. What recommendation does RUCO make regarding the electrical panels
15 in the Pinewood System?

16 A. RUCO believes the post-test year electrical panels should be disallowed
17 for the reasons previously mentioned. The adjustments are on Schedule
18 WAR-2. The supporting details are on Schedule WAR-3 in RUCO
19 surrebuttal rate base adjustment #4 that decreases UPIS by \$40,553 and
20 decreases accumulated depreciation by \$1,191.

21

¹ RUCO has allowed all arsenic and nitrate post test year plant in this rate proceeding because it constitutes a public health and/or safety concern.

1 Sedona System

2 Please explain RUCO's surrebuttal adjustment #4 that reduces post-test
3 year plant by \$2,011,576 and decreases accumulated depreciation by
4 \$21,940 in the Sedona System.

5 A. This adjustment consists of two post-test year wells. The first well is
6 located in the Valley Vista section of the Sedona System. Its well
7 identification number is #13. As shown on RUCO Exhibit 1, the
8 Company's data response to Staff data request BKB 11.16 designates
9 that this well was "placed in service in November '08." That is more than
10 ten full months after the test year.

11
12 Q. Does post-test year plant that exceeds Arizona's fundamental historical
13 test year concept for ratemaking by more than ten full months not meet
14 RUCO's criteria for allowing post-test year plant?

15 A. It does not meet RUCO's criteria for inclusion in rate base. As stated
16 earlier, RUCO has allowed post-test year plant additions in special
17 circumstances, unusual circumstances, when public safety and health
18 issues are of concern,² and when it is reasonably close to the test year
19 end (i.e. six-months post test year). To stray so far outside the test year,
20 Arizona's use of a historical test year would have to be abandoned.

21

² RUCO has allowed all arsenic and nitrate post-test year plant in this rate proceeding because it constitutes a public health and safety concern.

1 Q. What adjustment is necessary to remove the Valley Vista well #13 that did
2 not enter service until November 2008?

3 A. The necessary adjustment reduces UPIS by \$1,597,759 and reduces
4 accumulated depreciation by \$20,691.

5

6 Q. Did the Company accept RUCO's adjustment to remove the Valley Vista
7 well #13 from UPIS?

8 A. No. Although, the Company did accept the second part of rate base
9 adjustment #4 that removed the Carroll Canyon well from the Sedona
10 System.

11

12 Q. What adjustment was necessary to remove the Carroll Canyon well from
13 the Sedona System?

14 A. The necessary adjustment reduces UPIS by \$413,817 and reduces
15 accumulated depreciation by \$1,249. The adjustments are on Schedule
16 WAR-2. The supporting details are on Schedule WAR-3.

17

18 Casa Grande System

19 Q. Please explain RUCO's surrebuttal adjustment #4 in the Casa Grande
20 System?

21 A. This is a conforming adjustment that the Company accepted from
22 Commission Staff. The Company had improperly amortized a regulatory
23 asset in its rate application.

1 Q. What adjustment was necessary to properly reflect the net balance of the
2 regulatory asset?

3 A. It was necessary to reduce the regulatory asset by \$14,289 to properly
4 reflect the balance of that asset. This reduces the rate base by the same
5 amount. The adjustments are on Schedule TJC-2. The supporting details
6 are on Schedule TJC-3.

7

8 RUCO Rate Base Adjustment #5 – Customer Deposits Except in the
9 Sedona System

10 Q. Please explain RUCO's surrebuttal rate base adjustment #5 for all the
11 systems except the Sedona System.

12 A. This is a conforming adjustment to the Company's acceptance of a Staff
13 adjustment. The Company failed to include the customer deposits in its
14 rate base (B) Schedules. The adjustment includes the customer deposits
15 as a reduction to rate base since the deposits are a non-investor form of
16 capital. The adjustments are on Schedule TJC-2 and WAR-2. The
17 supporting details are on Schedules TJC-3 and WAR-3.

18

19 Q. Please explain RUCO's rate base adjustment #5 for the Sedona System.

20 A. This adjustment removes 35 percent of an Arizona Department of
21 Transportation ("ADOT") post-test year project. RUCO's reason for the
22 adjustment was due to an informal data response to Staff dated May 13,
23 2009. The data response indicated the project was 65 percent complete

1 as of November 2008. RUCO removed the other 35 percent of the
2 Company's post-test year plant adjustment as failing to meet RUCO's
3 criteria for inclusion in rate base in this case.

4

5 Q. Did the Company accept RUCO's rate base adjustment #5 for the Sedona
6 System?

7 A. No.

8

9 Q. Did the Company provide a reason for not accepting RUCO's adjustment
10 to the ADOT post-test year project in the Sedona System?

11 A. Yes. The Company stated, "Like arsenic and nitrate treatment, the costs
12 related to this project were mandated by the government." Therefore, the
13 Company erroneously concluded from my direct testimony that RUCO
14 automatically allows all post-test year plant that is mandated by
15 government.

16

17 Q. Please further clarify RUCO's position regarding post-test year plant that
18 is mandated by the government.

19 A. As stated earlier in my testimony, RUCO allowed all post test year plant in
20 this case that was related to arsenic and nitrate treatment plant for public
21 health and safety reasons. The caveat here regarding the ADOT project
22 is that RUCO does not view this project to be a public health and/or safety

1 Q. What was RUCO's rationale for making the purchased power adjustment
2 shown above to the Company's lead/lag study?

3 A. It was RUCO's understanding that the Company used the last Northern
4 Group rate case lead/lag study. After further review, the Company used
5 the Northern Group's lead/lag study as a starting point and made its own
6 adjustments to it. RUCO believes that a more appropriate starting point
7 would have been the most recent Western Group's lead/lag study.
8 RUCO's purchased power lag days adjustment used the 35.92 lag days
9 that were used in the most recent Western Group case. Upon further
10 review, the Company actually did their own lead/lag study for purchased
11 power expense.

12
13 Q. Please explain why RUCO believes the Western Group's lead/lag study is
14 more appropriate than the Northern Group's in this case.

15 A. The data in the Western Group's lead/lag study is much more current than
16 the Northern Group. The Western Group's lead/lag study was based on a
17 2003 test year whereas the Northern Group's was based on a 1999 test
18 year.

19
20 Q. Does RUCO accept the Company's purchased power expense lag days in
21 surrebuttal testimony?

22 A. Yes. RUCO accepts the Company's 30.87 lag days for all seventeen
23 systems in surrebuttal testimony.

1 Q. What was RUCO's rationale for making the purchased water adjustment
2 shown above to the Company's lead/lag study?

3 A. The Company utilized the same lead days for its lead/lag study for all
4 systems that had purchased water expense. There are five systems
5 (Superstition, Casa Grande, San Manuel, Ajo, and White Tanks) that have
6 considerable purchased water expense while a couple of other systems
7 have marginal purchased water expenses. Two of the systems
8 (Superstition and Casa Grande) purchase Central Arizona Project ("CAP")
9 surface water. San Manuel purchases water from BHP Mining Company.
10 Ajo purchases water from Ajo Improvement District. White Tanks
11 purchases water from Arizona-American Water Company.

12
13 Q. Wouldn't one think that the purchased water expense lead/lag days be
14 different in each system if purchased from different sources rather than
15 the Company's use of (0.11) lead days across all systems?

16 A. Yes. The Superstition and Casa Grande Systems should be quite similar
17 since those two purchase CAP water, but the other three systems should
18 be quite different.

19
20 Q. Did RUCO perform a purchased water expense lead/lag study for the five
21 systems with considerable purchased water expense?

22 A. Yes. RUCO reviewed the purchased water expense invoices of each of
23 the five systems with considerable amount of purchased water.

1 Q. Did the Company accept RUCO's purchased water expense lead/lag
2 days?

3 A. No.

4
5 Q. What reason(s) did the Company give for not accepting the purchased
6 water expense lead/lag days?

7 A. Company witness Mr. Reiker stated, "I found that while he did account for
8 CAP prepayments in the Casa Grande system, he did not account for any
9 water purchased from the CAP in the Superstition system."

10

11 Q. Is Mr. Reiker correct that RUCO overlooked the CAP prepayments?

12 A. Yes, but not entirely. RUCO's lead/lag study for the Superstition System
13 did not contain the CAP prepayments. RUCO requested all purchased
14 water invoices for the five systems. We went through and recorded each
15 invoice at the Company's Phoenix Office that the Company provided to
16 RUCO. Either the Company inadvertently failed to provide the
17 Superstition CAP prepayment invoices or RUCO overlooked them.

18

19 Q. Shouldn't an analyst immediately recognize that the CAP prepayment
20 invoices were missing from the study?

21 A. Yes, in most situations that would be true. However, the Superstition
22 System purchases CAP water and wheels it to the City of Mesa for
23 treatment. Then, Mesa wheels it back into the Superstition distribution

1 system. RUCO accounted for all of the treatment costs and simply
2 assumed that the CAP prepayment costs were captured in the City of
3 Mesa invoices.

4

5 Q. Has RUCO corrected the absence of the CAP prepayments?

6 A. Yes.

7

8 Q. How did RUCO correct for the absence of the CAP prepayments?

9 A. RUCO used the CAP prepayment lead days resulting from the Casa
10 Grande study. As Mr. Reiker rightfully points out, RUCO did account for
11 the CAP prepayments in the Casa Grande System properly. CAP
12 contracts have general terms for payments for all buyers. Therefore, the
13 lead days for the CAP prepayments that result in the number of purchased
14 water expense lead days to be used in the lead/lag study should be very
15 comparable because the terms are the same for both Superstition and
16 Casa Grande.

17

18 Q. What were the purchased water expense lead/lag days for each of the five
19 systems?

20 A. The following lead/lag days resulting from RUCO's study are now as
21 follows:

22 Superstition (40.09)

23 Casa Grande (55.31)

1	Ajo	38.97
2	White Tanks	121.16
3	San Manuel	26.04

4

5 The adjustments are on the respective Schedules TJC-6, page 2.

6

7 Q. Did the Company accept RUCO's lead/lag days for chemical expenses?

8 A. No. After further study and review, RUCO accepts the Company's (18.11)
9 lead days for chemical expenses.

10

11 Q. Did the Company accept RUCO's 30 lead/lag days for other operating and
12 maintenance expenses?

13 A. No. After further study and review, RUCO accepts the Company's (9.27)
14 lead days for other operating and maintenance expenses.

15

16 Q. Did the Company accept RUCO's recommendation to exclude rate case
17 expense from the lead/lag study?

18 A. Yes.

19

20 Q. Did the Company accept RUCO's adjustment to remove the cost of equity
21 from the lead/lag study?

22 A. No. All of RUCO's reasons for not including the cost of equity in the
23 lead/lag study are provided in Coley direct testimony on pages 23-25.

1 Q. Please explain RUCO's surrebuttal rate base adjustment #6 for the
2 Sedona System.

3 A. This adjustment includes the customer deposits in rate base and reduces
4 rate base accordingly. This adjustment is fully explained earlier in rate
5 base adjustment #5.

6

7 RUCO Rate Base Adjustment #7 – Working Capital in the Sedona System

8 Q. Please explain the adjustment to working capital for the Sedona System.

9 A. This adjustment is explained in RUCO rate base adjustment #6.

10

11 **OTHER ISSUES**

12 Q. Please explain any other issues RUCO has with the Company's rate
13 application and rebuttal schedules.

14 A. There is an error in both the Company's direct rate application and rebuttal
15 schedules.

16

17 Q. Please explain the error that exists in the rate application and rebuttal
18 schedules.

19 A. The error exists in the Oracle System and was pointed out to Mr. Reiker
20 via phone conversation. When the Company filed its rebuttal testimony
21 and schedules, the error was not corrected. The Company correctly
22 removes the Saddlebrook System plant in the B Schedules that were
23 recorded in the Oracle System. The Company does not remove the

1 Saddlebrook plant in its C-2 Appendix Schedules when calculating the
2 depreciation expense for the Oracle System. Rather than having a
3 positive pro-forma adjustment for Oracle's depreciation expense, the
4 adjustment should be negative once the Saddlebrook plant balances are
5 removed from Oracle's depreciation schedule.

6

7 Q. Did RUCO make the correct adjustment to properly reflect the plant
8 balances for Oracle excluding the Saddlebrook plant in its depreciation
9 expense schedule?

10 A. There is no special adjustment necessary to account for the error in the
11 Company's schedules. RUCO's total recommended plant balances are
12 the same in its TJC-2 and TJC-11. Whereas, the Company's B-2
13 Schedules for Oracle has a total plant balance of \$6,084,930 and the
14 Company's C-2 Appendix depreciation schedule has a total depreciable
15 plant balance of \$7,071,105, which is a difference of \$986,175. The
16 \$986,175 difference represents the total pro-forma adjustment shown on
17 Company Schedule B-2.

18

19 Q. Does this conclude your surrebuttal testimony?

20 A. Yes, it does.

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

<u>SCH. NO.</u>	<u>PAGE NO.</u>	<u>TITLE</u>
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 43,424,545	\$ 42,476,176
2	Adjusted Operating Income (Loss)	\$ 1,850,403	\$ 1,914,522
3	Current Rate of Return (L2 / L1)	4.26%	4.51%
4	Required Operating Income (L5 X L1)	\$ 4,261,800	\$ 3,113,504
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 2,411,397	\$ 1,198,982
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 3,927,284	\$ 1,952,703
9	Adjusted Test Year Revenue	\$ 11,939,904	\$ 11,939,904
10	Proposed Annual Revenue (L8 + L9)	\$ 15,867,189	\$ 13,892,607
11	Required Percentage Increase in Revenue (L8 / L9)	32.89%	16.35%
12	Consolidated Revenue Adjustment	\$ 937,341	\$ 157,394
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 4,864,542	\$ 2,110,097
14	Required Revenue Under Proposed Consolidation	\$ 16,804,800	\$ 14,050,001
15	Required Percentage Increase in Revenue Under Proposed Consolidation	40.74%	17.67%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 3,113,504			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	1,914,522			
13	Required Increase In Operating Income (L11 - L12)		\$ 1,198,982		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 1,020,016			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	266,295			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 753,721		
17	Total Required Increase In Revenue (L13 + L16)		\$ 1,952,703		
CALCULATION OF INCOME TAX:					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 13,892,607	
20	Synchronized Interest (Col. (C), L37)			9,759,087	
21	Arizona Taxable Income (L18 - L19 - L20)			1,490,914	
22	Arizona State Income Tax Rate			\$ 2,642,606	
23	Arizona Income Tax (L21 X L22)			6.9680%	
24	Fed. Taxable Income (L21 - L23)			\$ 2,458,470	\$ 184,137
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ 7,500	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ 6,250	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ 8,500	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ 91,650	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 721,980	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 835,880
31	Combined Federal and State Income Tax (L23 + L30)				\$ 1,020,016
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 266,295
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				\$ 753,721
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 42,476,176	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 1,490,914	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 12,555	\$ 1	\$ 12,556
2	Source of Supply Plant	5,528,785	(801,061)	4,727,724
3	Pumping Plant	7,692,391	(59,595)	7,632,796
4	Water Treatment Plant	6,885,736	(3,057)	6,882,679
5	Transmission & Distribution Plant	68,915,456	(502)	68,914,955
6	General Plant	4,555,508	(7,089)	4,548,420
7	Total Gross Plant in Service	<u>\$ 93,590,431</u>	<u>\$ (871,303)</u>	<u>\$ 92,719,129</u>
8	Accumulated Depreciation	(17,724,938)	212,613	(17,512,325)
9	Net Utility Plant In Service (Sum L1 & L2)	<u>\$ 75,865,493</u>	<u>\$ (658,690)</u>	<u>\$ 75,206,804</u>
10	Advances In Aid Of Const.	\$ (18,952,520)	\$ -	\$ (18,952,520)
11	Contribution In Aid Of Const.	\$ (10,888,555)	\$ -	\$ (10,888,555)
12	Accumulated Amortization Of CIAC	1,733,417	-	1,733,417
13	NET CIAC (L5 + L6)	<u>\$ (9,155,138)</u>	<u>\$ -</u>	<u>\$ (9,155,138)</u>
14	Deferred Income Tax	\$ (4,779,751)	\$ -	\$ (4,779,751)
15	Customer Deposits	\$ -	\$ (196,185)	\$ (196,185)
16	Allowance For Working Capital	\$ 446,461	\$ (93,495)	\$ 352,966
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	<u>\$ 43,424,545</u>	<u>\$ (948,369)</u>	<u>\$ 42,476,176</u>

References:

Column (A): Company Schedule B-1
Column (B): Schedule RLM-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 12,555	1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,556
3	Source of Supply Plant	5,528,785	(8)	(801,053)	-	-	-	-	4,727,724
4	Pumping Plant	7,692,391	6,292	(65,887)	-	-	-	-	7,632,796
5	Water Treatment Plant	6,885,736	(0)	(3,057)	-	-	-	-	6,882,679
6	Transmission & Distribution Plant	68,915,456	(2)	(500)	-	-	-	-	68,914,955
7	General Plant	4,555,508	(1)	(7,088)	-	-	-	-	4,548,420
8	Total Gross Plant in Service	\$ 93,590,431	\$ 6,282	\$ (877,585)	\$ -	\$ -	\$ -	\$ -	\$ 92,719,129
9	Accumulated Depreciation	\$ (17,724,938)	(22,612)	235,225	-	-	-	-	(17,512,325)
10	Net Utility Plant In Service (Sum L1 & L2)	\$ 75,865,493	\$ (16,330)	\$ (642,360)	\$ -	\$ -	\$ -	\$ -	\$ 75,206,804
11	Advances In Aid Of Const.	\$ (18,952,520)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,952,520)
12	Contribution In Aid Of Const.	\$ (10,888,555)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,888,555)
13	Accumulated Amortization Of CIAC	1,733,417	-	-	-	-	-	-	1,733,417
14	NET CIAC (L5 + L6)	\$ (9,155,138)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (9,155,138)
15	Deferred Income Tax	\$ (4,779,751)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,779,751)
16	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (196,185)	\$ -	\$ (196,185)
17	Allowance For Working Capital	\$ 446,461	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (93,495)	\$ 352,966
18	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 43,424,545	\$ (16,330)	\$ (642,360)	\$ -	\$ -	\$ (196,185)	\$ (93,495)	\$ 42,476,176

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJ'MTS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 8,708,171	\$ -	\$ 8,708,171	\$ 1,952,703	\$ 10,660,874
2	Commercial	2,125,918	-	2,125,918	-	2,125,918
3	Industrial	35,010	-	35,010	-	35,010
4	Private Fire Service	8,293	-	8,293	-	8,293
5	Other Water Revenues	346,347	-	346,347	-	346,347
6	Total Water Revenues	\$ 11,223,738	\$ -	\$ 11,223,738	\$ 1,952,703	\$ 13,176,441
7	Miscellaneous	\$ 716,166	\$ -	\$ 716,166	\$ -	\$ 716,166
8	Total Operating Revenues	\$ 11,939,904	\$ -	\$ 11,939,904	\$ 1,952,703	\$ 13,892,607
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 1,019,696	\$ -	\$ 1,019,696	\$ -	\$ 1,019,696
10	Other	48,540	-	48,540	-	48,540
	Pumping Expenses:					
11	Purchased Power	1,170,704	-	1,170,704	-	1,170,704
12	Purchased Gas	-	-	-	-	-
13	Other	307,004	-	307,004	-	307,004
14	Water Treatment Expenses	389,035	-	389,035	-	389,035
15	Transmission & Distribution Expenses	1,339,694	-	1,339,694	-	1,339,694
16	Customer Accounting Expenses	945,427	-	945,427	-	945,427
17	Sales Expense	5,489	-	5,489	-	5,489
18	Administrative & General Expenses	1,591,413	(57,875)	1,533,538	-	1,533,538
19	Total Operations & Maintenance Expense	\$ 6,817,003	\$ (57,875)	\$ 6,759,128	\$ -	\$ 6,759,128
20	Depreciation & Amortization Expenses	\$ 2,169,209	\$ (50,843)	\$ 2,118,366	\$ -	\$ 2,118,366
	Taxes					
21	Federal Income Taxes	\$ 123,547	\$ 94,676	\$ 218,223	\$ 617,657	\$ 835,880
22	State Income Taxes	27,216	20,856	48,072	136,064	184,137
23	Property Taxes	815,362	(68,099)	747,263	-	747,263
24	Other	137,164	(2,834)	134,330	-	134,330
25	Total Taxes	\$ 1,103,289	\$ 44,599	\$ 1,147,888	\$ 753,721	\$ 1,901,609
26	Total Operating Expenses	\$ 10,089,501	\$ (64,119)	\$ 10,025,382	\$ 753,721	\$ 10,779,103
27	Operating Income	\$ 1,850,403	\$ 64,119	\$ 1,914,522	\$ 1,198,982	\$ 3,113,504

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
 TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues												
2	Residential	\$ 8,708,171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,708,171
3	Commercial	2,125,918	-	-	-	-	-	-	-	-	-	-	2,125,918
4	Industrial	35,010	-	-	-	-	-	-	-	-	-	-	35,010
5	Private Fire Service	8,283	-	-	-	-	-	-	-	-	-	-	8,283
6	Other Water Revenues	346,347	-	-	-	-	-	-	-	-	-	-	346,347
7	Total Water Revenues	\$ 11,223,738	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,223,738
8	Miscellaneous	\$ 716,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 716,166
9	Total Operating Revenues	\$ 11,939,904	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,939,904
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 1,019,686	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,019,686
12	Other	48,540	-	-	-	-	-	-	-	-	-	-	48,540
13	Pumping Expenses:												
14	Purchased Power	1,170,704	-	-	-	-	-	-	-	-	-	-	1,170,704
15	Purchased Gas	-	-	-	-	-	-	-	-	-	-	-	-
16	Other	307,004	-	-	-	-	-	-	-	-	-	-	307,004
17	Water Treatment Expenses	389,035	-	-	-	-	-	-	-	-	-	-	389,035
18	Transmission & Distribution Expenses	1,339,684	-	-	-	-	-	-	-	-	-	-	1,339,684
19	Customer Accounting Expenses	945,427	-	-	-	-	-	-	-	-	-	-	945,427
20	Sales Expense	5,489	-	-	-	-	-	-	-	-	-	-	5,489
21	Administrative & General Expenses	1,581,413	(37,927)	-	(3,184)	-	-	(137)	-	-	(16,627)	-	1,533,538
22	Total Operations & Maintenance Expense	\$ 6,817,003	\$ (37,927)	\$ (2,854)	\$ (3,184)	\$ -	\$ -	\$ (137)	\$ (50,843)	\$ -	\$ (16,627)	\$ -	\$ 6,759,128
23	Depreciation & Amortization Expenses	\$ 2,169,209	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,169,209
24	Taxes												
25	Federal Income Taxes	\$ 123,547	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,676	\$ 218,223
26	State Income Taxes	271,216	-	-	-	-	-	-	-	-	-	20,856	48,072
27	Property Taxes	815,362	-	-	-	-	-	-	-	(68,099)	-	-	747,263
28	Other	137,164	-	(2,854)	-	-	-	-	-	-	-	-	134,310
29	Total Taxes	\$ 1,108,289	\$ (2,854)	\$ (2,854)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (68,099)	\$ -	\$ 115,532	\$ 1,147,988
30	Total Operating Expenses	\$ 10,985,501	\$ (37,927)	\$ (2,854)	\$ (3,184)	\$ -	\$ -	\$ (137)	\$ (50,843)	\$ (68,099)	\$ (16,627)	\$ 115,532	\$ 10,025,392
31	Operating Income	\$ 1,654,403	\$ 37,927	\$ 2,854	\$ 3,184	\$ -	\$ -	\$ 137	\$ 50,843	\$ 68,099	\$ 16,627	\$ (115,532)	\$ 1,914,622

ADJUSTMENTS:
 1- Labor Expenses - Normalize OT Hours in Test Year
 2- Payroll Tax Expense Related to Adjustment 1
 3- 401(K) Expense Related to Adjustment 1
 4- Reverse Adjustment for Conservation
 5- Purchased Power Revenues
 6- Insurance Expense
 7- Depreciation Expense
 8- Property Tax Expense
 9- Rate Case Expense

REFERENCE:
 Testimony, WAR And Schedule TJC-8 Page, 1 of 3
 Testimony, WAR And Schedule TJC-8 Page, 2 of 3
 Testimony, WAR And Schedule TJC-8 Page, 3 of 3
 Testimony WAR
 Testimony WAR
 Testimony, WAR And Schedule TJC-10
 Testimony, WAR And Schedule TJC-11
 Testimony, WAR And Schedule TJC-12
 Testimony, WAR And Schedule TJC-13

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Long-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 4,660,984	\$ 4,622,091
2	Adjusted Operating Income (Loss)	\$ 168,796	\$ 181,625
3	Current Rate of Return (L2 / L1)	3.62%	3.93%
4	Required Operating Income (L5 X L1)	\$ 457,441	\$ 338,799
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 288,646	\$ 157,175
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 470,098	\$ 255,980
9	Adjusted Test Year Revenue	\$ 1,723,475	\$ 1,723,475
10	Proposed Annual Revenue (L8 + L9)	\$ 2,193,573	\$ 1,979,454
11	Required Percentage Increase in Revenue (L8 / L9)	27.28%	14.85%
12	Consolidated Revenue Adjustment	\$ (106,651)	\$ 19,875
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 363,319	\$ 275,855
14	Required Revenue Under Proposed Consolidation	\$ 2,086,472	\$ 1,999,329
15	Required Percentage Increase in Revenue Under Proposed Consolidation	21.08%	16.01%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 338,799			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	<u>181,625</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 157,175		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 110,994			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>12,189</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 98,805		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 255,980</u>		
CALCULATION OF INCOME TAX					
RUCO					
Recommended					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			\$ 1,979,454	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			1,529,661	
20	Synchronized Interest (Col. (C), L37)			<u>162,235</u>	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 287,558	
22	Arizona State Income Tax Rate			<u>6.9680%</u>	
23	Arizona Income Tax (L21 X L22)				\$ 20,037
24	Fed. Taxable Income (L21 - L23)			<u>\$ 267,521</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 90,957	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 90,957
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 110,994</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 12,189
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				<u>\$ 98,805</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 4,622,091	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 162,235</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 43,332	\$ -	\$ 43,332
2	Source of Supply Plant	849,846	-	849,846
3	Pumping Plant	889,639	6,328	895,967
4	Water Treatment Plant	46,503	-	46,503
5	Transmission & Distribution Plant	7,664,743	-	7,664,743
6	General Plant	820,594	(704)	819,890
7	Total Gross Plant in Service	\$ 10,314,658	\$ 5,624	\$ 10,320,281
8	Accumulated Depreciation	(4,218,432)	(10,167)	(4,228,599)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 6,096,226	\$ (4,543)	\$ 6,091,683
10	Advances in Aid Of Const.	\$ (258,981)	\$ -	\$ (258,981)
11	Contribution in Aid of Const.	\$ (452,659)	\$ -	\$ (452,659)
12	Accumulated Amortization of CIAC	106,681	-	106,681
13	NET CIAC (L5 + L6)	\$ (345,978)	\$ -	\$ (345,978)
14	Deferred Income Tax	\$ (954,417)	\$ -	\$ (954,417)
15	Customer Deposits	\$ -	\$ (17,600)	\$ (17,600)
16	Allowance for Working Capital	\$ 124,134	\$ (16,750)	\$ 107,384
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,660,984	\$ (38,893)	\$ 4,622,091

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRB/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 43,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,332
3	Source of Supply Plant	849,846	-	-	-	-	-	-	849,846
4	Pumping Plant	889,639	6,328	-	-	-	-	-	895,967
5	Water Treatment Plant	46,503	-	-	-	-	-	-	46,503
6	Transmission & Distribution Plant	7,664,743	-	-	-	-	-	-	7,664,743
7	General Plant	820,594	-	-	(704)	-	-	-	819,890
8	Total Gross Plant in Service	\$ 10,314,656	\$ 6,328	\$ -	\$ (704)	\$ -	\$ -	\$ -	\$ 10,320,281
9	Accumulated Depreciation	(4,218,432)	(10,913)	-	746	-	-	-	(4,228,599)
10	Net Utility Plant in Service (Sum L1 & L2)	\$ 6,096,226	\$ (4,585)	\$ -	\$ 42	\$ -	\$ -	\$ -	\$ 6,091,683
11	Advances in Aid Of Const.	\$ (258,981)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (258,981)
12	Contribution in Aid of Const.	\$ (452,659)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (452,659)
13	Accumulated Amortization of CIAC NET CIAC (L5 + L6)	\$ 106,681	-	-	-	-	-	-	106,681
14	Deferred Income Tax	\$ (954,417)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (954,417)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (17,600)	\$ -	\$ (17,600)
16	Allowance for Working Capital	\$ 124,134	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (16,750)	\$ 107,384
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,660,984	\$ (4,585)	\$ -	\$ 42	\$ -	\$ (17,600)	\$ (16,750)	\$ 4,622,091

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimony)
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,192,596	\$ -	\$ 1,192,596	\$ 255,980	\$ 1,448,576
2	Commercial	491,700	-	491,700	-	491,700
3	Industrial	2,302	-	2,302	-	2,302
4	Private Fire Service	908	-	908	-	908
5	Other Water Revenues	12,628	-	12,628	-	12,628
6	Total Water Revenues	\$ 1,700,135	\$ -	\$ 1,700,135	\$ 255,980	\$ 1,956,115
7	Miscellaneous	\$ 23,340	\$ -	\$ 23,340	\$ -	\$ 23,340
8	Total Operating Revenues	\$ 1,723,475	\$ -	\$ 1,723,475	\$ 255,980	\$ 1,979,454
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	2,443	-	2,443	-	2,443
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	224,856	-	224,856	-	224,856
13	Purchased Gas	615	-	615	-	615
14	Other	50,077	-	50,077	-	50,077
15	Water Treatment Expenses	32,933	-	32,933	-	32,933
16	Transmission & Distribution Expenses	270,483	-	270,483	-	270,483
17	Customer Accounting Expenses	179,534	-	179,534	-	179,534
18	Sales Expense	529	-	529	-	529
19	Administrative & General Expenses	392,583	(11,551)	381,032	-	381,032
20	Total Operations & Maintenance Expense	\$ 1,154,054	\$ (11,551)	\$ 1,142,502	\$ -	\$ 1,142,502
21	Depreciation & Amortization Expenses	\$ 261,462	\$ (4,015)	\$ 257,447	\$ -	\$ 257,447
	Taxes					
22	Federal Income Taxes	\$ (2,100)	\$ 12,088	\$ 9,988	\$ 80,969	\$ 90,957
23	State Income Taxes	(463)	2,663	2,200	17,837	20,037
24	Property Taxes	114,911	(11,448)	103,463	-	103,463
25	Other	26,815	(566)	26,249	-	26,249
26	Total Taxes	\$ 139,163	\$ 2,737	\$ 141,900	\$ 98,805	\$ 240,706
27	Total Operating Expenses	\$ 1,554,679	\$ (12,829)	\$ 1,541,850	\$ 98,805	\$ 1,640,655
28	Operating Income	\$ 168,796	\$ 12,829	\$ 181,625	\$ 157,175	\$ 338,799

References:

Column (A): Company Schedule C-1
Column (B): TJC-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): TJC-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 1,182,586	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,182,586
3	Commercial	491,700	-	-	-	-	-	-	-	-	-	-	491,700
4	Industrial	2,302	-	-	-	-	-	-	-	-	-	-	2,302
5	Private Fire Service	908	-	-	-	-	-	-	-	-	-	-	908
6	Other Water Revenues	12,628	-	-	-	-	-	-	-	-	-	-	12,628
7	Total Water Revenues	\$ 1,700,135	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,700,135
8	Miscellaneous	\$ 23,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,340
9	Total Operating Revenues	\$ 1,723,475	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,723,475
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Other	2,443	-	-	-	-	-	-	-	-	-	-	2,443
14	Pumping Expenses:												
15	Purchased Power	224,866	-	-	-	-	-	-	-	-	-	-	224,866
16	Purchased Gas	615	-	-	-	-	-	-	-	-	-	-	615
17	Other	50,077	-	-	-	-	-	-	-	-	-	-	50,077
18	Water Treatment Expenses	32,933	-	-	-	-	-	-	-	-	-	-	32,933
19	Transmission & Distribution Expenses	270,483	-	-	-	-	-	-	-	-	-	-	270,483
20	Customer Accounting Expenses	179,534	-	-	-	-	-	-	-	-	-	-	179,534
21	Sales Expense	529	-	-	-	-	-	-	-	-	-	-	529
22	Administrative & General Expenses	392,983	(7,573)	-	(636)	-	-	(23)	-	-	(3,320)	-	391,032
23	Operations & Maintenance Expense	1,154,054	(7,573)	-	(636)	-	-	(23)	-	-	(3,320)	-	1,142,502
24	Depreciation & Amortization Expenses	\$ 261,462	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(4,015)	\$ -	\$ -	\$ -	\$ 257,447
25	Taxes												
26	Federal Income Taxes	\$ (2,100)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,088	\$ 9,988
27	State Income Taxes	(463)	-	-	-	-	-	-	-	-	-	2,200	2,200
28	Property Taxes	114,911	-	-	-	-	-	-	-	(11,448)	-	2,663	103,463
29	Other	28,815	-	(566)	-	-	-	-	-	-	-	-	28,249
30	Total Taxes	\$ 138,163	\$ -	\$ (566)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (11,448)	\$ -	\$ 14,751	\$ 141,900
31	Total Operating Expenses	\$ 1,554,679	\$ (7,573)	\$ (566)	\$ (636)	\$ -	\$ -	\$ (23)	\$ (4,015)	\$ (11,448)	\$ (3,320)	\$ 14,751	\$ 1,541,850
32	Operating Income	\$ 168,796	\$ 7,573	\$ 566	\$ 636	\$ -	\$ -	\$ 23	\$ 4,015	\$ 11,448	\$ 3,320	\$ (14,751)	\$ 181,625

ADJUSTMENTS:

- 1 - Labor Expense - Normalize OT Hours in Test Year
- 2 - Payroll Tax Expense Related to Adjustment 1
- 3 - 401(K) Expense Related to Adjustment 1
- 4 - Reverse Adjustment for Conservation
- 5 - Purchased Power Revenues
- 6 - Insurance Expense
- 7 - Depreciation Expense
- 8 - Property Tax Expense
- 9 - Rate Case Expense
- 10 - Income Tax

REFERENCE:

- 1 - Testimony, WAR And Schedule TJC-9 Page, 1 of 3
- 2 - Testimony, WAR And Schedule TJC-9 Page, 2 of 3
- 3 - Testimony, WAR And Schedule TJC-9 Page, 3 of 3
- 4 - Testimony, WAR And Schedule TJC-9 Page, 3 of 3
- 5 - Testimony, WAR
- 6 - Testimony, WAR
- 7 - Testimony, WAR And Schedule TJC-10
- 8 - Testimony, WAR And Schedule TJC-11
- 9 - Testimony, WAR And Schedule TJC-12
- 10 - Testimony, WAR And Schedule TJC-13
- 11 - Testimony, WAR And Schedule TJC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:
Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 2,520,716	\$ 2,501,385
2	Adjusted Operating Income (Loss)	\$ 275,080	\$ 280,323
3	Current Rate of Return (L2 / L1)	10.91%	11.21%
4	Required Operating Income (L5 X L1)	\$ 247,390	\$ 183,352
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ (27,670)	\$ (96,972)
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ (45,064)	\$ (157,931)
9	Adjusted Test Year Revenue	\$ 1,461,897	\$ 1,461,897
10	Proposed Annual Revenue (L8 + L9)	\$ 1,416,833	\$ 1,303,966
11	Required Percentage Increase in Revenue (L8 / L9)	-3.08%	-10.80%
12	Consolidated Revenue Adjustment	\$ 106,651	17,425
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 61,586	\$ (140,506)
14	Required Revenue Under Proposed Consolidation	\$ 1,523,034	\$ 1,321,391
15	Required Percentage Increase in Revenue Under Proposed Consolidation	4.20%	-9.61%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 183,352			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	<u>280,323</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ (96,972)		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 60,068			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>121,028</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ (60,960)		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ (157,931)</u>		
CALCULATION OF INCOME TAX					
RUCO					
Recommended					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			\$ 1,303,966	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			1,060,547	
20	Synchronized Interest (Col. (C), L37)			<u>87,799</u>	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 155,621	
22	Arizona State Income Tax Rate			<u>6.9680%</u>	
23	Arizona Income Tax (L21 X L22)				\$ 10,844
24	Fed. Taxable Income (L21 - L23)			<u>\$ 144,777</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 49,224	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 49,224
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 60,068</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 121,028
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				<u>\$ (60,960)</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 2,501,385	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 87,799</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) RUCO OCR/B/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCR/B/FVRB
	Plant Classification			
1	Intangible Plant	\$ 756	\$ -	\$ 756
2	Source of Supply Plant	688,417	-	688,417
3	Pumping Plant	719,189	-	719,189
4	Water Treatment Plant	92,922	-	92,922
5	Transmission & Distribution Plant	5,348,207	-	5,348,207
6	General Plant	546,855	-	546,855
7	Total Gross Plant in Service	\$ 7,396,345	\$ -	\$ 7,396,345
8	Accumulated Depreciation	(2,113,607)	6,701	(2,106,905)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 5,282,738	\$ 6,701	\$ 5,289,440
10	Advances in Aid Of Const.	\$ (1,453,186)	\$ -	\$ (1,453,186)
11	Contribution in Aid of Const.	\$ (1,089,317)	\$ -	\$ (1,089,317)
12	Accumulated Amortization of CIAC	226,089	-	226,089
13	NET CIAC (L5 + L6)	\$ (863,228)	\$ -	\$ (863,228)
14	Deferred Income Tax	\$ (494,457)	\$ -	\$ (494,457)
15	Customer Deposits	\$ -	\$ (15,925)	\$ (15,925)
16	Allowance for Working Capital	\$ 48,849	\$ (10,107)	\$ 38,742
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,520,716	\$ (19,331)	\$ 2,501,385

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 756	-	-	\$ -	-	\$ -	-	\$ 756
3	Source of Supply Plant	688,417	-	-	-	-	-	-	688,417
4	Pumping Plant	719,189	-	-	-	-	-	-	719,189
5	Water Treatment Plant	92,922	-	-	-	-	-	-	92,922
6	Transmission & Distribution Plant	5,348,207	-	-	-	-	-	-	5,348,207
7	General Plant	546,855	-	-	-	-	-	-	546,855
7	Total Gross Plant in Service	\$ 7,396,345	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,396,345
8	Accumulated Depreciation	(2,113,607)	6,701	-	-	-	-	-	(2,106,905)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 5,282,738	\$ 6,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,289,440
10	Advances in Aid Of Const.	\$ (1,453,186)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,453,186)
11	Contribution in Aid of Const.	\$ (1,089,317)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,089,317)
12	Accumulated Amortization of CIAC	226,089	-	-	-	-	-	-	226,089
13	NET CIAC (L5 + L6)	\$ (863,228)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (863,228)
14	Deferred Income Tax	\$ (494,457)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (494,457)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (15,925)	\$ -	\$ (15,925)
16	Allowance for Working Capital	\$ 48,849	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,107)	\$ 38,742
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,520,716	\$ 6,701	\$ -	\$ -	\$ -	\$ (15,925)	\$ (10,107)	\$ 2,501,385

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Intentionally Left Blank
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJ'M'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,067,828	\$ -	\$ 1,067,828	\$ (157,931)	\$ 909,896
2	Commercial	346,169	-	346,169	-	346,169
3	Industrial	-	-	-	-	-
4	Private Fire Service	1,924	-	1,924	-	1,924
5	Other Water Revenues	29,331	-	29,331	-	29,331
6	Total Water Revenues	\$ 1,445,253	\$ -	\$ 1,445,253	\$ (157,931)	\$ 1,287,321
7	Miscellaneous	\$ 16,645	\$ -	\$ 16,645	\$ -	\$ 16,645
8	Total Operating Revenues	\$ 1,461,897	\$ -	\$ 1,461,897	\$ (157,931)	\$ 1,303,966
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	2,096	-	2,096	-	2,096
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	220,661	-	220,661	-	220,661
13	Purchased Gas	698	-	698	-	698
14	Other	46,020	-	46,020	-	46,020
15	Water Treatment Expenses	22,454	-	22,454	-	22,454
16	Transmission & Distribution Expenses	213,548	-	213,548	-	213,548
17	Customer Accounting Expenses	134,508	-	134,508	-	134,508
18	Sales Expense	275	-	275	-	275
19	Administrative & General Expenses	152,251	(5,992)	146,259	-	146,259
20	Total Operations & Maintenance Expense	\$ 792,510	\$ (5,992)	\$ 786,518	\$ -	\$ 786,518
21	Depreciation & Amortization Expenses	\$ 186,533	\$ (2,248)	\$ 184,285	\$ -	\$ 184,285
	Taxes					
22	Federal Income Taxes	\$ 93,535	\$ 5,644	\$ 99,179	\$ (49,955)	\$ 49,224
23	State Income Taxes	20,605	1,243	21,848	(11,005)	10,844
24	Property Taxes	80,115	(3,618)	76,497	-	76,497
25	Other	13,539	(293)	13,246	-	13,246
26	Total Taxes	\$ 207,794	\$ 2,976	\$ 210,771	\$ (60,960)	\$ 149,811
27	Total Operating Expenses	\$ 1,186,838	\$ (5,263)	\$ 1,181,574	\$ (60,960)	\$ 1,120,615
28	Operating Income	\$ 275,060	\$ 5,263	\$ 280,323	\$ (96,972)	\$ 183,352

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues	\$ 1,087,828											\$ 1,087,828
2	Residential	346,169											346,169
3	Commercial	-											-
4	Industrial	1,924											1,924
5	Private Fire Service	28,331											28,331
6	Other Water Revenues	\$ 1,445,253											\$ 1,445,253
7	Total Water Revenues	\$ 16,845											\$ 16,845
8	Miscellaneous	\$ 1,461,887											\$ 1,461,887
9	Total Operating Revenues												
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 2,086											\$ 2,086
12	Other												
13	Pumping Expenses:	220,681											220,681
14	Purchased Power	688											688
15	Purchased Gas	46,020											46,020
16	Other	22,454											22,454
17	Water Treatment Expenses	213,548											213,548
18	Transmission & Distribution Expenses	134,508											134,508
19	Customer Accounting Expenses	152,275											152,275
20	Sales Expenses	\$ 782,510	(3,923)										\$ 782,510
21	Administrative & General Expenses												
22	Total Operations & Maintenance Expense	\$ 186,533											\$ 186,533
23	Depreciation & Amortization Expenses												
24	Taxes	\$ 83,535											\$ 83,535
25	Federal Income Taxes	20,605											20,605
26	State Income Taxes	60,115											60,115
27	Property Taxes	13,539											13,539
28	Other	\$ 207,794	(283)										\$ 207,794
29	Total Taxes	\$ 1,186,838	(3,923)										\$ 1,186,838
30	Total Operating Expenses	\$ 275,060	\$ 3,923										\$ 275,060
31	Operating Income												
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ADJUSTMENTS:
1 - Labor Expense - Normalize OT Hours in Test Year
2 - Payroll Tax Expense Related to Adjustment 1
3 - 401(K) Expense Related to Adjustment 1
4 - Reverse Adjustment for Conservation
5 - Purchased Power Revenues
6 - Insurance Expense
7 - Depreciation Expense
8 - Property Tax Expense
9 - Rate Case Expense

REFERENCE:
Testimony, WAR And Schedule TJC-8 Page, 1 of 3
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Testimony, WAR And Schedule TJC-10
Testimony, WAR And Schedule TJC-11
Testimony, WAR And Schedule TJC-12
Testimony, WAR And Schedule TJC-13

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
		DOLLAR AMOUNT	CAPITAL RATIO	COST RATE	WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

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WAR-2	1	RATE BASE
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WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 2,035,209	\$ 2,041,060
2	Adjusted Operating Income (Loss)	\$ (47,524)	\$ (42,235)
3	Current Rate of Return (L2 / L1)	-2.34%	-2.07%
4	Required Operating Income (L5 X L1)	\$ 199,741	\$ 149,610
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 247,264	\$ 191,845
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 402,704	\$ 312,445
9	Adjusted Test Year Revenue	\$ 812,359	\$ 812,359
10	Proposed Annual Revenue (L8 + L9)	\$ 1,215,223	\$ 1,124,804
11	Required Percentage Increase in Revenue (L8 / L9)	49.57%	38.46%
12	Consolidated Revenue Adjustment	\$ -	\$ 9,183
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ -	\$ 321,629
14	Required Revenue Under Proposed Consolidation	\$ -	\$ 1,133,987
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-	39.59%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 149,610			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	(42,235)			
13	Required Increase In Operating Income (L11 - L12)		\$ 191,845		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 49,014			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	(71,587)			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 120,600		
17	Total Required Increase In Revenue (L13 + L16)		\$ 312,445		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 1,124,804	
20	Synchronized Interest (Col. (C), L37)			926,181	
21	Arizona Taxable Income (L18 - L19 - L20)			71,641	
22	Arizona State Income Tax Rate			\$ 126,982	
23	Arizona Income Tax (L21 X L22)			6.9680%	\$ 8,848
24	Fed. Taxable Income (L21 - L23)			\$ 118,134	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 40,166	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)			\$ 40,166	\$ 40,166
31	Combined Federal and State Income Tax (L23 + L30)			\$ 49,014	\$ 49,014
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)			\$ (71,587)	\$ (71,587)
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)			\$ 120,600	\$ 120,600
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 2,041,060	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 71,641	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 488	\$ -	\$ 488
2	Source of Supply Plant	175,502	-	175,502
3	Pumping Plant	376,086	2,058	378,144
4	Water Treatment Plant	1,398,624	-	1,398,624
5	Transmission & Distribution Plant	1,712,957	-	1,712,957
6	General Plant	458,818	-	458,818
7	Total Gross Plant in Service	\$ 4,122,476	\$ 2,058	\$ 4,124,534
8	Accumulated Depreciation	(997,040)	33,929	(963,111)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 3,125,436	\$ 35,986	\$ 3,161,423
10	Advances in Aid Of Const.	\$ (73,164)	\$ -	\$ (73,164)
11	Contribution in Aid of Const.	\$ (742,146)	\$ -	\$ (742,146)
12	Accumulated Amortization of CIAC	7,505	-	7,505
13	NET CIAC (L5 + L6)	\$ (734,641)	\$ -	\$ (734,641)
14	Deferred Income Tax	\$ (321,972)	\$ -	\$ (321,972)
15	Customer Deposits	\$ -	\$ (5,425)	\$ (5,425)
16	Allowance for Working Capital	\$ 39,551	\$ (24,710)	\$ 14,840
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,035,209	\$ 5,851	\$ 2,041,060

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 488	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 488
3	Source of Supply Plant	175,502	-	-	-	-	-	-	175,502
4	Pumping Plant	376,086	2,058	-	-	-	-	-	378,144
5	Water Treatment Plant	1,398,624	-	-	-	-	-	-	1,398,624
6	Transmission & Distribution Plant	1,712,957	-	-	-	-	-	-	1,712,957
7	General Plant	458,818	-	-	-	-	-	-	458,818
7	Total Gross Plant in Service	\$ 4,122,476	\$ 2,058	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,124,534
8	Accumulated Depreciation	(997,040)	33,929	-	-	-	-	-	(963,111)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 3,125,436	\$ 35,986	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,161,423
10	Advances in Aid Of Const.	\$ (73,164)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (73,164)
11	Contribution in Aid of Const.	\$ (742,146)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (742,146)
12	Accumulated Amortization of CIAC	7,505	-	-	-	-	-	-	7,505
13	NET CIAC (L5 + L6)	\$ (734,641)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (734,641)
14	Deferred Income Tax	\$ (321,972)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (321,972)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,425)	\$ -	\$ (5,425)
16	Allowance for Working Capital	\$ 39,551	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (24,710)	\$ 14,840
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,035,209	\$ 35,986	\$ -	\$ -	\$ -	\$ (5,425)	\$ (24,710)	\$ 2,041,060

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Intentionally Left Blank
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 646,904	\$ -	\$ 646,904	\$ 312,445	\$ 959,350
2	Commercial	143,872	-	143,872	-	143,872
3	Industrial	-	-	-	-	-
4	Private Fire Service	56	-	56	-	56
5	Other Water Revenues	11,113	-	11,113	-	11,113
6	Total Water Revenues	\$ 801,946	\$ -	\$ 801,946	\$ 312,445	\$ 1,114,391
7	Miscellaneous	\$ 10,413	\$ -	\$ 10,413	\$ -	\$ 10,413
8	Total Operating Revenues	\$ 812,359	\$ -	\$ 812,359	\$ 312,445	\$ 1,124,804
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 241,318	\$ -	\$ 241,318	\$ -	\$ 241,318
10	Other	6,907	-	6,907	-	6,907
	Pumping Expenses:					
11	Purchased Power	-	-	-	-	-
12	Purchased Power	38,358	-	38,358	-	38,358
13	Purchased Gas	-	-	-	-	-
14	Other	34,669	-	34,669	-	34,669
15	Water Treatment Expenses	40,816	-	40,816	-	40,816
16	Transmission & Distribution Expenses	145,743	-	145,743	-	145,743
17	Customer Accounting Expenses	104,642	-	104,642	-	104,642
18	Sales Expense	497	-	497	-	497
19	Administrative & General Expenses	140,854	(3,899)	136,955	-	136,955
20	Total Operations & Maintenance Expense	\$ 753,804	\$ (3,899)	\$ 749,904	\$ -	\$ 749,904
21	Depreciation & Amortization Expenses	\$ 106,134	\$ (1,342)	\$ 104,792	\$ -	\$ 104,792
	Taxes					
22	Federal Income Taxes	\$ (63,368)	\$ 4,704	\$ (58,664)	\$ 98,829	\$ 40,166
23	State Income Taxes	(13,959)	1,036	(12,923)	21,771	8,848
24	Property Taxes	68,170	(5,596)	62,573	-	62,573
25	Other	9,102	(191)	8,911	-	8,911
26	Total Taxes	\$ (56)	\$ (47)	\$ (103)	\$ 120,600	\$ 120,498
27	Total Operating Expenses	\$ 859,882	\$ (5,288)	\$ 854,594	\$ 120,600	\$ 975,194
28	Operating Income	\$ (47,524)	\$ 5,288	\$ (42,235)	\$ 191,845	\$ 149,610

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
 TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 646,804	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 646,804
3	Commercial	143,872	-	-	-	-	-	-	-	-	-	-	143,872
4	Industrial	56	-	-	-	-	-	-	-	-	-	-	56
5	Purchase Fire Service	11,113	-	-	-	-	-	-	-	-	-	-	11,113
6	Other Water Revenues	801,946	-	-	-	-	-	-	-	-	-	-	801,946
7	Total Water Revenues	\$ 1,604,581	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,604,581
8	Miscellaneous	812,359	-	-	-	-	-	-	-	-	-	-	812,359
9	Total Operating Revenues	\$ 2,416,940	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,416,940
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	241,318	-	-	-	-	-	-	-	-	-	-	241,318
13	Other	6,807	-	-	-	-	-	-	-	-	-	-	6,807
14	Pumping Expenses:												
15	Purchased Power	38,358	-	-	-	-	-	-	-	-	-	-	38,358
16	Purchased Gas	34,689	-	-	-	-	-	-	-	-	-	-	34,689
17	Other	40,816	-	-	-	-	-	-	-	-	-	-	40,816
18	Water Treatment Expenses	145,743	-	-	-	-	-	-	-	-	-	-	145,743
19	Transmission & Distribution Expenses	104,642	-	-	-	-	-	-	-	-	-	-	104,642
20	Customer Accounting Expenses	497	-	-	-	-	-	-	-	-	-	-	497
21	Sales Expense	140,854	(2,555)	-	(214)	-	-	(10)	-	-	(1,120)	-	136,955
22	Administrative & General Expenses	753,804	(2,555)	-	(214)	-	-	(10)	-	-	(1,120)	-	749,904
23	Total Administrative & General Expenses	\$ 1,081,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,342)	\$ -	\$ -	\$ -	\$ 1,079,999
24	Depreciation & Amortization Expenses												
25	Federal Income Taxes	(63,368)	-	-	-	-	-	-	-	-	-	-	(63,368)
26	State Income Taxes	(13,959)	-	-	-	-	-	-	-	-	-	-	(13,959)
27	Property Taxes	68,170	-	-	-	-	-	-	-	(6,596)	-	-	61,574
28	Other	9,102	-	(191)	-	-	-	-	-	(6,596)	-	-	2,915
29	Total Taxes	\$ 8,905	\$ -	\$ (191)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (13,192)	\$ -	\$ -	\$ (12,278)
30	Total Operating Expenses	\$ 2,500,299	\$ (2,555)	\$ (191)	\$ (214)	\$ -	\$ -	\$ (10)	\$ (1,342)	\$ (6,596)	\$ (1,120)	\$ -	\$ 2,498,381
31	Operating Income	\$ (83,359)	\$ 2,555	\$ 191	\$ 214	\$ -	\$ -	\$ 10	\$ 1,342	\$ 6,596	\$ 1,120	\$ -	\$ (42,351)

ADJUSTMENTS:

1. Labor Expense - Normalis OT Hours in Test Year
2. Profit Expense Related to Adjustment 1
3. 401(K) Expense Related to Adjustment 1
4. Reverse Adjustment for Conservation
5. Purchased Power Revenues
6. Insurance Expense
7. Depreciation Expense
8. Property Tax Expense
9. Rate Case Expense

REFERENCE:

1. Testimony, WAR And Schedule TJC-8 Page 1 of 3
2. Testimony, WAR And Schedule TJC-8 Page 2 of 3
3. Testimony, WAR And Schedule TJC-8 Page 3 of 3
4. Testimony, WAR
5. Testimony, WAR
6. Testimony, WAR And Schedule TJC-10
7. Testimony, WAR And Schedule TJC-11
8. Testimony, WAR And Schedule TJC-12
9. Testimony, WAR And Schedule TJC-13

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

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WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 2,412,232	\$ 2,393,683
2	Adjusted Operating Income (Loss)	\$ 194,248	\$ 214,630
3	Current Rate of Return (L2 / L1)	8.05%	8.97%
4	Required Operating Income (L5 X L1)	\$ 236,743	\$ 175,457
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 42,494	\$ (39,173)
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 69,208	\$ (63,798)
9	Adjusted Test Year Revenue	\$ 1,126,215	\$ 1,126,215
10	Proposed Annual Revenue (L8 + L9)	\$ 1,195,423	\$ 1,062,417
11	Required Percentage Increase in Revenue (L8 / L9)	6.15%	-5.66%
12	Consolidated Revenue Adjustment	\$ -	\$ 8,846
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ -	\$ (54,952)
14	Required Revenue Under Proposed Consolidation	\$ -	\$ 1,071,263
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-	-4.88%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 175,457			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	214,630			
13	Required Increase In Operating Income (L11 - L12)		\$ (39,173)		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 57,482			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	82,107			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ (24,625)		
17	Total Required Increase In Revenue (L13 + L16)		\$ (63,798)		
CALCULATION OF INCOME TAX:					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 1,062,417	
20	Synchronized Interest (Col. (C), L37)			829,478	
21	Arizona Taxable Income (L18 - L19 - L20)			84,018	
22	Arizona State Income Tax Rate			\$ 148,920	
23	Arizona Income Tax (L21 X L22)			6.9680%	\$ 10,377
24	Fed. Taxable Income (L21 - L23)			\$ 138,543	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 47,105	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 47,105
31	Combined Federal and State Income Tax (L23 + L30)				\$ 57,482
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 82,107
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				\$ (24,625)
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 2,393,683	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 84,018	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
Plant Classification				
1	Intangible Plant	\$ 627	\$ -	\$ 627
2	Source of Supply Plant	571,108	-	571,108
3	Pumping Plant	951,836	-	951,836
4	Water Treatment Plant	104,121	-	104,121
5	Transmission & Distribution Plant	4,194,584	-	4,194,584
6	General Plant	262,652	-	262,652
7	Total Gross Plant in Service	\$ 6,084,930	\$ -	\$ 6,084,930
8	Accumulated Depreciation	(2,307,793)	(1,038)	(2,308,831)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 3,777,137	\$ (1,038)	\$ 3,776,099
10	Advances in Aid Of Const.	\$ (432,749)	\$ -	\$ (432,749)
11	Contribution in Aid of Const.	\$ (623,732)	\$ -	\$ (623,732)
12	Accumulated Amortization of CIAC	93,964	-	93,964
13	NET CIAC (L5 + L6)	\$ (529,768)	\$ -	\$ (529,768)
14	Deferred Income Tax	\$ (436,962)	\$ -	\$ (436,962)
15	Customer Deposits	\$ -	\$ (7,460)	\$ (7,460)
16	Allowance for Working Capital	\$ 34,574	\$ (10,051)	\$ 24,523
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)		\$ 2,412,232	\$ (18,548)	\$ 2,393,683

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRBFV/RB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRBFV/RB
1	Plant Classification								
2	Intangible Plant	\$ 627	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 627
3	Source of Supply Plant	571,108	-	-	-	-	-	-	571,108
4	Pumping Plant	951,836	-	-	-	-	-	-	951,836
5	Water Treatment Plant	104,121	-	-	-	-	-	-	104,121
6	Transmission & Distribution Plant	4,194,584	-	-	-	-	-	-	4,194,584
7	General Plant	262,652	-	-	-	-	-	-	262,652
8	Total Gross Plant in Service	\$ 6,084,930	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,084,930
9	Accumulated Depreciation	(2,307,793)	(1,038)	-	-	-	-	-	(2,308,831)
10	Net Utility Plant in Service (Sum L1 & L2)	\$ 3,777,137	(1,038)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,776,099
11	Advances in Aid Of Const.	\$ (432,749)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (432,749)
12	Contribution in Aid of Const.	\$ (623,732)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (623,732)
13	Accumulated Amortization of CIAC	93,964	-	-	-	-	-	-	93,964
14	NET CIAC (L5 + L6)	\$ (529,768)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (529,768)
15	Deferred Income Tax	\$ (436,962)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (436,962)
16	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,460)	\$ -	\$ (7,460)
17	Allowance for Working Capital	34,574	-	-	-	-	-	(10,051)	24,523
18	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 2,412,232	\$ (1,038)	\$ -	\$ -	\$ -	\$ (7,460)	\$ (10,051)	\$ 2,393,683

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adkjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Intentionally Left Blank
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 864,595	\$ -	\$ 864,595	\$ (63,798)	\$ 800,797
2	Commercial	229,443	-	229,443	-	229,443
3	Industrial	-	-	-	-	-
4	Private Fire Service	56	-	56	-	56
5	Other Water Revenues	21,015	-	21,015	-	21,015
6	Total Water Revenues	\$ 1,115,109	\$ -	\$ 1,115,109	\$ (63,798)	\$ 1,051,311
7	Miscellaneous	\$ 11,106	\$ -	\$ 11,106	\$ -	\$ 11,106
8	Total Operating Revenues	\$ 1,126,215	\$ -	\$ 1,126,215	\$ (63,798)	\$ 1,062,417
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	9,508	-	9,508	-	9,508
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	149,736	-	149,736	-	149,736
13	Purchased Gas	-	-	-	-	-
14	Other	38,603	-	38,603	-	38,603
15	Water Treatment Expenses	15,542	-	15,542	-	15,542
16	Transmission & Distribution Expenses	152,010	-	152,010	-	152,010
17	Customer Accounting Expenses	100,428	-	100,428	-	100,428
18	Sales Expense	549	-	549	-	549
19	Administrative & General Expenses	151,950	(5,288)	146,662	-	146,662
20	Total Operations & Maintenance Expense	\$ 618,326	\$ (5,288)	\$ 613,037	\$ -	\$ 613,037
21	Depreciation & Amortization Expenses	\$ 181,393	\$ (27,957)	\$ 153,436	\$ -	\$ 153,436
	Taxes					
22	Federal Income Taxes	\$ 53,978	\$ 13,307	\$ 67,285	\$ (20,180)	\$ 47,105
23	State Income Taxes	11,891	2,931	14,822	(4,445)	10,377
24	Property Taxes	53,921	(3,115)	50,806	-	50,806
25	Other	12,458	(259)	12,199	-	12,199
26	Total Taxes	\$ 132,248	\$ 12,864	\$ 145,112	\$ (24,625)	\$ 120,486
27	Total Operating Expenses	\$ 931,966	\$ (20,381)	\$ 911,585	\$ (24,625)	\$ 886,960
28	Operating Income	\$ 194,248	\$ 20,381	\$ 214,630	\$ (39,173)	\$ 175,457

References:

Column (A): Company Schedule C-1
Column (B): TJC-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): TJC-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
 TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues												
2	Residential	\$ 864,595	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 864,595
3	Commercial	228,443	-	-	-	-	-	-	-	-	-	-	228,443
4	Industrial	-	-	-	-	-	-	-	-	-	-	-	-
5	Private Fire Service	56	-	-	-	-	-	-	-	-	-	-	56
6	Other Water Revenues	21,015	-	-	-	-	-	-	-	-	-	-	21,015
7	Total Water Revenues	\$ 1,115,109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,115,109
8	Miscellaneous	\$ 11,106	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,106
9	Total Operating Revenues	\$ 1,126,215	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,126,215
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Other	9,508	-	-	-	-	-	-	-	-	-	-	9,508
14	Pumping Expenses:												
15	Purchased Power	148,736	-	-	-	-	-	-	-	-	-	-	148,736
16	Purchased Gas	-	-	-	-	-	-	-	-	-	-	-	-
17	Other	38,603	-	-	-	-	-	-	-	-	-	-	38,603
18	Water Treatment Expenses	15,542	-	-	-	-	-	-	-	-	-	-	15,542
19	Transmission & Distribution Expenses	152,010	-	-	-	-	-	-	-	-	-	-	152,010
20	Customer Accounting Expenses	100,428	-	-	-	-	-	-	-	-	-	-	100,428
21	Sales Expense	549	-	-	-	-	-	-	-	-	-	-	549
22	Administrative & General Expenses	151,950	(3,467)	-	(281)	-	-	(10)	-	-	(1,520)	-	146,662
23	Total Operations & Maintenance Expense	\$ 618,326	\$ (3,467)	\$ -	\$ (281)	\$ -	\$ -	\$ (10)	\$ -	\$ -	\$ (1,520)	\$ -	\$ 613,037
24	Depreciation & Amortization Expenses	\$ 181,393	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (27,957)	\$ -	\$ -	\$ -	\$ 153,436
25	Taxes												
26	Federal Income Taxes	\$ 53,978	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,307	\$ 67,285
27	State Income Taxes	11,891	-	-	-	-	-	-	-	-	-	2,931	14,822
28	Property Taxes	53,921	-	-	-	-	-	-	(3,115)	-	-	-	50,806
29	Other	12,458	(259)	-	-	-	-	-	-	-	-	-	12,199
30	Total Taxes	\$ 132,248	\$ (259)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,115)	\$ -	\$ -	\$ 16,238	\$ 145,112
31	Total Operating Expenses	\$ 931,966	\$ (3,467)	\$ (259)	\$ (281)	\$ -	\$ -	\$ (10)	\$ (27,957)	\$ (3,115)	\$ (1,520)	\$ 16,238	\$ 911,985
32	Operating Income	\$ 194,248	\$ 3,467	\$ 259	\$ 281	\$ -	\$ -	\$ 10	\$ 27,957	\$ 3,115	\$ 1,520	\$ (16,238)	\$ 214,630

ADJUSTMENTS:

- 1 Labor Expense - Normalize OT Hours in Test Year
- 2 Payroll Tax Expense Related to Adjustment 1
- 3 401(K) Expense Related to Adjustment 1
- 4 Reverse Adjustment for Conservation
- 5 Purchased Power Revenues
- 6 Insurance Expense
- 7 Depreciation Expense
- 8 Property Tax Expense
- 9 Rate Case Expense

REFERENCE:

- 1 Testimony, WAR And Schedule TJC-8 Page, 1 of 3
- 2 Testimony, WAR And Schedule TJC-8 Page, 2 of 3
- 3 Testimony, WAR And Schedule TJC-8 Page, 3 of 3
- 4 Testimony, WAR
- 5 Testimony, WAR
- 6 Testimony, WAR And Schedule TJC-10
- 7 Testimony, WAR And Schedule TJC-11
- 8 Testimony, WAR And Schedule TJC-12
- 9 Testimony, WAR And Schedule TJC-13

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 325,142	\$ 339,758
2	Adjusted Operating Income (Loss)	\$ 10,198	\$ 12,299
3	Current Rate of Return (L2 / L1)	3.14%	3.62%
4	Required Operating Income (L5 X L1)	\$ 31,910	\$ 24,904
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 21,712	\$ 12,605
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 35,361	\$ 20,529
9	Adjusted Test Year Revenue	\$ 98,722	\$ 98,722
10	Proposed Annual Revenue (L8 + L9)	\$ 134,083	\$ 119,252
11	Required Percentage Increase in Revenue (L8 / L9)	35.82%	20.80%
12	Consolidated Revenue Adjustment	\$ -	\$ (9,617)
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ -	\$ 10,913
14	Required Revenue Under Proposed Consolidation	\$ -	\$ 109,635
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-	11.05%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 24,904			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	12,299			
13	Required Increase In Operating Income (L11 - L12)		\$ 12,605		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 8,159			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	235			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 7,924		
17	Total Required Increase In Revenue (L13 + L16)		\$ 20,529		
RUCO					
Recommended					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			\$ 119,252	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			86,188	
20	Synchronized Interest (Col. (C), L37)			11,926	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 21,138	
22	Arizona State Income Tax Rate			6.9680%	
23	Arizona Income Tax (L21 X L22)				\$ 1,473
24	Fed. Taxable Income (L21 - L23)			\$ 19,665	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 6,686	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 6,686
31	Combined Federal and State Income Tax (L23 + L30)				\$ 8,159
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 235
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				\$ 7,924
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 339,758	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 11,926	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 2,137	\$ -	\$ 2,137
2	Source of Supply Plant	51,263	(66,360)	(15,097)
3	Pumping Plant	163,932	-	163,932
4	Water Treatment Plant	39,948	-	39,948
5	Transmission & Distribution Plant	265,881	-	265,881
6	General Plant	31,008	-	31,008
7	Total Gross Plant in Service	\$ 554,169	\$ (66,360)	\$ 487,809
8	Accumulated Depreciation	(167,152)	82,798	(84,354)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 387,018	\$ 16,438	\$ 403,455
10	Advances in Aid Of Const.	\$ (18,649)	\$ -	\$ (18,649)
11	Contribution in Aid of Const.	\$ (1,835)	\$ -	\$ (1,835)
12	Accumulated Amortization of CIAC	506	-	506
13	NET CIAC (L5 + L6)	\$ (1,329)	\$ -	\$ (1,329)
14	Deferred Income Tax	\$ (42,163)	\$ -	\$ (42,163)
15	Customer Deposits	\$ -	\$ (650)	\$ (650)
16	Allowance for Working Capital	\$ 266	\$ (1,171)	\$ (906)
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 325,142	\$ 14,616	\$ 339,758

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRBFVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRBFVRB
1	Plant Classification								
2	Intangible Plant	\$ 2,137	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,137
3	Source of Supply Plant	51,263	-	-	(66,360)	-	-	-	(15,097)
4	Pumping Plant	163,932	-	-	-	-	-	-	163,932
5	Water Treatment Plant	39,948	-	-	-	-	-	-	39,948
6	Transmission & Distribution Plant	265,881	-	-	-	-	-	-	265,881
7	General Plant	31,008	-	-	-	-	-	-	31,008
8	Total Gross Plant in Service	\$ 554,169	\$ -	\$ (66,360)	\$ -	\$ -	\$ -	\$ -	\$ 487,809
9	Accumulated Depreciation	(167,152)	3,162	-	79,635	-	-	-	(84,354)
10	Net Utility Plant in Service (Sum L1 & L2)	\$ 387,018	\$ 3,162	\$ -	\$ 13,275	\$ -	\$ -	\$ -	\$ 403,455
11	Advances in Aid Of Const.	\$ (18,649)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,649)
12	Contribution in Aid of Const.	\$ (1,835)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,835)
13	Accumulated Amortization of CIAC NET CIAC (L5 + L6)	\$ 506	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 506
14	Deferred Income Tax	\$ (42,163)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (42,163)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (650)	\$ -	\$ (650)
16	Allowance for Working Capital	266	-	-	-	-	-	(1,171)	(906)
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 325,142	\$ 3,162	\$ -	\$ 13,275	\$ -	\$ (650)	\$ (1,171)	\$ 339,758

References:

- Column (A): Company Schedule B-2
- Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimon)
- Column (C): Adjustment No. 2 - Intentionally Left Blank
- Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
- Column (E): Adjustment No. 4 - Intentionally Left Blank
- Column (F): Adjustment No. 5 - Customer Deposits
- Column (G): Adjustment No. 6 - Working Capital
- Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 44,901	\$ -	\$ 44,901	\$ 20,529	\$ 65,430
2	Commercial	50,096	-	50,096	-	50,096
3	Industrial	1,774	-	1,774	-	1,774
4	Private Fire Service	-	-	-	-	-
5	Other Water Revenues	749	-	749	-	749
6	Total Water Revenues	\$ 97,519	\$ -	\$ 97,519	\$ 20,529	\$ 118,048
7	Miscellaneous	\$ 1,203	\$ -	\$ 1,203	\$ -	\$ 1,203
8	Total Operating Revenues	\$ 98,722	\$ -	\$ 98,722	\$ 20,529	\$ 119,252
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	897	-	897	-	897
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	7,310	-	7,310	-	7,310
13	Purchased Gas	-	-	-	-	-
14	Other	4,150	-	4,150	-	4,150
15	Water Treatment Expenses	1,372	-	1,372	-	1,372
16	Transmission & Distribution Expenses	16,618	-	16,618	-	16,618
17	Customer Accounting Expenses	11,332	-	11,332	-	11,332
18	Sales Expense	58	-	58	-	58
19	Administrative & General Expenses	16,116	(506)	15,611	-	15,611
20	Total Operations & Maintenance Expense	\$ 57,855	\$ (506)	\$ 57,349	\$ -	\$ 57,349
21	Depreciation & Amortization Expenses	\$ 19,928	\$ (2,269)	\$ 17,660	\$ -	\$ 17,660
	Taxes					
22	Federal Income Taxes	\$ (959)	\$ 1,151	\$ 192	\$ 6,494	\$ 6,686
23	State Income Taxes	(211)	254	42	1,430	1,473
24	Property Taxes	10,675	(706)	9,969	-	9,969
25	Other	1,235	(25)	1,210	-	1,210
26	Total Taxes	\$ 10,741	\$ 674	\$ 11,414	\$ 7,924	\$ 19,338
27	Total Operating Expenses	\$ 88,524	\$ (2,101)	\$ 86,423	\$ 7,924	\$ 94,347
28	Operating Income	\$ 10,198	\$ 2,101	\$ 12,299	\$ 12,605	\$ 24,904

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 44,901											\$ 44,901
3	Commercial	50,096											50,096
4	Industrial	1,774											1,774
5	Private Fire Service												
6	Other Water Revenues	746											746
7	Total Water Revenues	\$ 97,519											\$ 97,519
8	Miscellaneous	\$ 1,203											\$ 1,203
9	Total Operating Revenues	\$ 98,722											\$ 98,722
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water												
13	Other	887											887
14	Pumping Expenses:												
15	Purchased Power	7,310											7,310
16	Purchased Gas												
17	Other	4,150											4,150
18	Water Treatment Expenses	16,372											16,372
19	Transmission & Distribution Expenses	16,818											16,818
20	Customer Accounting Expenses	11,332											11,332
21	Sales Expenses	58											58
22	Administrative & General Expenses	16,116	(335)										15,611
23	Operators & Maintenance Expense	57,855	(335)		(28)								57,349
24	Depreciation & Amortization Expenses	19,928							(2,269)				17,660
25	Taxes												
26	Federal Income Taxes	(959)											192
27	State Income Taxes	(211)											42
28	Property Taxes	10,975								(706)			9,989
29	Other	1,235		(25)									1,210
30	Total Taxes	\$ 10,741											\$ 11,414
31	Total Operating Expenses	\$ 88,524	(335)	(25)	(28)				(2,269)	(706)	(147)		\$ 86,423
32	Operating Income	\$ 10,198	355	25	28			4	2,269	706	147		\$ 12,299

ADJUSTMENTS:

- 1 - Labor Expense - Normalize OT Hours in Test Year
- 2 - Payroll Tax Expense Related to Adjustment 1
- 3 - 401(K) Expense Related to Adjustment 1
- 4 - Reverse Adjustment for Conservation
- 5 - Purchased Power Revenues
- 6 - Insurance Expense
- 7 - Depreciation Expense
- 8 - Property Tax Expense
- 9 - Rate Case Expense
- 10 - Income Tax

REFERENCE:

- 1 - Testimony, WAR And Schedule TJC-9 Page, 1 of 3
- 2 - Testimony, WAR And Schedule TJC-9 Page, 2 of 3
- 3 - Testimony, WAR And Schedule TJC-9 Page, 3 of 3
- 4 - Testimony, WAR
- 5 - Testimony, WAR
- 6 - Testimony, WAR And Schedule TJC-10
- 7 - Testimony, WAR And Schedule TJC-11
- 8 - Testimony, WAR And Schedule TJC-12
- 9 - Testimony, WAR And Schedule TJC-13
- 10 - Testimony, WAR And Schedule TJC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 7,663,611	\$ 7,426,481
2	Adjusted Operating Income (Loss)	\$ 143,848	\$ 159,794
3	Current Rate of Return (L2 / L1)	1.88%	2.15%
4	Required Operating Income (L5 X L1)	\$ 752,127	\$ 544,361
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 608,279	\$ 384,567
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 990,665	\$ 626,319
9	Adjusted Test Year Revenue	\$ 1,850,677	\$ 1,850,677
10	Proposed Annual Revenue (L8 + L9)	\$ 2,841,341	\$ 2,476,995
11	Required Percentage Increase in Revenue (L8 / L9)	53.53%	33.84%
12	Consolidated Revenue Adjustment	\$ (937,341)	\$ (360,458)
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 53,500	\$ 265,861
14	Required Revenue Under Proposed Consolidation	\$ 1,904,272	\$ 2,116,537
15	Required Percentage Increase in Revenue Under Proposed Consolidation	2.89%	14.37%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1

Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-13

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 544,361			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	159,794			
13	Required Increase In Operating Income (L11 - L12)		\$ 384,567		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 178,338			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	(63,414)			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 241,752		
17	Total Required Increase In Revenue (L13 + L16)		\$ 626,319		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 2,476,995	
20	Synchronized Interest (Col. (C), L37)			1,754,296	
21	Arizona Taxable Income (L18 - L19 - L20)			260,669	
22	Arizona State Income Tax Rate			\$ 462,030	
23	Arizona Income Tax (L21 X L22)			6.9680%	\$ 32,194
24	Fed. Taxable Income (L21 - L23)			\$ 429,836	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ 7,500	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ 6,250	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ 8,500	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ 91,650	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 32,244	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)			\$ 146,144	
31	Combined Federal and State Income Tax (L23 + L30)			\$ 178,338	
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)			\$ (63,414)	
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)			\$ 241,752	
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. TJC-2, Col. (C), L17)			\$ 7,426,481	
				3.51%	
				\$ 260,669	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 2,557	\$ -	\$ 2,557
2	Source of Supply Plant	4,436,512	(77,542)	4,358,970
3	Pumping Plant	1,646,392	(201,695)	1,444,697
4	Water Treatment Plant	86,137	-	86,137
5	Transmission & Distribution Plant	5,281,481	-	5,281,481
6	General Plant	848,882	-	848,882
7	Total Gross Plant in Service	\$ 12,301,961	\$ (279,237)	\$ 12,022,724
8	Accumulated Depreciation	(2,957,804)	101,814	(2,855,990)
9	Net Utility Plant In Service (Sum L1 & L2)	\$ 9,344,157	\$ (177,424)	\$ 9,166,733
10	Advances In Aid Of Const.	\$ (12,005)	\$ -	\$ (12,005)
11	Contribution In Aid Of Const.	\$ (324,169)	\$ -	\$ (324,169)
12	Accumulated Amortization Of CIAC	62,181	-	62,181
13	NET CIAC (L5 + L6)	\$ (261,988)	\$ -	\$ (261,988)
14	Deferred Income Tax	\$ (954,417)	\$ -	\$ (954,417)
15	Customer Deposits	\$ -	\$ (31,336)	\$ (31,336)
16	Allowance For Working Capital	\$ 79,865	\$ (28,370)	\$ 51,494
17	Net Regulatory Asset / (Liability)	\$ (532,000)	\$ -	\$ (532,000)
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 7,663,611	\$ (205,794)	\$ 7,426,481

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRBF/VRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRBF/VRB
1	Plant Classification								
2	Intangible Plant	\$ 2,557	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,557
3	Source of Supply Plant	4,436,512	-	-	(77,542)	-	-	-	4,358,970
4	Pumping Plant	1,646,392	-	-	(201,695)	-	-	-	1,444,697
5	Water Treatment Plant	86,137	-	-	-	-	-	-	86,137
6	Transmission & Distribution Plant	5,281,481	-	-	-	-	-	-	5,281,481
7	General Plant	848,882	-	-	-	-	-	-	848,882
7	Total Gross Plant in Service	\$ 12,301,961	\$ -	\$ -	\$ (279,237)	\$ -	\$ -	\$ -	\$ 12,022,724
8	Accumulated Depreciation	\$ (2,957,804)	25,492	-	76,321	-	-	-	(2,855,990)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 9,344,157	\$ 25,492	\$ -	\$ (202,916)	\$ -	\$ -	\$ -	\$ 9,166,733
10	Advances in Aid Of Const.	\$ (12,005)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (12,005)
11	Contribution In Aid Of Const.	\$ (324,169)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (324,169)
12	Accumulated Amortization Of CIAC	62,181	-	-	-	-	-	-	62,181
13	NET CIAC (L5 + L6)	\$ (261,988)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (261,988)
14	Deferred Income Tax	\$ (954,417)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (954,417)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (31,336)	\$ -	\$ (31,336)
16	Allowance For Working Capital	\$ 79,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (28,370)	\$ 51,494
17	Net Regulatory Asset / (Liability)	\$ (532,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (532,000)
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 7,663,611	\$ 25,492	\$ -	\$ (202,916)	\$ -	\$ (31,336)	\$ (28,370)	\$ 7,426,481

References:

- Column (A): Company Schedule B-2
- Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimony)
- Column (C): Adjustment No. 2 - Intentionally Left Blank
- Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
- Column (E): Adjustment No. 4 - Intentionally Left Blank
- Column (F): Adjustment No. 5 - Customer Deposits
- Column (G): Adjustment No. 6 - Working Capital
- Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJ'MTS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,223,975	\$ -	\$ 1,223,975	\$ 626,319	\$ 1,850,293
2	Commercial	491,044	-	491,044	-	491,044
3	Industrial	98,160	-	98,160	-	98,160
4	Private Fire Service	874	-	874	-	874
5	Other Water Revenues	16,285	-	16,285	-	16,285
6	Total Water Revenues	\$ 1,830,337	\$ -	\$ 1,830,337	\$ 626,319	\$ 2,456,655
7	Miscellaneous	\$ 20,340	\$ -	\$ 20,340	\$ -	\$ 20,340
8	Total Operating Revenues	\$ 1,850,677	\$ -	\$ 1,850,677	\$ 626,319	\$ 2,476,995
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	9,610	-	9,610	-	9,610
	Pumping Expenses:					
12	Purchased Power	199,919	-	199,919	-	199,919
13	Purchased Gas	-	-	-	-	-
14	Other	106,061	-	106,061	-	106,061
15	Water Treatment Expenses	10,374	-	10,374	-	10,374
16	Transmission & Distribution Expenses	353,495	-	353,495	-	353,495
17	Customer Accounting Expenses	226,344	-	226,344	-	226,344
18	Sales Expense	2,486	-	2,486	-	2,486
19	Administrative & General Expenses	394,754	(11,549)	383,205	-	383,205
20	Total Operations & Maintenance Expense	\$ 1,303,044	\$ (11,549)	\$ 1,291,494	\$ -	\$ 1,291,494
21	Depreciation & Amortization Expenses	\$ 355,564	\$ (18,626)	\$ 336,938	\$ -	\$ 336,938
	Taxes					
22	Federal Income Taxes	\$ (72,321)	\$ 20,355	\$ (51,966)	\$ 198,110	\$ 146,144
23	State Income Taxes	(15,932)	4,484	(11,448)	43,642	32,194
24	Property Taxes	107,575	(10,045)	97,530	-	97,530
25	Other	28,899	(566)	28,333	-	28,333
26	Total Taxes	\$ 48,221	\$ 14,229	\$ 62,450	\$ 241,752	\$ 304,202
27	Total Operating Expenses	\$ 1,706,829	\$ (15,946)	\$ 1,690,882	\$ 241,752	\$ 1,932,634
28	Operating Income	\$ 143,848	\$ 15,946	\$ 159,794	\$ 384,567	\$ 544,361

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 1,223,975	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,223,975
3	Commercial	481,044	-	-	-	-	-	-	-	-	-	-	481,044
4	Industrial	96,160	-	-	-	-	-	-	-	-	-	-	96,160
5	Private Fire Service	874	-	-	-	-	-	-	-	-	-	-	874
6	Other Water Revenues	16,285	-	-	-	-	-	-	-	-	-	-	16,285
7	Total Water Revenues	\$ 1,830,337	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,830,337
8	Miscellaneous	\$ 20,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,340
9	Total Operating Revenues	\$ 1,850,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,850,677
10	Operating Expenses												
11	Source of Supply Expenses:												
12	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Other	9,610	-	-	-	-	-	-	-	-	-	-	9,610
14	Pumping Expenses:												
15	Purchased Power	198,919	-	-	-	-	-	-	-	-	-	-	198,919
16	Purchased Gas	-	-	-	-	-	-	-	-	-	-	-	-
17	Other	106,061	-	-	-	-	-	-	-	-	-	-	106,061
18	Water Treatment Expenses	10,374	-	-	-	-	-	-	-	-	-	-	10,374
19	Transmission & Distribution Expenses	353,495	-	-	-	-	-	-	-	-	-	-	353,495
20	Customer Accounting Expenses	226,344	-	-	-	-	-	-	-	-	-	-	226,344
21	Sales Expense	2,486	-	-	-	-	-	-	-	-	-	-	2,486
22	Administrative & General Expenses	394,754	(7,573)	-	(636)	-	-	(20)	-	-	(3,320)	-	382,205
23	Administrative & Maintenance Expense	\$ 1,303,044	\$ (7,573)	\$ -	\$ (636)	\$ -	\$ -	\$ (20)	\$ -	\$ -	\$ (3,320)	\$ -	\$ 1,281,484
24	Depreciation & Amortization Expenses	\$ 355,564	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18,626)	\$ -	\$ -	\$ -	\$ 336,938
25	Taxes												
26	Federal Income Taxes	\$ (72,321)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,355	\$ (51,966)
27	State Income Taxes	(15,932)	-	-	-	-	-	-	-	-	-	4,484	(11,448)
28	Property Taxes	107,575	-	-	-	-	-	-	-	(10,045)	-	-	97,530
29	Other	28,899	-	(566)	-	-	-	-	-	-	-	-	28,333
30	Total Taxes	\$ 48,221	\$ (566)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,045)	\$ -	\$ 24,839	\$ 62,450
31	Total Operating Expenses	\$ 1,705,829	\$ (7,573)	\$ (566)	\$ (636)	\$ -	\$ (20)	\$ (18,626)	\$ (10,045)	\$ (10,045)	\$ (3,320)	\$ 24,839	\$ 1,690,882
32	Operating Income	\$ 143,848	\$ 7,573	\$ 566	\$ 636	\$ -	\$ -	\$ 20	\$ 18,626	\$ 10,045	\$ 3,320	\$ (24,839)	\$ 159,794

ADJUSTMENTS:

- 1 - Labor Expense - Normalizes OT Hours in Test Year
- 2 - Payroll Tax Expense Related to Adjustment 1
- 3 - 401(K) Expense Related to Adjustment 1
- 4 - Reverse Adjustment for Conservation
- 5 - Purchased Power Revenues
- 6 - Insurance Expense
- 7 - Depreciation Expense
- 8 - Property Tax Expense
- 9 - Rate Case Expense

REFERENCE:

- Testimony, WAR And Schedule TJC-8 Page, 1 of 3
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COST OF CAPITAL

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
		DOLLAR AMOUNT	CAPITAL RATIO	COST RATE	WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

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<u>SCH. NO.</u>	<u>PAGE NO.</u>	<u>TITLE</u>
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WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 41,274,515	\$ 39,870,486
2	Adjusted Operating Income (Loss)	\$ 656,994	\$ 780,941
3	Current Rate of Return (L2 / L1)	1.59%	1.96%
4	Required Operating Income (L5 X L1)	\$ 4,050,790	\$ 2,922,507
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 3,393,796	\$ 2,141,566
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 5,527,254	\$ 3,487,828
9	Adjusted Test Year Revenue	\$ 10,934,895	\$ 10,934,895
10	Proposed Annual Revenue (L8 + L9)	\$ 16,462,148	\$ 14,422,723
11	Required Percentage Increase in Revenue (L8 / L9)	50.55%	31.90%
12	Consolidated Revenue Adjustment	\$ (146,842)	\$ 137,287
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 5,380,398	\$ 3,625,115
14	Required Revenue Under Proposed Consolidation	\$ 16,315,353	\$ 14,560,010
15	Required Percentage Increase in Revenue Under Proposed Consolidation	49.20%	33.15%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	<u>93.0320%</u>			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 2,922,507			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	<u>780,941</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 2,141,566		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 957,444			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>(388,819)</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 1,346,263		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 3,487,828</u>		
RUCO					
Recommended					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			\$ 14,422,723	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			10,542,772	
20	Synchronized Interest (Col. (C), L37)			<u>1,399,454</u>	
21	Arizona Taxable Income (L18 - L19 - L20)			\$ 2,480,496	
22	Arizona State Income Tax Rate			<u>6.9680%</u>	
23	Arizona Income Tax (L21 X L22)				\$ 172,841
24	Fed. Taxable Income (L21 - L23)			<u>\$ 2,307,655</u>	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ 7,500	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ 6,250	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ 8,500	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ 91,650	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 670,703	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 784,603
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 957,444</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ (388,819)
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				<u>\$ 1,346,263</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 39,870,486	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 1,399,454</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 1,975,834	\$ (822,694)	\$ 1,153,140
2	Source of Supply Plant	6,113,706	(896,925)	5,216,781
3	Pumping Plant	5,577,501	-	5,577,501
4	Water Treatment Plant	7,112,797	-	7,112,797
5	Transmission & Distribution Plant	80,496,004	-	80,496,004
6	General Plant	3,245,256	-	3,245,256
7	Total Gross Plant in Service	\$ 104,521,097	\$ (1,719,619)	\$ 102,801,478
8	Accumulated Depreciation	(17,639,046)	674,867	(16,964,179)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 86,882,051	\$ (1,044,752)	\$ 85,837,300
10	Advances in Aid Of Const.	\$ (29,671,663)	\$ -	\$ (29,671,663)
11	Contribution in Aid of Const.	\$ (14,050,085)	\$ -	\$ (14,050,085)
12	Accumulated Amortization of CIAC	2,242,757	-	2,242,757
13	NET CIAC (L5 + L6)	\$ (11,807,328)	\$ -	\$ (11,807,328)
14	Deferred Income Tax	\$ (5,088,308)	\$ -	\$ (5,088,308)
15	Customer Deposits	\$ -	\$ (252,738)	\$ (252,738)
16	Allowance for Working Capital	\$ 383,959	\$ (92,250)	\$ 291,709
17	Net Regulatory Asset / (Liability)	\$ 575,803	\$ (14,289)	\$ 561,514
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 41,274,515	\$ (1,404,029)	\$ 39,870,486

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRBFV/RB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4 REGULATORY ASSET	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCCO ADJUSTED OCRBFV/RB
1	Plant Classification								
2	Intangible Plant	\$ 1,975,834	\$ (822,694)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,153,140
3	Source of Supply Plant	6,113,706	-	(896,925)	-	-	-	-	5,216,781
4	Pumping Plant	5,577,501	-	-	-	-	-	-	5,577,501
5	Water Treatment Plant	7,112,797	-	-	-	-	-	-	7,112,797
6	Transmission & Distribution Plant	80,496,004	-	-	-	-	-	-	80,496,004
7	General Plant	3,245,256	-	-	-	-	-	-	3,245,256
7	Total Gross Plant in Service	\$ 104,521,097	\$ (822,694)	\$ (896,925)	\$ -	\$ -	\$ -	\$ -	\$ 102,801,478
8	Accumulated Depreciation	(17,639,046)	(1,579)	676,446	-	-	-	-	(16,964,179)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 86,882,051	\$ (824,273)	\$ (220,479)	\$ -	\$ -	\$ -	\$ -	\$ 85,837,300
10	Advances in Aid Of Const.	\$ (29,671,663)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (29,671,663)
11	Contribution in Aid of Const.	\$ (14,050,085)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (14,050,085)
12	Accumulated Amortization of CIAC	2,242,757	-	-	-	-	-	-	2,242,757
13	NET CIAC (L5 + L6)	\$ (11,807,328)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (11,807,328)
14	Deferred Income Tax	\$ (5,088,308)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,088,308)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (252,738)	\$ -	\$ (252,738)
16	Allowance for Working Capital	383,959	-	-	-	-	-	(92,250)	291,709
17	Net Regulatory Asset / (Liability)	\$ 575,803	\$ -	\$ -	\$ -	\$ (14,289)	\$ -	\$ -	\$ 561,514
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 41,274,515	\$ (824,273)	\$ (220,479)	\$ (14,289)	\$ (252,738)	\$ (92,250)	\$ -	\$ 39,870,486

References:

- Column (A): Company Schedule B-2
- Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
- Column (C): Adjustment No. 2 - Intentionally Left Blank
- Column (D): Adjustment No. 3 - Conforming Adkismnt Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
- Column (E): Adjustment No. 4 - To Adjust Net Regulatory Asset
- Column (F): Adjustment No. 5 - Customer Deposits
- Column (G): Adjustment No. 6 - Working Capital
- Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJMTS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 6,578,320	\$ -	\$ 6,578,320	\$ 3,487,828	\$ 10,066,148
2	Commercial	2,217,689	-	2,217,689	-	2,217,689
3	Industrial	1,085,224	-	1,085,224	-	1,085,224
4	Private Fire Service	13,268	-	13,268	-	13,268
5	Other Water Revenues	450,711	-	450,711	-	450,711
6	Total Water Revenues	\$ 10,345,212	\$ -	\$ 10,345,212	\$ 3,487,828	\$ 13,833,040
7	Miscellaneous	\$ 589,682	\$ -	\$ 589,682	\$ -	\$ 589,682
8	Total Operating Revenues	\$ 10,934,895	\$ -	\$ 10,934,895	\$ 3,487,828	\$ 14,422,723
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 374,207	\$ -	\$ 374,207	\$ -	\$ 374,207
10	Other	76,178	-	76,178	-	76,178
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	1,387,878	-	1,387,878	-	1,387,878
13	Purchased Gas	509	-	509	-	509
14	Other	537,890	-	537,890	-	537,890
15	Water Treatment Expenses	531,617	-	531,617	-	531,617
16	Transmission & Distribution Expenses	1,887,995	-	1,887,995	-	1,887,995
17	Customer Accounting Expenses	909,384	-	909,384	-	909,384
18	Sales Expense	4,312	-	4,312	-	4,312
19	Administrative & General Expenses	1,761,682	(60,564)	1,701,118	-	1,701,118
20	Total Operations & Maintenance Expense	\$ 7,471,653	\$ (60,564)	\$ 7,411,089	\$ -	\$ 7,411,089
21	Depreciation & Amortization Expenses	\$ 2,329,760	\$ (152,308)	\$ 2,177,452	\$ -	\$ 2,177,452
	Taxes					
22	Federal Income Taxes	\$ (450,160)	\$ 131,532	\$ (318,628)	\$ 1,103,231	\$ 784,603
23	State Income Taxes	(99,166)	28,975	(70,191)	243,032	172,841
24	Property Taxes	806,467	(66,879)	739,588	-	739,588
25	Other	219,346	(4,703)	214,643	-	214,643
26	Total Taxes	\$ 476,487	\$ 88,925	\$ 565,412	\$ 1,346,263	\$ 1,911,675
27	Total Operating Expenses	\$ 10,277,900	\$ (123,947)	\$ 10,153,954	\$ 1,346,263	\$ 11,500,216
28	Operating Income	\$ 656,994	\$ 123,947	\$ 780,941	\$ 2,141,566	\$ 2,922,507

References:

Column (A): Company Schedule C-1
Column (B): TJC-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): TJC-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues	\$ 6,578,320											\$ 6,578,320
2	Residential	2,217,689											2,217,689
3	Commercial	1,095,224											1,095,224
4	Industrial	13,288											13,288
5	Private Fire Service	450,711											450,711
6	Other Water Revenues												
7	Total Water Revenues	\$ 10,345,212											\$ 10,345,212
8	Miscellaneous	\$ 589,682											\$ 589,682
9	Total Operating Revenues	\$ 10,934,895											\$ 10,934,895
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 374,207											\$ 374,207
12	Purchased Power	76,178											76,178
13	Purchased Gas	1,387,878											1,387,878
14	Other	509											509
15	Water Treatment Expenses	537,880											537,880
16	Transmission & Distribution Expenses	531,617											531,617
17	Customer Accounting Expenses	1,887,985											1,887,985
18	Sales Expense	908,384											908,384
19	Administrative & General Expenses	4,312											4,312
20	Total Operations & Maintenance Expense	\$ 7,471,653	\$ (40,375)	\$ (4,703)	\$ (3,412)			\$ (149)			\$ (16,627)		\$ 7,411,089
21	Depreciation & Amortization Expenses	\$ 2,328,760							\$ (152,308)				\$ 2,177,452
22	Taxes												
23	Federal Income Taxes	\$ (450,180)											\$ (450,180)
24	State Income Taxes	(69,166)											(69,166)
25	Property Taxes	808,467								(68,730)			739,737
26	Other	219,348		(4,703)				(149)					214,645
27	Total Taxes	\$ 478,487		\$ (4,703)				\$ (149)		\$ (68,730)			\$ 404,905
28	Total Operating Expenses	\$ 10,277,900	\$ (40,375)	\$ (4,703)	\$ (3,412)			\$ (299)	\$ (152,308)	\$ (68,730)	\$ (16,627)		\$ 10,153,954
29	Operating Income	\$ 656,995			\$ 3,412			\$ 289	\$ 152,308	\$ 68,730	\$ 16,627		\$ 780,841

ADJUSTMENTS:
1- Labor Expenses - Normalize OT Hours in Test Year
2- Payroll Tax Expense Related to Adjustment 1
3- 401(K) Expense Related to Adjustment 1
4- Reverse Adjustment for Conservation
5- Purchased Power Revenues
6- Insurance Expense
7- Depreciation Expense
8- Property Tax Expense
9- Rate Case Expense
10- Income Tax

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COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	69,671,689	45.85%	8.33%	3.82%
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

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WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 823,590	\$ 781,962
2	Adjusted Operating Income (Loss)	\$ (31,092)	\$ (30,967)
3	Current Rate of Return (L2 / L1)	-3.78%	-3.96%
4	Required Operating Income (L5 X L1)	\$ 80,829	\$ 57,318
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 111,922	\$ 88,285
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 182,279	\$ 143,784
9	Adjusted Test Year Revenue	\$ 131,926	\$ 131,926
10	Proposed Annual Revenue (L8 + L9)	\$ 314,205	\$ 275,710
11	Required Percentage Increase in Revenue (L8 / L9)	138.17%	108.99%
12	Consolidated Revenue Adjustment	\$ (174,589)	\$ (120,609)
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 7,690	\$ 23,175
14	Required Revenue Under Proposed Consolidation	\$ 139,662	\$ 155,101
15	Required Percentage Increase in Revenue Under Proposed Consolidation	5.85%	17.57%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 57,318			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	<u>(30,967)</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 88,285		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 18,778			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>(36,721)</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 55,499		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 143,784</u>		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 275,710	
20	Synchronized Interest (Col. (C), L37)			199,614	
21	Arizona Taxable Income (L18 - L19 - L20)			<u>27,447</u>	
22	Arizona State Income Tax Rate			\$ 48,649	
23	Arizona Income Tax (L21 X L22)			6.9680%	\$ 3,390
24	Fed. Taxable Income (L21 - L23)			\$ 45,259	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 15,388	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 15,388
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 18,778</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ (36,721)
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				<u>\$ 55,499</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 781,962	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			<u>\$ 27,447</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 1,223	\$ -	\$ 1,223
2	Source of Supply Plant	172,909	-	172,909
3	Pumping Plant	428,386	(2,500)	425,886
4	Water Treatment Plant	32,783	(35,041)	(2,258)
5	Transmission & Distribution Plant	438,789	(5,100)	433,689
6	General Plant	106,655	-	106,655
7	Total Gross Plant in Service	\$ 1,180,745	\$ (42,641)	\$ 1,138,104
8	Accumulated Depreciation	(260,401)	7,385	(253,016)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 920,344	\$ (35,256)	\$ 885,088
10	Advances in Aid Of Const.	\$ (15,715)	\$ -	\$ (15,715)
11	Contribution in Aid of Const.	\$ (49,164)	\$ -	\$ (49,164)
12	Accumulated Amortization of CIAC	12,246	-	12,246
13	NET CIAC (L5 + L6)	\$ (36,918)	\$ -	\$ (36,918)
14	Deferred Income Tax	\$ (51,746)	\$ -	\$ (51,746)
15	Customer Deposits	\$ -	\$ (2,635)	\$ (2,635)
16	Allowance for Working Capital	\$ 7,625	\$ (3,738)	\$ 3,887
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 823,590	\$ (41,628)	\$ 781,962

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRB/FVRB
1	Plant Classification								
1	Intangible Plant	\$ 1,223	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,223
2	Source of Supply Plant	172,909	-	-	-	-	-	-	172,909
3	Pumping Plant	428,886	-	-	(2,500)	-	-	-	425,886
4	Water Treatment Plant	32,783	-	-	(35,041)	-	-	-	(2,258)
5	Transmission & Distribution Plant	438,789	-	-	(5,100)	-	-	-	433,689
6	General Plant	106,655	-	-	-	-	-	-	106,655
7	Total Gross Plant in Service	\$ 1,180,745	\$ -	\$ -	\$ (42,641)	\$ -	\$ -	\$ -	\$ 1,138,104
8	Accumulated Depreciation	(260,401)	(9,692)	-	17,077	-	-	-	(253,016)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 920,344	\$ (9,692)	\$ -	\$ (25,564)	\$ -	\$ -	\$ -	\$ 885,088
10	Advances in Aid Of Const.	\$ (15,715)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (15,715)
11	Contribution in Aid of Const.	\$ (49,164)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (49,164)
12	Accumulated Amortization of CIAC	12,246	-	-	-	-	-	-	12,246
13	NET CIAC (L5 + L6)	\$ (36,918)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (36,918)
14	Deferred Income Tax	\$ (51,746)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (51,746)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,635)	\$ -	\$ (2,635)
16	Allowance for Working Capital	7,625	-	-	-	-	-	\$ (3,738)	\$ 3,887
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	-	-	-	-	-	-	-	-
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 823,590	\$ (9,692)	\$ -	\$ (25,564)	\$ -	\$ (2,635)	\$ (3,738)	\$ 781,962

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 88,841	\$ -	\$ 88,841	\$ 143,784	\$ 232,624
2	Commercial	22,651	-	22,651	-	22,651
3	Industrial	-	-	-	-	-
4	Private Fire Service	-	-	-	-	-
5	Other Water Revenues	19,498	-	19,498	-	19,498
6	Total Water Revenues	\$ 130,990	\$ -	\$ 130,990	\$ 143,784	\$ 274,774
7	Miscellaneous	\$ 936	\$ -	\$ 936	\$ -	\$ 936
8	Total Operating Revenues	\$ 131,926	\$ -	\$ 131,926	\$ 143,784	\$ 275,710
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	378	-	378	-	378
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	20,599	-	20,599	-	20,599
13	Purchased Gas	-	-	-	-	-
14	Other	4,831	-	4,831	-	4,831
15	Water Treatment Expenses	62,986	-	62,986	-	62,986
16	Transmission & Distribution Expenses	25,008	-	25,008	-	25,008
17	Customer Accounting Expenses	8,718	-	8,718	-	8,718
18	Sales Expense	43	-	43	-	43
19	Administrative & General Expenses	17,560	(627)	16,934	-	16,934
20	Total Operations & Maintenance Expense	\$ 140,124	\$ (627)	\$ 139,498	\$ -	\$ 139,498
21	Depreciation & Amortization Expenses	\$ 46,067	\$ (1,478)	\$ 44,589	\$ -	\$ 44,589
	Taxes					
22	Federal Income Taxes	\$ (31,753)	\$ 1,661	\$ (30,092)	\$ 45,480	\$ 15,388
23	State Income Taxes	(6,995)	366	(6,629)	10,019	3,390
24	Property Taxes	14,053	-	14,053	-	14,053
25	Other	1,522	(48)	1,474	-	1,474
26	Total Taxes	\$ (23,173)	\$ 1,979	\$ (21,194)	\$ 55,499	\$ 34,305
27	Total Operating Expenses	\$ 163,018	\$ (125)	\$ 162,893	\$ 55,499	\$ 218,392
28	Operating Income	\$ (31,092)	\$ 125	\$ (30,967)	\$ 88,285	\$ 57,318

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues												
2	Residential	\$ 88,841	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88,841
3	Commercial	22,651	-	-	-	-	-	-	-	-	-	-	22,651
4	Private Fire Service	-	-	-	-	-	-	-	-	-	-	-	-
5	Other Water Revenues	19,498	-	-	-	-	-	-	-	-	-	-	19,498
6	Total Water Revenues	\$ 130,990	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,990
7	Miscellaneous	\$ 936	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 936
8	Total Operating Revenues	\$ 131,926	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 131,926
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Other	378	-	-	-	-	-	-	-	-	-	-	378
13	Pumping Expenses:												
14	Purchased Power	20,589	-	-	-	-	-	-	-	-	-	-	20,589
15	Purchased Gas	-	-	-	-	-	-	-	-	-	-	-	-
16	Other	4,831	-	-	-	-	-	-	-	-	-	-	4,831
17	Water Treatment Expenses	62,886	-	-	-	-	-	-	-	-	-	-	62,886
18	Transmission & Distribution Expenses	25,008	-	-	-	-	-	-	-	-	-	-	25,008
19	Customer Accounting Expenses	8,718	-	-	-	-	-	-	-	-	-	-	8,718
20	Sales Expense	43	-	-	-	-	-	-	-	-	-	-	43
21	Administrative & General Expenses	17,950	(411)	-	(35)	-	-	(1)	-	-	(180)	-	16,934
22	Administrative & Maintenance Expenses	\$ 140,124	\$ (411)	\$ -	\$ (35)	\$ -	\$ -	\$ (1)	\$ -	\$ -	\$ (180)	\$ -	\$ 139,488
23	Depreciation & Amortization Expenses	\$ 46,087	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,478)	\$ -	\$ -	\$ -	\$ 44,589
24	Taxes												
25	Federal Income Taxes	\$ (31,753)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,661	\$ (30,092)
26	State Income Taxes	(6,895)	-	-	-	-	-	-	-	-	-	366	(6,529)
27	Property Taxes	14,053	-	-	-	-	-	-	-	-	-	-	14,053
28	Other	1,522	-	(48)	-	-	-	-	-	-	-	-	1,474
29	Total Taxes	\$ (23,173)	\$ -	\$ (48)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,027	\$ (21,184)
30	Total Operating Expenses	\$ 163,016	\$ (411)	\$ (48)	\$ (35)	\$ -	\$ -	\$ (1)	\$ (1,478)	\$ -	\$ (180)	\$ 2,027	\$ 162,893
31	Operating Income	\$ (31,092)	\$ 411	\$ 48	\$ 35	\$ -	\$ -	\$ 1	\$ 1,478	\$ -	\$ 180	\$ (2,027)	\$ (30,957)

ADJUSTMENTS:

- Labor Expense - Normalize OT Hours in Test Year
- Payroll Tax Expense Related to Adjustment 1
- 401(K) Expense Related to Adjustment 1
- Reverse Adjustment for Conservation
- Purchased Power Revenues
- Insurance Expense
- Depreciation Expense
- Property Tax Expense
- Rate Case Expense
- Income Tax

REFERENCE:

- Testimony, WAR And Schedule TIC-9 Page, 1 of 3
- Testimony, WAR And Schedule TIC-9 Page, 2 of 3
- Testimony, WAR And Schedule TIC-9 Page, 3 of 3
- Testimony WAR
- Testimony WAR
- Testimony, WAR And Schedule TIC-10
- Testimony, WAR And Schedule TIC-11
- Testimony, WAR And Schedule TIC-12
- Testimony, WAR And Schedule TIC-13
- Testimony, WAR And Schedule TIC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

<u>SCH. NO.</u>	<u>PAGE NO.</u>	<u>TITLE</u>
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 4,415,017	\$ 4,334,611
2	Adjusted Operating Income (Loss)	\$ 130,069	\$ 131,942
3	Current Rate of Return (L2 / L1)	2.95%	3.04%
4	Required Operating Income (L5 X L1)	\$ 433,301	\$ 317,727
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 303,233	\$ 185,785
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 493,855	\$ 302,576
9	Adjusted Test Year Revenue	\$ 1,244,735	\$ 1,244,735
10	Proposed Annual Revenue (L8 + L9)	\$ 1,739,054	\$ 1,547,311
11	Required Percentage Increase in Revenue (L8 / L9)	39.68%	24.31%
12	Consolidated Revenue Adjustment	\$ -	\$ 10,210
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ -	\$ 312,786
14	Required Revenue Under Proposed Consolidation	\$ -	\$ 1,557,521
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-	25.13%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	<u>0.6140</u>			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	<u>6.9680%</u>			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	<u>31.6309%</u>			
10	Combined Federal And State Income Tax Rate (L6 + L9)	<u>38.5989%</u>			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 317,727			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	<u>131,942</u>			
13	Required Increase In Operating Income (L11 - L12)		\$ 185,785		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 104,091			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	<u>(12,700)</u>			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 116,791		
17	Total Required Increase In Revenue (L13 + L16)		<u>\$ 302,576</u>		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 1,547,311	
20	Synchronized Interest (Col. (C), L37)			1,125,493	
21	Arizona Taxable Income (L18 - L19 - L20)			<u>152,145</u>	
22	Arizona State Income Tax Rate			\$ 269,673	
23	Arizona Income Tax (L21 X L22)			<u>6.9680%</u>	\$ 18,791
24	Fed. Taxable Income (L21 - L23)			\$ 250,882	
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 85,300	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 85,300
31	Combined Federal and State Income Tax (L23 + L30)				<u>\$ 104,091</u>
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ (12,700)
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				<u>\$ 116,791</u>
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 4,334,611	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			<u>3.51%</u>	
37	Synchronized Interest (L35 X L36)			<u>\$ 152,145</u>	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 10,580	\$ -	\$ 10,580
2	Source of Supply Plant	615,238	-	615,238
3	Pumping Plant	881,883	(35,104)	846,779
4	Water Treatment Plant	1,119,829	(904)	1,118,925
5	Transmission & Distribution Plant	10,239,592	-	10,239,592
6	General Plant	269,914	-	269,914
7	Total Gross Plant in Service	\$ 13,137,036	\$ (36,008)	\$ 13,101,028
8	Accumulated Depreciation	(1,716,046)	27,545	(1,688,502)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 11,420,990	\$ (8,463)	\$ 11,412,526
10	Advances in Aid Of Const.	\$ (5,647,808)	\$ -	\$ (5,647,808)
11	Contribution in Aid of Const.	\$ (1,134,727)	\$ -	\$ (1,134,727)
12	Accumulated Amortization of CIAC	175,250	-	175,250
13	NET CIAC (L5 + L6)	\$ (959,477)	\$ -	\$ (959,477)
14	Deferred Income Tax	\$ (454,211)	\$ -	\$ (454,211)
15	Customer Deposits	\$ 55,523	\$ (9,530)	\$ 45,993
16	Allowance for Working Capital	\$ 55,523	\$ (71,942)	\$ (16,420)
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,415,017	\$ (80,406)	\$ 4,334,611

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 10,580	-	-	-	-	-	-	\$ 10,580
3	Source of Supply Plant	615,238	-	-	-	-	-	-	615,238
4	Pumping Plant	881,883	-	-	(35,104)	-	-	-	846,779
5	Water Treatment Plant	1,119,829	-	-	(904)	-	-	-	1,118,925
6	Transmission & Distribution Plant	10,239,592	-	-	-	-	-	-	10,239,592
7	General Plant	269,914	-	-	-	-	-	-	269,914
8	Total Gross Plant in Service	\$ 13,137,036	\$ -	\$ -	\$ (36,008)	\$ -	\$ -	\$ -	\$ 13,101,028
9	Accumulated Depreciation	(1,716,046)	54	-	27,491	-	-	-	(1,688,502)
10	Net Utility Plant in Service (Sum L1 & L2)	\$ 11,420,990	\$ 54	\$ -	\$ (8,517)	\$ -	\$ -	\$ -	\$ 11,412,526
11	Advances in Aid Of Const.	\$ (5,647,808)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,647,808)
12	Contribution in Aid of Const.	\$ (1,134,727)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,134,727)
13	Accumulated Amortization of CIAC	175,250	-	-	-	-	-	-	175,250
14	NET CIAC (L5 + L6)	\$ (959,477)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (959,477)
15	Deferred Income Tax	\$ (454,211)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (454,211)
16	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (9,530)	\$ -	\$ (9,530)
17	Allowance for Working Capital	\$ 55,523	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (71,942)	\$ (16,420)
18	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,415,017	\$ 54	\$ -	\$ (8,517)	\$ -	\$ -	\$ (71,942)	\$ 4,334,611

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adkustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,057,928	\$ -	\$ 1,057,928	\$ 302,576	\$ 1,360,504
2	Commercial	119,358	-	119,358	-	119,358
3	Industrial	18,658	-	18,658	-	18,658
4	Private Fire Service	295	-	295	-	295
5	Other Water Revenues	36,166	-	36,166	-	36,166
6	Total Water Revenues	\$ 1,232,404	\$ -	\$ 1,232,404	\$ 302,576	\$ 1,534,980
7	Miscellaneous	\$ 12,331	\$ -	\$ 12,331	\$ -	\$ 12,331
8	Total Operating Revenues	\$ 1,244,735	\$ -	\$ 1,244,735	\$ 302,576	\$ 1,547,311
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 150,244	\$ -	\$ 150,244	\$ -	\$ 150,244
10	Other	5,606	-	5,606	-	5,606
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	105,581	-	105,581	-	105,581
13	Purchased Gas	-	-	-	-	-
14	Other	41,276	-	41,276	-	41,276
15	Water Treatment Expenses	34,975	-	34,975	-	34,975
16	Transmission & Distribution Expenses	173,577	-	173,577	-	173,577
17	Customer Accounting Expenses	72,619	-	72,619	-	72,619
18	Sales Expense	362	-	362	-	362
19	Administrative & General Expenses	146,701	(5,500)	141,201	-	141,201
20	Total Operations & Maintenance Expense	\$ 730,940	\$ (5,500)	\$ 725,440	\$ -	\$ 725,440
21	Depreciation & Amortization Expenses	\$ 294,495	\$ (3,953)	\$ 290,542	\$ -	\$ 290,542
	Taxes					
22	Federal Income Taxes	\$ (17,350)	\$ 6,943	\$ (10,408)	\$ 95,707	\$ 85,300
23	State Income Taxes	(3,822)	1,529	(2,293)	21,083	18,791
24	Property Taxes	53,436	(473)	52,963	-	52,963
25	Other	56,967	(420)	56,547	-	56,547
26	Total Taxes	\$ 89,231	\$ 7,579	\$ 96,811	\$ 116,791	\$ 213,601
27	Total Operating Expenses	\$ 1,114,666	\$ (1,873)	\$ 1,112,793	\$ 116,791	\$ 1,229,584
28	Operating Income	\$ 130,069	\$ 1,873	\$ 131,942	\$ 185,785	\$ 317,727

References:

Column (A): Company Schedule C-1
Column (B): TJC-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): TJC-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues	\$ 1,057,928											\$ 1,057,928
2	Residential	119,358											119,358
3	Commercial	19,658											18,658
4	Industrial	285											285
5	Private Fire Service	36,186											36,186
6	Other Water Revenues												
7	Total Water Revenues	\$ 1,232,404											\$ 1,232,404
8	Miscellaneous	\$ 12,931											\$ 12,931
9	Total Operating Revenues	\$ 1,244,735											\$ 1,244,735
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 150,244											\$ 150,244
12	Other	5,606											5,606
13	Pumping Expenses:												
14	Purchased Power	105,581											105,581
15	Other	41,276											41,276
16	Water Treatment Expenses	34,975											34,975
17	Transmission & Distribution Expenses	173,577											173,577
18	Customer Accounting Expenses	72,819											72,819
19	Sales Expense	362											362
20	Administrative & General Expenses	145,701	(3,604)					(11)			(1,560)		141,201
21	Total Operations & Maintenance Expenses	\$ 730,940	\$ (3,604)					\$ (11)			\$ (1,560)		\$ 725,440
21	Depreciation & Amortization Expenses	\$ 294,495							(3,953)				\$ 290,542
22	Taxes												
23	Federal Income Taxes	\$ (17,950)											\$ (17,950)
24	State Income Taxes	(3,922)											(2,293)
25	Property Taxes	53,436								(473)			52,963
26	Other	56,967		(420)									56,547
27	Total Taxes	\$ 89,231		\$ (420)						\$ (473)			\$ 88,758
28	Total Operating Expenses	\$ 1,114,666	\$ (3,604)	\$ (420)	\$ (305)			\$ (11)	\$ (3,953)	\$ (473)	\$ (1,560)	\$ 8,472	\$ 1,112,793
28	Operating Income	\$ 130,069	\$ 3,604	\$ 420	\$ 305			\$ 11	\$ 3,953	\$ 473	\$ 1,560	\$ (8,472)	\$ 131,642

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- Testimony, WAR And Schedule TJC-9 Page, 1 of 3
Testimony, WAR And Schedule TJC-9 Page, 2 of 3
Testimony, WAR And Schedule TJC-9 Page, 3 of 3
Testimony WAR
Testimony WAR
Testimony, WAR And Schedule TJC-10
Testimony, WAR And Schedule TJC-11
Testimony, WAR And Schedule TJC-12
Testimony, WAR And Schedule TJC-13
Testimony, WAR And Schedule TJC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

SCH. NO.	PAGE NO.	TITLE
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 1,123,706	\$ 1,097,935
2	Adjusted Operating Income (Loss)	\$ 49,548	\$ 51,013
3	Current Rate of Return (L2 / L1)	4.41%	4.65%
4	Required Operating Income (L5 X L1)	\$ 110,284	\$ 80,479
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 60,735	\$ 29,466
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 98,916	\$ 47,989
9	Adjusted Test Year Revenue	\$ 470,994	\$ 470,994
10	Proposed Annual Revenue (L8 + L9)	\$ 569,955	\$ 518,982
11	Required Percentage Increase in Revenue (L8 / L9)	20.99%	10.19%
12	Consolidated Revenue Adjustment	\$ -	\$ 3,676
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ -	\$ 51,665
14	Required Revenue Under Proposed Consolidation	\$ -	\$ 522,659
15	Required Percentage Increase in Revenue Under Proposed Consolidation	-	10.97%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 80,479			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	51,013			
13	Required Increase In Operating Income (L11 - L12)		\$ 29,466		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 26,366			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	7,843			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ 18,523		
17	Total Required Increase In Revenue (L13 + L16)		\$ 47,989		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 518,982	
20	Synchronized Interest (Col. (C), L37)			412,138	
21	Arizona Taxable Income (L18 - L19 - L20)			38,538	
22	Arizona State Income Tax Rate			\$ 68,307	
23	Arizona Income Tax (L21 X L22)			6.9680%	
24	Fed. Taxable Income (L21 - L23)			\$ 63,547	\$ 4,760
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 21,606	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 21,606
31	Combined Federal and State Income Tax (L23 + L30)				\$ 26,366
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 7,843
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				\$ 18,523
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 1,097,935	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 38,538	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 3,702	\$ -	\$ 3,702
2	Source of Supply Plant	9,477	-	9,477
3	Pumping Plant	89,231	-	89,231
4	Water Treatment Plant	4,306	-	4,306
5	Transmission & Distribution Plant	1,916,378	-	1,916,378
6	General Plant	184,119	-	184,119
7	Total Gross Plant in Service	\$ 2,207,212	\$ -	\$ 2,207,212
8	Accumulated Depreciation	(812,825)	(13)	(812,838)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 1,394,387	\$ (13)	\$ 1,394,375
10	Advances in Aid Of Const.	\$ (87,953)	\$ -	\$ (87,953)
11	Contribution in Aid of Const.	\$ (65,554)	\$ -	\$ (65,554)
12	Accumulated Amortization of CIAC	15,854	-	15,854
13	NET CIAC (L5 + L6)	\$ (49,700)	\$ -	\$ (49,700)
14	Deferred Income Tax	\$ (155,237)	\$ -	\$ (155,237)
15	Customer Deposits	\$ -	\$ (4,600)	\$ (4,600)
16	Allowance for Working Capital	\$ 22,208	\$ (21,159)	\$ 1,050
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 1,123,706	\$ (25,771)	\$ 1,097,935

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCR/B/FVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCR/B/FVRB
1	Plant Classification								
2	Intangible Plant	\$ 3,702	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,702
3	Source of Supply Plant	9,477	-	-	-	-	-	-	9,477
4	Pumping Plant	89,231	-	-	-	-	-	-	89,231
5	Water Treatment Plant	4,306	-	-	-	-	-	-	4,306
6	Transmission & Distribution Plant	1,916,378	-	-	-	-	-	-	1,916,378
7	General Plant	184,119	-	-	-	-	-	-	184,119
7	Total Gross Plant in Service	\$ 2,207,212	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,207,212
8	Accumulated Depreciation	(812,825)	(13)	-	-	-	-	-	(812,838)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 1,394,387	\$ (13)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,394,375
10	Advances in Aid Of Const.	\$ (87,953)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (87,953)
11	Contribution in Aid of Const.	\$ (65,554)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (65,554)
12	Accumulated Amortization of CIAC	15,854	-	-	-	-	-	-	15,854
13	NET CIAC (L5 + L6)	\$ (49,700)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (49,700)
14	Deferred Income Tax	\$ (155,237)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (155,237)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4,600)	\$ -	\$ (4,600)
16	Allowance for Working Capital	22,208	-	-	-	-	-	(21,159)	\$ 1,050
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	-	-	-	-	-	-	-	-
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 1,123,706	\$ (13)	\$ -	\$ -	\$ -	\$ (4,600)	\$ (21,159)	\$ 1,097,935

References:
Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adjustment Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJ'M'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 360,038	\$ -	\$ 360,038	\$ 47,989	\$ 408,027
2	Commercial	106,351	-	106,351	-	106,351
3	Industrial	-	-	-	-	-
4	Private Fire Service	124	-	124	-	124
5	Other Water Revenues	812	-	812	-	812
6	Total Water Revenues	\$ 467,325	\$ -	\$ 467,325	\$ 47,989	\$ 515,314
7	Miscellaneous	\$ 3,669	\$ -	\$ 3,669	\$ -	\$ 3,669
8	Total Operating Revenues	\$ 470,994	\$ -	\$ 470,994	\$ 47,989	\$ 518,982
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ 159,092	\$ -	\$ 159,092	\$ -	\$ 159,092
10	Other	71	-	71	-	71
	Pumping Expenses:					
11	Purchased Power	-	-	-	-	-
12	Purchased Power	3,297	-	3,297	-	3,297
13	Purchased Gas	-	-	-	-	-
14	Other	16,314	-	16,314	-	16,314
15	Water Treatment Expenses	4,904	-	4,904	-	4,904
16	Transmission & Distribution Expenses	66,320	-	66,320	-	66,320
17	Customer Accounting Expenses	29,076	-	29,076	-	29,076
18	Sales Expense	133	-	133	-	133
19	Administrative & General Expenses	55,525	(1,880)	53,644	-	53,644
20	Total Operations & Maintenance Expense	\$ 334,732	\$ (1,880)	\$ 332,851	\$ -	\$ 332,851
21	Depreciation & Amortization Expenses	\$ 51,154	\$ (706)	\$ 50,448	\$ -	\$ 50,448
	Taxes					
22	Federal Income Taxes	\$ 4,055	\$ 2,372	\$ 6,427	\$ 15,179	\$ 21,606
23	State Income Taxes	893	523	1,416	3,344	4,760
24	Property Taxes	26,265	(1,630)	24,636	-	24,636
25	Other	4,347	(143)	4,203	-	4,203
26	Total Taxes	\$ 35,560	\$ 1,122	\$ 36,681	\$ 18,523	\$ 55,205
27	Total Operating Expenses	\$ 421,445	\$ (1,465)	\$ 419,981	\$ 18,523	\$ 438,504
28	Operating Income	\$ 49,548	\$ 1,465	\$ 51,013	\$ 29,466	\$ 80,479

References:

- Column (A): Company Schedule C-1
- Column (B): TJC-8, Columns (B) Thru (I)
- Column (C): Column (A) + Column (B)
- Column (D): TJC-1
- Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD
1	Operating Revenues												
2	Residential	\$ 380,038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 380,038
3	Commercial	105,351	-	-	-	-	-	-	-	-	-	-	106,351
4	Industrial	124	-	-	-	-	-	-	-	-	-	-	124
5	Private Fire Service	812	-	-	-	-	-	-	-	-	-	-	812
6	Other Water Revenues	\$ 487,325	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 487,325
7	Miscellaneous	\$ 3,669	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,669
8	Total Operating Revenues	\$ 470,984	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 470,984
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 159,082	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 159,082
12	Other	71	-	-	-	-	-	-	-	-	-	-	71
13	Pumping Expenses:												
14	Purchased Power	3,287	-	-	-	-	-	-	-	-	-	-	3,287
15	Purchased Gas	16,314	-	-	-	-	-	-	-	-	-	-	16,314
16	Water Treatment Expenses	4,904	-	-	-	-	-	-	-	-	-	-	4,904
17	Transmission & Distribution Expenses	66,320	-	-	-	-	-	-	-	-	-	-	66,320
18	Customer Accounting Expenses	29,076	-	-	-	-	-	-	-	-	-	-	29,076
19	Sales Expense	133	-	-	-	-	-	-	-	-	-	-	133
20	Administrative & General Expenses	\$ 55,925	\$ (1,232)	\$ -	\$ (104)	\$ -	\$ -	\$ (4)	\$ -	\$ -	\$ (540)	\$ -	\$ 53,644
21	Total Operations & Maintenance Expense	\$ 334,732	\$ (1,232)	\$ -	\$ (104)	\$ -	\$ -	\$ (4)	\$ (706)	\$ -	\$ (540)	\$ -	\$ 332,651
22	Depreciation & Amortization Expenses	\$ 51,154	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,448
23	Taxes												
24	Federal Income Taxes	\$ 4,055	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,372	\$ 6,427
25	State Income Taxes	883	-	-	-	-	-	-	-	-	-	523	1,416
26	Property Taxes	28,285	-	-	-	-	-	-	-	(1,630)	-	-	24,636
27	Other	4,347	-	(143)	-	-	-	-	-	-	-	-	4,203
28	Total Taxes	\$ 35,560	\$ -	\$ (143)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,630)	\$ -	\$ 2,895	\$ 36,681
29	Total Operating Expenses	\$ 421,445	\$ (1,232)	\$ (143)	\$ (104)	\$ -	\$ -	\$ (4)	\$ (706)	\$ (1,630)	\$ (540)	\$ 2,895	\$ 419,981
30	Operating Income	\$ 49,546	\$ 1,232	\$ 143	\$ 104	\$ -	\$ -	\$ 4	\$ 706	\$ 1,630	\$ 540	\$ (2,895)	\$ 51,013

- ADJUSTMENTS:
- 1 - Labor Expense - Normalize OT Hours in Test Year
 - 2 - Payroll Tax Expense Related to Adjustment 1
 - 3 - 401(K) Expense Related to Adjustment 1
 - 4 - Reverse Adjustment for Conservation
 - 5 - Purchased Power Revenues
 - 6 - Insurance Expense
 - 7 - Depreciation Expense
 - 8 - Property Tax Expense
 - 9 - Rate Case Expense
 - 10 - Income Tax

- REFERENCE:
- 1 - Testimony, WAR And Schedule TJC-8 Page, 1 of 3
 - 2 - Testimony, WAR And Schedule TJC-8 Page, 2 of 3
 - 3 - Testimony, WAR And Schedule TJC-8 Page, 2 of 3
 - 4 - Testimony, WAR And Schedule TJC-8 Page, 3 of 3
 - 5 - Testimony WAR
 - 6 - Testimony WAR
 - 7 - Testimony, WAR And Schedule TJC-10
 - 8 - Testimony, WAR And Schedule TJC-11
 - 9 - Testimony, WAR And Schedule TJC-12
 - 10 - Testimony, WAR And Schedule TJC-13
 - 11 - Testimony, WAR And Schedule TJC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	69,671,689	45.85%	8.33%	3.82%
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:
Columns (A) Thru (D): Testimony, WAR

TABLE OF CONTENTS TO TJC SURREBUTTAL SCHEDULES (ABBREVIATED)

<u>SCH. NO.</u>	<u>PAGE NO.</u>	<u>TITLE</u>
WAR-1	1 & 2	REVENUE REQUIREMENT AND GROSS REVENUE CONVERSION FACTOR
WAR-2	1	RATE BASE
WAR-3	1	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
WAR-7	1	OPERATING INCOME
WAR-8	1	SUMMARY OF OPERATING INCOME ADJUSTMENTS
WAR-15	1	COST OF CAPITAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY OCRB/FVRB COST	(B) RUCO OCRB/FVRB COST
1	Adjusted Original Cost/Fair Value Rate Base	\$ 4,318,206	\$ 3,433,064
2	Adjusted Operating Income (Loss)	\$ 276,633	\$ 295,500
3	Current Rate of Return (L2 / L1)	6.41%	8.61%
4	Required Operating Income (L5 X L1)	\$ 423,800	\$ 251,644
5	Required Rate of Return on Fair Value Rate Base	9.81%	7.33%
6	Operating Income Deficiency (L4 - L2)	\$ 147,168	\$ (43,857)
7	Gross Revenue Conversion Factor (TJC-1, Page 2)	1.6286	1.6286
8	Required Increase in Gross Revenue Requirement (L7 X L6)	\$ 239,682	\$ (71,427)
9	Adjusted Test Year Revenue	\$ 2,214,952	\$ 2,214,952
10	Proposed Annual Revenue (L8 + L9)	\$ 2,454,634	\$ 2,143,525
11	Required Percentage Increase in Revenue (L8 / L9)	10.82%	-3.22%
12	Consolidated Revenue Adjustment	\$ 321,431	\$ 29,664
13	Required Increase in Gross Revenue Under Proposed Consolidation	\$ 561,113	\$ (41,763)
14	Required Revenue Under Proposed Consolidation	\$ 2,776,111	\$ 2,173,189
15	Required Percentage Increase in Revenue Under Proposed Consolidation	25.34%	-1.89%
16	Rate of Return on Common Equity	12.40%	8.33%

References:

Column (A): Company Schedules A-1 and C-1
Column (B): RUCO Schedule TJC-2, TJC-7, and TJC-15

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
CALCULATION OF GROSS REVENUE CONVERSION FACTOR:					
1	Revenue	1.0000			
2	Combined Federal And State Tax Rate (L10)	0.3860			
3	Subtotal (L1 - L2)	0.6140			
4	Revenue Conversion Factor (L1 / L3)	1.6286			
CALCULATION OF EFFECTIVE TAX RATE:					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	6.9680%			
7	Federal Taxable Income (L5 - L6)	93.0320%			
8	Applicable Federal Income Tax Rate (Col. (D), L34)	34.0000%			
9	Effective Federal Income Tax Rate (L7 X L8)	31.6309%			
10	Combined Federal And State Income Tax Rate (L6 + L9)	38.5989%			
11	Required Operating Income (Sch. TJC-1, Pg 1, C (B), L4)	\$ 251,644			
12	Adj'd T.Y. Oper'g Inc. (Loss) (Sch. TJC-1, Pg 1, C (B), L2)	295,500			
13	Required Increase In Operating Income (L11 - L12)		\$ (43,857)		
14	Income Taxes On Recommended Revenue (Col. (D), L31)	\$ 82,441			
15	Income Taxes On Test Year Revenue (Col. (D), L32)	110,011			
16	Required Increase In Revenue To Provide For Income Taxes (L14 - L15)		\$ (27,570)		
17	Total Required Increase In Revenue (L13 + L16)		\$ (71,427)		
CALCULATION OF INCOME TAX					
18	Revenue (Sch. TJC-1, Pg 1, Col. (B), L12)			RUCO Recommended	
19	Operating Expense Excluding Income Tax (TJC-7, Col. (E), L27 - L22 - L23)			\$ 2,143,525	
20	Synchronized Interest (Col. (C), L37)			1,809,440	
21	Arizona Taxable Income (L18 - L19 - L20)			120,501	
22	Arizona State Income Tax Rate			\$ 213,584	
23	Arizona Income Tax (L21 X L22)			6.9680%	
24	Fed. Taxable Income (L21 - L23)			\$ 198,702	\$ 14,883
25	Fed. Tax on 1st Inc. Bracket (\$1 - \$50,000) @ 15%			\$ -	
26	Fed. Tax on 2nd Inc. Bracket (\$50,001 - \$75,000) @ 25%			\$ -	
27	Fed. Tax on 3rd Inc. Bracket (\$75,001 - \$100,000) @ 34%			\$ -	
28	Fed. Tax on 4th Inc. Bracket (\$100,001 - \$335,000) @ 39%			\$ -	
29	Fed. Tax on 5th Inc. Bracket (\$335,001 - \$10M) @ 34%			\$ 67,559	
30	Total Federal Income Tax (L25 + L26 + L27 + L28 + L29)				\$ 67,559
31	Combined Federal and State Income Tax (L23 + L30)				\$ 82,441
32	Test Year Combined Income Tax, RUCO as Adjusted (TJC-7, Col. (C), L22 + L23)				\$ 110,011
33	RUCO Adjustment (L31 - L32) (See TJC-6, Col. (D), L23)				\$ (27,570)
34	Applicable Federal Income Tax Rate (Col. (D), L30 / Col. (C), L24)				34.00%
CALCULATION OF INTEREST SYNCHRONIZATION:					
35	Rate Base (Sch. WAR-2, Col. (C), L17)			\$ 3,433,064	
36	Weighted Avg. Cost of Debt (Sch. TJC-16, Col. (F), L1)			3.51%	
37	Synchronized Interest (L35 X L36)			\$ 120,501	

RATE BASE - ORIGINAL COST

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRB/FVRB	(B) RUCO OCRB/FVRB ADJUSTMENTS	(C) RUCO ADJ'TED OCRB/FVRB
	Plant Classification			
1	Intangible Plant	\$ 42,011	\$ -	\$ 42,011
2	Source of Supply Plant	2,098,977	(856,324)	1,242,653
3	Pumping Plant	1,400,953	-	1,400,953
4	Water Treatment Plant	845,417	-	845,417
5	Transmission & Distribution Plant	11,910,083	-	11,910,083
6	General Plant	762,698	-	762,698
7	Total Gross Plant in Service	\$ 17,060,139	\$ (856,324)	\$ 16,203,815
8	Accumulated Depreciation	(3,207,118)	51,770	(3,155,348)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 13,853,022	\$ (804,554)	\$ 13,048,468
10	Advances in Aid Of Const.	\$ (7,214,952)	\$ -	\$ (7,214,952)
11	Contribution in Aid of Const.	\$ (1,544,697)	\$ -	\$ (1,544,697)
12	Accumulated Amortization of CIAC	145,424	-	145,424
13	NET CIAC (L5 + L6)	\$ (1,399,273)	\$ -	\$ (1,399,273)
14	Deferred Income Tax	\$ (1,009,996)	\$ -	\$ (1,009,996)
15	Customer Deposits	\$ -	\$ (69,105)	\$ (69,105)
16	Allowance for Working Capital	\$ 89,405	\$ (11,484)	\$ 77,922
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,318,206	\$ (885,143)	\$ 3,433,064

References:

Column (A): Company Schedule B-1
Column (B): Schedule TJC-3
Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED OCRBFVRB	(B) ADJMT NO. 1 PLANT & ACCUM DEP.	(C) ADJMT NO. 2	(D) ADJMT NO. 3 PER BKB 11.16	(E) ADJMT NO. 4	(F) ADJMT NO. 5 CUSTOMER DEPOSITS	(G) ADJMT NO. 6 WORKING CAPITAL	(H) RUCO ADJUSTED OCRBFVRB
1	Plant Classification								
2	Intangible Plant	\$ 42,011	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42,011
3	Source of Supply Plant	2,098,977	-	(856,324)	-	-	-	-	1,242,653
4	Pumping Plant	1,400,953	-	-	-	-	-	-	1,400,953
5	Water Treatment Plant	845,417	-	-	-	-	-	-	845,417
6	Transmission & Distribution Plant	11,910,083	-	-	-	-	-	-	11,910,083
7	General Plant	762,698	-	-	-	-	-	-	762,698
7	Total Gross Plant in Service	\$ 17,060,139	\$ -	\$ (856,324)	\$ -	\$ -	\$ -	\$ -	\$ 16,203,815
8	Accumulated Depreciation	(3,207,118)	5,582	-	46,188	-	-	-	(3,155,348)
9	Net Utility Plant in Service (Sum L1 & L2)	\$ 13,853,022	\$ 5,582	\$ (810,136)	\$ -	\$ -	\$ -	\$ -	\$ 13,048,468
10	Advances in Aid Of Const.	\$ (7,214,952)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (7,214,952)
11	Contribution in Aid of Const.	\$ (1,544,697)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,544,697)
12	Accumulated Amortization of CIAC	145,424	-	-	-	-	-	-	145,424
13	NET CIAC (L5 + L6)	\$ (1,399,273)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,399,273)
14	Deferred Income Tax	\$ (1,009,996)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,009,996)
15	Customer Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (69,105)	\$ -	\$ (69,105)
16	Allowance for Working Capital	89,405	-	-	-	-	-	\$ (11,484)	\$ 77,922
17	Net Regulatory Asset / (Liability)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	TOTAL RATE BASE (Sum L's 3, 4, & 7 Thru 16)	\$ 4,318,206	\$ 5,582	\$ (810,136)	\$ -	\$ -	\$ (69,105)	\$ (11,484)	\$ 3,433,064

References:

Column (A): Company Schedule B-2
Column (B): Adjustment No. 1 - Adjust Test-Year Plant, PTY Plant & Accumulated Depreciation (See TJC-4 Total, TJC-4 Direct, TJC-4 PHX OFF and TJC-4 MS Schedules and TJC Testimor
Column (C): Adjustment No. 2 - Intentionally Left Blank
Column (D): Adjustment No. 3 - Conforming Adksimnt Per Data Response to BKB 11.16 to Remove Plant and Record Retirements
Column (E): Adjustment No. 4 - Intentionally Left Blank
Column (F): Adjustment No. 5 - Customer Deposits
Column (G): Adjustment No. 6 - Working Capital
Column (H): Sum Of Columns (A), (B), (C), (D), (E), (F) & (G)

OPERATING INCOME

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'TED	(D) RUCO PROP'D CHANGES	(E) RUCO AS RECOMM'D
	Operating Revenues					
1	Residential	\$ 1,458,989	\$ -	\$ 1,458,989	\$ (71,427)	\$ 1,387,562
2	Commercial	609,270	-	609,270	-	609,270
3	Industrial	8,657	-	8,657	-	8,657
4	Private Fire Service	1,673	-	1,673	-	1,673
5	Other Water Revenues	84,784	-	84,784	-	84,784
6	Total Water Revenues	\$ 2,163,372	\$ -	\$ 2,163,372	\$ (71,427)	\$ 2,091,945
7	Miscellaneous	\$ 51,580	\$ -	\$ 51,580	\$ -	\$ 51,580
8	Total Operating Revenues	\$ 2,214,952	\$ -	\$ 2,214,952	\$ (71,427)	\$ 2,143,525
	Operating Expenses					
	Source of Supply Expenses:					
9	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other	10,262	-	10,262	-	10,262
11	Pumping Expenses:	-	-	-	-	-
12	Purchased Power	192,581	-	192,581	-	192,581
13	Purchased Gas	878	-	878	-	878
14	Other	64,710	-	64,710	-	64,710
15	Water Treatment Expenses	33,911	-	33,911	-	33,911
16	Transmission & Distribution Expenses	285,973	-	285,973	-	285,973
17	Customer Accounting Expenses	267,290	-	267,290	-	267,290
18	Sales Expense	890	-	890	-	890
19	Administrative & General Expenses	378,361	(12,236)	366,125	-	366,125
20	Total Operations & Maintenance Expense	\$ 1,234,856	\$ (12,236)	\$ 1,222,620	\$ -	\$ 1,222,620
21	Depreciation & Amortization Expenses	\$ 426,056	\$ (34,032)	\$ 392,024	\$ -	\$ 392,024
	Taxes					
22	Federal Income Taxes	\$ 60,002	\$ 30,150	\$ 90,151	\$ (22,593)	\$ 67,559
23	State Income Taxes	13,218	6,642	19,860	(4,977)	14,883
24	Property Taxes	151,656	(8,458)	143,197	-	143,197
25	Other	52,532	(934)	51,598	-	51,598
26	Total Taxes	\$ 277,407	\$ 27,400	\$ 304,807	\$ (27,570)	\$ 277,237
27	Total Operating Expenses	\$ 1,938,319	\$ (18,868)	\$ 1,919,451	\$ (27,570)	\$ 1,891,881
28	Operating Income	\$ 276,633	\$ 18,868	\$ 295,500	\$ (43,857)	\$ 251,644

References:

Column (A): Company Schedule C-1
Column (B): TJC-8, Columns (B) Thru (I)
Column (C): Column (A) + Column (B)
Column (D): TJC-1
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS
TEST YEAR AS FILED AND ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJMT NO. 1 LABOR EXPENSE	(C) ADJMT NO. 2 PAYROLL TAX EXPENSE	(D) ADJMT NO. 3 401(K) EXPENSE	(E) ADJMT NO. 4 REVERSE ADJ. FOR CONSERVATION	(F) ADJMT NO. 5 PURCH. POWER REVENUES	(G) ADJMT NO. 6 INSURANCE EXPENSE	(H) ADJMT NO. 7 DEPRECIATION EXPENSE	(I) ADJMT NO. 8 PROPERTY TAX	(J) ADJMT NO. 9 RATE CASE EXPENSE	(K) ADJMT NO. 10 INCOME TAXES	(L) RUCO AS ADJTD.
1	Operating Revenues	\$ 1,458,989											\$ 1,458,989
2	Residential	609,270											609,270
3	Commercial	8,657											8,657
4	Private Fire Service	1,673											1,673
5	Other Water Revenues	84,794											84,794
6	Total Water Revenues	\$ 2,163,372											\$ 2,163,372
7	Miscellaneous	\$ 51,590											\$ 51,590
8	Total Operating Revenues	\$ 2,214,952											\$ 2,214,952
9	Operating Expenses												
10	Source of Supply Expenses:												
11	Purchased Water	\$ 10,262											\$ 10,262
12	Other												
13	Pumping Expenses:	192,591											192,591
14	Purchased Power	878											878
15	Purchased Gas	64,710											64,710
16	Water Treatment Expenses	33,911											33,911
17	Transmission & Distribution Expenses	285,973											285,973
18	Customer Accounting Expenses	287,290											287,290
19	Sales Expense	890											890
20	Administrative & General Expenses	378,361	(8,014)		(677)						(3,513)		396,125
21	Total Operations & Maintenance Expense	\$ 1,234,956	\$ (8,014)	\$ -	\$ (677)	\$ -	\$ -	\$ (31)	\$ -	\$ -	\$ (3,513)	\$ -	\$ 1,222,620
22	Depreciation & Amortization Expenses	\$ 426,056							(34,032)				\$ 392,024
23	Taxes												
24	Federal Income Taxes	\$ 60,002										\$ 30,150	\$ 90,151
25	State Income Taxes	13,218										6,842	19,860
26	Property Taxes	151,656								(8,458)			143,197
27	Other	52,532		(934)									51,598
28	Total Taxes	\$ 277,407	\$ -	\$ (934)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,458)	\$ -	\$ 36,791	\$ 304,807
29	Total Operating Expenses	\$ 1,959,319	\$ (8,014)	\$ (934)	\$ (677)	\$ -	\$ -	\$ (31)	\$ (34,032)	\$ (8,458)	\$ (3,513)	\$ 36,791	\$ 1,919,451
30	Operating Income	\$ 276,633	\$ 8,014	\$ 934	\$ 677	\$ -	\$ -	\$ 31	\$ 34,032	\$ 8,458	\$ 3,513	\$ (36,791)	\$ 295,500

ADJUSTMENTS:

- 1- Labor Expense - Normalize OT Hours in Test Year
- 2- Payroll Tax Expense Related to Adjustment 1
- 3- 401(K) Expense Related to Adjustment 1
- 4- Reverse Adjustment for Conservation
- 5- Purchased Power Revenues
- 6- Insurance Expense
- 7- Depreciation Expense
- 8- Property Tax Expense
- 9- Rate Case Expense
- 10- Income Tax

REFERENCE:

- Testimony, WAR And Schedule TJC-8 Page, 1 of 3
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Testimony, WAR And Schedule TJC-11
Testimony, WAR And Schedule TJC-12
Testimony, WAR And Schedule TJC-13
Testimony, WAR And Schedule TJC-14

COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) DOLLAR AMOUNT	(B) CAPITAL RATIO	(C) COST RATE	(D) WEIGHTED COST RATE
1	Short-Term Debt	\$ 7,300,000	4.80%	3.00%	0.14%
2	Long-Term Debt	\$ 75,000,000	49.35%	6.83%	3.37%
3	Common Equity	<u>69,671,689</u>	<u>45.85%</u>	8.33%	<u>3.82%</u>
4	Total Capitalization	<u>\$ 151,971,689</u>	<u>100.00%</u>		
5	WEIGHTED AVERAGE COST OF CAPITAL				7.33%

References:

Columns (A) Thru (D): Testimony, WAR