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Transcript Exhibit(s)

Docket #(s): W-01303A-08-0227

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M1, M3-M5

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S-1
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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
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DIRECT

TESTIMONY

OF

STEVEN M. OLEA

ASSISTANT DIRECTOR
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

JANUARY 20, 2009

INTRODUCTION

Q. Please state your name and business address.

A. Steven M. Olea, 1200 West Washington, Phoenix, Arizona, 85007.

Q. By whom and in what capacity are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission") as the Assistant Director for the Utilities Division ("Division").

Q. Please state your educational background.

A. I graduated from Arizona State University ("ASU") in 1976 with a Bachelors Degree in Civil Engineering. From 1976 to 1978, I obtained 47 graduate hours of credit in Environmental Engineering at ASU.

Q. Please state your pertinent work experience.

A. From April 1978 to October 1978, I worked for the Engineering Services Section of the Bureau of Air Quality Control in the Arizona Department of Health Services ("ADHS"). My responsibilities were to inspect air pollution sources to determine compliance with ADHS rules and regulations.

From November 1978 to July 1982, I was with the Technical Review Unit of the Bureau of Water Quality Control ("BWQC") in ADHS (this is now part of the Arizona Department of Environmental Quality ["ADEQ"]). My responsibilities were to review water and wastewater construction plans for compliance with ADHS rules, regulations, and Engineering Bulletins.

From July 1982 to August 1983, I was with the Central Regional Office, BWQC, ADHS. My responsibilities were to conduct construction inspections of water and wastewater facilities to determine compliance with plans approved by the Technical Review Unit. I also performed routine operation and maintenance inspections to determine compliance with ADHS rules and regulations, and compliance with United States Environmental Protection Agency requirements.

From August 1983 to August 1986, I was a Utilities Consultant/Water-Wastewater Engineer with the Division. My responsibilities were to provide engineering analyses of Commission regulated water and wastewater utilities for rate cases, financing cases, and consumer complaint cases. I also provided testimony at hearings for those cases.

From August 1986 to August 1990, I was the Engineering Supervisor for the Division. My primary responsibility was to oversee the activities of the Engineering Section, which included one technician and eight Utilities Consultants. The Utilities Consultants included one Telecommunications Engineer, three Electrical Engineers, and four Water-Wastewater Engineers. I also assisted the Chief Engineer and performed some of the same tasks as I did as a Utilities Consultant.

In August 1990, I was promoted to the position of Chief Engineer. My duties were somewhat the same as when I was the Engineering Supervisor, except that now I was less involved with the day-to-day supervision of the Engineering Staff and more involved with the administrative and policy aspects of the Engineering Section.

In April 2000, I was promoted to my present position as one of two Assistant Directors of the Division. In this position, I assist the Division Director in the policy aspects of the Division. I am primarily responsible for matters dealing with water and energy.

I. PURPOSE

Q. What was your assignment in this case?

A. My assignment was to review the Cost of Service Study ("COSS") performed by Arizona-American Water Company ("AZ-American" or "Company").

Q. What is the purpose of this prefiled testimony?

A. This testimony will discuss my review of AZ-American's COSS and present the results of that review along with Staff's recommendations.

Q. Have you reviewed or prepared COSSs in the past as part of your duties at the Commission?

A. Yes, I have prepared and/or reviewed COSSs for water, sewer, electric and natural gas utilities. Some of these cases include Arizona Water Company rate cases (Docket Nos. U-1445-85-037 & U-1445-91-227), Arizona Sierra Utility Company (Docket No. U-2140-87-219), Graham County Electric Cooperative (Docket No. U-1749-92-298), Sulphur Springs Valley Electric Cooperative (Docket No. U-1575-92-220), and Southwest Gas Corporation (Docket No. U-1551-86-300). This is not an all-inclusive listing.

Q. Was rate design part of your assignment?

A. No. Rate design should not be confused with COSS. A COSS is the allocation of only costs to each customer class. Rate design is basically the allocation of revenues to each customer class. The COSS is only one of many factors that is considered when allocating revenues. Once the revenue allocation is completed, then specific rates are designed to collect those revenues. Staff's rate design witness in this case is Mr. Marvin Millsap.

COST OF SERVICE STUDY

Q. What is a Cost of Service Study?

A. In very simple terms, a COSS is an estimation of cost-causation by customer class, i.e. how much does it cost the utility to provide its service to each specific customer class. The reason for determining the costs incurred by the utility to serve each customer class is to assist in allocating the revenue requirement for each customer class.

For each utility, there are several generally accepted methods for conducting a COSS. There is no one "correct" COSS method, but rather a range of reasonable alternatives. This is not to suggest that COSSs are arbitrary; some allocations are clearly more reasonable than others. This is the reason a COSS should only be used as a general guide and as one of several considerations in allocating revenue requirements and designing rates.

Q. What was the process you used in reviewing the Company's COSS?

A. I began by reviewing the overall cost of service methodology used by the Company. I then looked at specific items with in the COSS.

Q. Did you conduct a separate independent COSS?

A. No, I did not.

Q. What are Staff's findings regarding the overall cost of service methodology used by the Company in this case?

A. The two most generally accepted COSS methods used in the water industry are the Base-Extra Capacity Method and the Commodity-Demand Method as outlined in the American Water Works Association Manual M1, "Principles of Water Rates, Fees, and Charges". For this case, the Company chose the method which I have usually used in the past, which is the Commodity-Demand Method. The Commodity-Demand Method breaks the costs of providing water service into four primary cost components: commodity costs (costs that tend to vary with the amount of water), demand costs (costs associated with peak use/demand), customer costs (costs not associated with water use, e.g., billing) and direct fire protection costs. I find the Company's use of the Commodity-Demand Method in this case to be appropriate.

Q. Do you have any specific comments regarding the Company's COSS?

A. Yes, despite the fact that Staff finds the Company's specific method of COSS to be appropriate, Staff believes that little weight should be given to the COSS in this case. The basic reason is that any COSS is only as reliable as the inputs used in the study. For any COSS, one of the primary inputs is the usage data. For a water COSS, that would be the water usage data, i.e., average use and peak use.

In this particular case, Staff is concerned about the water use data that were used by the Company, due to the fact that Staff had many issues regarding the water use data provided to Staff's Engineering Section. As an example, for the Paradise Valley Water System, the Company's application showed that the gallons of water pumped (in thousands) were 3,154,381. After questioning by Staff, the Company revised this figure several months later to 3,403,548 gallons. The Paradise Valley Water System usage data are those with which Staff had the least difficulty.

The system with the largest change in water use data throughout Staff's review of this case was Mohave Water District's Arizona Gateway System. In June 2008, the 2007 water use data provided to Staff showed the water produced at 8,685,000 gallons and the water sold at 9,392,000 gallons. In other words, this system was selling over eight percent more water than it was producing. In September 2008, the 2007 data provided to Staff showed water sold at 5,646,000 gallons. With water produced at 8,685,000 gallons, this is a water loss of approximately thirty-five percent (35%). In November 2008, the 2007 water sold data provided to Staff was at 8,496,000 gallons. With water produced at 8,685,000 gallons, this is a water loss of just over two percent (2%).

Q. Why are the water use data critical in a COSS?

A. The water use data are used to develop the commodity and demand allocation factors necessary to spread the costs to the different customer classes, e.g. residential, commercial. Therefore, if the water use data are incorrect or unreliable, then the allocation factors derived from such data are equally as incorrect or unreliable.

Q. Do you have any further comments regarding the water use data used in the Company's COSS?

A. Yes, the water use figures used in the Company's COSS do not match those provided to Staff. For example, in the Paradise Valley Water System, the data provided to Staff show that water pumped for the test year to be 3,403,548,000 gallons, which equates to 9,324,789 gallons per day ("GPD"). The average GPD shown in the Company's COSS is 9,144,000, which equates to 3,337,560,000 gallons. This is almost a two percent (2%) difference. Although, this may not seem significant, the water use numbers used by the Company in its COSS and those provided to Staff should not be different at all.

Another concern of Staff's is the water lost. Several of the Company's systems had excessive water loss, i.e., over ten percent (10%). (Please see testimony of Staff witness Dorothy Hains.) It is my understanding that in deriving the maximum day demand and maximum hour demand, the Company relied on the gallons pumped data. For those systems with excessive water loss, this would place the responsibility of the lost water on the customers rather than on the Company.

Q. Are the facts that Staff is recommending that the Commission give little or no weight to the Company's COSS and that Staff did not perform an independent COSS present a problem with allocating revenues and developing an appropriate rate design in this case?

A. This would be a problem if in this case either Staff or the Company wanted to propose a revenue allocation or rate design that was very different from the existing. However, both

Staff and the Company are proposing to use the same basic revenue allocation and rate design that the Company has today.

Q. Does Staff have any further recommendations with regard to the Company's COSS?

A. Staff would strongly recommend that in the Company's next rate case, if it provides a COSS, that it be required to ensure that the water use figures provided to Staff and those it uses in its COSS are identical. If in the next application Staff finds this not to be the case, Staff should be ordered to find the application insufficient. In addition, the water use figures provided to Staff must be accurate. If during its review of the Company's filing, Staff finds the water use data to be inaccurate, Staff should be ordered to file its findings in the docket and the Hearing Division should be required to suspend the timeclock in the proceeding until the Company provides the data required by Staff.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
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BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
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SURREBUTTAL

TESTIMONY

OF

STEVEN M. OLEA

ASSISTANT DIRECTOR
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

MARCH 3, 2009

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1 **INTRODUCTION**

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

3 A. Steven M. Olea, 1200 West Washington, Phoenix, Arizona, 85007.
4

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

6 A. I am employed by the Arizona Corporation Commission ("Commission") as the Assistant
7 Director for the Utilities Division ("Division").

8

9 **Q. Are you the same Steven M. Olea that has previously provided testimony in this case?**

10 A. Yes, I am.

11

12 **Q. What is the purpose of this surrebuttal testimony?**

13 A. I will be providing Staff's responses to portions of Arizona-American Water Company's
14 ("Az-American" or "Company") rebuttal testimony. Specifically, I will be responding to the
15 Company's testimony in regards to my recommendations regarding the Az-American's Cost
16 of Service Study ("COSS") and the Company's proposal to amend its Water Facilities Hook-
17 Up Fee WHU-1.

18

19 **Q. With regard to Staff's recommendations regarding the Company's COSS, have any of**
20 **the Az-American witnesses provided any information in their rebuttal testimony that**
21 **would cause you to change or modify your recommendation?**

22 A. No, they have not. Staff is still of the opinion that a company with the personnel and
23 sophistication of Az-American should be able to ensure that the water use numbers within its

applications to the Commission match throughout those applications. Az-American's purpose is to supply water to its customers, i.e., the product which it sells is water. It would seem reasonable that any business that is in the business of selling a product would be concerned about how much product it produces and how much of that produced product it sells. In Staff's opinion, good business practice dictates a knowledge and understanding of how much product is produced and sold. This should be true even for a regulated water company such as Az-American. This analysis would seem particularly appropriate for a company experiencing poor financial health. Staff believes it is critical for Az-American to implement a procedure whereby it can prove to this Commission that the Company actually knows where its product is going. Unfortunately, in this case, it has been extremely difficult to get water use numbers with which Staff is minimally comfortable utilizing. However, Staff has limited confidence in the numbers provided by the Company. Staff believes that deeming any future rate application insufficient if the water use numbers do not match within that application should provide the proper incentive to the Company to take care of this issue.

Q. In its rebuttal testimony, is the Company proposing a change to its Water Facilities Hook-Up Fee WHU-1 tariff for its Agua Fria system?

A. Yes, the Company is proposing several changes. First, the Company is proposing to change the language in the Applicability and Purpose portions of the tariff. Second, the Company is proposing changes to the definitions portion of the tariff. The third change the Company is proposing is in the Rates portion of the tariff. The fourth area of the tariff the Company proposes to change is the Terms and Conditions.

Q. Does Staff agree or disagree with the changes being proposed by the Company to its WHU-1 tariff?

A. At the present, Staff is unable to answer this question. Before Staff is able to make a recommendation to the Commission regarding the Company's proposed changes, Staff would like the Company to provide additional information explaining the purpose and necessity of the changes. Staff would request that the Company provide responses, in its rejoinder testimony, to the following questions:

1. What is the purpose of combining the Applicability and Purpose portions of the tariff and changing the wording?

2. What is the purpose of changing the wording in the first paragraph under definitions?

3. What is the purpose of adding Applicant to the definitions?

4. What is the purpose of changing the wording in the definition of Main Extension Agreement ("MXA")?

5. What is the purpose of replacing the term Off-Site Facilities with Common Facilities and changing the wording?

6. What is the purpose of changing the wording in the definition of Service Connection?

7. The Company should explain the purpose for each of the changes being proposed in the Terms and Conditions portion of the tariff.

8. In the first paragraph under Time of Payment, why is payment required 15 days after the MXA is approved and not at the time of the payment for the MXA?

9. Why is the Company proposing that only Component A be eligible for offset? Does this mean that the MXAs entered into by the Company will not require an Applicant to provide any source of water, since an Applicant will already be providing for its source of water under Component B (the portion paying for the White Tanks Surface Water Treatment Facility)?

10. The proposed tariff states (section IV.D.), "The Company and Applicant may agree to construction of additional facilities, whether on-site or off-site of the Applicant's development, that are required to serve only the Applicant's

development, but which are not Distribution Mains under R14-2-401 and which are not subject to refund under R14-2-406(D)." What type of facilities is the Company referring to that would not be refundable under Commission rules?

11. Under Large Subdivision Projects (section IV.F.), the Company uses the word "may" and "should" in several places. Why did the Company not use the word "shall" instead?

Q. Will Staff be able to make a recommendation to the Commission once the Company answers the above questions?

A. Maybe. Staff reserves the right to ask further questions of the appropriate Company witnesses during cross-examination if the responses provided by the Company to the above questions do not provide Staff with adequate information to make a recommendation or if the Company's responses lead to further questions.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
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SANDRA D. KENNEDY
Commissioner
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
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DIRECT TESTIMONY

OF

DOROTHY HAINS, P. E.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 12, 2009

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Engineering Report for Arizona-American Tubac Water District DMH-6

Engineering Report for Arizona-American Mohave Wastewater District DMH-7

INTRODUCTION

Q. Please state your name and business address.

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

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

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

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

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

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

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

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

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

Q. Have you previously testified before this Commission?

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

Q. What is your educational background?

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

Q. Briefly describe your pertinent work experience.

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

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

A. I have been a registered Civil Engineer in Arizona since 1990. I am a member of the American Society of Civil Engineering ("ASCE"), American Water Works Association ("AWWA") and Arizona Water & Pollution Control Association ("AWPCA").

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide Staff's engineering evaluation of the subject Arizona-American Water Company ("Company") rate proceeding. Seven of the Company's districts are included: Agua Fria Water District ("Agua Fria"), Havasu Water District ("Havasu"), Mohave Water District ("Mohave Water"), Paradise Valley Water District ("Paradise Valley"), Sun City West Water District ("Sun City West"), Tubac Water District ("Tubac") and Mohave Wastewater District ("Mohave Wastewater").

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

A. To present the findings of Staff's engineering evaluation of operations in the Company's Agua Fria, Havasu, Mohave Water, Paradise Valley, Sun City West, Tubac and Mohave Wastewater Districts. The findings are contained in the Engineering Reports that I have prepared for this proceeding. The reports are included as Exhibits DMH-1 through DMH-7 in this pre-filed testimony.

ENGINEERING REPORTS

Q. Would you briefly describe what was involved in preparing your Engineering Reports for this rate proceeding?

A. After reviewing the application for the Agua Fria, Havasu, Mohave Water, Paradise Valley, Sun City West, Tubac and Mohave Wastewater Districts, I physically inspected the systems to evaluate their operation and to determine if any plant items were not used and useful. I contacted the Maricopa County Department of Environmental Services ("MCDES") and the Arizona Department of Environmental Quality ("ADEQ") to determine if the water systems were in compliance with the Safe Drinking Water Act water quality requirements. Further, I contacted ADEQ to determine if the wastewater systems were in compliance with the ADEQ wastewater discharge permit requirements. After I obtained information from the Company regarding plant improvements, chemical testing expense water usage data and wastewater flow data, I analyzed that information. I also contacted the Arizona Department of Water Resources ("ADWR") to determine if the water systems were in compliance with the ADWR's requirements governing water providers. Based on all the above, I prepared the attached Engineering Reports.

Q. Please describe the information contained in your Engineering Reports.

A. The Reports are divided into three general sections: 1) *Executive Summary*; 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibits*. The *Discussions* section for Agua Fria, Havasu, Mohave Water, Paradise Valley, Sun City West and Tubac can be further divided into ten subsections: A) Location of Company; B) Description of the Water System; C) MCDES Compliance or ADEQ Compliance; D) ACC Compliance; E) ADWR compliance; F) Water Testing Expenses, G) Water Usage, H) Growth; I) Depreciation Rates; J) Other Issues. These subsections provide information about the water systems serving the Agua Fria, Havasu, Mohave Water, Paradise Valley, Sun City West and Tubac. The *Discussions* section for Mohave Wastewater is divided into eight subsections: A) Location of Company; B) Description of the Wastewater System; C) Wastewater Flow; D) Growth; E) ADEQ Compliance; F) ACC Compliance; G) Depreciation Rates; H) Other Issues.

RECOMMENDATIONS AND CONCLUSIONS

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

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

Agua Fria

Recommendations:

I. Staff recommends the depreciation rates for Agua Fria presented in Figure 6 by National Association of Regulatory Commissioners' ("NARUC") account.

II. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges.

III. Staff recommends that $143,485 of Arsenic Treatment Plant installation be removed from plant.

IV. Staff recommends that the well, tanks, and booster pumps in the Coolwell System be removed from plant. The cost of interconnection was $85,845, because the interconnection project only involved mains and one hydrant, Staff recommends $85,845 be listed in NARUC Account No. 331.

V. Staff recommends that tanks and booster pumps in Plant No. 6 of the Agua Fria System be removed from plant.

VI. Staff considers the reported water testing expenses and the estimated water testing costs of $25,089 for the Agua Fria reasonable.

Conclusions:

I. MCESD has determined that Agua Fria is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. Agua Fria is within the Phoenix Active Management Area and is in compliance with ADWR monitoring and reporting rules.

III. Agua Fria System, North East Agua Fria ("NEAF") System and Coolwell System have 4.33, 8.81 and 7.17 percent lost water respectively, which is within acceptable limits.

IV. Agua Fria has an approved cross connection tariff.

V. Systems in Agua Fria have adequate production and storage capacity to serve existing customers.

VI. Agua Fria has an approved curtailment tariff.

VII. The post test year plant, 2.2 MG Sierra Montana storage tank, was not in service during Staff's inspection.

VIII. The White Tanks Regional Treatment Plant is not used and useful.

IX. A check with the Utilities Division Compliance Section showed Agua Fria has no outstanding compliance issues.

Havasu

Recommendations:

I. Staff recommends the depreciation rates for Havasu presented in Figure 6 by NARUC account.

II. Staff recommends approval of separate meter and service line installation charges as shown under the Staff Recommended columns in Table 4.

III. Lost water for Havasu was calculated to be 13.34 percent which exceeds acceptable limits. Staff recommends that the Company reduce its water loss to below 10 percent in Havasu by December 31, 2009, or before it files its next rate increase application and/or CC&N application and/or financing application, whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss remains less than 10 percent immediately. If the water loss for the twelve month period ending December 31, 2009, is greater than 10 percent, the Company must come up with a plan to reduce water loss to less than 10 percent, or prepare a report containing a detailed analysis and explanation demonstrating why water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case.

IV. Staff recommends that $143,485 of Arsenic Treatment Plant installation be removed from plant.

V. Staff considers the reported water testing expenses and the estimated water testing costs of $5,295 for the Havasu reasonable.

Conclusions:

I. ADEQ has determined that the Havasu system is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. ADWR has determined that Havasu is not within any ADWR Active Management Area and is in compliance with the ADWR requirements governing water providers.

III. Havasu has an approved cross connection tariff.

IV. Havasu has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon.

V. Havasu has an approved curtailment tariff.

VI. A check with the Utilities Division Compliance Section showed Havasu has no outstanding compliance issues.

Mohave Water

Recommendations:

I. Staff recommends the depreciation rates for Mohave Water presented in Figure 6 by NARUC account.

II. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges.

III. Bullhead City System has 14.39 percent lost water, which exceeds acceptable limits. Staff recommends that the Company reduce its water loss to 10 percent or

less in the Bullhead City System by December 31, 2010, or before it files its next rate increase application, and/or CC&N application, and/or financing application, whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss is reduced to 10 percent or less immediately. If the water loss for a twelve month period prior to December 31, 2010 is greater than 10 percent, the Company must come up with a plan to reduce water loss to 10 percent or less, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case.

IV. Staff recommends that the Company file by August 31, 2009, as a compliance item in this same docket, a copy of the Approval of Construction, issued by ADEQ or its authorized agency, indicating that the new well with a minimum production of 190 GPM interconnected to Desert Foothills is complete and in service.

V. Staff considers the reported water testing expenses and the estimated water testing costs of $17,107 for the Mohave Water reasonable.

Conclusions:

I. ADEQ stated that it has determined that the Mohave Water systems and the Bermuda Water system are currently delivering water that meet water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. Mohave Water is not within any Active Management Area. ADWR stated that all water systems in the Mohave Water are in compliance with its requirements governing water providers.

III. Mohave Water has an approved cross connection tariff.

IV. All systems except Desert Foothills System in Mohave Water have adequate production and storage capacity to serve existing customers.

V. Mohave Water has an approved curtailment tariff.

VI. The post test year plant, 0.25 MG Big Bend Acres storage tank, was not in service during Staff's inspection.

VII. A check with the Utilities Division Compliance Section showed Mohave Water has no outstanding compliance issues.

Paradise Valley

Recommendations:

I. Staff recommends the depreciation rates for Paradise Valley presented in Figure 6 by NARUC account.

II. Staff recommends approval of separate meter and service line installation charges as shown under the Staff Recommended columns in Table 4.

III. Staff recommends annual water testing expense for Paradise Valley be adjusted to the annual expense amount of $2,033.

IV. Paradise Valley has 9.59 percent lost water which is within acceptable limits. Staff recommends that the Company monitor the water system closely and take action to ensure that lost water remains less than 10 percent in the future. If the water loss at any time before the next rate case is greater than 10 percent, the Company shall come up with a plan to reduce loss water to less than 10 percent, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case.

Conclusions:

I. MCESD has determined that Paradise Valley is currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. Paradise Valley is within the Phoenix Active Management Area and is in compliance with ADWR monitoring and reporting rules.

III. Paradise Valley has an approved cross connection tariff and an approved curtailment tariff.

IV. Paradise Valley has adequate well production and storage capacity.

V. The Trichloroethylene ("TCE") contaminated well, PCX-1 well has been disconnected from Miller Road TCE treatment plant since May 2008.

VI. Staff concludes that the Well No. 12 project is not used and useful plant for purposes of this case.

VII. A check with the Utilities Division Compliance Section showed Paradise Valley has no outstanding compliance issues.

Sun City West

Recommendations:

I. Staff recommends the depreciation rates for Sun City West presented in Figure 6 by NARUC account.

II. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges.

III. Staff recommends that $143,485 of Arsenic Treatment Plant installation should be removed from this rate base.

IV. Staff considers the reported water testing expenses and the estimated water testing costs of $5,618 for the Sun City West District reasonable.

Conclusions:

I. MCESD has determined that Sun City West is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. Sun City West is within the Phoenix Active Management Area and is in compliance with ADWR monitoring and reporting rules.

III. Sun City West has 6.3 percent lost water which is within acceptable limits.

IV. Sun City West has an approved cross connection tariff.

V. Sun City West has adequate production and storage capacity to serve its existing customers.

VI. Sun City West has an approved curtailment tariff.

VII. A check with the Utilities Division Compliance Section showed Sun City West has no outstanding compliance issues.

Tubac

Recommendations:

I. Staff recommends the depreciation rates for Tubac presented in Figure 6 by NARUC account.

II. Staff recommends approval of the meter and service line installation charges listed in the right-hand columns of Table 4.

III. All production wells in Tubac contain arsenic levels exceeding the arsenic MCL. Tubac proposes to install a granular iron media filter arsenic removal treatment

plant ("ARTP") and seek ACRM approval from the Commission. Staff believes that ARTP installation is necessary.

IV. Water testing expenses are based upon participation in ADEQ Monitoring Assistance Program. Annual testing expenses should be adjusted to $2,360.

Conclusions:

I. ADEQ has determined that Tubac is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. The ADEQ has granted Tubac a waiver of the MCL violation while it works to address the problem.

II. Tubac is within the Santa Cruz Active Management Area and is in compliance with ADWR requirements governing water providers.

III. Tubac has 8.02 percent lost water which is within acceptable limits.

IV. Tubac has an approved cross connection tariff.

V. Tubac has adequate production and storage capacity to serve its existing customers.

VI. Tubac has an approved curtailment tariff.

VII. A check with the Utilities Division Compliance Section showed Tubac has no outstanding compliance issues.

Mohave Wastewater

Recommendations:

I. Staff recommends the depreciation rates for Mohave Wastewater presented in Figure 6 by NARUC account.

II. Staff recommends approval of the Off-site Facilities Hook-up Fee ("OFHF") fees and reporting requirement contained in Figure 7.

III. Staff accepts the Company reported amount of $11,403 annual chemical testing costs for this proceeding.

IV. Staff recommends approval of the Off-site Facilities Hook-up Fee ("OFHF") fees and reporting requirement contained in Figure 7. The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2010, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period. The first report shall cover the time frame from inception of this tariff through December 31, 2009.

Conclusions:

I. The Mohave Wastewater is in full compliance with ADEQ for operation and maintenance, operator certification and discharge permit limit.

II. Staff concludes that the Mohave Wastewater treatment plants have adequate capacity to treat its customers.

III. The Company currently is not in compliance with the reporting requirements of its OFHF Tariff.

IV. A check with the Utilities Division Compliance Section showed no delinquent compliance items.

V. The Wishing Well Wastewater Treatment Plant expansion project was completed and in service in summer 2008. The total cost of this project was $4,276,039.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

EXHIBIT DMH-1

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC., AGUA FRIA WATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Agua Fria Water District
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona American Company's Agua Fria District ("Agua Fria District") presented in Figure 6 by the National Association of Regulatory Commissioners' ("NARUC") account. (See §I of report for discussion and details.)

II. Staff recommends the adoption of the Company and Staff recommended service line, meter installation charges and total charges. (See §J of report for discussion and details.)

III. Staff recommends that $143,485 of Arsenic Treatment Plant installation be removed from plant. (See §J of report for discussion and details.)

IV. Staff recommends that well, tanks, and booster pumps in the Coolwell System be removed from plant. The cost of interconnection was $85,845, because the interconnection project only involved mains and one hydrant. Therefore, Staff recommends $85,845 be listed in NARUC account #331. (See §J of report for discussion and details.)

V. Staff recommends that the tanks, and booster pumps in Plant #6 of the Agua Fria System be removed from plant. (See §J of report for discussion and details.)

VI. Staff considers the reported water testing expenses and the estimated water testing costs of $25,089 for the Agua Fria District reasonable. (See §F of report for discussion and details.)

Conclusions:

I. Maricopa County Environmental Services Department ("MCESD") has determined that Agua Fria District is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §C for a discussion and details.)

II. The Agua Fria District is within the Phoenix Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") monitoring and reporting rules. (See §E of report for discussion and details.)

III. The Agua Fria System, North East Agua Fria ("NEAF") System and Coolwell System have 4.33, 8.81 and 7.17 percent lost water respectively, which is within acceptable limits. (See §G of report for discussion and details.)

IV. The Agua Fria District has an approved cross connection tariff. (See §J of report for discussion and details.)

V. The Agua Fria District Systems have adequate production and storage capacity to serve existing customers. (See §B of report for discussion and details.)

VI. The Agua Fria District has an approved curtailment tariff. (See §K of report for discussion and details.)

VII. The post test year plant, 2.2 MG Sierra Montana storage tank, was not in service during Staff's inspection. (See §J of report for discussion and details.)

VIII. The White Tanks Regional Treatment Plant is not used and useful. (See §J of report for discussion and details.)

IX. A check with the Utilities Division Compliance Section showed Agua Fria has no outstanding compliance issues. (See §D of report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona American – Agua Fria Water District ("Agua Fria" or "Company") serves over 33,000 customers in the unincorporated Agua Fria area which is located southwest of the City of Phoenix in Maricopa County. Figure 1 describes the location of the Company within Maricopa County, and Figure 2 describes the CC&N area of Agua Fria.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on September 10 and 11, 2008, by Dorothy Hains, Utilities Engineer, accompanied by the Company's representatives, Jeremiah Mecham (Company's Operation Supervisor).

System Analysis

During the test year, Agua Fria operated three separate systems. The detail discussions are below:

(1) Aqua Fria System (PWS #07-695)

Agua Fria System_consists of thirty-one drinking water wells that are capable of producing a total flow of 24,805 gallons per minute ("GPM"), five arsenic treatment plants ("ATP")[1] and a total of 16.7 million gallons ("MG") of storage capacity. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figures 3A through 3M provide a process schematic showing both the active and inactive components of the water system.

Well Data

Active Drinking Water Wells (Agua Fria System)

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
1.1	55-623682	1956	20	1,000	12	250	1,200	17823 N White Feather Path
1.2	55-575445	2000	18	1,200	10	250	1,200	14362 W Carlin Dr
1.4	55-605761	1946	18	1,200	10	200	1,000	13843 W Bell Rd
1.5	55-587293	2001	18	950	10	250	1,200	14270 W Mtn View Blvd
2.1	55-553671	1996	16	1,060	10	250	1,200	14837 W Yorkshire

[1] ATP #1 has 6.9 million gallons per day ("MGD") treatment capacity; ATP #2 has3.5 MGD treatment capacity; ATP #5 has 2 MGD treatment capacity; ATP #9 has 2.8 MGD treatment capacity and AFTL ATP has 1.47 MGD treatment capacity..

								Dr.
2.3	55-573654	1982	20	852	10	200	1,100	15341 W Mtn View Blvd
2.4	55-520840	1988	16	1,060	8	250	1,200	18510 N Reems Rd
3.1	55-565447	1999	18	1,100	10	250	1,200	17961 Goldwater Canyon Dr.
3.2	55-565446	2002	18	1,200	10	200	1,000	17760 Estrella Vista Dr.
3.3	55-591439	2002	19	1,080	10	260	1,133	16734 W Stevenage St.
3.4	55-203096	2004	19	1,150	10	250	1,200	16664 W Cabrera Court
4.1	55-604498	1948	20	1,200	8	250	1,200	17800 N Citrus Rd
4.2	55-555779	1996	16	1,150	6	200	800	17811 N Thornberry Dr.
4.3	55-590166	2002	18	1,050	10	250	888	17626 W Sabrina Dr.
4.4	55-576971	2000	16	1,575	10	200	1,000	17116 W Paradise Ln
4.5	55-593407	2003	19	1,205	10	200	990	16797 W Statler St.
4.6	55-202092	2004	19	1,055	8	125	514	545 W Surprise Farms Loop Dr
4.7	55-204414	2005	19	1,480	8	250	950	352 N NW Ranch Park
5.1	55-514145	1986	16	1,000	8	150	800	7502 N Cotton Ln
5.2	55-624692	1954	18	888	4	125	600	17540 W Olive Ave
5.3	55-604500	1954	20	1,000	8	200	800	16095 N Cotton Ln
8.1	55-592749	2003	18	980	4	100	400	WP #8 site
8.2	55-595241	2004	18	1,103	8	125	540	17211 W Greenway Rd
8.3	55-598979	2003	15	841	6	75	240	15024 N 181st Ave
9.1	55-585407	2001	12	900	6	100	320	19784 W Indian School Rd
9.2	55-595267	2003	16	660	8	125	500	3860 N Citrus Ln
9.3	55-592226	2002	12	1,520	8	125	530	17257 W Indian School Dr.
9.4	55-591437	2002	16	610	6	100	500	4350 N Cotton Ln
AFTL1	55-205432	2005	18	1,606	8	200	500	9050 N Cortessa PKW
AFTL4	55-212434	2006	18	720	6	150	600	8850 N 183rd Ave
11.2	55-215470	2007	18	1,058	10	250	800	11695 N Sarival Ave

In active Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
2.2	55-554002	1997	18	1,170	8	250	1,200	18031 N Reems Rd

Arsenic Treatment Plant

	Location	Treatment Type	Treatment Capacity
Plant #1	17823 N White Feather Path	Granular Ferric Media filtration	5.5 - 6.9 million gallons per day ("MGD")
Plant #2	14837 W Yorkshire Dr	Granular Ferric Media filtration	3.5 - 4.3 MGD
Plant #5	7502 N Cotton Ln	Granular Ferric Media filtration	2 – 3.2 MGD
AFTL Plant	9050 N Cortessa PKW	Granular Ferric Media filtration	1.47 MGD
Plant #9	19784 W Indian School Rd	Ion Exchange	2.8 MGD

Active Storage, Pumping

Location	Structure or equipment	Capacity
WP #1 (17823 N White Feather Path)	Booster Pumps	four 150-HP
	Storage Tank s	Two 1,325,000 gal (underground, concrete)
	Pressure Tanks	one 10,000 gal
WP #2 (14837 W Yorkshire Dr)	Booster Pumps	Three 60-HP Three 200-HP One 100-HP One 75-HP
	Storage Tanks	Two 1,000,000 gal
	Pressure Tanks	Two 10,000 gal
WP #3 (19508 N Papago Dr.)	Booster Pumps	One 150-HP Three 100-HP Four 75-HP
	Storage Tanks	Two 1,000,000 gal
	Pressure Tanks	Two 13,000 gal
WP #4 (17630 W Bell Rd)	Booster Pumps	Five 125-HP Two 60-HP
	Storage Tanks	One 2,000,000 gal One 1,500,000 gal
	Pressure Tanks	One 10,000 gal
WP #5 (7502 N Cotton Ln)	Booster Pumps	Two 150-HP Two 125-HP Two 50-HP
	Storage Tanks	One 1,500,000 gal (underground)
	Pressure Tanks	Two 10,000 gal
WP #8 (Citrus Rd, south of Greenway)	Booster Pumps	Four 125-HP Two 40-HP
	Storage Tanks	One 1,500,000 gal
	Pressure Tanks	Two 13,000 gal
WP #9 (19784 W Indian School Rd)	Booster Pumps	Four 50-HP

	Storage Tanks	One 100,000 gal
	Pressure Tanks	One 10,000 gal
WP #10 (21513 W Sunrise Lane)	Booster Pumps	Five 50-HP
	Storage Tanks	Two 1,735,000 gal (underground, concrete)
	Pressure Tanks	One 10,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	65,669
6	Various	666,345
8	Various	1,432,980
10	Various	137,014
12	Various	885,609
14	Various	4,976
16	Various	175,619
18	Various	6,711
20	Various	46,619
24	Various	15,458
30	Various	36,966
36	Various	15
48	Various	29
undetermined	Various	60,737

Meters

Size (inches)	Quantity
⅝ x ¾	19,220
¾	7,771
1	4,383
1½	373
2	493
3	74
4	2
6	5
8	2

Irrigation Well

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
Irrigation well #2	55-611448	1982	20	1,066	12	400	1,450	13100 W Junipero Dr
Irrigation well #1	55-611447	1982	20	1,075	12	400	1,950	13480 W Junipero Dr

(2) North East Agua Fria System (PWS #07-531)

North East Agua Fria ("NEAF") System consists of two drinking water wells that are capable of producing a total flow of 2,600 GPM, an on-site hypochlorite generating plant and a total of 1.25 MG of storage capacity. NEAF System also operates two irrigation wells that produce 3,400 GPM water. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figure 3N provides a process schematic showing both the active and inactive components of the water system.

Well Data

Active Drinking Water Wells (NEAF System)

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
100.1	55-595221	2003	18	1,100	10	200	1,000	
100.2	55-595224	2004	18	1,208	12	300	1,600	

Active Storage, Pumping

Location	Structure or equipment	Capacity
WP #1 (13040 W Junipero Dr.)	Booster Pumps	Two 125-HP One 60-HP
	Storage Tank s	One 1,250,000 gal
	Pressure Tanks	One 20,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	N/A
6	Various	N/A
8	Various	N/A
10	Various	N/A
12	Various	N/A

14	Various	N/A
16	Various	N/A
18	Various	N/A
20	Various	N/A
24	Various	N/A
30	Various	N/A
36	Various	N/A
48	Various	N/A
undetermined	Various	N/A

Meters

Size (inches)	Quantity (NEAF)	Quantity (Coolwell)	Quantity (Total)
⅝ x ¾	123	19	123
¾	1,558	4	1,558
1	1,060	3	1,060
1½	11	1	11
2	44	1	44
6	1	0	1

(3) Coolwell System (PWS #07-080)

Coolwell System ("Coolwell") consists of one drinking water well that is capable of producing a total flow of 300 GPM, and a total of 10,000 gallons storage capacity. The water system alone does not have adequate storage and well production to serve its existing customers. However, Coolwell was recently (August, 2008) interconnected with the NEAF system. The Company decided to disconnect production and storage plants in Coolwell system to serve its customers. A detailed discussion of this issue follows in Section J. Figure 3O provides a process schematic showing both the active and inactive components of the water system.

Coolwell Well System (inactive)

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
Coolwell well	55-803469	1972	16	850	4	50	300	In Agua Fria River floodplain

Coolwell Storage, Pumping (inactive)

Location	Structure or equipment	Capacity
Coolwell well site	Booster Pumps	One 1½-HP One 3-HP One 5-HP
	Storage Tank s	One 10,000 gal
	Pressure Tanks	One 2,000 gal

Coolwell Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	N/A
6	Various	N/A
8	Various	N/A
10	Various	N/A
12	Various	N/A
14	Various	N/A
16	Various	N/A
18	Various	N/A
20	Various	N/A
24	Various	N/A
30	Various	N/A
36	Various	N/A
48	Various	N/A
undetermined	Various	N/A

Coolwell Meters

Size (inches)	Quantity (NEAF)	Quantity (Coolwell)	Quantity (Total)
⅝ x ¾	123	19	19
¾	1,558	4	4
1	1,060	3	3
1½	11	1	1
2	44	1	1

Staff concludes that the NEAF does have adequate storage and well production to serve both NEAF and Coolwell customers.

C. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

Based on memorandums dated April 9 and May 21, 2008[2], MCESD has determined that all water systems in Agua Fria District are currently in compliance with its requirements. MCESD also stated that it has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items.

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Agua Fria is in ADWR's Phoenix Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR for Agua Fria on August 13, 2008 and on October 20, 2008. In its reports ADWR stated that all water systems in the Agua Fria District are in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

(1) Agua Fria System

The Company's estimated annual water testing expense for Agua Fria System (07-695) is $17,372. Staff concludes that this estimate is reasonable. Therefore, for purposes of this rate case, Staff recommends water testing expenses be adjusted to the Company's estimated annual expense amount of $17,372. (See Table 1)

(2) NEAF and Coolwell Systems

Both NEAF System and Coolwell System are subject to mandatory participation in the ADEQ Monitoring Assistance Program ("MAP"), the estimated annual test costs were based on combined systems. Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, bacteria and disinfection by-products.

2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented as a pro forma expense on an annualized basis.

---

[2] The Agua Fria System report was received on May 14, 2008; reports for NEAF System and Coolwell System were received on May 21, 2008.

3. All monitoring expenses are based on Staff's best knowledge of lab costs and methodology and one point of entry.

4. The estimated water testing expenses represent a minimum cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 1 shows the estimated annual monitoring expense, assuming participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount of $7,717 shown in Table 1.

Table 1 Water Testing Cost (Agua Fria Water District)

Monitoring	Cost per test		No. of tests per three year period		Total cost per three year period		Annual Cost		
	Aqua Fria	NEAF /Coolwell	Aqua Fria	NEAF/ Coolwell	Aqua Fria	NEAF/ Coolwell	Aqua Fria	NEAF/ Coolwell	Agua Fria Water District
Bacteriological – monthly	$11	$11	2880	324	$31,680	$3,564	$10,560	$1,188	$11,748
Customer requested bact	$11		36		$396		$132		$132
Customer requested HPC	$35		0		0		0		
Inorganics – Priority Pollutants		MAP							
Radiochemical – (1/3 yr) Gross Alpha Uranium Radium 228 Radium 226	 $60 $140 $130 $100	 MAP	 28 28 28 28		 $1,680 $3,920 $3,640 $2,800	MAP	 $560 $1307 $1213 $933	MAP	$4,013
Phase II and V:									
IOC's*		MAP	7			MAP		MAP	
SOC's*		MAP	18			MAP		MAP	
VOC's*		MAP	15			MAP		MAP	
Dioxin	$500		16		$8,000		$2,667		$2,667
Nitrites* per 9 yrs		MAP	7			MAP		MAP	
Nitrates – annual*		MAP	57	6		MAP		MAP	
Asbestos – per 9 years*		~~MAP~~	5	5		MAP		MAP	
Lead & Copper – Triennial*			90	120					
TTHM/HHAs – annual*&**			96	3					
Maximum chlorine residual levels*				36					
MAP fees (annual)		$6,528.51[1]						$6,528.51	$6,528.51

Arsenic*&**			12						
Total							$17,372	$7,716[51]	**$25,089**

Notes:

1. Coolwell (PWS #07-080) is interconnected with NEAF (PWS #07-531). Coolwell is no longer in service; its customers are served by NEAF.
2. Summary of $250 (all MAP system base fee), $6278.51 (total of 2,443 customers modified by $2.57) are $6,528.51.

* The test will be done in the Company's Lab in Belleville.

** To comply with ADEQ requirement, the Company has to conduct quarterly arsenic testing at each well site and ADEQ designed sampling points aka Points Of Entry.

The total estimated annual water quality testing costs for Agua Fria District are $25,089.

G. WATER USAGE

Figures 4A through 4D are graphs that show water consumption data in gallons per day ("GPD") per customer for the Agua Fria System, the NEAF System and the Coolwell System for the test year period of January 2007 through December 2007.

1. Water Sold

Based on information provided by the Agua Fria District, water use for the test year is presented in the Table below and in Figure 4.

	Agua Fria System	**NEAF System**	**Coolwell System**
High usage month	September, 2007	July 2007	July 2007
Average daily flow in high usage month (in gallons per day)	792	846	849
Low usage month	February 2007	December 2007	March 2007
Average daily flow in low usage month (in gallons per day)	298	439	311
Annual average daily flow (in gallons per day)	460	602	596

2. Lost Water

Lost water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water for systems in Agua Fria Water District is listed in the Table below:

	Agua Fria System	NEAF System	Coolwell System
Water Loss (%)	4.33	8.81	7.17

Lost water for all systems in the Agua Fria Water District were within acceptable limits during the test year.

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 13,764 at the end of 2002 to 33,021 by the end of 2007, with an average growth rate of 2,280 customers per year from 2002 to 2007. Based on the linear regression analysis, Staff estimates that the Company could have over 44,000 customers by the end of 2012. The following table summarizes Staff's projected growth.

Table 2 Actual and Projected Growth

Year	Nos. of Customers	
2002	13,764	Reported
2003	15,214	Reported
2004	21,375	Reported
2005	26,514	Reported
2006	30,741	Reported
2007	33,021	Reported
2008	35,301	Estimated
2009	37,581	Estimated
2010	39,861	Estimated
2011	42,141	Estimated
2012	44,421.	Estimated

I. DEPRECIATION RATES

Decision No. 67093 (dated June 30, 2004) approved the depreciation rates used by Agua Fria in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25 percent depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15 percent depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

Staff recommends that the depreciation rates presented in Figure 6 by the NARUC account.

J. OTHER ISSUES

1. Service Line and Meter Installation Charges

The Company requested that meter and service line installation charges for all size meters be determined on an individual case basis. Staff is recommending specific charges for meters smaller than 3-inch and actual costs for 3-inch meters and larger. Staff recommends approval of separate meter and service line installation charges as shown under the column headings "Staff Recommended" in Table 4 for meter sizes smaller than 3-inches. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff which Staff recommends be adopted in this case.

Table 4 Service Line and Meter Installation Charges (AF)

Meter Size	Current Charges(service line)	Current Charge (meter installation)	Proposed Charges (service line)	Proposed Charge (meter installation)	Staff Recommendation Charge (Service Line)	Staff Recommendation charge (meter installation)	Staff Recommendation total charges
5/8 x 3/4-inch	$370	$130	Actual Cost	Actual Cost	$445	$155	$600
3/4-inch	$370	$205	Actual Cost	Actual Cost	$445	$255	$700
1-inch	$420	$240	Actual Cost	Actual Cost	$495	$315	$810
1½-inch	$450	$450	Actual Cost	Actual Cost	$550	$525	$1,075
2-inch (Turbine)	$580	$945	Actual Cost	Actual Cost	$830	$1,045	$1,875
2-inch (Compound)	$580	$1,640	Actual Cost	Actual Cost	$830	$1,890	$2,720
3-inch (Turbine)	$745	$1,420	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch (Compound)	$765	$2,195	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Turbine)	$1,090	$2,270	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Compound)	$1,120	$3,145	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Turbine)	$1,610	$4,425	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Compound)	$1,630	$6,120	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved Curtailment Tariff.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. Arsenic Treatment Plant ("ATP") Capacity

In 2006 to comply with the new arsenic standard, the Company began its arsenic treatment plant installations in order to remove arsenic in the water supply. All five plants, the 6.9 MGD treatment plant (Plant No. 1), 3.5 MGD plant (Plant No. 2), 2 MGD plant (Plant No. 5), 2.8 MGD (Plant No. 9) and 1.47 MGD plant (AFTL Plant) were completed and have been in operation since 2007.

ATP No. 5 only treats ground water produced by Well No. 5.1 and Well No. 5.2. The combined flows from these two wells are 1,400 GPM. Based on the design report, the loading rate is 5 GPM per square foot under normal operation. Staff determined that three 11-feet diameter media vessels have adequate treatment capacity to remove arsenic. However, the Company installed four 11-foot diameter media vessels; therefore, Staff recommends that cost of one 11-feet diameter vessel be removed from rate base.

The estimated cost of one 11-foot diameter vessel was $143,485[3] in 2005.

5. Post Test Year Plant

(a) <u>The 2.2 MG Storage Tank</u>

The Company has requested that a 2.2 MG storage tank (also called Sierra Montana 2.2 MG reservoir) be included in rate base. During the inspection, Staff found that construction of this item had not been completed and therefore was not in service; however, MCDES issued a Certificate of Approval of Construction for this project on November 25, 2008. It appears that this plant was completed and placed in service in November 2008.

(b) <u>The White Tanks Regional Water Treatment Plant</u>

The Company also requested the White Tanks Treatment Plant be included in this rate base. This plant item was not used and useful during the inspection. No Certificate of Approval of Construction has been issued for this project.

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[3] See Company Response to DR #20.1, total costs of four vessels (manufactured by Severn Trent) in Agua Fria Arsenic Treatment Plant #2 were $573,439. One fourth of $573,439 is $143,485.

(c) Coolwell System Interconnection

The Coolwell System was recently interconnected with NEAF System. This project resolves inadequate storage in the Coolwell system. The cost of this interconnection was $85,845. Because the interconnection project involved mains and one hydrant, Staff recommends classification of $85,845 to NARUC account No. 331.

(d) Waddell Haciendas Project

The Company installed approximately 500 feet of 10-inch pipelines on Acoma Road between 183rd Ave and 186th Ave. MCESD issued a Certificate of Approval To Construct for this project on May 8, 2007. This project was completed prior to Staff's inspection, however, no Approval of Construction has been issued.

(e) Reems Road Bypass Project

The Company installed approximately 2,000 feet 16-inch pipelines on Reem Road between Bell Road and Mountain View Blvd. MCESD issued a Certificate of Approval to Construct for this project on March 3, 2008. This project was in service shortly after Staff's inspection, however, no Approval of Construction has been issued.

6. Not Used and Useful Plant Items.

During the inspection, Staff found following items were not used and useful:

(a) Well 2.2[4] of Agua Fria System

(b) Plant No. 6 of Agua Fria System

The Wells[5], one 40,000 gallons storage tank, two 5,000 gallons pressure tanks and a three-pump booster station were disconnected from the Company's system in 2006. Therefore, Staff recommends that tanks and booster pumps in Plant #6 of the Agua Fria System should be removed from the plant.

(c) Coolwell System[6]

The 300 GPM well, the 10,000 gallons storage tank, the 2,000 gallon pressure tank and the three-pump booster pump station have been disconnected from the Company's service system. Therefore, Staff recommends that well, tanks, and booster pumps in Coolwell System be removed from plant.

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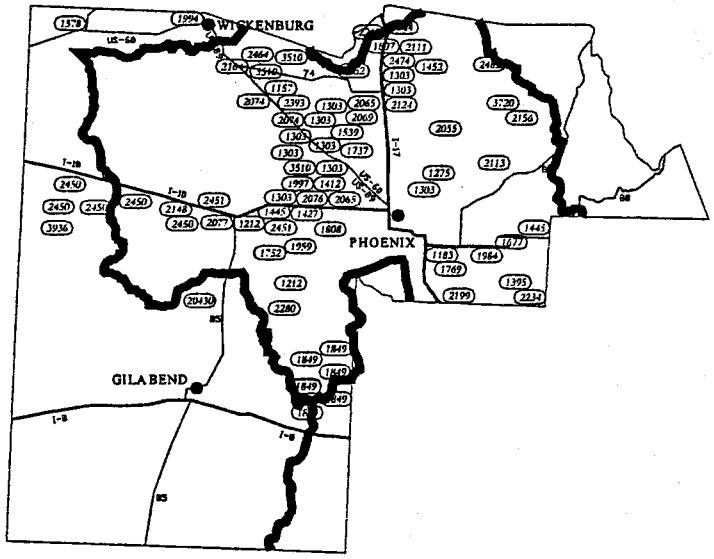
[4] The Company terminated this well service due to well screen problem.
[5] Well #6-10-C and Well #7-22 are leased wells which are owned by Maricopa Water District
[6] The System was terminated its service in the summer 2008.

FIGURES

FIGURE 1

LOCATION OF AGUA FRIA WATER DISTRICT

MARICOPA COUNTY



1997	ADAMAN MUTUAL WATER COMPANY
1578	AGUILA WATER SERVICES, INC.
2077	ALLENVILLE WATER COMPANY, INC.
1303	ARIZONA-AMERICAN WATER COMPANY
1445	ARIZONA WATER COMPANY
2074	BEARDSLEY WATER COMPANY, INC.
1275	BERNEIL WATER COMPANY
1964	BLACK CANYON RETREAT WATER COMPANY
1994	CABALLEROS WATER COMPANY, INC.
1452	CAVE CREEK WATER COMPANY
2113	CHAPARRAL CITY WATER COMPANY
2393	CHAPARRAL WATER COMPANY
3510	CIRCLE CITY WATER COMPANY L.L.C.
1752	CLEARWATER UTILITIES COMPANY, INC.
1984	DAIRYLAND WATER CORPORATION
2124	DESERT HILLS WATER COMPANY, INC.
3936	EAGLETAIL WATER COMPANY LC
1959	GRANDVIEW WATER COMPANY, INC.
20430	GREEN ACRES WATER, LLC
2234	H2O, INC.
2055	JAMES P. PAUL WATER COMPANY
1769	KYRENE WATER COMPANY
2452	LAKE PLEASANT WATER COMPANY
1427	LITCHFIELD PARK SERVICE COMPANY
2267	MCADAMS WATER COMPANY
1849	MOBILE WATER COMPANY
2164	MORRISTOWN WATER COMPANY
1737	NEW RIVER UTILITY COMPANY
2199	PIMA UTILITY COMPANY
2464	PUESTA DEL SOL WATER COMPANY
1395	QUEEN CREEK WATER COMPANY
1808	RIGBY WATER COMPANY
2156	RIO VERDE UTILITIES, INC.
1539	ROSE VALLEY WATER COMPANY
2111	SABROSA WATER COMPANY
1183	SENDE VISTA WATER COMPANY, INC.
2474	SHANGRI-LA ASSOCIATES, INC.
2280	SOUTH RAINBOW VALLEY WATER COOPERATIVE
2069	SUNRISE WATER COMPANY, INC.
2076	TIERRA BUENA WATER COMPANY
2483	TONTO HILLS UTILITY COMPANY
1677	TURNER RANCHES WATER & SANITATION COMPANY
1212	VALENCIA WATER COMPANY
1412	VALLEY UTILITIES WATER COMPANY, INC.
2148	VALLEY VIEW WATER COMPANY, INC.
2451	WATER UTILITY OF GREATER BUCKEYE, INC.
2450	WATER UTILITY OF GREATER TONOPAH, INC.
3720	WATER UTILITY OF NORTHERN SCOTTSDALE, INC.
1157	WEST END WATER COMPANY
2065	WILHOIT WATER COMPANY, INC.
1807	WRANGLERS ROOST WATER COMPANY

07/22/08

FIGURE 2

AGUA FRIA WATER DISTRICT CERTIFICATED AREA

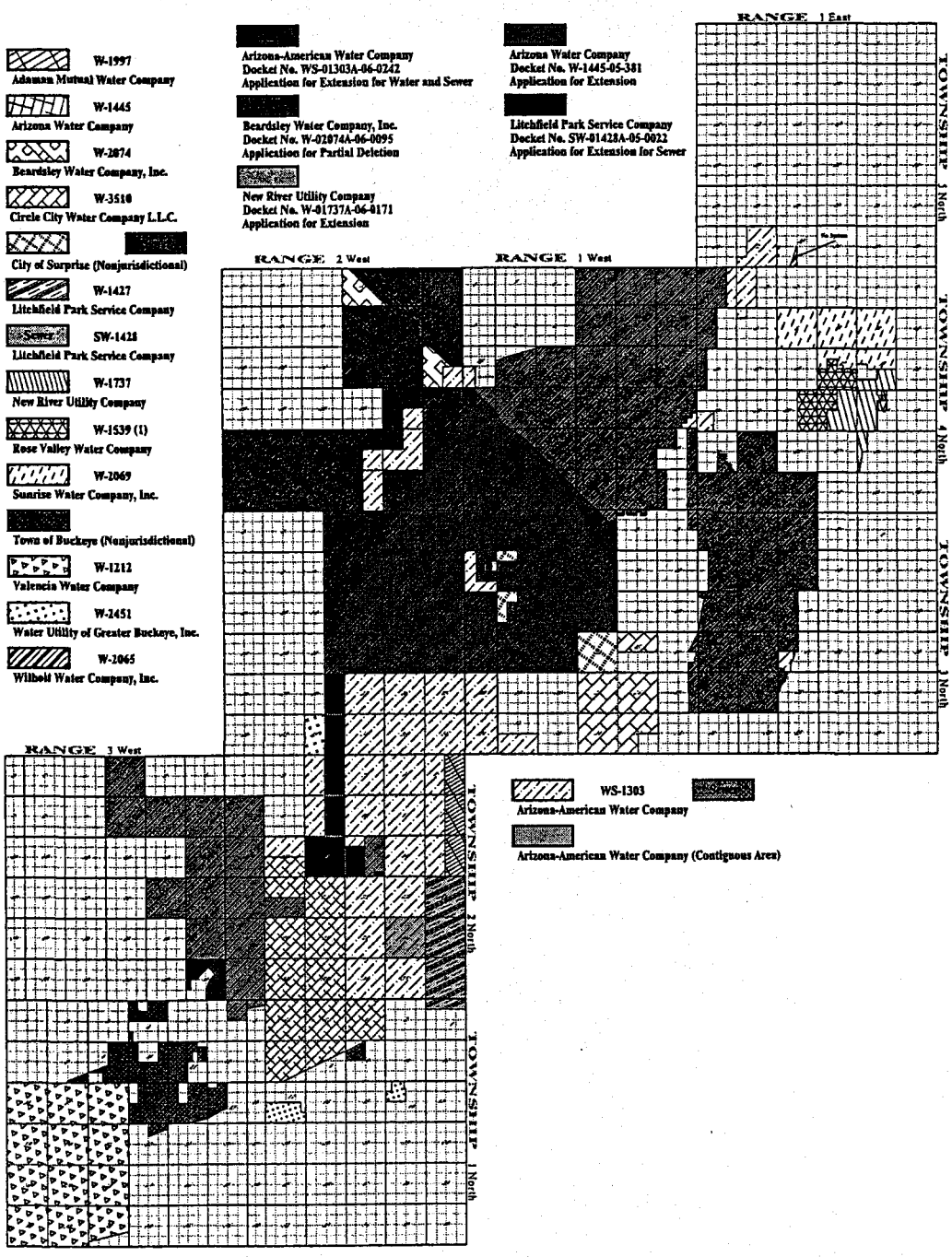


FIGURE 3A

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM FOR EXISTING SYSTEMS (AGUA FRIA SYSTEM)

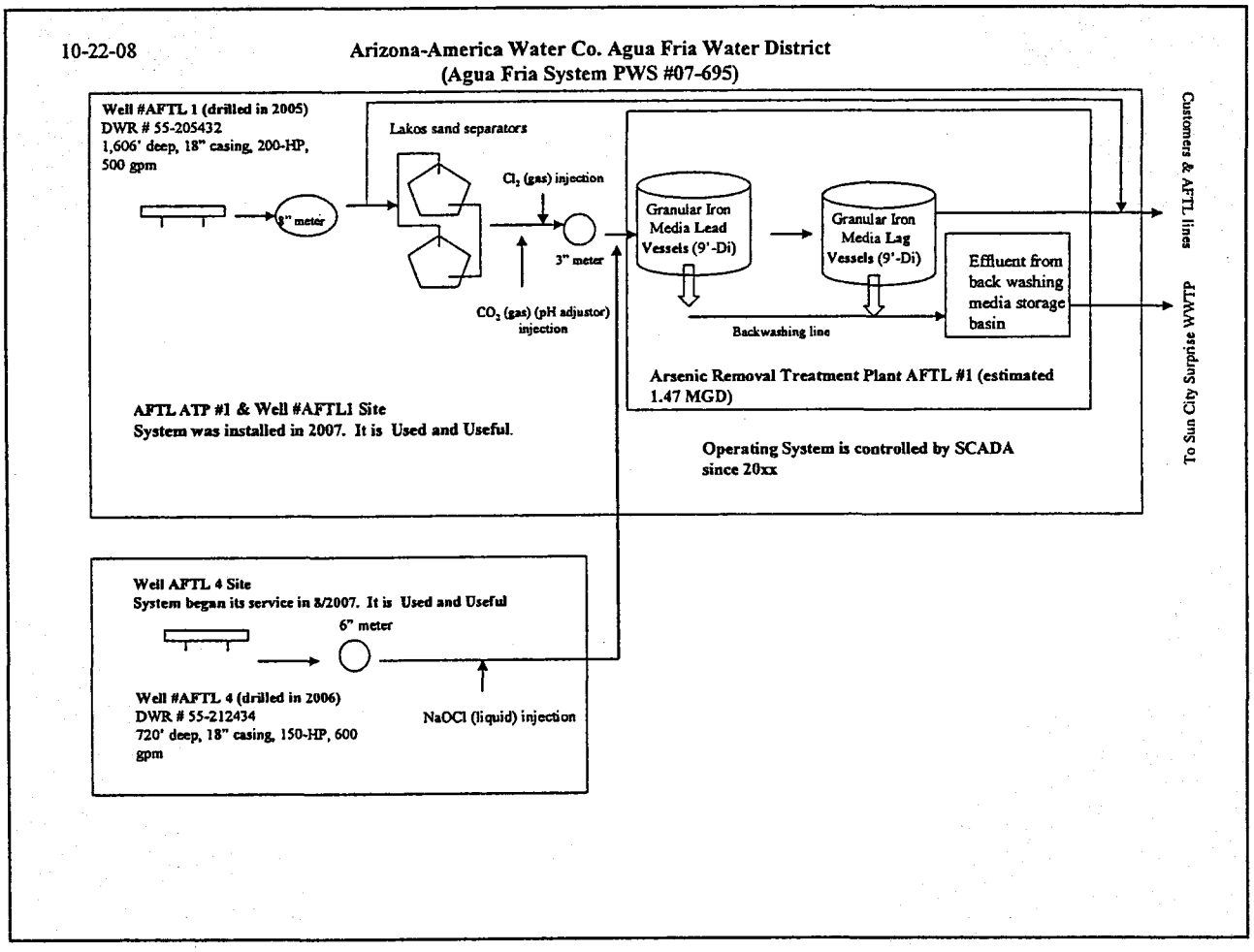


FIGURE 3B

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

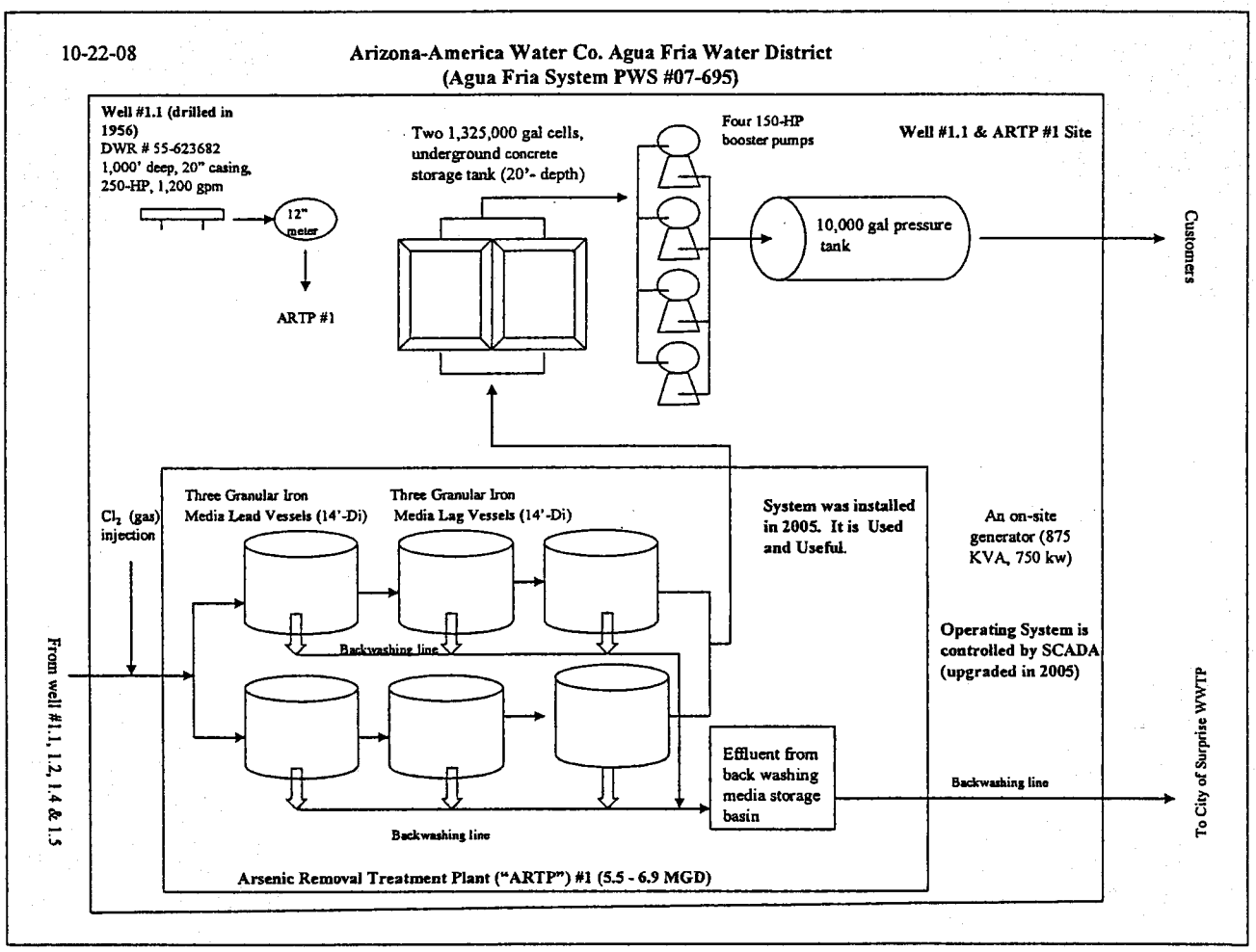


FIGURE 3C

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

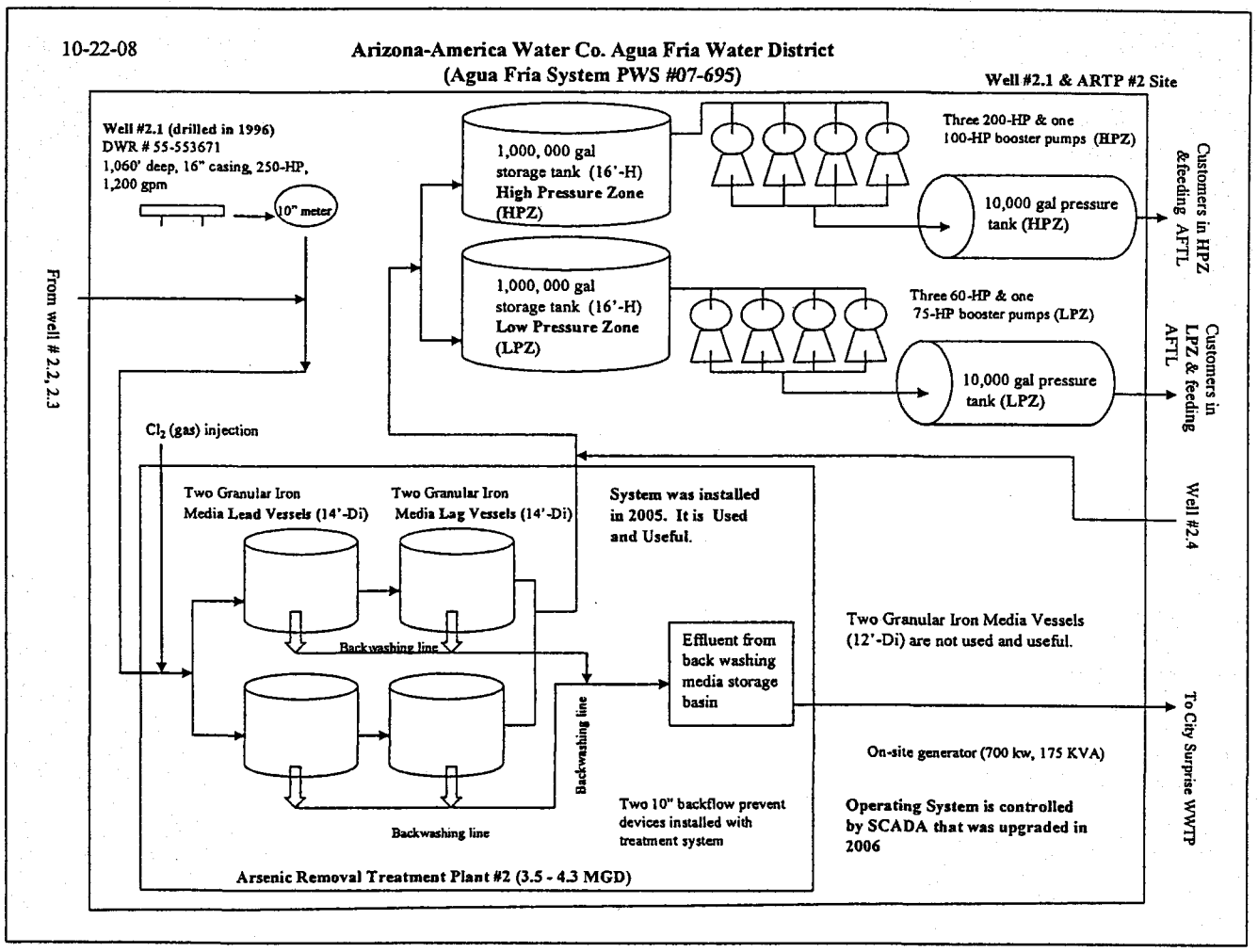


FIGURE 3D

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

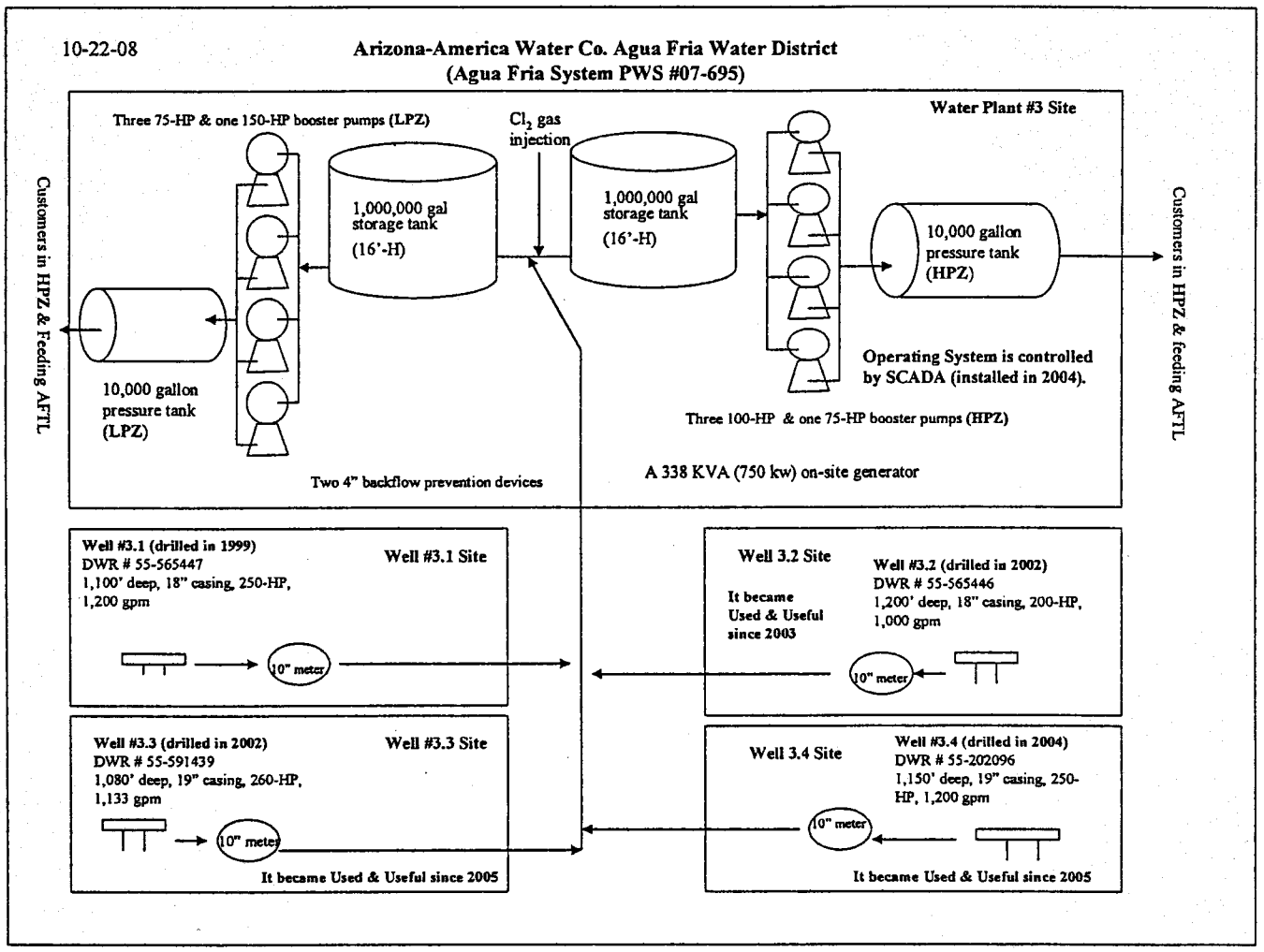


FIGURE 3E

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

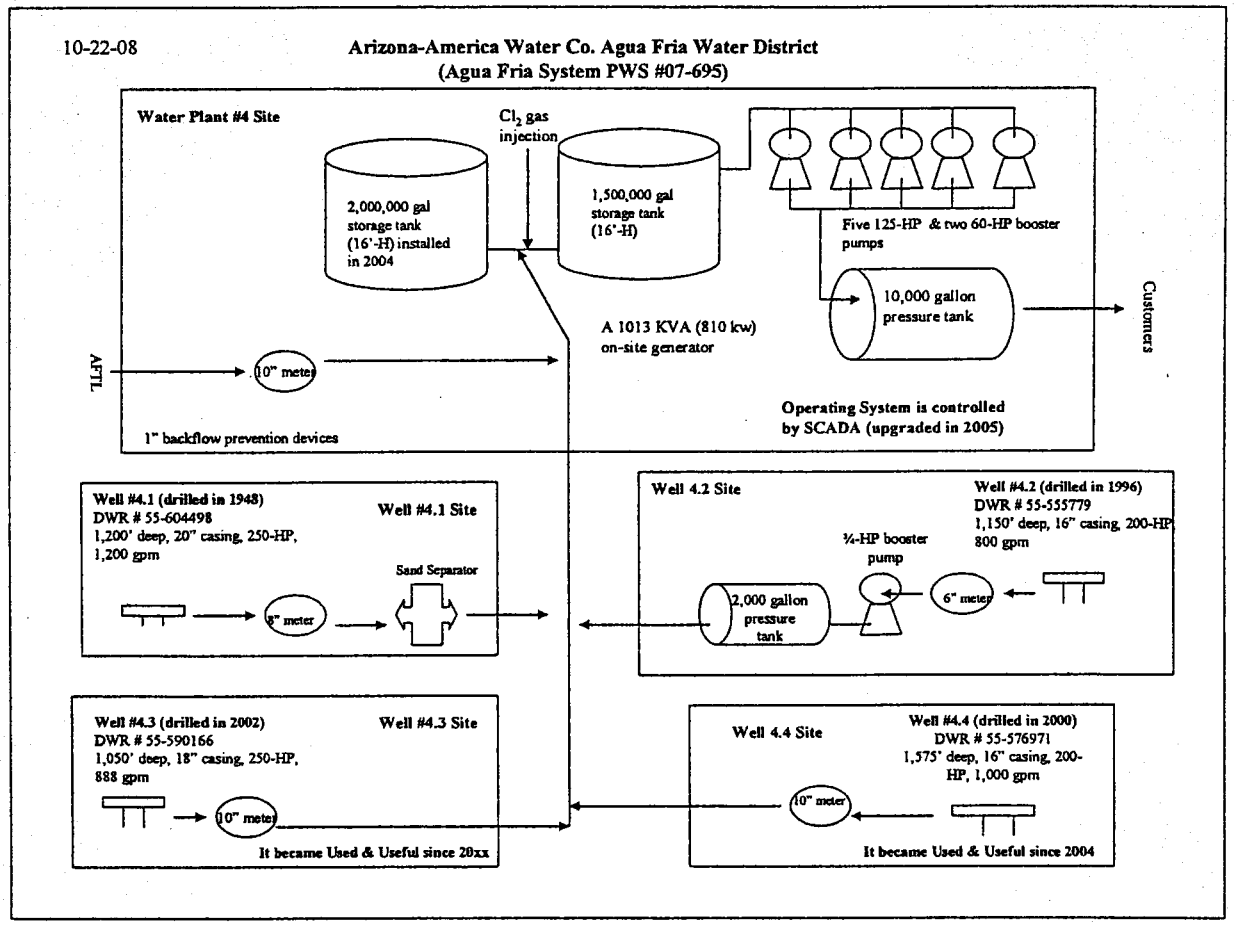


FIGURE 3F

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

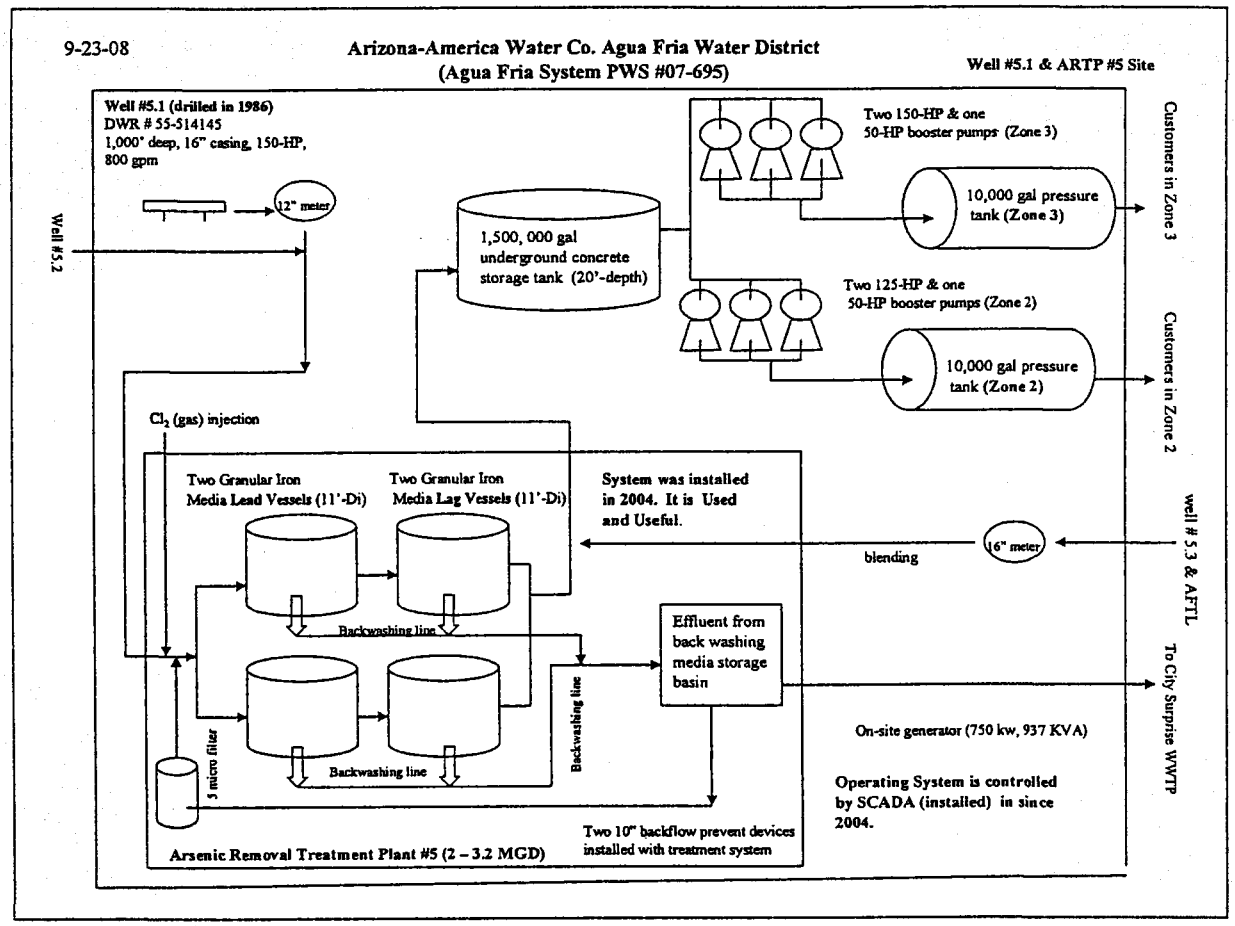


FIGURE 3G

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

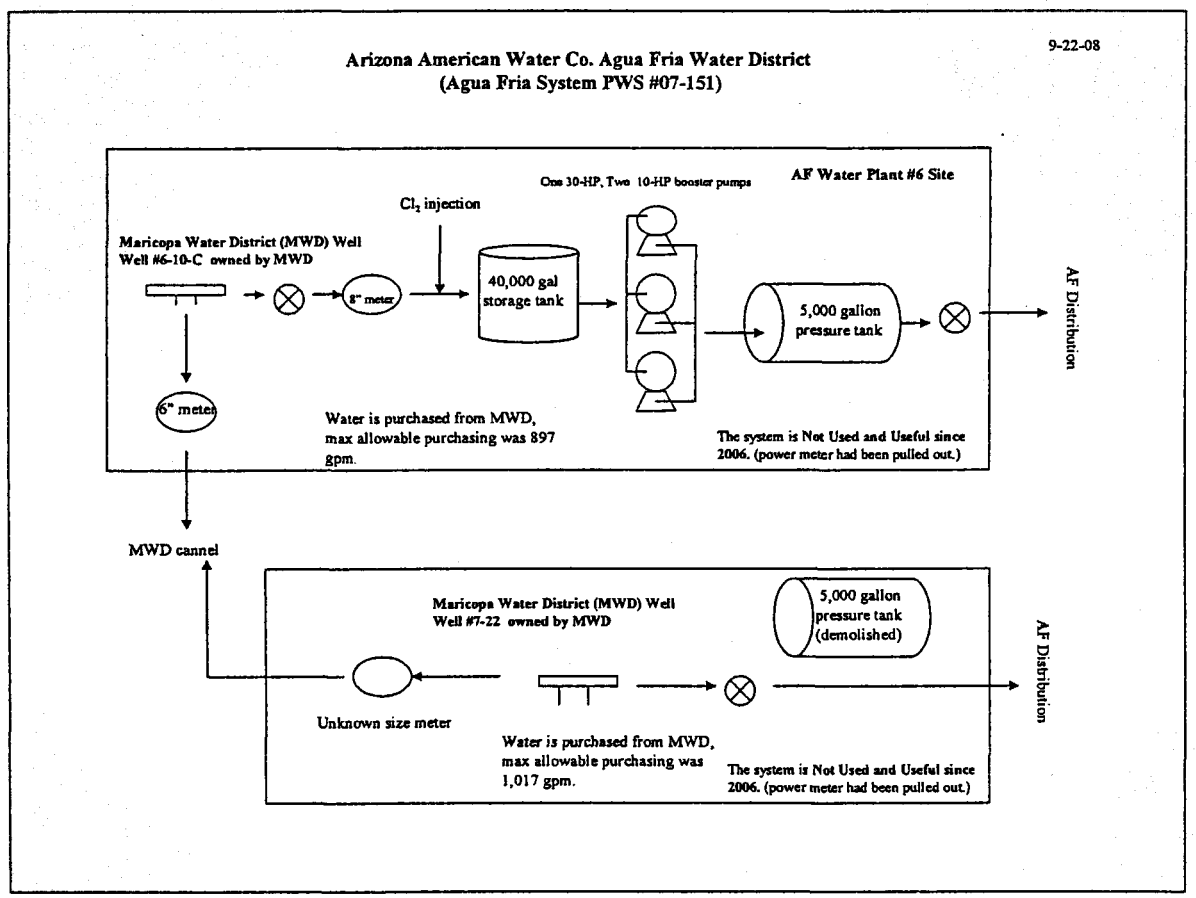


FIGURE 3H

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

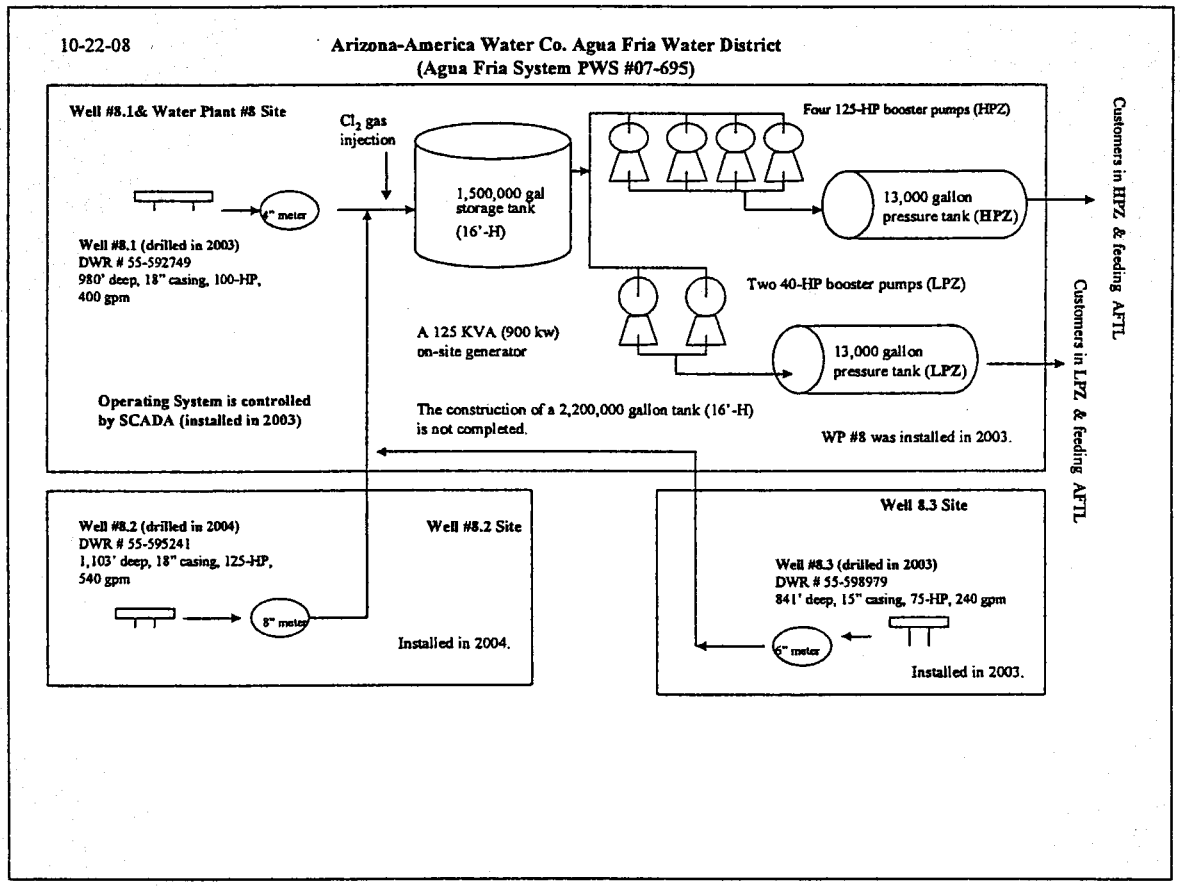


FIGURE 3I

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

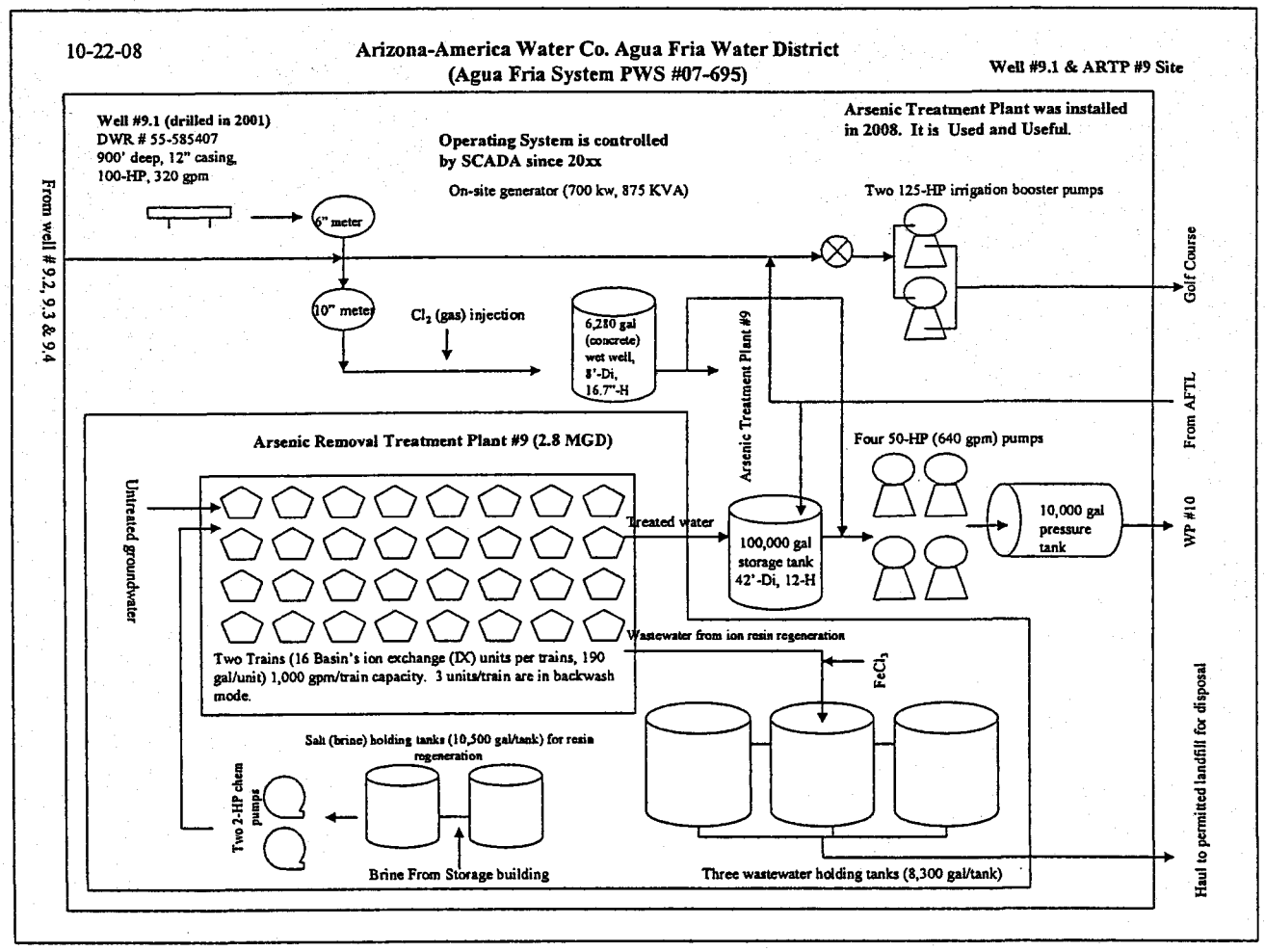


FIGURE 3J

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

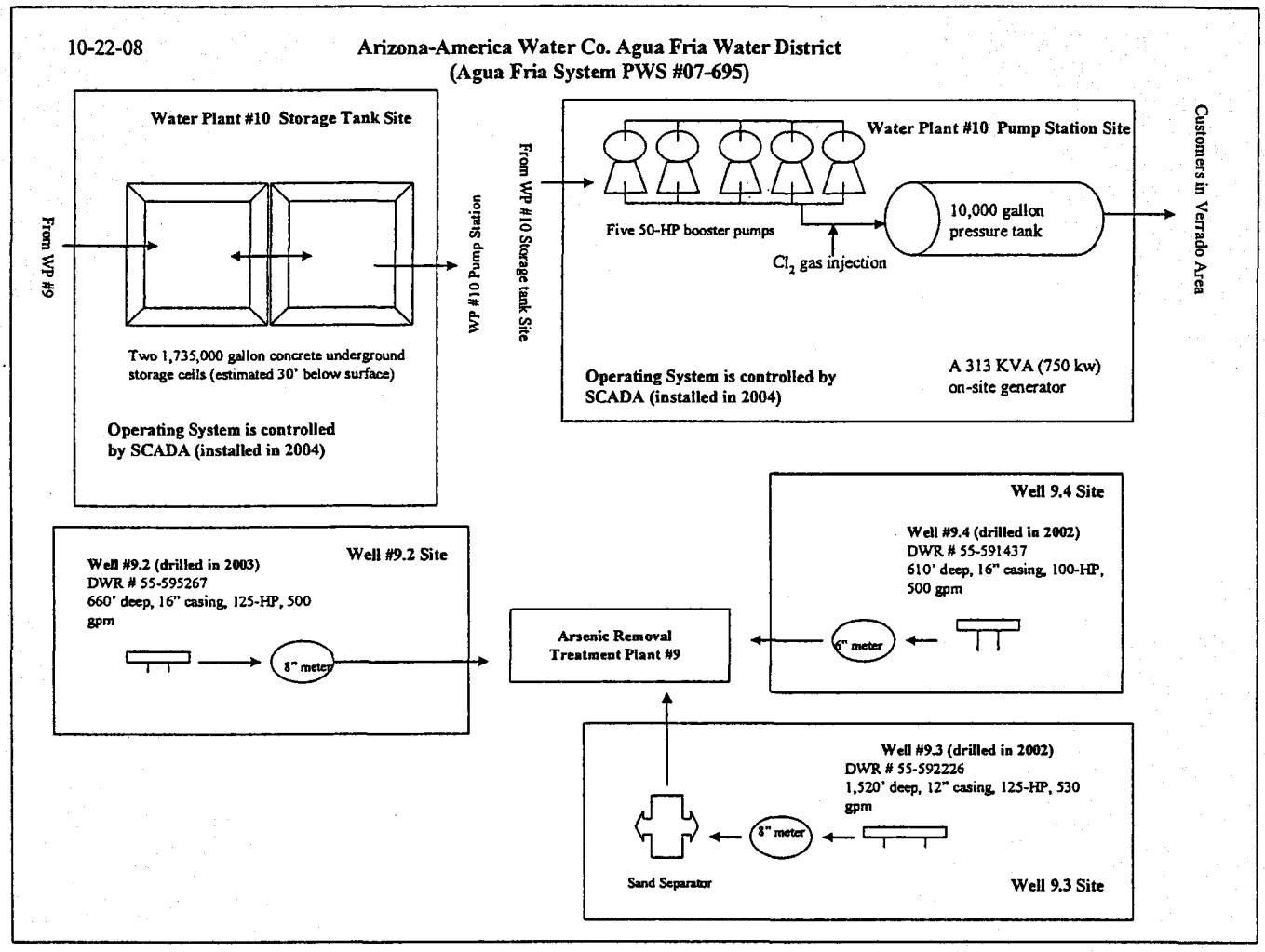


FIGURE 3K

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

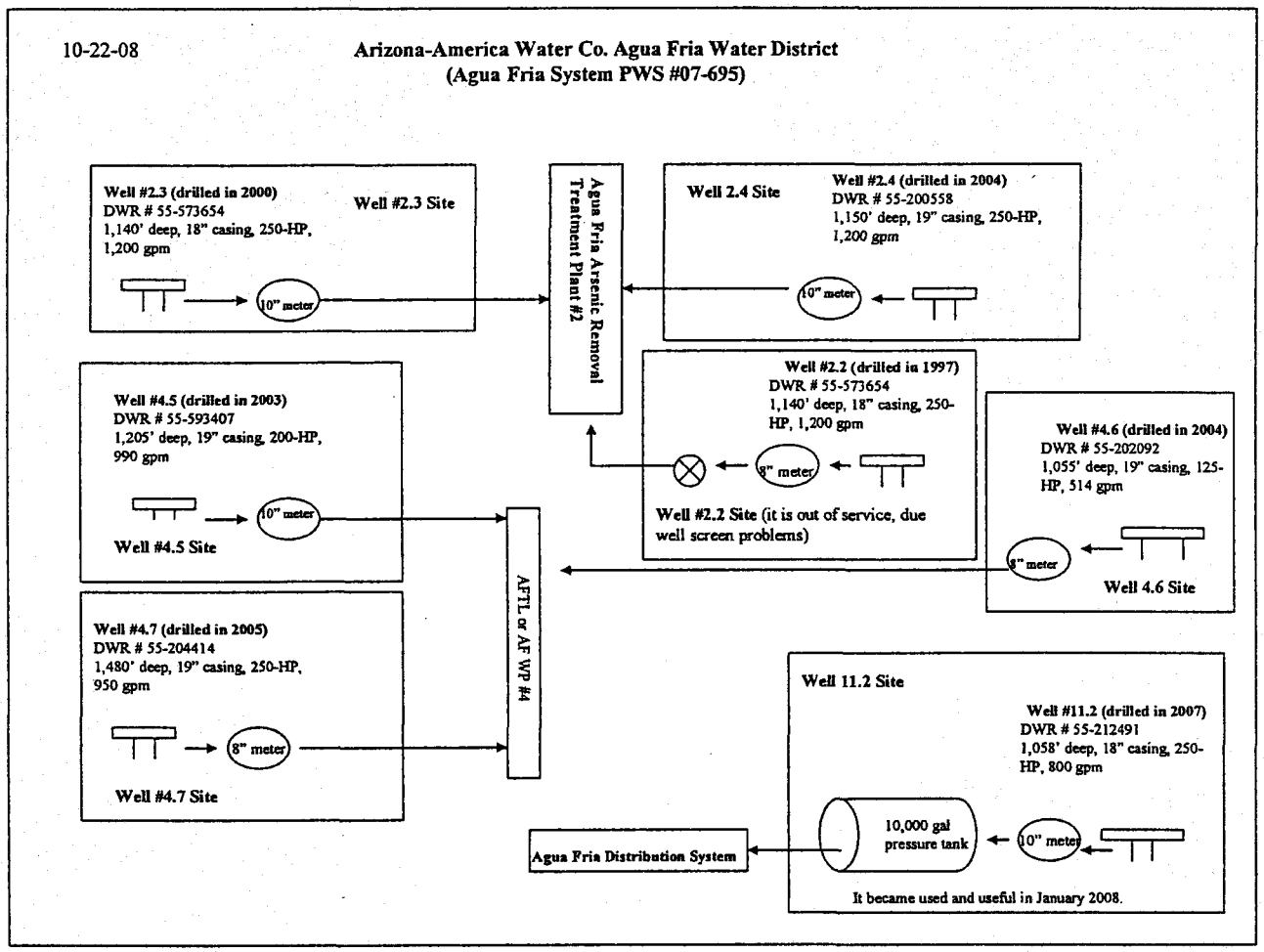


FIGURE 3L

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

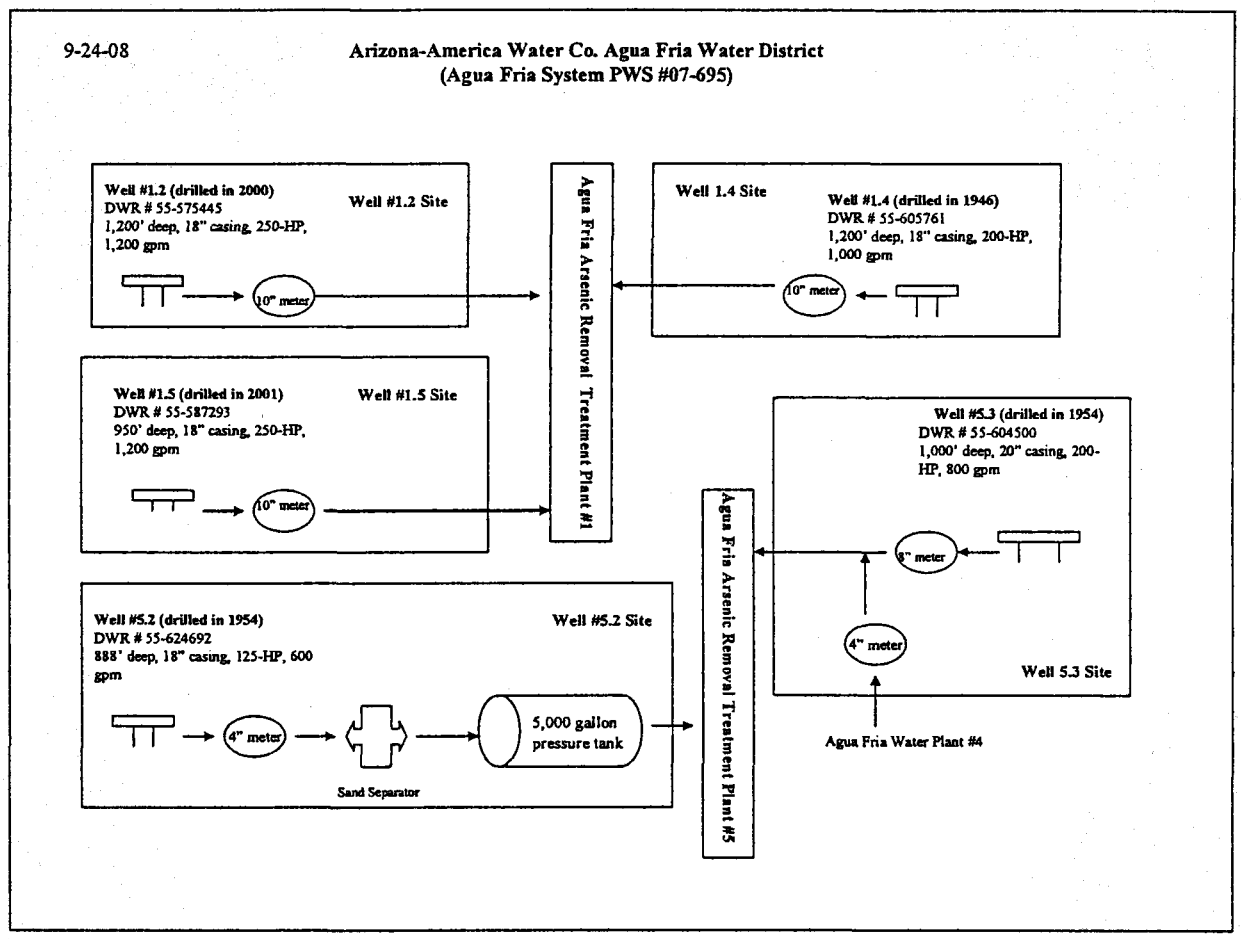


FIGURE 3M

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (AGUA FRIA SYSTEM)

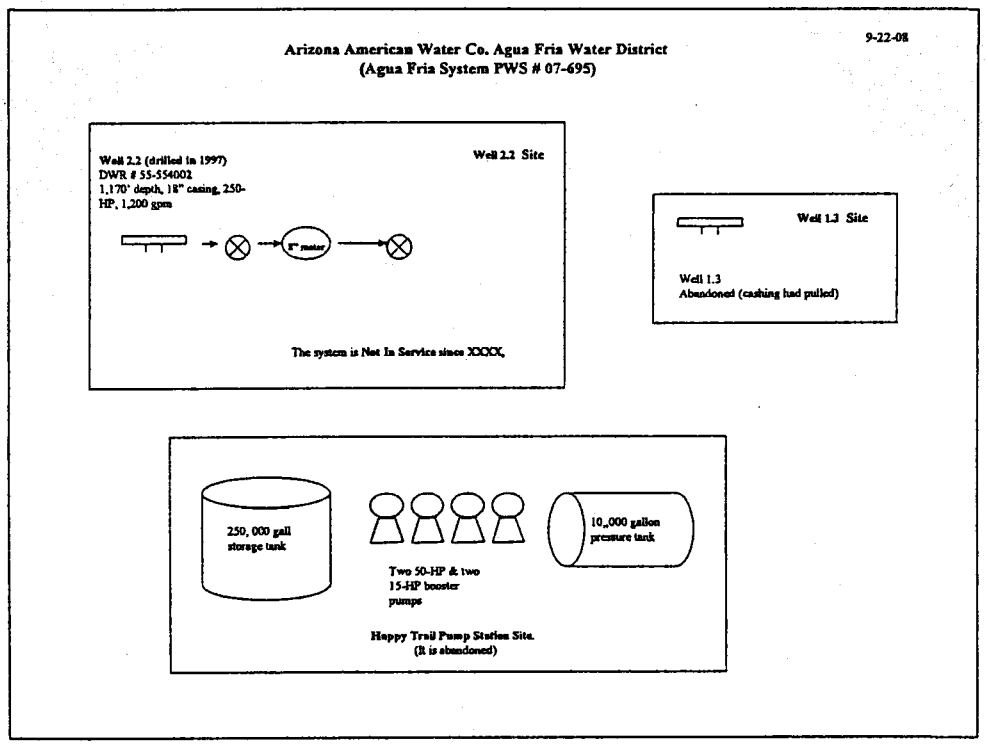


FIGURE 3N

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (NEAF SYSTEM)

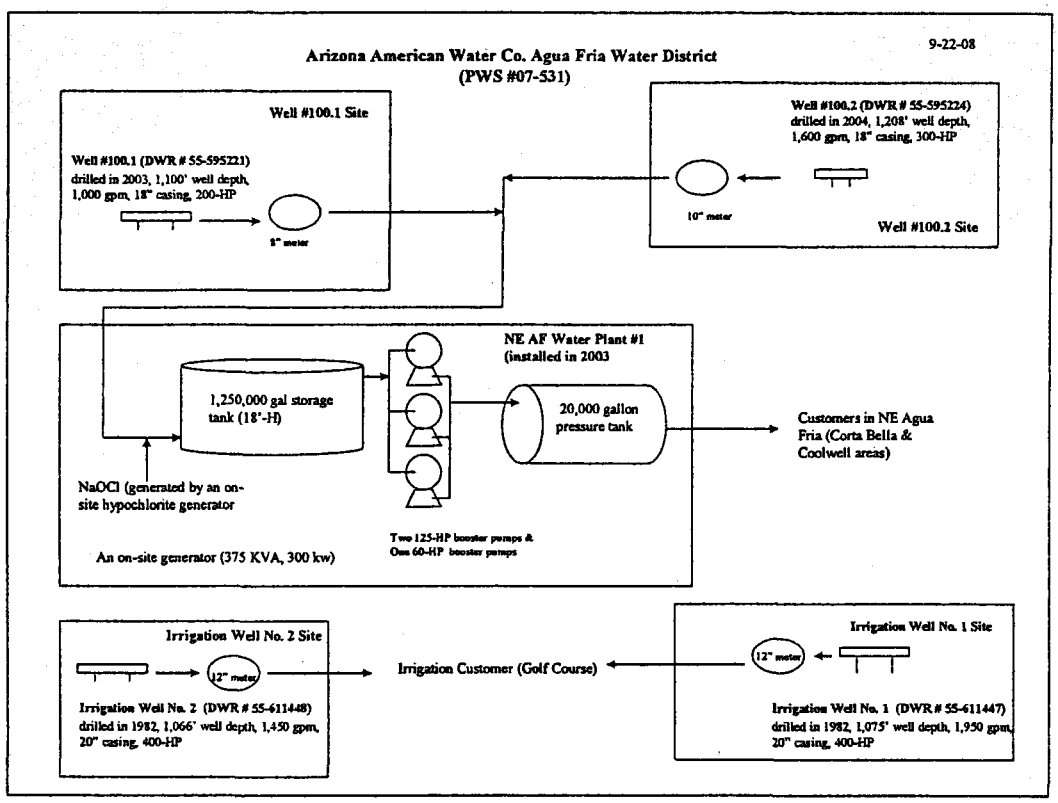


FIGURE 3O

AGUA FRIA WATER DISTRICT SYSTEMATIC DIAGRAM (COOLWELL SYSTEM)

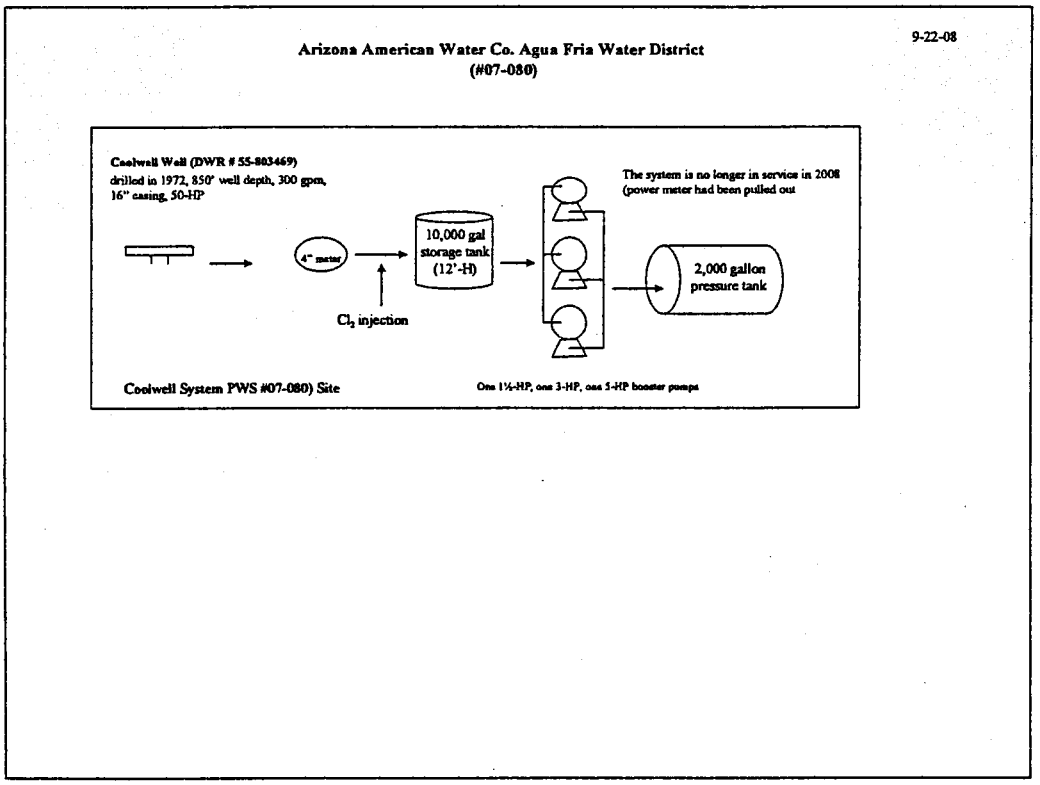


FIGURE 4A

AGUA FRIA WATER DISTRICT WATER USAGE (AGUA FRIA SYSTEM)

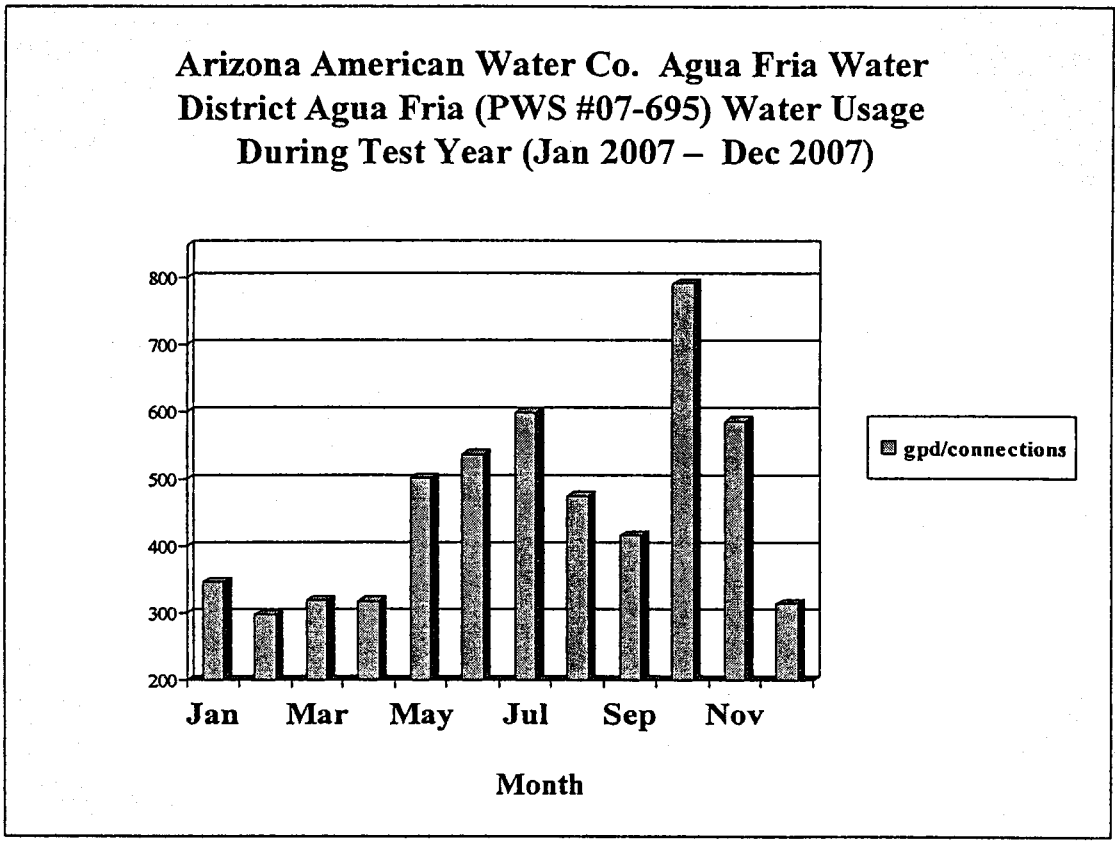


FIGURE 4B

AGUA FRIA WATER DISTRICT WATER USAGE (NEAF SYSTEM)

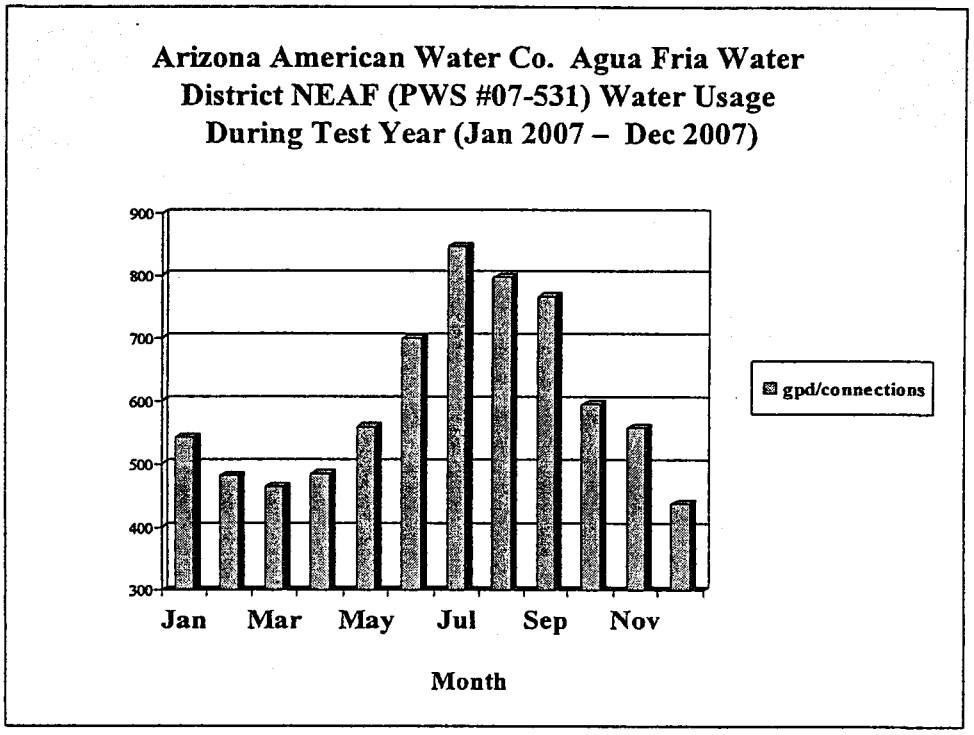


FIGURE 4C

AGUA FRIA WATER DISTRICT WATER USAGE (NEAF IRRIGATION SYSTEM)

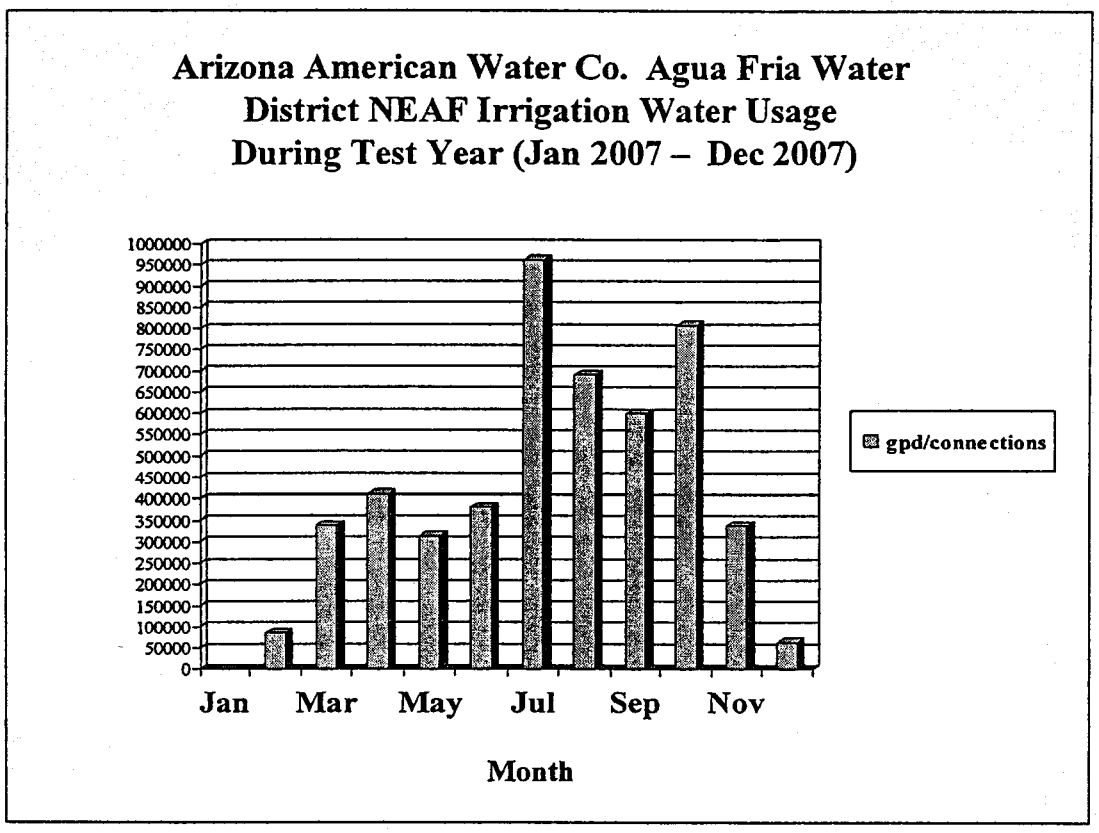


FIGURE 4D

AGUA FRIA WATER DISTRICT WATER USAGE (COOLWELL SYSTEM)

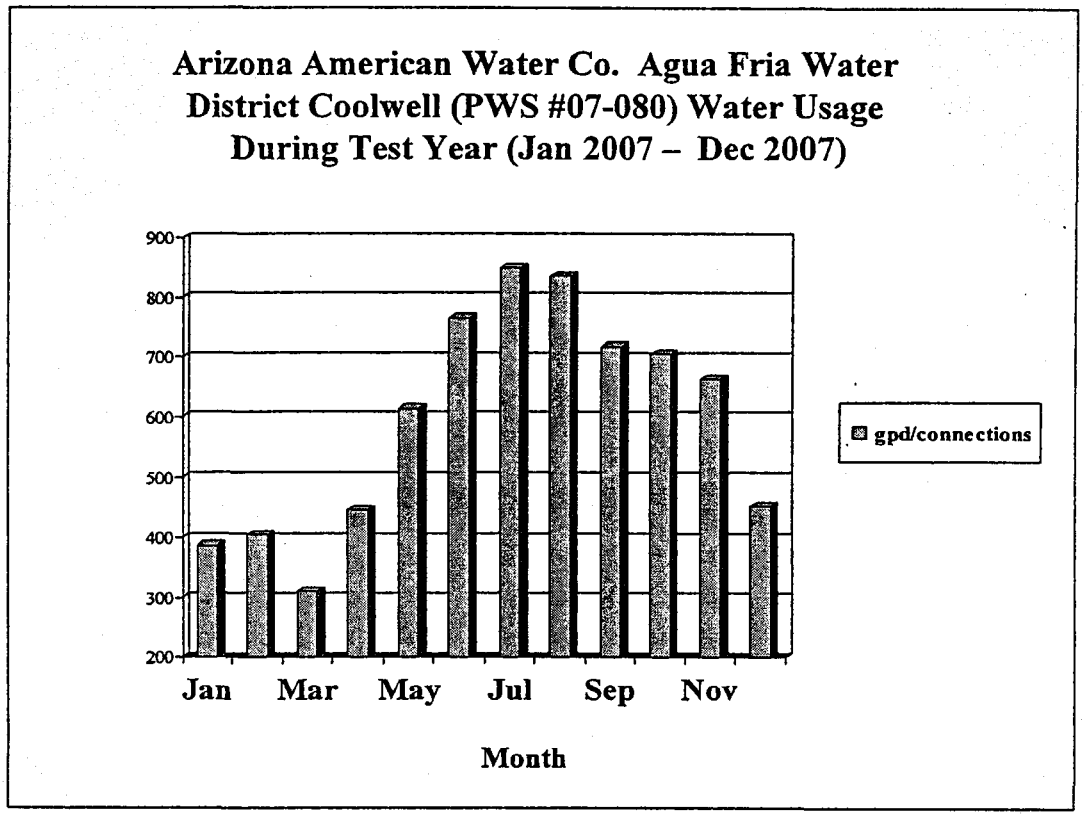


FIGURE 5

GROWTH IN AGUA FRIA WATER DISTRICT

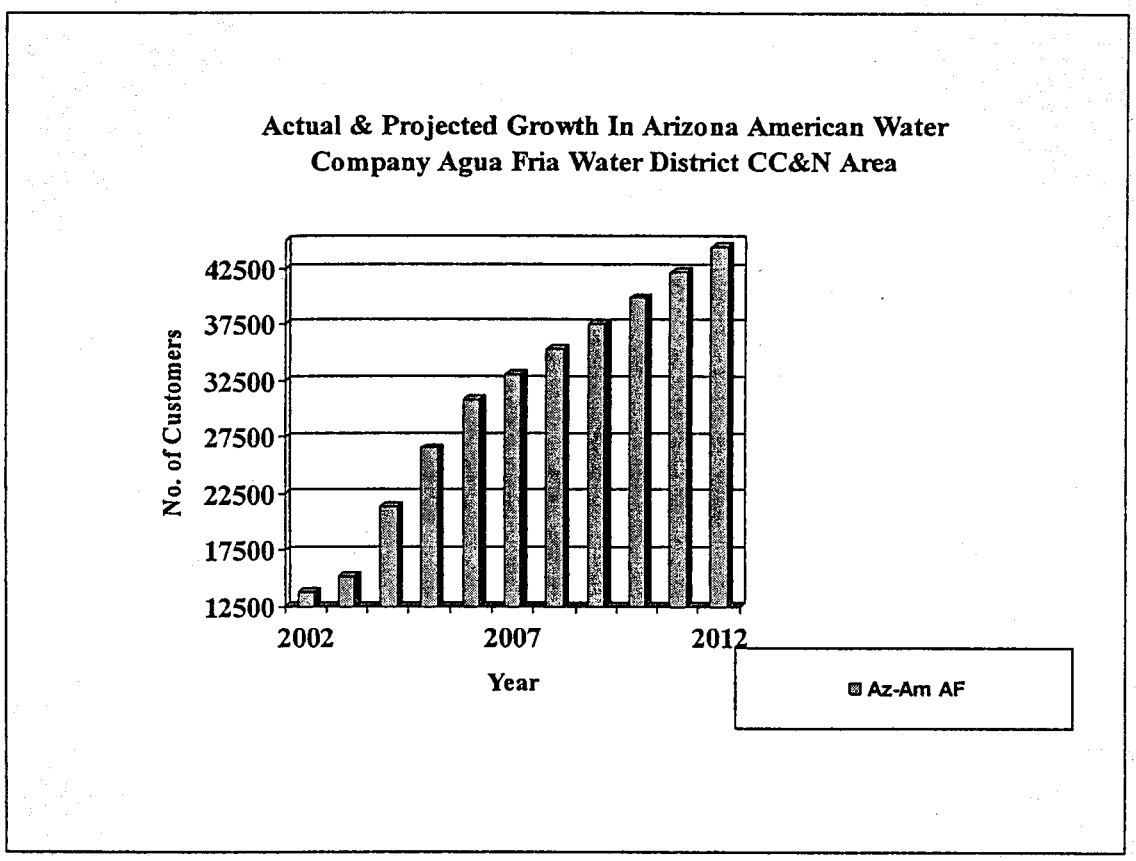


FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS (Agua Fria Water District)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #68310	Rate (%) Sun City West Water proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	0.00	1.67	0.00
	304600	Structure & Improvement office	1.68	2.03	4.63
	304800	Structure & Improvement Misc	0.00	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	0.00	0.00	2.50
307	307000	**Wells & Springs**	2.52	2.52	3.33
310	310100	**Power Generation Equip Other**	0.00	4.42	4.42
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	4.42	4.42	4.42
	311500	Pump Equipment Other	4.42	4.42	4.42
320		**Water Treatment**			
320.1	320100	Water Treatment Equipment	4.00		
		Water Treatment Equipment Non-		4.00	
	N/A	Media	N/A	N/A	7.06
320.2	N/A	Solution Chemical Feeder	N/A	N/A	5.00
320.3	N/A	Media Water Treatment Equipment	N/A	N/A	5.00
		(pressurized vessels)	N/A	N/A	5.00
	N/A	Ion Exchange Treatment Equipment	N/A	N/A	4.00
320.4	N/A	Sludge Disposal Equipment	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
330.1	N/A	Storage Tanks	N/A	N/A	1.67
330.2	N/A	Pressure tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.53		
	331001	TD mains not classified by size	N/A	1.53	1.53
	331100	TD mains 4-inch & less	N/A	1.53	1.53
	331200	TD mains 6-inch to 8-inch	N/A	1.53	1.53
	331300	TD mains 10-inch to 16-inch	N/A	1.53	1.53
		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	0.00	0.00	2.00

333	333000	**Services**	2.48	2.48	2.48
334		**Meters**			
	334100	Meters	2.51	2.51	2.51
	334200	Meter installations	N/A	2.51	2.51
335	335000	**Hydrants**	2.00	2.00	2.00
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	4.98		
	339100	Other P/E Intangible		0	0
	339500	Other P/E SS		0	0
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.55	4.04	4.04
	340200	Computer & periph equipment	4.55	4.04	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks	N/A	25.00	22.00
	341200	Transportation Equip, heavy Duty Trucks	N/A	25.00	15.00
342	342000	**Store Equipments**	3.92	3.92	3.92
343	343000	**Tools Shop & Garage Equipments**	4.14	4.02	4.02
344	344000	**Lab equipments**	3.71	0.00	3.71
345	345000	**Power operated equipments**	5.14	5.20	5.20
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	10.28	10.30	10.30
	346300	Communication Equip Other	N/A	4.93	4.93

EXHIBIT DMH-2

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC., HAVASU WATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Havasu Water Division
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona American Company's Havasu District ("Havasu") presented in Figure 6 by National Association of Regulatory Commissioners' ("NARUC") account. (See §I of report for discussion and details.)

II. Staff recommends approval of separate meter and service line installation charges as shown under the Staff Recommended columns in Table 4. (See §J of report for discussion and details.)

III. Lost water for Havasu was calculated to be 13.34 percent which exceeds acceptable limits. Staff recommends that the Company reduce its water loss to below 10 percent in Havasu by December 31, 2009, or before it files its next rate increase application and/or CC&N application and/or financing application, whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss remains less than 10 percent immediately. If the water loss for the twelve month period ending December 31, 2009, is greater than 10 percent, the Company must come up with a plan to reduce water loss to less than 10 percent, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case. (See §G of report for discussion and details.)

IV. Staff recommends that $143,485 of Arsenic Treatment Plant installation be removed from plant. (See §J of report for discussion and details.)

V. Staff considers the reported water testing expenses and the estimated water testing costs of $5,295 for the Havasu reasonable. (See §F of report for discussion and details.)

Conclusions:

I. Arizona Department of Environmental Quality ("ADEQ") has determined that Havasu system is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §C for a discussion and details.)

II. Arizona Department of Water Resource ("ADWR") has determined that Havasu is not within any ADWR's Active Management Area and is in compliance with the ADWR requirements governing water providers. (See §E of report for discussion and details.)

III. Havasu has an approved cross connection tariff. (See §J of report for discussion and details.)

IV. Havasu has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. (See §B of report for discussion and details.)

V. Havasu has an approved curtailment tariff. (See §J of report for discussion and details.)

VI. A check with the Utilities Division Compliance Section showed Havasu has no outstanding compliance issues. (See §D of report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona-American Water Company Havasu Water Division ("Havasu" or "Company") serves water to approximately 1,530 customers and is located in north of the City of Lake Havasu in Mohave County. Figure 1 describes the location of Havasu, and Figure 2 describes the Certificate of Convenience and Necessity ("CC&N") area of Havasu.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on June 17, 2008, by Dorothy Hains, Utilities Engineer, accompanied by Company representative, David Evans (the Company's Operation Superintendent).

System Analysis

Havasu consists of four drinking water wells that are capable of producing a total flow of 1,400 gallons per minute ("GPM"), a 2.2 million gallons per day ("MGD") arsenic treatment plant and 1.85 million gallons ("MG") of storage capacity. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figures 3A, 3B, 3C and 3D provide a process schematic showing both the active and inactive components of the water system.

Well Data

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
3	55-601831	1972	8	160	4	40	250
7	55-539646	1993	10	150	6	20	550
8	55-512988	1986	8	420	4	15	100
9	55-594370	2003	16	790	8	20	500

In active Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
1	55-601829	N/A	6	180	6	N/A	N/A
2	55-534237	1992	12	355	6	N/A	N/A
4	55-601832[1]	1970	10	245	3	5	75
5	55-601833	1980	8	150	6	30	175
6	55-601830	1968	10	148		N/A	N/A
N/A	55-210908[2]	2007	N/A	770	N/A	N/A	N/A

Note: 1. When active this well was used for construction purposes.
2. Aka the North Point Well.

Arsenic Treatment Plant ("ATP")

Number of treatment plant	1
Plant location	At Well #8 & #9 site
Type	Granular Ferric Media filtration
treatment capacity (normal operation condition)	2.2 million gallons per day ("MGD")
# of vessels in the plant	2
Diameter of vessel	14 ft
Year installed	2005

Active Storage, Pumping

Location	Structure or equipment	Capacity
North Point Well & Booster Station Site	Booster Pumps	Two 25-HP One 5-HP One 50-HP One 75-HP
	Storage Tank	One 750,000 gal
	Pressure Tank	Two 211 gal
Booster Station #3 Site	Booster Pumps	Two 25-HP One 30-HP
	Storage Tank	One 125,000 gal
	Pressure Tank	One 5,000 gal
Booster Station #4 Site	Booster Pumps	Two 25-HP
	Storage Tank	One 125,000 gal
	Pressure Tank	One 10,000 gal
Well #8/Well #9 Site	Booster Pumps	Two 25-HP Two 30-HP Four 50-HP One 75-HP
	Storage Tank	One 250,000 gal One 500,000 gal
	Pressure Tank	One 10,000 gal One 200 gal
Well #3/ Well #5 Site	Booster Pumps	Two 25-HP One 30-HP
	Storage Tank	One 100,000 gal
	Pressure Tank	One 8,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
2	N/A	691
3	N/A	1,959
4	polyvinyl chloride ("PVC")	36,322
6	PVC	58,721
6	Ductile Iron pipe ("DIP")	5,611
8	PVC	28,812
8	DIP	1,346
10	PVC	519
12	N/A	469

Meters

Size (inches)	Quantity
⅝ x ¾	1,489
¾	4
1	14
1½	110
2	23
3	4
4	6
6	1

C. ARIZONA DEPARTMENT OF ENVIORNMENTAL QUALITY ("ADEQ") COMPLIANCE

Based on a memorandum dated January 31, 2008, ADEQ has determined that Havasu is currently in compliance with its requirements. ADEQ also stated that it has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items.

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Havasu is not within any ADWR's Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR for Havasu on June 20, 2008. In its report ADWR stated that Havasu is in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

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

1. MAP will do baseline testing on everything except copper, lead, bacteria and disinfection by-products.

2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented as a pro forma expense on an annualized basis.

3. All monitoring expenses are based on Staff's best knowledge of lab costs and methodology and two point-of-entries.

4. The estimated water testing expenses represent a minimum cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 1 shows the estimated annual monitoring expense, assuming participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount of $5,295 shown in Table 1.

Table 1 Water Testing Cost

Monitoring – 4 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	$20	180	$3,600	$1,200
Inorganics – Priority Pollutants	$300	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	$60	MAP	MAP	MAP
Phase II and V:				
IOC's, SOC's, VOC's	$2,805	MAP	MAP	MAP
Nitrites	$20	MAP	MAP	MAP
Nitrates – annual	$40	12	MAP	MAP
Asbestos – per 9 years	$180	2⅓	MAP	MAP
Lead & Copper – annual*	$0	20	$0	$0
TTHM/HHAs – per 3 years**	$0	6	$0	$0
Maximum chlorine residual	$20	0	$0	$0

levels				
MAP fees (annual)				$4,094.72
Arsenic*& **	$0	60	$0	$0
Total				**$5,295**

* The test will be done in the Company's Lab in Belleville. .
** To comply with ADEQ requirement, the Company has to conduct quarterly arsenic testing at each well site and ADEQ designed sampling points aka Points of Entry.

G. WATER USAGE

Figure 4 is a graph that shows water consumption data in gallons per day ("GPD") per customer for the system for the test year period of January 2007 through December 2007.

1. Water Sold

Based on information provided by the Company, water use for the year 2007 is presented in Figure 4. The high monthly water use was 878 gallons per day ("GPD") per connection in March, and the low monthly water use was 292 GPD per connection in June. The average annual use was 439 GPD per connection.

2. Lost Water

Lost water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water for Havasu was calculated to be 13.34 percent which exceeds acceptable limits.

In Decision No. 67093, (issued on June 30, 2004) the Commission identified that Havasu had water loss exceeding the 10 percent limit and ordered the Company to make necessary corrections. On August 10, 2006, the Company docketed a statement stating that the water loss issue had been resolved and declared that the Company was in compliance with Decision No. 67093. However, based on water use data in the Company's Annual Reports, Havasu had 21 percent water loss in 2004, 7.5 percent water loss in 2005 and 30 percent water loss in 2006. Also, the Company failed to continue its water loss monitoring and provide a plan that outlines the procedures, steps and time frames to achieve acceptable levels of loss water.

Staff recommends that the Company reduce its water loss to below 10 percent in Havasu by December 31, 2009, or before it files its next rate increase application and/or CC&N application and/or financing application whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss remains less than 10 percent

immediately. If the water loss for the twelve month period ending December 31, 2009, is greater than 10 percent, the Company must come up with a plan to reduce water loss to less than 10 percent, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case.

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 1,248 at the end of 2002 to 1,528 by the end of 2007, with an average growth rate of 70 customers per year from 2002 to 2007. Based on the linear regression analysis, Staff estimates that the Company could have over 1,900 customers by the end of 2012. The following tables summarize Staff and the Company's projected growth.

Table 3 Actual and Projected Growth

Year	Nos. of Customers	
2002	1,248	Reported
2003	1,299	Reported
2004	1,422	Reported
2005	1,485	Reported
2006	1,507	Reported
2007	1,528	Reported
2008	1,674	Estimated
2009	1,744	Estimated
2010	1,815	Estimated
2011	1,885	Estimated
2012	1,955	Estimated

I. DEPRECIATION RATES

Decision No. 67093 approved the depreciation rates used by Havasu in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25 percent depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15 percent depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHERS

1. Service Line and Meter Installation Charges

The Company requested that meter and service line installation charges for all size meters be determined on an individual case basis. Staff is recommending specific charges for meters smaller than 3-inch and actual costs for 3-inch meters and larger. Staff recommends approval of separate meter and service line installation charges as shown under the column headings "Staff Recommended" in Table 4 for meter sizes smaller than 3-inches. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff which Staff recommends be adopted in this case.

Table 4 Service Line and Meter Installation Charges

Meter Size	Current Charges (Service line installation)	Current Charge (Meter installation)	Proposed Charges (Service line installation)	Proposed Charge (meter installation)	Staff Recommendation ((Service Line)	Staff Recommendation (meter installation)	Staff Recommendation total charges
5/8 x 3/4-inch	$370	$130	Actual Cost	Actual Cost	$445	$155	$600
3/4-inch	$370	$205	Actual Cost	Actual Cost	$445	$255	$700
1-inch	$420	$240	Actual Cost	Actual Cost	$495	$315	$810
1½-inch	$450	$450	Actual Cost	Actual Cost	$550	$525	$1.075
2-inch (Turbo)	$580	$945	Actual Cost	Actual Cost	$830	$1,045	$1,875
2-inch (Compound)	$580	$1,640	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch (Turbo)	$745	$1,420	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch (Compound)	$765	$2,195	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Turbo)	$1,090	$2,270	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Compound)	$1,120	$3,145	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Turbo)	$1,610	$4,425	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Compound)	$1,630	$6,120	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved curtailment tariff on file with the Commission.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. The 2.2 MGD ATP

The plant was installed in 2005. The ATP only treats ground water produced by Well No. 8 and Well No. 9. The combined flow from these two wells is 600 GPM. The loading rate on media is 5 GPM/square foot under normal operation. Staff concludes that the one 14-foot diameter media vessel or two 9-foot diameter media vessels would have provided adequate treatment capacity to remove arsenic. The Company installed two 14-foot diameter media vessels instead; therefore,

Staff recommends that cost of one 14-foot diameter vessel be removed from rate base. Staff estimates the cost of one 14-foot diameter vessel was to be $143,485[1].

5. Well No. 4[2] and Well No. 5[3]

Both wells have been disconnected and were not in-service at the time of Staff's inspection.

[1] The Company did not provide any invoices of the costs of this vessel; Staff used information from Sun City West to calculate its estimate. Total costs of four 12-foot diameter vessels in Sun City West Arsenic Treatment Plant #2 were $573,439. One fourth of $573,439 is $143,485. Similar Severn Trent systems were used in Havasu and Sun City West.

[2] Well #4 was disconnected in 2006.

[3] Well #5 was disconnected in 2004.

FIGURES

FIGURE 1

HAVASU WATER DIVISION CERTIFICATED AREA

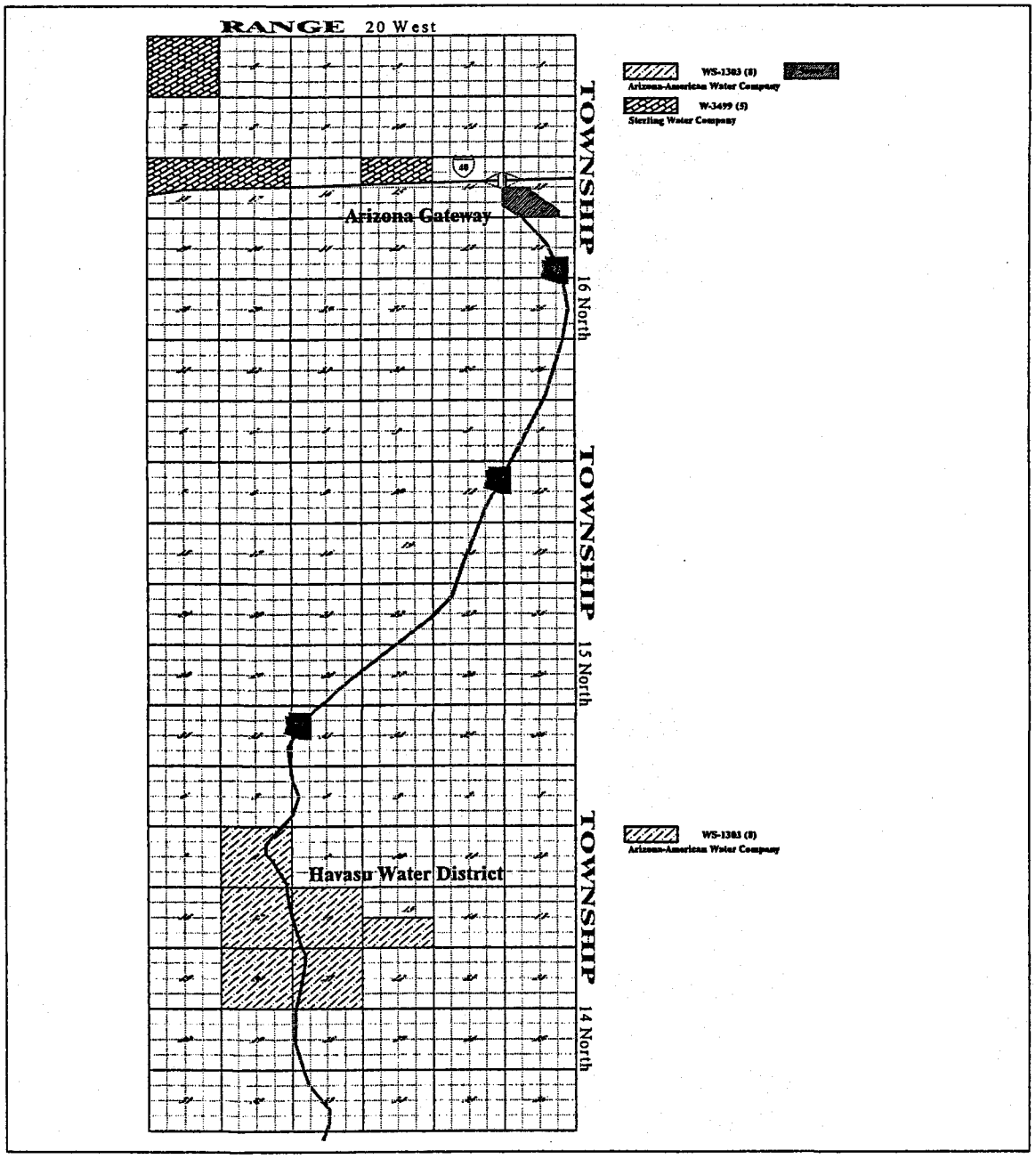
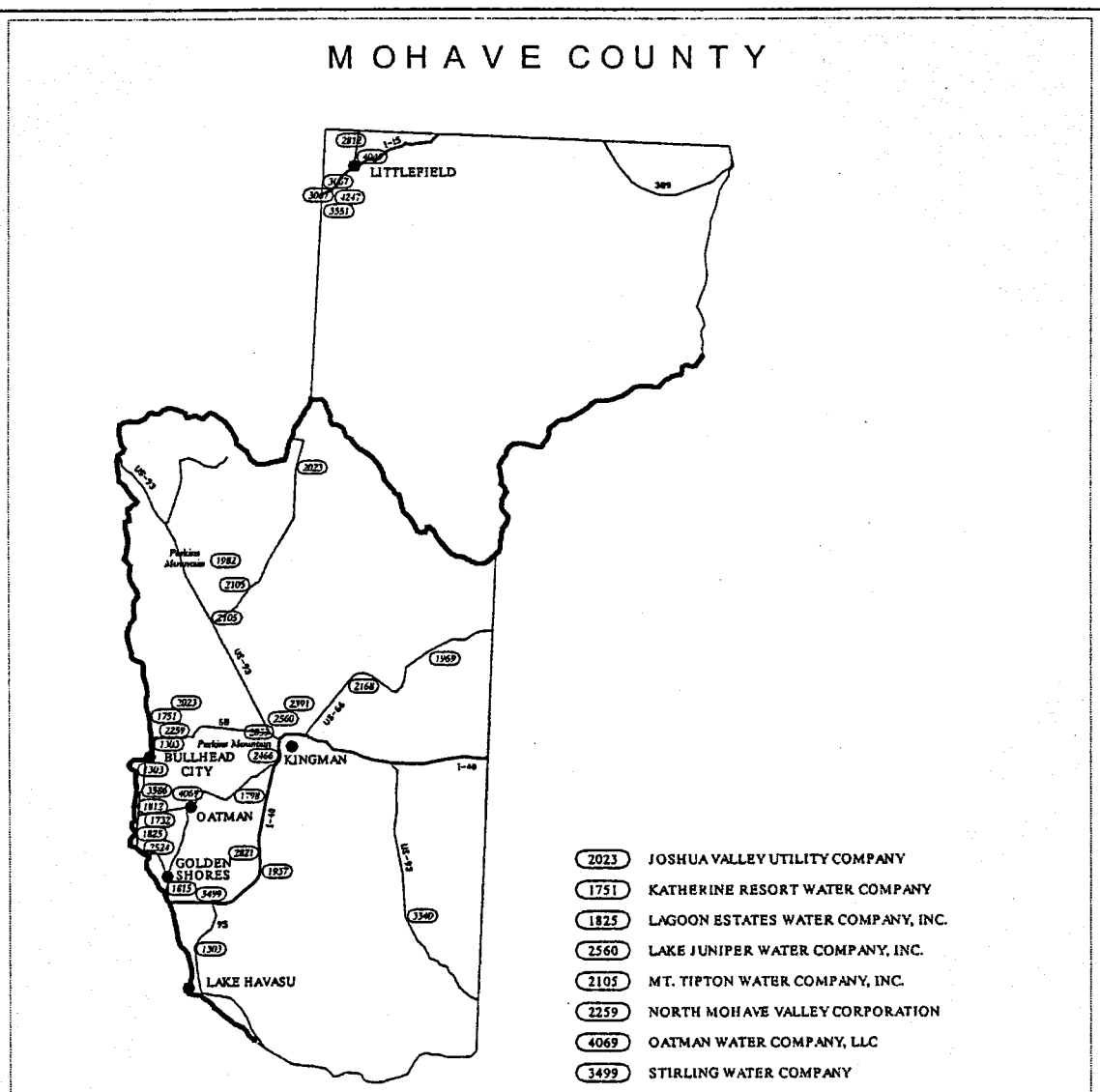


FIGURE 2

LOCATION OF HAVASU WATER DIVISION



(1303) ARIZONA-AMERICAN WATER COMPANY
(3067) BEAVER DAM WATER COMPANY, INC.
(1812) BERMUDA WATER COMPANY, INC.
(2812) BIASI WATER COMPANY, INC.
(2391) CERBAT WATER COMPANY
(2821) DOUBLE R WATER DISTRIBUTORS, INC.
(4049) DS WATER COMPANY
(2524) FORT MOHAVE INDIAN TRIBE
(1815) GOLDEN SHORES WATER COMPANY, INC.
(1969) HATCH VALLEY WATER COMPANY
(2023) JOSHUA VALLEY UTILITY COMPANY
(1751) KATHERINE RESORT WATER COMPANY
(1825) LAGOON ESTATES WATER COMPANY, INC.
(2560) LAKE JUNIPER WATER COMPANY, INC.
(2105) MT. TIPTON WATER COMPANY, INC.
(2259) NORTH MOHAVE VALLEY CORPORATION
(4069) OATMAN WATER COMPANY, LLC
(3499) STIRLING WATER COMPANY
(4247) SUNRISE UTILITIES, LLC
(3586) SUNRISE VISTAS UTILITIES COMPANY
(1798) SUNSET WATER COMPANY
(2168) TRUXTON CANYON WATER COMPANY, INC.
(2033) VALLEY PIONEER'S WATER COMPANY, INC.
(3551) VIRGIN MOUNTAIN UTILITIES COMPANY
(2466) WALNUT CREEK WATER COMPANY, INC.
(1982) WHITE HILLS WATER COMPANY, INC.
(1732) WILLOW VALLEY WATER COMPANY, INC.
(3340) WOODYS ENTERPRISES, LTD
(1937) YUCCA WATER ASSOCIATION, INC.

01/10/07

FIGURE 3A

HAVASU WATER DIVISION SYSTEMATIC DIAGRAM

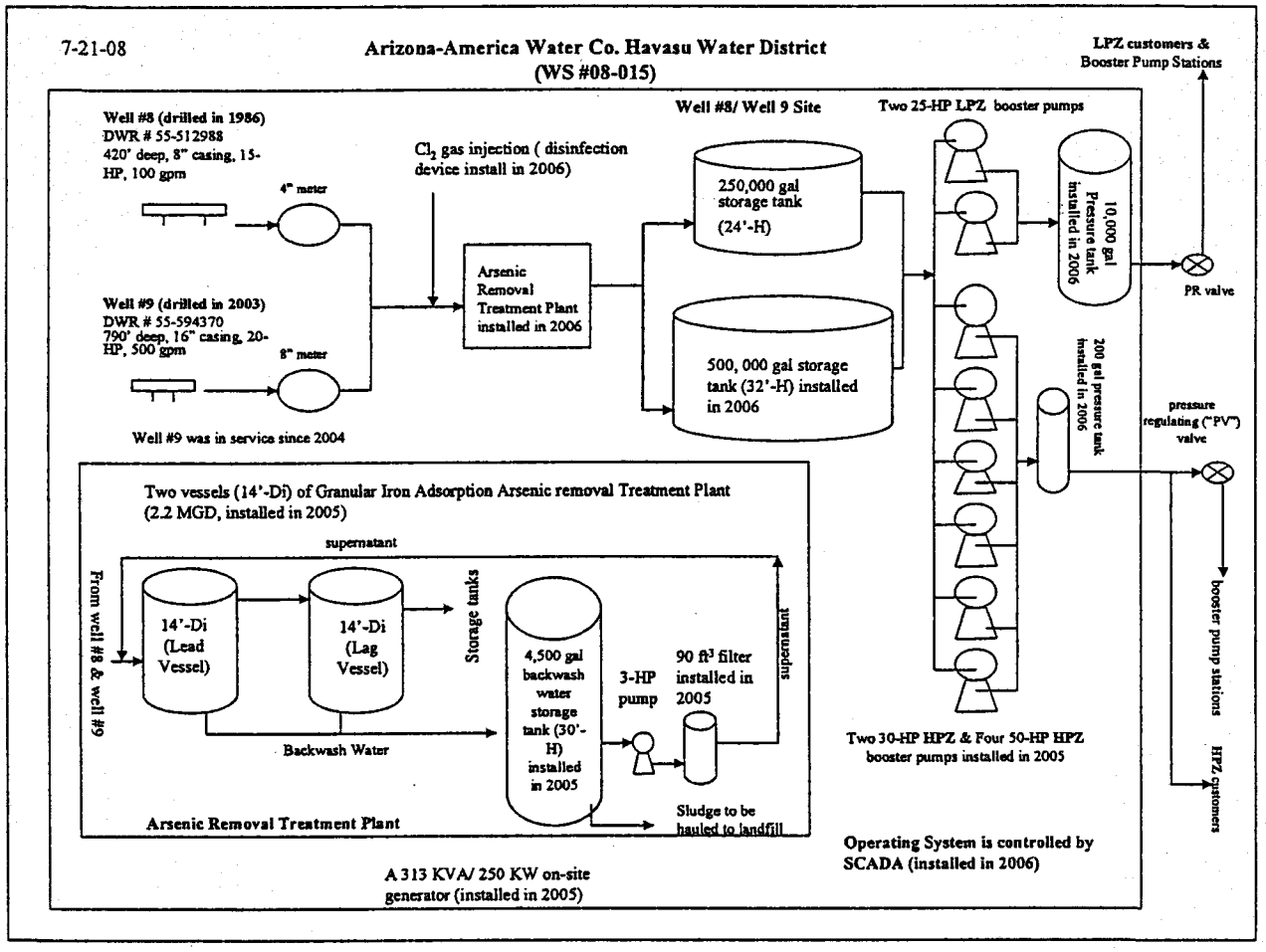


FIGURE 3B

HAVASU WATER DIVISION SYSTEMATIC DIAGRAM

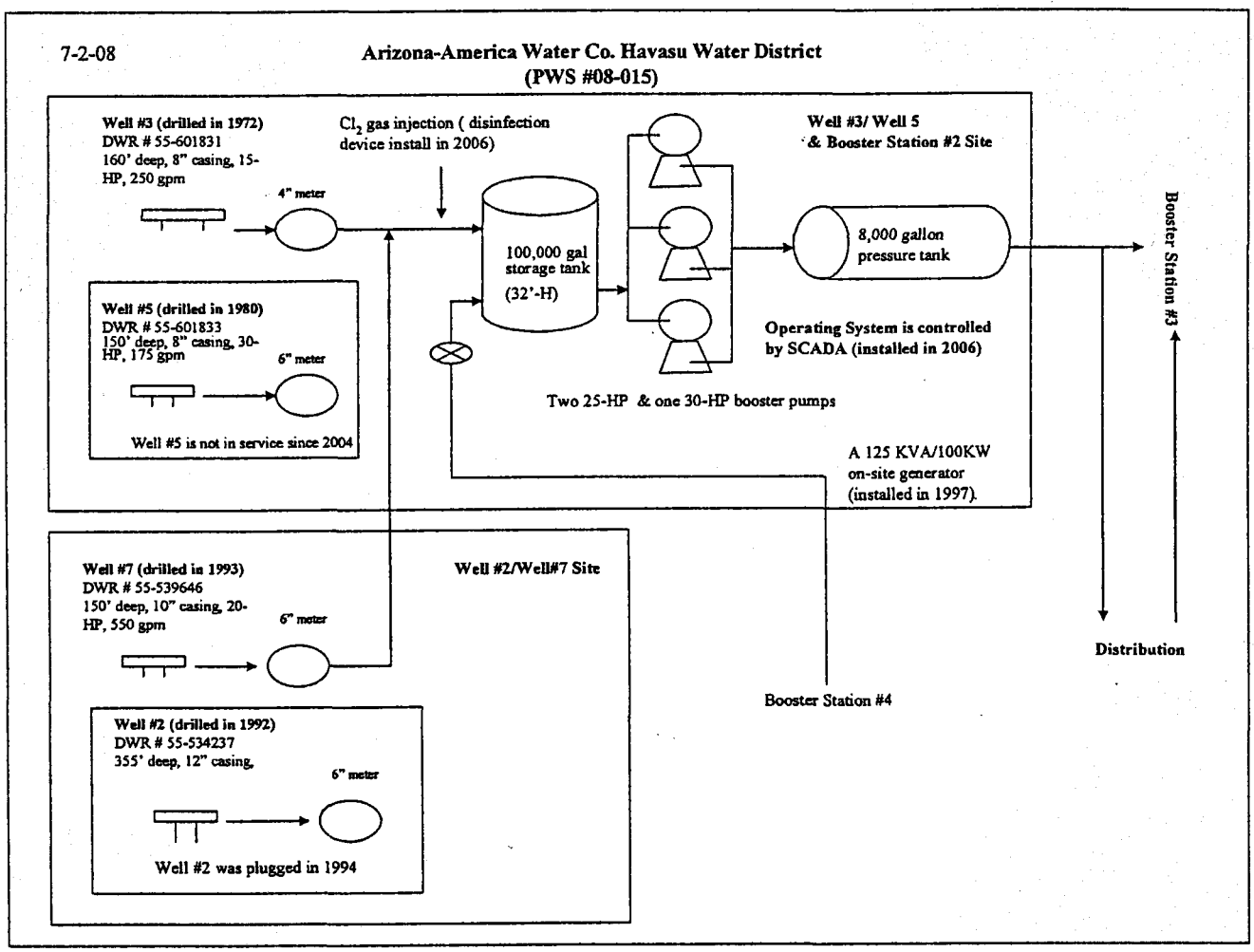


FIGURE 3C

HAVASU WATER DIVISION SYSTEMATIC DIAGRAM

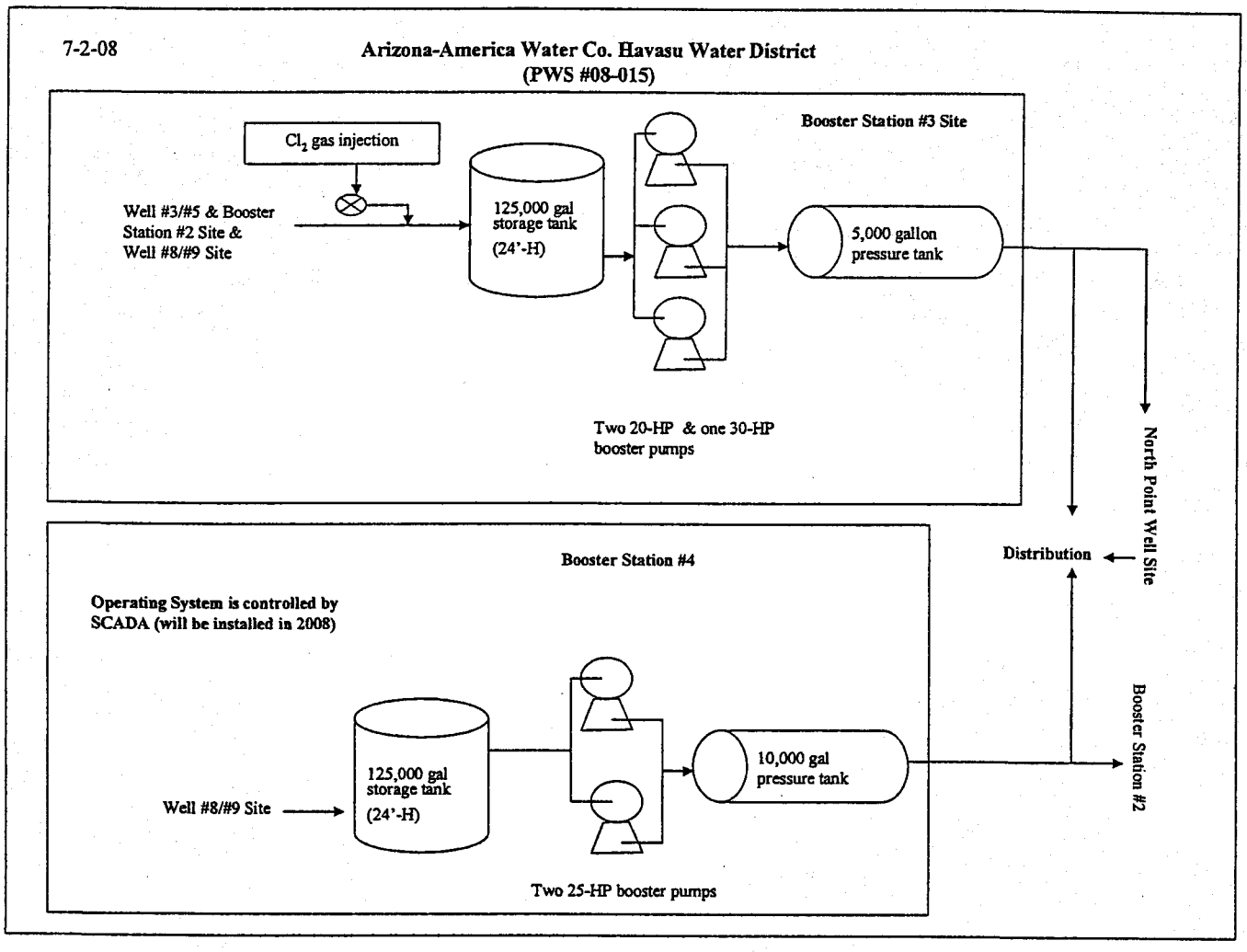


FIGURE 3D

HAVASU WATER DIVISION SYSTEMATIC DIAGRAM

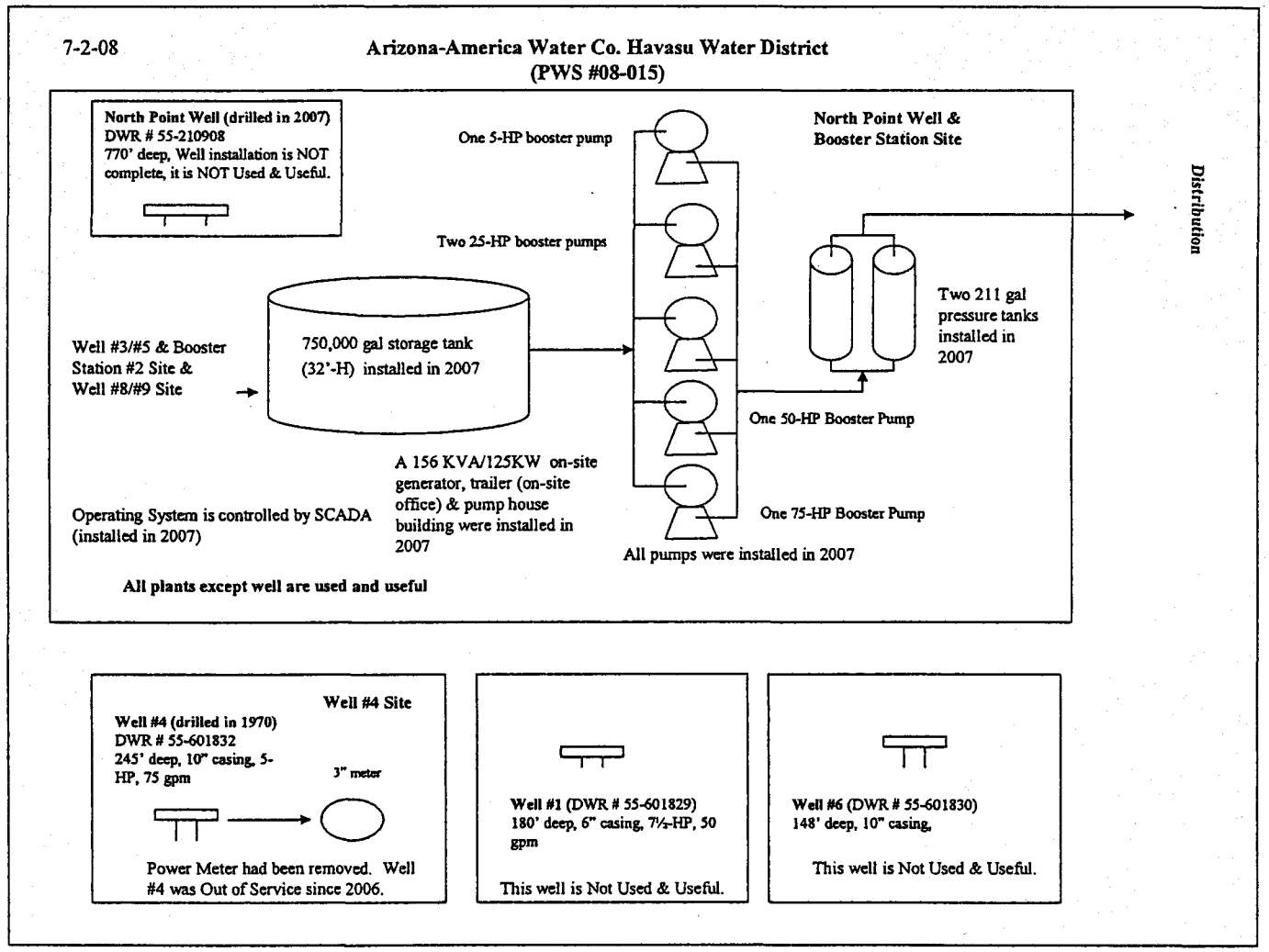


FIGURE 4

HAVASU WATER DIVISION WATER USAGE

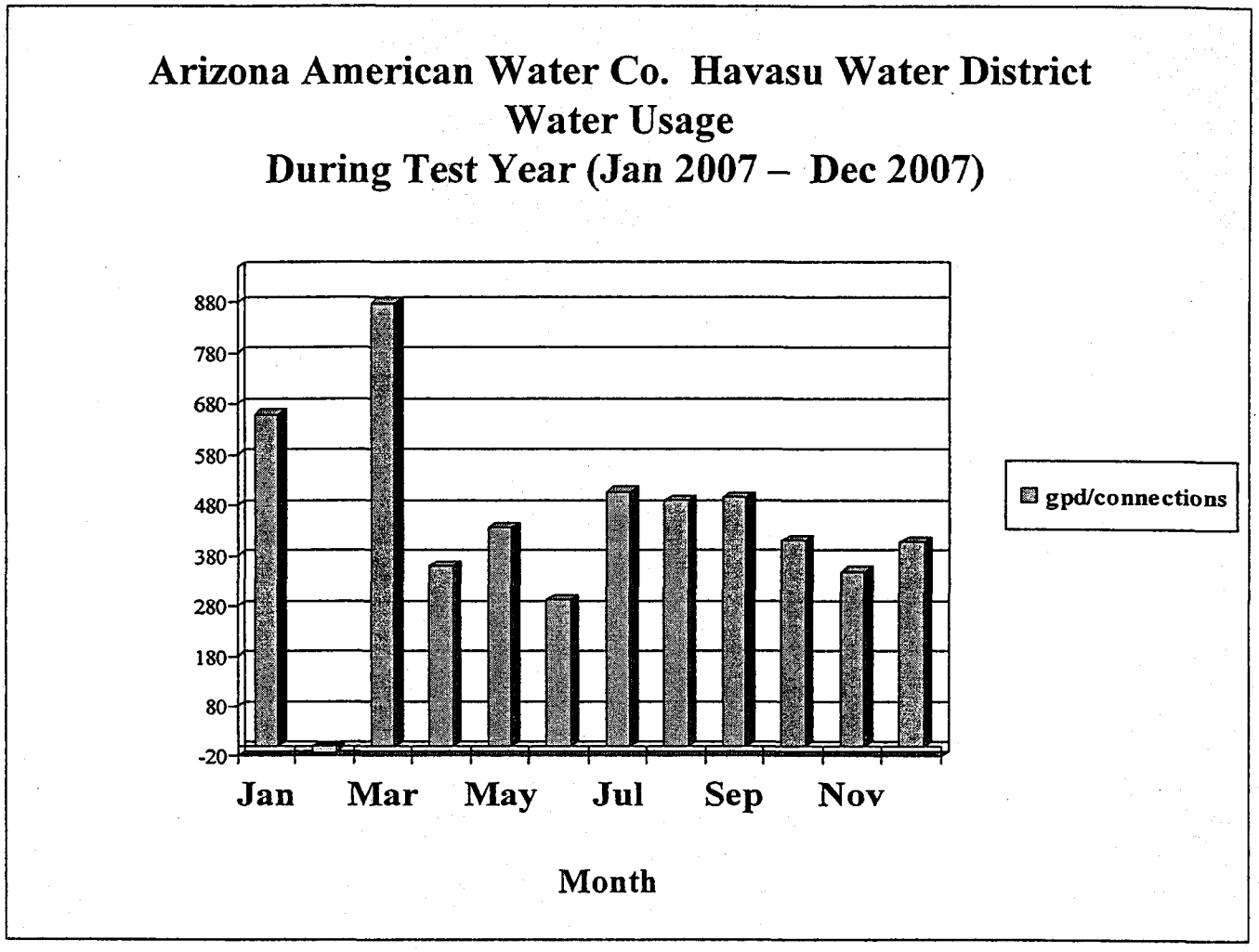


FIGURE 5

GROWTH IN HAVASU WATER DIVISION

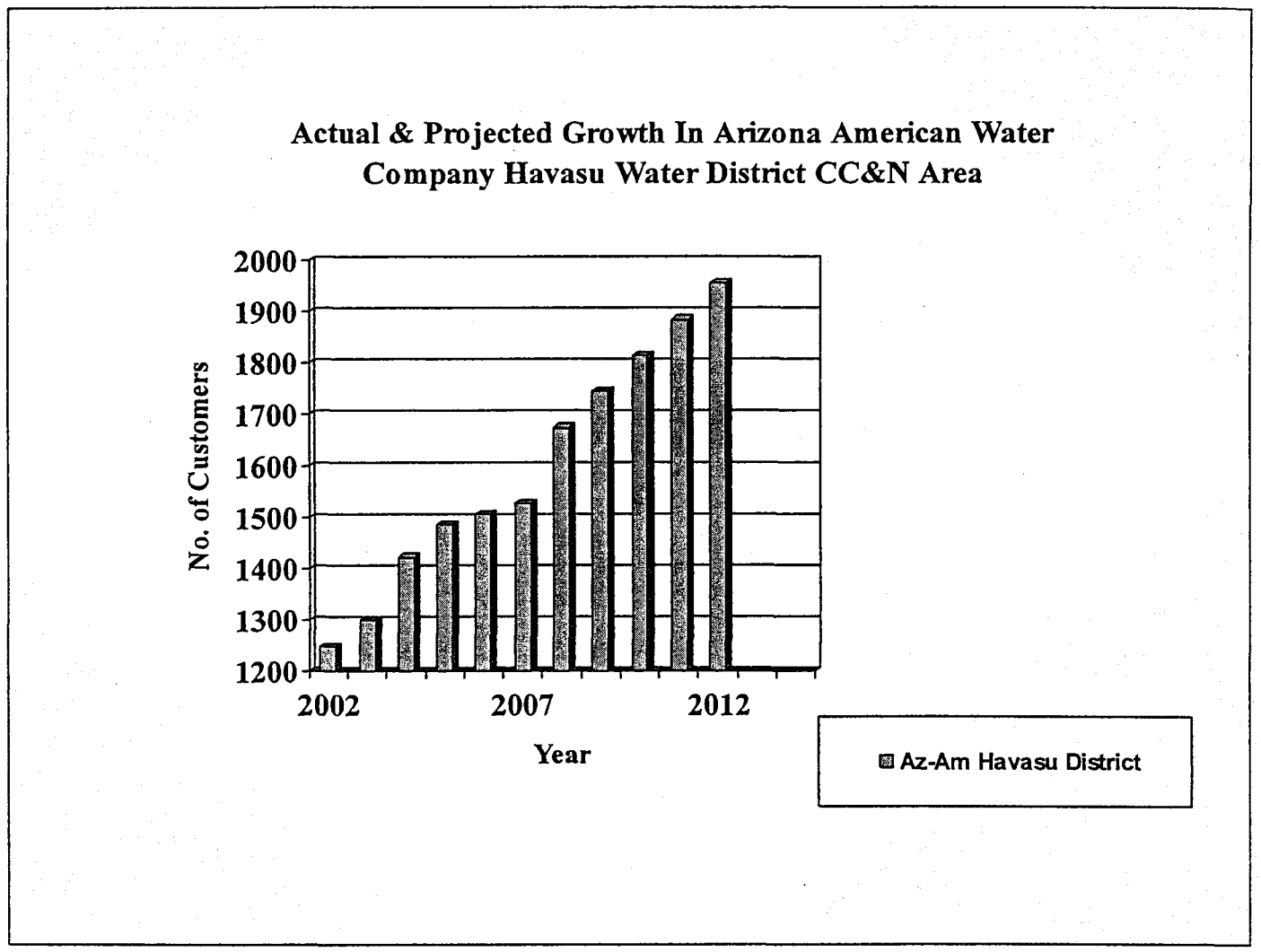


FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS -Havasu

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 68310	Rate (%) proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	
	303300	Land & Land Rights P	0	0	
	303500	Land & Land Right TD	0	0	
	303600	Land & Land Right AG	0	0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.79	2.58	2.58
	304200	Structure & Improvement P	0	0.00	0.00
	304300	Structures and Improvements WT	0	0.00	0.00
	304400	Structure & Improvement TD	0	0.00	0.00
	304600	Structure & Improvement office	2.03	2.58	2.58
	304800	Structure & Improvement Misc		0.00	0.00
305	305000	**Collection & Impounding reservoirs**	2.54	2.58	2.54
307	307000	**Wells & Springs**	2.54	2.54	2.54
310	310100	**Power Generation Equip Other**	5.12	3.83	3.83
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	3.71	3.83	3.83
	311300	Pump Equipment Diesel	0.00	0.00	0.00
	311500	Pump Equipment Other	0.00	0.00	0.00
320		**Water Treatment Equipment**			
320.1	320100	Water Treatment Plant (Non-Media)	12.00	12.00	7.06
320.4	N/A	Water Treatment Plant (Media)	N/A	N/A	5.00
320.2	N/A	Chemical Solution Feeders	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	2.33	2.33	2.33
330.1	N/A	Storage Tank	N/A	N/A	2.33
330.2	N/A	Pressure Tank	N/A	N/A	5.00
331		**Transmission and Distribution**	2.10		
	331001	TD mains not classified by size	N/A	2.10	2.10
	331100	TD mains 4-inch & less	N/A	2.10	2.10
	331200	TD mains 6-inch to 8-inch	N/A	2.10	2.10
	331300	TD mains 10-inch to 16-inch	N/A	2.10	2.10
		TD mains 18-inch and larger	N/A	N/A	2.00
		Other Transmission and Distribution	N/A	N/A	2.00
		Fire mains	N/A	N/A	2.00
333	333000	**Services**	2.89	2.89	2.89
334		**Meters**	3.52		
	334100	Meters		3.52	3.52
	334200	Meter installations		3.52	3.52
335	335000	**Hydrants**	0.00	1.99	1.99
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	N/A		

	339100	Other P/E Intangible		0	0
	3392500	Other P/E SS		0	0
340		**Office Furniture & Equipments**			
	340100	Office Furniture & Equipments	4.10	4.47	4.47
	340200	Computer & periph equipment	4.10	4.47	4.47
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks		25.00	20.00
	341200	Transportation Equip, heavy Duty Trucks		25.00	15.00
342	342000	**Store Equipments**	3.93	3.93	3.93
343	343000	**Tools Shop & Garage Equipments**	7.55	4.49	4.49
344	344000	**Lab equipments**	3.06	3.06	3.06
345	345000	**Power operated equipments**	9.23	2.55	2.55
346		**Communication Equipments**	4.10		
	346100	Communication Equip non-telephone		8.37	8.37
	346300	Communication Equip Other		6.19	6.19
347		Miscellaneous Equipment	6.19	N/A	6.19

EXHIBIT DMH-3

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC., MOHAVE WATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Mohave Water District
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona American Company's Mohave Water District ("Mohave Water District") presented in Figure 6 by National Association of Regulatory Commissioners' ("NARUC") account. (See §I of report for discussion and details.)

II. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges. (See §J of report for discussion and details.)

III. Staff recommends that the Company reduce its water loss to 10 percent or less in the Bullhead City System by December 31, 2010, or before it files its next rate increase application and/or CC&N application and/or financing application, whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss is reduced to 10 percent or less immediately. If the water loss for a twelve month period prior to December 31, 2010 is greater than 10 percent, the Company must come up with a plan to reduce water loss to 10 percent or less, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case. (See §G of report for discussion and details.)

IV. Staff recommends that the Company file by August 31, 2009, as a compliance item in this same docket, a copy of the Approval of Construction, issued by ADEQ or its authorized agency, indicating that the new well with a minimum production of 190 GPM interconnected to Desert Foothills is complete and in service. (See §B of report for discussion and details.)

V. Staff considers the reported water testing expenses and the estimated water testing costs of $17,107 for the Mohave Water District reasonable. (See §F of report for discussion and details.)

Conclusions:

I. Arizona Department of Environmental Quality ("ADEQ") stated that it has determined that the Mohave Water District systems and the Bermuda Water system are currently delivering water that meet water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See §C for a discussion and details.)

II. Mohave Water District is not within any Active Management Area. Arizona Department of Water Resource ("ADWR") stated that all water systems in the Mohave Water are in compliance with its requirements governing water providers. (See §E of report for discussion and details.)

III. Mohave Water District has an approved cross connection tariff. (See §J of report for discussion and details.)

IV. All systems except Desert Foothills System in Mohave Water District have adequate production and storage capacity to serve existing customers. (See §B of report for discussion and details.)

V. Mohave Water District has an approved curtailment tariff. (See §J of report for discussion and details.)

VI. The post test year plant, 0.25 MG Big Bend Acres storage tank, was not in service during Staff's inspection. (See §J of report for discussion and details.)

VII. A check with the Utilities Division Compliance Section showed Mohave Water has no outstanding compliance issues. (See §D of report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona American – Mohave Water District ("Mohave Water District" or "Company") serves over 15,800 customers in the Bullhead City area and other unincorporated areas in Mohave County. Figure 1 describes the location of the Company within Mohave County, and Figure 2 describes the CC&N area of Mohave Water District.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on September 30 and October 7, 2008, by Dorothy Hains, Utilities Engineer, accompanied by Company representative, David Evans (the Company's Operation Superintendent).

System Analysis

During the test year, the Mohave Water District operated six separate systems. A detailed description of each system is presented below:

(1) Bullhead City System (PWS #08-032)

The Bullhead City System consists of six drinking water wells that are capable of producing a total flow of 7,100 gallons per minute ("GPM") and storage capacity totaling 5.7 million gallons ("MG"). The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figures 3A through 3D provide a process schematic showing both the active and inactive components of this water system.

Well Data (Bullhead City System)

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
24-1	55-506309	1983	16	515	6	250	1,400	2599 Black Mtn Rd, Bullhead City
16-3	55-509446	1985	14	602	12	75	500	1874 Arena Dr., Bullhead City
BBA-2	55-519149	1987	18	280	10	100	2,100	2264 Kaibab Dr., Bullhead City
16-2	55-603472	1975	12-10	610	8	75	600	1742 Arriba Dr., Bullhead City
16-1	55-603473	1970	14-16	400	8	200	2,150	1742 Mesa Vista Dr.., Bullhead City
BHC-5	55-603477	1975	12	450	6	40	350	2495 E 2nd Ave., Bullhead City

Inactive Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
BBH-1	55-603415	N/A	16	200	6	25	112	2264 Kaibab Dr., Bullhead City
	55-603474	1959	16	101	6	18	450	N/A
	55-603476	1961	8	115	N/A	N/A	250	N/A
	55-603478	N/A	12	157	3	8	83	N/A
	55-603479	N/A	12	580	6	20	220	N/A

Active Storage, Pumping

Location	Structure or equipment	Capacity
Big Bend Acres Well Site (2264 Kaibab Dr., Bullhead City)	Booster Pumps	Three 50-HP
	Storage Tanks	One 125,000 gal
Mohave Drive Booster Pump Station Site	Booster Pumps	One 50-HP One 2-HP One 1½-HP
	Pressure Tanks	One 5,000 gal
Desert Glen Booster Pump Station Site	Booster Pumps	One 100-HP Two 15-HP
	Storage Tanks	One 200,000 gal
	Pressure Tanks	One 3,000 gal
Mountain View Booster Pump Station Site	Booster Pumps	Two 20-HP
	Pressure Tanks	One 70 gal
Upper Zone Tank Site	Storage Tanks	One 123,000 gal
Well 24-1 Site (2599 Black Mtn Rd, Bullhead City)	Booster Pumps	Three 100-HP
	Storage Tanks	One 1,000,000 gal
Silver Creek Tank Site (3002 Silver Creek Rd)	Storage Tanks	One 300,000 gal
Laurado Tank Site	Storage Tanks	One 250,000 gal One 750,000 gal
Well 16-1 Site (1742 Mesa Vista Dr.., Bullhead City)	Booster Pumps	one 15-HP
	Storage Tanks	One 500,000 gal One 1,000,000 gal
Well 16-2 Site (1742 Arriba Dr., Bullhead City)	Booster Pumps	One 100-HP
	Storage Tanks	One 424,000 gal One 1,000,000 gal
	Pressure Tanks	One 10,000 gal

Riverview Mall Booster Pump Station Site (2350 Miriacle Mile Dr.)	Booster Pumps	Two 15-HP One 50-HP
	Storage Tanks	One 35,000 gal
	Pressure Tanks	One 3,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
2	N/A	12,802
3	N/A	78,303
4	PVC	220,186
6	PVC	413,959
8	PVC	174,546
10	PVC	2,558
12	PVC	91,251
16	Various	3,823
18	Various	1,443

Meters

Size (inches)	Quantity
⅝ x ¾	12,465
¾	3
1	288
1½	1,438
2	414
3	24
4	7
6	6

(2) <u>Camp Mohave System (PWS #08-037)</u>

The Camp Mohave System consists of one drinking water well that is capable of producing a total flow of 200 GPM and storage capacity totaling 250,000 gallons. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figure 3E provides a process schematic showing both the active and inactive components of the water system.

Well Data (Camp Mohave System)

Active Drinking Water Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-559559	1996	8	312	4	20	200	1360 E Camp Mohave Rd, Bullhead City

Inactive Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-603416	1995	8	200	N/A	N/A	55	1360 E Camp Mohave Rd, Bullhead City

Active Storage, Pumping

Location	Structure or equipment	Capacity
Well Site (1360 E Camp Mohave Rd, Bullhead City)	Booster Pumps	Two 40-HP One 15-HP
	Storage Tanks	One 250,000 gal
	Pressure Tanks	One 5,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	N/A	6,569
6	N/A	1,828
8	N/A	2,309
10	N/A	4,080

Meters

Size (inches)	Quantity
⅝ x ¾	99
¾	3
1	9
2	12

(3) Arizona Gateway System (PWS #08-163)

The Arizona Gateway System consists of two drinking water wells that are capable of producing a total flow of 399 GPM and storage capacity totaling 300,000 gallons. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figure 3E provides a process schematic showing both the active and inactive components of the water system.

Well Data (AZ Gateway System)

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
1	55-586016	2001	8	290	2	7½	29	N/A
2	55-200219	2004	6	750	6	60	370	N/A

Active Storage, Pumping

Location	Structure or equipment	Capacity
N/A	Booster Pumps	Four 40--HP
	Storage Tanks	One 300,000 gal
	Pressure Tanks	One 190 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
6	N/A	1,219
8	N/A	28,879
10	N/A	4,368

Meters

Size (inches)	Quantity
⅝ x ¾	2
2	2

(4) Lake Mohave System (PWS #08-062)

The Lake Mohave System consists of two drinking water wells that are capable of producing a total flow of 300 GPM and storage capacity totaling 223,000 gallons. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figure 3F provides a process schematic showing both the active and inactive components of the water system.

Meters

Size (inches)	Quantity
⅝ x ¾	271
¾	1
1	3

(5) Desert Foothills System (PWS #08-137)

The Desert Foothills System ("Desert Foothills") consists of one drinking water well that is capable of producing a total flow of 600 GPM and storage capacity totaling 1,000,000 gallons. The water system does not have adequate well production to serve its existing customers. However, based on the Response to Staff Data Request No. DH-16.5, Laughlin Ranch a Developer will contribute a well with 190 GPM which will be connected to the Desert Foothills soon. Once this well and interconnection is complete the Desert Foothills will have adequate well production to serve its existing customers and projected growth for a five-year planning horizon. Staff recommends that the Company file by August 31, 2009, as a compliance item in this same docket, a copy of the Approval of Construction, issued by ADEQ or its authorized agency, indicating that the new well with a minimum production of 190 GPM interconnected to Desert Foothills is complete and in service. Figure 3G provides a process schematic showing both the active and inactive components of the water system.

Well Data (Desert Foothills System)

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-557919	1996	12	1,073	6	100	600	29010 Desert Vista Dr., Bullhead City

Inactive Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-551125	1995	5	1,212	N/A	10	25	29010 Desert Vista Dr., Bullhead City

Well Data (Lake Mohave System)

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-556101	1996	8	505	3	20	150	3000 Locust Dr. ,Bullhead City
	55-603417	1973	10	500	3	20	150	3000 Locust Dr. ,Bullhead City

Inactive Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
	55-548414	1995	24	760	N/A	N/A	500	Tamarack Dr. & Locust Dr., Bullhead City

Active Storage, Pumping

Location	Structure or equipment	Capacity
Well Site (3000 Locust Dr. ,Bullhead City)	Booster Pumps	Two 20-HP
	Storage Tanks	One 100,000 gal
	Pressure Tanks	One 1,000 gal
Upper Booster Pump Station Site	Booster Pumps	Two 5-HP
	Pressure Tanks	One 3,000 gal
Pegasus Ranch Booster Pump Station Site (Tamarack Dr. & Locust Dr., Bullhead City)	Booster Pumps	Two 25-HP One 7½- HP
	Pressure Tanks	One 1,000 gal
	Storage Tanks	One 123,000 gal
	Pressure Tanks	One 10,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
2	N/A	451
3	N/A	169
4	N/A	10,298
6	N/A	9,388
8	N/A	5,474

Active Storage, Pumping

Location	Structure or equipment	Capacity
Well Site (29010 Desert Vista Dr., Bullhead City)	Booster Pumps	Three 15-HP One 25-HP
	Storage Tank s	Two 500,000 gal
	Pressure Tanks	One 5,000 gal
Terrances Booster Pump Station Site (11046 Desert Canyon Dr., Bullhead City)	Booster Pumps	two 10-HP One 40-HP
	Pressure Tanks	One 5,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
6	N/A	10,167
8	N/A	42,422
10	N/A	1,998
12	N/A	6,599

Meters

Size (inches)	Quantity
⅝ x ¾	1,034
¾	2
1	4
2	5

(6) Rio Vista System (PWS #08-333)

The Rio Vista System is a consecutive water system with water purchased from the Bermuda Water Company (PWS #08-063).

Plant Data (Rio Vista System)

Meters

Size (inches)	Quantity
⅝ x ¾	119
1	1

C. ARIZONA DEPARTMENT OF ENVIORNMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ has determined that all systems in Mohave Water District are currently in full compliance with its requirements.[1] ADEQ also determined that Bermuda Water Company is currently in full compliance with its requirements.[2] ADEQ further stated that the Mohave Water District systems and the Bermuda Water system are currently delivering water that meet water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items.

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Mohave Water District is not in an ADWR Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR for all systems in the Mohave Water District.[3] In its reports ADWR stated that all water systems in the Mohave Water are in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

(1) Bullhead City System

The Company's estimated annual water testing expense for the Bullhead City System (PWS #08-032) is $11,087. Staff concludes that this estimate is reasonable. Therefore, Staff recommends water testing expenses be adjusted for purposes of this rate case to the Company's estimated annual expense amount of $11,087. (See Table 1 below.)

Table 1 Water Testing Cost (Bullhead City System - PWS #08-032)

Monitoring – 6 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	$20	1,440	$28,800	$9,600
Customer requested bact	$201	0	0	$132
Customer requested HPC		0	0	0
Inorganics – Priority Pollutants				
Radiochemical – (1/ 3 yr) Gross Alpha				

[1] ADEQ correspondence dated April 9, 2008.
[2] ADEQ correspondence dated February 12, 2008.
[3] ADWR correspondence dated August 13, 2008 and October 20, 2008.

Uranium Radium 228 Radium 226	$60 $165 $110 $75	6 6 6 6	$360 $990 $660 $450	$120 $330 $220 $150
Phase II and V:				
IOC's*		6		
SOC's*		12		
VOC's*		6		
Dioxin	$500	4	$2,000	$667
Nitrites* per 9 yrs		6		
Nitrates – annual*				
Asbestos – per 9 years*		6		
Lead & Copper –Triennial*		30		
TTHM/HHAs –annual*		18		
Maximum chlorine residual levels				
MAP fees (annual)				
Arsenic*, **				
Total				**$11,087**

* Assumes testing will be done in the Company's Lab in Belleville.
** To comply with ADEQ requirement, the Company has to conduct quarterly arsenic testing at each well site and ADEQ designed sampling points aka Points Of Entry.

(2) Camp Mohave System, Lake Mohave System and Desert Foothills System

All three systems, the Camp Mohave System (PWS #08-037), the Lake Mohave System (PWS #08-062), and the Desert Foothills System (PWS #08-137) are subject to mandatory participation in the ADEQ Monitoring Assistance Program ("MAP"). The estimated annual test costs were based on combined systems. Staff calculated the testing costs based on the following assumptions:

1. MAP will do baseline testing on everything except copper, lead, bacteria and disinfection by-products.

2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented as a pro forma expense on an annualized basis.

3. The estimated water testing expenses represent a minimum cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 2 shows the estimated annual monitoring expense, based on participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount of $5,540 shown in Table 2.

Table 2 Water Testing Cost (Camp Mohave (PWS #08-037), Lake Mohave (PWS #08-062) & Desert Foothills (PWS #08-137))

	Cost per test ($)	No. of tests per three year period			Total cost per three year period			Annual Cost			
PWS # 08-xxx		037	062	137	037	062	137	037	062	137	Total
Bacteriological – monthly	20	36	36	108	720	720	2,160	240	240	720	1,200
Inorganics – Priority Pollutants	300				MAP	MAP	MAP	MAP	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	60				MAP	MAP	MAP	MAP	MAP	MAP	MAP
Phase II and V:											
IOC's*, SOC's*, VOC's*	2,805			6	MAP	MAP	MAP	MAP	MAP	MAP	MAP
Nitrites*	20			6	MAP	MAP	MAP	MAP	MAP	MAP	MAP
Nitrates – annual*	40	3	12	3	MAP	MAP	MAP	MAP	MAP	MAP	MAP
Asbestos – per 9 years*	180	1	2½	1	MAP	MAP	MAP	MAP	MAP	MAP	MAP
Lead & Copper – Triennial*	0	15	30	30	0	0	0	0	0	0	0
TTHM/HHAs – per 3 years*	0	3	1	1	0	0	0	0	0	0	0
Maximum chlorine residual levels	0	36	36	36	0	0	0	0	0	0	0
MAP fees (annual)								501.85	954.18	2,884.25	4,340.28
Total								741.85	1,194.18	3,604.25	**5,540.28**

Notes: Notes:
* The test will be done in the Company's Lab in Belleville.

(3) <u>Arizona Gateway System & Rio Vista System</u>

Because the Arizona Gateway System (PWS #08-163) is a semi-public system and the Rio Vista System (PWS #08-333) is a consecutive water system, both systems are exempt from participating in the MAP program. The Company only monitors biological bacteria for these two systems. The Company's estimated annual water testing expenses for Arizona Gateway System and Rio Vista System are $480. Staff concludes that this estimate is reasonable. Therefore, Staff recommends water testing expenses be adjusted for purposes of this rate case to the Company's estimated annual expense amount of $480. (See Table 3 below.)

Table 3 Water Testing Cost (Arizona Gateway (PWS #08-163) & Rio Vista (PWS #08-333))

	Cost per test ($)	No. of tests per three year period		Total cost per three year period		Annual Cost		
PWS # 08-xxx		333	163	037	062	037	062	Total
Bacteriological – monthly	20	36	36	720	720	240	240	480
Lead & Copper – Triennial*	0	0	0	0	0	0	0	0
TTHM/HHAs – per 3 years*	0	0	0	0	0	0	0	0
Maximum chlorine residual levels	0			0	0	0	0	0
MAP fees (annual)						N/A	N/A	N/A
Total								**480**

Notes: Notes:
* The test will be done in the Company's Lab in Belleville.

The total estimated annual water quality testing costs for the Mohave Water District is $17,107.

G. WATER USAGE

Figures 4A through 4F are graphs that show water consumption data in gallons per day ("GPD") per customer for Mohave System, Camp Mohave System, Lake Mohave System, Desert Foothills System, Arizona Gateway System and Rio Vista System for the test year period of January 2007 through December 2007.

1. Water Sold

Based on information provided by the Mohave Water District, water use for the test year is presented in the Table below and in Figure 4.

System Name	Bullhead City	Camp Mohave	Lake Mohave	Desert Foothills	Arizona Gateway	Rio Vista
High usage month	July 2007	July 2007	September 2007	September 2007	December 2007	November 2007
Average daily flow in high usage month (in GPD)	447	951	364	826	14,403	501
Low usage month	January 2007	January 2007	February 2007	February 2007	March 2007	December 2007
Average daily flow in low usage month (in GPD)	296	411	210	443	2,718	227
Annual average daily flow (in GPD)	356	754	294	622	5,795	387

2. Lost Water

Lost water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water percentages for each system in the Mohave Water District are listed in the Table below:

System Name	Bullhead City	Camp Mohave	Lake Mohave	Desert Foothills	Arizona Gateway	Rio Vista
Water Loss (%)	14.39	2.52	1.42	7.55	2.19	0.00

Lost water for all systems except Bullhead City System in the Mohave Water District were within acceptable limits during the test year. Lost water for Bullhead City System was calculated to be 14.39 percent which exceeds acceptable limits.

Staff recommends that the Company reduce its water loss to 10 percent or less in the Bullhead City System by December 31, 2010, or before it files its next rate increase application and/or CC&N application and/or financing application, whichever comes first. Staff further recommends that the Company begin water loss monitoring and take action to ensure water loss is reduced to 10 percent or less immediately. If the water loss for a twelve month period prior to December 31, 2010, is greater than 10 percent, the Company must come up with a plan to reduce water loss to 10 percent or less, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10 percent or less is not feasible or cost effective. Such a report shall be docketed in this case.

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports. The number of customers increased from 13,637 at the end of 2002 to 15,822 by the end of 2007, with an average growth rate of 535 customers per year from 2002 to 2007. Based on the linear regression analysis, Staff estimates that the Company could have over 18,800 customers by the end of 2012. The following table summarizes Staff's projected growth.

Table 4 Actual and Projected Growth

Year	Nos. of Customers	
2002	13,637	Reported
2003	13,716	Reported
2004	14,495	Reported
2005	15,427	Reported
2006	16,013	Reported
2007	15,822	Reported
2008	16,726	Estimated
2009	17,262	Estimated
2010	17,798	Estimated
2011	18,333	Estimated
2012	18,869	Estimated

I. DEPRECIATION RATES

Decision No. 67093 (dated June 30, 2004) approved the depreciation rates used by Mohave Water District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25 percent depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15 percent depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHER ISSUES

1. Service Line and Meter Installation Charges

The Company proposes maintaining its current meter and service line installation charges that are within Staff's experience of what are reasonable and customary charges. Staff does not object to the Company's proposal. Staff recommends continued use of the existing service line

and meter installation charges as listed under the columns labeled "Staff Recommended" in Table 5 below.

Table 5 Service Line and Meter Installation Charges (Mohave Water District)

Meter Size	Current Meter Charges	Current Service Line Installation Charge	Staff Recommended (meter installation charge)	Staff Recommended (Service Line installation charge)	Staff Recommended total charges
5/8 x 3/4-inch	$130	$370	$130	$370	$500
3/4-inch	$205	$370	$205	$370	$575
1-inch	$240	$420	$240	$420	$660
1½-inch	$450	$450	$450	$450	$900
2-inch (Turbo)	$945	$580	$945	$580	$1,975
2-inch (Compound)	$1,640	$580	$1,640	$580	$2,220
3-inch (Turbo)	$1,420	$745	$1,420	$745	$2,165
3-inch (Compound)	$2,195	$465	$2,195	$465	$2,660
4-inch (Turbo)	$2,270	$1,090	$2,270	$1,090	$3,360
4-inch (Compound)	$3,145	$1,120	$3,145	$1,120	$4,265
6-inch (Turbo)	$4,425	$1,610	$4,425	$1,610	$6,035
6-inch (Compound)	$6,120	$1,630	$6,120	$1,630	$7,750
Over 6-inch			Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved Curtailment Tariff.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. Post Test Year Plant

(a) The 0.25 MG Storage Tank

The Company has requested that a 0.25 MG storage tank (also called Big Bend Acres Tank) be included in rate base. Construction of this storage tank was not complete and it was not in-service at the time of Staff's inspection.[4]

[4]ADEQ issued a Partial Engineer's Certificate of Completion for this project on November 26, 2008.

FIGURES

FIGURE 1

LOCATION OF MOHAVE WATER DISTRICT

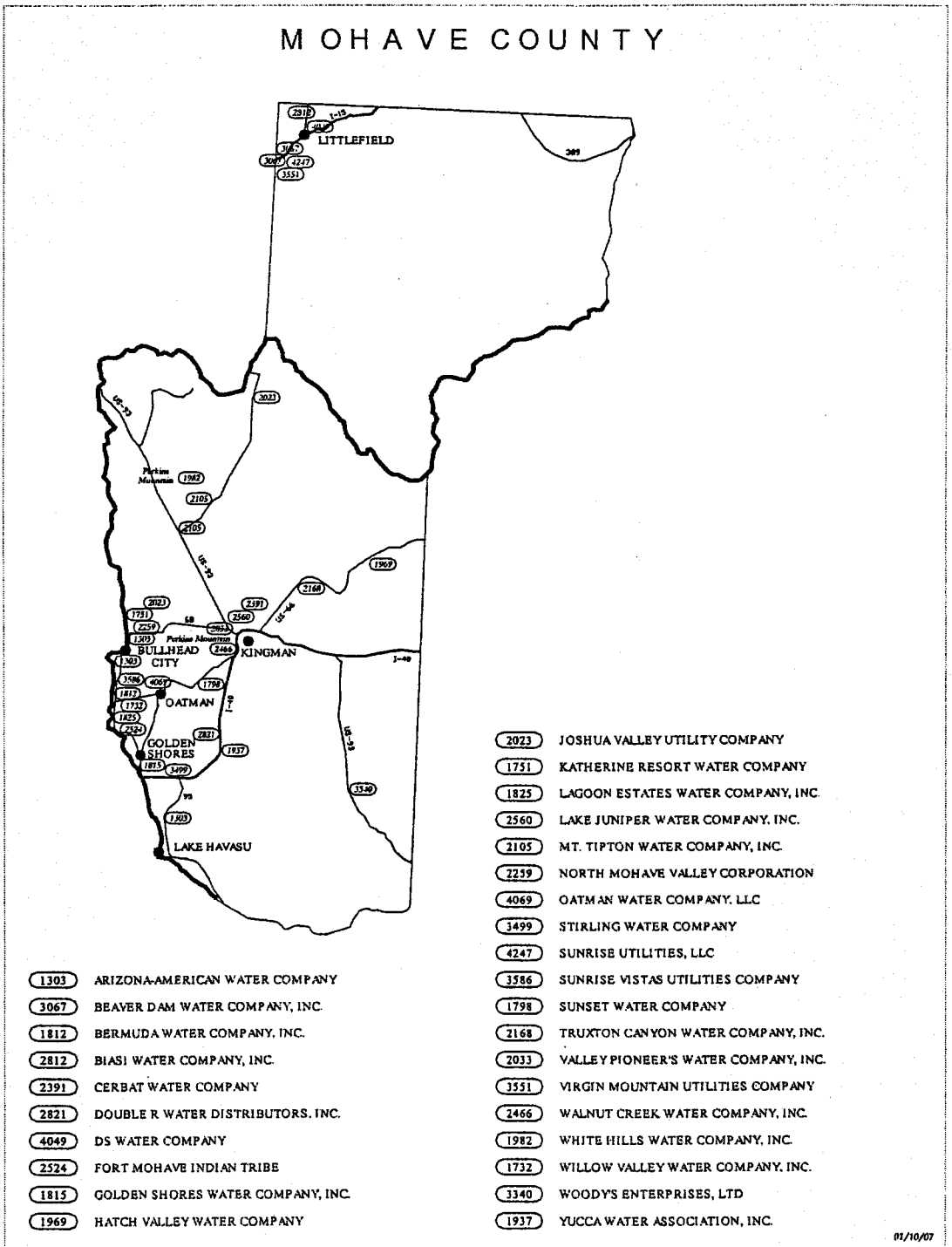

FIGURE 2

MOHAVE WATER DISTRICT CERTIFICATED AREA

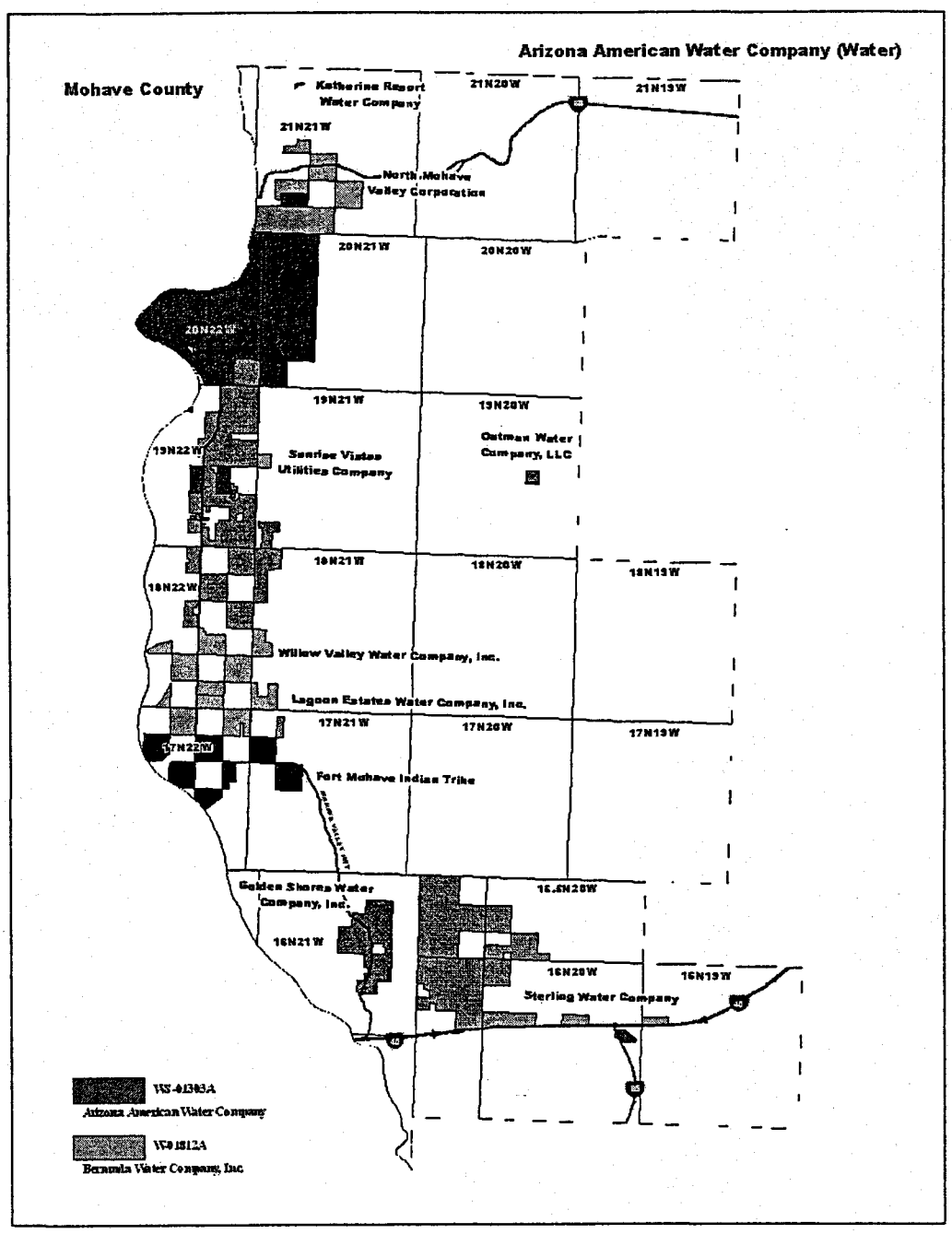

FIGURE 3A

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM FOR EXISTING SYSTEMS (BULLHEAD CITY SYSTEM)

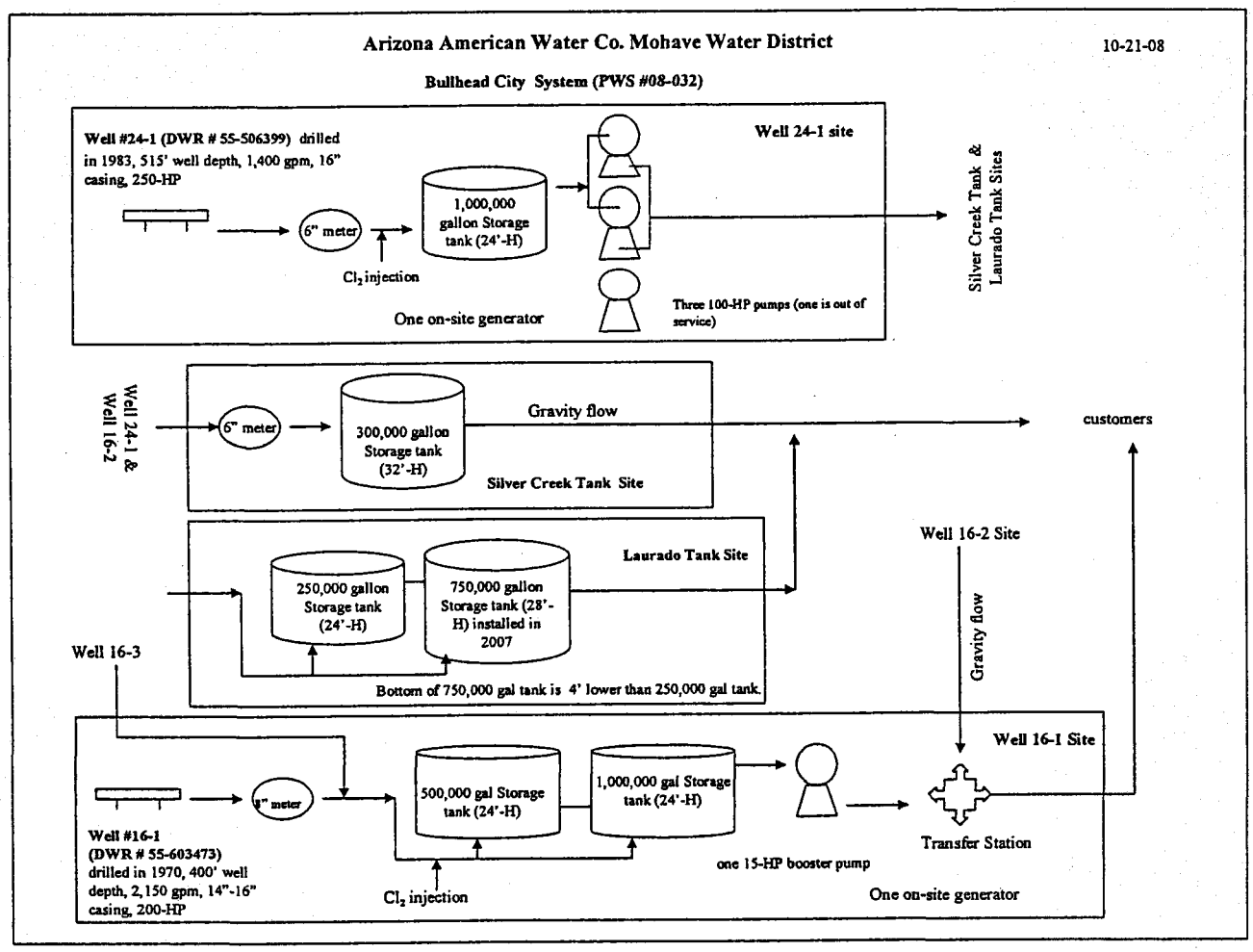

FIGURE 3B

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (BULLHEAD CITY SYSTEM)

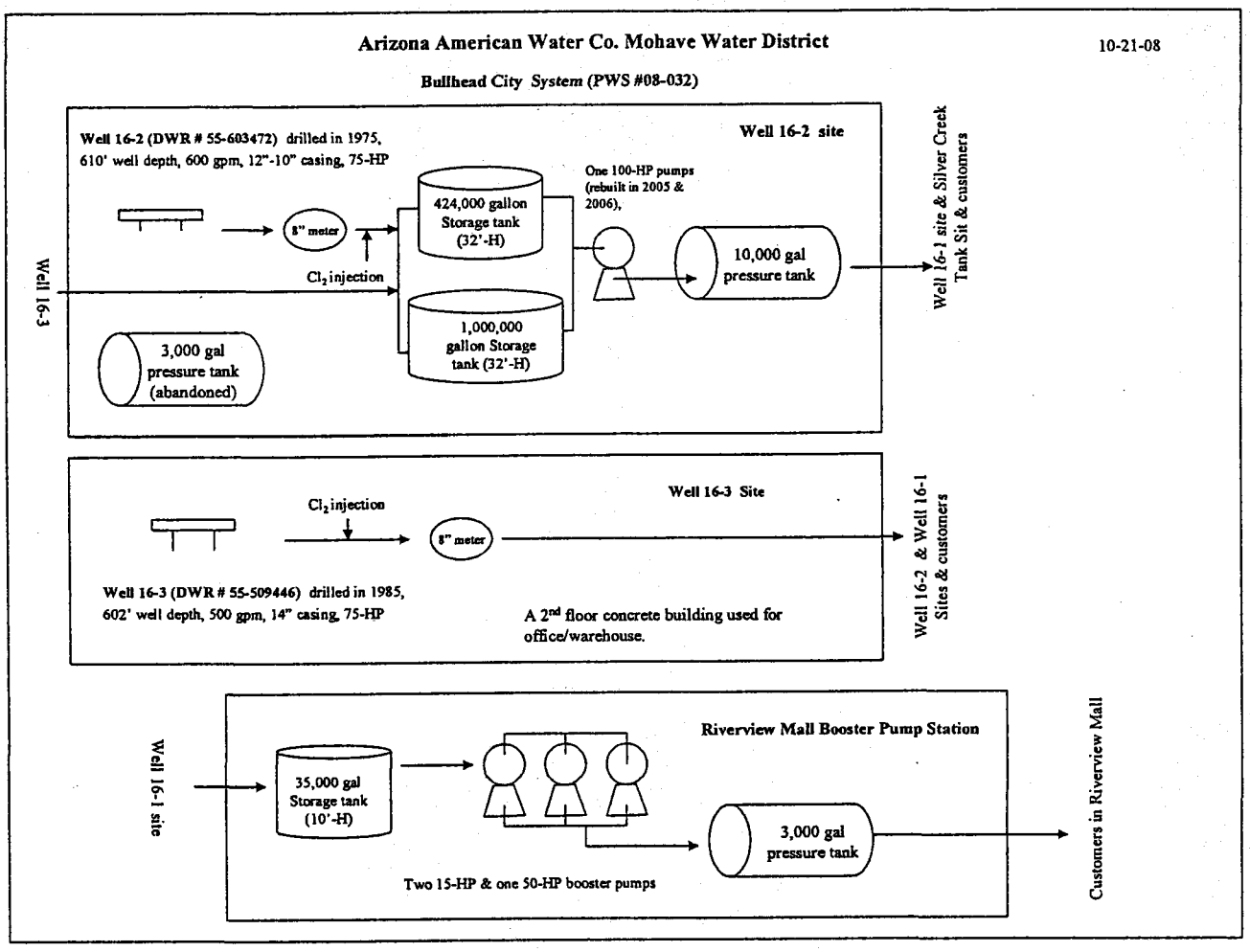

FIGURE 3C

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (BULLHEAD CITY SYSTEM)

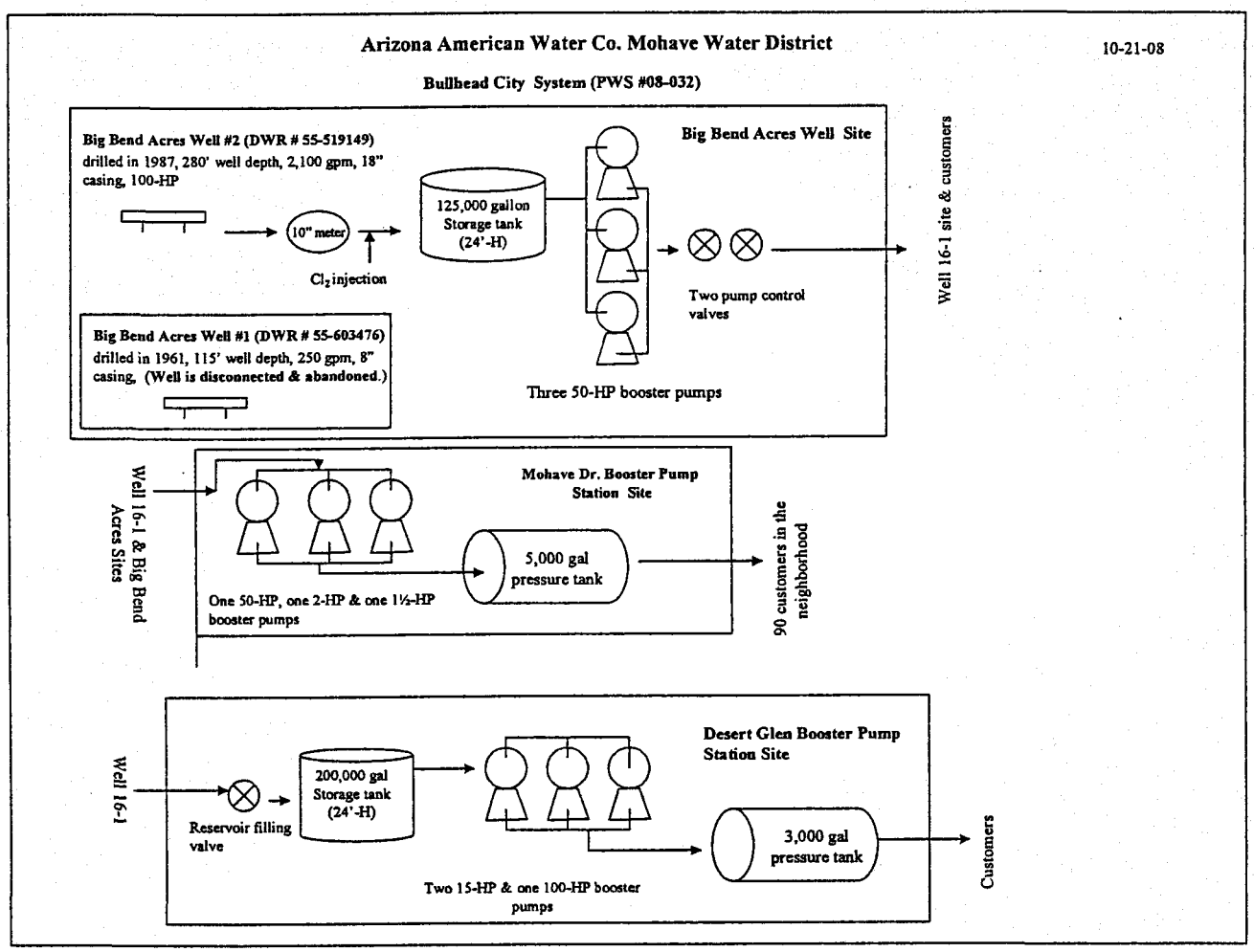

FIGURE 3D

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (BULLHEAD CITY SYSTEM)

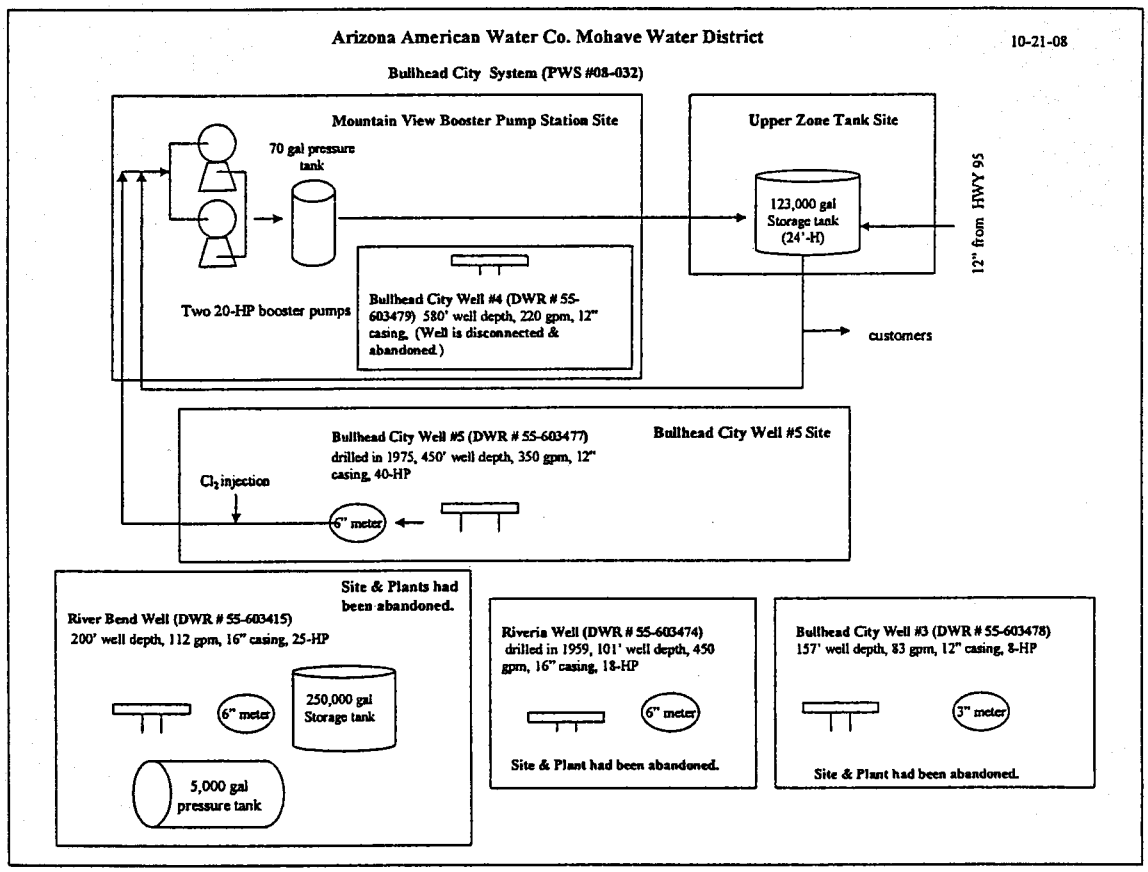

FIGURE 3E

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (CAMP MOHAVE SYSTEM & ARIZONA GATEWAY SYSTEM)

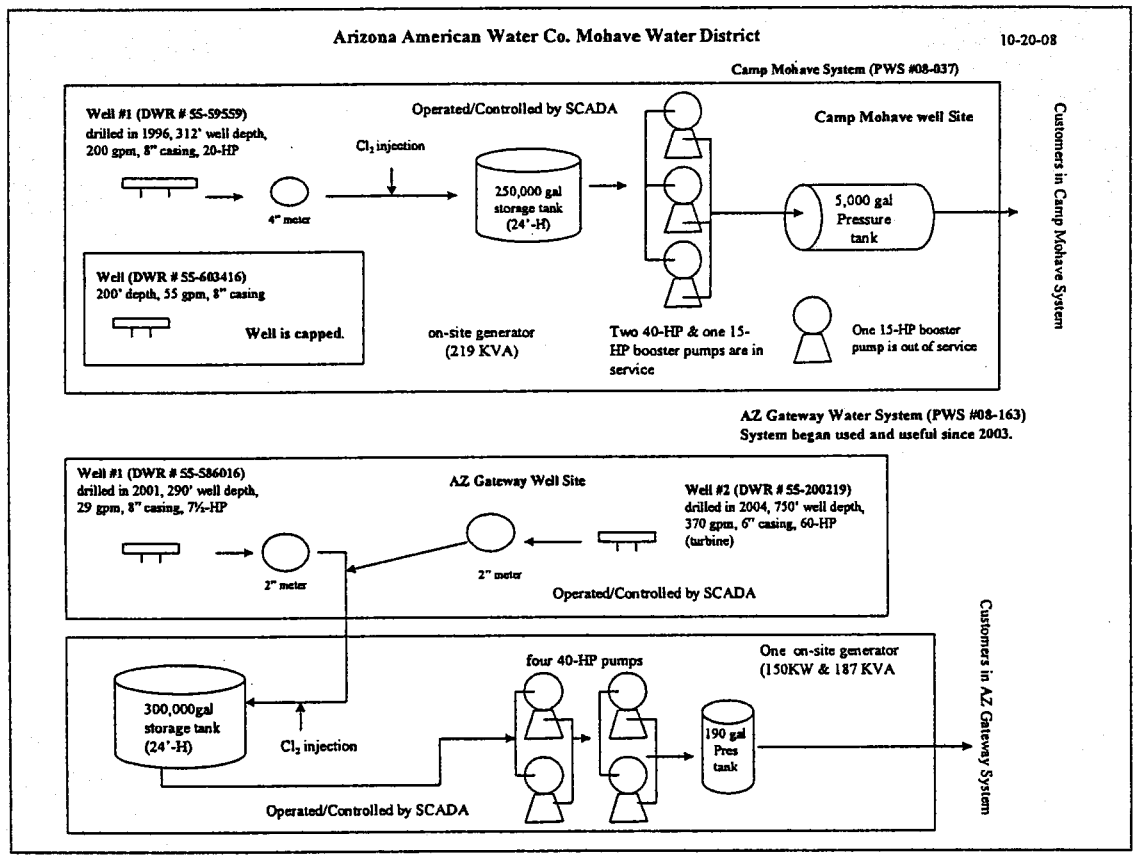

FIGURE 3F

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (DESERT FOOTHILLS SYSTEM & RIO VISTA SYSTEM)

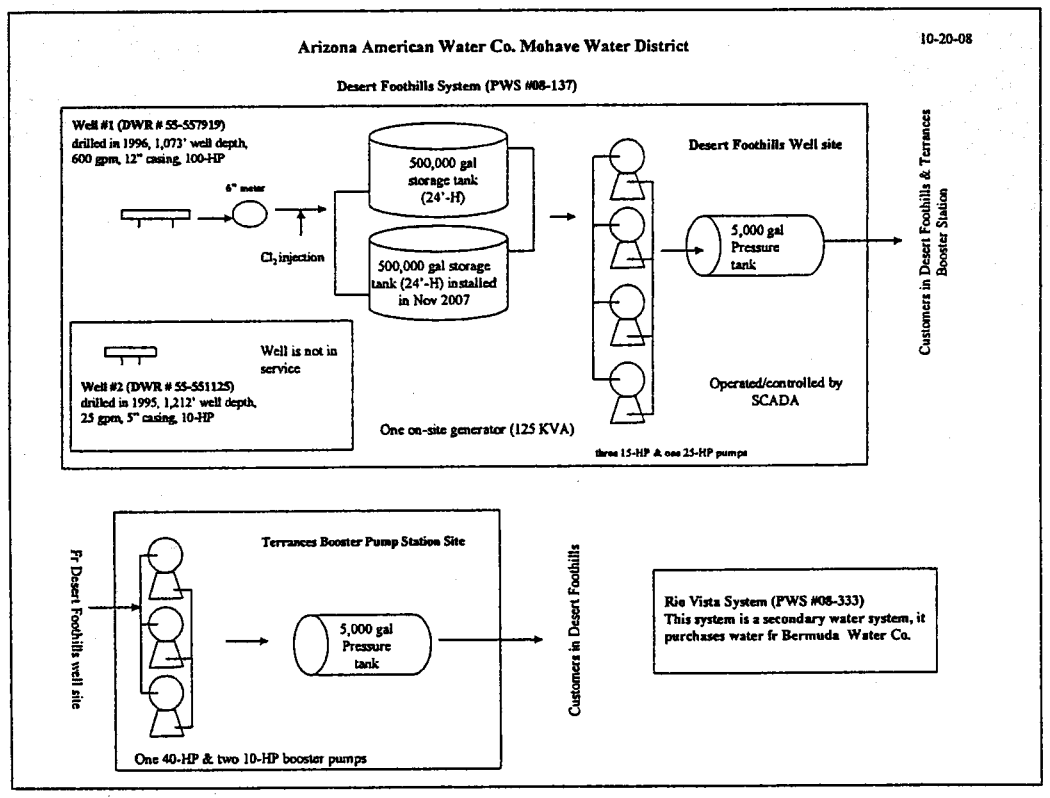

FIGURE 3G

MOHAVE WATER DISTRICT SYSTEMATIC DIAGRAM (LAKE MOHAVE SYSTEM)

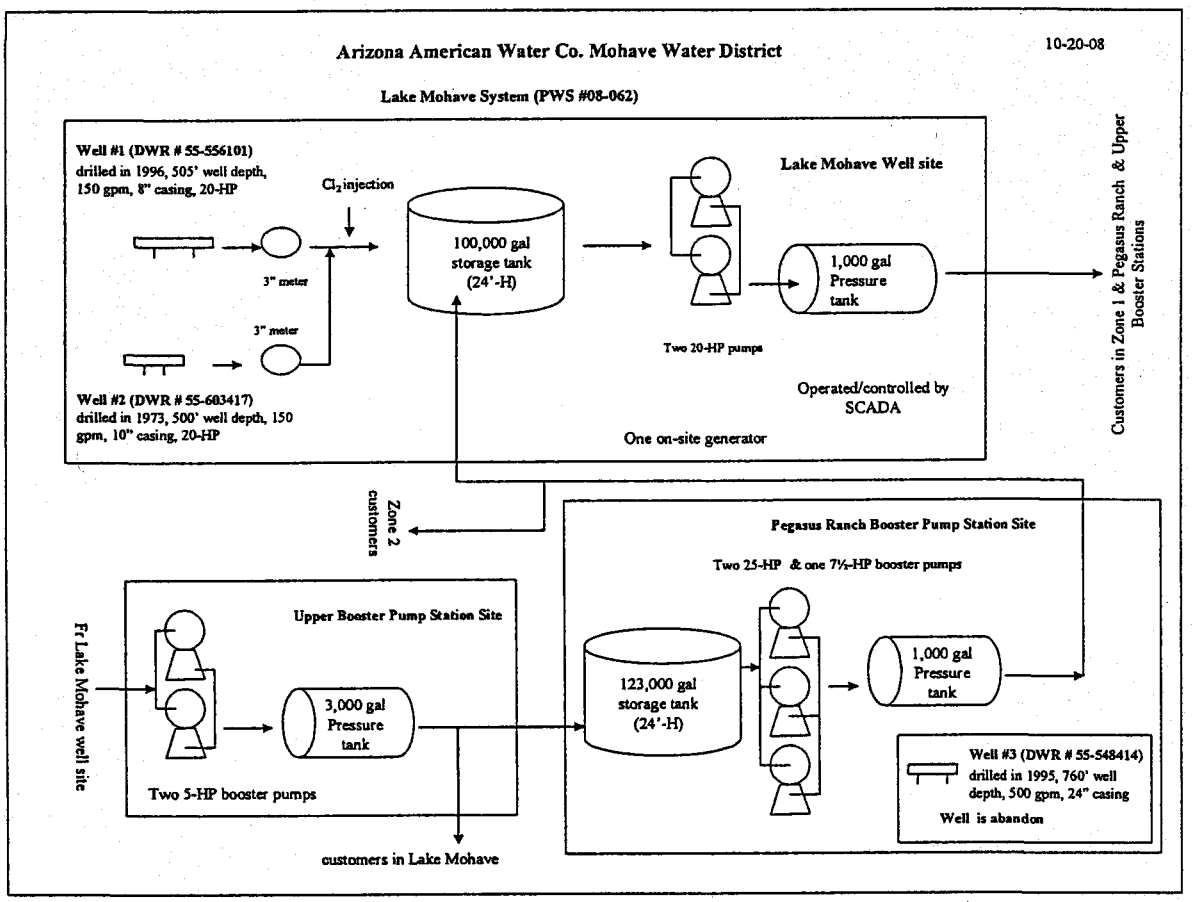

FIGURE 4A

MOHAVE WATER DISTRICT WATER USAGE (BULLHEAD CITY SYSTEM)

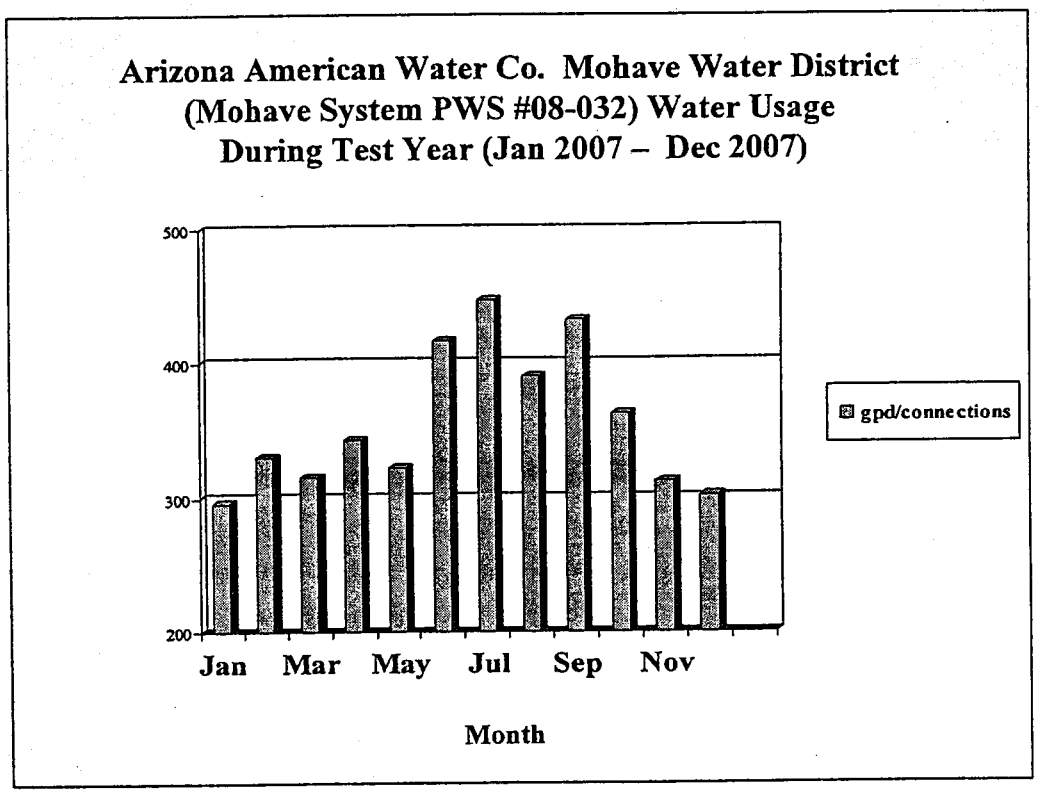

FIGURE 4B

MOHAVE WATER DISTRICT WATER USAGE (CAMP MOHAVE SYSTEM)

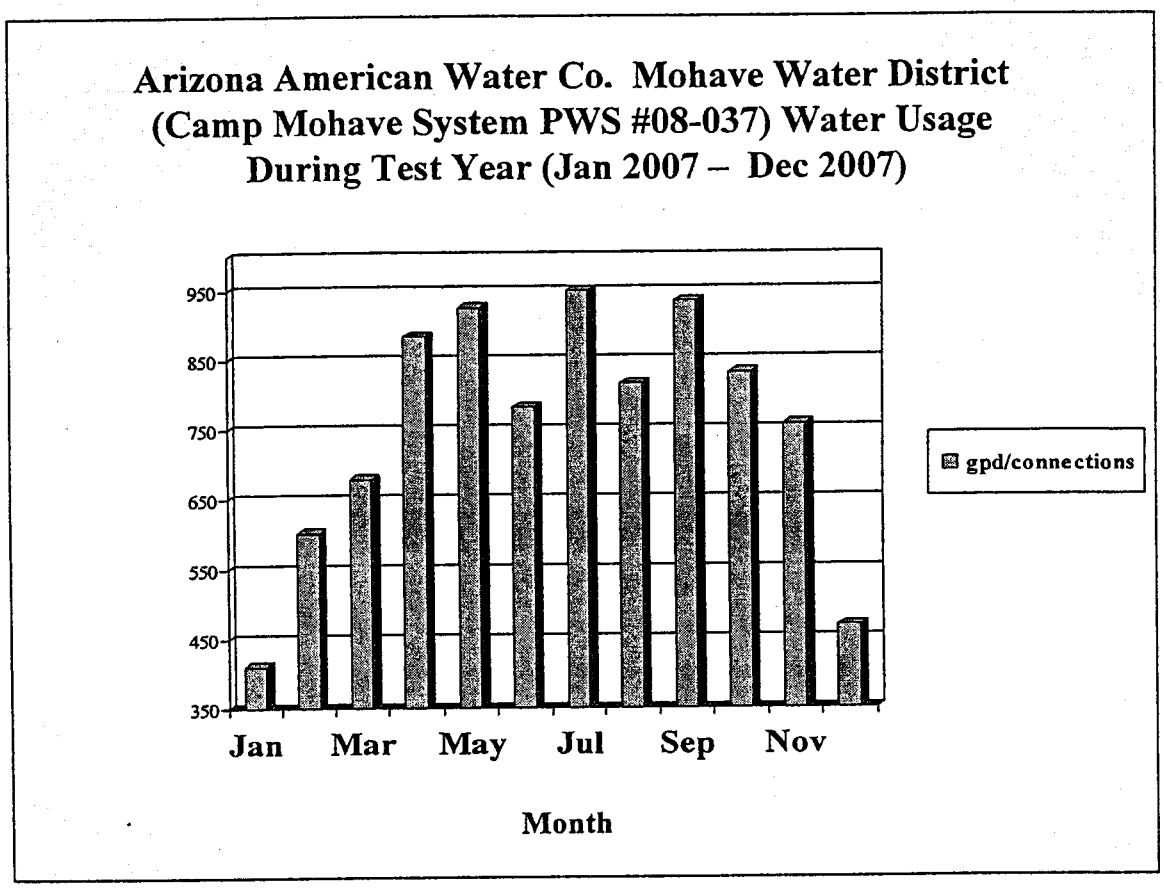

FIGURE 4C

MOHAVE WATER DISTRICT WATER USAGE (LAKE MOHAVE SYSTEM)

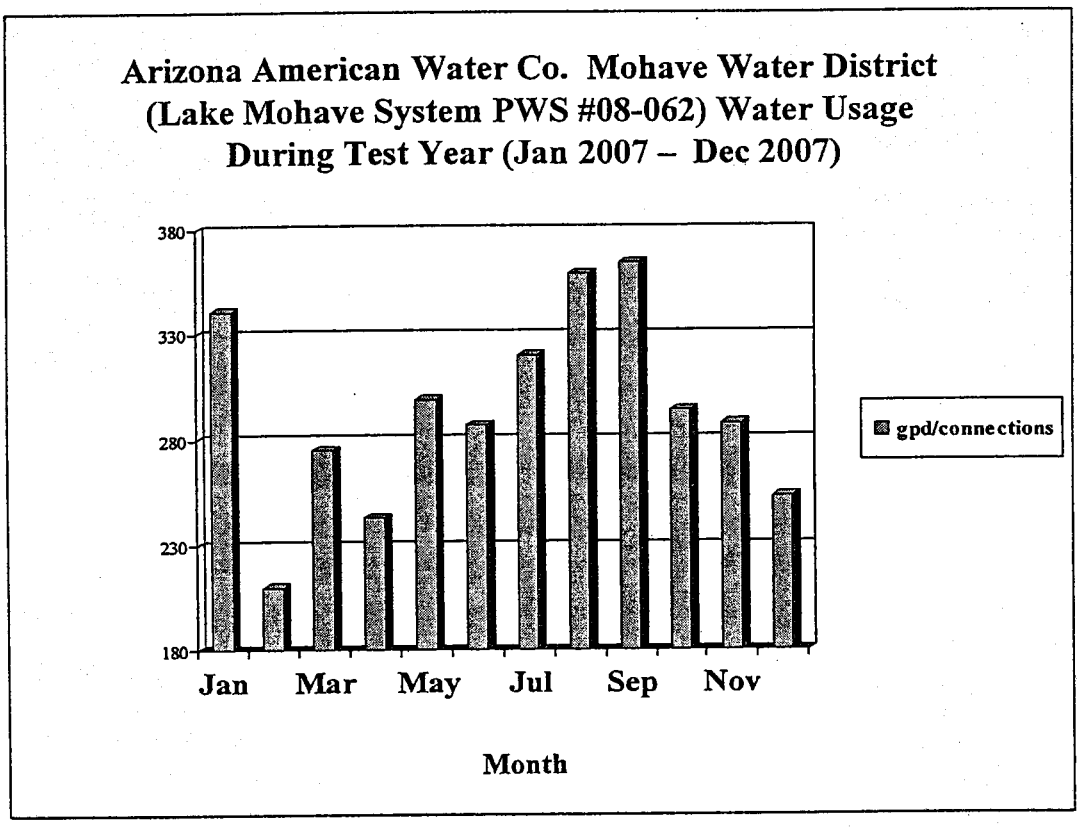

FIGURE 4D

MOHAVE WATER DISTRICT WATER USAGE (DESERT FOOTHILLS SYSTEM)

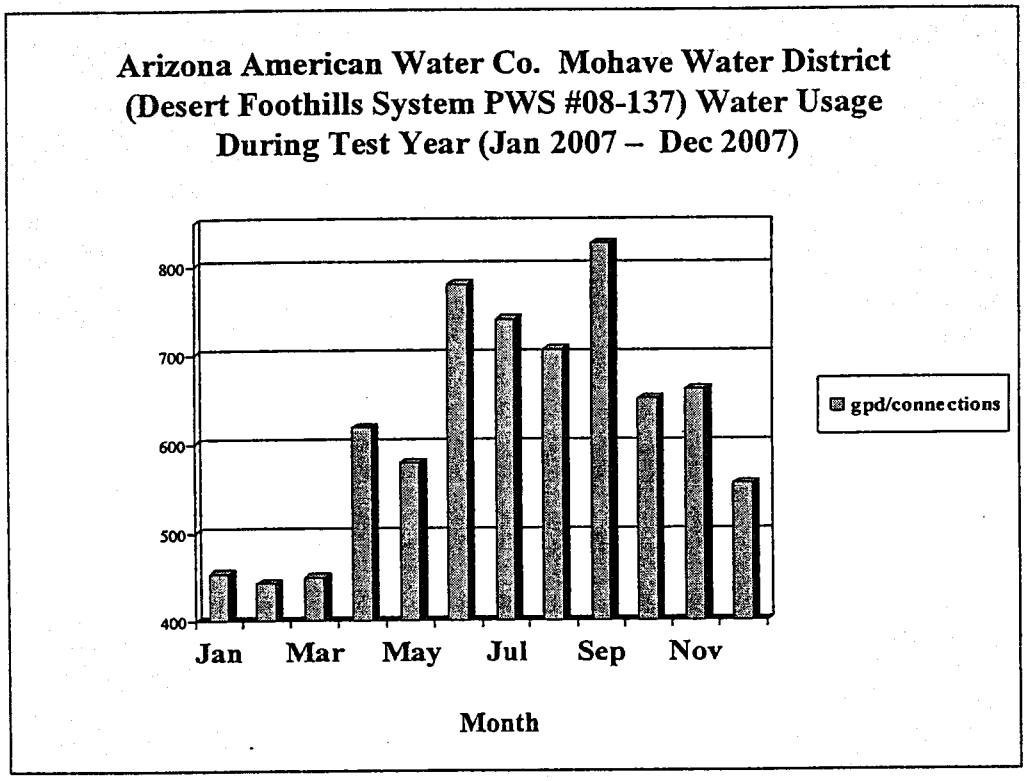

FIGURE 4E

MOHAVE WATER DISTRICT WATER USAGE (ARIZONA GATEWAY SYSTEM)

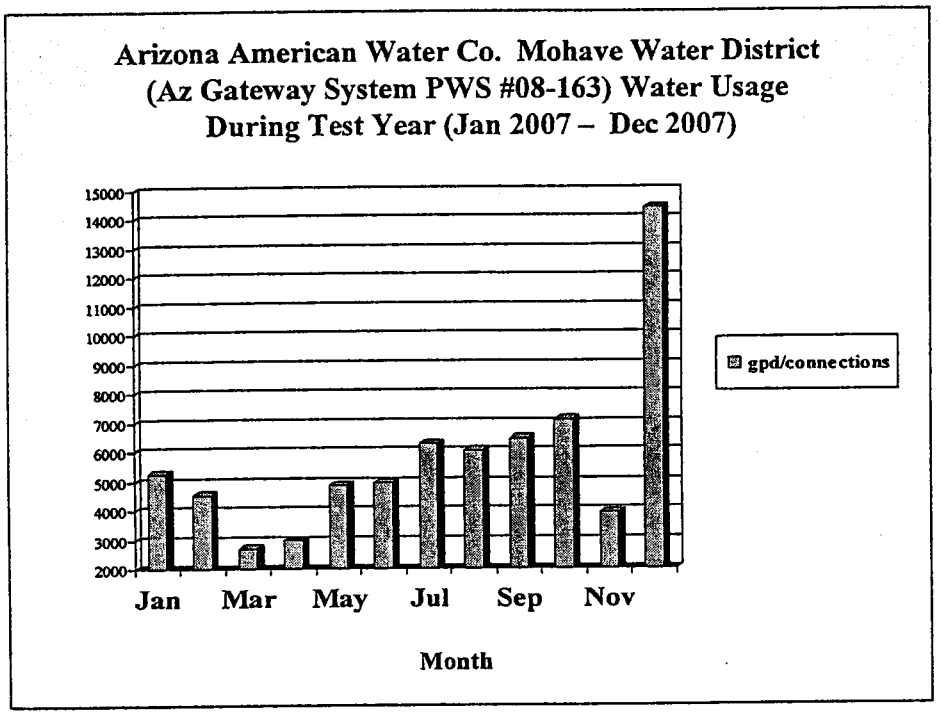

FIGURE 4F

MOHAVE WATER DISTRICT WATER USAGE (RIO VISTA SYSTEM)

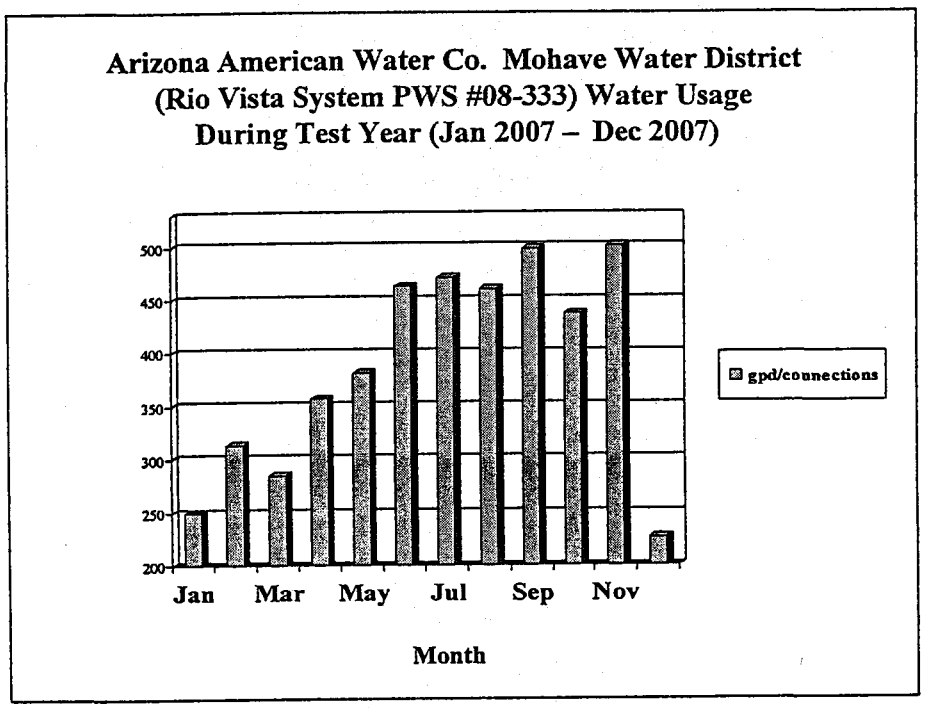

FIGURE 5

GROWTH IN MOHAVE WATER DISTRICT

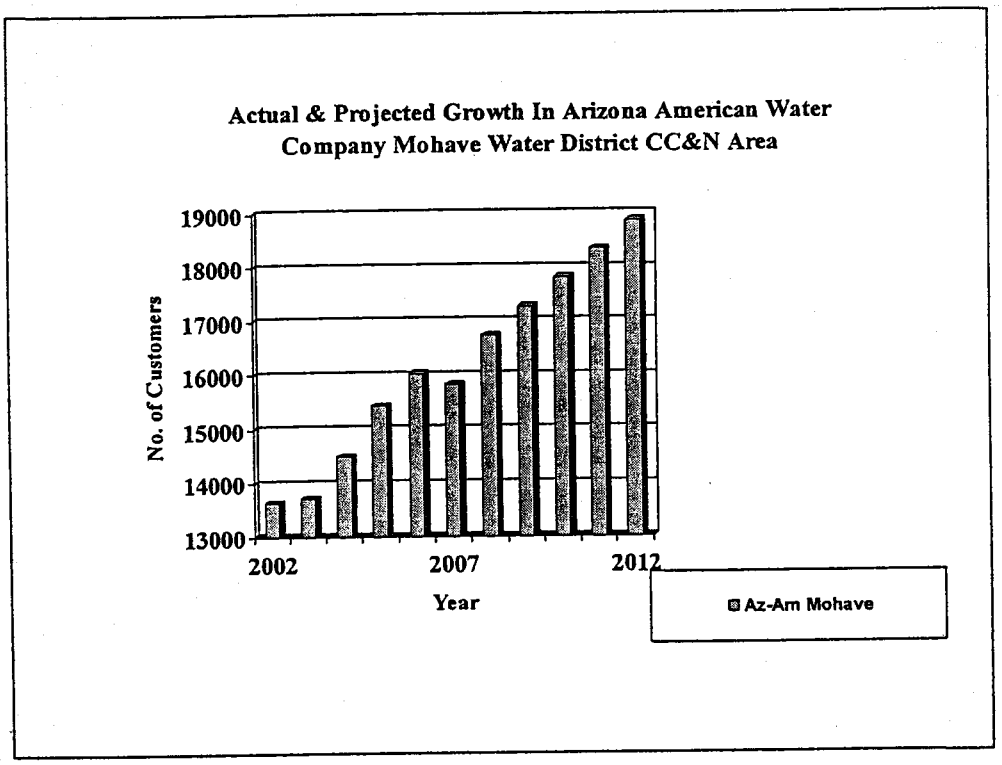

FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS (Mohave Water District)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #69440	Rate (%) Sun City West Water proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	
	303300	Land & Land Rights P	0	0	
	303500	Land & Land Right TD	0	0	
	303600	Land & Land Right AG	0	0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.83	2.83	2.83
	304200	Structure & Improvement P	2.39	2.39	2.39
	304300	Structures and Improvements WT	2.50	2.50	2.50
	304400	Structure & Improvement TD	1.81	1.81	1.81
	304510	Structure & Improvement AG Cap Lease	4.63	4.63	4.63
	304600	Structure & Improvement office	2.03	2.03	2.03
	304700	Structure & Improvement Store, Shop, Garage	4.63	4.63	4.63
	304800	Structure & Improvement Misc	0.00	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	2.54	2.54	2.54
307	307000	**Wells & Springs**	2.70	2.70	2.70
310	310100	**Power Generation Equip Other**	N/A	0.00	5.00
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	5.12	5.12	5.12
	311300	Pump Equipment Diesel	N/A	0.00	5.00
	311500	Pump Equipment Other	N/A	0.00	5.00
320		**Water Treatment**			
	320100	Water Treatment Equipment Non-Media	12.00	12.00	5.00
320.3	N/A	Chemical Solution Feeders	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.81	1.81	1.81
330.1	N/A	Storage Tank	N/A	N/A	1.81
330.2	N/A	Pressure Tank	N/A	N/A	5.00
331		**Transmission and Distribution**			
	331001	TD mains not classified by size	2.61	2.61	1.53
	331100	TD mains 4-inch & less	2.61	2.61	1.53
	331200	TD mains 6-inch to 8-inch	2.61	2.61	1.53
	331300	TD mains 10-inch to 16-inch	2.61	2.61	1.53
		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	N/A	N/A	2.00
333	333000	**Services**	5.41	5.41	2.89
334		**Meters**			

	334100	Meters	6.53	6.53	6.53
	334200	Meter installations	6.53	6.53	6.53
335	335000	**Hydrants**	1.99	1.99	1.99
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	N/A		
	339100	Other P/E Intangible		0	0
	339500	Other P/E SS		0	0
340					
	340100	Office Furniture & Equipments	4.04	4.04	4.04
	340200	Computer & periph equipment	4.04	4.04	15.59
	340300	Computer software	37.71	37.71	25
341		**Transportation Equipment**			
	341100	Transportation Equip, Lt Duty Trucks	25.00	25.00	22.00
	341200	Transportation Equip, heavy Duty Trucks	N/A	25.00	15.00
342	342000	**Store Equipments**	3.93	3.93	3.93
343	343000	**Tools Shop & Garage Equipments**	11.70	11.70	4.49
344	344000	**Lab equipments**	3.30	3.30	10.00
345	345000	**Power operated equipments**	13.90	13.90	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	3.66	3.66	3.66
	346200	Communication Equip telephone	9.76	9.76	9.76
	346300	Communication Equip Other	6.19	6.19	6.19

EXHIBIT DMH-4

ENGINEERING REPORT FOR ARIZONA-AMERICAN-WATER COMPANY, INC.,

PARADISE VALLEY WATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Paradise Valley Water District
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona American Company's Paradise Valley District ("Paradise Valley") presented in Figure 6 by National Association of Regulatory Commissioners' ("NARUC") account. (See § I of report for discussion and details.).

II. Staff recommends approval of separate meter and service line installation charges as shown under the Staff Recommended columns in Table 4. (See § J of report for discussion and details.)

III. Staff recommends annual water testing expense for Paradise Valley be adjusted to the annual expense amount of $2,033. (See § F of report for discussion and details.)

IV. Paradise Valley Water has 9.59% lost water which is within acceptable limits. Staff recommends that the Company monitor the water system closely and take action to ensure that lose of water remains less than 10%in the future. If the water loss at any time before the next rate case is greater than 10%, the Company shall come up with a plan to reduce loss water to less than 10%, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10%or less is not feasible or cost effective. Such a report shall be docketed in this case. (See § G of report for discussion and details.)

Conclusions:

I. Maricopa County Environmental Services Department ("MCESD") has determined that Paradise Valley is currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See § C for a discussion and details.)

II. Paradise Valley is within the Phoenix Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") monitoring and reporting rules. (See § E of report for discussion and details.)

III. Paradise Valley Water has an approved cross connection tariff and an approved curtailment tariff. (See § J of report for discussion and details.)

IV. Paradise Valley has adequate well production and storage capacity. (See § B of report for discussion and details.)

V. The Trichloroethylene ("TCE") contaminated well, PCX-1 well has been disconnected from Miller Road TCE treatment plant since May 2008. (See § J of report for discussion and details.)

VI. Staff concludes that the Well No. 12 project is not used and useful plant for purposes of this case. (See § J of report for discussion and details.)

VII. A check with the Utilities Division Compliance Section showed Paradise Valley has no outstanding compliance issues. (See § D of report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona American – Paradise Valley Water District ("Paradise Valley" or "Company") serves approximately 4,750 customers in the Town of Paradise Valley, the City of Scottsdale and the City of Phoenix in Maricopa County. Figure 1 describes the location of the Company within Maricopa County, and Figure 2 describes the CC&N area of Paradise Valley.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on August 14, 2008, by Dorothy Hains, Utilities Engineer, accompanied by the Company's representatives, Paul Steve Lutringer, (Company's Operation Supervisor) and Michael Helton (Arizona-American Water's Production Superintendent).

System Analysis

Paradise Valley consists of ten drinking water wells that are capable of producing a total flow of 12,100 gallons per minute ("GPM"), a 21.3 million gallons per day ("MGD") arsenic treatment plant ("ATP") and 4.89 million gallons ("MG") of storage capacity. The water system has adequate storage and well production. Figures 3A, 3B, 3C and 3D provide a process schematic showing both the active and inactive components of the water system.

Well Data
Active Drinking Water Wells

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (feet)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
11	55-624805	1995	Varies from 20 - 16	1,396	12	300	1,800	Paradise Valley Treatment Plant ("TP") (Cattlerack Rd and Lincoln Rd)
12	55-624806	1962	Varies from 24 - 20	1,301	12	300	1,800	PV TP
14	55-624807	1965	Varies from 20 - 8	1,743	10	400	2,100	Miller Road (near Trichloroethylene ("TCE") TP.
15	55-624808	1969	Varies from 20 18 - 6	1,430	10	400	2,300	Miller Road (near TCE TP).
16	55-624809	1980	18	1,500	18	400	2,200	Cattlerack Rd (north of PV TP)
17	55-537967	1993	20	1,100	12	400	2,400	Lincoln Dr (north of Cattlerack Rd)

Water Treatment Plant

	Treatment Type	Size (in MGD)	Location
TCE Removal Plant	Air strip	N/A	Miller Rd (near TCE TP).
Arsenic Removal Plant	Coagulation/Filtration	21.3	PV TP

Active Storage, Pumping

Location	Structure or equipment	Capacity
Miller Road (near TCE TP)	Booster Pumps	Three 125-HP
	Storage Tank	One 485,000 gallon underground tank
	Pressure Tanks	Two 10,000 gal
PV TP (Cattlerack Rd)	Booster Pumps	Four 400-HP Two 600-HP
	Storage Tanks	Two 1,500,000 gal
60th Street Tank Site	Storage tank	200,000 gal
Club Estates Booster Pump Station ("BPS") site	Booster Pumps	Two 10-HP
Club Estates Tank/ Glen Dr Booster Pump Station Site	Storage tank	30,000 gal
	Booster Pumps	Two 1½-HP One 3-HP
	Pressure Tanks	One 500 gal
Stone Canyon BPS Site	Booster Pumps	Two 40-HP
Stone Canyon Tank Site	Storage tank	95,000 gal
Country Club BPS	Booster Pumps	Four 30-HP
Country Club Take Site	Storage tank	One 360,000 gal One 500,000 gal
Racquet Club Tank Site	Storage tank	100,000 gal
Clearwater Hills BPS #1 Site	Booster Pumps	Three 60-HP
Clearwater Hills Tank #2 Site	Storage tank	100,000 gal
Clearwater Hills BPS #3 Site	Booster Pumps	Two 10-HP
	Pressure Tanks	One 500 gal
Clearwater Hills Tank #3 Site	Storage tank	22,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	102,519
6	Various	298,197
8	Various	122,340
10	Various	2,800
12	Various	54,449
16	Various	42,841
20	Various	2,804
24	Various	13,123
undetermined	Various	1,122

Meters

Size (inches)	Quantity
⅝ x ¾	2,358
¾	30
1	2,031
1½	145
2	305
3	24
4	2
6	5

C. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

Based on a memorandum dated March 8, 2008, MCESD has determined that Paradise Valley is currently in compliance with its requirements and is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance issues.

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Paradise Valley is in ADWR's Phoenix Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR related to Paradise Valley on June 20, 2008. In its report ADWR stated that Paradise Valley is in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

The Company's estimated annual water testing expense is $2,033. Staff concludes that this estimate is reasonable. Therefore, Staff recommends water testing expenses be adjusted for purposes of this rate case to the Company's estimated annual expense amount of $2,033. (See Table 1.)

Table 1 Water Testing Cost (Paradise Valley District - PWS #07-056)

Monitoring – 6 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	$11	360	$3960	$1,320
Customer requested bact	$11	36	$396	$132
Customer requested HPC	$35	9	$315	$105
Inorganics – Priority Pollutants				
Radiochemical – (1/ 3 yr)				
Gross Alpha	$60	1	$60	$20
Uranium	$140	1	$140	$47
Radium 228	$130	1	$130	$43
Radium 226	$100	1	$100	$33
Phase II and V:				
IOC's*		1		
SOC's*		1		
VOC's*		12		
Dioxin	$500	2	$1000	$333
Nitrites* per 9 yrs		12		
Nitrates – annual*		24		
Asbestos – per 9 years*		1		
Lead & Copper –Triennial*		30		
TTHM/HHAs –annual*		12		
Maximum chlorine residual levels				
MAP fees (annual)				
Arsenic*, **				
Total				**$2,033**

* Assumes testing will be done in the Company's Lab in Belleville.

** To comply with ADEQ requirement, the Company has to conduct quarterly arsenic testing at each well site and ADEQ designed sampling points aka Points Of Entry.

G. WATER USAGE

Figure 4 is a graph that shows water consumption data in gallons per day ("GPD") per customer for the system for the test year period of January 2007 through December 2007.

1. Water Sold

Based on information provided by the Paradise Valley Water, water use for the year 2007 is presented in Figure 4. The high monthly water use was 2,625 GPD per connection in July, and the low monthly water use was 1,037 GPD per connection in February. The average annual use was 1,767 GPD per connection.

2. Lost Water

Lost water loss should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, theft, and flushing. Lost water for Paradise Valley Water was calculated to be 9.59% which is within acceptable limits.

Staff recommends that the Company monitor the water system closely and take action to ensure that water loss remains less than 10% in the future. If the water loss at any time before the next rate case is greater than 10%, the Company shall come up with a plan to reduce water loss to less than 10%, or prepare a report containing a detailed analysis and explanation demonstrating why a water loss reduction to 10% or less is not feasible or cost effective. Such a report shall be docketed in this case.

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 4,684 at the end of 2002 to 4,750 by the end of 2007, with an average growth rate of 14 customers per year. Based on the linear regression analysis, Staff estimates that the Company could have over 4,800 customers by the end of 2012. The following table summarizes Staff's projected growth.

Table 2 Actual and Projected Growth

Year	Nos. of Customers	
2002	4,684	Reported
2003	4,658	Reported
2004	4,695	Reported
2005	4,719	Reported
2006	4,726	Reported
2007	4,750	Reported

2008	4,754	Estimated
2009	4,769	Estimated
2010	4,783	Estimated
2011	4,798	Estimated
2012	4,812	Estimated

I. DEPRECIATION RATES

Decision No. 68858 (dated August 1, 2006) approved the depreciation rates used by Paradise Valley in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25% depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15% depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

The Company also proposed a 37.71% depreciation rate for its computer software but provided no specific justification for this accelerated depreciation rate. Staff typically recommends a 25% depreciation rate and without having specific justification to do otherwise will recommend the typical 25% rate in this case.

The Company also proposed a 14.59% depreciation rate for its Structure & Improvement Source Supply but provided no specific justification for this accelerated depreciation rate. Staff typically recommends a 2.5% depreciation rate and without having specific justification to do otherwise will recommend the typical 2.5% rate in this case.

Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHERS

1. Service Line and Meter Installation Charges

The Company requested that meter and service line installation charges for all size meters be determined on an individual case basis. Staff is recommending specific charges for meters smaller than 3-inch and actual costs for 3-inch meters and larger. Staff recommends approval of separate meter and service line installation charges as shown under the column headings "Staff Recommended" in Table 4 for meter sizes smaller than 3-inches. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff which Staff recommends be adopted in this case.

Table 3 Service Line and Meter Installation Charges (PV)

Meter Size	Current Charges)	Proposed Charges	Staff Recommendation ((Service Line)	Staff Recommendation (meter installation)	Staff Recommendation total charges
5/8 x 3/4-inch	$480	Actual Cost	$445	$155	$600
3/4-inch	$560	Actual Cost	$445	$255	$700
1-inch	$650	Actual Cost	$495	$315	$810
1½-inch	$895	Actual Cost	$550	$525	$1,075
2-inch)	$1,555	Actual Cost	$830	$1,045	$1,875
3-inch	$2,235	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch	$3,440	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch	$6,195	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch			Actual Cost	Actual Cost	Actual Cost

2. *Curtailment Tariff*

The Company has an approved curtailment tariff.

3. *Cross Connection & Backflow Tariff*

The Company has an approved Cross Connection & Backflow Tariff.

4. *Arsenic Treatment Plant*

In 2006 to comply with the new arsenic standard, the Company began its arsenic treatment plant installation in order to remove arsenic in the water supply. The 21.3 MGD treatment plant was completed and has been in operation since 2007.

5. *Trichloroethylene ("TCE")*

In the winter of 2007, the Company experienced an equipment malfunction in its Miller Road TCE treatment plant which caused TCE levels to exceed the maximum contaminant level ("MCL") at the treatment plant discharge point[1]. In May 2008, MCDES issued an approval to allow the Company to disconnect the TCE contaminated well[2] (PCX-1 well) from the Paradise Valley water system and the Miller Road treatment plant. During its site inspection Staff noted

[1] When the final treated water leaves the TCE treatment plant before it flows to the Company's distribution mains, the Company monitors and reports TCE levels in the water.
[2] Previously the Company had operated the TCE contaminated well, PCX-1 which is owned by Motorola.

that this disconnection work had been completed at the Miller Road treatment plant and one of three air stripping towers was no longer in operation.

6. Well No. 12 Replacement

During its site inspection, Staff noted that construction of the proposed Well No. 12 had not commenced. Therefore, Staff concludes that the Well No. 12 project is not used and useful plant for purposes of this case.

7. Phase III of Fire Flow Project

The Phase III of fire flow project provided for the installation of fire flow mains on McDowell Road between Scottsdale Road and Cattlerack Road. During its site inspection, Staff noted that this project had been completed. Also, MCDES issued a Certificate of Approval of Construction for this project on October 29, 2008.

8. Well No. 17 Rehabilitation Project

During its site inspection, Staff noted that construction of the proposed Well No. 17 had been completed and it was in service.

FIGURES

FIGURE 1

PARADISE VALLEY WATER DIVISION CERTIFICATED AREA

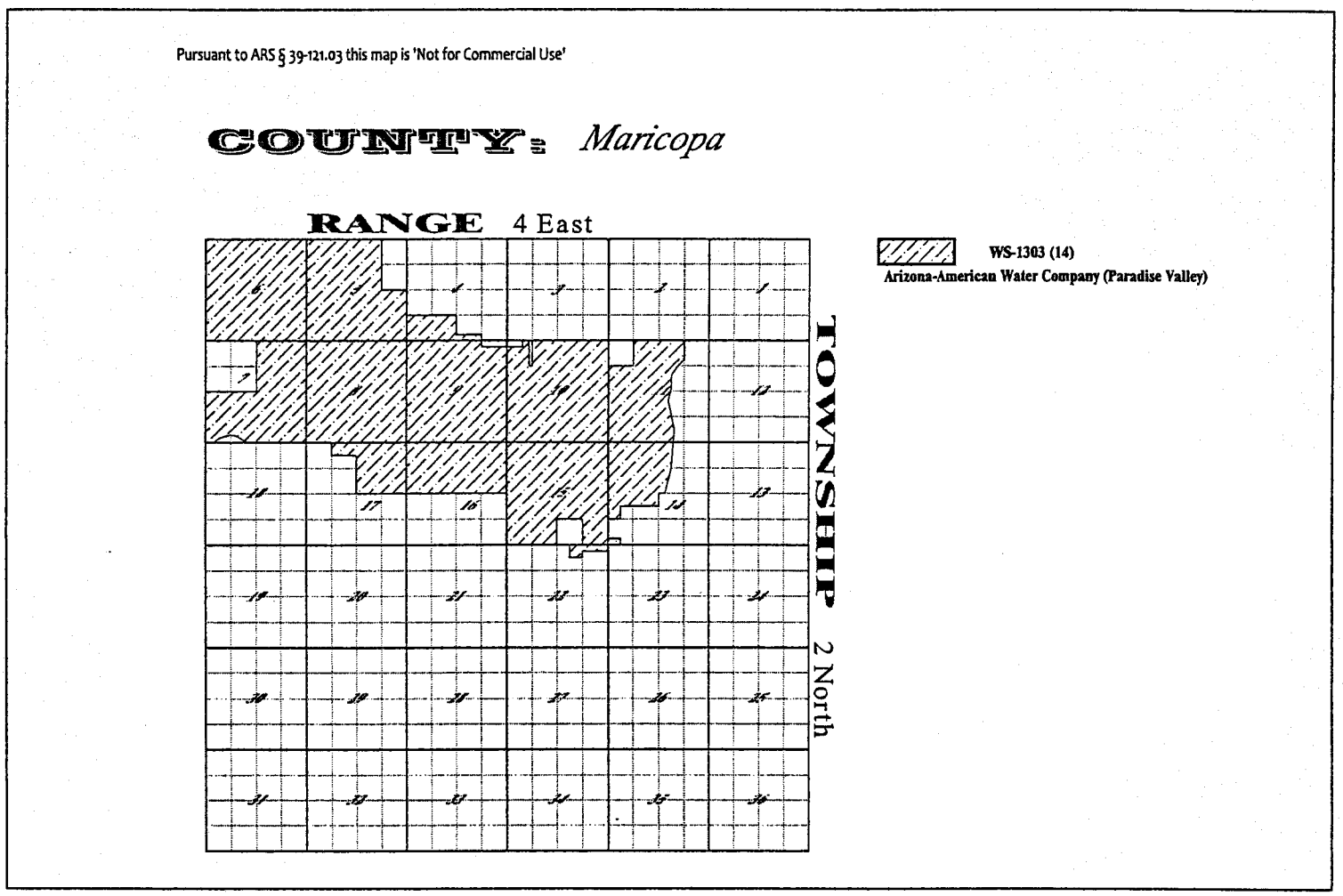
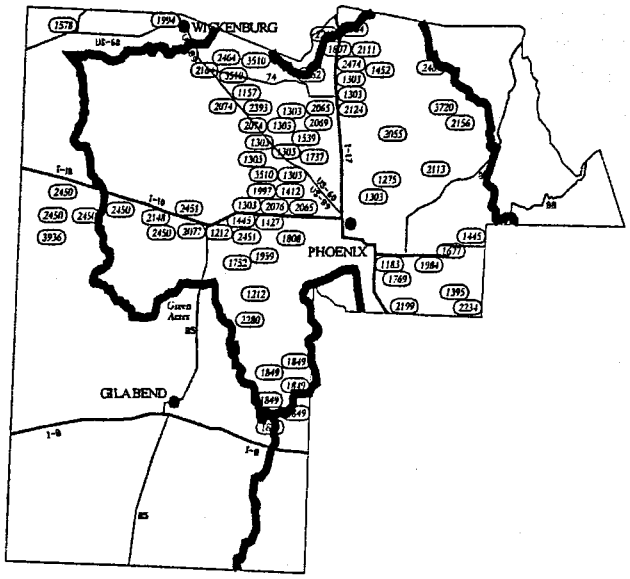


FIGURE 2

LOCATION OF PARADISE VALLEY WATER DIVISION

MARICOPA COUNTY



1997	ADAMAN MUTUAL WATER COMPANY	2164	MORRISTOWN WATER COMPANY
1578	AGUILA WATER SERVICES, INC.	1737	NEW RIVER UTILITY COMPANY
2077	ALLENVILLE WATER COMPANY, INC.	2199	PIMA UTILITY COMPANY
1303	ARIZONA-AMERICAN WATER COMPANY	2464	PUESTA DEL SOL WATER COMPANY
1445	ARIZONA WATER COMPANY	1395	QUEEN CREEK WATER COMPANY
2074	BEARDSLEY WATER COMPANY, INC.	1808	RIGBY WATER COMPANY
1275	BERNEIL WATER COMPANY	2156	RIO VERDE UTILITIES, INC.
1964	BLACK CANYON RETREAT WATER COMPANY	1539	ROSE VALLEY WATER COMPANY
1994	CABALLEROS WATER COMPANY, INC.	2111	SABROSA WATER COMPANY
1452	CAVE CREEK WATER COMPANY	1183	SENDE VISTA WATER COMPANY, INC.
2113	CHAPARRAL CITY WATER COMPANY	2474	SHANGRI-LA ASSOCIATES, INC.
2393	CHAPARRAL WATER COMPANY	2280	SOUTH RAINBOW VALLEY WATER COOPERATIVE
3510	CIRCLE CITY WATER COMPANY L.L.C.	2069	SUNRISE WATER COMPANY, INC.
1752	CLEARWATER UTILITIES COMPANY, INC.	2076	TIERRA BUENA WATER COMPANY
1984	DAIRYLAND WATER CORPORATION	2483	TONTO HILLS UTILITY COMPANY
2124	DESERT HILLS WATER COMPANY, INC.	1677	TURNER RANCHES WATER & SANITATION COMPANY
3936	EAGLETAIL WATER COMPANY LC	1212	VALENCIA WATER COMPANY
1959	GRANDVIEW WATER COMPANY, INC.	1412	VALLEY UTILITIES WATER COMPANY, INC.
2234	H2O, INC.	2148	VALLEY VIEW WATER COMPANY, INC.
2055	JAMES P. PAUL WATER COMPANY	2451	WATER UTILITY OF GREATER BUCKEYE, INC.
1769	KYRENE WATER COMPANY	2450	WATER UTILITY OF GREATER TONOPAH, INC.
2452	LAKE PLEASANT WATER COMPANY	3720	WATER UTILITY OF NORTHERN SCOTTSDALE, INC.
1427	LITCHFIELD PARK SERVICE COMPANY	1157	WEST END WATER COMPANY
2267	MCADAMS WATER COMPANY	2065	WILHOIT WATER COMPANY, INC.
1849	MOBILE WATER COMPANY	1807	WRANGLERS ROOST WATER COMPANY

01/10/07

FIGURE 3A

PARADISE VALLEY WATER DIVISION SYSTEMATIC DIAGRAM FOR EXISTING SYSTEMS

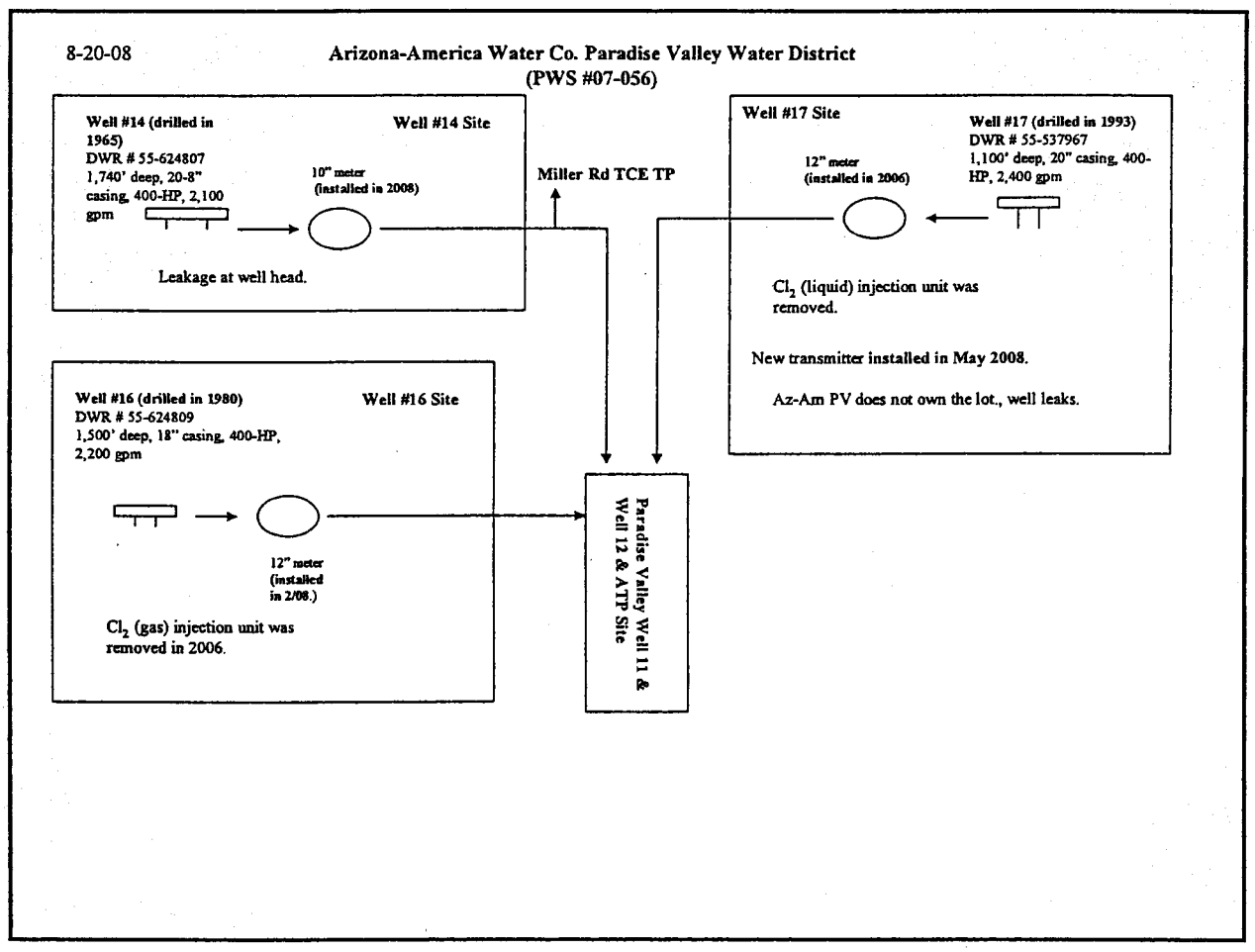


FIGURE 3B

PARADISE VALLEY WATER DIVISION SYSTEMATIC DIAGRAM

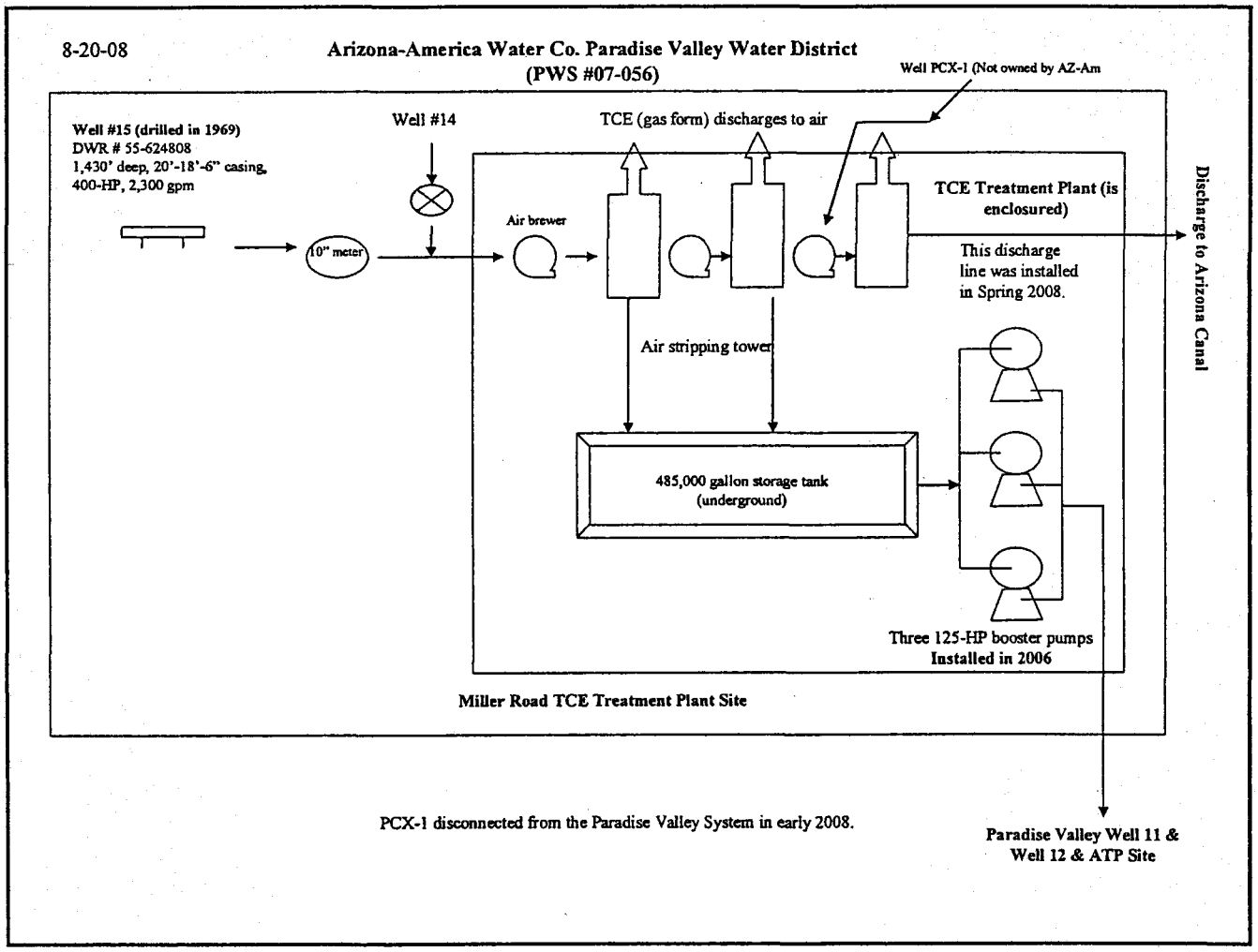


FIGURE 3C

PARADISE VALLEY WATER DIVISION SYSTEMATIC DIAGRAM

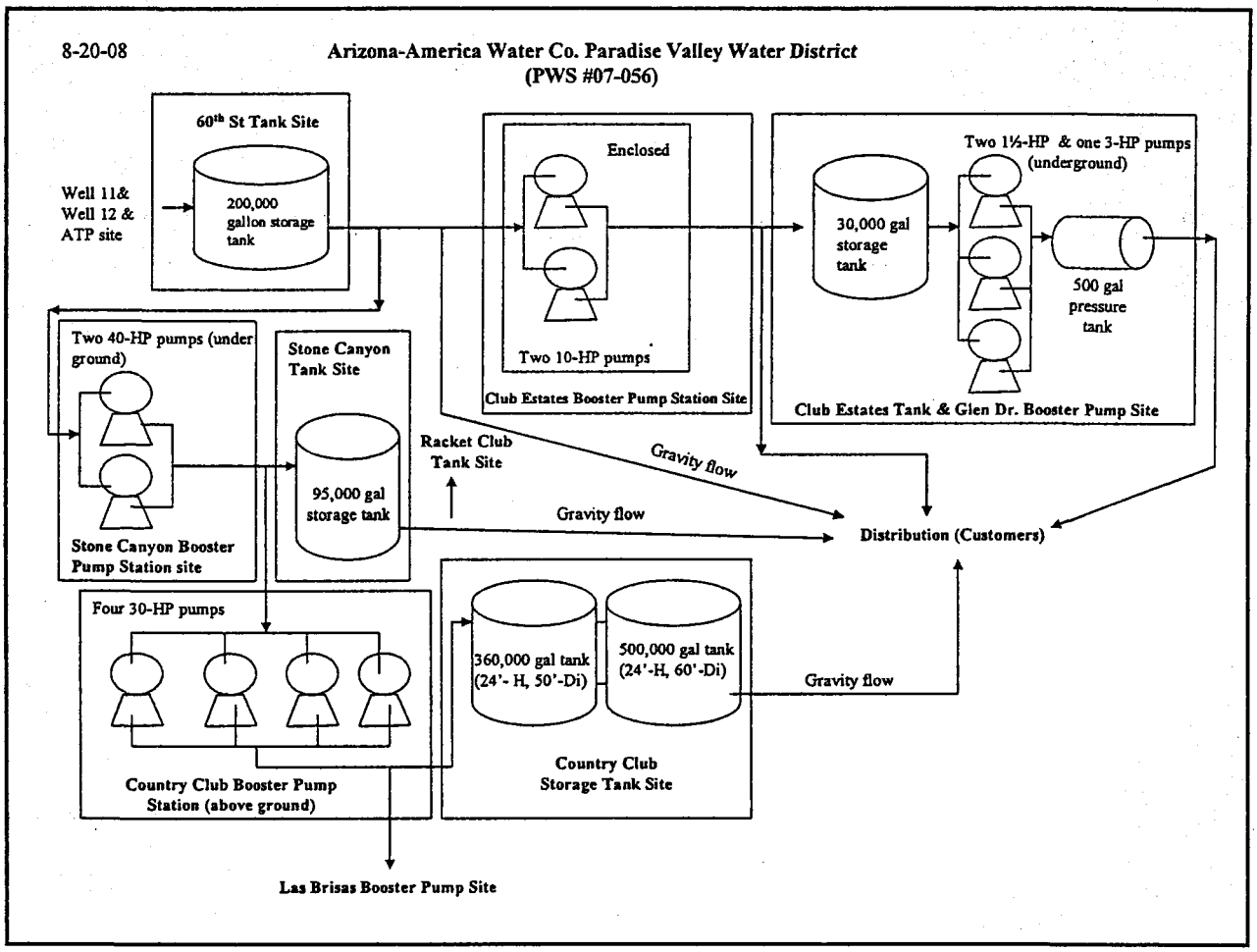


FIGURE 3D

PARADISE VALLEY WATER DIVISION SYSTEMATIC DIAGRAM

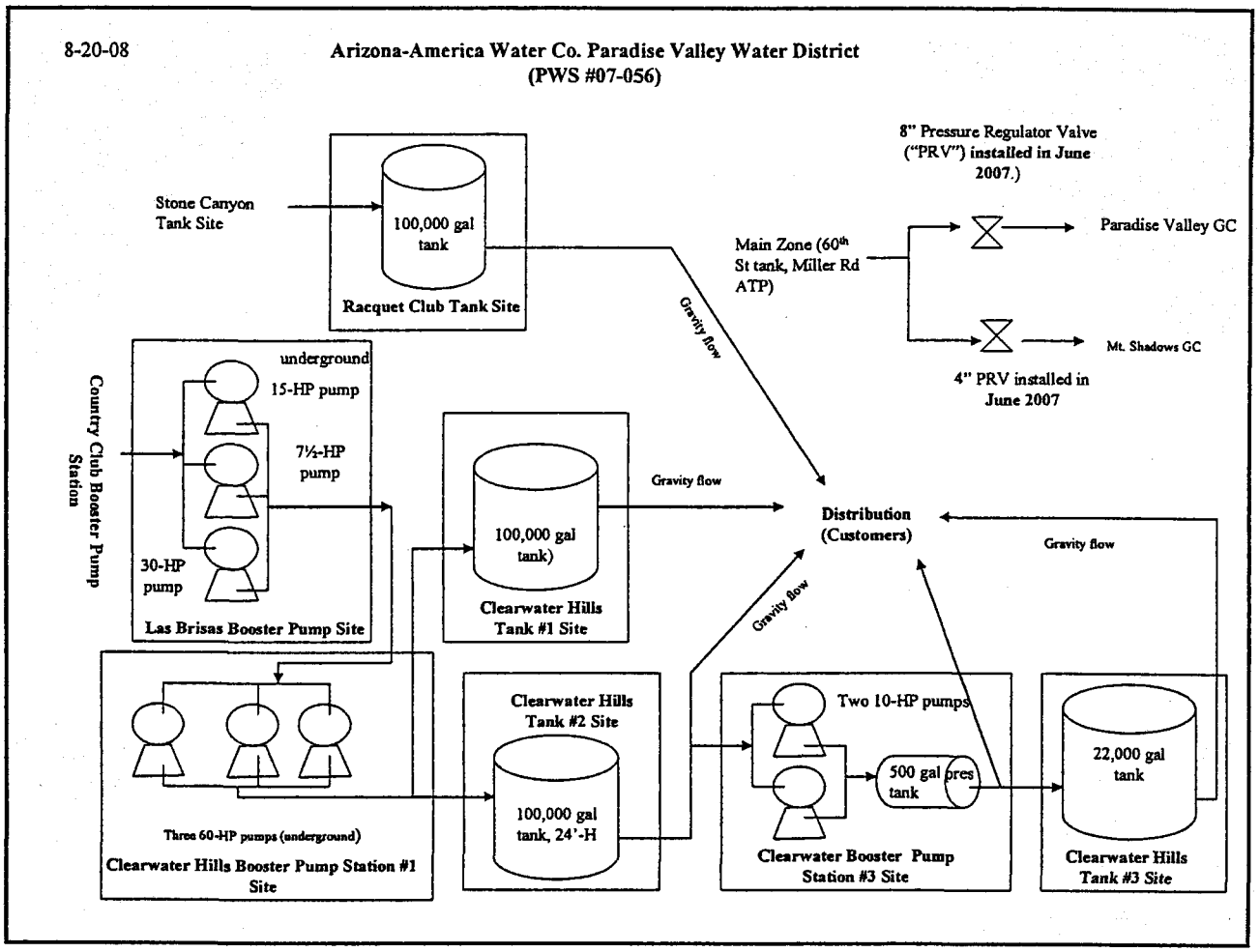


FIGURE 3E

PARADISE VALLEY WATER DIVISION SYSTEMATIC DIAGRAM

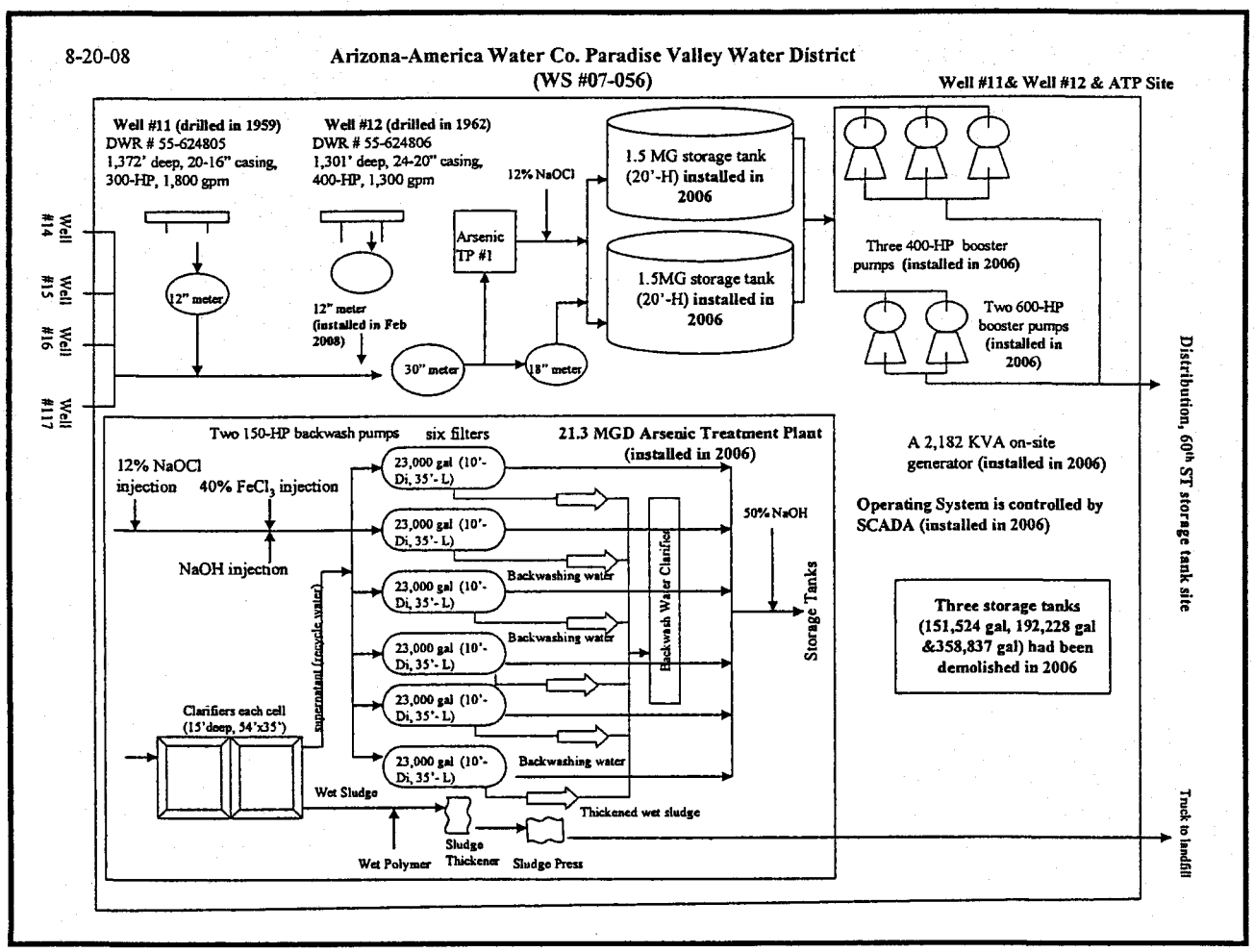


FIGURE 4

PARADISE VALLEY WATER DIVISION WATER USAGE

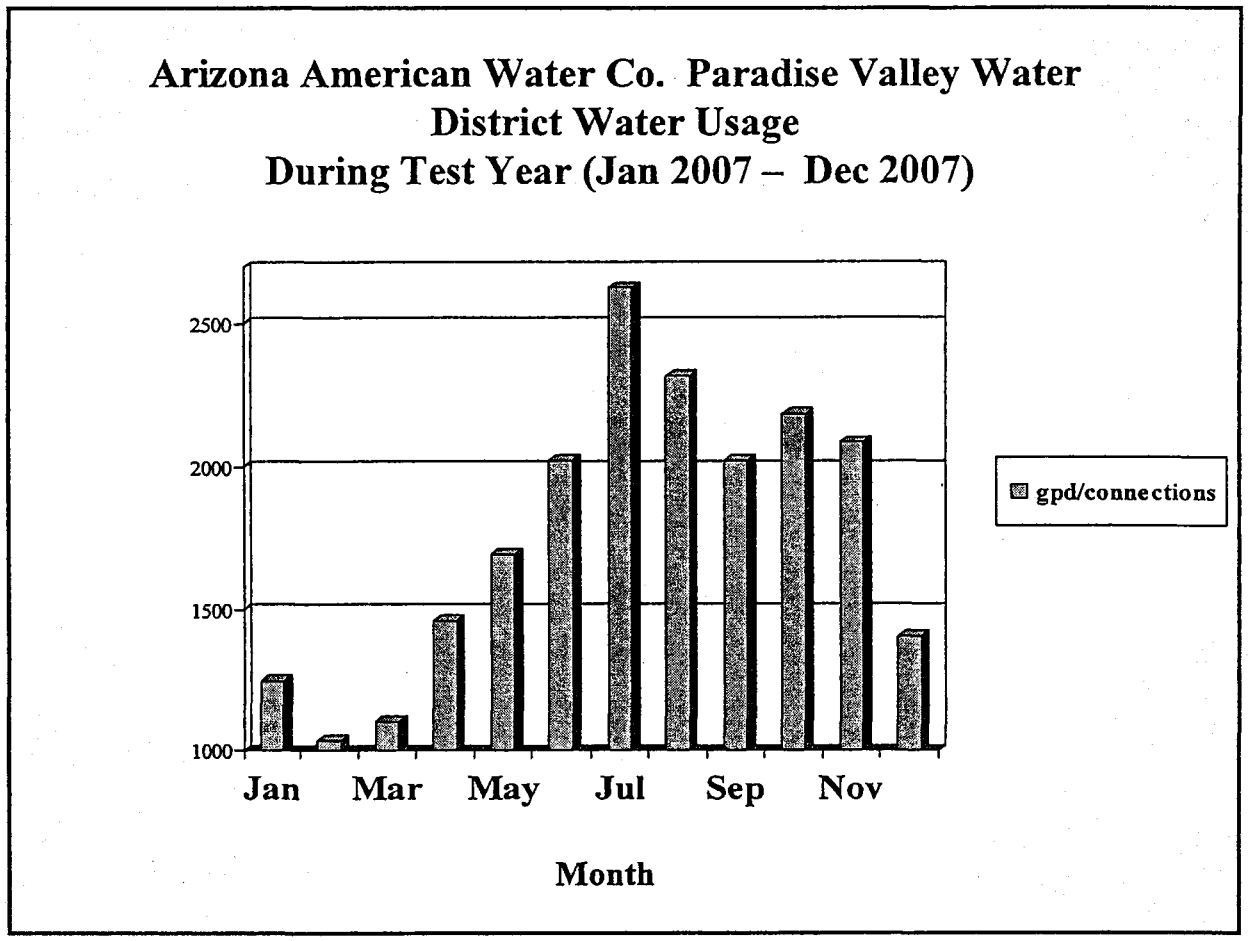


FIGURE 5

GROWTH IN PARADISE VALLEY WATER DIVISION

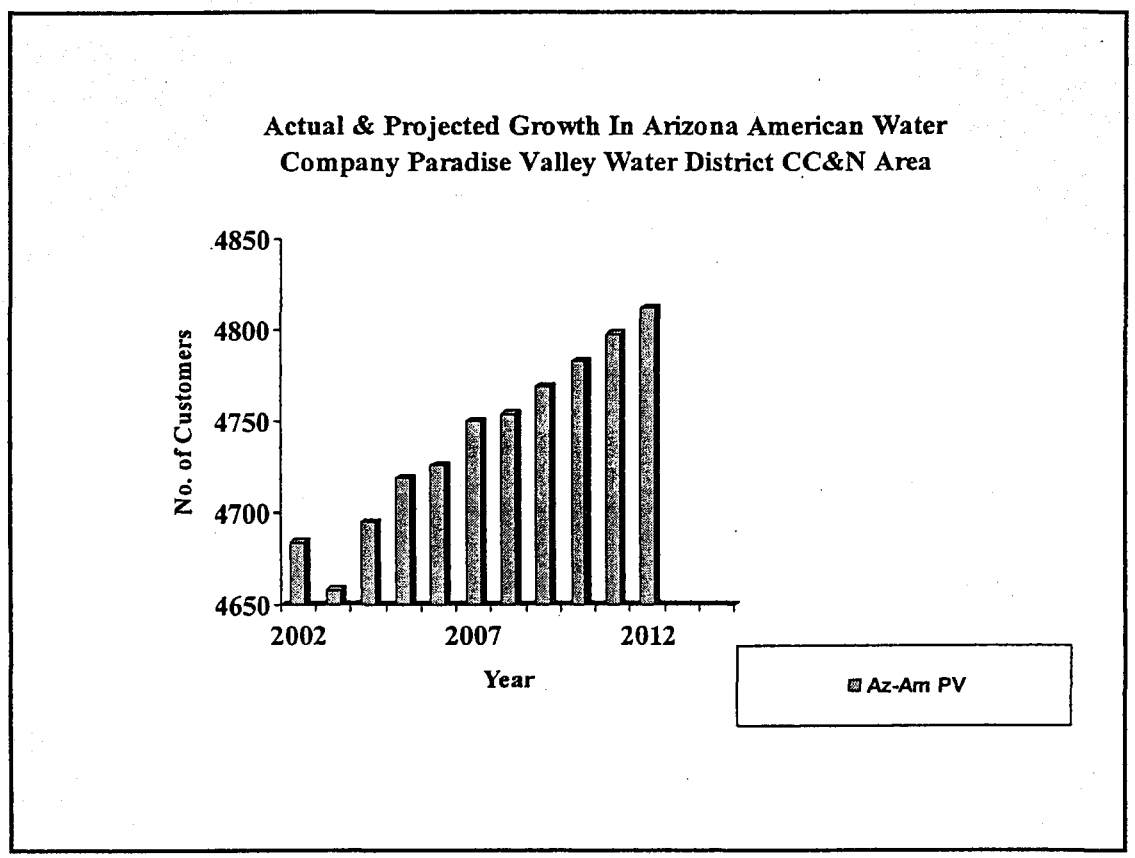


FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS – Paradise Valley

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 68858	Rate (%) proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	
	303300	Land & Land Rights P	0	0	
	303500	Land & Land Right TD	0	0	
	303600	Land & Land Right AG	0	0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	14.59	14.59	2.50
	304200	Structure & Improvement P	3.99	3.99	3.99
	304300	Structures and Improvements WT	2.00	2.00	2.00
	304400	Structure & Improvement TD	1.50	1.50	1.50
	304500	Structure & Improvement AG	4.63	3.99	3.99
	304600	Structure & Improvement office	4.63	0.00	0.00
	304700	Structure & Improvement store, shop, garage	4.63	3.99	3.99
	304800	Structure & Improvement Misc	4.63	3.99	3.99
307	307000	**Wells & Springs**	2.48	2.48	2.48
310	310100	**Power Generation Equip Other**	N/A	4.39	4.39
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.39	4.39	4.39
	311300	Pump Equipment Diesel	4.39	4.39	4.39
320		**Water Treatment**			
320.1	320100	Water Treatment Equipment Non-	7.06	7.06	7.06
320.2	N/A	Media	N/A	N/A	5.00
320.3	N/A	Chemical Solution Feeders	N/A	N/A	5.00
320.4		Sludge Disposal Equipments	N/A	N/A	5.00
330	33000	**Distribution Reservoirs & Standpipes** Distribution Reservoirs & Standpipes	3.15	3.15	3.15
331		**Transmission and Distribution**			
	331001	TD mains Not Classified by Sizes	0	0	0
	331100	TD mains 4-inch & less	4.17	4.17	4.17
	331200	TD mains 6-inch to 8-inch	2.52	2.52	2.52
	331300	TD mains 10-inch to 16-inch	2.34	2.34	2.34
		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	N/A	N/A	2.00
333	333000	**Services**	4.72	4.72	4.72
334		**Meters**			
	334100	Meters	7.21	7.21	2.51
	334200	Meter installations	1.51	1.51	1.51
335	335000	**Hydrants**	2.10	2.10	2.10
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**			

	339600	Other P/E CPS	0	0.00	0.00
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.04	4.04	4.04
	340200	Computer & periph equipment	15.89	15.59	10.00
	340300	Computer software	37.71	37.71	25
	340500	Other Office Equipment	7.13	7.13	7.13
341		**Transportation Equipment**			
	341100	Transportation Equip, Lt Duty Trucks	28.05	28.05	22.00
	341300	Transportation Equip Autos	7.80	7.80	7.80
	341400	Transportation Equip, Other	0.93	0.93	0.93
342	342000	**Store Equipments**	N/A	N/A	4.00
343	343000	**Tools Shop & Garage Equipments**	3.61	3.61	3.61
344	344000	**Lab equipments**	N/A	N/A	10.00
345	345000	**Power operated equipments**	4.64	4.64	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	9.76	9.76	9.76
	346300	Communication Equip Other	7.91	7.91	4.93

EXHIBIT DMH-5

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC., SUN CITY WEST WATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Sun City West Water District
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona American Company's Sun City West District ("Sun City West District") presented in Figure 6 by NARUC account. (See § I of report for discussion and details.)

II. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges. (See § J of report for discussion and details.)

III. Staff recommends that $143,485 of Arsenic Treatment Plant installation should be removed from plant. (See § J of report for discussion and details.)

IV. Staff considers the reported water testing expenses and the estimated water testing costs of $5,618 for the Sun City West District reasonable. (See § F of report for discussion and details.)

Conclusions:

I. Maricopa County Environmental Services Department ("MCESD") has determined that Sun City West District is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. (See § C for a discussion and details.)

II. Sun City West District is within the Phoenix Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") monitoring and reporting rules. (See § E of report for discussion and details.)

III. Sun City West District has 6.3 percent lost water which is within acceptable limits. (See § G of report for discussion and details.)

IV. Sun City West District has an approved cross connection tariff. (See § J of report for discussion and details.)

V. Sun City West District has adequate production and storage capacity to serve its existing customers. (See § B of report for discussion and details.)

VI. Sun City West District has an approved curtailment tariff. (See § K of report for discussion and details.)

VII. A check with the Utilities Division Compliance Section showed Sun City West has no outstanding compliance issues. (See § D of report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona-American – Sun City West Water District ("Sun City West" or "Company") serves over 15,400 customers in the unincorporated Sun City West area which is located northwest of the City of Phoenix in Maricopa County. Figure 1 describes the location of the Company within Maricopa County, and Figure 2 describes the CC&N area of Sun City West.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on July 15, 2008, by Dorothy Hains, Utilities Engineer, accompanied by the Company's representative, Paul Taylor (Company's Operation Supervisor).

System Analysis

Sun City West operates a system that consists of ten drinking water wells that are capable of producing a total flow of 10,140 gallons per minute ("GPM"), two arsenic treatment plants ("ATP")[1] and a total of 4.02 million gallons ("MG") of storage capacity. The water system has adequate storage and well production to serve its existing customers and projected growth for a five-year planning horizon. Figures 3A, 3B, 3C and 3D provide a process schematic showing both the active and inactive components of the water system.

Well Data

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
1.1	55-547409	1995	16	1,190	8	250	1,120	14141 W Meeker
1.2	55-601217	1982/1986	16	716	10	200	1,060	19425 Wilson Way
1.3	55-612963	1955	16	1,032	10	200	1,000	14427 Yosemite
1.4	55-205590	2005	20	1,176	12	300	1,400	13503 W Daisy Ct.
1.5	55-610220	1947	20	1,000	10	200	850	17618 N Lasso Dr.
2.1	55-547408	1995	16	1,186	8	200	1,100	12702 W Stardust Blvd
2.2	55-610215	1982	20	904	10	200	1,200	13059 Deer Valley
2.3	55-610214	1982	20	852	10	200	1,100	13449 W Deer Valley
2.4	55-520840	1988	16	1,060	8	260	800	14207 W Parade Dr
2.5	55-612959	1958	20	963	8	200	960	21801 N 151st Ave

[1] ATP #1 has 7.6 million gallons per day ("MGD") treatment capacity and ATP #2 has 6 MGD treatment capacity.

Inactive Well

Well #	ADWR No.	Year Drilled (19xx)	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)	Location
1	55-610219	1982	20	1,176	10	200	1,000	13503 W Daisy Ct.

Arsenic Treatment Plant

	Location	Treatment Type	Treatment Capacity
Plant #1	14141 W Meeker	Coagulation/Filtration	7.6 million gallons per day ("MGD")
Plant #2	12702 W Stardust Blvd	Granular Ferric Media filtration	6.0 MGD

Storage and Pumping

Location	Structure or equipment	Capacity
14141 W Meeker	Booster Pumps	Seven 100-HP One 75-HP
	Storage Tank s	Two 1,250,000 gal
	Pressure Tanks	Two 10,000 gal
12702 W Stardust Blvd	Booster Pumps	Three 150-HP four 100-HP One 75-HP
	Storage Tanks	Two 758,000 gal
	Pressure Tanks	Two 10,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	21,778
6	Various	696,395
8	Various	80,571
10	Various	84,150
12	Various	97,571
14	Various	26,710
16	Various	19,201
18	Various	6,821
20	Various	1,901

Meters

Size (inches)	Quantity
⅝ x ¾	14,270
¾	4
1	261
1½	552
2	279
3	13
4	26
6	1

C. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

Based on a memorandum dated May 14, 2008, from MCESD, MCESD has determined that Sun City West is currently in compliance with its requirements. MCESD also stated that it has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance issues.

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Sun City West is in ADWR's Phoenix Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR for Sun City West on September 3, 2008. In its report ADWR stated that Sun City West is in compliance with its requirements governing water providers.

F. WATER TESTING EXPENSES

The Company's estimated annual water testing expense is $5,618. Staff concludes that this estimate is reasonable. Therefore, Staff recommends water testing expenses be adjusted for purposes of this rate case to the Company's estimated annual expense amount of $5,618. (See Table 1.)

Table 1 Water Testing Cost (Sun City West District - PWS #07-0150)

Monitoring – 10 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	$11	1,080	$11,880	$3,960
Customer requested bact	$11	3	$33	$11
Customer requested HPC	$35	0	$0	$0
Inorganics – Priority Pollutants				
Radiochemical – (1/ 3 yr)				
Gross Alpha	$60	8	$480	$160
Uranium	$140	8	$1,120	$373
Radium 228	$130	8	$1,040	$347
Radium 226	$100	8	$800	$267
Phase II and V:				
IOC's*		10		
SOC's*		8		
VOC's*		4		
Dioxin	$500	4	$2,000	$500
Nitrites* per 9 yrs		0		
Nitrates – annual*		2		
Asbestos – per 9 years*		0		
Lead & Copper – Triennial*		30		
TTHM/HHAs –annual*		48		
Maximum chlorine residual levels				
MAP fees (annual)				
Arsenic**		40		
Total				**$5,618**

* The test will be done in the Company's lab in Belleville.

** To comply with ADEQ requirement, the Company has to conduct quarterly arsenic testing at each well site and ADEQ designed sampling points aka Points Of Entry.

G. WATER USAGE

Figure 4 is a graph that shows water consumption data in gallons per day ("GPD") per customer for the system for the test year period of January 2007 through December 2007.

1. Water Sold

Based on information provided by the Sun City West Water, water use for the year 2007 is presented in Figure 4. The high monthly water use was 432 GPD per connection in July, and the low monthly water use was 269 GPD per connection in March. The average annual use was 351 GPD per connection.

2. Lost Water

Lost water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water for Sun City West Water was calculated to be 6.3% which is within acceptable limits.

H. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports. The number of customers increased from 21,961 at the end of 2002 to 23,014 by the end of 2007, with an average growth rate of 281 customers per year from 2002 to 2007. Based on the linear regression analysis, Staff estimates that the Company could have over 24,600 customers by the end of 2012. The following table summarizes Staff's projected growth.

Table 2 Actual and Projected Growth

Year	Nos. of Customers	
2002	21,961	Reported
2003	21,899	Reported
2004	22,461	Reported
2005	23,011	Reported
2006	23,041	Reported
2007	23,014	Reported
2008	23,528	Estimated
2009	23,809	Estimated
2010	24,090	Estimated
2011	24,371	Estimated
2012	24,652	Estimated

I. DEPRECIATION RATES

Decision No. 67093 (dated June 30, 2004) approved the depreciation rates used by Sun City West in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25% depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15% depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

J. OTHERS

1. Service Line and Meter Installation Charges

The Company is proposing to maintain its current meter and service line installation charges that are within Staff's experience of what are reasonable and customary charges. Staff does not object to the Company's proposal. Staff recommends the adoption of the Company and Staff recommended service line and meter installation charges and total charges.

Table 3 Service Line and Meter Installation Charges (Sun City West)

Meter Size	Current Meter Charges	Current Service Line Installation Charge	Company proposed & Staff Recommended (meter installation charge)	Company proposed & Staff Recommended (Service Line installation charge)	Company proposed & Staff Recommended (total charges)
5/8 x 3/4-inch	$130	$370	$130	$370	$500
3/4-inch	$205	$370	$205	$370	$575
1-inch	$240	$420	$240	$420	$660
1½-inch	$450	$450	$450	$450	$900
2-inch (Turbo)	$945	$580	$945	$580	$1,525
2-inch (Compound)	$1,640	$580	$1,640	$580	$2,220
3-inch (Turbo)	$1,420	$745	$1,420	$745	$2,165
3-inch (Compound)	$2,195	$465	$2,195	$465	$2,660
4-inch (Turbo)	$2,270	$1,090	$2,270	$1,090	$3,360
4-inch (Compound)	$3,145	$1,120	$3,145	$1,120	$4,265

6-inch (Turbo)	$4,425	$1,610	$4,425	$1,610	$6,035
6-inch (Compound)	$6,120	$1,630	$6,120	$1,630	$7750
Over 6-inch	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved Curtailment Tariff.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. Arsenic Treatment Plant ("ATP") Capacity

In 2006 to comply with the new arsenic standard, the Company began its arsenic treatment plant installation in order to remove arsenic in the water supply. Both the 7.8 MGD treatment plant (plant #1) and 6 MGD plant (plant #2) were completed and have been in operation since 2007.

ATP No. 2 treats ground water produced by only Well No. 2.4 and Well No. 2.5. The combined flows from these two wells are 1,760 GPM, or 2.53 MGD. Based on the design report, the loading rate is 5 GPM/square foot under normal operation. Staff determined that three 12-feet diameter media vessels should have adequate treatment capacity to remove arsenic. However, the Company installed four 12-foot diameter media vessels instead of three vessels; therefore, Staff recommends that cost of one 12-feet diameter vessel be removed from rate base.

The cost of one 12-foot diameter vessel was $143,485[2] in 2005.

5. Well No. 1.4 Replacement

The replaced Well No. 1.4 was installed in 2005 and it is used and useful.

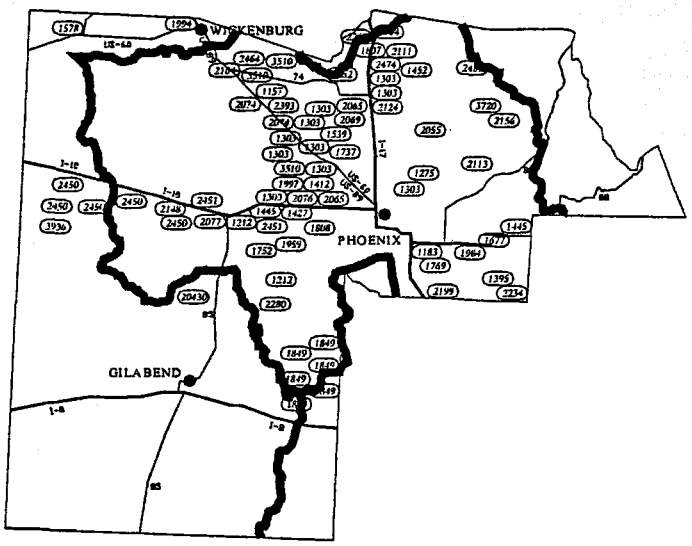
[2] See Company Response to DR #20.1, total costs of four vessels (manufactured by Severn Trent) in Sun City West Arsenic Treatment Plant #2 were $573,439. One fourth of $573,439 is $143,485.

FIGURES

FIGURE 1

LOCATION OF SUN CITY WEST WATER DISTRICT

MARICOPA COUNTY



1997	ADAMAN MUTUAL WATER COMPANY
1578	AGUILA WATER SERVICES, INC.
2077	ALLENVILLE WATER COMPANY, INC.
1303	ARIZONA-AMERICAN WATER COMPANY
1445	ARIZONA WATER COMPANY
2074	BEARDSLEY WATER COMPANY, INC.
1275	BERNEIL WATER COMPANY
1964	BLACK CANYON RETREAT WATER COMPANY
1994	CABALLEROS WATER COMPANY, INC.
1452	CAVE CREEK WATER COMPANY
2113	CHAPARRAL CITY WATER COMPANY
2393	CHAPARRAL WATER COMPANY
3510	CIRCLE CITY WATER COMPANY L.L.C.
1752	CLEARWATER UTILITIES COMPANY, INC.
1984	DAIRYLAND WATER CORPORATION
2124	DESERT HILLS WATER COMPANY, INC.
3936	EAGLETAIL WATER COMPANY LC
1959	GRANDVIEW WATER COMPANY, INC.
20430	GREEN ACRES WATER, LLC
2234	H2O, INC.
2055	JAMES P PAUL WATER COMPANY
1769	KYRENE WATER COMPANY
2452	LAKE PLEASANT WATER COMPANY
1427	LITCHFIELD PARK SERVICE COMPANY
2267	MCADAMS WATER COMPANY
1849	MOBILE WATER COMPANY
2164	MORRISTOWN WATER COMPANY
1737	NEW RIVER UTILITY COMPANY
2199	PIMA UTILITY COMPANY
2464	PUESTA DEL SOL WATER COMPANY
1395	QUEEN CREEK WATER COMPANY
1808	RIGBY WATER COMPANY
2156	RIO VERDE UTILITIES, INC.
1539	ROSE VALLEY WATER COMPANY
2111	SABROSA WATER COMPANY
1183	SENDE VISTA WATER COMPANY, INC.
2474	SHANGRI-LA ASSOCIATES, INC.
2280	SOUTH RAINBOW VALLEY WATER COOPERATIVE
2069	SUNRISE WATER COMPANY, INC.
2076	TIERRA BUENA WATER COMPANY
2483	TONTO HILLS UTILITY COMPANY
1677	TURNER RANCHES WATER & SANITATION COMPANY
1212	VALENCIA WATER COMPANY
1412	VALLEY UTILITIES WATER COMPANY, INC.
2148	VALLEY VIEW WATER COMPANY, INC.
2451	WATER UTILITY OF GREATER BUCKEYE, INC.
2450	WATER UTILITY OF GREATER TONOPAH, INC.
3720	WATER UTILITY OF NORTHERN SCOTTSDALE, INC.
1157	WEST END WATER COMPANY
2065	WILHOIT WATER COMPANY, INC.
1807	WRANGLERS ROOST WATER COMPANY

07/22/08

FIGURE 2

SUN CITY WEST WATER DISTRICT CERTIFICATED AREA

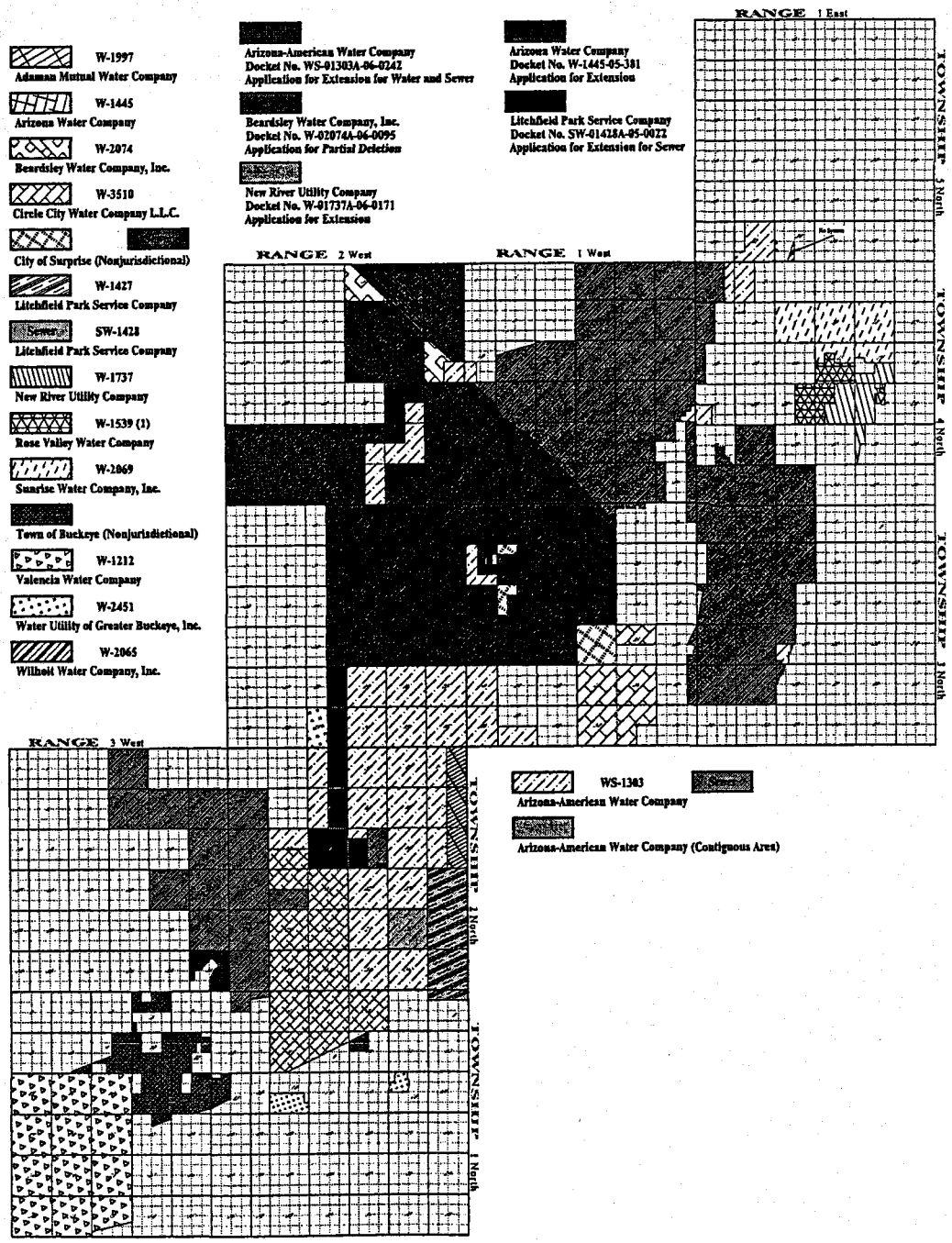


FIGURE 3A

SUN CITY WEST WATER DIVISION SYSTEMATIC DIAGRAM FOR EXISTING SYSTEMS

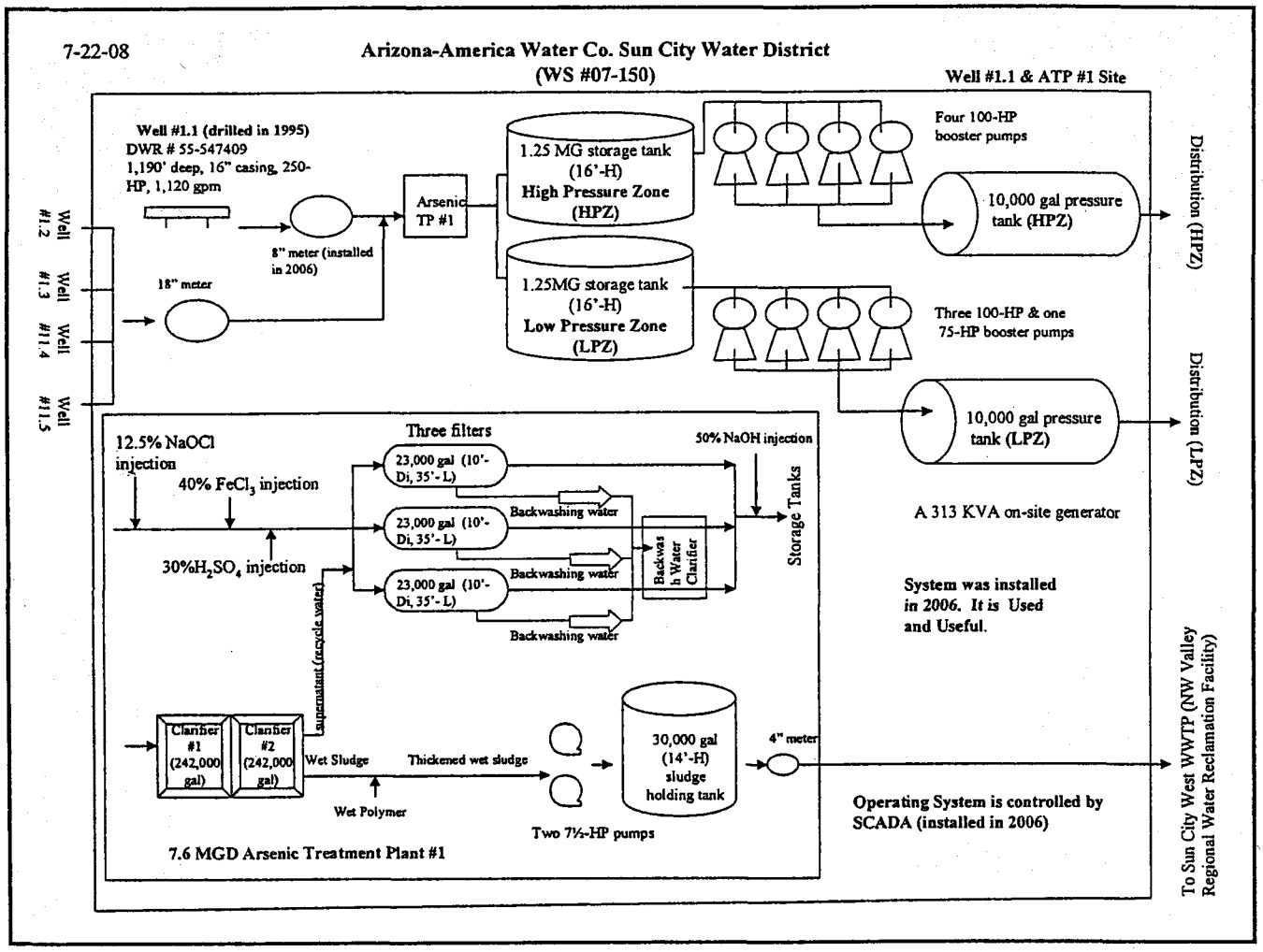


FIGURE 3B

SUN CITY WEST WATER DIVISION SYSTEMATIC DIAGRAM

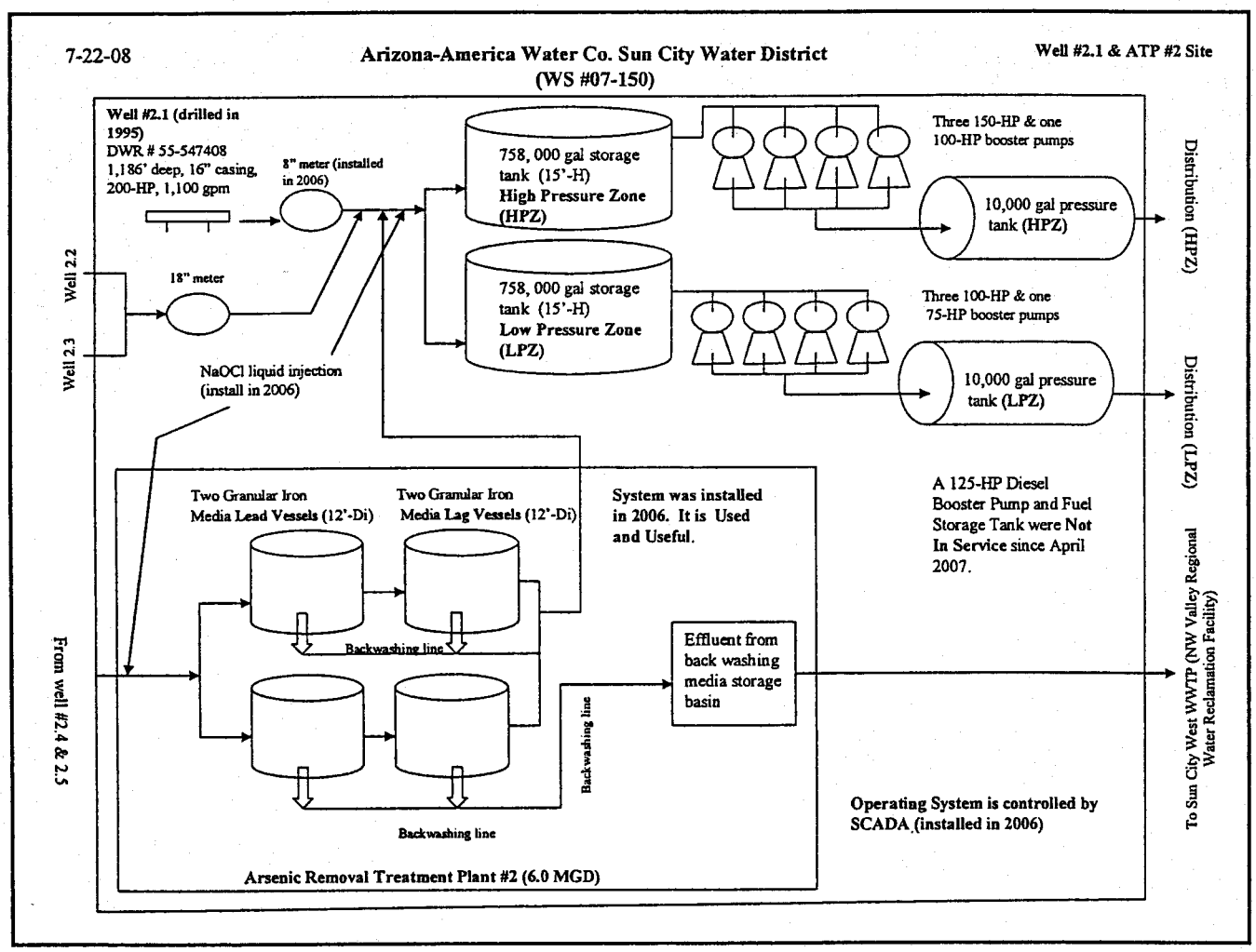


FIGURE 3C

SUN CITY WEST WATER DIVISION SYSTEMATIC DIAGRAM

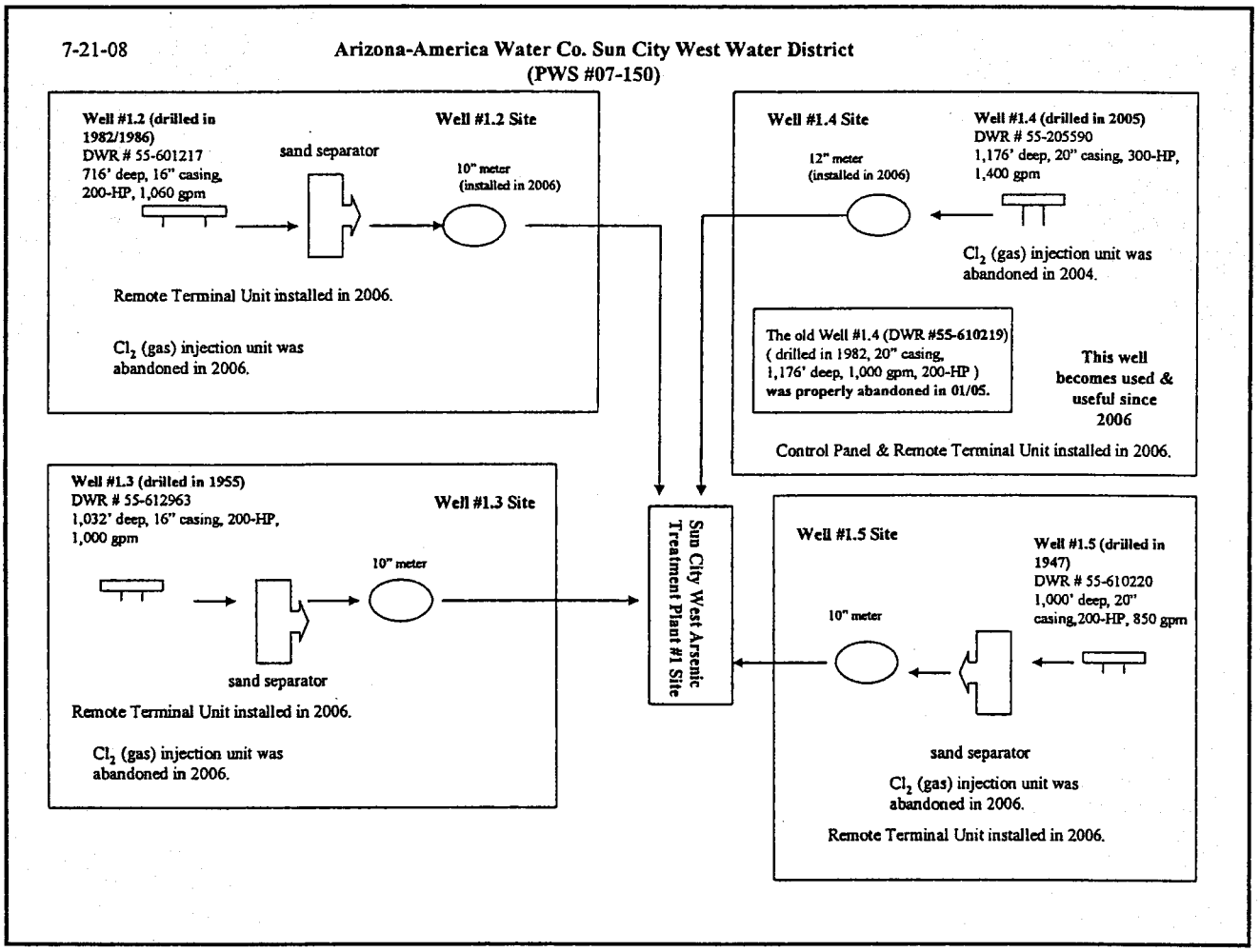


FIGURE 3D

SUN CITY WEST WATER DIVISION SYSTEMATIC DIAGRAM

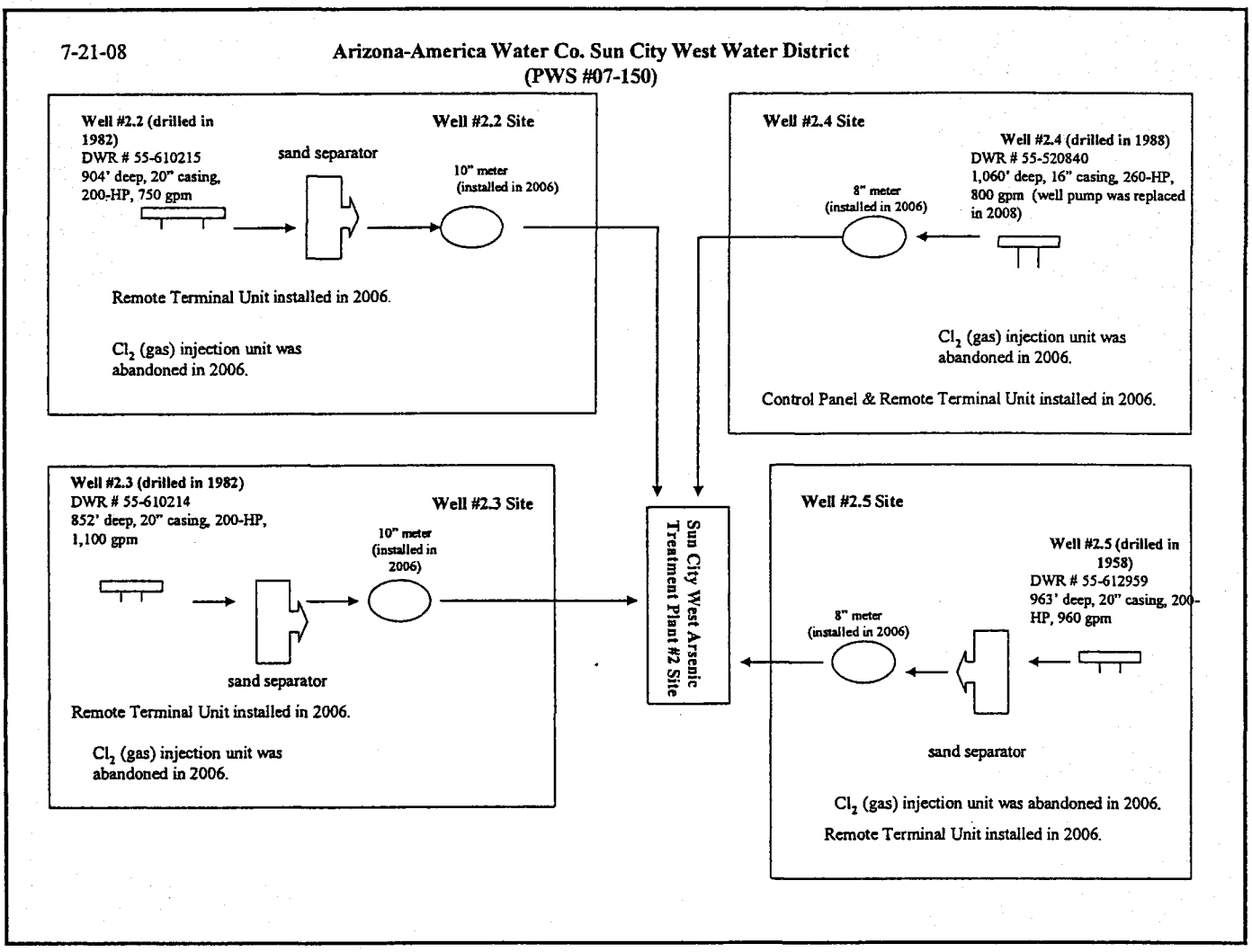


FIGURE 4

SUN CITY WEST WATER DIVISION WATER USAGE

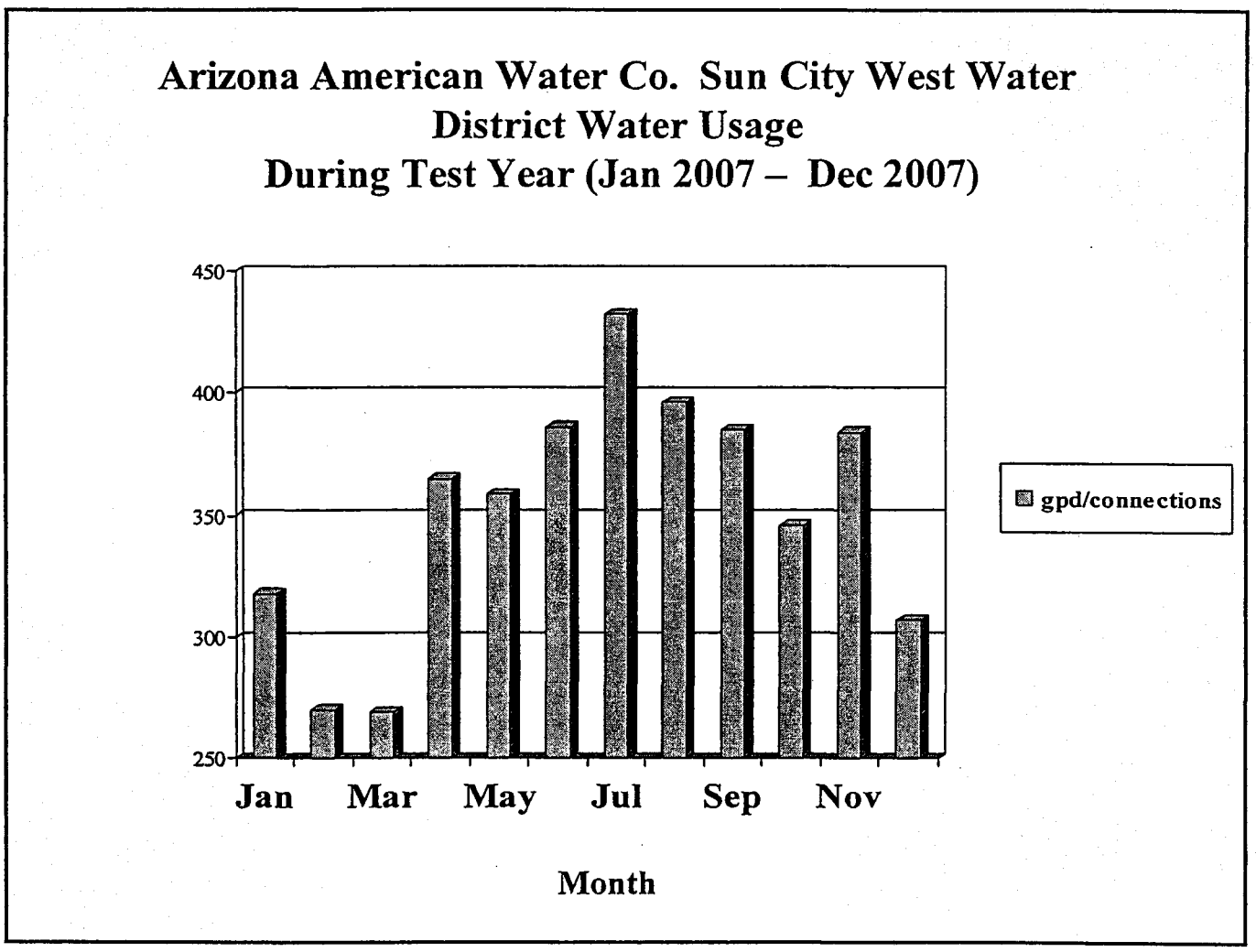


FIGURE 5

GROWTH IN SUN CITY WEST WATER DIVISION

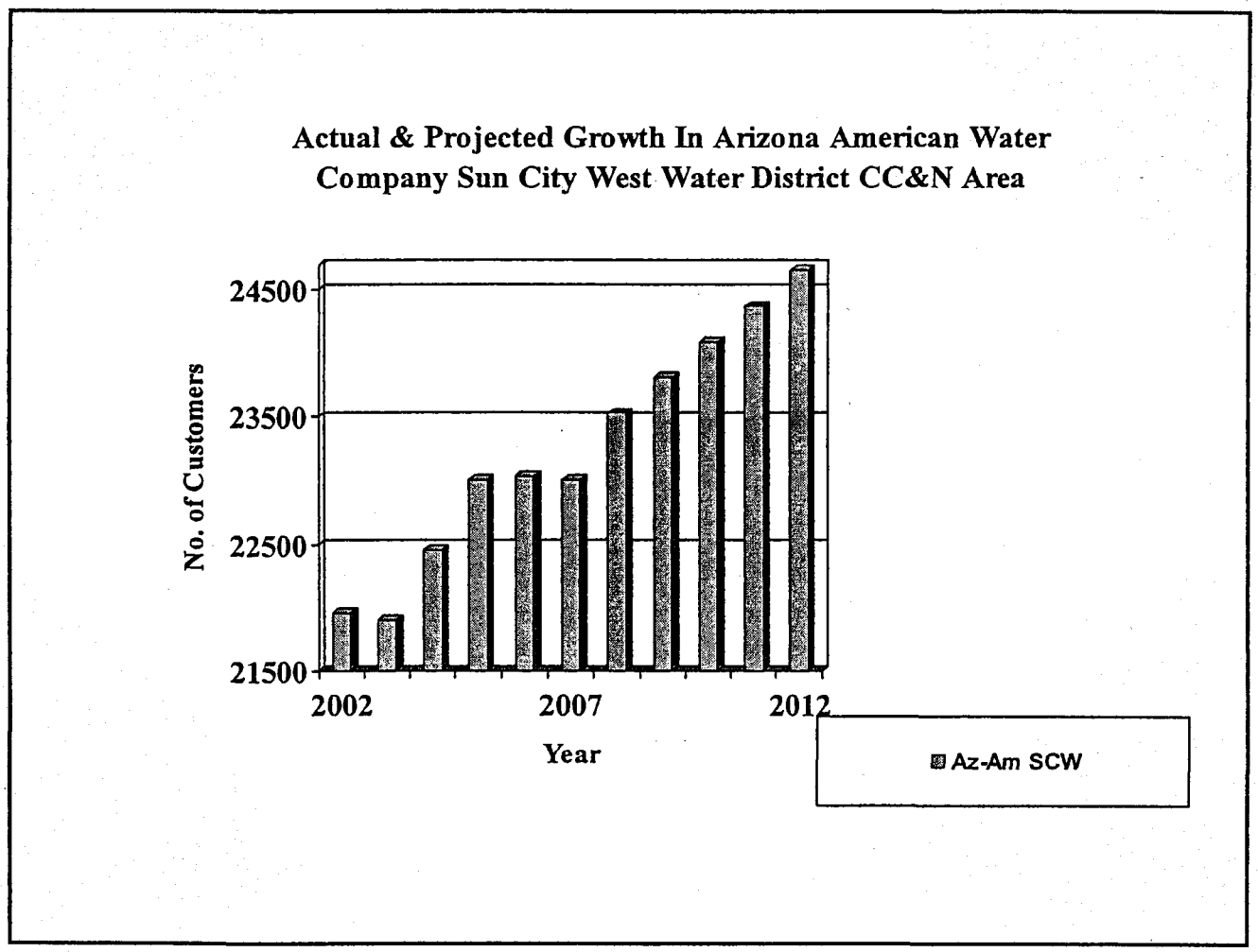


FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS (Sun City West Water)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #68310	Rate (%) Sun City West Water proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	
	303300	Land & Land Rights P	0	0	
	303500	Land & Land Right TD	0	0	
	303600	Land & Land Right AG	0	0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	0	1.67	2.00
	304600	Structure & Improvement office	1.68	2.12	4.63
	304800	Structure & Improvement Misc	0	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	0.00	0.00	0.00
307	307000	**Wells & Springs**	2.52	2.52	2.52
310	310100	**Power Generation Equip Other**		0.00	4.42
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	4.42	4.42	5.00
	311500	Pump Equipment Other	4.42	4.42	5.01
320		**Water Treatment**			
320.1	320100	Water Treatment Equipment (Non-Media)	4.00	4.00	7.06
320.2	N/A	Solution Chemical Feeder	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment	N/A	N/A	5.00
320.4	N/A	Media Water Treatment Equipment (pressurized vessels)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
330.1	N/A	Storage Tanks	N/A	N/A	1.67
330.2	N/A	Pressure tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.53		
	331001	TD mains not classified by size	N/A	1.53	1.53
	331100	TD mains 4-inch & less	N/A	1.53	1.53
	331200	TD mains 6-inch to 8-inch	N/A	1.53	1.53
	331300	TD mains 10-inch to 16-inch	N/A	1.53	1.53
	332000	Fire Mains	0.00	1.53	1.53
333	333000	**Services**	2.48	2.48	2.48
334		**Meters**			
	334100	Meters	2.51	2.51	2.51
	334200	Meter installations	N/A	2.51	2.51
335	335000	**Hydrants**	2.00	2.00	2.00
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67

339		**Other Plant & Misc Equipment**	4.98		
	339100	Other P/E Intangible		0	0
	339500	Other P/E SS		0	2.00
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.55	4.59	4.59
	340200	Computer & periph equipment	4.55	4.59	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks	N/A	25.00	25.00
	341200	Transportation Equip, heavy Duty Trucks	N/A	25.00	15.00
342	342000	**Store Equipments**	3.92	4.02	3.91
343	343000	**Tools Shop & Garage Equipments**	4.14	4.02	4.02
344	344000	**Lab equipments**	3.71	3.71	3.71
345	345000	**Power operated equipments**	5.14	5.02	5.02
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	10.28	10.30	10.30
	346300	Communication Equip Other	N/A	4.93	4.93

EXHIBIT DMH-6

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC.,

TUBAC WATER DISTRICT

BY DOROTHY HAINS

Engineering Report
For Arizona-American Water Company's Tubac Water District
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

EXECUTIVE SUMMARY

Recommendations:

I. Staff recommends the depreciation rates for Arizona-American Company's Tubac District ("Tubac") presented in Figure 6 by NARUC account. (See § J of report for discussion and details.).

II. Staff recommends approval of the meter and service line installation charges listed in the right-hand columns of Table 4. (See § K of report for discussion and details.)

III. All production wells in Tubac contain arsenic levels exceeding the arsenic maximum contaminant level ("MCL"). Tubac proposes to install a granular iron media filter arsenic removal treatment plant ("ARTP") and seek Arsenic Cost Recovery Mechanism ("ACRM") approval from the Commission. Staff believes that ARTP installation is necessary. (See § K of report for discussion and details.)

IV. Water testing expenses are based upon participation in the Arizona Department of Environmental Quality ("ADEQ") Monitoring Assistance Program. Annual testing expenses should be adjusted to $2,360. (See § G and Table 1 for discussion and details.)

Conclusions:

I. ADEQ has determined that Tubac is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. The ADEQ has granted Tubac a waiver of the arsenic MCL violation while it works to address the problem. (See § D for a discussion and details.)

II. Tubac is within the Santa Cruz Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") requirements governing water providers. (See § F of report for discussion and details.)

III. Tubac has 8.02% lost water which is within acceptable limits. (See § H of report for discussion and details.)

IV. Tubac has an approved cross connection tariff. (See § K of report for discussion and details.)

V. Tubac has adequate production and storage capacity to serve its existing customers. (See § B of report for discussion and details.)

VI. Tubac has an approved curtailment tariff. (See § K of report for discussion and details.)

VII. A check with the Utilities Division Compliance Section showed Tubac has no outstanding compliance issues. (See § E of report for discussion and details.).

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A. LOCATION OF COMPANY

Arizona-American Water Company Tubac Water District ("Tubac") serves water to approximately 540 customers and is located in the Town of Tubac which is north of the City of Nogales, near I-19 in Santa Cruz County. Figure 1 describes the location of Tubac Water District, and Figure 2 describes the Certificate of Convenience and Necessity ("CC&N") area of Tubac.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on May 14, 2008, by Dorothy Hains, Utilities Engineer, accompanied by the Company's representatives, Steve Lutringer, (Company's Operations Supervisor) and Kathy Papini (Tubac On-site Operator).

System Analysis

Tubac operates a drinking water system that consists of three drinking water wells that are capable of producing a total flow of 1,300 gallons per minute ("GPM") and 50,000 gallons of total storage capacity. The water system has adequate storage and well production. Figures 3A and 3B provide process schematic drawings showing both the active and inactive components of the system.

Well Data

Active Drinking Water Wells

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
2.1	55-604371	1965	12	140	4	40	300
4.1	55-505043	1983	16	650	8	75	500
5.1	55-632901	1977	12	302	6	75	500

Inactive Well

Well #	ADWR No.	Year Drilled	Casing Size (inches)	Well Depth (ft)	Well Meter Size (inches)	Pump (HP)	Pump Yield (GPM)
3.1	55-604370	1965	12	204	3	25	180

Active Storage, Pumping

Location	Structure or equipment	Capacity
Booster Pump Station	Booster Pumps	Two 5-HP
	Pressure Tank	One 2,000 gal
	Pressure Tank	One 5,000 gal
	Storage Tank	One 50,000 gal
Well #5 Site	Pressure Tank	One 5,000 gal
Well #4 Site	Pressure Tank	One 5,000 gal
Well #2 Site	Pressure Tank	One 5,000 gal

Distribution Mains

Diameter (inches)	Material	Length (feet)
4	Various	28,468
6	polyvinyl chloride ("PVC")	12,017
6	Ductile Iron pipe ("DIP")	352
8	PVC	20,295
8	DIP	897

Meters

Size (inches)	Quantity
⅝ x ¾	513
¾	N/A
1	46
1½	2
2	14
3	4

C. ARSENIC

The most recent lab analysis by Tubac indicated that the arsenic levels in its source supply vary from 16 µg/l to 36 µg/l[1]. Tubac is not in compliance with the arsenic MCL standard[2], however, Tubac is in the process of designing an arsenic treatment plant ("TP") which is expected to bring the system into compliance.[3] The proposed arsenic treatment plant will be installed at the Well No. 5.1 site in 2009. (See the detailed discussion in § K.)

[1] According to a 2007 sample test results, arsenic levels in ground water are 24 µg/l detected in Well #2.1, 36 µg/l detected in Well #4.1 and 16 µg/l detected in Well #5.1.
[2] Arsenic MCL is 10 µg/l.
[3] The Arizona Department of Environmental Quality has granted Tubac a waiver of the MCL violation while it works to address the problem.

D. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Based on an ADEQ memorandum dated February 8, 2008, ADEQ has determined that Tubac is currently in compliance with its requirements. ADEQ also stated that it has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4 (except for arsenic).

E. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no outstanding compliance issues.

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Tubac is in ADWR's Santa Cruz Active Management Area ("AMA"). Staff received a Compliance Status Report from ADWR related to Tubac on June 3, 2008. ADWR stated that Tubac is in compliance with ADWR requirements governing water providers.

G. WATER TESTING EXPENSES

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

1. MAP will do baseline testing on everything except copper, lead, bacteria and disinfection by-products.

2. ADEQ testing is performed in 3-year compliance cycles. Therefore, monitoring costs are estimated for a 3-year compliance period and then presented as a pro forma expense on an annualized basis.

3. All monitoring expenses are based on Staff's best knowledge of lab costs and methodology and one point of entry.

4. The estimated water testing expenses represent a <u>minimum</u> cost based on no "hits" other than lead and copper, and assume compositing of well samples. If any constituents were found, then the testing costs would dramatically increase.

Table 1 shows the estimated annual monitoring expense, assuming participation in the MAP program. Water testing expenses should be adjusted to the annual expense amount of $2,360 shown in Table 1.

Table 1 Water Testing Cost

Monitoring – 3 wells (Tests per 3 years, unless noted.)	Cost per test	No. of tests per three year period	Total cost per three year period	Annual Cost
Bacteriological – monthly	$15	108	$1,620	$540
Inorganics – Priority Pollutants	$300	MAP	MAP	MAP
Radiochemical – (1/ 4 yr)	$60	MAP	MAP	MAP
Phase II and V:				
IOC's, SOC's, VOC's	$2,805	MAP	MAP	MAP
Nitrites	$20	MAP	MAP	MAP
Nitrates – annual	$40	12	MAP	MAP
Asbestos – per 9 years	$180	2⅓	MAP	MAP
Lead & Copper – annual*	$0	20	$0	$0
TTHM/HHAs –annually**	$0	6	$0	$0
Maximum chlorine residual levels***	$0	108	$0	$0
MAP fees (annual)				$1,820
Arsenic*&**	$0	12	$0	$0
Total				**$2,360**

* The test will be done in the Company's lab in Belleville.

** To comply with ADEQ requirement, the Company has to conduct annual arsenic testing at each well site and each Point of Entry ("POE") site.

*** There is no cost for this element because the Company uses probe to measure this element.

H. WATER USAGE

Figure 4 is a graph that shows water consumption data in gallons per day ("GPD") per customer for the system for the test year period of January 2007 through December 2007.

Water Sold

Based on information provided by Tubac, water use for the year 2007 is presented in Figure 4. The high monthly water use was 676 gallons per day ("GPD") per connection in July, and the low monthly water use was 326 GPD per connection in February. The average annual use was 483 GPD per connection.

Lost Water

Lost water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, fire fighting, and flushing. Lost water for Tubac was calculated to be 8.02% which is within acceptable limits.

I. GROWTH

Figure 5 shows customer growth based on the service connection data contained in the Company's annual reports, the number of customers increased from 485 at the end of 2002 to 536 by the end of 2007, with an average growth rate of 12 customers per year. Based on the linear regression analysis, Staff estimates that the Company could have approximately 600 customers by the end of 2012. The following tables summarize Staff's projected growth.

Table 2 Actual and Projected Growth

Year	Nos. of Customers	
2002	485	Reported
2003	484	Reported
2004	495	Reported
2005	514	Reported
2006	532	Reported
2007	536	Estimated
2008	552	Estimated
2009	564	Estimated
2010	576	Estimated
2011	589	Estimated
2012	601	Estimated

J. DEPRECIATION RATES

Decision No. 67093 (dated June 30, 2004) approved the depreciation rates used by Tubac in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

The Company proposed a 25% depreciation rate for its heavy duty trucks but provided no specific justification for this accelerated depreciation rate. Staff believes that a 15% depreciation rate is more appropriate since heavy duty trucks usually have a useful life of at least 6 to 7 years.

The Company does not own and operate a water treatment plant yet; however, the Company states that Tubac's proposed arsenic treatment plant will be designed and operated by a granular iron media filter plant, and Staff recommends a 5% depreciation rate for media Water Treatment Plant Equipment (account No. 320.4).

Staff recommends the depreciation rates presented in Figure 6 by NARUC account.

K. OTHERS

1. Service Line and Meter Installation Charges

The Company requested that meter and service line installation charges for all size meters be determined on an individual case basis. Staff is recommending specific charges for meters smaller than 3-inch and actual costs for 3-inch meters and larger. Staff recommends approval of separate meter and service line installation charges as shown under the column headings "Staff Recommended" in Table 4 for meter sizes smaller than 3-inches. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff which Staff recommends be adopted in this case.

Table 3 Service Line and Meter Installation Charges (Tubac)

Meter Size	Current Charges (Service line installation)	Current Charge (Meter installation)	Proposed Charges (Service line installation)	Proposed Charge (meter installation)	Staff Recommendation (Service Line)	Staff Recommendation (meter installation)	Staff Recommended total charge
5/8 x 3/4-inch	$370	$130	Actual Cost	Actual Cost	$445	$155	$600
3/4-inch	$370	$205	Actual Cost	Actual Cost	$445	$255	$700
1-inch	$420	$240	Actual Cost	Actual Cost	$495	$315	$810
1½-inch	$450	$450	Actual Cost	Actual Cost	$550	$525	$1,075
2-inch (Turbo)	$580	$945	Actual Cost	Actual Cost	$830	$1,045	$1,875
2-inch (Compound)	$580	$1,640	Actual Cost	Actual Cost	$830	$1,890	$2,720
3-inch (Turbo)	$745	$1,420	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch (Compound)	$765	$2,195	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Turbo)	$1,090	$2,270	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch (Compound)	$1,120	$3,145	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Turbo)	$1,610	$4,425	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch (Compound)	$1,630	$6,120	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

2. Curtailment Tariff

The Company has an approved curtailment tariff on file with the Commission.

3. Cross Connection & Backflow Tariff

The Company has an approved Cross Connection & Backflow Tariff.

4. Arsenic Cost Recovery Mechanism ("ACRM")

In order to meet the arsenic MCL standard requirement, Tubac plans to install a granular iron media filter arsenic removal treatment plant ("ARTP"). Tubac proposes plant installation to begin in spring 2009. The estimated ARTP installation cost is one million dollars. Staff believes that ARTP installation is necessary.

FIGURES

FIGURE 1

TUBAC WATER DIVISION CERTIFICATED AREA

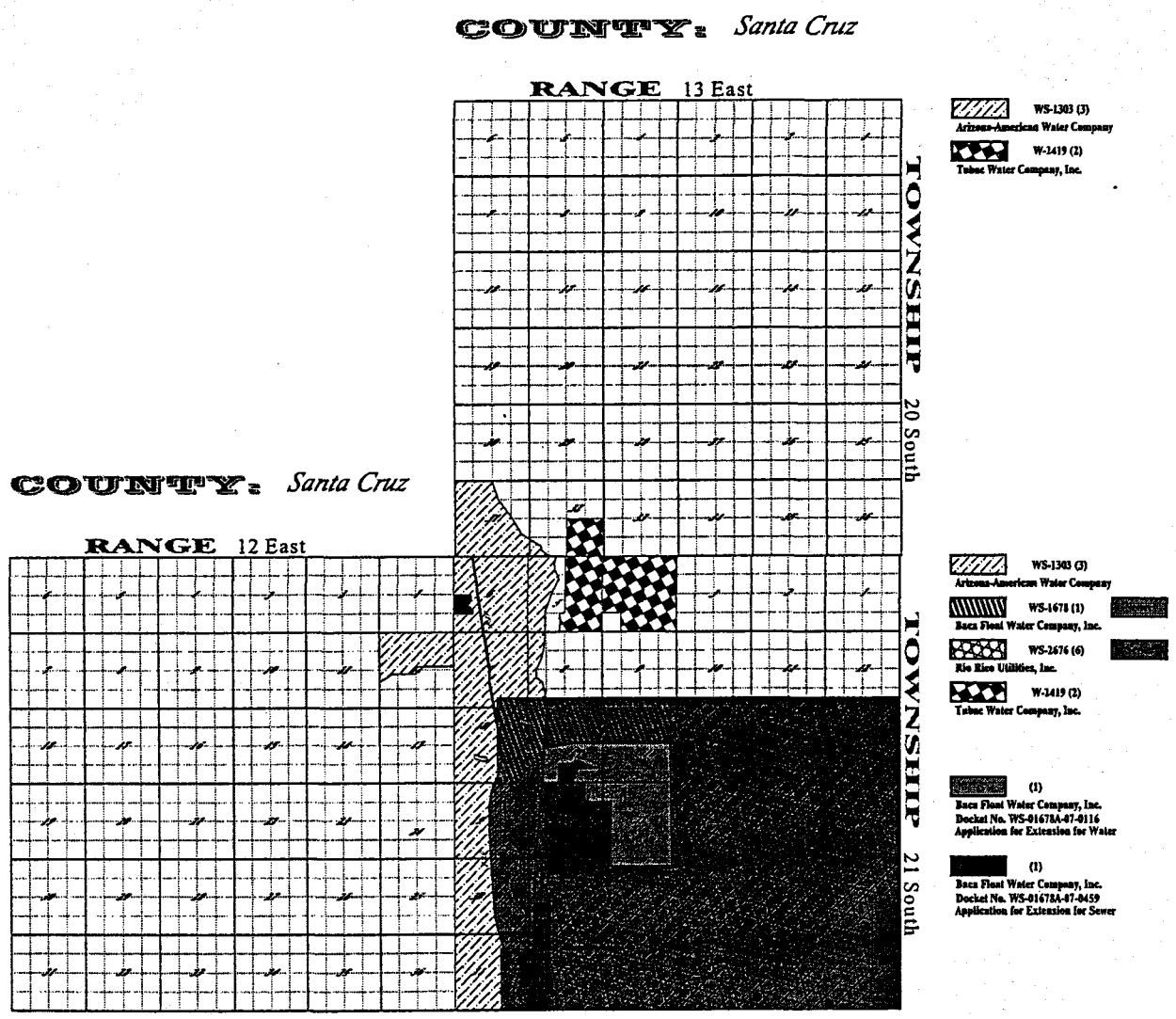

FIGURE 2

LOCATION OF TUBAC WATER DIVISION

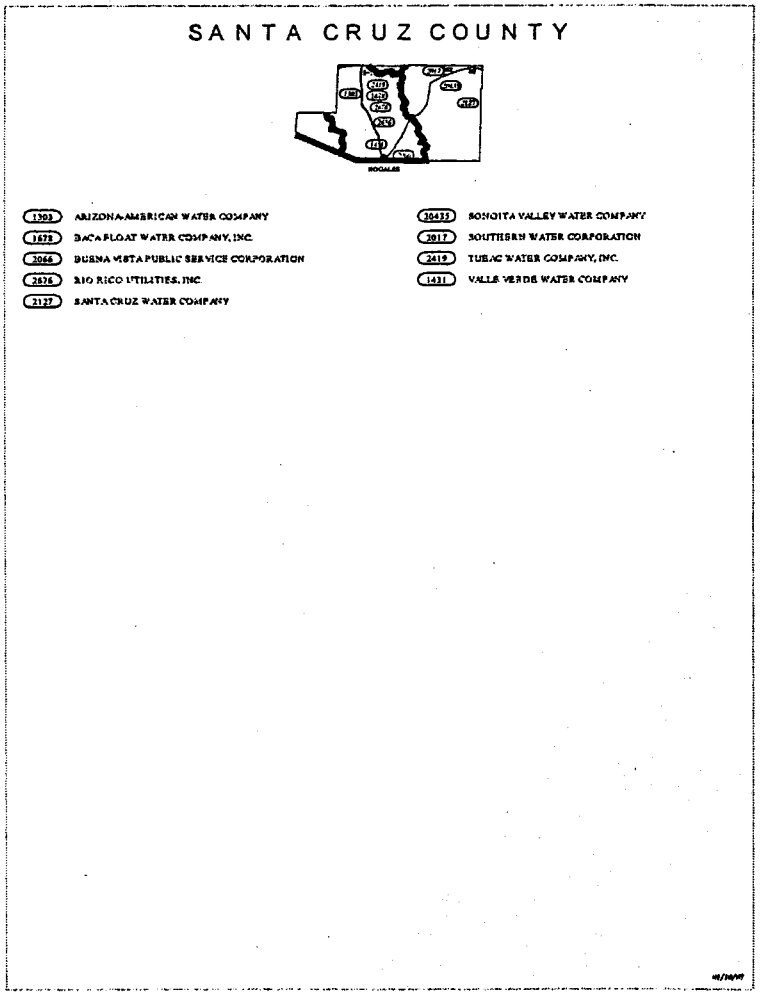

FIGURE 3A

TUBAC WATER DIVISION SYSTEMATIC DIAGRAM FOR EXISTING SYSTEMS

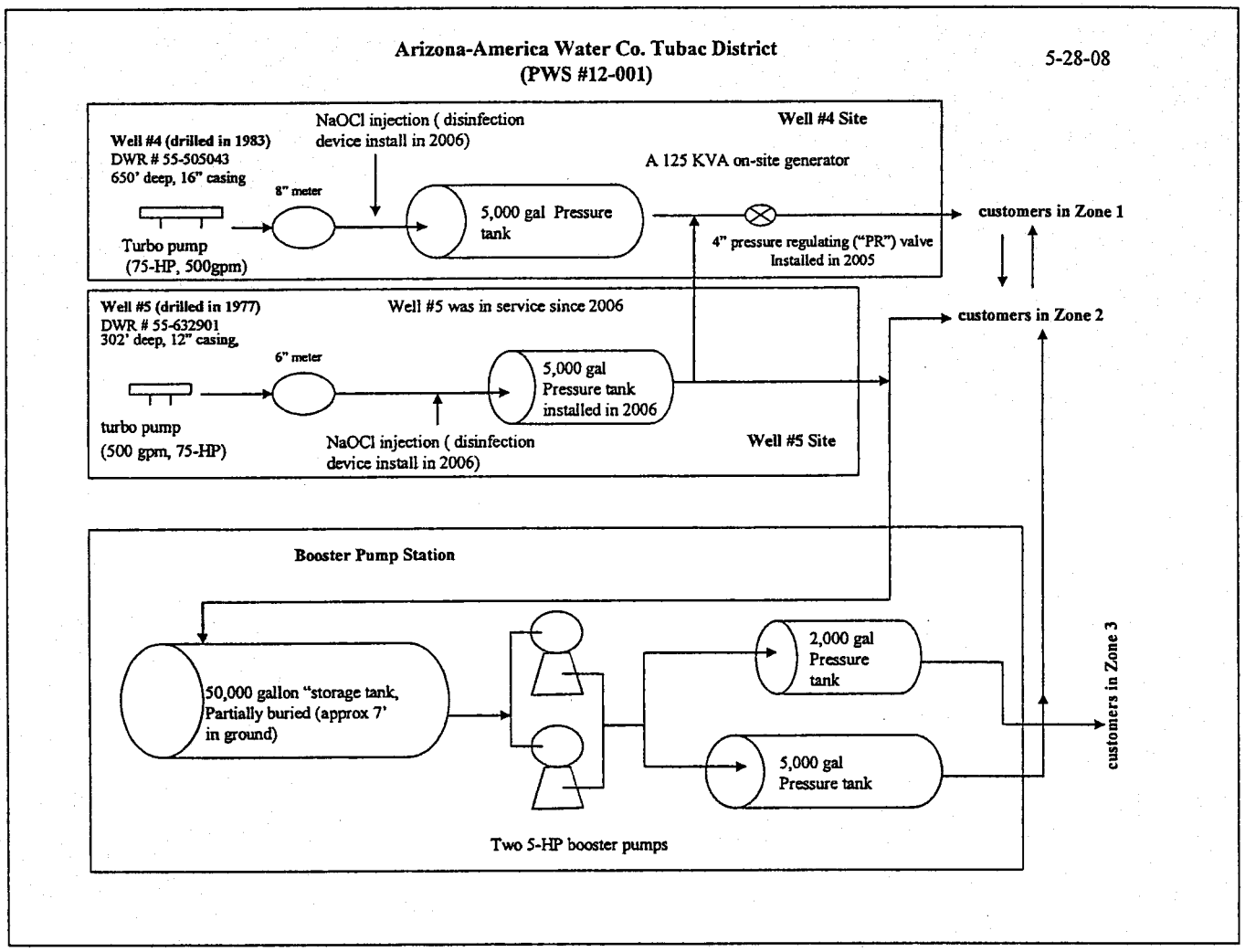

FIGURE 3B

TUBAC WATER DIVISION SYSTEMATIC DIAGRAM

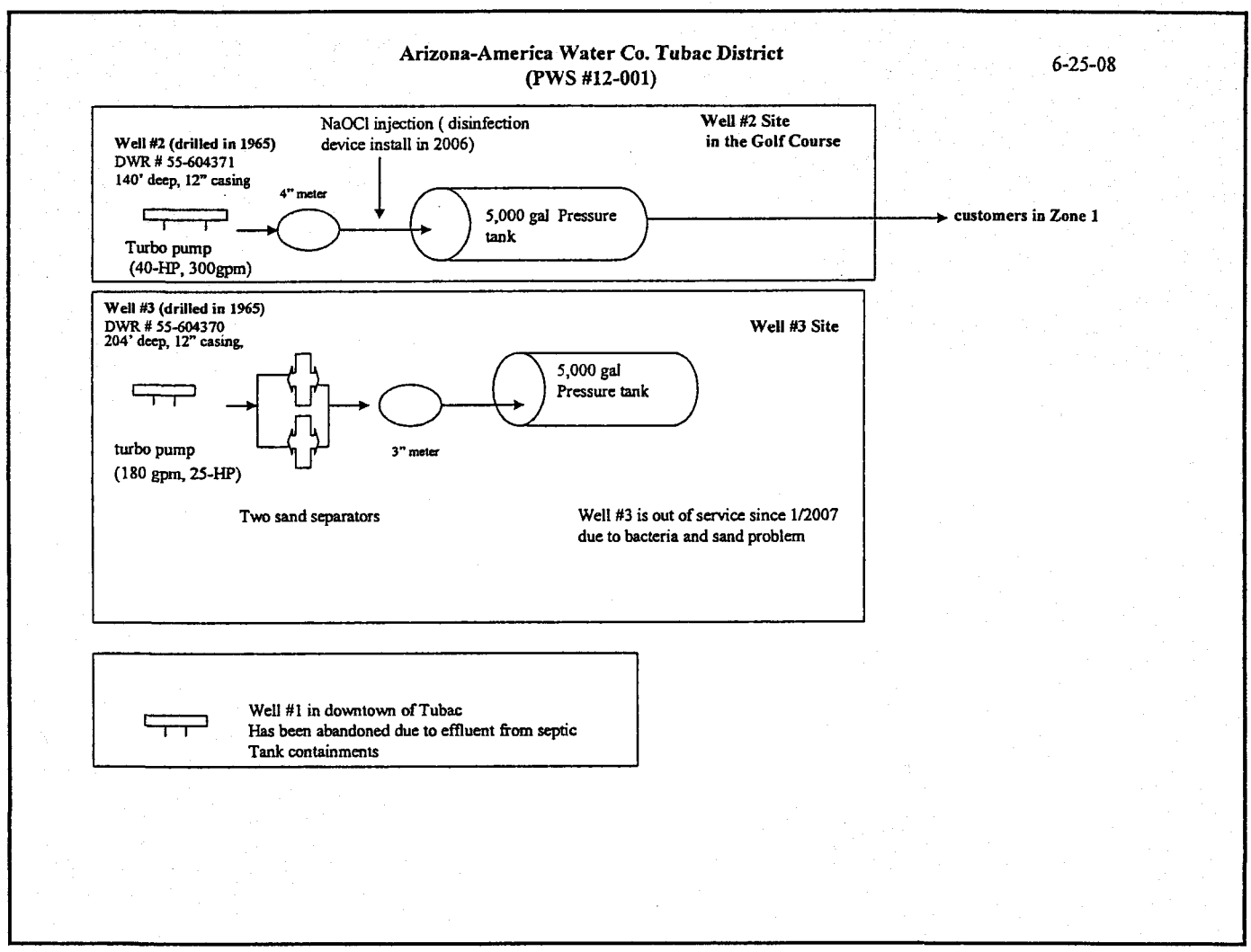

FIGURE 4

TUBAC WATER DIVISION WATER USAGE

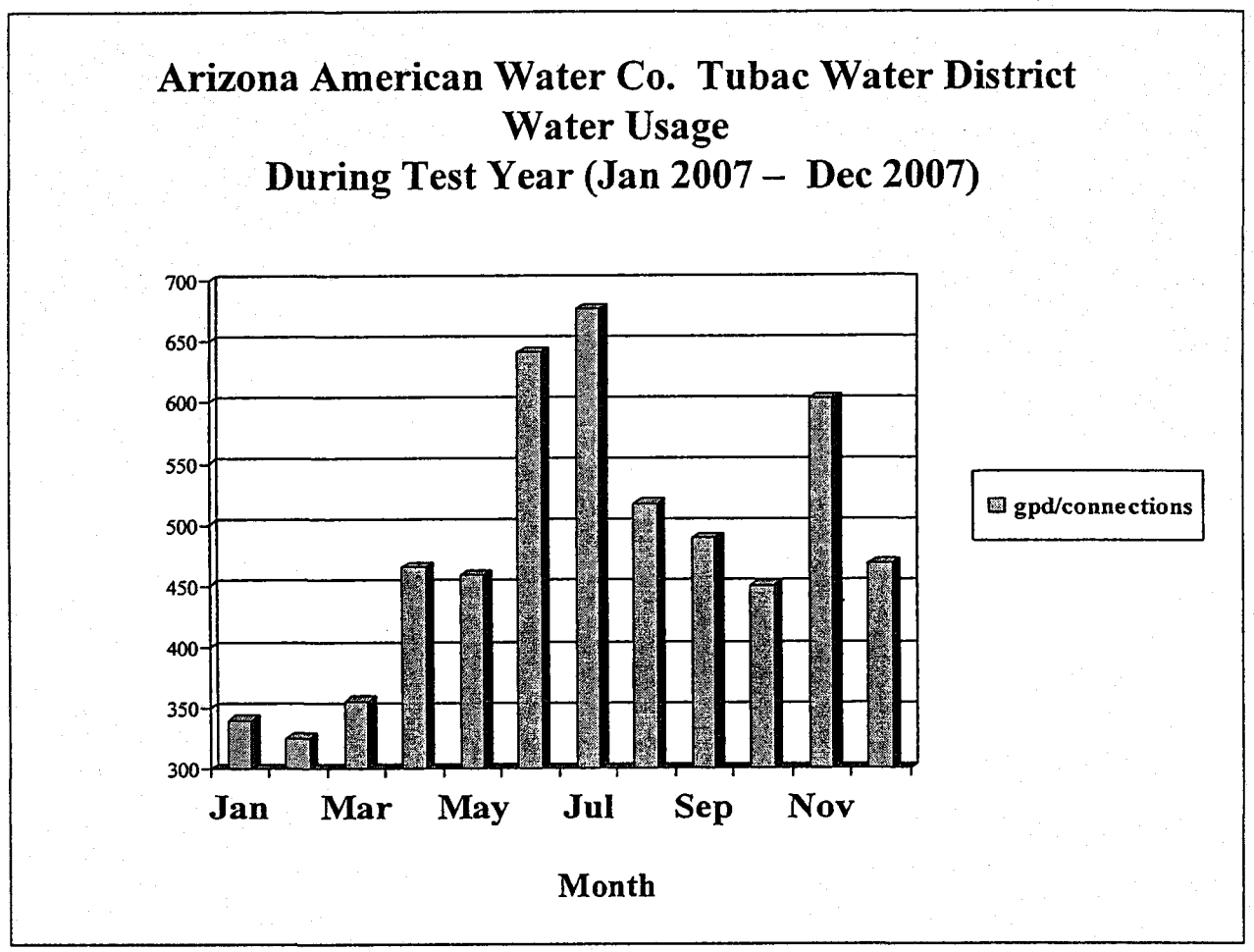

FIGURE 5

GROWTH IN TUBAC WATER DIVISION

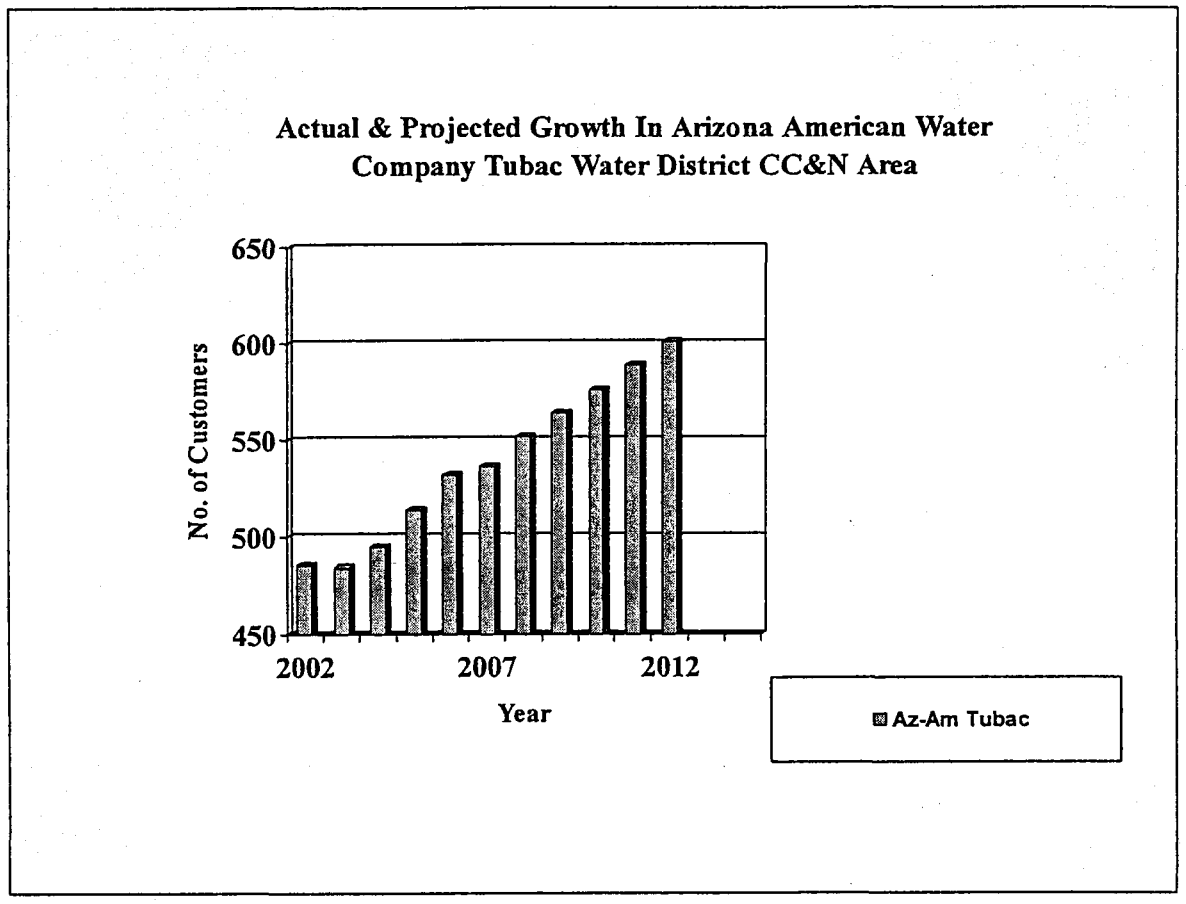

FIGURE 6
DEPRECIATION RATES FOR WATER SYSTEMS (Tubac)

NARUC Acct #	Company's Account #.	Depreciable Plant	Approved Rate (Decision # 67093)	Proposed Rate (%) (Tubac)	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**	0		0
	303200	Land & Land Rights SS		0	
	303300	Land & Land Rights P		0	
	303400	Land & Land Rights WTLand & Land		0	
	303500	Right TD		0	
	303600	Land & Land Right AG		0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.40	2.21	2.21
	304200	Structure & Improvement P	1.94	2.21	2.21
	304300	Structures and Improvements WT	0	2.21	2.21
	304400	Structure & Improvement TD	1.92	2.21	2.21
	304600	Structure & Improvement office	2.89	2.21	2.21
	304800	Structure & Improvement Misc		0	
305	305000	**Collection & Impounding reservoirs**	0	0	0
307	307000	**Wells & Springs**	3.08	3.08	3.08
310	310100	**Power Generation Equip Other**	0	4.24	4.24
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.24	4.24	4.24
	311300	Pump Equipment Diesel	5.00	4.24	4.24
	311500	Pump Equipment Gas/Other	4.24	4.24	4.24
320		**Water Treatment**			
320.1	320100	Water Treatment Equipment (Non-	4.00	4.00	4.00
	N/A	Media)			
320.4	N/A	Water Treatment Equipment (Media)	N/A	N/A	5.00
320.2	N/A	Chemical Solution Feeders	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.62	1.62	1.62
330.1	N/A	Storage Tanks	N/A	N/A	2.22
330.2	N/A	Pressure Tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.97		
	331001	TD mains not classified by size		1.97	1.97
	331100	TD mains 4-inch & less		1.97	1.97
	331200	TD mains 6-inch to 8-inch		1.97	1.97
	331300	TD mains 10-inch to 16-inch		2.34	2.34
333	333000	**Services**	2.45	2.45	2.45
334		**Meters**	2.42		
	334100	Meters		2.42	2.42
	334200	Meter installations		2.42	2.42
335	335000	**Hydrants**	1.97	1.97	1.97
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**			
	339100	Other P/E Intangible		0	0

	339500	Other P/E TD		0.00	0.00
340					
	340100	Office Furniture & Equipments	3.28	10.83	3.28
	340200	Computer & periph equipment	3.28	10.83	10.83
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks		25.00	25.00
	341200	Transportation Equip, heavy Duty Trucks		25.00	15.00
342	342000	**Store Equipments**	4.00	3.59	3.59
343	343000	**Tools Shop & Garage Equipments**	3.42	3.59	3.59
344	344000	**Lab equipments**	0.00	0.0	0.0
345	345000	**Power operated equipments**	0.00	4.64	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	5.03	5.03	5.03
	346300	Communication Equip Other (misc)	4.93	4.93	4.93

EXHIBIT DMH-7

ENGINEERING REPORT FOR ARIZONA-AMERICAN WATER COMPANY, INC.,

MOHAVE WASTEWATER DISTRICT

BY DOROTHY HAINS

JANUARY 9, 2009

Engineering Report
For Arizona-American Water Company's Mohave Wastewater Division
Docket No. W-01303A-08-0227
(Rate Increase Application)

By Dorothy Hains

January 9, 2009

EXECUTIVE SUMMARY

Recommendations:

I. It is recommended that the Mohave Wastewater District use depreciation rates as delineated in Figure 6. (See § G and Figure 6 of the report for discussion and details.)

II. Staff recommends approval of the Off-site Facilities Hook-up Fee ("OFHF") fees and reporting requirement contained in Figure 7. The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2010, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period. The first report shall cover the time frame from inception of this tariff through December 31, 2009. (See § F of the report for discussion and details.)

III. Staff recommends the Company reported amount of $11,403 annual chemical testing costs. (See § H of the report for discussion and details.)

Conclusions:

I. The Arizona-American Mohave Wastewater District ("Mohave District") is in full compliance with the Arizona Department of Environmental Quality ("ADEQ") for operation and maintenance, operator certification and discharge permit limit. (See § E of the report for discussion and details.)

II. Staff concludes that the Mohave Wastewater District's treatment plants have adequate capacity to treat its customers. (See § C of the report for discussion and details.)

III. The Company currently is not in compliance with the reporting requirements of its OFHF Tariff. (See § F of the report for discussion and details.)

IV. A check with the Utilities Division Compliance Section showed no delinquent compliance items. (See § F of the report for discussion and details.)

V. The Wishing Well Wastewater Treatment Plant expansion project was completed and in service in summer 2008. The total cost of this project was $4,276,039. (See § H of the report for discussion and details.)

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A. LOCATION OF COMPANY

Arizona-American – Mohave Wastewater District ("Mohave Wastewater District" or "Company") provides service in two different areas, the Arizona Gateway development and in Mohave Valley. Arizona Gateway is located at the intersection of Highway 95 and Interstate 40 and is approximately 12 miles north of Lake Havasu City. Mohave Valley is located south of Bullhead City. The Company serves approximately 1,240 customers in its Certificate of Convenience and Necessity ("CC&N") service area. Figure 1 describes the CC&N area of Mohave Wastewater District, and Figure 2 describes the location of the Company within Mohave County.

B. DESCRIPTION OF THE WASTEWATER SYSTEM

Mohave Wastewater District owns and operates two wastewater treatment plants ("WWTP"s), Wishing Well WWTP and Arizona Gateway WWTP. Both plant facilities were visited on September 30, 2008, by Dorothy Hains, Utilities Engineer, accompanied by Company representative, David Evans (the Company's Operation Superintendent).

Arizona Gateway System

This system is a developer built system. The Arizona Gateway WWTP is a 112,000 gallon per day ("GPD") extended aeration plant that serves a collection system for a commercial development block which includes a truck stop, fast food chains, gas station, storage building, etc. This underground-treatment plant consists of influent entering into a flow equalization basin, treated in two separate train aeration reactors with a sludge holding tank. The treated effluent is filtered then disinfected using chlorination/de-chlorination and final-treated effluent is disposed into a two-cell, unlined evaporation pond located within the compound of the treatment plant site. Currently this plant serves only 3 customers.

The collection system served one commercial block customer during the test year ending December 31, 2007. A system schematic is shown for this system in Figure 3A.

Lift Station

Location	Quantity of Pumps	Horsepower per Pump	Capacity per Pump (GPM)	Wet Well Capacity (gals.)
Arizona Gateway WWTP	1	1.4	70	N/A

Manholes

Type	Quantity
Standard	12

Collection Mains

Diameter	Material	Length (Feet)
8-inch	PVC	4,000
	Total:	4,000

Service Laterals

Diameter	Material	Length (Feet)
6-inch	PVC	16
	Total:	16

Wishing Well System

The Mohave Valley area is served by the Wishing Well System. The Wishing Well WWTP is a 500,000 GPD extended aeration plant[1]. This treatment process consists of influent entering into the headworks, aeration basins and clarifier tanks, sludge digester, filters, and a chlorine disinfection unit. Final treated effluent discharges through an effluent channel flow measuring weir to the Desert Lake Golf course for irrigation use. After dewatering, dry sludge is disposed of at a landfill.

Figures 3B and 3C are schematics of this system. The following tables describe the system in more detail.

Lift Stations

Location	Quantity of Pumps	Horsepower per Pump	Capacity per Pump (GPM)	Wet Well Capacity (gals.)
Mountain View Drive	2	7.5	114	2,100
Lago Cove	2	3	17	1,000

[1] The plant is treating the sewage to Class B effluent standards which is suitable for reuse in the golf course.

Force Mains

Size	Material	Length (Feet)
4-inch	PVC	3,000

Manholes

Type	Quantity
Standard	365
Drop	2

Cleanouts

Quantity
14

Collection Mains

Diameter	Material	Length (Feet)
6-inch	PVC	201
8-inch	PVC	89,213
10-inch	PVC	7,426
12-inch	PVC	12,300
15-inch	PVC	6,086

Service Laterals

Diameter	Material	Length (Feet)
4-inch	PVC	1,511
8-inch	PVC	2
	Total:	16

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ regulates the wastewater systems under Permit Nos. 30157 and 36948 for Wishing Well System and Permit No. 36949 for Arizona Gateway System. Per the February 5, 2008 Compliance Status Reports issued by ADEQ, both systems are in full compliance for operation and maintenance, operator certification and discharge permit limits.

F. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items.

Off-site Facilities Hookup Fee ("OFHF") Tariff

The Company currently has an approved OFHF Tariff. It appears that the Company has failed to comply with the reporting requirement contained in the OFHF tariff in Figure 7. Staff recommends approval of the OFHF tariff in Figure 7. The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2010, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period. The first report shall cover the time frame from inception of this tariff through December 31, 2009.

G. DEPRECIATION RATES

Decision No. 69440 (dated May 1, 2007) approved the depreciation rates used by Mohave Wastewater District in this rate proceeding except that the Company reorganized the authorized rates utilizing the National Association of Regulatory Commissioners' ("NARUC") latest plant account matrix as presented in Figure 6.

Staff recommends the depreciation rates presented by NARUC account in Figure 6.

H. OTHER ISSUES

1. Service Line Connection Charges

The Company requested that service line connection charges for all classes be determined on an individual case basis. Staff believes that the Company requests are reasonable and recommends approval.

Table 2 Service Line Connection Charges (Mohave WW)

	Current Charges	Proposed Charges	Staff Recommendation total charges
Residential	$250	Actual Cost	Actual Cost
Commercial	$250	Actual Cost	Actual Cost
School	$250	Actual Cost	Actual Cost
Multiple Dwelling	Actual Cost	Actual Cost	Actual Cost
Mobile Home Park	Actual Cost	Actual Cost	Actual Cost
Effluent	$250	Actual Cost	Actual Cost

2. Chemical Testing Expenses

Arizona Gateway System

The Company's estimated annual water testing expense for Arizona Gateway System (07-695) is $4,384. Staff concludes that this estimate is reasonable. (See Table 3)

Table 3 Wastewater Testing Cost (Arizona Gateway LLC -APP Permit #P36949)

	Cost per test	No. of tests per year	Annual Cost
Fecal Coliform – monthly	$27	12	$324
BOD (effluent) weekly	$40	52	$2,080
TSS (effluent) – weekly	$15	52	$780
Total Nitrogen – monthly	$100	12	$1,200
Total			**$4,384**

Wishing Well System

The Company's estimated annual water testing expense for Wishing Well System is $7,019. Staff concludes that this estimate is reasonable. (See Table 4)

Table 4 Wastewater Testing Cost (Wishing Well - APP Permit # P105010)

	Cost per test	No. of tests per year	Annual Cost
Fecal Coliform – daily (4 min per week)	$27	208	$5,616
TCLP Bio-solids (metals) - annually	$260	1	$260
Total Nitrogen (effluent) - quarterly	$100	4	$400
Fluoride (effluent) - annually	$20	1	$20
Cyanide (effluent) – annually	$73	1	$73
Metals (effluent) – annually	$210	1	$210
VOC's (effluent) annually	$250	1	$250
Semi-Volatile Organics (effluent) annually	$190	1	$190
Total			**$7,019**

Therefore, Staff recommends water testing expenses be adjusted for purposes of this rate case to the Company's total estimated annual expense amount of $11,403.

3. Wishing Well Treatment Plant Expansion

The Company began its Wishing Well Treatment Plant expansion project in 2007. The 250,000 GPD plant was incapable of properly treating wastewater flow, and therefore, the Company expanded the treatment capacity to 500,000 GPD. This construction work was completed and plant was in service in summer 2008. The total cost of the construction was $4,276,039. The itemized costs per NARUC accounts are listed in the table below:

NARUC Acct #	Description	Per the Company's Acct #	Item Description	Information from the Company ($)	**Staff recommended Total costs($)**
354	Structure & Improvements				**976,643.**[6]
		354200 Structures and Improvements			
		354400-ww struct	Fence (barrier, gate,	5,510.40	

		& Imp TDP	masonry, palisade, wire mesh, wooden)		
		354400-ww struct & Imp TDP	landscaping	68,789.75	
		354400-ww struct & Imp TDP	Vault/chamber/pit (concrete, fiberglass, plastic, steel)	201,194.81	
		354400-ww struct & Imp TDP	Roofing	100,825.56	
		354400-ww struct & Imp TDP	Railing & Grating	2,078.00	
		354400-ww struct & Imp TDP	Electrical – wiring/conduit	62,501.86	
		354400-ww struct & Imp TDP	Electrical – transformer	94,630.96	
		354400-ww struct & Imp TDP	Electrical – surge/transient equip (lightning arrestors)	35,008.91	
		354400-ww struct & Imp TDP	Electrical – disconnect (fused, manual, spring loaded)	287,073.06	
		354400-ww struct & Imp TDP	Electrical – distribution/lighting panel	119,030.29	
355	Power Generation Equipment	355400-ww power gen equip TDP	Generator (alternator – AC, DC)	139,597.22	**186,696.08**
		354400-ww struct & Imp TDP	Electric – Changeover/Transfer switch (Auto, manual)	47,098.86	
361	Sewer Collection	361100-ww collecting mains	Pipe & fittings (PVC 10")	2,096.15	**146,946.40**
		361100-ww collecting mains	Pipe & fittings (PVC 12")	38,429.51	
		361100-ww collecting mains	Pipe & fittings (PVC 16")	80,701.96	
		361100-ww collecting mains	Pipe & fittings (PVC 18")	6,113.79	
		361100-ww collecting mains	Manhole/catch basin	19,604.99	
364	Flow meter device	380000-ww TD Equipment	Meters – process(closed pipe time of fight, magnetic, multi-jet, programmable, open channel, ultrasonic paddle, propeller, thermal mass flow, ultrasonic, vertex Rota meter)	18,484.70	**18,487.70**

371	Pumping Equipment	371100-ww pump Equip	Submersible centrifugal pump	6,611.73	**6,611.73**
380	Treatment and Disposal Equip				**2,819,517.15**
		380100 WW TD Equip : Sedimentation tanks/ACC			
		380000-ww TD Equip	Clarifier tanks	464,984.14	
		380000-ww TD Equip	Clarifier (decanter)	565,532.19	
		380000-ww TD Equip	Pretrement – aerator (cascade, diffused air, multiple tray, spray)	514,005.22	
			Subtotal	**1,544,521.55**	
		380300 WW TD Equip: sludge dry/filter			
		380000-ww TD Equip	Galvanized 2"	13,483.33	
		380000-ww TD Equip	Galvanized 3"	784.20	
		380000-ww TD Equip	Galvanized 4"	4,542.48	
		380000-ww TD Equip	Steel 6"	11,157.88	
		380000-ww TD Equip	Steel 8"	1,435.29	
		380000-ww TD Equip	Steel 10"	12,763.15	
		380000-ww TD Equip	Press (Auger/Screw, belt, centrifugal/centrifuge, filter, lisep, picket fence thickener, plate & frame, washpactor)	220,585.25	
		380000-ww TD Equip	Compressor (centrifugal, liquid ring, liquid ring oil free, Millbury aeromixer, positive displacement)	56,014.26	
			Subtotal	**320,765.84**	
		380500 WW TD Equip: chemical treatment plant			
		380000-ww TD Equip	Pipe & fitting (PVC 1")	9,944.87	
		380000-ww TD Equip	Pipe & fitting (PVC 2")	476.12	
		380000-ww TD	Pipe & fitting (DIP 3")	5,951.51	

		Equip			
		380000-ww TD Equip	Pipe & fitting (DIP 6")	12,603.21	
		380000-ww TD Equip	Pipe & fitting (DIP 12")	82,448.76	
		380000-ww TD Equip	Pipe & fitting (DIP 14")	57,644.26	
		380000-ww TD Equip	Pipe & fitting (DIP 16")	83,381.46	
		380000-ww TD Equip	Chemical Feed - Liquid metering pump/Feeder	53,493.61	
		380000-ww TD Equip	Gas dispenser	158,221.66	
			Subtotal	**464,165.46**	
		380600 WW TD Equip: other disposal			
		380000-ww TD Equip	Grit removal (cyclone, detritor, grit dredger, screw)	135,355.09	
		380000-ww TD Equip	Blower (fan, rotary lube, turbine)	292,182.67	
		380000-ww TD Equipment	Flow control (valves)	62,526.54	
			Subtotal	**490,064.30**	
396	Communication equip	380000-ww TD Equip	Logic controller	25,570.16	**110,425.89**
		380000-ww TD Equip	antenna	39,627.37	
		380000-ww TD Equip	Auto dialers	1.268.72	
		380000-ww TD Equip	DPC/RTU	25,570.16	
		380000-ww TD Equip	Telemetry equip	18,389.48	
397	Misc Equip	3970000-ww Misc Equip	eyewash	10,713.43	**10,713.43**
Total					**4,276,038.98**

FIGURES

Figure 1

MOHAVE SEWER CERTIFICATED AREA

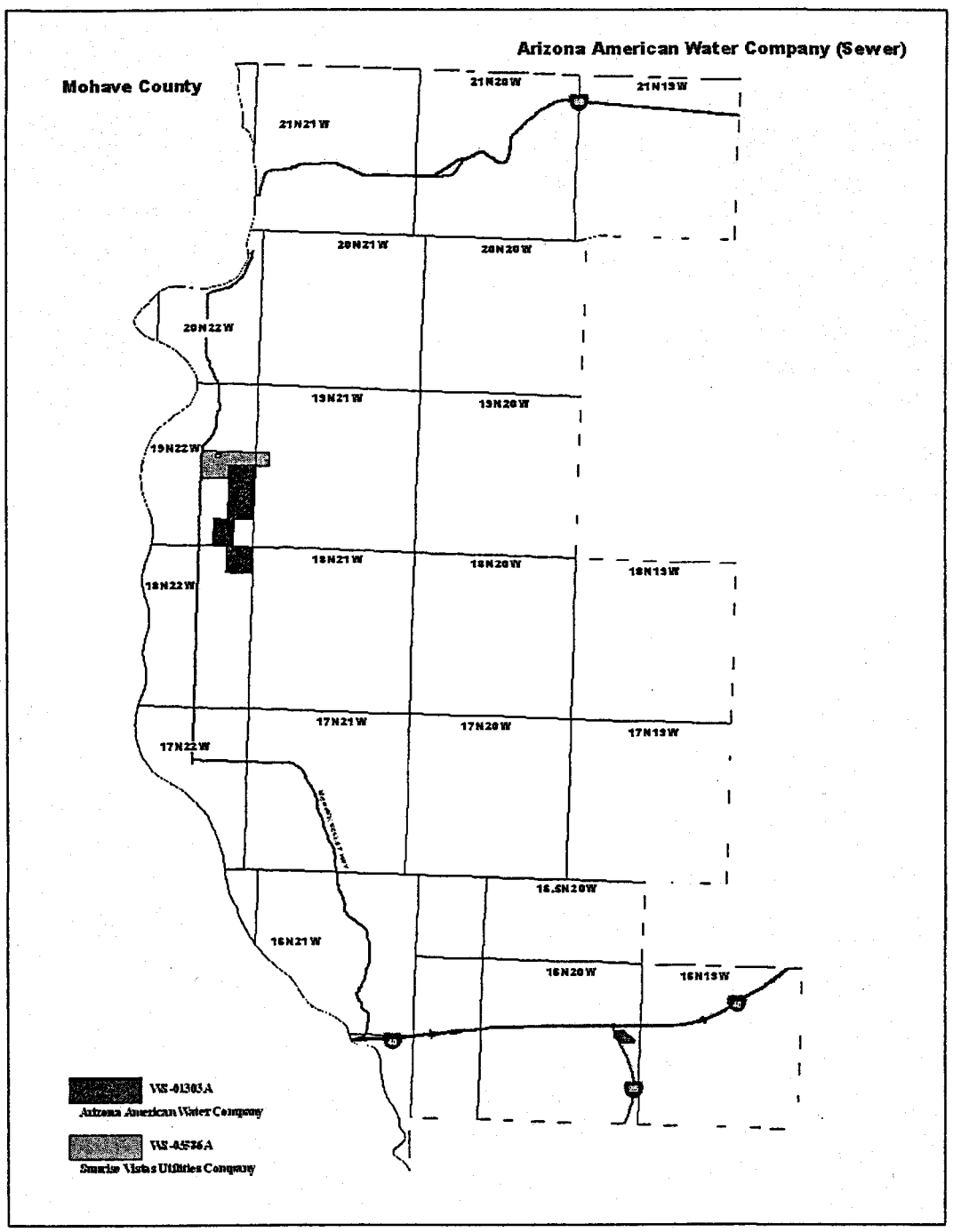

Figure 2

LOCATION OF MOHAVE SEWER DIVISION

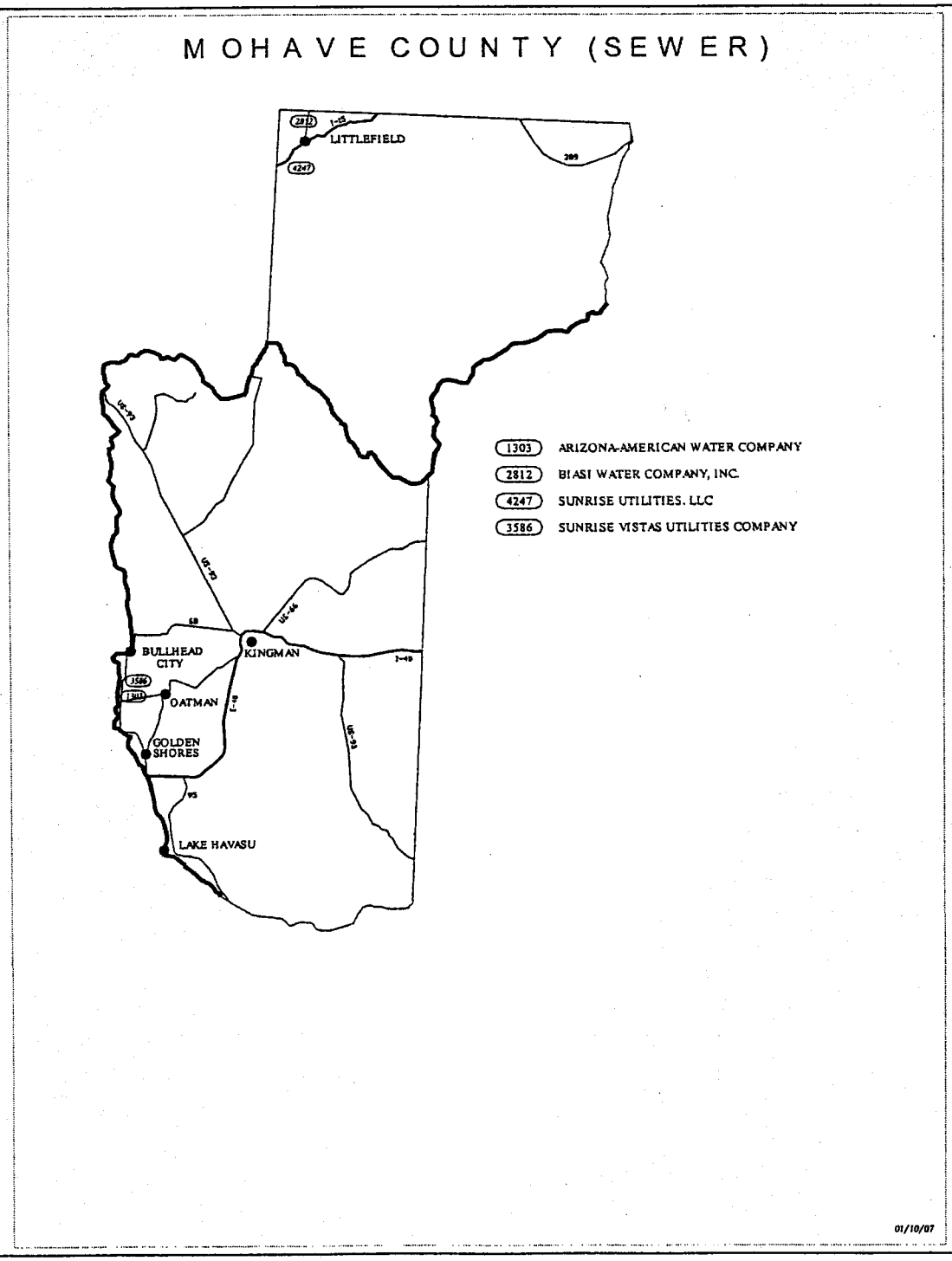

FIGURE 3A

MOHAVE SEWER SYSTEMATIC FLOW DIAGRAM

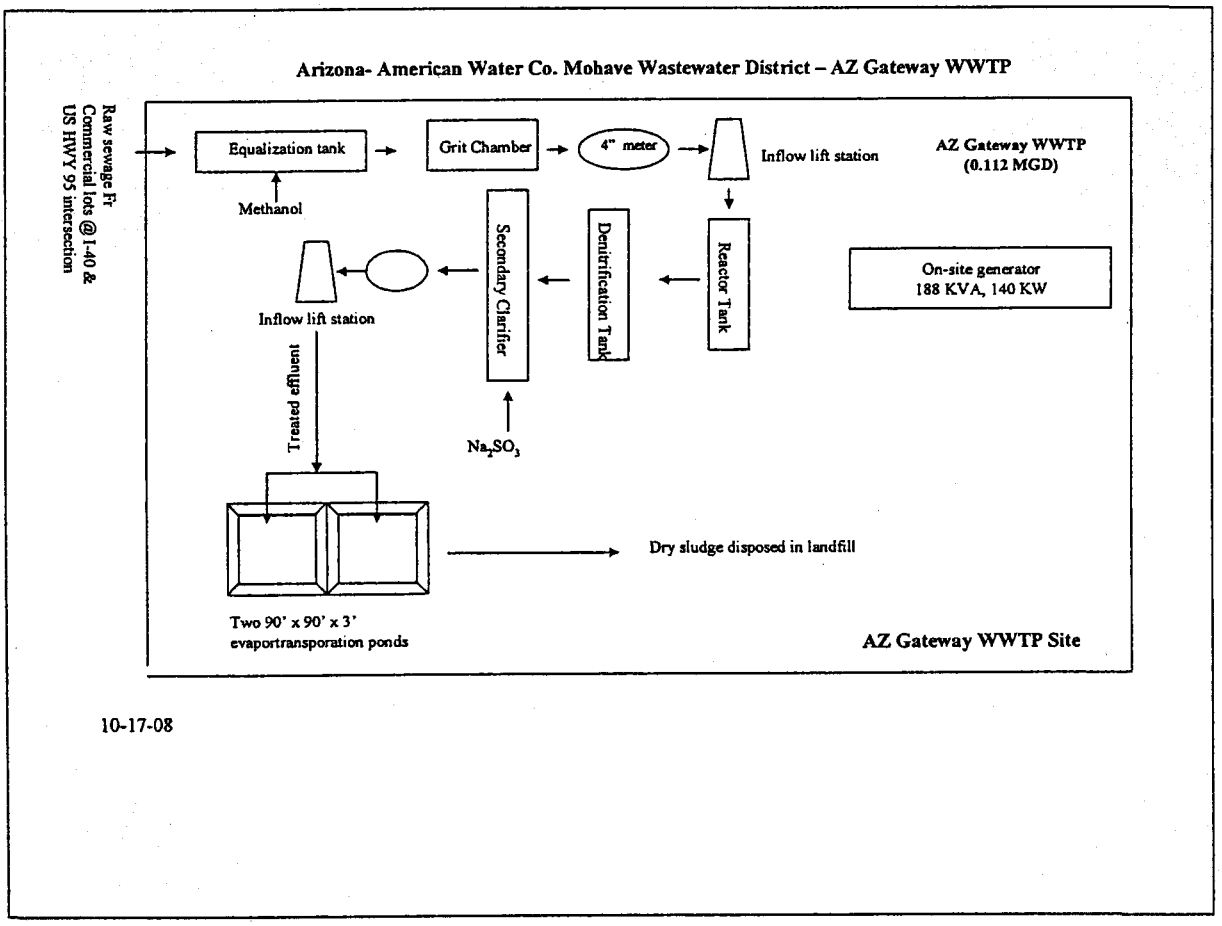

FIGURE 3B

MOHAVE SEWER SYSTEMATIC FLOW DIAGRAM

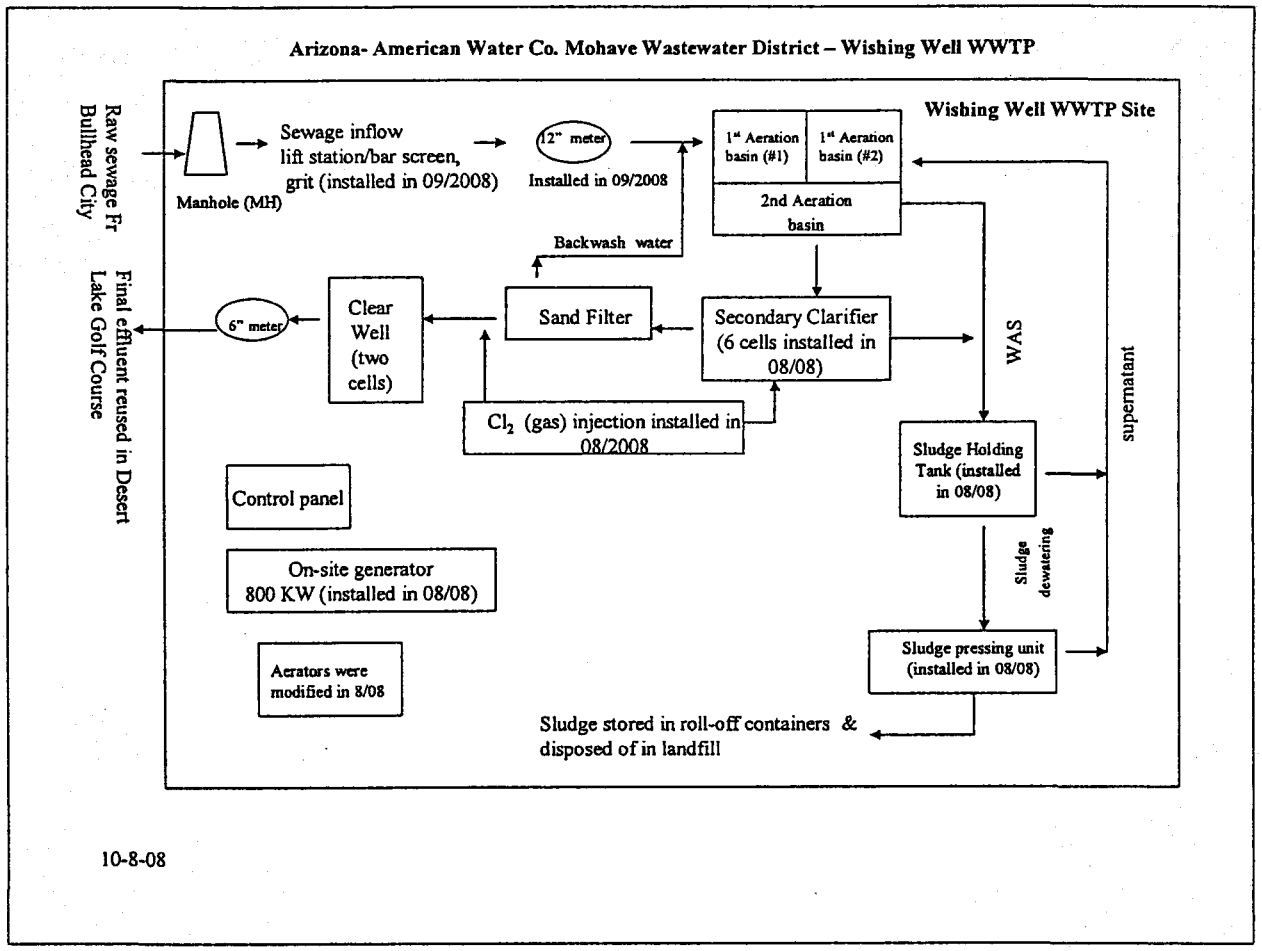

FIGURE 3C

MOHAVE SEWER SYSTEMATIC FLOW DIAGRAM

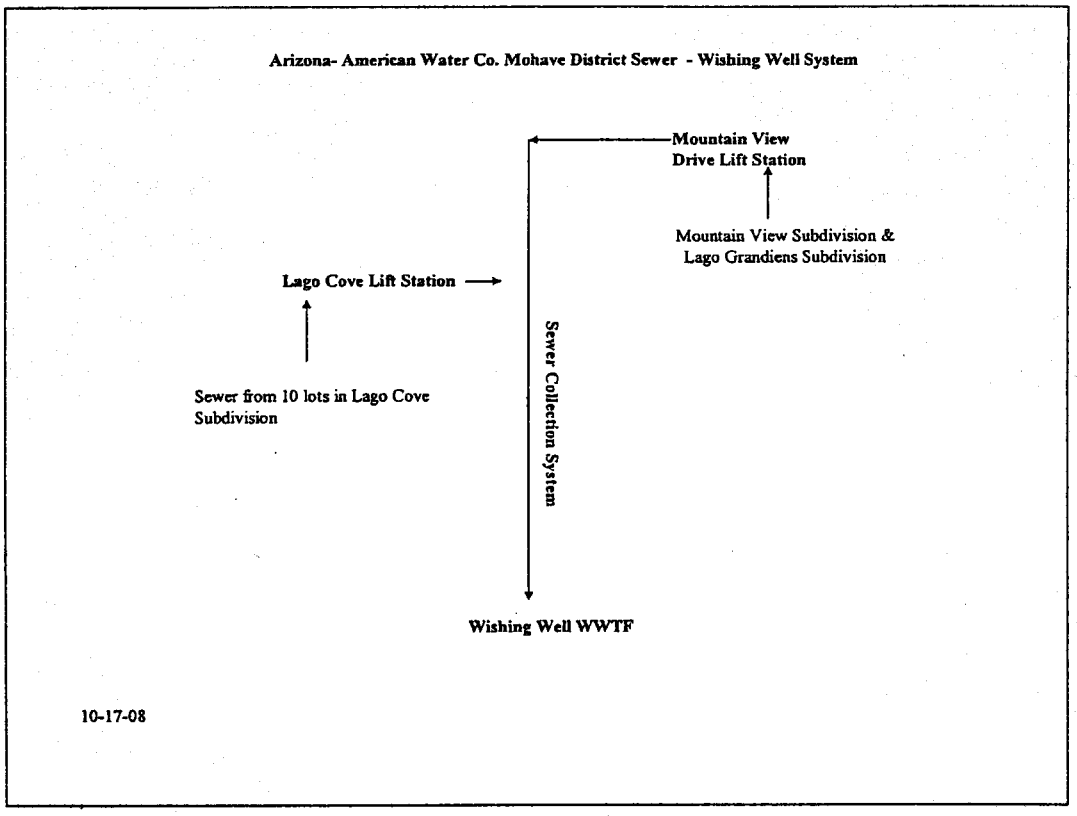

FIGURE 4A

WASTEWATER FLOW FROM ARIZONA GATEWAY SERVICE AREA (IN MOHAVE WASTEWATERDIVISION)

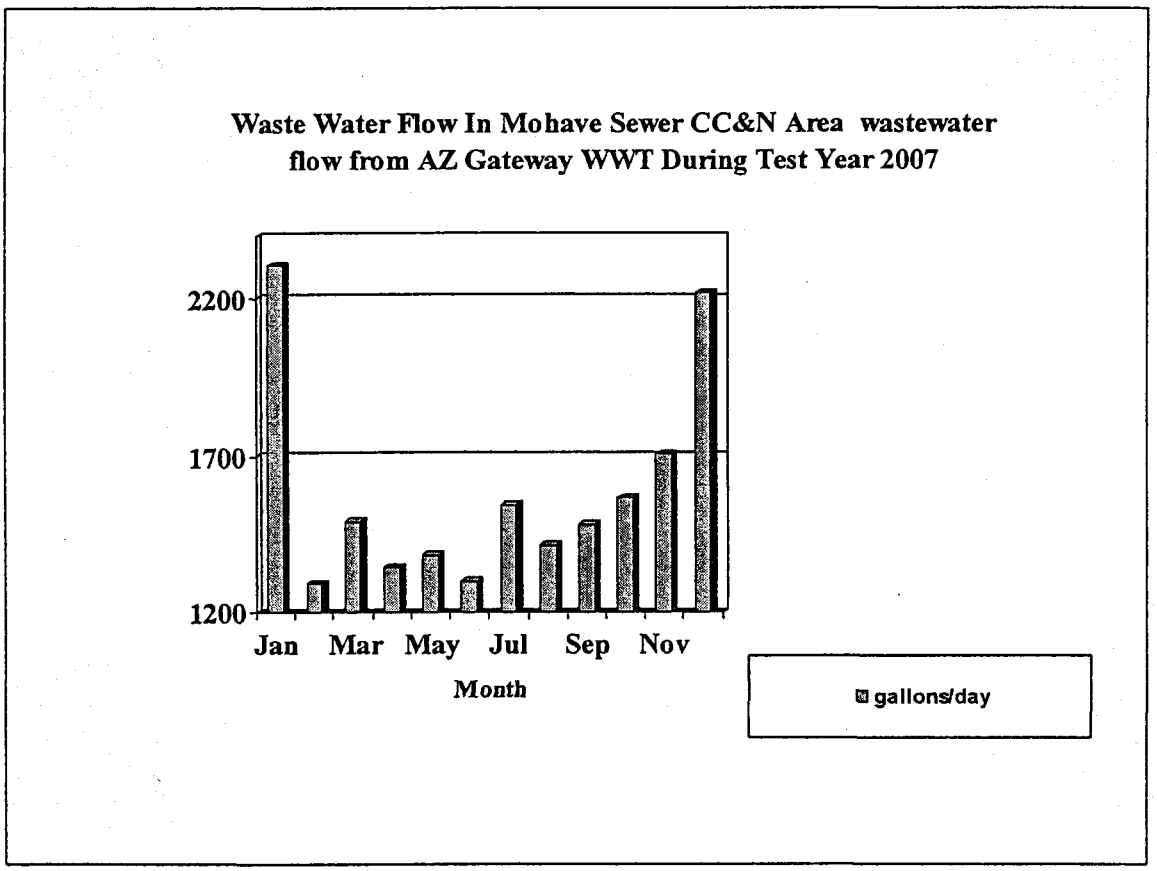

FIGURE 4B

WASTEWATER FLOW FROM WISHING WELL SERVICE AREA (MOHAVE WASTEWATER DISTRICT)

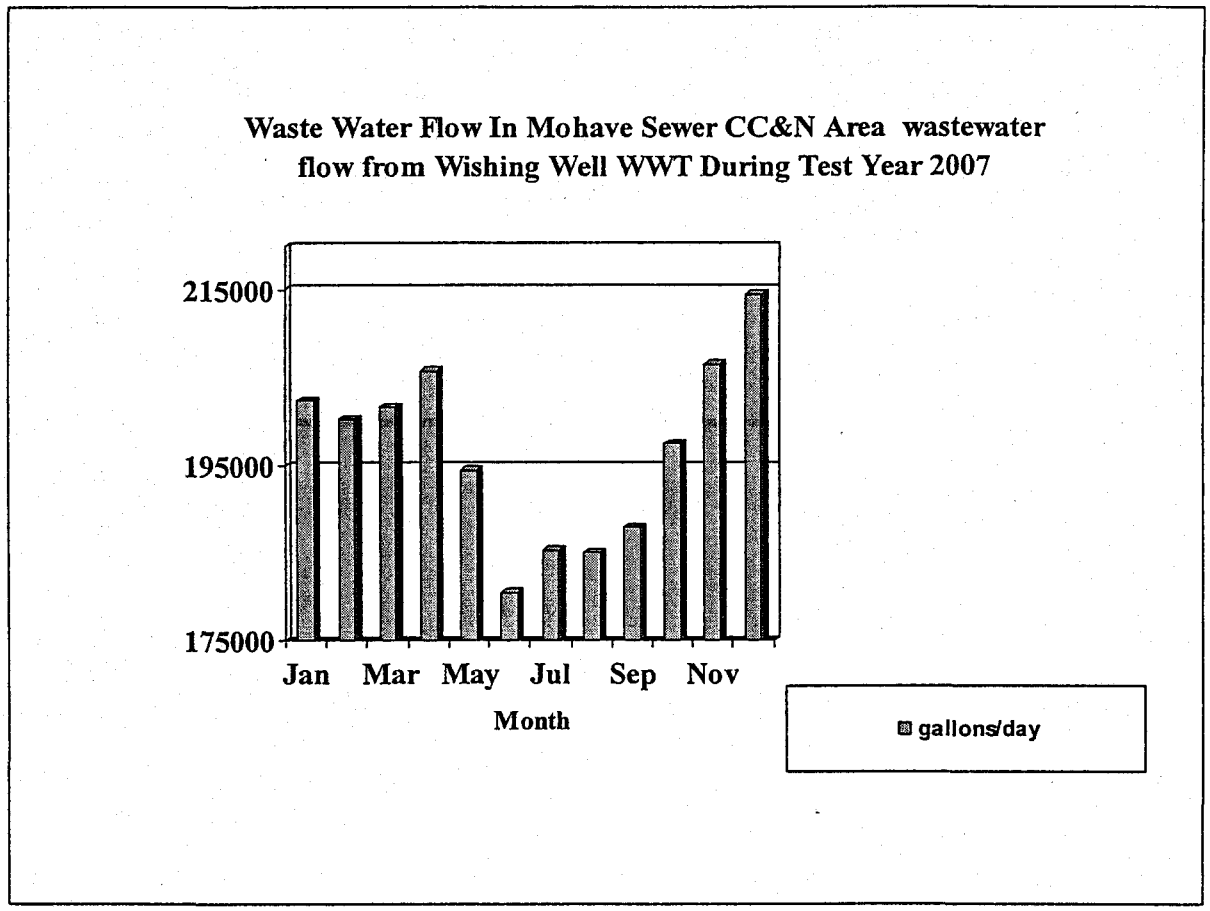

FIGURE 5

PROJECTED AND ACURATE GROWTH IN MOHAVE WASTEWATER DISTRICT

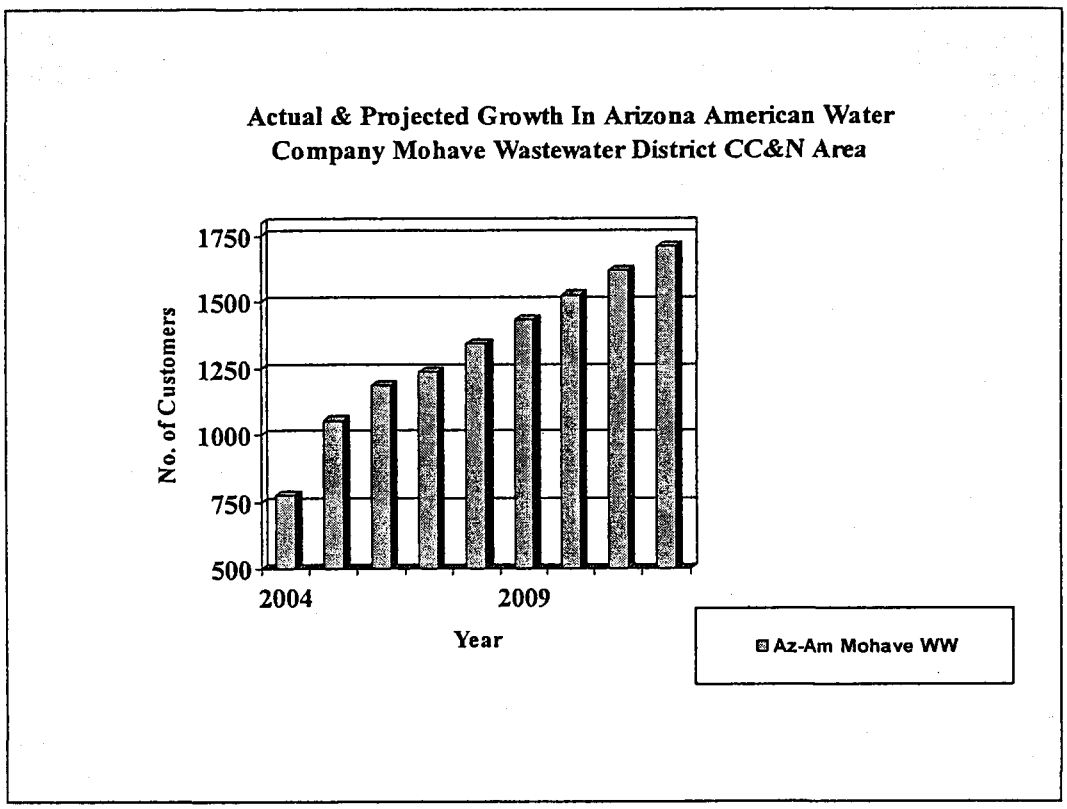

Figure 6 Depreciation Rates for Mohave - Wastewater

NARUC Acct #	Company's Acct #.	Depreciable Plant	Decision #69440	Rate (%) Mohave WW District proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0.00	0	
302	302000	**Franchises**	0.00	0	
303		**Land & Land Rights**			
	303200	Land & Land Rights SS	0.00		
	303300	Land & Land Rights P	0.00		
	303500	Land & Land Rights TD	0.00		
	303600	Land & Land Rights AG	0.00		
304		**Structure Improvements**			
	304100	Structure Improvements SS	0.00		
	304200	Structure Improvements P	0.00		
	304300	Structure Improvements WT	0.00		
	304400	Structure Improvements TD	0.00		
	304510	Structure Improvements AG Cap Lease	0.00		
	304600	Structure Improvements Office	0.00		
	304700	Structure Improvements Store, Shop, Garage	0.00		
305	305000	**Collection & Improvement**	0.00		
307	307000	**Wells & Springs**	0.00		
311		**Pump Equipments**			
	311200	Pump Equipments Electric	0.00		
320		**Water Treatment Plant**			
	320100	Water Treatment Plant Non-Media	0.00		
330		**Reservoirs & Standpipes**			
	330000	Reservoirs & Standpipes	0.00		
331		**Mains, Transmissions**			
	331001	TD Mains Not Classified by	0.00		
	331100	TD Mains 4 in & less	0.00		
	331200	TD Mains 6 in to 8 in	0.00		
	331300	TD Mains 10 in to 16 in	0.00		
333	333000	**Services**	0.00		
334		**Meters**			
	334100	Meters	0.00		
	334200	Meter installation	0.00		
335	335000	**Hydrants**	0.00		
340		**Office Furniture**			
	340100	Office Furniture & equipment	4.04		
	340200	Computer & Periph equipment	4.04		
	340300	Computer software	37.71		
341		**Transportation**			
	34100	Transportation Equipment Lt Duty Trucks	0.00		
342	342000	**Stores Equipment**	N/A		
343	343000	**Tool, Shop, Garage Equipment**	N/A		
344	344000	**Lab Equipments**	N/A		
345	345000	**Power Operated Equipment**	N/A		
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	3.66		
	346200	Communication Equip telephone	9.76		
	346300	Communication Equip Other	6.19		
351	351000	**Wastewater ("WW") Organization**	N/A	N/A	0
352	352000	**WW Franchise**	0.00	N/A	0

353		**Land & Land Rights**	N/A	N/A	0
354		**Structure Improvements**			
	354200	WW Collection: Structures and Improvements	2.80	2.80	2.80
355	N/A	Power Generation Equipment	N/A	N/A	5.00
360	360000	WW Force Mains	1.00	2.00	2.00
361	361100	WW collection Mains	1.00	2.00	2.00
362	362000	WW special collection structures	1.00	2.00	2.00
363	363000	WW sewer service connections	2.04	2.04	2.04
364	364000	Flow Measuring Devices	5.42	5.42	10.00
365	N/A	Flow Measuring Installations	N/A	N/A	5.00
370	380650	Receiving Well	N/A	N/A	5.00
371	371100	WW pump equipment: electric	5.42	5.42	5.42
374	N/A	Reuse Distribution Reservoir	N/A	N/A	2.50
375	N/A	Reuse Transmission and Distribution System	N/A	N/A	2.00
380		**Treatment & Disposal Equipment**			
	380100	WW Treatment & Disposal Equipment: Sedimentation tanks/ACC	3.60	3.60	3.60
	380300	Treatment & Disposal Equipment: sludge dry/filter	5.00	5.00	5.00
	380500	Treatment & Disposal Equipment: chemical treatment plant	5.00	5.00	5.00
	380600	WW Treatment & Disposal Equipment other disposal	5.00	5.00	5.00
381	N/A	Plant Sewers	N/A	N/A	5.00
382	382000	WW Outfall Line	N/A	N/A	4.00
389	389100	WW Other Plant & Misc Equipment Int	N/A	N/A	6.67
390	390000	Office Furniture & Equipments	N/A	N/A	6.67
391	391000	WW transportation equipment	N/A	N/A	15.00
392	392000	WW stores equipment	N/A	N/A	4.00
393	393000	Wastewater Tools, Shop, Garage Equipment	4.47	4.47	4.47
394	344000	Lab equipments	3.71	3.71	3.71
395	N/A	Power Operated Equipment	N/A	N/A	5.00
396	396000	Communication Equipment	N/A	10.30	10.30
397	397000	WW Misc Equipment	N/A	5.10	5.10
398	39800	Other plants	N/A	0.00	0.00

FIGURE 7
TARIFF SCHEDULE

UTILITY: Arizona-American Water Company - DECISION NO. _____
DOCKET NO.: WS-01303A-08-0227 EFFECTIVE DATE: _____

OFF-SITE FACILITIES HOOK-UP FEE

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Arizona-American Water Company - Mohave Wastewater District ("the Company") pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment plant facilities among all new service laterals. These charges are applicable to all new service laterals established after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company's establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission's ("Commission") rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

"Applicant" means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builder of new residential subdivisions.

"Company" means Arizona-American Water Company - Mohave Wastewater District –

"Collection Main Extension Agreement" means any agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities to the Company to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as "Wastewater Facilities Agreement".

"Off-site Facilities" means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

"Service Lateral" means and includes all service laterals for single-family residential or other uses.

III. Off-Site Facilities Hook-up Fee

For each new service lateral, the Company shall collect an off-site facilities hook-up fee as listed in the following table:

TREATMENT PLANT HOOK-UP FEE TARIFF TABLE		
Service Lateral Size	Factor	Fee
4-inch	1	$785*
6-inch	2	$1,570
8-inch	3½	$2,748

* Established per Decision No. 69440.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per parcel, service lateral, or lot within a subdivision (similar to a service lateral installation charge).

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of off-site facilities, or for repayment of loans obtained for installation of off-site facilities. Off-site hook-up fees shall not be used for repairs, maintenance, or operational purposes.

(C) Time of Payment:

(1) In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder when operational acceptance is issued for the on-site wastewater facilities constructed to serve the improvement.

(2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the charges hereunder shall be due and payable at the time wastewater service is requested for the property.

(D) Off-Site Facilities Construction By Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed

by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall be refunded the difference upon acceptance by the Company (of the off-site facilities).

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.

(F) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.

(G) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.

(H) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.

(I) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(J) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January 31st to Docket Control for the prior twelve (12) month period, beginning January 31, 2009, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the amount of money spent from the account, the amount of interest earned on the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period.

ALL-STATE LEGAL®
EXHIBIT
S-4
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

SURREBUTTAL TESTIMONY

OF

DOROTHY HAINS

UTILITIES ENGINEER

UTILITIES DIVISION

MARCH 3, 2009

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I. INTRODUCTION

Q. Please state your name and business address.

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

Q. Are you the same Dorothy Hains who has previously filed testimony in this Arizona-American Water Company ("Arizona-American" or "Company") Sun City Sewer and Sun City West Sewer rate proceeding?

A. Yes.

Q. What is the purpose of your Surrebuttal Testimony?

A. In my testimony I will respond to three issues raised in the Company's Rebuttal Testimony. (1) the Company argues against Staff's recommendation in my Direct Testimony that Arizona-American reduce its water loss to below 10 percent before it files its next rate increase application and/or CC&N application and/or financing application, whichever comes first; (2) the Company's proposed small meter replacement program; and (3) the Company also argues against Staff's recommendations in my Direct Testimony to disallow certain plant costs associated with arsenic removal. Staff also would like to take this opportunity to replace the depreciation tables for the water districts of Agua Fria, Havasu, Mohave Water Paradise Valley, Sun City West Water and Tubac. Finally, Staff comments on the Company's plan to construct a central plant treatment option to treat the Tubac District water supply.

II. WATER LOSS

Q. Is water loss in excess of 10 percent a new issue for the districts in question?

A. No. Water loss over 10 percent has been an on going problem in the Company's Mohave Water, Havasu and Paradise Valley districts for some years. The table below is a summary of the water loss in these three districts from 2004 through 2007, the data used to calculate these amounts came from Company Annual Reports. Staff believes this data suggests that the Company has not been aggressive enough in taking action to correct the problem.

Water Loss (%) in district	Havasu	Mohave Water	Paradise Valley
2004	20.8	13.89	10.38
2005	7.54	12.25	10.28
2006	30.46	12.22	12.47
2007	13.34	14.39[1]	9.59

Although the Company has various on-going meter and other infrastructure replacement programs to address the issue, it is not clear to Staff that the Company has actually implemented these programs in all districts.

Q. The Company argued that it is not cost effective to reduce water loss below 10 percent in the current difficult economic climate. Does Staff agree with the Company?

A. Staff agrees with the Company that to reduce water loss below 10 percent could be costly. However, water loss reduction is part of the Company's routine maintenance program and reasonable costs can be recovered in rates. The Company has an obligation to properly maintain its system even in difficult times. Staff's recommendation provides the Company

[1] 14.39% was water loss occurred in the Bullhead City System in 2007.

the opportunity to provide a detailed report demonstrating to the Commission that water loss reduction to less than 10 percent is truly cost prohibitive and not cost effective.

Q. Are Staff's recommendations regarding the water loss issue for the Company new?

A. No. Similar recommendations were made by Staff in a previous Company rate case. Staff's water loss recommendations in Docket No. W-01303A-07-0209 were approved by the Commission in Decision No. 70351.

III. ARSENIC TREATMENT PLANT TREATMENT CAPACITY ADJUSTMENTS

Agua Fria Water Arsenic Treatment Plant No. 5

Q. Please respond to the Company's Rebuttal Testimony.

A. In the Agua Fria system, the Company has installed an arsenic removal plant consisting of four 11-foot ("ft') diameter vessels. Three 11-ft diameter vessels filled with media can adequately remove arsenic to meet the arsenic standard under the manufactures recommended normal loading rate of 5 gallons per minute per square feet ("gpm/sq ft"). In the event one vessel is out of service (for maintenance, etc.), the other two vessels can operate at a rate of 8 gpm/sq ft (which is the manufactures recommended maximum loading rate), therefore 1,520 gpm of treated capacity is available, which is more than enough to treat the 1,400 gpm of total well capacity.

Q. Is Staff still recommending a $143,485 plant adjustment?

A. No. After further review of the invoices for the Agua Fria Arsenic Treatment Plant No. 5, Staff believes that Staff's $143,485 estimate was overstated and should be reduced. Therefore, Staff's recommended Agua Fria Arsenic Treatment Plant No. 5 plant adjustment is now $126,352.

Havasu Arsenic Treatment Plant

Q. Does Staff still believe that the arsenic treatment plant in Havasu Water District includes excess capacity? Please explain.

A. Yes. An arsenic treatment plant using media adsorption needs 120 square feet of surface area to remove arsenic when treating a total 600 gpm well capacity (plant is operating at a loading rate of 5gpm/sq ft). Two 14-ft diameter vessels provide a 308 square feet surface area which is more than double the capacity needed. The Company has installed an arsenic treatment plant consisting of two 14-ft diameter vessels.

Q. Does Staff still believe that a 14-ft diameter vessel is adequate? Please explain.

A. A 14-ft diameter vessel filled with media will provide adequate surface area; however, operational problems are created during media replacement by the use of a single vessel. Therefore Staff has concluded that two 10-ft diameter vessels should have been used in lieu of two 14-ft diameter vessels. Two 10-ft diameter vessels should be adequate to treat a 638 gpm flow capacity. In the event one vessel is out of service, the other 10-ft diameter vessel can operate at a rate of 8 gpm/sq ft; thereby providing, a 628 gpm of treatment capacity. This is more than enough to treat the 600 gpm of total well capacity.

Q. Based on the foregoing, did Staff calculate a new plant adjustment for Havasu Water District?

A. No, Staff is still recommending the same plant adjustment of $143,485 for Havasu Water District. When Staff recalculated a plant adjustment based on a unit cost of $349/sq ft (approximately $35.6/gallon) for a 10-ft diameter vessel versus $344/sq ft (approximately $30/gallon) for the 14-ft diameter vessel, the cost difference was less than $400.

Therefore, Staff continues to recommend a plant adjustment of $143,485 for the Havasu Water District.

Sun City West Arsenic Treatment Plant No. 2

Q. Has Staff's position with regard to its Sun City West Arsenic Treatment Plant No. 2 plant adjustment changed? If so, please explain.

A. After reviewing the Rebuttal Testimony of Company witness Mr. Gross, Staff now understands that the Company operates the subject plant at a total well capacity of 1,790 gpm (although the Approval of Construction documented the totaled flow to Plant No 2 was 1,700 gpm). Therefore, based on the higher flow rate, Staff now concludes that the Company should have installed four 11-ft diameter vessels instead of four 12-ft diameter vessels. When one 11-ft diameter vessel is out of service, the remaining treatment units would be operated at 8 gpm/sq ft, providing 2,200 gpm of treatment capacity which is more than adequate to treat the total well capacity of 1,790 gpm.

Q. Is Staff still recommending a $143,485 plant adjustment for Sun City West Water District?

A. No. Staff's estimated cost for four 11-ft diameter vessels is $483,300 and its estimated cost for four 12-ft diameter vessels is $575,380. Therefore, Staff is now recommending a $92,080 plant adjustment for Sun City West Water District (the difference between $483,300 and $575,380 equals $92,080).

IV. DEPRECIATION TABLES FOR WATER DISTRICTS

Q. Please explain why Staff is revising its recommended Depreciation Tables for the water districts in this rate application.

A. With reference to Company Data Request No. 2 (docketed on February 4, 2009), the Company requested that Staff consider revised depreciation rates for computer & peripheral equipment (account #340200), transportation equipment light truck (account #341100) and transportation equipment other (account # 341400). For computer & peripheral equipment (account #340200) and transportation equipment light truck (account #341100), Staff concludes that the Company's latest proposed rates are reasonable. For account #341400 (transportation equipment- other (golf cart)), Staff recommends a 16.67 percent depreciation rate. Staff also corrects several typographical errors in the Depreciation Rate table for the Agua Fria System. The revised depreciation tables containing the depreciation rates Staff now recommends are attached.

V. ARSENIC TREATMENT TUBAC WATER DISTRICT

Q. Have you reviewed the Company's Rebuttal Testimony filed by Jeffery W. Stuck regarding the Company's plan to construct a central plant treatment option to treat the District's water supply?

A. Yes.

Q. Do you agree with the benefits listed by the Company in support of the proposed central plant treatment option?

A. Yes. It is Staff understanding that ADEQ does not recommend Point-Of-Use ("POU") devices in public water systems that serve more than 300 connections (according to the testimony the District had an average of 535 customers during the test year). While Staff

has not analyzed the cost estimates presented in Mr. Stuck's testimony it is reasonable to conclude that operations and maintenance costs of a POU option increases significantly when more than 300 connections are served. Staff believes that the Company's proposal is consistent with recommendations provided by ADEQ. Further, ADEQ states in its POU Guidance document, "The establishment of a POU program raises challenging issues for a water system, including increased liability and private property access issues."

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS (Agua Fria Water District)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #68310	Rate (%) Agua Fria proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	0.00	1.67	1.67
	304600	Structure & Improvement office	1.68	2.03	4.63
	304800	Structure & Improvement Misc	0.00	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	0.00	0.00	2.50
307	307000	**Wells & Springs**	2.52	2.52	3.33
310	310100	**Power Generation Equip Other**	0.00	4.42	4.42
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	4.42	4.42	4.42
	311500	Pump Equipment Other	4.42	4.42	4.42
320		**Water Treatment**			
320.1	320100	Water Treatment Equipment	4.00		
	N/A	Water Treatment Equipment Non-Media (arsenic removal equip)	N/A	4.00	7.06
	N/A	Media Water Treatment Equipment (pressurized vessels, arsenic removal eqip)	N/A	N/A	5.00
	N/A	Ion Exchange Treatment Equip(arsenic removal equip)	N/A	N/A	4.00
320.2	N/A	Solution Chemical Feeder	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment (arsenic removal plant)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
330.1	N/A	Storage Tanks	N/A	N/A	1.67
330.2	N/A	Pressure tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.53		
	331001	TD mains not classified by size	N/A	1.53	1.53
	331100	TD mains 4-inch & less	N/A	1.53	1.53
	331200	TD mains 6-inch to 8-inch	N/A	1.53	1.53
	331300	TD mains 10-inch to 16-inch	N/A	1.53	1.53
		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	0.00	0.00	2.00

333	333000	**Services**	2.48	2.48	2.48
334		**Meters**			
	334100	Meters	2.51	2.51	2.51
	334200	Meter installations	N/A	2.51	2.51
335	335000	**Hydrants**	2.00	2.00	2.00
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	4.98		
	339100	Other P/E Intangible	N/A	0	0
	339500	Other P/E SS	N/A	0	0
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.55	4.04	4.04
	340200	Computer & periph equipment	4.55	10.00	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks	N/A	20.00	20.00
	341200	Transportation Equip, heavy Duty Trucks	N/A	25.00	15.00
	341400	Transportation Equipment Other - Golf Carts	N/A	25.00	16.67
342	342000	**Store Equipments**	3.92	3.92	3.92
343	343000	**Tools Shop & Garage Equipments**	4.14	4.02	4.02
344	344000	**Lab equipments**	3.71	0.00	3.71
345	345000	**Power operated equipments**	5.14	5.20	5.20
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	10.28	10.30	10.30
	346300	Communication Equip Other	N/A	4.93	4.93

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS -Havasu

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 68310	Rate (%) proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			0
	303200	Land & Land Rights SS	0	0	
	303300	Land & Land Rights P	0	0	
	303500	Land & Land Right TD	0	0	
	303600	Land & Land Right AG	0	0	
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.79	2.58	2.58
	304200	Structure & Improvement P	0	0.00	0.00
	304300	Structures and Improvements WT	0	0.00	0.00
	304400	Structure & Improvement TD	0	0.00	0.00
	304600	Structure & Improvement office	2.03	2.58	2.58
	304800	Structure & Improvement Misc	N/A	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	2.54	2.58	2.54
307	307000	**Wells & Springs**	2.54	2.54	2.54
310	310100	**Power Generation Equip Other**	5.12	3.83	3.83
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	3.71	3.83	3.83
	311300	Pump Equipment Diesel	0.00	0.00	0.00
	311500	Pump Equipment Other	0.00	0.00	0.00
320		**Water Treatment**			
320.1		Water Treatment Plant Equipment			
	320100	Water Treatment Plant (Non-Media arsenic removal equip)	12.00	12.00	7.06
	N/A	Water Treatment Plant (Media arsenic removal equip)	N/A	N/A	5.00
320.2	N/A	Chemical Solution Feeders	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment (arsenic removal equip)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000		2.33	2.33	2.33
330.1	N/A	Distribution Reservoirs & Standpipes	N/A	N/A	2.33
330.2	N/A	Storage Tank	N/A	N/A	5.00
		Pressure Tank			
331		**Transmission and Distribution**	2.10		
	331001	TD mains not classified by size	N/A	2.10	2.10
	331100	TD mains 4-inch & less	N/A	2.10	2.10
	331200	TD mains 6-inch to 8-inch	N/A	2.10	2.10
	331300	TD mains 10-inch to 16-inch	N/A	2.10	2.10
		TD mains 18-inch and larger	N/A	N/A	2.00
		Other Transmission and Distribution	N/A	N/A	2.00
		Fire mains	N/A	N/A	2.00
333	333000	**Services**	2.89	2.89	2.89

334		**Meters**	3.52		
	334100	Meters	N/A	3.52	3.52
	334200	Meter installations	N/A	3.52	3.52
335	335000	**Hydrants**	0.00	1.99	1.99
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	N/A		
	339100	Other P/E Intangible		0	0
	3392500	Other P/E SS		0	0
340		**Office Furniture & Equipments**			
	340100	Office Furniture & Equipments	4.10	4.47	4.47
	340200	Computer & periph equipment	4.10	10.00	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty		25.00	20.00
	341200	Trucks		25.00	15.00
	341400	Transportation Equip, heavy Duty Trucks	N/A	25.00	16.67
		Transportation Equipment, Other – Golf Cart			
342	342000	**Store Equipments**	3.93	3.93	3.93
343	343000	**Tools Shop & Garage Equipments**	7.55	4.49	4.49
344	344000	**Lab equipments**	3.06	3.06	3.06
345	345000	**Power operated equipments**	9.23	2.55	2.55
346		**Communication Equipments**	4.10		
	346100	Communication Equip non-telephone		8.37	8.37
	346300	Communication Equip Other		6.19	6.19
347		Miscellaneous Equipment	6.19	N/A	6.19

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS (Mohave Water District)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #69440	Rate (%) Mohave Water proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.83	2.83	2.83
	304200	Structure & Improvement P	2.39	2.39	2.39
	304300	Structures and Improvements WT	2.50	2.50	2.50
	304400	Structure & Improvement TD	1.81	1.81	1.81
	304510	Structure & Improvement AG Cap Lease			
		Structure & Improvement office	4.63	4.63	4.63
	304600	Structure & Improvement Store, Shop,	2.03	2.03	2.03
	304700	Garage			
		Structure & Improvement Misc	4.63	4.63	4.63
	304800		0.00	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	2.54	2.54	2.54
307	307000	**Wells & Springs**	2.70	2.70	2.70
310	310100	**Power Generation Equip Other**	N/A	0.00	5.00
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	5.12	5.12	5.12
	311300	Pump Equipment Diesel	N/A	0.00	5.00
	311500	Pump Equipment Other	N/A	0.00	5.00
320		**Water Treatment**			
320.1		Water Treatment Plant Equipment			
	320100	Water Treatment Equipment Non-Media			
		(arsenic removal equip)	12.00	12.00	7.06
	N/A	Water Treatment Equipment -Media			
		(arsenic removal equip)	N/A	N/A	5.00
320.2	N/A	Chemical Solution Feeders	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment (arsenic	N/A	N/A	5.00
		removal)			
330		**Distribution Reservoirs & Standpipes**			
		Distribution Reservoirs & Standpipes			
	33000	Storage Tank	1.81	1.81	1.81
330.1	N/A	Pressure Tank	N/A	N/A	1.81
330.2	N/A		N/A	N/A	5.00
331		**Transmission and Distribution**			
	331001	TD mains not classified by size	2.61	2.61	1.53
	331100	TD mains 4-inch & less	2.61	2.61	1.53
	331200	TD mains 6-inch to 8-inch	2.61	2.61	1.53
	331300	TD mains 10-inch to 16-inch	2.61	2.61	1.53

		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	N/A	N/A	2.00
333	333000	**Services**	5.41	5.41	2.89
334		**Meters**			
	334100	Meters	6.53	6.53	6.53
	334200	Meter installations	6.53	6.53	6.53
335	335000	**Hydrants**	1.99	1.99	1.99
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	N/A		
	339100	Other P/E Intangible		0	0
	339500	Other P/E SS		0	0
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.04	4.04	4.04
	340200	Computer & periph equipment	4.04	10.00	10.00
340.1	340300	Computer software	37.71	37.71	25
341		**Transportation Equipment**			
	341100	Transportation Equip, Lt Duty Trucks	25.00	20.00	20.00
	341200	Transportation Equip, heavy Duty Trucks	N/A	25.00	15.00
	341400	Transportation Equip, Other – Golf Carts	N/A	25.00	16.67
342	342000	**Store Equipments**	3.93	3.93	3.93
343	343000	**Tools Shop & Garage Equipments**	11.70	11.70	4.49
344	344000	**Lab equipments**	3.30	3.30	10.00
345	345000	**Power operated equipments**	13.90	13.90	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	3.66	3.66	3.66
	346200	Communication Equip telephone	9.76	9.76	9.76
	346300	Communication Equip Other	6.19	6.19	6.19

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS – Paradise Valley

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision # 68858	Rate (%) proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	14.59	14.59	2.50
	304200	Structure & Improvement P	3.99	3.99	3.99
	304300	Structures and Improvements WT	2.00	2.00	2.00
	304400	Structure & Improvement TD	1.50	1.50	1.50
	304500	Structure & Improvement AG	4.63	3.99	3.99
	304600	Structure & Improvement office	4.63	0.00	0.00
	304700	Structure & Improvement store, shop, garage	4.63	3.99	3.99
	304800	Structure & Improvement Misc	4.63	3.99	3.99
307	307000	**Wells & Springs**	2.48	2.48	2.48
310	310100	**Power Generation Equip Other**	N/A	4.39	4.39
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.39	4.39	4.39
	311300	Pump Equipment Diesel	4.39	4.39	4.39
320		**Water Treatment**			
320.1		Water Treatment Plant Equip			
	320100	Water Treatment Equipment Non-Media (arsenic removal equip)	7.06	7.06	7.06
320.2	N/A	Chemical Solution Feeders	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equip (arsenic removal)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	3.15	3.15	3.15
331		**Transmission and Distribution**			
	331001	TD mains Not Classified by Sizes	0	0	0
	331100	TD mains 4-inch & less	4.17	4.17	4.17
	331200	TD mains 6-inch to 8-inch	2.52	2.52	2.52
	331300	TD mains 10-inch to 16-inch	2.34	2.34	2.34
		TD mains 18-inch and larger	N/A	N/A	2.00
	332000	Fire Mains	N/A	N/A	2.00
333	333000	**Services**	4.72	4.72	4.72
334		**Meters**			
	334100	Meters	7.21	7.21	2.51
	334200	Meter installations	1.51	1.51	1.51
335	335000	**Hydrants**	2.10	2.10	2.10
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67

339		**Other Plant & Misc Equipment**			
	339600	Other P/E CPS	0	0.00	0.00
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.04	4.04	4.04
	340200	Computer & periph equipment	15.89	10.00	10.00
	340500	Other Office Equipment	7.13	7.13	7.13
340.1	340300	Computer software	37.71	37.71	25
341		**Transportation Equipment**			
	341100	Transportation Equip, Lt Duty Trucks	28.05	20.00	20.00
	341300	Transportation Equip Autos	7.80	7.80	7.80
	341400	Transportation Equip, Other – Golf Carts	0.93	25.00	16.67
342	342000	**Store Equipments**	N/A	N/A	4.00
343	343000	**Tools Shop & Garage Equipments**	3.61	3.61	3.61
344	344000	**Lab equipments**	N/A	N/A	10.00
345	345000	**Power operated equipments**	4.64	4.64	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	9.76	9.76	9.76
	346300	Communication Equip Other	7.91	7.91	4.93

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS (Sun City West Water)

NARUC Acct #	Company's Account #.	Depreciable Plant	Decision #68310	Rate (%) Sun City West Water proposed	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**			
	303200	Land & Land Rights SS	0	0	0
	303300	Land & Land Rights P	0	0	0
	303500	Land & Land Right TD	0	0	0
	303600	Land & Land Right AG	0	0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.50	2.50	2.50
	304200	Structure & Improvement P	1.67	1.67	1.67
	304300	Structures and Improvements WT	1.67	1.67	1.67
	304400	Structure & Improvement TD	0	1.67	2.00
	304600	Structure & Improvement office	1.68	2.12	4.63
	304800	Structure & Improvement Misc	0	0.00	0.00
305	305000	**Collection & Impounding reservoirs**	0.00	0.00	0.00
307	307000	**Wells & Springs**	2.52	2.52	2.52
310	310100	**Power Generation Equip Other**		0.00	4.42
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.42	4.42	4.42
	311300	Pump Equipment Diesel	4.42	4.42	5.00
	311500	Pump Equipment Other	4.42	4.42	5.01
320		**Water Treatment**			
320.1		Water Treatment Equipment			
	320100	Water Treatment Equipment (Non-Media arsenic removal equip)	4.00	4.00	7.06
	N/A	Media Water Treatment Equipment (pressurized vessels arsenic removal equip)	N/A	N/A	5.00
320.2	N/A	Solution Chemical Feeder	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment (arsenic removal)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.67	1.67	1.67
330.1	N/A	Storage Tanks	N/A	N/A	1.67
330.2	N/A	Pressure tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.53		
	331001	TD mains not classified by size	N/A	1.53	1.53
	331100	TD mains 4-inch & less	N/A	1.53	1.53
	331200	TD mains 6-inch to 8-inch	N/A	1.53	1.53
	331300	TD mains 10-inch to 16-inch	N/A	1.53	1.53
	332000	Fire Mains	0.00	1.53	1.53
333	333000	**Services**	2.48	2.48	2.48
334		**Meters**			
	334100	Meters	2.51	2.51	2.51

	334200	Meter installations	N/A	2.51	2.51
335	335000	**Hydrants**	2.00	2.00	2.00
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**	4.98		
	339100	Other P/E Intangible		0	0
	339500	Other P/E SS		0	2.00
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	4.55	4.59	4.59
	340200	Computer & periph equipment	4.55	10.00	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks	N/A	20.00	20.00
	341200	Transportation Equip, heavy Duty	N/A	25.00	15.00
	341400	Trucks	N/A	25.00	16.67
		Transportation Equip, Other – Golf Carts			
342	342000	**Store Equipments**	3.92	4.02	3.91
343	343000	**Tools Shop & Garage Equipments**	4.14	4.02	4.02
344	344000	**Lab equipments**	3.71	3.71	3.71
345	345000	**Power operated equipments**	5.14	5.02	5.02
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	10.28	10.30	10.30
	346300	Communication Equip Other	N/A	4.93	4.93

FIGURE 6 (revised)
DEPRECIATION RATES FOR WATER SYSTEMS (Tubac)

NARUC Acct #	Company's Account #.	Depreciable Plant	Approved Rate (Decision # 67093)	Proposed Rate (%) (Tubac)	Staff Recommended Rate (%)
301	301000	**Organization**	0	0	0
302	302000	**Franchises**	0	0	0
303		**Land & Land Rights**	0		
	303200	Land & Land Rights SS		0	0
	303300	Land & Land Rights P		0	0
	303400	Land & Land Rights WTLand & Land		0	0
	303500	Right TD		0	0
	303600	Land & Land Right AG		0	0
304		**Structures & Improvements**			
	304100	Structure & Improvement SS	2.40	2.21	2.21
	304200	Structure & Improvement P	1.94	2.21	2.21
	304300	Structures and Improvements WT	0	2.21	2.21
	304400	Structure & Improvement TD	1.92	2.21	2.21
	304600	Structure & Improvement office	2.89	2.21	2.21
	304800	Structure & Improvement Misc		0	0
305	305000	**Collection & Impounding reservoirs**	0	0	0
307	307000	**Wells & Springs**	3.08	3.08	3.08
310	310100	**Power Generation Equip Other**	0	4.24	4.24
311		**Pumping Equipment**			
	311200	Pump Equipment Electric	4.24	4.24	4.24
	311300	Pump Equipment Diesel	5.00	4.24	4.24
	311500	Pump Equipment Gas/Other	4.24	4.24	4.24
320		**Water Treatment**			
320.1		Water Treatment Equipment			
	320100	Water Treatment Equipment (Non-Media arsenic removal equip)	4.00	4.00	7.06
	N/A	Media Water Treatment Equipment (pressurized vessels arsenic removal equip)	N/A	N/A	5.00
320.2	N/A	Solution Chemical Feeder	N/A	N/A	5.00
320.3	N/A	Sludge Disposal Equipment (arsenic removal)	N/A	N/A	5.00
330		**Distribution Reservoirs & Standpipes**			
	33000	Distribution Reservoirs & Standpipes	1.62	1.62	1.62
330.1	N/A	Storage Tanks	N/A	N/A	2.22
330.2	N/A	Pressure Tanks	N/A	N/A	5.00
331		**Transmission and Distribution**	1.97		
	331001	TD mains not classified by size		1.97	1.97
	331100	TD mains 4-inch & less		1.97	1.97
	331200	TD mains 6-inch to 8-inch		1.97	1.97
	331300	TD mains 10-inch to 16-inch		2.34	2.34
333	333000	**Services**	2.45	2.45	2.45
334		**Meters**	2.42		
	334100	Meters		2.42	2.42

	334200	Meter installations		2.42	2.42
335	335000	**Hydrants**	1.97	1.97	1.97
336	N/A	**Backflow Prevention Devices**	N/A	N/A	6.67
339		**Other Plant & Misc Equipment**			
	339100	Other P/E Intangible		0	0
	339500	Other P/E TD		0.00	0.00
340		**Office Furniture & Equipment**			
	340100	Office Furniture & Equipments	3.28	10.83	3.28
	340200	Computer & periph equipment	3.28	10.00	10.00
340.1	N/A	Computer Software	N/A	N/A	25.00
341		**Transportation Equipment**	25.00		
	341100	Transportation Equip, Lt Duty Trucks	N/A	20.00	20.00
	341200	Transportation Equip, heavy Duty	N/A	25.00	15.00
	341400	Trucks	N/A	25.00	16.67
		Transportation Equip, Other – Golf Carts			
342	342000	**Store Equipments**	4.00	3.59	3.59
343	343000	**Tools Shop & Garage Equipments**	3.42	3.59	3.59
344	344000	**Lab equipments**	0.00	0.0	0.0
345	345000	**Power operated equipments**	0.00	4.64	4.64
346		**Communication Equipments**			
	346100	Communication Equip non-telephone	5.03	5.03	5.03
	346300	Communication Equip Other (misc)	4.93	4.93	4.93

ALL-STATE LEGAL®
EXHIBIT
S-5
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
SANDRA KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

DIRECT

TESTIMONY

OF

GARY T. MCMURRY

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 12, 2009

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EXECUTIVE SUMMARY
ARIZONA AMERICAN WATER COMPANY
DOCKET NO. W-01303A-08-0227

Arizona-American Water Company is an Arizona for-profit Class A public service corporation providing water and wastewater service to approximately 130,000 customers located throughout Arizona. The present application is for approximately 76,000 of the Company's 130,000 customers. On May 2, 2008, Arizona-American Water Company ("Arizona-American" or "Company") filed a general rate application. The application shows that Arizona-American reported a net loss of $4.6 million for the test year ended December 31, 2007 for the seven Districts in its application. Arizona-American requests a combined $19,961,632 revenue increase to provide a 50.2 percent increase in revenue.

Agua Fria Water proposes test year total operating expenses of $16,217,325. Staff recommends four operating expense adjustments resulting in a net reduction of $239,397.

Havasu Water proposes test year total operating expenses of $1,158,005. Staff recommends three operating adjustments resulting in a net reduction of $160,293.

Mohave Water proposes test year total operating expenses of $5,076,491. Staff recommends three operating adjustments resulting in a net reduction of $488,760.

Mohave Wastewater proposes test year total operating expenses of $780,542. Staff recommends two operating adjustments resulting in a net increase of $47,045.

Paradise Valley Water proposes test year total operating expenses of $6,296,235. Staff recommends four operating adjustments resulting in a net reduction of $311,720.

Sun City West Water proposes test year total operating expenses of $5,114,006. Staff recommends three operating adjustments resulting in a net reduction of $80,308.

Tubac Water proposes test year total operating expenses of $465,453. Staff recommends three operating adjustments resulting in a net increase of $11,148.

The testimony of Mr. Gary McMurry presents Staff's recommendation in the areas of operating income and expenses. Staff's recommendations include as many as four operating expense adjustments (tank maintenance accrual, depreciation expense, chemical expenses, property tax expense, and income tax expense) per water system.

I. INTRODUCTION

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

A. My name is Gary McMurry. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Business Administration with a major in Accounting from the University of Arizona in 1980. I have since been awarded two professional designations; one as a Certified Internal Auditor and the other as a Certified Fraud Examiner, after successfully meeting the prescribed requirements established by both professional organizations.

My prior work experience includes approximately 20 years of auditing (both internal and external), five additional years as a bank examiner, and two years of investigations work. Prior to joining the Commission, I was employed by the Office of Audit and Analysis for the Department of Transportation primarily as a construction auditor.

In 2007, I began employment at the Commission as a Public Utilities Analyst IV in the Finance and Regulatory Analysis Section. Since coming to the Commission, I have participated in a number of rate cases and other regulatory proceedings involving water and gas utilities. I have also attended various seminars and classes on general regulatory and business issues, including the National Association of Regulatory Utility Commissioners ("NARUC") Utility Rate School and the Institute of Public Utilities Annual Regulatory Studies Program ("Camp NARUC").

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. I am responsible for the examination and verification of financial and statistical information included in assigned utility rate applications. I develop revenue requirements, design rates, and prepare written reports, testimony and schedules to present Staff's recommendations to the Commission. I am also responsible for testifying at formal hearings on these matters.

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony is to present Staff's analysis and recommendations regarding the application by Arizona-American Water Company ("Arizona-American" or "Company") for a permanent rate increase for seven of its systems. I will present Staff's recommendation in the areas of test year operating income and expense adjustments.

Q. What is the basis of your recommendations?

A. I performed a regulatory audit of the Company's records to determine whether sufficient, relevant and reliable evidence exists to support the proposals in Arizona-American's rate application. My regulatory audit consisted of the following: (1) examining and testing Arizona-American's accounting ledgers, reports and supporting documents; (2) checking the accumulation of amounts in the records; (3) tracing recorded amounts to source documents; and (4) verifying that the Company applied accounting principles were in accordance with the NARUC Uniform System of Accounts ("USOA").

Q. How is your testimony organized?

A. My testimony is presented in nine sections. Section I is this introduction. Section II provides a background of the Company. Section III is a summary of Staff's recommended operating income and expense adjustments for the Agua Fria Water system. Section IV is a summary of Staff's recommended operating income and expense adjustments for the Havasu system. Section V is a summary of Staff's recommended operating income and expense adjustments for the Mohave Water system. Section VI is a summary of Staff's recommended operating income and expense adjustments for the Mohave Wastewater system. Section VII is a summary of Staff's recommended operating income and expense adjustments for the Paradise Valley Water system. Section VIII is a summary of Staff's recommended operating income and expense adjustments for the Sun City West Water system. Section IX is a summary of Staff's recommended operating income and expense adjustments for the Tubac Water system.

II. BACKGROUND

Q. Would you please review the pertinent background information associated with the Company's application for a permanent rate increase?

A. Yes. Arizona-American is a Class A public service corporation servicing approximately 130,000 customers located throughout Arizona. The present application is for approximately 76,000 of the Company's 130,000 customers. Arizona-American is a wholly owned subsidiary of American Water Works ("AWW"), the largest investor owned utility in the United States with 19 separate state subsidiaries including California, Ohio, and Texas. Arizona-American's application indicates that its shareholders are frustrated by both the inadequate authorized return and the opportunity to earn that return in Arizona.

Q. What test year did Arizona-American use in its filing?

A. Arizona-American's rate filing is based on the twelve months ending December 31, 2007.

III. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE AGUA FRIA SYSTEM

Q. Please summarize Staff's operating income adjustments for the Agua Fria District.

A. Operating Expenses:

Tank Maintenance Accrual – This adjustment removes $469,568 in accruals related to the water tank maintenance program.

Depreciation Expense – This adjustment removes $295,690 in depreciation expense claimed primarily on plant additions that were not placed into service until after the test year.

Chemical Expense Adjustment – This adjustment recognizes a reduction of $142,065 in chemical expense to remove a double count of expense in the Agua Fria District.

Income Taxes – This adjustment increases income taxes by $667,926 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Agua Fria Operating Expense Adjustment No. 1 – Tank Maintenance Accrual

Q. What did the Company propose with respect to the Tank Maintenance Accrual adjustment?

A. The Company proposed a water tank maintenance program, which will increase its operating expenses by $437,819 to allow the Company to perform inspections, maintenance, and repairs to water tanks throughout the Central and Eastern Regions.

Q. What historical tank maintenance procedures were performed by Arizona-American over the past ten years?

A. In response to Staff data request GTM-8.17, the Company stated that of the 18 tanks in the Central Region (Agua Fria and Sun City West), only four have been inspected and no maintenance activity has occurred in the past ten years. In response to Staff data request GTM-8.17, the Company stated that with respect to the Eastern Region (Paradise Valley, Mohave, Havasu, and Tubac), of the 36 tanks, 13 have received interior repainting, 15 received exterior painting, and six tanks were refurbished in the past ten years.

Q. Is the tank maintenance program being proposed comparable to the historical tank maintenance procedures performed in the past?

A. No. In response to Staff data request GTM-8.16, the Company stated that it has deferred most tank maintenance procedures since 2001, as it was unaffordable given other priorities and financial problems.

Q. What was the actual cost of the maintenance procedures performed by the Company on its water tanks over the past ten years?

A. In response to GTM-8.17, the Company declined to provide historical source documentation to support the maintenance performed indicating that the historical

information was not available for six districts (including Agua Fria) prior to 2001 and has not been assembled for subsequent years for these districts. The Company declined to provide historical cost information stating, "it would require significant effort to assemble the requested maintenance information."

Q. How does the Company arrive at its $437,819 estimate for the annual tank maintenance program?

A. In response to GTM-12.6, the Company stated that the estimates of cost were based on previous work performed in the some of other districts and the Company's current contracted vendors pricing list. In response to GTM-12.3, the Company declined to provide support for its inspection pricing stating that the pricing table was confidential. The Company did state that inspections for the Central region were estimated on a tank-by-tank basis.

Q. Has the Company provided Staff with tank maintenance cost data that differs from the amount in its rate filing?

A. Yes. The data provided to Staff reflects the Company's estimates using an average costing methodology based on recent outside contractor bids.

Q. What is the basis for this new tank maintenance cost?

A. These new tank maintenance costs projections are based on cost estimates for the seven districts using the arithmetic average of two outside bids for the "Rehabilitation, Repainting the Interior, and Spot Coating the Exterior" of two, 1,250,000 gallon tanks located in the Sun City Water District.

Q. Does Staff have any concerns regarding the use of these bids?

A. Yes. The Company stated that it did not accept these outside bids because the Company believed the costs quoted were excessive. In addition, by the inclusion of the term "rehabilitation" in the wording of the proffered bid, the scope of the work appears to include capital improvements, not simply tank maintenance. Finally, the small sample size (2 bids) chosen, the selection of two large (1.25 million gallon) tanks of the same size, and the selection of tanks not located in the seven districts covered by the rate application leads to questions regarding the sample being representative of the population in general. Thus, while Staff agrees that the Company should properly maintain its storage tanks and recover those costs, the bids the Company used to project tank maintenance expense is not known and measurable for the Agua Fria District.

Q. What method is Staff recommending to calculate the tank maintenance cost?

A. Staff recommends normalizing tank maintenance expense by using and average of the general ledger balances for the past three years.

Q. What is Staff's recommendation?

A. Staff recommends removing $469,568 in operating expenses for tank maintenance as shown in Schedule GTM-12. Staff recommends an adjusted maintenance expense of $121,761.

Agua Fria Operating Expense Adjustment No. 2 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $4,397,190.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of contributions in aid of construction ("CIAC").

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant). Staff and the Company reduced depreciation expense for the amortization of contributions-in-aid-of-construction in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends a decrease in depreciation expense of $295,690 to $4,101,501.

Agua Fria Operating Expense Adjustment No. 3 – Chemical Expense Adjustment

Q. What is the Company proposing for chemical expense?

A. Arizona-American is proposing the test year recorded amount and a pro forma amount to reflect increased costs for arsenic removal for a total of $1,121,555.

Q. Did Staff find any problems with the Company's proposed amount?

A. Yes. In response to Staff data request GTM-8.12, the Company provided support for the annualized chemical expense adjustment for four of the seven water districts. The Company's response revealed errors in the Agua Fria and Paradise Valley chemical adjustment calculations. Specifically, the pro forma calculations double counted some costs.

Q. What is Staff proposing for chemical expense?

A. Staff is proposing a decrease to chemical expense by $142,065 from $1,121,555 to $979,490 to remove the double count.

Agua Fria Operating Expense Adjustment No. 4 – Intentionally left blank

Agua Fria Operating Expense Adjustment No. 5 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing a negative $138,756 for a combined State and Federal test year income tax expense as shown on Schedule GTM-16.

Q. How did Staff calculate test year income tax expense?

A. Staff calculated test year income tax expense by applying the statutory State and Federal income tax rates to Staff's adjusted test year taxable income as shown on Schedule GTM-16.

Q. Did Staff prepare a schedule showing the computation of test year income taxes?

A. Yes. Staff's computation of income taxes is shown on Schedule GWB-2.

Q. What is Staff's recommendation?

A. Staff recommends increasing test year income tax expense by $667,926 from a negative $138,756 to a positive $529,171.

IV. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE HAVASU SYSTEM

Q. Please summarize Staff's operating income adjustments for the Havasu Water District.

A. Operating Expenses:

Tank Maintenance Accrual – This adjustment removes $187,950 in accruals related to the water tank maintenance program.

Depreciation Expense – This adjustment decreases $76,346 in depreciation expense claimed primarily on plant additions that were not placed into service until after the test year.

Income Taxes – This adjustment increases income taxes by $112,905 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Havasu Operating Expense Adjustment No. 1 – Tank Maintenance Accrual

Q. What did the Company propose with respect to the Tank Maintenance Accrual adjustment?

A. The Company proposed a water tank maintenance program, which will increase its operating expenses by $189,831 to allow the Company to perform inspections, maintenance, and repairs to water tanks throughout the Central and Eastern Regions.

Q. What historical tank maintenance procedures were performed by Arizona-American over the past ten years?

A. In response to Staff data request GTM-8.17, the Company stated with respect to the Eastern Region (Paradise Valley, Mohave, Havasu and Tubac), that of the 36 tanks, 13 have received interior repainting, 15 received exterior painting and six tanks were refurbished. The Company stated that inspections for the Eastern Region used an average costing methodology but the inspections for the Central Region were estimated on a tank by tank basis.

Q. Is the tank maintenance program being proposed comparable to the historical tank maintenance procedures performed in the past?

A. No. In response to Staff data request GTM-8.16, the Company stated that it has deferred most tank maintenance procedures since 2001, as it was unaffordable given other priorities and financial problems.

Q. What was the actual cost of the maintenance procedures performed by the Company on its water tanks over the past ten years?

A. In response to GTM-8.17, the Company declined to provide historical source documentation to support the maintenance performed indicating that the historical information was not available for six districts (including Agua Fria) prior to 2001 and has not been assembled for subsequent years for these districts. The Company declined to provide historical cost information stating, "it would require significant effort to assemble the requested maintenance information."

Q. How does the Company arrive at its $189,831 estimate for the annual tank maintenance program?

A. In response to GTM-12.6, the Company stated that the estimates of cost were based on previous work performed in the some of other districts and the Company's current contracted vendors pricing list. In response to GTM-12.3, the Company declined to provide support for its inspection pricing stating that the pricing table was confidential. The Company did state that inspections for the Central region were estimated on a tank-by-tank basis.

Q. Has the Company provided Staff with tank maintenance cost data that differs from the amount in its rate filing?

A. Yes. The data provided to Staff reflects the Company's estimates using an average costing methodology based on recent outside contractor bids.

Q. What is the basis for this new tank maintenance cost?

A. These new tank maintenance costs projections are based on cost estimates for the seven districts using the arithmetic average of two outside bids for the "Rehabilitation,

Repainting the Interior, and Spot Coating the Exterior" of two, 1,250,000 gallon tanks located in the Sun City Water District.

Q. Does Staff have any concerns regarding the use of these bids?

A. Yes. The Company stated that it did not accept these outside bids because the Company believed the costs quoted were excessive. In addition, by the inclusion of the term "rehabilitation" in the wording of the proffered bid, the scope of the work appears to include capital improvements, not simply tank maintenance. Finally, the small sample size (2 bids) chosen, the selection of two large (1.25 million gallon) tanks of the same size, and the selection of tanks not located in the seven districts covered by the rate application leads to questions regarding the sample being representative of the population in general. Thus, while Staff agrees that the Company should properly maintain its storage tanks and recover those costs, the bids the Company used to project tank maintenance expense is not known and measurable for the Havasu District.

Q. What method is Staff recommending to calculate the tank maintenance cost?

A. Staff recommends normalizing tank maintenance expense by using and average of the general ledger balances for the past three years.

Q. What is Staff's recommendation?

A. Staff recommends removing $187,950 in operating expenses for tank maintenance as shown in Schedule GTM-12. Staff recommends an adjusted maintenance expense of $10,747.

Havasu Operating Expense Adjustment No. 2 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $291,351.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American's proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year). Staff and the Company reduced depreciation expense for the amortization of CIAC in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends a decrease in depreciation expense of $76,346 to $215,004.

Havasu Operating Expense Adjustment No. 3 – Intentionally left blank

Havasu Operating Expense Adjustment No. 4 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing a negative $159,839 for a combined test year income tax expense as shown on Schedule GTM-15.

Q. How did Staff calculate test year income tax expense?

A. Staff calculated test year income tax expense by applying the statutory state and federal income tax rates to Staff's adjusted test year as shown on Schedule GTM-15.

Q. Did Staff prepare a schedule showing the computation of income taxes?

A. Yes. Staff's computation of income taxes is shown on Schedule GWB-2.

Q. What is Staff's recommendation?

A. Staff recommends increasing test year income expense by $112,905 from a negative $159,839 to a negative $46,934.

V. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE MOHAVE WATER SYSTEM

Q. Please summarize Staff's operating income adjustments for the Mohave Water District.

A. Operating Expenses:

Tank Maintenance Accrual – This adjustment removes $488,488 in accruals related to the water tank maintenance program.

Depreciation Expense – This adjustment removes $348,839 in depreciation expense claimed.

Income Taxes – This adjustment increases income taxes by $349,142 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Mohave Water Operating Expense Adjustment No. 1 – Tank Maintenance Accrual

Q. What did the Company propose with respect to the Tank Maintenance Accrual adjustment?

A. The Company proposed a water tank maintenance program, which will increase its operating expenses by $488,488 to allow the Company to perform inspections, maintenance, and repairs to water tanks throughout the Central and Eastern Regions.

Q. What historical tank maintenance procedures were performed by Arizona-American over the past ten years?

A. In response to Staff data request GTM-8.17, the Company stated with respect to the Eastern Region (Paradise Valley, Mohave, Havasu and Tubac), that of the 36 tanks, 13 have received interior repainting, 15 received exterior painting and six tanks were refurbished. The Company stated that inspections for the Eastern Region used an average costing methodology but the inspections for the Central Region were estimated on a tank by tank basis.

Q. Is the tank maintenance program being proposed comparable to the historical tank maintenance procedures performed in the past?

A. No. In response to Staff data request GTM-8.16, the Company stated that it has deferred most tank maintenance procedures since 2001, as it was unaffordable given other priorities and financial problems.

Q. What was the actual cost of the maintenance procedures performed by the Company on its water tanks over the past ten years?

A. In response to GTM-8.17, the Company declined to provide historical source documentation to support the maintenance performed indicating that the historical information was not available for six districts (including Agua Fria) prior to 2001 and has not been assembled for subsequent years for these districts. The Company declined to provide historical cost information stating, "it would require significant effort to assemble the requested maintenance information."

Q. How does the Company arrive at its $488,488 estimate for the annual tank maintenance program?

A. In response to GTM-12.6, the Company stated that the estimates of cost were based on previous work performed in the some of other districts and the Company's current contracted vendors pricing list. In response to GTM-12.3, the Company declined to provide support for its inspection pricing stating that the pricing table was confidential. The Company did state that inspections for the Central region were estimated on a tank-by-tank basis.

Q. Has the Company provided Staff with tank maintenance cost data that differs from the amount in its rate filing?

A. Yes. The data provided to Staff reflects the Company's estimates using an average costing methodology based on recent outside contractor bids.

Q. What is the basis for this new tank maintenance cost?

A. These new tank maintenance costs projections are based on cost estimates for the seven districts using the arithmetic average of two outside bids for the "Rehabilitation, Repainting the Interior, and Spot Coating the Exterior" of two, 1,250,000 gallon tanks located in the Sun City Water District.

Q. Does Staff have any concerns regarding the use of these bids?

A. Yes. The Company stated that it did not accept these outside bids because the Company believed the costs quoted were excessive. In addition, by the inclusion of the term "rehabilitation" in the wording of the proffered bid, the scope of the work appears to include capital improvements, not simply tank maintenance. Finally, the small sample size (2 bids) chosen, the selection of two large (1.25 million gallon) tanks of the same size, and the selection of tanks not located in the seven districts covered by the rate application leads to questions regarding the sample being representative of the population in general. Thus, while Staff agrees that the Company should properly maintain its storage tanks and recover those costs, the bids the Company used to project tank maintenance expense is not known and measurable for the Mohave District.

Q. What method is Staff recommending to calculate the tank maintenance cost?

A. Staff recommends normalizing tank maintenance expense by using and average of the general ledger balances for the past three years.

Q. What is Staff's recommendation?

A. Staff recommends removing $488,307 in operating expenses for tank maintenance as shown in Schedule GTM-12. Staff recommends an adjusted maintenance expense of $534,396.

Mohave Water Operating Expense Adjustment No. 2 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $883,235.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the

Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant). Staff and the Company reduced depreciation expense for the amortization of CIAC in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends a decrease in depreciation expense of $348,839 to $534,396.

Mohave Water Operating Expense Adjustment No. 3 – Intentionally left blank

Mohave Water Operating Expense Adjustment No. 4 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing a negative $196,927 for a combined state and federal test year income tax expense as shown on Schedule GTM-15.

Q. How did Staff calculate Test Year Income Tax Expense?

A. Staff calculated test year income tax expense by applying the statutory state and federal income tax rates to Staff's adjusted Test Year taxable income as shown on Schedule GTM-16.

Q. Did Staff prepare a schedule showing the computation of test year income taxes?

A. Yes. Staff's computation of income taxes is shown on Schedule GWB-2.

Q. What is Staff's recommendation?

A. Staff recommends increasing test year income expense by $349,142 from a negative $196,927 to a positive $152,214.

VI. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE MOHAVE WASTEWATER SYSTEM

Q. Please summarize Staff's operating income adjustments for the Mohave Wastewater District.

A. Operating Expenses:

Depreciation Expense– This adjustment removes $26,796 in depreciation expense.

Income Taxes – This adjustment increases income taxes by $73,732 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Mohave Wastewater Operating Expense Adjustment No. 1 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $248,398.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American's proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation decreases depreciation expense by $26,796 to $221,601. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant). Staff and the Company reduced depreciation expense for the amortization of CIAC in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends a decrease in depreciation expense of $26,796 to $221,601.

Mohave Wastewater Operating Expense Adjustment No. 2 – Property Taxes Intentionally left blank

Mohave Wastewater Operating Expense Adjustment No. 3 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing a negative $76,894 for a combined state and federal test year income tax expense as shown on Schedule GTM-14.

Q. How did Staff calculate Test Year Income Tax Expense?

A. Staff calculated Test Year Income Tax Expense by applying the statutory state and federal income tax rates to Staff's adjusted test year taxable income as shown on Schedule GTM-16.

Q. Did Staff prepare a schedule showing the computation of test year income taxes?

A. Yes. Staff's computation of income taxes is shown on Schedule GWB-2.

Q. What is Staff's recommendation?

A. Staff recommends increasing test year income expense by $73,732 from a negative $76,894 to a negative $3,162.

VII. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE PARADISE VALLEY WATER SYSTEM

Q. Please summarize Staff's operating income adjustments for the Paradise Valley District.

A. Operating Expenses:

Tank Maintenance Accrual – This adjustment removes $453,461 in accruals related to the water tank maintenance program.

Depreciation Expense – This adjustment adds $77,868 in depreciation expense claimed primarily on plant additions that were not placed into service until after the test year.

Chemical Expense Adjustment – This adjustment recognizes a reduction of $51,390 in chemical expense to reflect errors in the chemical calculation in the Paradise Valley District.

Property Taxes – This adjustment decreases property taxes by $1,567 to reflect application of the modified version of the Arizona Department of Revenue's ("ADOR") property tax methodology, which the Commission has consistently adopted.

Income Taxes – This adjustment increases income taxes by $162,266 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Paradise Valley Operating Expense Adjustment No. 1 – Tank Maintenance Accrual

Q. What did the Company propose with respect to the Tank Maintenance Accrual adjustment?

A. The Company proposed a water tank maintenance program which will increase its operating expenses by $398,910 to allow the Company to perform inspections, maintenance, and repairs to water tanks throughout the Central and Eastern Regions.

Q. What historical tank maintenance procedures were performed by Arizona-American over the past ten years?

A. In response to Staff data request GTM-8.17 the Company stated that with respect to the Eastern Region (Paradise Valley, Mohave, Havasu, and Tubac), of the 36 tanks, 13 have received interior repainting, 15 received exterior painting, and six tanks were refurbished in the past ten years.

Q. Is the tank maintenance program being proposed comparable to the historical tank maintenance procedures performed in the past?

A. No. In response to Staff data request GTM-8.16, the Company stated that it has deferred most tank maintenance procedures since 2001 as it was unaffordable given other priorities and financial problems.

Q. What was the actual cost of the maintenance procedures performed by the Company on its water tanks over the past ten years?

A. In response to GTM-8.17, the Company declined to provide historical source documentation to support the maintenance performed indicating that the historical information was not available for six districts prior to 2001 and has not been assembled for subsequent years for these districts. The Company declined to provide historical cost information stating, "it would require significant effort to assemble the requested maintenance information."

Q. How does the Company arrive at its $398,910 estimate for the tank maintenance program?

A. In response to GTM-12.6, the Company stated that the estimates of cost were based on previous work performed in other districts and its current contracted vendors pricing list. In response to GTM-12.3, the Company declined to provide support for its inspection pricing stating that the pricing table was confidential. The Company did state that inspections for the Central region were estimated on a tank by tank basis.

Q. Has the Company provided Staff with tank maintenance cost data that differs from the amount in its rate filing?

A. Yes. The data provided to Staff reflects the Company's estimates using an average costing methodology based on recent outside contractor bids.

Q. What is the basis for this new tank maintenance cost?

A. These new tank maintenance costs projections are based on cost estimates for the seven districts using the arithmetic average of two outside bids for the "Rehabilitation,

Repainting the Interior, and Spot Coating the Exterior" of two, 1,250,000 gallon tanks located in the Sun City Water District.

Q. Does Staff have any concerns regarding the use of these bids?

A. Yes. The Company stated that it did not accept these outside bids, as the Company believed the costs quoted were excessive. In addition, by the inclusion of the term "rehabilitation" in the wording of the proffered bid, the scope of the work appears to include capital improvements, not simply tank maintenance. Finally, the small sample size (2 bids) chosen, the selection of two large (1.25 million gallon) tanks of the same size, and the selection of tanks not located in the seven districts covered by the rate application leads to questions regarding the sample being representative of the population in general.

Q. What method is Staff recommending to calculate the tank maintenance cost?

A. Staff recommends normalizing tank maintenance expense by using and average of the general ledger balances for the past three years.

Q. What is Staff's recommendation?

A. Staff recommends removing $453,461 in operating expenses for tank maintenance as shown in Schedule GTM-12. Staff recommends an adjusted maintenance expense of $124,831.

Paradise Valley Operating Expense Adjustment No. 2 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $1,615,824.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American's proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant). Staff and the Company reduced depreciation expense for the amortization of CIAC in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends an increase in depreciation expense of $77,868 to $1,693,691.

Paradise Valley Operating Expense Adjustment No. 3 – Chemical Expense Adjustment

Q. What is the Company proposing for chemical expense?

A. Arizona-American is proposing the test year recorded amount of $236,982 for chemical expenses.

Q. Did Staff find any problems with the Company's proposed amount?

A. Yes. In response to Staff data request GTM-8.12, the Company provided support for the annualized chemical expense adjustment for four of the seven water districts. The Company's response revealed errors in the Agua Fria and Paradise Valley chemical adjustment calculations.

Q. What is Staff proposing for chemical expense?

A. Staff is proposing a decrease to chemical expense of $51,390 from $236,982 to $185,592.

Paradise Valley Operating Expense Adjustment No. 4 – Property Taxes

Q. What is the Company proposing for test year property tax expense?

A. Arizona-American is proposing $268,996 in property taxes. The Company's proposed property taxes are calculated on the modified ADOR's methodology typically adopted by the Commission for water and wastewater utilities. The results from using this methodology are primarily dependent upon the test year and proposed revenue. In other words, each revenue requirement has its own property tax expense in the same manner as each operating income has its own tax expenses. Thus, the Company has included a factor for property taxes in the gross revenue conversion factor ("GRCF") that automatically adjusts the revenue requirement for changes in revenue in the same way that income taxes are adjusted for changes in operating income. This flexible method will accurately reflect property tax expense at any authorized revenue level. This refinement removes the need

to include proposed revenues in the calculation of test year property tax expense and allows for accurate calculation of property tax expense at the test year revenue level.

Q. Did Staff use the same modified ADOR method as the Company?

A. Yes. Accordingly, any Staff adjustment is due to factors other than the methodology employed, e.g., different revenue requirement or test year revenue.

Q. What is Staff recommending for test year property tax expense?

A. Staff recommends $267,428 for property tax expense, a decrease of $1,567 over the Company's calculation. Staff further recommends adoption of its GRCF that includes a factor for property tax expense as shown on GWB-2.

Paradise Valley Operating Expense Adjustment No. 5 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing $228,400 for a combined test year income tax expense as shown on Schedule GTM-16.

Q. How did Staff calculate test year income tax expense?

A. Staff calculated test year income tax expense by applying the statutory state and federal income tax rates to Staff's adjusted Test Year taxable income as shown on Schedule GTM-16.

Q. Did Staff prepare a schedule showing the computation of test year income taxes?

A. Yes. Staff's computation of income taxes is shown on Schedule GWB-2.

Q. What is Staff's recommendation?

A. Staff recommends increasing test year income tax expense by $162,266 from $228,400 to $390,666.

VIII. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE SUN CITY WEST WATER SYSTEM

Q. Please summarize Staff's operating income adjustments for the Sun City West Water District.

A. Operating Expenses:

Tank Maintenance Accrual – This adjustment removes $181,751 in accruals related to the water tank maintenance program.

Depreciation expense– This adjustment adds $162,980 in depreciation expense.

Income Taxes – This adjustment decreases income taxes by $3,472 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Sun City West Operating Expense Adjustment No. 1 – Tank Maintenance Accrual

Q. What did the Company propose with respect to the Tank Maintenance Accrual adjustment?

A. The Company proposed a water tank maintenance program which will increase its operating expenses by $137,026 to allow the Company to perform inspections, maintenance, and repairs to water tanks throughout the Central and Eastern Regions.

Q. What historical tank maintenance procedures were performed by Arizona-American over the past ten years?

A. In response to Staff data request GTM-8.17, the Company stated that of the 18 tanks in the Central Region (Agua Fria and Sun City West), only four have been inspected and no maintenance activity has occurred in the past ten years.

Q. Is the tank maintenance program being proposed comparable to the historical tank maintenance procedures performed in the past?

A. No. In response to Staff data request GTM-8.16 the Company stated that it has deferred most tank maintenance procedures since 2001, as it was unaffordable given other priorities and financial problems.

Q. What was the actual cost of the maintenance procedures performed by the Company on its water tanks over the past ten years?

A. In response to GTM-8.17, the Company declined to provide historical source documentation to support the maintenance performed indicating that the historical information was not available for six districts prior to 2001 and has not been assembled for subsequent years for these districts. The Company declined to provide historical cost information stating, "it would require significant effort to assemble the requested maintenance information."

Q. How does the Company arrive at its $137,026 estimate for the tank maintenance program?

A. In response to GTM-12.6, the Company stated that the estimates of cost were based on previous work performed in other districts and its current contracted vendors pricing list. In response to GTM-12.3, the Company declined to provide support for its inspection

pricing stating that the pricing table was confidential. The Company did state that inspections for the Central Region were estimated on a tank by tank basis.

Q. Has the Company provided Staff with tank maintenance cost data that differs from the amount in its rate filing?

A. Yes. The data provided to Staff reflects the Company's estimates using an average costing methodology based on recent outside contractor bids.

Q. What is the basis for this new tank maintenance cost?

A. These new tank maintenance costs projections are based on cost estimates for the seven districts using the arithmetic average of two outside bids for the "Rehabilitation, Repainting the Interior, and Spot Coating the Exterior" of two, 1,250,000 gallon tanks located in the Sun City Water District.

Q. Does Staff have any concerns regarding the use of these bids?

A. Yes. The Company stated that it did not accept these outside bids because the Company believed the costs quoted were excessive. In addition, by the inclusion of the term "rehabilitation" in the wording of the proffered bid, the scope of the work appears to include capital improvements, not simply tank maintenance. Finally, the small sample size (2 bids) chosen, the selection of two large (1.25 million gallon) tanks of the same size, and the selection of tanks not located in the seven districts covered by the rate application leads to questions regarding the sample being representative of the population in general. Thus, while Staff agrees that the Company should properly maintain its storage tanks and recover those costs, the bids the Company used to project tank maintenance expense is not known and measurable for the Sun City West District.

Q. What method is Staff recommending to calculate the tank maintenance cost?

A. Staff recommends normalizing tank maintenance expense by using and average of the general ledger balances for the past three years.

Q. What is Staff's recommendation?

A. Staff recommends removing $181,751 in operating expenses for tank maintenance as shown in Schedule GTM-12. Staff recommends an adjusted maintenance expense of $65,577.

Sun City West Operating Expense Adjustment No. 2 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $1,323,541.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American's proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant) as well as allocations of assets from corporate headquarters.

Q. What is Staff's recommendation?

A. Staff recommends an increase in depreciation expense of $162,980 to $1,486,521.

Sun City West Operating Expense Adjustment No. 3 – Intentionally left blank

Sun City West Operating Expense Adjustment No. 4 – Income Taxes

Q. What is the Company proposing for test year income taxes?

A. Arizona-American is proposing a negative $324,059 for a combined test year income tax expense as shown on Schedule GTM-16.

Q. How did Staff calculate test year income tax expense?

A. Staff calculated test year income tax expense by applying the statutory state and federal income tax rates to Staff's adjusted Test Year taxable income as shown on Schedule GTM-16.

Q. What is Staff's recommendation?

A. Staff recommends decreasing test year income tax expense by $3,427 from a negative $324,059 to a negative $327,531.

IX. SUMMARY OF STAFF'S OPERATING INCOME AND EXPENSE ADJUSTMENTS FOR THE TUBAC WATER SYSTEM

Q. Please summarize Staff's operating income adjustments for the Tubac Water District.

A. Operating Expenses:

Depreciation expense – This adjustment removes $1,492 in depreciation expense.

Property Taxes – This adjustment decreases property taxes by $6,710 to reflect application of the modified version of the Arizona Department of Revenue's property tax methodology, which the Commission has consistently adopted.

Income Taxes – This adjustment increases income taxes by $16,150 to reflect the application of statutory State and Federal income tax rates to Staff's test year taxable income.

Tubac Operating Expense Adjustment No. 1 – Depreciation Expense

Q. What amount of depreciation expense is Arizona-American proposing?

A. Arizona-American is proposing depreciation expense of $81,679.

Q. What are the components of the Company's proposed depreciation expense?

A. Arizona-American proposed depreciation expense consists of test year depreciation expense plus pro forma adjustments to recognize depreciation on post test year plant additions and the amortization of CIAC.

Q. How did Arizona-American calculate each component of its proposed depreciation expense for each of the seven systems?

A. The Company calculated test year depreciation expense by multiplying the original cost of its depreciable test year plant in service by the depreciation rates approved in the prior rate proceedings.

Q. Did Staff recompute the Company's depreciation expense for each of the seven systems?

A. Yes. Staff recomputed depreciation expense based on Staff's recommended total plant in service and Commission approved depreciation rates. Staff used the same methodology as the Company to calculate depreciation expense. Staff's calculation differs from the Company's due to the use of Staff's recommended plant in service, which may differs from the Company's, and excludes amounts included by the Company for assets placed into service after test year end (post test year plant) as well as allocations of assets from corporate headquarters. Staff and the Company reduced depreciation expense for the amortization of CIAC in accordance with the NARUC USOA.

Q. What is Staff's recommendation?

A. Staff recommends a decrease in depreciation expense of $1,492 to $80,187.

Tubac Operating Expense Adjustment No. 2 – Property Taxes

Q. What is the Company proposing for test year property tax expense?

A. Arizona-American is proposing $26,350 in property taxes. The Company's proposed property taxes are calculated on the modified ADOR's methodology typically adopted by the Commission for water and waste water utilities. The results from using this methodology are primarily dependent upon the test year and proposed revenue. In other words, each revenue requirement has its own property tax expense in the same manner as each operating income has its own tax expenses. Thus, the Company has included a factor for property taxes in the GRCF that automatically adjusts the revenue requirement for changes in revenue in the same way that income taxes are adjusted for changes in operating income. This flexible method will accurately reflect Property Tax expense at any authorized revenue level. This refinement removes the need to include proposed revenues in the calculation of test year Property Tax expense and allows for accurate calculation of Property Tax expense at the test year revenue level.

Q. Did Staff use the same modified ADOR method as the Company?

A. Yes. Accordingly, any Staff adjustment is due to factors other than the methodology employed, e.g., different revenue requirement or test year revenue.

Q. What is Staff's recommendation for test year property tax expense?

A. Staff recommends $25,341 for property tax expense, a decrease of $1,008 over the Company's calculation. Staff further recommends adoption of its GRCF that includes a factor for property tax expense as shown on GWB-2.

1 *Tubac Operating Expense Adjustment No. 3 – Income Taxes*

2 **Q. What is the Company proposing for test year income taxes?**

3 A. Arizona-American is proposing a negative $52,178 for a combined test year income tax
4 expense as shown on Schedule GTM-14.

5

6 **Q. How did Staff calculate test year income tax expense?**

7 A. Staff calculated test year income tax expense by applying the statutory state and federal
8 income tax rates to Staff's adjusted test year taxable income as shown on Schedule GTM-
9 14.

10

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

12 A. Staff recommends increasing test year income tax expense by $13,648 from a negative
13 $52,178 to a negative $38,529.

14

15 **Q. Does this conclude your Direct Testimony?**

16 A. Yes, it does.

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ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
SANDRA KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

SURREBUTTAL

TESTIMONY

OF

GARY T. MCMURRY

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 3, 2009

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EXECUTIVE SUMMARY
ARIZONA AMERICAN WATER COMPANY
DOCKET NOS. W-01303A-08-0227
AND SW-01303A-08-0227

The Surrebuttal Testimony of Staff witness Gary T. McMurry addresses the following issues:

Test Year Operating Income – The adjusted test year operating income for Staff and the Company by system are as follows:

System	Company	Staff
Agua Fria	$2,601,288	$2,819,140
Havasu	($ 131,419)	$ 31,245
Mohave Water	$ 37,140	$ 513,875
Mohave WW	$ 15,619	$ 115,161
Paradise Valley	$1,552,497	$1,867,671
Sun City West	$ 587,425	$ 637,152
Tubac	($ 38,553)	($ 47,649)
Total	$4,624, 069	$5,936,595

The primary differences in test year operating income for between Staff and the Company relate to Chemical, Tank Maintenance, and Depreciation Expenses. Staff agrees with the Company's test year revenues.

Response to the Rebuttal Testimony of Mr. G. Troy Day:

1. Tank Maintenance – Staff continues to recommend normalization of the past three years' recorded expenses. The Company's proposal to recover estimated tank maintenance costs is not adequately supported, includes future inflationary costs, and among other concerns, assumes that its costs are the same as the unauthorized proposed costs of another utility. Staff reserves the right to revisit this issue subject to further discovery.

Staff response to Rebuttal Testimony of Ms. Sheryl L. Hubbard:

1. Depreciation Expense – The reason for differences between the Staff and Company's depreciation expense are due to differences in rate base and depreciation rates.

2. Chemical Expense – Staff agrees with the Company's rebuttal position amount for chemical expense.

3. Fuel and Power Adjustor Mechanism – The Company proposes to establish a fuel and power adjustor mechanism. Unlike other decisions, where an adjustment mechanism has been approved, the Company failed to provide adequate support for the expense's volatility and its impact on the Company's overall financial performance. Staff recommends denial

of the adjustor mechanism because of Staff's concern for piecemeal regulation inherent in adjustment mechanisms.

I. INTRODUCTION

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

A. My name is Gary T. McMurry. I am a Public Utilities Analyst IV employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Gary T. McMurry who filed Direct Testimony in this case?

A. Yes, I am.

Q. What is the purpose of your testimony in this case?

A. The purpose of my Surrebuttal Testimony in this proceeding is to respond to the Rebuttal Testimony of Arizona-American Water Company ("Arizona-America" or "Company") witnesses G. Troy Day and Sheryl L. Hubbard regarding test year operating revenues and expenses and fuel and power adjustment mechanism.

II. RESPONSE TO MR. G. TROY DAY'S REBUTTAL TESTIMONY

Tank Maintenance

Q. Did the Company in its Rebuttal Testimony propose a new Tank-Maintenance program and related costs not mentioned in its Direct Testimony?

A. Yes.

Q. Please explain the Company's proposed tank maintenance program and how it calculated the relate costs.

A. The Company proposes a maintenance schedule for a storage tank that includes recoating the interiors every 14 years and painting the exteriors every 14 years. The Company claims that the proposed interior and exterior maintenance schedules are adapted from its

Missouri Arizona-American affiliate where average interior maintenance interval is eight years and the average external interval is 12 years. The Company modified the maintenance intervals to reflect its experience with the Arizona climate and water quality characteristics.[1]

Q. What information did the Company provide to show the calculation of its proposed costs for its revised tank maintenance program?

A. According to Mr. Day, the Company calculated the cost for interior coating by applying a rate of $4.22 per square foot and the cost for the exterior painting by applying a rate of $1.68 per square foot. This calculation is shown in detail in Exhibit GTD-R1, Page 2 of Mr. Day's rebuttal and is summarized in Exhibit GTD-R1, Page 3. Page 1 of Exhibit GTD-R1 shows the Company's estimated cost for inspecting (evaluation and report, washout and disinfection) tanks. No inspection frequency is specified.

Q. What is the source for the interior coating and exterior painting rates the Company uses in the calculation of its proposed tank maintenance expense?

A. The Company uses the high end of the range of rates (interior, $3.83 - $4.22/sq. ft.; exterior, $1.58 - $1.68/ sq. ft) Arizona Water Company claims for 2008 costs.[2]

Q. Does Exhibit GTD-R1 fully explain the Company's proposed costs?

A. No. The Company's rebuttal includes in aggregate for all six water systems pro forma adjustments of $376,957 for tank maintenance. The proposed pro forma allowance would provide $5,277,398 over 14 years. Exhibit GTD-R1, Page 3 shows the cost over the 15-year period 2009 through 2023 is $4,400,281 for interior coating and exterior painting. The $877,117 difference between the pro forma request and the calculation on Exhibit

[1] G. Troy Day Surrebuttal at 3.
[2] Docket No. W-01445A-08-0440, Fredrick K. Schneider, direct, p.24-25.

GTD-R1, Page 3 is unexplained except that at least part of the difference represents inspection costs. Exhibit GTD-R1, Page 1 shows the total inspection cost is $217,250 (Eastern Division, $128,705 and Central Division, $88,545) - as previously noted, the inspection frequency is not specified. The discrepancy between the 15-year cost in Exhibit GTD-R1, Page 3 and the 14-year maintenance cycle is not explained and should be part of any reconciliation of the difference.

Q. Does Staff have any comments regarding the $4,400,281 15-year maintenance cost shown in Exhibit GTD-R1, Page 3?

A. Yes. First, the costs are inflated at a compounded annual rate of 3.0 percent. Accordingly, the costs for the year 2023 are inflated over the 2008 amount by a factor of 1.03^{15} or 1.558. Thus, the calculation reflects future costs instead of historical test year costs. These projected, inflated amounts are not known and measurable and should be rejected. Furthermore, even if recognition of future, inflated costs was appropriate, the inflationary period should be consistent with the number of years the rates are expect to be in place before a subsequent rate case.

Q. Does Staff have other concerns regarding the Company proposed maintenance costs?

A. Yes. First, Arizona-American has not explained why Arizona Water Company's claimed costs are representative of Arizona-American's costs nor has it shown that the costs are directly comparable (include identical items). Second, the costs claimed by Arizona Water Company have not been adopted by the Commission.

Q. What does Staff recommend regarding the tank maintenance?

A. Staff continues to recommend the normalized historical costs as presented in its direct testimony. However, Staff does perceive potential merit to the Company proposed plan

with appropriate support and modifications. Accordingly, Staff reserves the right to revisit this issue subject to further discovery.

III. RESPONSE TO MS. SHERYL L. HUBBARD'S REBUTTAL TESTIMONY

Depreciation Expense

Q. What are the Company rebuttal and Staff surrebuttal depreciation expenses by system?

A. The following chart shows the Company's rebuttal and Staff's surrebuttal depreciation expenses by system.

	Company Rebuttal	Staff Surrebuttal
Agua Fria	4,397,190	4,071,081
Havasu	291,351	187,656
Mohave Water	883,235	554,265
Mohave WW	248,398	29,337
Paradise Valley	1,615,824	1,643,187
Sun City West	1,323,541	1,479,023
Tubac	81,127	81,127

Q. What are the reasons for the differences in depreciation expense between the Company's Rebuttal Testimony and Staff's Surrebuttal Testimony?

A. The differences in depreciation expense are attributable to differences in depreciable plant and depreciation rates, including the amortization rate for contributions-in-aid-of-construction ("CIAC").

Chemical Expense

Q. Does Staff agree with the Company's rebuttal position regarding chemical expense?

A. Yes. The Company's original application included a double count of some chemical expenses in the Agua Fria and Paradise Valley Districts. Staff's Direct Testimony

included an adjustment to remove the double count. However, Staff's adjustment also contained an error. The Company's rebuttal position rectifies both errors. Staff agrees with the Company that the Chemical Expenses for the Agua Fria and the Paradise Valley Districts are $981,390 and 185,037, respectively.

Q. Does Staff agree with the Company's rebuttal position regarding chemical expense including the Company's proposed amortization of deferred Arsenic O&M for the Havasu District?

A. Yes. Mr. Broderick proposed in his Direct Testimony to amortize Havasu's deferred arsenic O&M costs over 12 years. Decision No. 69162, dated December 5, 2006, authorized the deferral of these arsenic costs. However, in preparation of the schedules for the original rate filing, the amortization of deferred arsenic O&M costs was omitted. The Company corrected the oversight in the schedules submitted in Rebuttal Testimony. The proposed annual amortization of deferred arsenic O&M costs is $7,916 ($94,996 ÷ 12).

Property Taxes

Q. Does the Company refute Staff's recommendations with respect to property taxes?

A. No. The Company notes that Staff's proposed adjustments to property taxes reflect the conforming adjustment necessary to account for the difference between the Company's and Staff's revenue requirement.

Income Taxes

Q. Does the Company refute Staff's recommendations with respect to income taxes?

A. No. The Company notes that Staff's proposed adjustments to income taxes reflect the conforming adjustment necessary to account for the difference between the Company's and Staff's revenue requirement.

Fuel and Power Adjustor Mechanism

Q. Is the Company proposing any expense adjustor mechanism?

A. Yes. The Company is proposing a fuel and power adjustor mechanism.

Q. What reason has the Company given to support its request for a fuel and power adjustment mechanism?

A. The Company supports its request for a fuel and power adjustment mechanism citing that power costs are a significant portion of its operating expenses.

Q. Does the mere significance of a particular expense warrant establishment of an adjustment mechanism?

A. No. Other criteria such as volatility and ability to control should also be considered. Furthermore, a concern for piecemeal regulation is inherent in adjustment mechanisms, i.e., an adjustor mechanism has the potential to automatically increase rates due to an increase in one particular expense without the simultaneous consideration of changes in other costs that may have declined or revenues that may have increased. In other words, an adjustment mechanism has the built-in potential to allow a company to increase rates based on certain isolated costs when its other costs may be declining resulting in increased income. In addition, adjustment mechanisms may also provide a disincentive for a utility to obtain the lowest possible cost commodity when the costs are simply passed through to

the ratepayer. Accordingly, Staff recommends denial of the Company's request for a fuel and power adjustment mechanism.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

DIRECT

TESTIMONY

OF

GERALD BECKER

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 12, 2009

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Revenue Requirement GWB-1
Gross Revenue Conversion Factor GWB-2
Rate Base – Original Cost GWB-3
Summary of Original Cost Rate Base Adjustments GWB-4
Rate Base Adjustment #1 – Working Capital GWB-5
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ATTACHMENTS

Consumer Services Memorandum ..... ATTACHMENT A

EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NOS. W-01303A-08-0227 AND SW-01303A-08-0227

Arizona-American Water Company ("AAWC" or "Company") is a certificated Arizona public service corporation that provided wastewater utility service in various communities throughout the state. This proceeding originally included 10 of the Company's systems but the Company withdrew 3 of them, leaving 7 systems. The case is for the test year ended December 31, 2007.

On May 1, 2008, AAWC filed an application for a permanent rate increase. The Company requested the following increases for the 7 systems in this case.

Agua Fria Water District:

Agua Fria Water District proposed an increase of $9,192,303, or 48.8 percent, revenue increase from $18,818,613 to $28,010,816. The proposed revenue increase would produce an operating income of $8,146,017 for an 8.40 percent rate of return on an original cost rate base ("OCRB") of $96,976,395. Staff's revenue requirement of $21,746,549 represents an increase of $2,927,935, or 15.6 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $62,858,663.

Havasu Water District:

Havasu Water District proposed an increase of $815,803, or 79.5 percent, revenue increase from $1,026,587 to $1,842,390. The proposed revenue increase would produce an operating income of $354,604 for an 8.40 percent rate of return on an OCRB of $4,221,474. Staff's revenue requirement of $1,448,116 represents an increase of $1,026,586, or 41.0 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $4,062,403.

Mohave Water District:

Mohave Water District proposed an increase of $1,665,410, or 32.4 percent, revenue increase from $5,113,631 to $6,779,041. The proposed revenue increase would produce an operating income of $1,011,470 for an 8.40 percent rate of return on an OCRB of $12,041,310. Staff's revenue requirement of $5,323,533 represents an increase of $209,902, or 4.10 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $8,895,477.

Mohave Wastewater District:

Mohave Wastewater District proposed an increase of $642,148, or 80.7 percent, revenue increase from $796,161 to $1,438,309. The proposed revenue increase would produce an operating income of $398,173 for an 8.40 percent rate of return on an OCRB of $4,740,149. Staff's revenue requirement of $796,161 represents an increase of $0, or 0.00 percent. This amount is intended to cover the company's expenses and cannot be compared with this system's rate base which is negative after Staff's adjustments.

Paradise Valley Water District:

Paradise Valley Water District proposed an increase of $3,101,550, or 39.5 percent, revenue increase from $7,848,732 to $10,950,282. The proposed revenue increase would produce an operating income of $3,432,659 an 8.40 percent rate of return on an OCRB of $40,864,986. Staff's revenue requirement of $9,643,480 represents an increase of $1,749,748, or 4.10 percent, for a 22.87 percent rate of return on a Staff adjusted OCRB of original cost rate base of $39,012,577.

Sun City West Water District:

Sun City West Water District proposed an increase of $4,276,305, or 75.0 percent, revenue increase from $5,701,431 to $9,977,736. The proposed revenue increase would produce an operating income of $3,183,691 for an 8.40 percent rate of return on an OCRB of $37,901,085. Staff's revenue requirement of $9,104,518 represents an increase of $3,403,087, or 59.69 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $37,264,959.

Tubac Water District:

Tubac Water District proposed an increase of $278,214, or 65.2 percent, revenue increase from $426,900 to $705,114. The proposed revenue increase would produce an operating income of $128,306 for an 8.40 percent rate of return on an OCRB of $1,527,454. Staff's revenue requirement of $626,781 represents an increase of $199,881, or 46.82 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $1,240,183.

INTRODUCTION

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

A. My name is Gerald Becker. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

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

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

Q. Please describe your educational background and professional experience.

A. I received a Masters of Business Administration with an emphasis in Accounting from Pace University. I am a Certified Public Accountant and a Certified Internal Auditor.

I have participated in multiple rate, financing and other regulatory proceedings. I attended the National Association of Regulatory Utility Commissioners ("NARUC") Utilities Rate School.

I began employment with the Commission as a utilities regulatory analyst in April 2006. Prior to joining the Commission, I worked as an Auditor at the Department of Economic Security and Department of Revenue in the Taxpayer Assistance Section. Prior to those jobs, I worked for 15 years as an Auditor, Analyst, Financial Analyst, and Budget Manager at United Illuminating, an investor owned electric company in New Haven, CT.

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

A. I am presenting Staff's analysis and recommendations in the areas of rate base and revenue requirement, regarding Arizona-American Water Company ("AAWC" or "Company") application for a permanent rate increase. Staff witness Gary McMurry is presenting Staff's analysis of operating revenues and expenses, Staff witness David Parcell is presenting Staff's cost of capital recommendations. Staff witness Marvin Millsap is presenting rate design recommendations. Staff witness Dorothy Hains is presenting Staff's engineering analysis and recommendations.

Q. What is the basis of your recommendations?

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

BACKGROUND

Q. Please review the background of this application.

A. AWW is a holding company whose major subsidiaries provide water and wastewater services in 19 states. AWW is the largest investor-owned water and wastewater company in the United States.

AWW has undertaken several ownership changes over the past several years. Until 2003, AWW was a publicly-traded company headquartered in Voorhees, N.J. In 2003, AWW's stock was acquired by RWE Aktiengesellschaft ("RWE") (a German company) and

became a whole-owned subsidiary of RWE. In 2005, RWE announced its intention to exit is water activities in the U.S. and elsewhere and, in connection with this, sold approximately 63.2 million shares in an initial public offering ("IPO") of AWW's shares. This sale amounted to approximately 40 percent of AWW's shares now being owned by the investing public and the remaining 60 still owned by RWE. RWE intends to divest its remaining ownership of AWW through the consummation of additional public offerings in the future as dictated by market conditions.

As noted above, AWW owns a number of water and wastewater subsidiaries that operate in 32 states throughout the U.S. One of these is AAWC. AWW also owns non-regulated subsidiaries. AWW raises debt capital for its subsidiaries through its financing subsidiary American Water Capital Corp.

The application is for 6 water systems and 1 wastewater system owned by AAWC. Those systems include Agua Fria Water, Havasu Water, Mohave Water, Mohave Wastewater, Paradise Valley Water, Sun City West Water, and Tubac Water.

Q. What are the primary reasons for the Company's requested permanent rate increase?

A. The Company's application states that the filing complies with the filing requirements established by the Commission in Decision Nos. 68825, 69173, 69181, and 69396. The Company further states that it has lost nearly $30 million since AWW purchased the assets of Citizens Water Resources in 2002 and that it lost $4.6 million in 2007. The Company states that the Commission concluded that the Company's times interest earned ratio ("TIER") was 0.44. The Company further states that despite an equity infusion of $15

million in 2007, its TIER had further plummeted to 0.072. The Company states that a TIER of 1.0 is not sustainable in the long term.

CONSUMER SERVICE

Q. Please provide a brief history of customer complaints received by the Commission regarding AAWC.

A. Staff reviewed the Commission's records for the period January 1, 2006 through January 8, 2009 and found:

For Agua Fria Water District, there were 34 complaints and 17 opinions, all opposed to the rate increase.

For the Havasu Water District, there were 34 complaints and 8 opinions, all opposed to the rate increase.

For the Mohave Water and Wastewater Districts, there were 51 complaints and 333 opinions, all opposed to the rate increase.

For the Paradise Valley Water District, there were 65 complaints and 12 opinions, all opposed to the rate increase.

For the Sun City West Water District, there were 60 complaints and 9 opinions, all opposed to the rate increase.

For the Tubac Water District, there were 3 complaints and 2 opinions, all opposed to the rate increase.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Company's filing.

A. The Company proposes total annual operating revenue of $59,693,715 for the systems in this case. This represents an increase of $19,961,660, or 50.2 percent, over Test Year revenue of $39,732,055. The amounts for each system are shown below.

Company Proposed

	Test Year	Company Proposed	$$ Increase	% Increase
AF Water	$18,818,613	$ 28,010,843	$ 9,192,203	48.8%
Havasu	$ 1,026,587	$ 1,842,390	$ 815,803	79.5%
Mohave Water	$ 5,113,631	$ 6,769,041	$ 1,655,410	32.4%
Mohave Wastewater	$ 796,161	$ 1,438,309	$ 642,148	80.7%
Paradise Valley	$ 7,848,732	$ 10,950,282	$ 3,101,550	39.5%
Sun City West Water	$ 5,701,431	$ 9,977,736	$ 4,276,305	75.0%
Tubac	$ 426,900	$ 705,114	$ 278,214	65.2%
Overall	$ 39,732,055	$ 59,693,715	$ 19,961,633	50.2%

Q. Please summarize Staff's recommended revenue.

A. Staff's recommends a revenue requirement of $48,528,678. This represents an increase of $8,796,623, or 22.1 percent. The amounts for each system are shown below.

Staff Recommended

	Test Year	Staff Recommended	$$ Increase	% Increase
AF Water	$ 18,818,613	$ 21,746,548	$ 2,927,935	15.6%
Havasu	$ 1,026,587	$ 1,448,117	$ 421,530	41.1%
Mohave Water	$ 5,113,631	$ 5,323,533	$ 209,902	4.1%
Mohave Wastewater	$ 796,161	$ 796,161	$ -	0.0%
Paradise Valley	$ 7,848,732	$ 9,643,480	$ 1,794,748	22.9%
Sun City West Water	$ 5,701,431	$ 9,104,518	$ 3,403,087	59.7%
Tubac	$ 426,900	$ 626,781	$ 199,881	46.82%
Overall	$ 39,732,055	$ 48,532,000	$ 8,801,945	22.2%

The above proposed and recommended revenue increase would apply to the customers of each system as shown below:

Below is a description of the Revenue Requirement:

Agua Fria Water District:

Agua Fria Water proposed a $9,192,303, or 48.8 percent, revenue increase from $18,818,613 to $28,010,816. The proposed revenue increase would produce an operating income of $8,146,017 for an 8.40 percent rate of return on an original cost rate base ("OCRB") of $96,976,395. Staff's revenue requirement of $21,746,549 represents an increase of $2,927,935, or 15.6 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $62,858,663.

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Havasu Water proposed a $815,803, or 79.5 percent, revenue increase from $1,026,587 to $1,842,390. The proposed revenue increase would produce an operating income of $354,604 for an 8.40 percent rate of return on an OCRB of $4,221,474. Staff's revenue requirement of $1,448,116 represents an increase of $1,026,586, or 41.0 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $4,062,403.

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Mohave Water proposed a $1,665,410, or 32.4 percent, revenue increase from $5,113,631 to $6,779,041. The proposed revenue increase would produce an operating income of $1,011,470 for an 8.40 percent rate of return on an OCRB of $12,041,310. Staff's revenue

requirement of $5,323,533 represents an increase of $209,902, or 4.10 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $8,895,477.

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Mohave Wastewater proposed a $642,148, or 80.7 percent, revenue increase from $796,161 to $1,438,309. The proposed revenue increase would produce an operating income of $398,173 for an 8.40 percent rate of return on an OCRB of $4,740,149. Staff's revenue requirement of $796,161 represents an increase of $0, or 0.00 percent. This amount is intended to cover the company's expenses and cannot be compared with this system's rate base which is negative after Staff's adjustments. For these reasons, the accompanying schedules regarding revenue requirements are for informational purposes only.

Paradise Valley Water District:

Paradise Valley Water proposed a $3,101,550, or 39.5 percent, revenue increase from $7,848,732 to $10,950,282. The proposed revenue increase would produce an operating income of $3,432,659 an 8.40 percent rate of return on an OCRB of $40,864,986. Staff's revenue requirement of $9,643,480 represents an increase of $1,749,748, or 4.10 percent, for a 22.87 percent rate of return on a Staff adjusted OCRB of original cost rate base of $39,012,577.

Sun City West Water District:

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Tubac Water District:

Tubac Water proposed a $278,214, or 65.2 percent, revenue increase from $426,900 to $705,114. The proposed revenue increase would produce an operating income of $128,306 for an 8.40 percent rate of return on an OCRB of $1,527,454. Staff's revenue requirement of $626,781 represents an increase of $199,881, or 46.82 percent, for a 7.34 percent rate of return on a Staff adjusted OCRB of original cost rate base of $1,240,813.

Q. What Test Year did the Company use for this filing?

A. AAWC's rate filing is based on the twelve months ended December 9, 2005 ("Test Year").

Q. Please summarize the rate base and operating income recommendations and adjustments addressed in your testimony for AAWC.

A. My testimony addresses the following issues:

Plant in Service, Accumulated Depreciation, and Advances in Aid of Construction ("AIAC") and Contributions in Aid of Construction ("CIAC") – This adjustment adjusts Plant in Service, Accumulated Depreciation and associated AIAC for the respective system based on Staff's review of a sample of the plant activity since the last rate proceeding.

Imputed Regulatory AIAC – This adjustment removes post test year adjustments proposed by the Company for all systems except Paradise Valley to reflect the intent of Decision No. 67093. In this case, the Company proposed post test amortization of its Imputed Regulatory Advances in Aid of Construction ("IR AIAC") but not its Imputed Regulatory Contributions in Aid of Construction ("IR CIAC").

Working Capital – These adjustments adjust the cash working capital component of the overall working capital adjustment to rate base.

Deferred Debits – These adjustments adjust the deferred debits that the Company proposed to be included in its rate base.

White Tanks CWIP - Agua Fria Water system only – This adjustment modifies that $25 million of CWIP that the Company has requested in rate base of the White Tanks Plant with an expected in service date of April 2010.

Post Test Year Plant – This adjustment removes post test year plant for some systems.

RATE BASE ADJUSTMENTS- MULTIPLE SYSTEMS

Fair Value Rate Base

Q. Did the Company prepare a Schedule showing the elements of Reconstruction Cost New Rate Base?

A. No, the Company did not. The Company requested that its original cost rate base ("OCRB") be treated as its fair value rate base.

Rate Base Summary

Q. Please summarize Staff's adjustments to AAWC's rate base shown on Schedules GWB-3, GWB-3, and GWB-3.

A. Staff's adjustments to the Company's rate base resulted in a net decrease of $45,545,190 from $198,272,854 to $152,667,455. This decrease was primarily due to removing the amortization of IR AIAC, recalculating cash working capital, and recalculating deferred debits. In the Agua Fria Water, Mohave Water and Mohave Wastewater systems, some post test year plant was removed. In the Agua Fria Water system, Staff removed the Company's recommended inclusion of $25 million of CWIP for the White Tanks plant which has an expected in service date of April 2010. A summary of the Company proposed and Staff recommended rate base amounts is shown below.

Rate Base Adjustment No. 1 – Plant in Service, accumulated depreciation and AIAC

Q. What did the Company and Staff propose for Plant in Service, Accumulated Depreciation, and associated AIAC and CIAC?

A. The Company and Staff proposed the following amounts for each system.

Rate Base

	Company Proposed	Staff Recommended	Difference	% Difference
AF Water	$ 96,976,395	$ 62,858,663	$ (34,117,732)	-35.2%
Havasu	$ 4,221,474	$ 4,062,403	$ (159,071)	-3.8%
Mohave Water	$12,041,310	$ 8,895,477	$ (3,145,833)	-26.1%
Mohave Wastewster	$ 4,740,149	$ (610,468)	$ (5,350,617)	-112.9%
Paradise Valley	$ 40,864,986	$ 38,958,204	$ (1,852,409)	-4.5%
Sun City West Water	$ 37,901,086	$ 37,264,959	$ (636,127)	-1.7%
Tubac	$1,527,454	$ 1,240,813	$ (286,641)	-18.8%
Overall	$198,272,854	$152,675,887	$ (45,596,967)	-23.0%

Q. What is the nature of Staff's adjustments to Plant, Accumulated Depreciation and AIAC?

A. Staff tested a sample of the capital additions since each respective system's prior case and determined that the Company was unable to provide the supporting documentation for some items. In addition, Staff witness Dorothy Hains visited each site and performed a determination of the plant's used and usefulness as discussed in Staff's Engineering Report for each system. Accordingly, Staff adjusted the Plant, Accumulated Depreciation and AIAC balances accordingly as shown on Schedule GWB 3 for each system. Further, Staff corrected a clerical error made by the Company whereby retirements for Sun City West Water, Paradise Valley Water, and another system not in this case were made to the wrong system.

Rate Base Adjustment No. 2 – Working Capital

Q. Please describe the working capital adjustment to rate base.

A. Working capital is a collective term that typically includes amounts for prepaid expenses, materials and supplies inventory, and cash working capital. In its summary schedules filed in Docket, the Company aggregated these items as one line item. Staff Schedules GWB 3 and GWB 4 provide the composition of the Company's working capital by component to show the cash working capital component and Staff's recommended

adjustments to that component. Staff's adjustments relate to the cash working capital component only.

The purpose of calculating a cash working capital amounts is to quantify the amount of cash that a company needs to operate by analyzing the timing differentials between the period required for revenues to be realized and collected and the periods between the date that an expense is incurred and the date paid. A lead lag study summarizes the differences between the collection of revenues and the payment of expenses and creates a cash working capital amount which is added or subtracted from the Company's rate base.

Q. Did the Company supply a lead lag study in this case?

A. Yes.

Q. Was Staff able to use the Company's study to calculate cash working capital?

A. No.

Q. Please explain.

A. Staff reviewed the study and concluded that while the revenue lag days were well supported by the Company, the Company's expense lag days included therein were not reliable. Staff further noted that the amounts included as expense amounts in the study did not agree to the respective expense amounts provided elsewhere in the Company's.

Q. How did Staff attempt to resolve these concerns?

A. Staff discussed its concerns with Company personnel. The Company agreed that the expense amounts and lead lag days could not be explained or supported by new or existing evidence in the case. Staff informed the Company that Staff would create its lead lag

amount to estimate cash working capital by using Staff adjusted test year expenses in the present case but would use the lead lag days for expenses as reflected in the Company's previous case for its Mohave systems in Decision No. 69440. This lead lag study was also used as the basis of adjustments to Company amounts in two other AAWC cases (W-01303A-06-0403 and W-01303A-06-0491) which were adopted by the Commission in Decision Nos. 70372 and 70209, respectively.

Q. Was Staff able to produce its own estimates of cash working capital for each system?

A. Yes. As indicated in Schedule GWB-5 for Havasu and Tubac Water and GWB-6 for the remaining systems, Staff recomputed the cash working capital for each system.

Q. What does Staff recommend?

A. Staff recommends approval of the recalculated cash working capital amounts as shown for each system in Schedules GWB-5 for Agua Fria Water and Tubac Water, and GWB-6 for the other five systems.

Rate Base Adjustment No. 3 – Imputed Regulatory Advances (and Imputed Regulatory Contributions)

Q. What are Imputed Regulatory Advances and Imputed Regulatory Contributions?

A. Decision No. 63584 authorized the sale of Citizen Assets and the transfer of its Certificate of Convenience and Necessity ("CC&N") to AAWC. The Decision also stipulated that certain amounts recorded by Citizens as CIAC and AIAC be imputed to AAWC. The IR CIAC amounts were to be amortized over a period of 10 years. The IR AIAC amounts were to be amortized over a period of 6.5 years. The original amounts for each system are shown below:

	IR CIAC	IR AIAC
Sun City West Water	$971,578	$12,151,160
Mohave Water	$2,865,061	$4,208,406
Mohave Wastewater	$1,458,672	$745,789
Havasu Water	$280,867	$418,704
Agua Fria Water	$1,973,438	$27,835,370
Tubac Water	$143,675	$170,081

Q. What CIAC adjustment does the Company propose in this rate case?

A. The Company does not propose an adjustment to amortize the imputed CIAC beyond the end of the test year ending December 31, 2007.

Q. Does Staff agree with the Company?

A. Yes. Staff agrees with the Company's proposed treatment of IR CIAC and believes that IR AIAC should be treated in the same manner as discussed below.

Q. What AIAC adjustment does the Company propose in this rate case?

A. The Company proposes an adjustment to amortize the imputed AIAC amount through July 2009.

Q. Does Staff agree with the Company's proposed adjustment?

A. No. The Company's proposed adjustment to July 2009 creates a mismatch between revenues and expenses, violates the Historical Test Year, and clearly circumvents the intent of the previous order. Staff's opinion is that it is inappropriate for the Company to claim additional amortization through some date after the end of the Test Year in this case. The recognition of post test year amortization through July 2009, creates a mismatch between revenues and expenses, violates the Historical Test Year and clearly circumvents the intent of the previous order. Staff's opinion is that it is inappropriate for the Company to claim additional amortization through some date after the end of the Test Year in this

case. Staff further notes that the Commission did not approve amortization of post test year IR AIAC and IR CIAC in Decision No. 70372 dated June 13, 2008, regarding Docket No. W-01303A-06-0403 (the Company's Anthem Water and Anthem/Agua Fria Wastewater cases) and Decision No. 70209 dated March 20, 2008, regarding Docket No. W-01303A-06-0491 (the Company's Sun City and Sun City West Wastewater systems).

Q. What does Staff recommend concerning post test year amortization of Imputed AIAC amounts?

A. Staff recommends eliminating the Company's post test year adjustments to the Imputed AIAC balances remaining at the end of the test year. Staff recommends increasing the Imputed AIAC balance for each system as shown below and as indicated on the related schedule for each system.

	Original IR AIAC	Balance at 12-31-07	Company Proposed	Staff Adjustment
Sun City West Water	$12,151,160	$934,705	$-0-	$934,705
Mohave Water	$4,208,406	$323,724	$-0-	$323,724
Mohave Wastewater	$745,789	$57,368	$-0-	$57,368
Havasu Water	$418,704	$32,208	$-0-	$32,208
Agua Fria Water	$27,835,370	$2,106,567	$-0-	$2,106,567
Tubac Water	$170,081	$13,083	$-0-	$13,083

Rate Base Adjustment No. 4 – Deferred Debits

Q. What did the Company include in deferred debits?

A. In its deferred debits adjustment to rate base, the Company included a broad group of items including unrecovered rate case expense from previous proceedings, unamortized expenses from debt issuances and unusual account balances described by accounting terms.

Q. How did Staff evaluate these items?

A. Staff reviewed the composition of the deferred debits included in each system's rate base and asked the Company to explain and support their inclusion in rate bases.

Q. How did the Company respond?

A. The Company responded that the inclusion of these items in rate base was an oversight on its part. The Company included a spreadsheet showing that of the $5,950,111 originally included the rate base for the systems, $5,351,563 should be removed. A schedule of these adjustments by system is shown below:

System	Per Co at 12/31/07	Staff Recommended	Adjustment
Agua Fria Water	$3,529,517	$208,401	($3,321,116)
Havasu Water	$155,374	$9,673	($145,701)
Mohave Water	$1,749,805	$99,833	($1,649,972)
Mohave Wastewater	$0	$ 7,701	$7,701
Paradise Valley Water	$1,238,398	$154,761	($1,083,637)
Sun City West Water	$(777,486)	$114,798	$892,284
Tubac Water	$54,503	$3,381	(51,122)
Totals	$5,950,111	$598,548	$5,351,563

Q. What does Staff recommend?

A. Staff agrees with the revised amounts provided by the Company and has posted these adjustments on Schedules GWB 3 and GWB 4 for each respective system.

RATE BASE ADJUSTMENTS- AF WATER SYSTEMS

Rate Base Adjustment No. 5 – AF System $25 million of CWIP in Rate Base

Q. What did the Company propose for the White Tanks Plant?

A. The Company proposes inclusion of $25 million of CWIP associated with the White Tanks treatment plant. To date, the plant is not yet in service and the expected in service date is not until April 2010.

Q. Please explain the Company's reasons for requesting the inclusion of CWIP in rate base.

A. The Company states that the slowdown in the real estate market has caused actual hook up fees to be far below the Company's forecast. The Company further states that it would be fair for AF customers to pay a portion of the White Tanks plant in order to stay the course on funding the balance of the plant's cost via hook up fees. To compare with the $25 million amount request in rate base, the Company further states that at the end of the test year, it had spend approximately $8.4 million and that this would climb to $43.2 million by the end of 2008.

Q. Did Staff agree with the Company's position?

A. No. Staff disagrees with the inclustion of CWIP in rate base for several reasons.

1. An increase in hook up fees to fund the White Tanks plants was granted in Decision No. 69914 (Docket No. W-01303A-05-0718). In this case, the Commission authorized increases in the hook up fees as shown below:

Meter Size	Existing Water Facilities Hook-up Fee	Proposed Water Facilities Hook-up Fee
5/8 x 3/4-inch	$ 1,150	$ 3,280
3/4 –inch	1,725	4,920
1-inch	2,875	8,200
1 1/2-inch	5,750	16,400
2-inch	9,200	26,240
3-inch	18,400	52,480
4-inch	28,750	82,000
6-inch or larger	57,500	164,000

The increases approved in this decision were intended to fund the entire cost of the White Tanks plants.

2. During the Open Meeting to hear the case, the Commission asked the Company if it would fund and complete the project regardless of events in the real estate market. Through its counsel, the Company responded that it would complete the project regardless of the real estate market.

3. The intent of Docket No. W-01303A-05-0718 is that the plant would be entirely funded through hook up fees and that ratepayers would be not burdened with its cost. The inclusion of CWIP in rate base would effectively reverse the intent of the previous order.

Q. Is the Company proposing any changes to the hook up fees authorized in Decision No. 69914?

A. The Company proposes that the amounts remain but requests an extension of the ending date of December 31, 2015 to December 31, 2020 in order to allow more time to fund the project. To date, the plant is not yet in service and the expected in service date is not until 2010.

Q. Does Staff agree with the Company's position?

A. Yes. Due to the` slowdown in the market, Staff believes that it is reasonable to allow the Company more time to recover its investment. The intent of Decision No. 69914 was to fund the plant through hook up fees in order to provide for lower rates in the future.

Q. Is the Company proposing any other changes to the activity at the White Tanks Plant?

A. Yes. The Company is requesting accounting order to for an O&M deferral mechanism similar to that of an Arsenic Cost Recovery Mechanism ("ACRM") mechanism and the Company also provided notice of a proposed Joint Development agreement with the Maricopa Water District. These issues are discussed later in my testimony.

RATE BASE ADJUSTMENTS- POST TEST YEAR PLANT

Agua Fria Water Rate Base Adjustment No. 6 - Post Test Year Plant Additions.

Q. What is the Company proposing for Plant in Service?

A. In its Agua Fria Water system, the Company is proposing a total of $211,145,154 for Plant in Service relating to its OCRB. The Company is proposing all plant, property and equipment that were in service during the test year, plus pro forma adjustments of $3,214,033 for additions made to plant after the test year ("post test year plant") and a $25,000,000 adjustment for CWIP associated with the construction of the White Tanks Plant (see above).

Q. When was this post test year plant placed into service?

A. According to Ms. Dorothy Hains' Direct Testimony (see Engineering Report), $1,167,268 was in service as of September 10, 2008 (the "Waddell Haciendas" subdivision) and $2,046,765 (the "Sierra Montana" subdivision) was not in service as of the inspection date

of September 10, 2008. The $25 million of CWIP associated with the White Tanks has a planned in service date of April 2010.

Q. When is recognition of post test year plant appropriate?

A. Post test year plant is usually mismatched with the revenues, expenses, and rate base of the test year. Matching is a fundamental principle of accounting and rate-making. The absence of matching distorts the meaning of and reduces the usefulness of operating income and rate of return for measuring the fairness and reasonableness of rates. Accordingly, recognizing post test year plant in rate base is generally appropriate only in special and unusual cases where failure to do so would create an inequity. Staff had traditionally recognized two such cases:

1. When the magnitude of the investment relative to the utility's total investment is such that not including the post test year plant in the cost of service would jeopardize the utility's financial health; and

2. When conditions such as the following exist:
   a. The cost of the post test year plant is significant and substantial,
   b. The net impact on revenue and expenses for the post test year plant is known and insignificant, or is revenue neutral,
   c. The post test year plant is prudent and necessary for the provision of services and reflects appropriate, efficient, effective and timely decision-making.

Q. Has the Company stated that the exclusion of post test year plant will jeopardize its financial health?

A. The Company speaks mostly to the inclusion of the $25 million of White Tanks CWIP as being crucial to its financial health due to cash flow considerations.

Q. Is the net impact on revenues and expenses for the post test year plant known and insignificant or revenue neutral?

A. For the Waddell Haciendas plant, the plant is revenue neutral. For the Sierra Montana plant, revenues would increase. For the White Tanks CWIP, revenues would also increase.

Q. Are all retirements related to the post test year plant recognized in the rate filing?

A. There are no retirements associated with the above post test plant and CWIP.

Q. Did the Company demonstrate any extraordinary circumstances in this case?

A. For the White Tanks CWIP, the Company has demonstrated that the CWIP requested is approximately 34.7 percent of the rate base excluding the CWIP adjustment.

Q. What does Staff recommend?

A. Staff believes that the Waddell Haciendas Plant of $2,046,765 provides a benefit to current ratepayers by creating operational efficiencies and increasing reliability. Staff recommends that the $1,167,268 of Waddell Haciendas plant should be disallowed because it is not revenue neutral. Regarding the White Tanks CWIP, Staff believes that the Company has not demonstrated extraordinary circumstances and recommends exclusion of the $25 million at this time.

Q. Other than a piece of plant being in service, what other criteria is necessary to include plant in rate base?

A. Plant should be calculated using the same dates as other rate base items and revenues and expenses for proper matching.

Mohave Water Rate Base Adjustment No. 6 - Post Test Year Plant Additions.

Q. What is the Company proposing for Plant in Service?

A. In its Mohave system, the Company is proposing a total of $28,800,225 for Plant in Service relating to its OCRB. The Company is proposing all plant, property and equipment that were in service during the test year, plus pro forma adjustments of $610,732 for additions made to plant after the test year ("post test year plant").

Q. When was this post test year plant placed into service?

A. According to Ms. Dorothy Hains' Direct Testimony (see Engineering Report), none of the $610,732 of post test year plant was in service as of September 10, 2008.

Q. When is recognition of post test year plant appropriate?

A. Post test year plant is usually mismatched with the revenues, expenses, and rate base of the test year. Matching is a fundamental principle of accounting and rate-making. The absence of matching distorts the meaning of and reduces the usefulness of operating income and rate of return for measuring the fairness and reasonableness of rates. Accordingly, recognizing post test year plant in rate base is generally appropriate only in special and unusual cases where failure to do so would create an inequity. Staff has traditionally recognized two such cases:

1. When the magnitude of the investment relative to the utility's total investment is such that not including the post test year plant in the cost of service would jeopardize the utility's financial health; and
2. When conditions such as the following exist:
   a. The cost of the post test year plant is significant and substantial,
   b. The net impact on revenue and expenses for the post test year plant is known and insignificant, or is revenue neutral,
   c. The post test year plant is prudent and necessary for the provision of services and reflects appropriate, efficient, effective and timely decision-making.

Q. Has the Company stated that the exclusion of this post test year plant will jeopardize its financial health?

A. No.

Q. Is the net impact on revenues and expenses for the post test year plant known and insignificant or revenue neutral?

A. The net impacts of this plant are not known at this time.

Q. Are all retirements related to the post test year plant recognized in the rate filing?

A. There are no retirements associated with the above post test plant.

Q. Did the Company demonstrate any extraordinary circumstances in this case?

A. No.

Q. What does Staff recommend?

A. Staff believes that the post year plant in this system does not benefit current ratepayers by either creating operational efficiencies or increasing reliability, nor has the Company demonstrated extraordinary circumstances.

Mohave Wastewater Rate Base Adjustment No. 5 - Post Test Year Plant Additions.

Q. What is the Company proposing for Plant in Service?

A. In its Mohave system, the Company is proposing a total of $7,154,300 for Plant in Service relating to its OCRB. The Company is proposing all plant, property and equipment that were in service during the test year, plus pro forma adjustments of $3,932,080 for additions made to plant after the test year ("post test year plant").

Q. When was this post test year plant placed into service?

A. According to Ms. Dorothy Hains' Direct Testimony (see Engineering Report), all of the $3,932,080 was in service as of September 10, 2008.

Q. When is recognition of post test year plant appropriate?

A. Post test year plant is usually mismatched with the revenues, expenses, and rate base of the test year. Matching is a fundamental principle of accounting and rate-making. The absence of matching distorts the meaning of and reduces the usefulness of operating income and rate of return for measuring the fairness and reasonableness of rates. Accordingly, recognizing post test year plant in rate base is generally appropriate only in special and unusual cases where failure to do so would create an inequity. Staff has traditionally recognized two such cases:

1. When the magnitude of the investment relative to the utility's total investment is such that not including the post test year plant in the cost of service would jeopardize the utility's financial health; and
2. When conditions such as the following exist:
   a. The cost of the post test year plant is significant and substantial,
   b. The net impact on revenue and expenses for the post test year plant is known and insignificant, or is revenue neutral,
   c. The post test year plant is prudent and necessary for the provision of services and reflects appropriate, efficient, effective and timely decision-making.

Q. Has the Company stated that the exclusion of this post test year plant will jeopardize its financial health?

A. No.

Q. Is the net impact on revenues and expenses for the post test year plant known and insignificant or revenue neutral?

A. No.

Q. Are all retirements related to the post test year plant recognized in the rate filing?

A. There are no retirements associated with the above post test plant.

Q. Did the Company demonstrate any extraordinary circumstances in this case?

A. No.

Q. What does Staff recommend?

A. Staff believes that the post year plant in this system does not benefit current ratepayers by either creating operational efficiencies or increasing reliability, nor has the Company demonstrated extraordinary circumstances.

OTHER ISSUES- AGUA FRIA WATER SYSTEM

Accounting Order

Q. What is the nature of the Company's proposal?

A. The Company is proposing to defer 12 months of O&M which is approximately $1.93 million and then file for a surcharge akin to ACRM Step-One whereby the first 12 months of O&M would be added to the second 12 months of O&M and both would be recovered during the second 12 month period. At the end of the second 12 month period the surcharge would be adjusted to reflect the actual on going O&M until completion of the next rate case.

Q. Did Decision No. 69914 provide for any deferrals?

A. Yes. Decision No. 69914 provided for the deferral of depreciation expense and post in service AFUDC to the extent that the capital investment is not covered by hook up fees. The Decision further authorized the Company to file for an O&M deferral mechanism but stated that the Decision "does not predetermine the necessity for or the appropriateness of any mechanism proposed in the future by Arizona-American Water Company for recovery of Operations and Maintenance Expense incurred for the White Tanks Project."[1]

[1] Decision No. 69914, page 30, lines 1-3

Q. What is Staff's view on the deferral of O&M?

A. Staff believes that accounting orders should only be issued under very unusual or extraordinary conditions to prevent harm to either the Company or the ratepayers. In the case at hand, the Company has already been indemnified against harm for post in service AFUDC and depreciation expense via the accounting orders in the previous case. Staff further notes that the cost of the Central Arizona Project ("CAP") entitlement for AF Water is already included in the Company's O&M in this proceeding, further reducing the Company's exposure to un-recovered O&M.

Staff does not see any evidence that the Company's net costs and O&M not subject to deferral mechanisms and future recovery will be extraordinary. Staff believes that the cost of providing treated water will be offset by cost savings attached to the present expenses of providing ground water which are reflected in present rates along with the CAP entitlement as discussed above. Thus, Stuff recommends denial of an additional `accounting order.

Joint Development Agreement With The Maricopa Water District

Q. What is the Company proposing?

A. The Company is proposing a Joint Development Agreement ("JDA") with the Maricopa Water District ("MWD").

Q. Is MWD the same entity that was party to Docket No. W-01303A-05-0718 that resulted in the issuance of Decision No. 69914?

A. Yes. It is.

Q. Are you the same Gerald Becker who was among the Staff assigned to this previous case?

A. Yes, I am.

Q. Please explain the nature of the previous case brought before the Commission.

A. The White Tanks Plant was originally proposed as a joint venture between AAW and MWD. However, negotiations failed and, AAW proposed to increase its hook up fee to fund the construction of the White Tanks Regional Treatment Facility ("White Tanks Plant") on its own. MWD intervened and made various claims to oppose the increase, including claims that it could build and operate the plant less expensively and more quickly. Significant time was spent deliberating the financial and operational characteristics of the plant proposed by AAW and a competing alternative proposed by MWD. The Commission approved the increase in the hook up fee so that AAW could build the treatment plant.

Q. Please provide a summary of the White Tanks Plant.

A. As approved in the last proceeding, the White Tanks Plant was to be constructed on land previously purchased and already owned by the Company. The White Tanks Plant has a total design capacity of 80 million gallons per day ("MGD") of treatment capacity to be constructed in 4 phases of 20 MGD each. Within each 20 MGD phases, the capacity could be constructed in 1/3 increments of approximately 6.7 MGD. The initial construction of Phase 1a would be 13.5 MGD with the remaining 6.5 of expansion available in that phase.

Q. Please provide a summary of the cost structure of the various phases of the White Tanks Plant.

A. During the last proceeding, the cost estimates for the White Tanks Plant have been very dynamic, but for purposes of discussion here and to give some numerical perspective on the cost structure, Staff refers to the original application in the previous docket.[2] In this document, the Company describes the cost of the plant for its first phase of 20 MGD. It states that a 6.7 MGD plant would cost $64,815,000. A 13.5 MGD plant would cost $2,510,000 higher more, or $67,325,000. In the last case, the Company further represented that the third 6.7 MGD would be the same as the second 6.7 MGD of capacity, meaning that the total cost of the first 20 MGD would be $69,815,000.

Q. Please provide a summary of the Joint Development agreement in this case.

A. The Company is proposing a partnership with MWD. Under the terms of the agreement, MWD would own 32.5 percent of the White Tanks Plant and the Company would own the remaining 67.5 percent. The land under the plant would become the property of MWD and the Company would receive another parcel of land of equal value from MWD. MWD would lease to AAW an undivided portion of the plant site to the Company for 99 years at no cost. The Company states that this represents a benefit to ratepayers as removing the value of the land will reduce rate base. The Company's application further states that MWD has until November 15, 2008, to exercise this option, but the Company has informed Staff that the option was extended until January 2009.

Q. Does Staff recommend approval of the Joint Development agreement?

A. No.

[2] Arizona American revised application dated September 1, 2006, page 7, lines 3-4

Q. Please explain.

A. As described above, a very disproportionate amount of costs are associated with the first 6.7 MGD of capacity in Phase1. By averaging the costs of the entire first phase of 20 MGD of capacity and setting a sales price accordingly, MWD benefits from the risk and initial expenditures associated with the construction of the first 6.7 MGD of capacity but will not have risked or contributed anything during that initial phase of construction. Further, if MWD were to build its own plant similar to the Company's, the first 6.7 MGD of capacity would cost approximately $64.8 million, based on the information contained in the Company's application in the previous docket. As described above, the second and third 6.7 MGD of capacity would add approximately $5 million to the total cost, meaning that the cost of 20 MGD of capacity would be $69.8 million. Under the proposal at hand, MWD would purchase 6.7 MGD of capacity for 32.5 percent of the total at a cost of approximately $22.7 million as compared with the estimated of $64.8 million to the Company for the its first 6.7 MGD of capacity. Staff is concerned that the sales price is too low and believes that an unregulated entity such as MWD should compensate the Company and indirectly, its ratepayers, in an amount that is more equal to the amounts saved by MWD by not constructing its own facility.

Further, Staff is concerned about the ownership of the land under the plant. The Company states that it would trade the land under the plant to MWD for other land of comparable value and that this would benefit ratepayers by reducing rate base. This is technically correct but further discussion is warranted. In the previous proceeding, the cost of the plant site already owned by AAW was stated to be approximately $562,000. Staff believes that it is ill-conceived to spend $69.8 million to construct a plant on land not owned by the Company for the purpose of reducing rate base by $562,000, or 0.8 percent of the cost of the first 20 MGD of capacity of the plant.

Further, the plant has a total capacity of 80 MGD and looking to the future, phase 2, 3, and 4 of the plant may be constructed to add an additional 60 MDG of capacity. Being conservative and assigning a cost of $7.5 million to each new phase, or $67.5 million for, three phases, the total unadjusted cost of the 80 MGD capacity plant would be $137.3 million. When this amount is adjusted for 3 percent inflation for the next 99 years, the investment would amount to an asset worth a seasonally adjusted value of approximately $2.6 billion but it would be located on land owned by an unregulated entity with no obligation to renew the lease.

Q. Did Decision No. 69914 give the Commission express authority to approve or disapprove the Joint Development Agreement?

A. Yes, the Order specifically provided for the following on page 31 of the Decision:

> *IT IS FURTHER ORDERED that the Commission shall have complete authority to determine the entitlement and rate making treatment of any proceeds resulting from the sale to third parties of either the White Tanks facility itself, in whole or in part, or of any part of the capacity produced thereby.*

Q. What does Staff recommend?

A. Staff recommends denial of the Joint Development Agreement as presented.

OTHER ISSUES- TUBAC ACRM

Q. Please describe the background for this proposal

A. The Company had originally applied but withdrew its application for an ACRM on May 4, 2005, due to strong community interest in pursuing alternative technologies and seeking an extension of the arsenic compliance deadline. On January 18, 2008, the Environmental Protection Agency denied the Company's request for a three year exemption to meet the

new maximum contaminant level. In its Application the Company stated that construction would commence in the Summer 2008.

Q. What is the Company proposing?

A. The Company states that it proposed an ACRM identical to those approved for its other systems with the exception of including some engineering overheads consistent with recent precedent concerning Arizona Water Company ACRM's in Docket No. W-01445-00-0962.

Q. What does Staff recommend?

A. Staff recommends approval of the Company's request for an ACRM. However, Staff does not recommend making a predetermination regarding the inclusion of engineering overheads.

OPERATING INCOME

Operating Income & Expenses

Staff witness Gary McMurry is sponsoring the testimony related to all income and expense adjustments. Please refer to his testimony for further explanation of the adjustments to operating expenses.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

MEMORANDUM

TO: Gerald Becker
Public Utilities Analyst V
Utilities Division

FROM: Alfonso Amezcua and Staff
Public Utilities Consumer Analyst
Utilities Division

THRU: Connie Walczak
Consumer Services Supervisor
Utilities Division

DATE: January 8, 2009

RE: **ARIZONA-AMERICAN WATER COMPANY**
Agua Fria Water District, Havasu Water District, Mohave Water District, Paradise Valley Water District, Sun City West Water District and Tubac Water District and Mohave Wastewater District.

DOCKET NOS. W-01303A-08-0227
SW-01303A-08-0227

COMPLAINT HISTORY

A search of the Consumer Services database reveals that the following customer complaints and opinions were filed against the Company by system from January 1, 2006 through current:

Agua Fria Water District

2006-14 Complaints-8 billing, 5 quality of service, 1 deposit

2007-13 Complaints-9 billing, 2 quality of service, 1 disconnect, 1 construction

2008-6 Complaints-5 billing, 1 quality of service
16 Opinions-all opposed to the proposed rate increase

2009-1 Complaint-billing
1 Opinion-opposed to the rate increase

Havasu Water District

2006-6 Complaints-2 billing, 3 quality of service, 1 repair

2007-5 Complaints-3 billing, 1 quality of service, 1 rates and tariff

2008-6 Complaints-3 billing, 3 quality of service
8 Opinions-all opposed to the rate increase

2009-Zero Complaints/opinions

Mohave Water and Wastewater District

2006-12 Complaints-7 billing, 5 quality of service

2007-18 Complaints-7 billing, 1 new service, 2 service, 6 quality of service, 2 rate case items

2008-20 Complaints-8 billing, 1 deposits, 3 service, 5 quality of service, 2 disconnects/terminations, 1 repair issues
331 Opinions-all opposed to the rate increase

2009-1 Complaint-billing
2 Opinions-opposed to the rate increase

Paradise Valley Water District

2006-10 Complaints-7 billing, 2 quality of service, 1 repair

2007-23 Complaints-13 billing, 8 quality of service, 2 rates and tariffs

2008-32 Complaints-17 billing, 15 quality of service
12 Opinions-all opposed to the proposed rate increase

2009-Zero Complaints/opinions

Sun City West Water District

2006-18 Complaints-11 billing, 6 quality of service, 1 disconnect

2007-26 Complaints-18 billing, 3 service, 3 quality of service, 2 disconnect, 1 repair, 1 rates and tariffs

2008-16 Complaints-11 billing, 3 quality of service, 1 disconnect, 1 rates and tariffs
8 Opinions-all opposed to the rate increase

2009-1 Opinion-opposed to the rate increase

Tubac Water District

2006-2 Complaints-billing

2007-Zero Complaints/opinions

2008-1 Complaint-billing
2 Opinions-opposed to the rate increase

2009-Zero Complaints/opinions

Eleven complaints remain open (pending investigation). All other complaints have been resolved and closed.

SUFFICIENCY STATUS

The Company met sufficiency status on July 23, 2008.

AFFIDAVIT OF MAILING

The Company mailed the Customer Notification to its customers in their October 2008 billing cycle. It was docketed on December 10, 2008.

BILL FORMAT COMPLIANCE

A review of the Company's bill format indicates that it is in compliance with the Arizona Administrative Code R14-2-409.B.2.

CORPORATIONS DIVISION STATUS

The Corporations Division reports on January 8, 2009, that the Company is in good standing.

PUBLIC COMMENT MEETING

A Public Comment Meeting has not been scheduled at this time, but public comment will be taken during the first day of the hearing.

HEARING DATE

A hearing date has been scheduled for March 19, 2009.

INTERVENORS

Twenty-nine requests for intervention have been received and granted.

CURTAILMENT TARIFF

Arizona-American Water Company has a Curtailment Tariff for the following districts which became effective on **October 24, 2007**:

Agua Fria Water District
Havasu Water District
Mohave Water District
Paradise Valley Water District
Sun City West Water District
Tubac Water District

BACKFLOW TARIFF

Arizona-American Water Company has a Cross Connection/Backflow Tariff for the following districts which became effective on **April 2, 2006**:

Agua Fria Water District, Havasu Water District, Mohave Water District, Sun City West Water District, Tubac Water District

Paradise Valley Water District became effective on **August 1, 1999**.

Cc: File
Engineering

ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

DIRECT TESTIMONY OF GERALD BECKER

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GWB-	5	RATE BASE ADJUSTMENT #1- PLANT, ACCUMULATED DEPRECIATION & AIAC
GWB-	6	RATE BASE ADJUSTMENT #2 - WORKING CAPITAL
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GWB-	8	RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS
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ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 96,976,395	$ 96,976,395	$ 62,858,663	$ 62,858,663
2	Adjusted Operating Income (Loss)	$ 2,601,288	$ 2,601,288	$ 2,840,683	$ 2,840,683
3	Current Rate of Return (L2 / L1)	2.68%	2.68%	4.52%	4.52%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 8,146,017	$ 8,146,017	$ 4,613,826	$ 4,613,826
6	Operating Income Deficiency (L5 - L2)	$ 5,544,729	$ 5,544,729	$ 1,773,143	$ 1,773,143
7	Gross Revenue Conversion Factor	1.6578	1.6578	1.6513	1.6513
8	Required Revenue Increase (L7 * L6)	$ 9,192,198	$ 9,192,198	$ 2,927,935	$ 2,927,935
9	Adjusted Test Year Revenue	$ 18,818,613	$ 18,818,613	$ 18,818,613	$ 18,818,613
10	Proposed Annual Revenue (L8 + L9)	$ 28,010,811	$ 28,010,811	$ 21,746,549	$ 21,746,549
11	Required Increase in Revenue (%)	48.85%	48.85%	15.56%	15.56%
12	Rate of Return on Common Equity (%)	10.75%	10.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	(E)	(F)
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4405%					
5	Subtotal (L3 - L4)	60.5595%					
6	**Revenue Conversion Factor (L1 / L5)**	1.651269					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.3707%					
22	Effective Property Tax Factor (L20*L21)		0.8416%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4405%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 4,613,826					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 28)	$ 2,840,683					
26	Required Increase in Operating Income (L24 - L25)		$ 1,773,143				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 1,643,831					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 529,171					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 1,114,660				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 21,746,549					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 843,205					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 803,072					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 40,132				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 2,927,935				

		(A)	(B)	(C)	(D)	(E)	(F)
		Test Year			Staff Recommended		
				AF Water	AF Water		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 18,818,613	$ 21,746,549		$ 21,746,549
40	Operating Expenses Excluding Income Taxes			$ 15,448,759	$ 15,488,891		$ 15,488,891
41	Synchronized Interest (L56)			$ 1,998,905	$ 1,998,905		$ 1,998,905
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ 1,370,949	$ 4,258,753		$ 4,258,752
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ 95,528	$ 296,750		$ 296,750
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ 1,275,421	$ 3,962,003		$ 3,962,002
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500		$ 7,500
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250	$ -	$ 6,250
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500	$ -	$ 8,500
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650	$ -	$ 91,650
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 319,743	$ 1,233,181	$ -	$ 1,233,181
51	Total Federal Income Tax	$ -	$ -	$ 433,643	$ 1,347,081	$ -	$ 1,347,081
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ 529,171	$ 1,643,831	$ -	$ 1,643,831
53	Applicable Tax Rate						34.0000%

		AF Water
	Calculation of Interest Synchronization:	
54	Rate Base (Schedule GWB-3, Col. (C), Line 17)	$ 62,858,663
55	Weighted Average Cost of Debt	3.1800%
56	Synchronized Interest (L45 X L46)	$ 1,998,905

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 211,145,154	$ (3,236,597)	$ 207,908,557
	CWIP in Rate Base	$ 25,000,000	$ (25,000,000)	
2	Less: Accumulated Depreciation	20,033,433	7,532	20,040,965
3	Net Plant in Service	$ 216,111,721	$ (3,244,129)	$ 187,867,592
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 29,706,550	$ -	$ 29,706,550
5	Less: Accumulated Amortization	1,435,287	-	1,435,287
6	Net CIAC	28,271,263	-	28,271,263
7	Advances in Aid of Construction (AIAC)	98,233,813	(1,189,832)	97,043,981
8	Imputed Reg AIAC	-	2,268,167	2,268,167
9	Imputed Reg CIAC	796,965	-	796,965
10	Deferred Income Tax Credits (Debits)	(2,839,311)	-	(2,839,311)
	Customer Meter Deposits	19,040		19,040
	ADD:			
11	Cash Working Capital	1,409,860	(1,474,153)	(64,293)
12	Prepayments	214,929	-	214,929
13	Supplies Inventory	192,139	-	192,139
14	Projected Capital Expenditures		-	-
15	Deferred Debits	3,529,517	(3,321,116)	208,401
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 96,976,395	$ (9,117,732)	$ 62,858,663

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5& 6	[F] STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	1,229						$ 1,229
2	302000	Franchises	321,997	$ -		$ -	$ -	$ -	$ 321,997
3	303200	Land & Land Rights SS	1,429,017			-	-	-	$ 1,429,017
4	303300	Land & Land Rights P	(28,462)	-		-	-	-	$ (28,462)
5	303400	Land & Land Rights WT	624,652						$ 624,652
	303500	Land & Land Rights TD	-						$ -
6	303600	Land & Land Rights AG	-						$ -
7	304100	Struct & Imp SS	9,008,963						$ 9,008,963
8	304200	Struct & Imp P	4,836,856			-	-	-	$ 4,836,856
9	304300	Struct & Imp WT	1,162,010			-	-	-	$ 1,162,010
10	304400	Struct & Imp TD	3,550,952			-	-	-	$ 3,550,952
	304600	Struct & Imp Offices	173,284						$ 173,284
11	304800	Struct & Imp Misc	-			-	-	-	$ -
12	305000	Collect & Impounding	-			-	-	-	$ -
	307000	Wells & Springs	11,874,350						$ 11,874,350
13	310100	Power Generation Equip Other	828,846						$ 828,846
14	311200	Pump Equip Electric	21,166,169			-	-	-	$ 21,166,169
15	311300	Pump Equip Diesel	11,872			-	-	-	$ 11,872
16	311500	Pump Equip Other	1,271,551	-		-	-	-	$ 1,271,551
17	320100	WT Equip Non-Media	9,499,933			-	-	-	$ 9,499,933
18	330000	Dist Reservoirs & Standpipe	9,713,171	-		-	-	(1,647,404)	$ 8,065,767
19	331001	TD Mains Not Classified by Size	5,710,217						$ 5,710,217
20	331100	TD Mains 4in & Less	21,371,152			-	-		$ 21,371,152
21	331200	TD Mains 6in to 8in	31,329,478						$ 31,329,478
22	331300	TD Mains 10in to 16in	27,284,414	(1,189,832)					$ 26,094,582
23	331400	TD Mains 18in and Grtr.	13,774,400			-	-	(399,361)	$ 13,375,039
24	332000	Fire Mains	89,876			-	-	-	$ 89,876
25	333000	Services	11,273,032			-	-	-	$ 11,273,032
26	334100	Meters	4,666,830						$ 4,666,830
27	334200	Meter Installations	1,583,276						$ 1,583,276
28	335000	Hydrants	11,793,410			-	-	-	$ 11,793,410
29	339100	Other P/E Intangible	-						$ -
30	339300	Other P/E Misc	-			-	-	-	$ -
31	339500	Other P/E TD	-			-	-	-	$ -
32	340100	Office Furniture & Equip	92,864						$ 92,864
33	340200	Comp & Periph Equip	74,674						$ 74,674
34	341100	Trans Equip Lt Duty Trks	202,657						$ 202,657
35	341200	Trans Equip Hvy Duty Trks	-			-	-	-	$ -
36	342000	Stores Equipment	-			-	-	-	$ -
37	343000	Tools,Shop,Garage Equip	8,608			-	-	-	$ 8,608
38	344000	Laboratory Equipment	-			-	-	-	$ -
39	345000	Power Operated Equipment	30,559			-	-	-	$ 30,559
40	346100	Comm Equip Non-Telephone	1,462,701			-	-	-	$ 1,462,701
41	346300	Comm Equip Other	390,585			-	-	-	$ 390,585
42	391100	Computer Equipment	-						$ -
43									$ -
44		*POST TY PLANT*							$ -
45	330000	Dist Reservoirs & Standpipe	1,647,404						$ 1,647,404
46	331400	TD Mains 18in and Grtr.	399,361						$ 399,361
47									$ -
48	304400	Struct & Imp TD	192,154						$ 192,154
49	331200	TD Mains 6in to 8in	205,286						$ 205,286
50	331300	TD Mains 10in to 16in	748,152						$ 748,152
51	346190	Remote Control & Instrumentation	21,676						$ 21,676
52									$ -
53		*CORPORATE ALLOCATION*							$ -
54	304620	Struct & Imp Leasehold	48,860						$ 48,860
55	340100	Office Furniture & Equip	241,927						$ 241,927
56	340200	Comp & Periph Equip	98,398						$ 98,398
57	340300	Computer Software	387,190						$ 387,190
58	340300	Computer Software-Other	10,057						$ 10,057
59	343000	Tools,Shop,Garage Equip	8,270						$ 8,270
60	346100	Comm Equip Non-Telephone	40,019						$ 40,019
61	346300	Comm Equip Other	1,054						$ 1,054
62									$ -
63		*REALLOCATION FROM CORPORATE*							$ -
64	307000	Wells & Springs	6,865						$ 6,865
65	310100	Power Generation Equip Other	15,127						$ 15,127
66	311200	Pump Equip Electric	52,898						$ 52,898
67	320100	WT Equip Non-Media	218,139						$ 218,139
68	339300	Other P/E Misc	212,320						$ 212,320
69	340200	Comp & Periph Equip	5,078						$ 5,078
70									$ -
71									$ -
72									$ -
73									$ -
74									-
75									-
76		Total Plant in Service	211,145,154	(1,189,832)	-	-	-	(2,046,765)	207,908,557
77		CWIP in Rate Base	$ 25,000,000					$ (25,000,000)	$ -
78		Accumulated Depreciation	20,033,433	7,532				-	20,040,965
79		Net Plant in Service (L58 - L 59)	$216,111,721	$ (1,197,364)	$ -	$ -	$ -	$ (27,046,765)	$ 187,867,593
80									-
81		*LESS:*							-
82		Contributions in Aid of Construction (CIAC)	$ 29,706,550		$ -	$ -	$ -	$ -	$ 29,706,550
83		Less: Accumulated Amortization	1,435,287	-	-			-	1,435,287
84		Net CIAC (L63 - L64)	28,271,263	-	-	-	-	-	28,271,263
85		Advances in Aid of Construction (AIAC)	98,233,813	(1,189,832)					97,043,981
86		Imputed Reg Advances	-	-	-	2,268,167	-		2,268,167
87		Imputed Reg CIAC	796,965	-	-				796,965
88		Deferred Income Tax Credits (Debits)	(2,839,311)	-	-	-	-	-	(2,839,311)
89		Meter Deposits	19,040						19,040
90		*ADD:*							-
91		Working Capital Allowance	1,409,860	-	(1,474,153)	-	-		(64,293)
92		Pumping Power		-	-	-	-		-
93		Purchase Wastewater Treatment Charges		-	-	-	-		-
94		Material and Supplies Inventory	192,139	-	-	-	-		192,139
95		Prepayments	214,929	-	-	-	-	-	214,929
96		CWIP in Rate Base		-	-	-	-	-	-
97		Deferred Debits	3,529,517	-	-	-	(3,321,116)	-	208,401
98		Original Cost Rate Base	$ 96,976,396	$ (7,532)	$ (1,474,153)	$ (2,268,167)	$ (3,321,116)	$ (27,046,765)	$ 62,858,664

ADJ #		References:
1	Plant, Accumulated Depreciation and AIAC	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	White Tanks CWIP Adjustment	Schedule GWB-9A
6	Post Test Year Plant	Schedule GWB-9B

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Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	331.10	Mains 10" to 16"	1,189,832	(1,189,832)	-
		Mains 10" to 16" Accumulated Deprec.	(7,532)	7,532	-
		AIAC	1,189,832	(1,189,832)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 1,440,677	$ -	1,440,677	12.00	$ 17,288,126
2	Purchased Water	$ 901,467	-	901,467	86.87	$ 78,310,438
3	Fuel & Power	$ 1,954,815	-	1,954,815	32.42	$ 63,375,087
4	Chemicals	$ 1,121,555		979,490	28.47	$ 27,886,080
5	Waste Disposal	$ (870)		(870)	30.00	$ (26,100)
6	Management Fees	$ 2,775,604		2,775,604	(3.88)	$ (10,769,344)
7	Group Insurance	$ 396,645		396,645	(4.64)	$ (1,840,431)
8	Pensions	$ 240,413		240,413	45.00	$ 10,818,593
9	Regulatory Expense	$ 64,012		64,012	30.00	$ 1,920,360
10	Insurance Other Than Group	$ 158,153		158,153	45.00	$ 7,116,885
11	Customer Accounting	$ 370,806		370,806	7.46	$ 2,766,213
12	Rents	$ 63,217		63,217	(10.68)	$ (675,158)
13	General Office Expense	$ 161,107		161,107	30.00	$ 4,833,210
14	Miscellaneous	$ 787,967		787,967	30.00	$ 23,639,000
15	Maintenance Expense	$ 591,329		121,761	30.00	$ 3,652,820
16	Taxes Other Than Income-Property Taxes	$ 803,071		803,072	212.50	$ 170,652,904
17	Taxes Other Than Income-Other	$ 128,923		128,923	15.65	$ 2,017,649
18	Income Taxes	$ (138,756)		529,171	42.04	$ 22,246,340
19	Interest		1,998,905	1,998,905	106.52	212,923,412
20	**Total Operating Expenses**	11,820,135	1,998,905	13,875,335	764.73	636,136,085
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	45.85			
24	Revenue Lag	Company Workpapers	48.943			
25	Net Lag	Line 24 - 23	(3.10)			
26	Staff Adjusted Expenses	Line 20, Col 35	13,875,335			
27	Cash Working Capital	Line 25 * Line 26/365 da	(117,724)			
28	Company As Field	Co Schedule B-5	1,409,860			
29	Staff Adjustment	To GWB-4	(1,527,584)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 27,385,370		$ 27,385,370
2	None	2002	-	4,051,534	23,333,836
3	None	2003	-	4,213,134	19,120,702
4	None	2004	-	4,213,134	14,907,568
5		2005		4,213,134	10,694,434
6		2006		4,213,134	6,481,300
7	None	2007	-	4,213,134	2,268,167
8	Per Staff		$ 27,385,370	$25,117,203	$ 2,268,167
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 2,268,167

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	3,529,517	(3,321,116)	208,401
2			$ 3,529,517	$ (3,321,116)	$ 6,850,633

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB-9 A

RATE BASE ADJUSTMENT #5 - WHITE TANKS PLANT IN CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	White Tanks Plant in CWIP	$ 25,000,000	$ (25,000,000)	$ -

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-9 B

RATE BASE ADJUSTMENT #6 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
330000	White Tanks Plant in CWIP	1,647,404	$ (1,647,404)	$ -
331400	)ist Reservoirs & Standpipe	399,361	$ (399,361)	$ -
	TOTAL	2,046,765	$ (2,046,765)	

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 17,913,497	$ -	$ 17,913,497	$ 2,927,935	$ 20,841,432
3	Other Wastewater Revenues	905,117	-	905,117	-	905,117
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 18,818,613	$ -	$ 18,818,613	$ 2,927,935	$ 21,746,549
6						
7	Labor	$ 1,440,677	$ -	1,440,677	$ -	$ 1,440,677
8	Purchased Water	$ 901,467	-	901,467	-	901,467
9	Fuel & Power	$ 1,954,815	-	1,954,815	-	1,954,815
10	Chemicals	$ 1,121,555	(142,065)	979,490	-	979,490
11	Waste Disposal	$ (870)		(870)	-	(870)
12	Management Fees	$ 2,775,604		2,775,604	-	2,775,604
13	Group Insurance	$ 396,645		396,645	-	396,645
14	Pensions	$ 240,413		240,413	-	240,413
15	Regulatory Expense	$ 64,012		64,012	-	64,012
16	Insurance Other Than Group	$ 158,153		158,153	-	158,153
17	Customer Accounting	$ 370,806		370,806	-	370,806
18	Rents	$ 63,217		63,217	-	63,217
19	General Office Expense	$ 161,107		161,107	-	161,107
20	Miscellaneous	$ 787,967		787,967	-	787,967
21	Maintenance Expense	$ 591,329	(469,568)	121,761	-	121,761
22	Depreciation & Amortization	$ 4,397,190	(295,690)	4,101,501	-	4,101,501
23	Taxes Other Than Income-Property Taxes	$ 803,071		803,072	40,132	843,205
24	Taxes Other Than Income-Other	$ 128,923		128,923	-	128,923
25	Income Taxes	$ (138,756)	667,926	529,171	1,114,660	1,643,831
26						
27	**Total Operating Expenses**	16,217,325	(239,397)	15,977,930	1,154,793	17,132,722
28	**Operating Income (Loss)**	$ 2,601,288	$ 239,397	$ 2,840,683	$ 1,773,143	$ 4,613,827

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Chemicals ADJ #3	[E] Property Taxes ADJ #4	[F] Income Taxes ADJ #5	[G] STAFF ADJUSTED
1								
2	Wastewater Revenues	$ 17,913,497	$ -	$ -	$ -	$ -	$ -	$ 17,913,497
3	Other Wastewater Revenues	905,117	-	-	-	-	-	$ 905,117
4	Other	-	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 18,818,613	$ -	$ -	$ -	$ -	$ -	$ 18,818,613
6								
7								
8	Labor	$ 1,440,677	$ -	$ -	$ -	$ -	$ -	1,440,677
9	Purchased Water	901,467	-	-	-	-	-	901,467
10	Fuel & Power	1,954,815	-	-	-	-	-	1,954,815
11	Chemicals	1,121,555	-	-	(142,065)	-	-	979,490
12	Waste Disposal	(870)	-	-	-	-	-	(870)
13	Management Fees	2,775,604	-	-	-	-	-	2,775,604
14	Group Insurance	396,645	-	-	-	-	-	396,645
15	Pensions	240,413	-	-	-	-	-	240,413
16	Regulatory Expense	64,012	-	-	-	-	-	64,012
17	Insurance Other Than Group	158,153	-	-	-	-	-	158,153
18	Customer Accounting	370,806	-	-	-	-	-	370,806
19	Rents	63,217	-	-	-	-	-	63,217
20	General Office Expense	161,107	-	-	-	-	-	161,107
21	Miscellaneous	787,967	-	-	-	-	-	787,967
22	Maintenance Expense	591,329	(469,568)	-	-	-	-	121,761
23	Depreciation & Amortization	4,397,190	-	(295,690)	-	-	-	4,101,501
24	Taxes Other Than Income-Property Taxes	803,071	-	-	-	1	-	803,072
25	Taxes Other Than Income-Other	128,923	-	-	-	-	-	128,923
26	Income Taxes	(138,756)	-	-	-	-	667,926	529,171
27			-	-	-	-	-	-
28								
29	**Total Operating Expenses**	$ 16,217,325	$ (469,568)	$ (295,690)	$ (142,065)	$ 1	$ 667,926	$ 15,977,930
30	**Operating Income (Loss)**	$ 2,601,288	$ 469,568	$ 295,690	$ 142,065	$ (1)	$ (667,926)	$ 2,840,683

ADJ #		References:
1	Tank Maintenance	GTM 12
2	Depreciation Expense	GTM 13
3	Chemicals Expense	GTM 14
4	Property Taxes	GTM 15
5	Income Taxes	GTM 16

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Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 591,329	$ (469,568)	$ 121,761

Repair and Maintenance Expenses	
Calendar year 2005	58,559
Calendar year 2006	153,213
Calendar year 2007	153,510
Total for three year period	365,282
Normalization Period	3
Normalized Amount	121,761

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec 67093 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	1,229	0.00%	-
3	302000	Franchises	321,997	0.00%	-
4	303200	Land & Land Rights SS	1,429,017	0.00%	-
5	303300	Land & Land Rights P	(28,462)	0.00%	-
6	303400	Land & Land Rights WT	624,652	0.00%	-
7	303500	Land & Land Rights TD	-	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	9,008,963	2.50%	225,224
10	304200	Struct & Imp P	4,836,856	1.67%	80,775
11	304300	Struct & Imp WT	1,162,010	1.67%	19,406
12	304400	Struct & Imp TD	3,550,952	1.67%	59,301
13	304600	Struct & Imp Offices	173,284	4.63%	8,023
14	304800	Struct & Imp Misc	-	0.00%	-
15	305000	Collect & Impounding	-	2.50%	-
16	307000	Wells & Springs	11,874,350	3.33%	395,416
17	310100	Power Generation Equip Other	828,646	4.42%	36,626
18	311200	Pump Equip Electric	21,166,169	4.42%	935,545
19	311300	Pump Equip Diesel	11,872	4.42%	525
20	311500	Pump Equip Other	1,271,551	4.42%	56,203
21	320100	WT Equip Non-Media	9,499,933	4.00%	379,997
22	330000	Dist Reservoirs & Standpipe	9,713,171	1.67%	162,210
23	331001	TD Mains Not Classified by Size	5,710,217	1.53%	87,366
24	331100	TD Mains 4in & Less	21,371,152	1.53%	326,979
25	331200	TD Mains 6in to 8in	31,329,478	1.53%	479,341
26	331300	TD Mains 10in to 16in	26,094,582	1.53%	399,247
27	331400	TD Mains 18in and Grtr.	13,774,400	2.00%	275,488
28	332000	Fire Mains	89,876	2.00%	1,798
29	333000	Services	11,273,032	2.48%	279,571
30	334100	Meters	4,666,830	2.51%	117,137
31	334200	Meter Installations	1,583,276	2.51%	39,740
32	335000	Hydrants	11,793,410	2.00%	235,868
33	339100	Other P/E Intangible	-	0.00%	-
34	339300	Other P/E Misc	-		-
35	339500	Other P/E TD	-		-
36	340100	Office Furniture & Equip	92,864	4.04%	3,752
37	340200	Comp & Periph Equip	74,674	10.00%	7,467
38	341100	Trans Equip Lt Duty Trks	202,657	22.00%	44,585
39	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
40	342000	Stores Equipment	-	3.92%	-
41	343000	Tools,Shop,Garage Equip	8,608	4.02%	346
42	344000	Laboratory Equipment	-	3.71%	-
43	345000	Power Operated Equipment	30,559	5.20%	1,589
44	346100	Comm Equip Non-Telephone	1,462,701	10.30%	150,658
45	346300	Comm Equip Other	390,585	10.30%	40,230
46	391100	Computer Equipment	-	10.00%	-
47					
48	*POST TY PLANT*				
49	330000	Dist Reservoirs & Standpipe	1,647,404	0.00%	-
50	331400	TD Mains 18in and Grtr.	399,361	0.00%	-
51					
52	304400	Struct & Imp TD	192,154	1.67%	3,209
53	331200	TD Mains 6in to 8in	205,286	1.53%	3,141
54	331300	TD Mains 10in to 16in	748,152	1.53%	11,447
55	346190	Remote Control & Instrumentation	21,676	5.20%	1,127
56					
57	*CORPORATE ALLOCATION*		-		
58	304620	Struct & Imp Leasehold	48,860	1.67%	816
59	340100	Office Furniture & Equip	241,927	4.04%	9,774
60	340200	Comp & Periph Equip	98,398	10.00%	9,840
61	340300	Computer Software	387,190	25.00%	96,798
62	340300	Computer Software-Other	10,057	25.00%	2,514
63	343000	Tools,Shop,Garage Equip	8,270	4.02%	332
64	346100	Comm Equip Non-Telephone	40,019	10.30%	4,122
65	346300	Comm Equip Other	1,054	10.30%	109
66					
67	*REALLOCATION FROM CORPORATE*		-		
68	307000	Wells & Springs	6,865	3.33%	229
69	310100	Power Generation Equip Other	15,127	4.42%	669
70	311200	Pump Equip Electric	52,898	4.42%	2,338
71	320100	WT Equip Non-Media	218,139	4.00%	8,726
72	339300	Other P/E Misc	212,320	4.98%	10,574
73	340200	Comp & Periph Equip	5,078	10.00%	508
74					
75					
76		**Total Plant in Service**	209,955,322	2.39%	5,016,683
77					
78					
79		Less Non Depreciable Plant			
80	301000	Organization	1,229	0.00%	-
81	302000	Franchises	321,997	0.00%	-
82	303200	Land & Land Rights SS	1,429,017	0.00%	-
83	303300	Land & Land Rights P	(28,462)	0.00%	-
84	303400	Land & Land Rights WT	624,652	0.00%	-
85	303500	Land & Land Rights TD	-	0.00%	-
86		Net Depreciable Plant and Depreciation Amounts	$ 207,606,889		$ 5,016,683
87		Composite Depreciation Rate		2.42%	
88		Less			
89		Amortization of Regulatory CIAC at Settlement Rate			(197,344)
90		Amortization of CIAC at Composite Rate	$ 29,706,550		$ (717,839)
91		Staff Recommended Depreciation Expense			$ 4,101,501
92		Company Proposed Depreciation Expense			4,397,190
93		Staff Adjustment			$ (295,690)

References:
Col A Schedule GWB-4
Col B Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C Col [A] times Col [B]

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Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - CHEMICAL EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Chemicals	$ 1,121,555	$ (142,065)	$ 979,490

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM, GTM-8.12
Column (C): Column (A) + Column (B)

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Schedule GTM-15

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 18,818,613	$ 18,818,613
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	37,637,226	37,637,226
4	Staff Recommended Revenue	18,818,613	21,746,549
5	Subtotal (Line 4 + Line 5)	56,455,840	59,383,775
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	18,818,613	19,794,592
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	37,637,226	39,589,184
10	Plus: 10% of CWIP - 2005	1,422,630	1,422,630
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	39,059,856	41,011,813
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	8,983,767	9,432,717
15	Composite Property Tax Rate - Obtained from ADOR	8.94%	8.94%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 803,072	
17	Company Proposed Property Tax	$ 803,071	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ 1	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 843,205
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 803,072
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 40,132
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 40,132
23	Increase in Revenue Requirement		$ 2,927,936
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.37067%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-16

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (138,756)	$ 667,926	$ 529,171

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 4,221,474	$ 4,221,474	$ 4,062,403	$ 4,062,403
2	Adjusted Operating Income (Loss)	$ (131,419)	$ (131,419)	$ 28,874	$ 28,874
3	Current Rate of Return (L2 / L1)	-3.11%	-3.11%	0.71%	0.71%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 354,604	$ 354,604	$ 298,180	$ 298,180
6	Operating Income Deficiency (L5 - L2)	$ (486,023)	$ 486,023	$ 269,306	$ 269,306
7	Gross Revenue Conversion Factor	1.6785	1.6785	1.5652	1.5652
8	Required Revenue Increase (L7 * L6)	$ (815,804)	$ 815,804	$ 421,530	$ 421,530
9	Adjusted Test Year Revenue	$ 1,026,586	$ 1,026,586	$ 1,026,586	$ 1,026,586
10	Proposed Annual Revenue (L8 + L9)	$ 210,782	$ 210,782	$ 1,448,116	$ 1,448,116
11	Required Increase in Revenue (%)	-79.47%	79.47%	41.06%	41.06%
12	Rate of Return on Common Equity (%)	11.50%	11.50%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
	Calculation of Gross Revenue Conversion Factor:			
1	Revenue	100.0000%		
2	Uncollecible Factor (Line 11)	0.0000%		
3	Revenues (L1 - L2)	100.0000%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	36.1122%		
5	Subtotal (L3 - L4)	63.8878%		
6	**Revenue Conversion Factor (L1 / L5)**	1.565244		
	Calculation of Uncollecttible Factor:			
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	35.1884%		
9	One Minus Combined Income Tax Rate (L7 - L8)	64.8116%		
10	Uncollectible Rate	0.0000%		
11	Uncollectible Factor (L9 * L10)		0.0000%	
	Calculation of Effective Tax Rate:			
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	30.3341%		
16	Effective Federal Income Tax Rate (L14 x L15)	28.2204%		
17	Combined Federal and State Income Tax Rate (L13 +L16)		35.1884%	
	Calculation of Effective Property Tax Factor			
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	35.1884%		
20	One Minus Combined Income Tax Rate (L18-L19)	64.8116%		
21	Property Tax Factor (GTM-14, L24)	1.4253%		
22	Effective Property Tax Factor (L20*L21)		0.9238%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			36.1122%
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 298,180		
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 27)	$ 28,874		
26	Required Increase in Operating Income (L24 - L25)		$ 269,306	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 99,282		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (46,934)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 146,216	
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 1,448,116		
31	Uncollectible Rate (Line 10)	0.0000%		
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -		
33	Adjusted Test Year Uncollectible Expense	$ -		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -	
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 50,193		
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 44,184		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 6,008	
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 421,531	
39		Staff Adj. Test Year	Staff Recommeded	
40	Revenue (Sch GWB-1, Col. [C] L9 & 10)	$ 1,026,586	$ 1,448,117	
41	Operating Expenses Excluding Income Taxes	$ 1,044,646	$ 1,050,654	
42	Synchronized Interest (L56)	$ 129,184	$ 129,184	
43	Arizona Taxable Income (L39 - L40 - L41)	$ (147,244)	$ 268,278	
44	Arizona State Income Tax Rate	6.9680%	6.9680%	
45	Arizona Income Tax (L42 x L43)	$ (10,260)	$ 18,694	
46	Federal Taxable Income (L43 - L44)	$ (136,984)	$ 249,585	
47	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)	$ 7,500	
48	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ (6,250)	$ 6,250	
49	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)	$ 8,500	
50	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (14,424)	$ 58,338	
51	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	
52	Total Federal Income Tax	$ (36,674)	$ 80,588	
53	Combined Federal and State Income Tax (L44 + L51)	$ (46,934)	$ 99,282	
54				
55			30.33%	
56	Applicable Federal Income Tax Rate			
57				
58	*Calculation of Interest Synchronization:*			
59	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 4,062,403	$ 4,062,403	
60	Weighted Average Cost of Debt	3.1800%	3.1800%	
61	Synchronized Interest (L45 X L46)	$ 129,184	$ 129,184	

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 9,837,304		$ 9,837,304
2	Less: Accumulated Depreciation	$ 1,327,687	-	1,327,687
3	Net Plant in Service	$ 8,509,617	$ -	$ 8,509,617
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 1,361,843	$ -	$ 1,361,843
5	Less: Accumulated Amortization	6,753	-	6,753
6	Net CIAC	1,355,090	-	1,355,090
7	Advances in Aid of Construction (AIAC)	3,217,334		3,217,334
8	Imputed Reg AIAC	-	34,679	34,679
9	Imputed Reg CIAC	113,427	-	113,427
10	Deferred Income Tax Credits (Debits)	(131,385)	-	(131,385)
	Customer Meter Deposits	512		
	ADD:			
11	Cash Working Capital	102,420	(124,904)	(22,484)
12	Prepayments	4,556	-	4,556
13	Supplies Inventory	4,486	-	4,486
14	Projected Capital Expenditures ##		-	-
15	Deferred Debits	155,374	-	155,374
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 4,221,474	$ (159,583)	$ 4,062,403

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	10,144						$ 10,144
2	302000	Franchises	-			$ -	$ -	$ -	$ -
3	303200	Land & Land Rights SS	41,597			-	-	-	$ 41,597
4	303300	Land & Land Rights P	-			-	-	-	$ -
5	303500	Land & Land Rights TD	-						$ -
	303600	Land & Land Rights AG	-						$ -
6	304100	Struct & Imp SS	2,096,895						$ 2,096,895
7	304200	Struct & Imp P	99,968						$ 99,968
8	304300	Struct & Imp WT	-			-	-	-	$ -
9	304400	Struct & imp TD	-			-	-	-	$ -
10	304600	Struct & Imp Offices	20,698			-	-	-	$ 20,698
	304800	Struct & Imp Misc	-						$ -
11	305000	Collect & Impounding	148,253			-	-	-	$ 148,253
12	307000	Wells & Springs	573,245			-	-	-	$ 573,245
	310100	Power Generation Equip Other	50,935						$ 50,935
13	311200	Pump Equip Electric	1,352,954						$ 1,352,954
14	311300	Pump Equip Diesel	-			-	-	-	$ -
15	311500	Pump Equip Other	4,202			-	-	-	$ 4,202
16	320100	WT Equip Non-Media	258,942			-	-	-	$ 258,942
17	330000	Dist Reservoirs & Standpipe	1,356,012			-	-	-	$ 1,356,012
18	331001	TD Mains Not Classified by Size	758,554			-	-	-	$ 758,554
19	331100	TD Mains 4in & Less	442,775						$ 442,775
20	331200	TD Mains 6in to 8in	959,064			-	-	-	$ 959,064
21	331300	TD Mains 10in to 16in	730,665						$ 730,665
22	333000	Services	278,916						$ 278,916
23	334100	Meters	175,586			-	-	-	$ 175,586
24	334200	Meter Installations	17,253			-	-	-	$ 17,253
25	335000	Hydrants	-			-	-	-	$ -
26	339100	Othber P/E Intangible	-						$ -
27	3392500	Other P/E SS	116,045						$ 116,045
28	340100	Office Furniture & Equip	3,254			-	-	-	$ 3,254
29	340200	Comp & Periph Equip	23,678						$ 23,678
30	341100	Trans Equip Lt Duty Trks	76,510			-	-	-	$ 76,510
31	341200	Trans Equip Hvy Duty Trks	-			-	-	-	$ -
32	342000	Stores Equipment	-						$ -
33	343000	Tools,Shop,Garage Equip	17,822						$ 17,822
34	344000	Laboratory Equipment	460						$ 460
35	345000	Power Operated Equipment	33,093			-	-	-	$ 33,093
36	346100	Comm Equip Non-Telephone	11,702			-	-	-	$ 11,702
37	346300	Comm Equip Other	44,413			-	-	-	$ 44,413
38						-	-	-	$ -
39		*CORPORATION ALLOCATION*				-	-	-	$ -
40	304620	Struct & Imp Leasehold	2,261			-	-	-	$ 2,261
41	331001	Mains				-	-	-	$ -
42	340100	Office Furniture & Equip	11,195						$ 11,195
43	340200	Comp & Periph Equip	4,553						$ 4,553
	340300	Computer Software	17,917						$ 17,917
	340300	Computer Software-Other	465						$ 465
	343000	Tools,Shop,Garage Equip	383						$ 383
	346100	Comm Equip Non-Telephone	1,852						$ 1,852
	346300	Comm Equip Other	49						$ 49
									$ -
		Post Test Year Arsenic O&M Deferral:							$ -
		Cost for Media Replacement in Havasu (March, 2008)	$88,300						$ 88,300
		Add AFUDC - Cost times rate times # of months	$6,696						$ 6,696
		Subtotal $94,996							$ -
44									$ -
45									$ -
46									$ -
47									$ -
48									$ -
49									$ -
50									$ -
51		**Total Plant in Service**	9,837,304	-	-	-	-	-	9,837,304
		9,837,304							
1		Accumulated Depreciation	1,327,687					-	1,327,687
2		Net Plant in Service (L58 - L 59)	$ 8,509,617	$ -	$ -	$ -	$ -	$ -	$ 8,509,617
3									
4		*LESS:*							
5		Contributions in Aid of Construction (CIAC)	$ 1,361,843		$ -	$ -	$ -	$ -	$ 1,361,843
6		Less: Accumulated Amortization	6,753	-	-			-	6,753
7		Net CIAC (L63 - L64)	1,355,090	-	-	-	-	-	1,355,090
8		Advances in Aid of Construction (AIAC)	3,217,334	-					3,217,334
9		Imputed Reg Advances	-	-	$34,679		-		34,679
10		Imputed Reg CIAC	113,427	-	-				113,427
11		Deferred Income Tax Credits (Debits)	(131,385)	-	-	-	-	-	(131,385)
12		Customer Meter Deposits	512						512
13		*ADD:*							-
14		Working Capital Allowance	102,420	(124,904)	-	-	-		(22,484)
15		Pumping Power		-	-	-	-		-
16		Purchase Wastewater Treatment Charges		-	-	-	-		-
17		Material and Supplies Inventory	4,486	-	-	-	-		4,486
18		Prepayments	4,556	-	-	-		-	4,556
19		Projected Capital Expenditures		-	-	-	-	-	-
20		Deferred Debits	155,374	-	-	(145,701)	-	-	9,673
21		Original Cost Rate Base	$ 4,221,474	$ (124,904)	$ (34,679)	$ (145,701)	$ -	$ -	$ 3,916,191
22									
23			ADJ #			References:			
24			1	Working Capital		Schedule GWB-5			
25			2	Imputed Reg AIAC		Schedule GWB-6			
26			3	Deferred Debits		Schedule GWB-7			
27									

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GWB-5

RATE BASE ADJUSTMENT #4 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 204,741	$ -	$ 204,741	12.00	$ 2,456,893
2	Purchased Water	$ -	-	$ -	86.87	$ -
3	Fuel & Power	$ 111,139	-	$ 111,139	32.42	$ 3,603,126
4	Chemicals	$ 88,249		$ 88,249	28.47	$ 2,512,449
5	Waste Disposal	$ (52)		$ (52)	30.00	$ (1,560)
6	Management Fees	$ 166,461		$ 166,461	(3.88)	$ (645,869)
7	Group Insurance	$ 63,729		$ 63,729	(4.64)	$ (295,701)
8	Pensions	$ 35,586		$ 35,586	45.00	$ 1,601,358
9	Regulatory Expense	$ 3,840		$ 3,840	30.00	$ 115,200 *
10	Insurance Other Than Group	$ 8,974		$ 8,974	45.00	$ 403,830
11	Customer Accounting	$ 22,062		$ 22,062	7.46	$ 164,583
12	Rents	$ 5,059		$ 5,059	(10.68)	$ (54,030)
13	General Office Expense	$ 13,616		$ 13,616	30.00	$ 408,480 *
14	Miscellaneous	$ 42,644		$ 42,644	30.00	$ 1,279,308 *
15	Maintenance Expense	$ 198,697		$ 10,747	30.00	$ 322,400 *
16	Taxes Other Than Income-Property Taxes	$ 44,112		$ 44,184	212.50	$ 9,389,176
17	Taxes Other Than Income-Other	$ 17,638		$ 17,638	15.65	$ 276,029
18	Income Taxes	$ (159,839)		$ (46,934)	42.04	$ (1,973,101)
19	Interest		134,059	134,059	106.52	14,279,998
20	**Total Operating Expenses**	866,655	134,059	925,741	764.73	33,842,568
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	36.56			
24	Revenue Lag	Company Workpapers	46.254			
25	Net Lag	Line 24 - 23	(9.70)			
26	Staff Adjusted Expenses	Line 20, Col 35	925,741			
27	Cash Working Capital	Line 25 * Line 26/365 day	(24,594)			
28	Company As Field	Co Schedule B-5	102,420			
29	Staff Adjustment	To GWB-4				
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GWB- 6

RATE BASE ADJUSTMENT #4 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 418,704		$ 418,704
2	None	2002	-	61,945	356,759
3	None	2003	-	64,416	292,343
4	None	2004	-	64,416	227,927
5		2005		64,416	163,511
6		2006		64,416	99,095
7	None	2007	-	64,416	34,679
8	Per Staff		$ 418,704	$ 384,025	$ 34,679
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 34,679

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GWB - 7

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	155,374	(145,701)	9,673
6			$ 155,374	$ (145,701)	$ 301,075

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 1,003,476	$ -	$1,003,476	$ 421,531	$ 1,425,007
3	Other Wastewater Revenues	23,110	-	23,110	-	23,110
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 1,026,586	$ -	$1,026,586	$ 421,531	$ 1,448,117
6						
7	Labor	$ 204,741	$ -	204,741	$ -	$ 204,741
8	Purchased Water	-	-	-	-	-
9	Fuel & Power	111,139	-	111,139	-	111,139
10	Chemicals	88,249	-	88,249	-	88,249
11	Waste Disposal	(52)	-	(52)	-	(52)
12	Management Fees	166,461	-	166,461	-	166,461
13	Group Insurance	63,729	-	63,729	-	63,729
14	Pensions	35,586	-	35,586	-	35,586
15	Regulatory Expense	3,840	-	3,840	-	3,840
16	Insurance Other Than Group	8,974	(8,974)		-	-
17	Customer Accounting	22,062	-	22,062	-	22,062
18	Rents	5,059	-	5,059	-	5,059
19	General Office Expense	13,616	-	13,616	-	13,616
20	Miscellaneous	42,644	-	42,644	-	42,644
21	Maintenance Expense	198,697	(187,950)	10,747	-	10,747
22	Depreciation & Amortization	291,351	(76,346)	215,004	-	215,004
23	General Taxes-Property Taxes	44,112	73	44,184	6,008	50,193
24	General Taxes-Other	17,638	-	17,638	-	17,638
25	Income Taxes	(159,839)	112,905	(46,934)	146,216	99,282
26	**Total Operating Expenses**	1,158,005	(160,293)	997,712	152,224	1,149,936
27	**Operating Income (Loss)**	$ (131,419)	$ 160,293	$ 28,874	$ 269,307	$ 298,181

References:
Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Wastewater Revenues	$ 1,003,476	$ -	$ -	$ -	$ -	$ 1,003,476
3	Other Wastewater Revenues	23,110	-	-	-	-	$ 23,110
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 1,026,586	$ -	$ -	$ -	$ -	$ 1,026,586
6							
7	Labor	$ 204,741	$ -	$ -	$ -	$ -	204,741
8	Purchased Water	-	-	-	-	-	-
9	Fuel & Power	111,139	-	-	-	-	111,139
10	Chemicals	88,249	-	-	-	-	88,249
11	Waste Disposal	(52)	-	-	-	-	(52)
12	Management Fees	166,461	-	-	-	-	166,461
13	Group Insurance	63,729	-	-	-	-	63,729
14	Pensions	35,586	-	-	-	-	35,586
15	Regulatory Expense	3,840	-	-	-	-	3,840
16	Insurance Other Than Group	8,974	-	-	-	-	8,974
17	Customer Accounting	22,062	-	-	-	-	22,062
18	Rents	5,059	-	-	-	-	5,059
19	General Office Expense	13,616	-	-	-	-	13,616
20	Miscellaneous	42,644	-	-	-	-	42,644
21	Maintenance Expense	198,697	(187,950)	-	-	-	10,747
22	Depreciation & Amortization	291,351	-	(76,346)	-	-	215,004
23	General Taxes-Property Taxes	44,112	-	-	73	-	44,184
24	General Taxes-Other	17,638	-	-	-	-	17,638
25	Income Taxes	(159,839)	-	-	-	112,905	(46,934)
26	**Total Operating Expenses**	$ 1,158,005	$ (187,950)	$ (76,346)	$ 73	$ 112,905	$ 1,006,686
27	**Operating Income (Loss)**	$ (131,419)	$ 187,950	$ 76,346	$ (73)	$ (112,905)	$ 19,900

ADJ #		References:
1	Tank Maintenance Accrual	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 15

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Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 198,697	$ (187,950)	$ 10,747

Repair and Maintenance Expenses	
Calendar year 2005	16,662
Calendar year 2006	6,712
Calendar year 2007	8,866
Total for three year period	32,240
Normalization Period	3
Normalized Amount	10,747

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec. 67093 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	10,144	0.00%	-
3	302000	Franchises	-	0.00%	-
4	303200	Land & Land Rights SS	41,597	0.00%	-
5	303300	Land & Land Rights P	-	0.00%	-
6	303500	Land & Land Rights TD	-	0.00%	-
7	303600	Land & Land Rights AG	-	0.00%	-
8	304100	Struct & Imp SS	2,096,895	2.58%	54,100
9	304200	Struct & Imp P	99,968	2.58%	2,579
10	304300	Struct & Imp WT	-	0.00%	-
11	304400	Struct & Imp TD	-	-	-
12	304600	Struct & Imp Offices	20,698	2.58%	534
13	304800	Struct & Imp Misc	-	2.58%	-
14	305000	Collect & Impounding	148,253	2.58%	3,825
15	307000	Wells & Springs	573,245	2.54%	14,560
16	310100	Power Generation Equip Other	50,935	3.83%	1,951
17	311200	Pump Equip Electric	1,352,954	3.83%	51,818
18	311300	Pump Equip Diesel	-		-
19	311500	Pump Equip Other	4,202	3.83%	161
20	320100	WT Equip Non-Media	258,942	7.06%	18,281
21	330000	Dist Reservoirs & Standpipe	1,356,012	2.33%	31,595
22	331001	TD Mains Not Classified by Size	758,554	2.10%	15,930
23	331100	TD Mains 4in & Less	442,775	2.10%	9,298
24	331200	TD Mains 6in to 8in	959,064	2.10%	20,140
25	331300	TD Mains 10in to 16in	730,665	2.10%	15,344
26	333000	Services	278,916	2.89%	8,061
27	334100	Meters	175,586	3.52%	6,181
28	334200	Meter Installations	17,253	3.52%	607
29	335000	Hydrants	-	1.99%	-
30	339100	Othber P/E Intangible	-		-
31	3392500	Other P/E SS	116,045		-
32	340100	Office Furniture & Equip	3,254	4.47%	145
33	340200	Comp & Periph Equip	23,678	4.47%	1,058
34	341100	Trans Equip Lt Duty Trks	76,510	20.00%	15,302
35	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
36	342000	Stores Equipment	-	3.93%	-
37	343000	Tools,Shop,Garage Equip	17,822	4.49%	800
38	344000	Laboratory Equipment	460	3.06%	14
39	345000	Power Operated Equipment	33,093	2.55%	844
40	346100	Comm Equip Non-Telephone	11,702	8.37%	979
41	346300	Comm Equip Other	44,413	6.19%	2,749
42			-		-
43	*CORPORATION ALLOCATION*		-		-
44	304620	Struct & Imp Leasehold	2,261	2.58%	58
45	331001	Mains	-		-
46	340100	Office Furniture & Equip	11,195	4.47%	500
47	340200	Comp & Periph Equip	4,553	4.47%	204
48	340300	Computer Software	17,917	25.00%	4,479
49	340300	Computer Software-Other	465	25.00%	116
50	343000	Tools,Shop,Garage Equip	383	4.49%	17
51	346100	Comm Equip Non-Telephone	1,852	8.37%	155
52	346300	Comm Equip Other	49	6.19%	3
53					
54	*Post Test Year Arsenic O&M Deferral:*				
55	Cost for Media Replacement in Havasu (March, 2008)		88,300		-
56	Add AFUDC - Cost times rate times # of months		6,696		-
57			-		-
58		Rounding			-
59		**Total Plant in Service**	9,837,304	2.87%	282,391
60					
61					
62		Less Non Depreciable Plant			
63	301000	Organization	10,144	0.00%	-
64	303200	Land & Land Rights SS	41,597	0.00%	-
65	303600	Land & Land Rights AG	-	0.00%	-
66					
67		Net Depreciable Plant and Depreciation Amounts	$ 9,785,563		$ 282,391
68		Composite Depreciation Rate		2.89%	
69		Less			
70		Amortization of Regulatory CIAC at Settlement Rate			28,087
71		Amortization of CIAC at Composite Rate	$ 1,361,843		$ 39,300
72		Staff Recommended Depreciation Expense			$ 215,004
73		Company Proposed Depreciation Expense			291,351
74		Staff Adjustment			$ (76,346)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

ARIZONA-AMERICAN WATER COMPANY - HAVASU WATER
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Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2005	$ 1,026,586	$ 1,026,586
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	2,053,172	2,053,172
4	Staff Recommended Revenue	1,026,586	1,448,117
5	Subtotal (Line 4 + Line 5)	3,079,758	3,501,289
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	1,026,586	1,167,096
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	2,053,172	2,334,193
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	2,066,626	2,347,647
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	475,324	539,959
15	Composite Property Tax Rate - Obtained from ADOR	9.30%	9.30%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 44,184	
17	Company Proposed Property Tax	$ 44,112	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ 73	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 50,193
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 44,184
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 6,008
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 6,008
23	Increase in Revenue Requirement		$ 421,531
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.42533%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (159,839)	$ 112,905	$ (46,934)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1- PLANT, ACCUMULATED DEPRECIATION & AIAC
GWB-	6	RATE BASE ADJUSTMENT #2 - WORKING CAPITAL
GWB-	7	RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC
GWB-	8	RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS
GWB-	9	RATE BASE ADJUSTMENT #5 - POST TEST YEAR PLANT
GWB-	10	OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED
GTM-	11	SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR
GTM-	12	OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL
GTM-	13	OPERATING INCOME ADJUSTMENT #2 - DEPRECIATION EXPENSE
GTM-	14	OPERATING INCOME ADJUSTMENT #3 - PROPERTY TAX EXPENSE
GTM-	15	OPERATING INCOME ADJUSTMENT #4 - INCOME TAX EXPENSE

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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 12,041,310	$ 12,041,310	$ 8,895,477	$ 8,895,477
2	Adjusted Operating Income (Loss)	$ 37,140	$ 37,140	$ 525,900	$ 525,900
3	Current Rate of Return (L2 / L1)	0.31%	0.31%	5.91%	5.91%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 1,011,470	$ 1,011,470	$ 652,928	$ 652,928
6	Operating Income Deficiency (L5 - L2)	$ 974,330	$ 974,330	$ 127,028	$ 127,028
7	Gross Revenue Conversion Factor	1.6990	1.6990	1.6524	1.6524
8	Required Revenue Increase (L7 * L6)	$ 1,655,405	$ 1,655,405	$ 209,902	$ 209,902
9	Adjusted Test Year Revenue	$ 5,113,631	$ 5,113,631	$ 5,113,631	$ 5,113,631
10	Proposed Annual Revenue (L8 + L9)	$ 6,769,036	$ 6,769,036	$ 5,323,533	$ 5,323,533
11	Required Increase in Revenue (%)	32.37%	32.37%	4.10%	4.10%
12	Rate of Return on Common Equity (%)	11.50%	11.50%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4824%					
5	Subtotal (L3 - L4)	60.5176%					
6	**Revenue Conversion Factor (L1 / L5)**	1.652412					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.4390%					
22	Effective Property Tax Factor (L20*L21)		0.8835%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4824%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 652,928					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 525,900					
26	Required Increase in Operating Income (L24 - L25)		$ 127,028				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 232,069					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 152,214					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 79,854				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 5,323,533					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 224,060					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 221,039					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 3,020				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 209,903				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				Mohave Water	Mohave Water	Mohave Water Only	Mohave Water Only
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 5,113,631	$ 5,323,533		
40	Operating Expenses Excluding Income Taxes			$ 4,435,517	$ 4,438,537		
41	Synchronized Interest (L56)			$ 283,766	$ 283,766		
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ 394,349	$ 601,232	$ -	$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ 27,478	$ 41,894	$ -	$ -
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ 366,871	$ 559,338	$ -	$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500	$ -	$ -
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250	$ -	$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500	$ -	$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650	$ -	$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 10,836	$ 76,275	$ -	$ -
51	Total Federal Income Tax	$ -	$ -	$ 124,736	$ 190,175	$ -	
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ 152,214	$ 232,069	$ -	$ -
53	Effective Tax Rate				34.0000%		

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 28,800,225	$ (2,150,499)	$ 26,649,726
2	Less: Accumulated Depreciation	13,084,198	(26,559)	13,057,639
3	Net Plant in Service	$ 15,716,027	$ (2,123,940)	$ 13,592,087
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 107,549	$ -	$ 107,549
5	Less: Accumulated Amortization	4	-	4
6	Net CIAC	107,545	-	107,545
7	Advances in Aid of Construction (AIAC)	5,947,009	(1,539,768)	4,407,241
8	Imputed Reg AIAC	-	348,557	348,557
9	Imputed Reg CIAC	1,157,044	-	1,157,044
10	Deferred Income Tax Credits (Debits)	(1,360,455)	-	(1,360,455)
	Customer Meter Deposits	7,800		7,800
	ADD:			
11	Cash Working Capital	367,562	(563,132)	(195,570)
12	Prepayments	57,963	-	57,963
13	Supplies Inventory	8,897	-	8,897
14	Projected Capital Expenditures		-	-
15	Deferred Debits	1,749,805	(1,649,972)	99,833
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 12,041,310	$ (3,145,833)	$ 8,895,477

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	34,004						$ 34,004
2	302000	Franchises	37,061						$ 37,061
3	303200	Land & Land Rights SS	290,792						$ 290,792
4	303300	Land & Land Rights P	2,351						$ 2,351
5	303500	Land & Land Rights TD	9,609						$ 9,609
6	303600	Land & Land Rights AG	31,052						$ 31,052
7	304100	Struct & Imp SS	389,266						$ 389,266
8	304200	Struct & Imp P	1,687						$ 1,687
9	304300	Struct & Imp WT	47,846						$ 47,846
10	304400	Struct & Imp TD	4,583						$ 4,583
11	304510	Struct & Imp AG Cap Lease	-						$ -
12	304600	Struct & Imp Offices	457,148						$ 457,148
13	304700	Struct & Imp Store, Shop, Garage	29,223						$ 29,223
14	305000	Collect & Impounding	663,944						$ 663,944
15	307000	Wells & Springs	807,515						$ 807,515
16	310100	Power Generation Equip Other	137,874						$ 137,874
17	311200	Pump Equip Electric	2,264,799						$ 2,264,799
18	311300	Pump Equip Diesel	-						$ -
19	311500	Pump Equip Other	1,009						$ 1,009
20	320100	WT Equip Non-Media	50,870						$ 50,870
21	330000	Dist Reservoirs & Standpipe	1,584,129					(490,772)	$ 1,093,357
22	331001	TD Mains Not Classified by Size	49,470					(59,875)	$ (10,405)
23	331100	TD Mains 4in & Less	11,718,645						$ 11,718,645
24	331200	TD Mains 6in to 8in	2,367,285	(1,539,768)					$ 827,517
25	331300	TD Mains 10in to 16in	216,751					(60,084)	$ 156,667
26	333000	Services	3,447,830						$ 3,447,830
27	334100	Meters	1,770,642						$ 1,770,642
28	334200	Meter Installations	236,697						$ 236,697
29	335000	Hydrants	36,473						$ 36,473
30	339100	Other P/E Intangible	-						$ -
31	339500	Other P/E TD	-						$ -
32	340100	Office Furniture & Equip	137,645						$ 137,645
33	340200	Comp & Periph Equip	66,842						$ 66,842
34	340300	Computer Software	833						$ 833
35	341100	Trans Equip Lt Duty Trks	343,147						$ 343,147
36	341200	Trans Equip Hvy Duty Trks	-						$ -
37	342000	Stores Equipment	2,400						$ 2,400
38	343000	Tools,Shop,Garage Equip	134,138						$ 134,138
39	344000	Laboratory Equipment	7,623						$ 7,623
40	345000	Power Operated Equipment	172,529						$ 172,529
41	346100	Comm Equip Non-Telephone	180,533						$ 180,533
42	346200	Comm Equip Telephone	49,678						$ 49,678
43	346300	Comm Equip Other	5,110						$ 5,110
44									
45		*CORPORATE PLANT ALLOCATION*							$ -
46	304620	Struct & Imp Leasehold	23,411						$ 23,411
47	331001	Mains							$ -
48	340100	Office Furniture & Equip	115,919						$ 115,919
49	340200	Comp & Periph Equip	47,147						$ 47,147
50	340300	Computer Software	185,522						$ 185,522
51	340300	Computer Software-Other	4,819						$ 4,819
52	343000	Tools,Shop,Garage Equip	3,963						$ 3,963
53	346100	Comm Equip Non-Telephone	19,175						$ 19,175
54	346300	Comm Equip Other	505						$ 505
55									
56		*POST TEST YEAR PLANT*							
57	330000	Dist Reservoirs & Standpipe	490,772						$ 490,772
58	331300	TD Mains 10in to 16in	60,084						$ 60,084
59	331400	TD Mains Greater than 18"	59,875						$ 59,875
60									
61									
62									
63		**Total Plant in Service**	28,800,226	(1,539,768)	-	-	-	(610,731)	26,649,727
64		27,260,458							
65		c	13,084,198	(26,559)				-	13,057,639
66		Net Plant in Service (L58 - L 59)	$ 15,716,028	$ (1,513,209)	$ -	$ -	$ -	$ (610,731)	$ 13,592,088
67									
68		*LESS:*							
69		Contributions in Aid of Construction (CIAC)	$ 107,549		$ -	$ -	$ -	$ -	$ 107,549
70		Less: Accumulated Amortization	4	-	-		-	-	4
71		Net CIAC (L63 - L64)	107,545	-	-	-	-	-	107,545
72		Advances in Aid of Construction (AIAC)	5,947,009	(1,539,768)					4,407,241
73		Imputed Reg Advances	-	-	-	348,557	-		348,557
74		Imputed Reg CIAC	1,157,044	-	-				1,157,044
75		Deferred Income Tax Credits (Debits)	(1,360,455)	-	-	-	-	-	(1,360,455)
76		Customer Meter Deposits	7,800						7,800
77		*ADD:*							-
78		Working Capital Allowance	367,562	-	(563,132)	-	-		(195,570)
79		Pumping Power		-	-	-	-		-
80		Purchase Wastewater Treatment Charges		-	-	-	-		-
81		Material and Supplies Inventory	8,897	-	-	-	-		8,897
82		Prepayments	57,963	-	-	-	-	-	57,963
83		Projected Capital Expenditures		-	-	-	-	-	-
84		Deferred Debits	1,749,805	-	-	-	(1,649,972)		99,833
85		**Original Cost Rate Base**	$ 12,041,311	$ 26,559	$ (563,132)	$ -	$ (1,649,972)	$ (610,731)	$ 8,895,478

ADJ #		References:
1	Plant, Accumulated Depreciation and AIAC	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	Post Test Year Plant	Schedule GWB-9

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Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	331.20	Stonebridge Subdivision Plant	1,189,832	(1,189,832)	-
	Acc Deprec.	Stonebridge Subdivision Acc Depr.	7,532	(7,532)	-
	AIAC	Stonebridge Subdivision AIAC	1,189,832	(1,189,832)	-
	331.20	WinterHaven Subdivision Plant	239,069.00	(239,069)	
	Acc Deprec.	WinterHaven Subdivision Acc Dep	12,999.00	(12,999)	
	AIAC	WinterHaven Subdivision AIAC	239,069.00	(239,069)	
	331.20	Mira Monte Subdivision Plant	110,867.00	(110,867)	
	Acc Deprec.	Mira Monte Subdivision Acc Dep	6,028.00	(6,028)	
	AIAC	Mira Monte Subdivision AIAC	110,867.00	(110,867)	
	331.20	Plant Adjustment	1,539,768.00	(1,539,768.00)	-
	Acc. Depreci	Acc. Depreciation Total Adj.	26,559.00	(26,559.00)	-
		AIAC Total Adj.	1,539,768.00	(1,539,768.00)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 899,973	$ -	899,973	12.00	$ 10,799,671
2	Purchased Water	$ 44,384	-	44,384	86.87	$ 3,855,638
3	Fuel & Power	$ 501,877	-	501,877	32.42	$ 16,270,852
4	Chemicals	$ 7,846		7,846	28.47	$ 223,384
5	Waste Disposal	$ (295)		(295)	30.00	$ (8,850)
6	Management Fees	$ 940,899		940,899	(3.88)	$ (3,650,688)
7	Group Insurance	$ 209,312		209,312	(4.64)	$ (971,209)
8	Pensions	$ 127,879		127,879	45.00	$ 5,754,561
9	Regulatory Expense	$ 119,303		119,303	30.00	$ 3,579,090
10	Insurance Other Than Group	$ 51,991		51,991	45.00	$ 2,339,595
11	Customer Accounting	$ 132,002		132,002	7.46	$ 984,735
12	Rents	$ 15,559		15,559	(10.68)	$ (166,170)
13	General Office Expense	$ 103,944		103,944	30.00	$ 3,118,320
14	Miscellaneous	$ 354,017		354,017	30.00	$ 10,620,516
15	Maintenance Expense	$ 583,888	(488,307)	95,581	30.00	$ 2,867,430
16	Taxes Other Than Income-Property Taxes	$ 221,795		221,039	212.50	$ 46,970,830
17	Taxes Other Than Income-Other	$ 75,809		75,809	15.65	$ 1,186,412
18	Income Taxes	$ (196,927)		152,214	42.04	$ 6,399,085
19	Interest		336,736	336,736	106.52	35,869,118.72
20	**Total Operating Expenses**	4,193,256	(151,571)	4,390,071	765	146,042,320
21						146,042,320
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	33.27			
24	Revenue Lag	Company Workpapers	48.239			
25	Net Lag	Line 24 - 23	(14.97)			
26	Staff Adjusted Expenses	Line 20, Col C	4,390,071			
27	Cash Working Capital	Line 25 * Line 26/365 da	(180,085)			
28	Company As Field	Co Schedule B-5	367,562			
29	Staff Adjustment	To GWB-4	(547,647)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 4,208,406		$4,208,406
2	None	2002	-	622,613	3,585,793
3	None	2003	-	647,447	2,938,345
4	None	2004	-	647,447	2,290,898
5		2005		647,447	1,643,451
6		2006		647,447	996,004
7	None	2007	-	647,447	348,557
8	Per Staff		$ 4,208,406	$ 3,859,849	$ 348,557
9	Company Proposed Imputed Reg. AIAC				-
10	Staff Adjustment			$ -	$ 348,557

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	1,749,805	(1,649,972)	99,833
2			$ 1,749,805	$ (1,649,972)	$ 3,399,777

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB- 9

RATE BASE ADJUSTMENT #5 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
330000	Distribution Reservoirs	490,772	$ (490,772)	$ -
331300	TD Mains 10"-16"	60,084	$ (60,084)	$ -
331001	TD Mains 18in and Grtr.	59,875	$ (59,875)	$ -
		610,731	(610,731)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 4,932,608	$ -	$ 4,932,608	$ 209,902	$ 5,142,510
3	Other Wastewater Revenues	181,023	-	181,023	-	181,023
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 5,113,631	$ -	$ 5,113,631	$ 209,902	$ 5,323,533
6						
7	Labor	$ 899,973	$ -	899,973	$ -	$ 899,973
8	Purchased Water	$ 44,384	-	44,384	-	44,384
9	Fuel & Power	$ 501,877	-	501,877	-	501,877
10	Chemicals	$ 7,846	-	7,846	-	7,846
11	Waste Disposal	$ (295)	-	(295)	-	(295)
12	Management Fees	$ 940,899	-	940,899	-	940,899
13	Group Insurance	$ 209,312	-	209,312	-	209,312
14	Pensions	$ 127,879	-	127,879	-	127,879
15	Regulatory Expense	$ 119,303	-	119,303	-	119,303
16	Insurance Other Than Group	$ 51,991	-	51,991	-	51,991
17	Customer Accounting	$ 132,002	-	132,002	-	132,002
18	Rents	$ 15,559	-	15,559	-	15,559
19	General Office Expense	$ 103,944	-	103,944	-	103,944
20	Miscellaneous	$ 354,017	-	354,017	-	354,017
21	Maintenance Expense	$ 583,888	(488,307)	95,581	-	95,581
22	Depreciation & Amortization	$ 883,235	(348,839)	534,396	-	534,396
23	General Taxes-Property Taxes	$ 221,795	(756)	221,039	3,020	224,060
24	General Taxes-Other	$ 75,809	-	75,809	-	75,809
25	Income Taxes	$ (196,927)	349,142	152,214	79,854	232,069
26	0					
27	0					
28	**Total Operating Expenses**	5,076,491	(488,760)	4,587,731	82,875	4,670,606
29	**Operating Income (Loss)**	$ 37,140	$ 488,760	$ 525,900	$ 127,027	$ 652,928

References:
Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Wastewater Revenues	$ 4,932,608	$ -	$ -	$ -	$ -	$ 4,932,608
3	Other Wastewater Revenues	181,023	-	-	-	-	$ 181,023
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 5,113,631	$ -	$ -	$ -	$ -	$ 5,113,631
6							
7	Labor	$ 899,973	$ -	$ -	$ -	$ -	899,973
8	Purchased Water	44,384	-	-	-	-	44,384
9	Fuel & Power	501,877	-	-	-	-	501,877
10	Chemicals	7,846	-	-	-	-	7,846
11	Waste Disposal	(295)	-	-	-	-	(295)
12	Management Fees	940,899	-	-	-	-	940,899
13	Group Insurance	209,312	-	-	-	-	209,312
14	Pensions	127,879	-	-	-	-	127,879
15	Regulatory Expense	119,303	-	-	-	-	119,303
16	Insurance Other Than Group	51,991	-	-	-	-	51,991
17	Customer Accounting	132,002	-	-	-	-	132,002
18	Rents	15,559	-	-	-	-	15,559
19	General Office Expense	103,944	-	-	-	-	103,944
20	Miscellaneous	354,017	-	-	-	-	354,017
21	Maintenance Expense	583,888	(488,307)	-	-	-	95,581
22	Depreciation & Amortization	883,235	-	(348,839)	-	-	534,396
23	General Taxes-Property Taxes	221,795	-	-	(756)	-	221,039
24	General Taxes-Other	75,809	-	-	-	-	75,809
25	Income Taxes	(196,927)	-	-	-	349,142	152,214
26							-
							-
27	**Total Operating Expenses**	$ 5,076,491	$ (488,307)	$ (348,839)	$ (756)	$ 349,142	$ 4,587,731
28	**Operating Income (Loss)**	$ 37,140	$ 488,307	$ 348,839	$ 756	$ (349,142)	**$ 525,900**

ADJ #		References:
1	Tank Maintenance Accrual	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 15

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Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 583,888	$ (488,307)	$ 95,581

Repair and Maintenance Expenses	
Calendar year 2005	100,287
Calendar year 2006	91,056
Calendar year 2007	95,400
Total for three year period	286,743
Normalization Period	3
Normalized Amount	95,581

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec. 67093 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	34,004	0.00%	-
3	302000	Franchises	37,061	0.00%	-
4	303200	Land & Land Rights SS	290,792	0.00%	-
5	303300	Land & Land Rights P	2,351	0.00%	-
6	303500	Land & Land Rights TD	9,609	0.00%	-
7	303600	Land & Land Rights AG	31,052	0.00%	-
8	304100	Struct & Imp SS	389,266	2.83%	11,016
9	304200	Struct & Imp P	1,687	2.39%	40
10	304300	Struct & Imp WT	47,846	2.50%	1,196
11	304400	Struct & Imp TD	4,583	1.81%	83
12	304510	Struct & Imp AG Cap Lease	-	4.63%	-
13	304600	Struct & Imp Offices	457,148	2.03%	9,280
14	304700	Struct & Imp Store, Shop, Garage	29,223	4.63%	1,353
15	305000	Collect & Impounding	663,944	2.54%	16,864
16	307000	Wells & Springs	807,515	2.70%	21,803
17	310100	Power Generation Equip Other	137,874	5.00%	6,894
18	311200	Pump Equip Electric	2,264,799	5.12%	115,958
19	311300	Pump Equip Diesel	-	5.00%	-
20	311500	Pump Equip Other	1,009	5.00%	50
21	320100	WT Equip Non-Media	50,870	5.00%	2,544
22	330000	Dist Reservoirs & Standpipe	1,584,129	1.81%	28,673
23	331001	TD Mains Not Classified by Size	49,470	1.53%	757
24	331100	TD Mains 4in & Less	11,718,645	1.53%	179,295
25	331200	TD Mains 6in to 8in	827,517	1.53%	12,661
26	331300	TD Mains 10in to 16in	216,751	2.00%	4,335
27	333000	Services	3,447,830	2.89%	99,642
28	334100	Meters	1,770,642	6.53%	115,623
29	334200	Meter Installations	236,697	6.53%	15,456
30	335000	Hydrants	36,473	1.99%	726
31	339100	Other P/E Intangible	-		-
32	339500	Other P/E TD	-		-
33	340100	Office Furniture & Equip	137,645	4.04%	5,561
34	340200	Comp & Periph Equip	66,842	15.59%	10,421
35	340300	Computer Software	833	25.00%	208
36	341100	Trans Equip Lt Duty Trks	343,147	22.00%	75,492
37	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
38	342000	Stores Equipment	2,400	3.93%	94
39	343000	Tools,Shop,Garage Equip	134,138	4.49%	6,023
40	344000	Laboratory Equipment	7,623	10.00%	762
41	345000	Power Operated Equipment	172,529	4.64%	8,005
42	346100	Comm Equip Non-Telephone	180,533	3.66%	6,608
43	346200	Comm Equip Telephone	49,678	9.76%	4,849
44	346300	Comm Equip Other	5,110	6.19%	316
45			-		
46	*CORPORATE PLANT ALLOCATION*				
47	304620	Struct & Imp Leasehold	23,411	4.63%	1,084
48	331001	Mains	-	1.53%	-
49	340100	Office Furniture & Equip	115,919	4.04%	4,683
50	340200	Comp & Periph Equip	47,147	15.59%	7,350
51	340300	Computer Software	185,522	25.00%	46,381
52	340300	Computer Software-Other	4,819	25.00%	1,205
53	343000	Tools,Shop,Garage Equip	3,963	4.49%	178
54	346100	Comm Equip Non-Telephone	19,175	3.66%	702
55	346300	Comm Equip Other	505	6.19%	31
56					
57	*POST TEST YEAR PLANT*				
58	330000	Dist Reservoirs & Standpipe	490,772	0.00%	-
59	331300	TD Mains 10in to 16in	60,084	0.00%	-
60	331400	TD Mains Greater than 18"	59,875	0.00%	-
61					
62		**Total Plant in Service**	27,260,458	3.02%	824,203
63					
64		Less Non Depreciable Plant			
65		Organization	34,004	0.00%	-
66		Franchises	37,061	0.00%	-
67		Land & Land Rights SS	290,792	0.00%	-
68		Land & Land Rights P	2,351	0.00%	-
69		Land & Land Rights TD	9,609	0.00%	-
70		Land & Land Rights AG	31,052	0.00%	-
71					
72		Net Depreciable Plant and Depreciation Amounts	$ 26,855,589		$ 824,203
73		Composite Depreciation Rate		3.07%	
74		Less			
75		Amortization of Regulatory CIAC at Settlement Rate			286,506
76		Amortization of CIAC at Composite Rate	$ 107,549		$ 3,301
77		Staff Recommended Depreciation Expense			$ 534,396
78		Company Proposed Depreciation Expense			883,235
79		Staff Adjustment			$ (348,839)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 5,113,631	$ 5,113,631
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	10,227,262	10,227,262
4	Staff Recommended Revenue	5,113,631	5,323,533
5	Subtotal (Line 4 + Line 5)	15,340,893	15,550,795
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	5,113,631	5,183,598
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	10,227,262	10,367,197
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	10,240,716	10,380,651
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	2,355,365	2,387,550
15	Composite Property Tax Rate - Obtained from ADOR	9.38%	9.38%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 221,039	
17	Company Proposed Property Tax	$ 221,795	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (756)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 224,060
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 221,039
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 3,020**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 3,020
23	Increase in Revenue Requirement		$ 209,902
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.43896%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (196,927)	$ 349,142	$ 152,214

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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GWB-	3	RATE BASE - ORIGINAL COST
GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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GWB-	6	RATE BASE ADJUSTMENT #2 - WORKING CAPITAL
GWB-	7	RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC
GWB-	8	RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS
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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 4,740,149	$ 4,740,149	$ (610,469)	$ (610,469)
2	Adjusted Operating Income (Loss)	$ 15,619	$ 15,619	$ (31,426)	$ (31,426)
3	Current Rate of Return (L2 / L1)	0.33%	0.33%	5.15%	5.15%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 398,173	$ 398,173	$ (44,808)	$ (44,808)
6	Operating Income Deficiency (L5 - L2)	$ 382,553	$ 382,553	$ (13,383)	$ (13,383)
7	Gross Revenue Conversion Factor	1.6786	1.6786	1.2849	1.2849
8	Required Revenue Increase (L7 * L6)	$ 642,143	$ 642,143	$ (17,195)	$ (17,195)
9	Adjusted Test Year Revenue	$ 796,161	$ 796,161	$ 796,161	$ 796,161
10	Proposed Annual Revenue (L8 + L9)	$ 1,438,304	$ 1,438,304	$ 778,966	$ 778,966
11	Required Increase in Revenue (%)	80.65%	80.65%	-2.16%	-2.16%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	22.1714%					
5	Subtotal (L3 - L4)	77.8286%					
6	**Revenue Conversion Factor (L1 / L5)**	1.284875					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	20.9228%					
9	One Minus Combined Income Tax Rate (L7 - L8)	79.0772%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	15.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	13.9548%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		20.9228%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	20.9228%					
20	One Minus Combined Income Tax Rate (L18-L19)	79.0772%					
21	Property Tax Factor (GTM-14, L24)	1.5790%					
22	Effective Property Tax Factor (L20*L21)		1.2486%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			22.1714%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ (44,808)					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ (31,426)					
26	Required Increase in Operating Income (L24 - L25)		$ (13,383)				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ (6,703)					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (3,162)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ (3,541)				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 778,966					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 37,760					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 38,032					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ (272)				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ (17,195)				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
		Mohave WW	Mohave WW	Mohave WW	Mohave WW	Mohave WW	Mohave WW
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 796,161			$ 778,966
40	Operating Expenses Excluding Income Taxes			$ 830,749			$ 830,477
41	Synchronized Interest (L56)			$ (19,474)			$ (19,474)
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (15,114)			$ (32,037)
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%			6.9680%
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (1,053)			$ (2,232)
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (14,061)			$ (29,805)
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (2,109)			$ (4,471)
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ -			$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ -			$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ -			$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ -			$ -
51	Total Federal Income Tax	$ -	$ -	$ (2,109)			$ (4,471)
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (3,162)			$ (6,703)

53	Effective Tax Rate	15.0000%

	Calculation of Interest Synchronization:	Mohave WW
54	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ (610,469)
55	Weighted Average Cost of Debt	3.1900%
56	Synchronized Interest (L45 X L46)	$ (19,474)

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 7,154,300	$ (4,238,442)	$ 2,915,858
2	Less: Accumulated Depreciation	367,213	(9,584)	357,629
3	Net Plant in Service	$ 6,787,087	$ (4,228,858)	$ 2,558,229
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 726,484	$ -	$ 726,484
5	Less: Accumulated Amortization	57,539	-	57,539
6	Net CIAC	668,945	-	668,945
7	Advances in Aid of Construction (AIAC)	1,414,706	(306,362)	1,108,344
8	Imputed Reg AIAC	-	61,769	61,769
9	Imputed Reg CIAC	131,237	-	131,237
10	Deferred Income Tax Credits (Debits)	(105,590)	-	(105,590)
	Customer Meter Deposits			
	ADD:			
11	Cash Working Capital	58,358	(1,374,054)	(1,315,696)
12	Prepayments	3,661	-	3,661
13	Supplies Inventory	341	-	341
14	Projected Capital Expenditures		-	-
15	Deferred Debits	-	7,701	7,701
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 4,740,149	$ (5,350,618)	$ (610,469)

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	-						$ -
2	352000	WW Franchises	364						$ 364
3	354200	WW Struct & Imp Coll	201,579						$ 201,579
4	360000	WW Collection Sewers Forced	5,382						$ 5,382
5	361100	WW Collecting Mains	1,615,707	(306,362)					$ 1,309,345
	362000	WW Special Coll Struct	74,760						$ 74,760
6	363000	WW Services Sewer	314,343						$ 314,343
7	364000	WW Flow Measuring Devices	23,113						$ 23,113
8	371100	WW Pump Equip Elect	18,935						$ 18,935
9	380100	WW Equip Sed Tanks/Acc	803,788						$ 803,788
10	380300	WW TD Equip Sldge Dry/Filt	8,807						$ 8,807
	380500	WW TD Equip Chem Trmt Plt	14,311						$ 14,311
11	380600	WW TD Equip Oth Disp	39,019						$ 39,019
12	393000	WW Tool Shop & Garage Equip	44,237						$ 44,237
	394000	WW Laboratory Equipment	587						$ 587
13	396000	Communication Equipment	26,205						$ 26,205
14	398000	Other Plant	-						$ -
15									$ -
16		*CORPORATE ALLOCATION*							$ -
17	304620	Struct & Imp Leasehold	1,817						$ 1,817
18	331001	Mains							$ -
19	340100	Office Furniture & Equip	8,997						$ 8,997
20	340200	Comp & Periph Equip	3,659						$ 3,659
21	340300	Computer Software	14,399						$ 14,399
22	340300	Computer Software-Other	374						$ 374
23	343000	Tools,Shop,Garage Equip	308						$ 308
24	346100	Comm Equip Non-Telephone	1,488						$ 1,488
25	346300	Comm Equip Other	39						$ 39
26									$ -
27	354500	WW Struct & Impr Gen	765,906					$ (765,906)	$ -
28	371100	WW Pump Equip Elect	813,581					$ (813,581)	$ -
29	380000	WW TD Equipment	2,352,593					$ (2,352,593)	$ -
30									$ -
31									$ -
32		**Total Plant in Service**	7,154,301	(306,362)	-	-	-	(3,932,080)	2,915,859
33									
34		Accumulated Depreication	367,213	(9,584)				-	357,629
35		Net Plant in Service	$ 6,787,088	$ (296,778)	$ -	$ -	$ -	$ (3,932,080)	$ 2,558,230
36									
37		*LESS:*							
38		Contributions in Aid of Construction (CIAC)	$ 726,484		$ -	$ -	$ -	$ -	$ 726,484
39		Less: Accumulated Amortization	57,539	-	-			-	57,539
40		Net CIAC (L63 - L64)	668,945	-	-	-	-	-	668,945
41		Advances in Aid of Construction (AIAC)	1,414,706	(306,362)					1,108,344
42		Imputed Reg Advances	-	-	-	61,769	-		61,769
43		Imputed Reg CIAC	131,237	-	-				131,237
44		Deferred Income Tax Credits (Debits)	(105,590)	-	-	-	-	-	(105,590)
45		ITC							-
46		*ADD:*							-
47		Working Capital Allowance	58,358	-	(1,374,054)	-	-		(1,315,696)
48		Pumping Power		-	-	-	-		-
49		Purchase Wastewater Treatment Charges		-	-	-	-		-
50		Material and Supplies Inventory	341	-	-	-	-		341
51		Prepayments	3,661	-	-	-	-	-	3,661
52		Projected Capital Expenditures		-	-	-	-	-	-
53		Deferred Debits	-	-	-	-	7,701	-	7,701
54		**Original Cost Rate Base**	$ 4,740,150	$ 9,584	$ (1,374,054)	$ (61,769)	$ 7,701	$ (3,932,080)	$ (610,468)

ADJ #		References:
1	Plant, Accumulated Depreciation and AIAC	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	Post Test Year Plant	Schedule GWB-9

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Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	361.20	Mesa Vista Subdivision Plant	170,432	(170,432)	-
	Acc Deprec.	Mesa Vista Subdivision Acc Depr.	7,995	(7,995)	-
	AIAC	Mesa Vista Subdivision AIAC	170,432	(170,432)	-
	361.20	Sage Hill Subdivision Plant	135,930.00	(135,930)	
	Acc Deprec.	Sage Hill Subdivision Acc Dep	1,589.00	(1,589)	
	AIAC	Sage Hill Subdivision AIAC	135,930.00	(135,930)	
	361.20	Plant Adjustment	306,362.00	(306,362.00)	-
	Acc. Depreci	Acc. Depreciation Total Adj.	9,584.00	(9,584.00)	-
		AIAC Total Adj.	306,362.00	(306,362.00)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 108,996	$ -	108,996	12.00	$ 1,307,949
2	Fuel & Power	$ 73,650	-	73,650	86.87	$ 6,397,956
3	Chemicals	$ 9,214	-	9,214	32.42	$ 298,717
4	Waste Disposal	$ 126,228		126,228	28.47	$ 3,593,711
5	Management Fees	$ 123,665		123,665	30.00	$ 3,709,950
6	Group Insurance	$ 24,046		24,046	(3.88)	$ (93,298)
7	Pensions	$ 18,447		18,447	(4.64)	$ (85,595)
8	Regulatory Expense	$ 22,140		22,140	45.00	$ 996,316
9	Insurance Other Than Group	$ 7,294		7,294	30.00	$ 218,820 *
10	Customer Accounting	$ 16,497		16,497	45.00	$ 742,343
11	Rents	$ 1,613		1,613	7.46	$ 12,033
12	General Office Expense	$ 7,874		7,874	(10.68)	$ (84,094)
13	Miscellaneous	$ 16,726		16,726	30.00	$ 501,786 *
14	Maintenance Expense	$ 4,948		4,948	30.00	$ 148,440 *
15	General Taxes-Property Taxes	$ 37,922		38,032	212.50	$ 8,081,723
16	General Taxes-Other	$ 9,778		9,778	15.65	$ 153,028
17	Income Taxes	$ (76,894)		(2,611)	42.04	$ (109,766)
18	Interest		283,766	283,766	106.52	30,226,723
19	**Total Operating Expenses**	532,144	283,766	890,302	734.73	56,016,741
20						
21						
22	Expense Lag	Line 21, Col. (E) / Col [C]	62.92			
23	Revenue Lag	Company Workpapers	48.239			
24	Net Lag	Line 24 - 23	14.68			
25	Staff Adjusted Expenses	Line 20, Col 35	890,302			
26	Cash Working Capital	Line 25 * Line 26/365 day	35,806			
27	Company As Field	Co Schedule B-5	1,409,860			
28	Staff Adjustment	To GWB-4	(1,374,054)			
29						
30	References:					
31	Column [A]: Company Schedule C-1					
32	Column [B]: Staff adjustments to expenses, See Testimony GWB					
33	Column [C]: Column [A] + Column [B]					
34	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
35	Column [E]: Column [C] * Column [D]					

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RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 745,789		$ 745,789
2	None	2002	-	110,336	635,453
3	None	2003	-	114,737	520,716
4	None	2004	-	114,737	405,980
5	None	2005		114,737	291,243
6	None	2006		114,737	176,506
7	None	2007	-	114,737	61,769
8	Per Staff		$ 745,789	$ 684,020	$ 61,769
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 61,769

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	-	7,701	7,701
6			$ -	$ 7,701	$ (7,701)

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB - 9

RATE BASE ADJUSTMENT #6 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
354500	Structures & Imp Gen'l	765,906	$ (765,906)	$ -
371100	Pump Equip Electric	813,581	$ (813,581)	$ -
380000	TD Equipmen t	2,352,593	$ (2,352,593)	$ -
		3,932,080	(3,932,080)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 791,279	$ -	$ 791,279	$ (17,195)	$ 774,084
3	Other Wastewater Revenues	4,882	-	4,882	-	4,882
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 796,161	$ -	$ 796,161	$ (17,195)	$ 778,966
6						
7	Labor	$ 108,996	$ -	108,996	$ -	$ 108,996
8	Fuel & Power	73,650	-	73,650	-	73,650
9	Chemicals	9,214	-	9,214	-	9,214
10	Waste Disposal	126,228	-	126,228	-	126,228
11	Management Fees	123,665	-	123,665	-	123,665
12	Group Insurance	24,046	-	24,046	-	24,046
13	Pensions	18,447	-	18,447	-	18,447
14	Regulatory Expense	22,140	-	22,140	-	22,140
15	Insurance Other Than Group	7,294	-	7,294	-	7,294
16	Customer Accounting	16,497	-	16,497	-	16,497
17	Rents	1,613	-	1,613	-	1,613
18	General Office Expense	7,874	-	7,874	-	7,874
19	Miscellaneous	16,726	-	16,726	-	16,726
20	Maintenance Expense	4,948	-	4,948	-	4,948
21	Depreciation & Amortization	248,398	(26,796)	221,601	-	221,601
22	General Taxes-Property Taxes	37,922	109	38,032	(272)	37,760
23	General Taxes-Other	9,778	-	9,778	-	9,778
24	Income Taxes	(76,894)	73,732	(3,162)	(3,541)	(6,703)
25	0					
26	0					
27	**Total Operating Expenses**	780,542	47,045	827,587	(3,812)	823,774
28	**Operating Income (Loss)**	$ 15,619	$ (47,045)	$ (31,426)	$ (13,383)	$ (44,808)

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Depreciation Exp. ADJ #1	[C] Property Taxes ADJ #2	[D] Income Taxes ADJ #3	[G] STAFF ADJUSTED
1						
2	Wastewater Revenues	$ 791,279	$ -	$ -	$ -	$ 791,279
3	Other Wastewater Revenues	4,882	-	-	-	$ 4,882
4	Other	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 796,161	$ -	$ -	$ -	$ 796,161
6						
7	Labor	$ 108,996	$ -	$ -	$ -	108,996
8	Fuel & Power	73,650	-	-	-	73,650
9	Chemicals	9,214	-	-	-	9,214
10	Waste Disposal	126,228	-	-	-	126,228
11	Management Fees	123,665	-	-	-	123,665
12	Group Insurance	24,046	-	-	-	24,046
13	Pensions	18,447	-	-	-	18,447
14	Regulatory Expense	22,140	-	-	-	22,140
15	Insurance Other Than Group	7,294	-	-	-	7,294
16	Customer Accounting	16,497	-	-	-	16,497
17	Rents	1,613	-	-	-	1,613
18	General Office Expense	7,874	-	-	-	7,874
19	Miscellaneous	16,726	-	-	-	16,726
20	Maintenance Expense	4,948	-	-	-	4,948
21	Depreciation & Amortization	248,398	(26,796)	-	-	221,601
22	General Taxes-Property Taxes	37,922	-	109	-	38,032
23	General Taxes-Other	9,778	-	-	-	9,778
24	Income Taxes	(76,894)	-	-	74,283	(2,611)
25						-
26						-
27						
28	**Total Operating Expenses**	$ 780,542	$ (26,796)	$ 109	$ 74,283	$ 828,138
29	**Operating Income (Loss)**	$ 15,619	$ 26,796	$ (109)	$ (74,283)	$ (31,977)

ADJ #		References:
1	Depreciation Expense	GTM 12
2	Property Taxes	GTM 13
3	Income Taxes	GTM 14

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Schedule GTM-12

OPERATING ADJUSTMENT #1- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec. 69440 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	-	0.00%	-
3	352000	WW Franchises	364	0.00%	-
4	354200	WW Struct & Imp Coll	201,579	2.80%	5,644
5	360000	WW Collection Sewers Forced	5,382	2.00%	108
6	361100	WW Collecting Mains	1,309,345	2.00%	26,187
7	362000	WW Special Coll Struct	74,760	2.00%	1,495
8	363000	WW Services Sewer	314,343	2.04%	6,413
9	364000	WW Flow Measuring Devices	23,113	10.00%	2,311
10	371100	WW Pump Equip Elect	18,935	5.42%	1,026
11	380100	WW Equip Sed Tanks/Acc	803,788	3.60%	28,936
12	380300	WW TD Equip Sldge Dry/Filt	8,807	5.00%	440
13	380500	WW TD Equip Chem Trmt Plt	14,311	5.00%	716
14	380600	WW TD Equip Oth Disp	39,019	5.00%	1,951
15	393000	WW Tool Shop & Garage Equip	44,237	4.47%	1,977
16	394000	WW Laboratory Equipment	587	3.71%	22
17	396000	Communication Equipment	26,205	10.30%	2,699
18	398000	Other Plant	-		-
19					
20	*CORPORATE ALLOCATION*		-		-
21	304620	Struct & Imp Leasehold	1,817	0.00%	-
22	331001	Mains	-	0.00%	-
23	340100	Office Furniture & Equip	8,997	4.04%	363
24	340200	Comp & Periph Equip	3,659	4.04%	148
25	340300	Computer Software	14,399	25.00%	3,600
26	340300	Computer Software-Other	374	25.00%	94
27	343000	Tools,Shop,Garage Equip	308	4.47%	14
28	346100	Comm Equip Non-Telephone	1,488	3.66%	54
29	346300	Comm Equip Other	39	6.19%	2
30					
31	*POST TEST YEAR PLANT*				-
32	354500	WW Struct & Impr Gen	765,906	5.00%	38,295
33	371100	WW Pump Equip Elect	813,581	5.42%	44,096
34	380000	WW TD Equipment	2,352,593	5.00%	117,630
35					-
36					-
37					-
38					-
39					-
40					-
41					-
42					-
43					-
44					-
45					-
46					-
47					-
48					-
49					-
50					-
51					-
52					-
53					-
54			-		-
55		**Total Plant In Service**	6,847,939	4.15%	284,222
56					
57					
58		Less Non Depreciable Plant			
59	352000	WW Franchises	364	0.00%	-
60	304620	Struct & Imp Leasehold	1817	0.00%	-
61					
62					363.48
63		Net Depreciable Plant and Depreciation Amounts	$ 6,845,758		$ 283,859
64		Composite Depreciation Rate		4.15%	
65		Less			
66		Amortization of Regulatory CIAC at Settlement Rate			32,497
67		Amortization of CIAC at Composite Rate	$ 726,484		$ 30,124
68		Staff Recommended Depreciation Expense			$ 221,601
69		Company Proposed Depreciation Expense			248,398
70		Staff Adjustment			$ (26,796)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Schedule GTM-13

OPERATING ADJUSTMENT #2 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 796,161	$ 796,161
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	1,592,322	1,592,322
4	Staff Recommended Revenue	796,161	778,966
5	Subtotal (Line 4 + Line 5)	2,388,483	2,371,288
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	796,161	790,429
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	1,592,322	1,580,859
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	1,605,776	1,594,313
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	369,328	366,692
15	Composite Property Tax Rate - Obtained from ADOR	10.30%	10.30%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 38,032	
17	Company Proposed Property Tax	$ 37,922	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ 109**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 37,760
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 38,032
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ (272)**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ (272)
23	Increase in Revenue Requirement		$ (17,195)
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.57895%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ 126,228	$ (129,390)	$ (3,162)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1- PLANT, ACCUMULATED DEPRECIATION & AIAC
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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 40,864,986	$ 40,864,986	$ 38,958,204	$ 38,958,204
2	Adjusted Operating Income (Loss)	$ 1,552,497	$ 1,552,497	$ 1,864,218	$ 1,864,218
3	Current Rate of Return (L2 / L1)	3.80%	3.80%	4.79%	4.79%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 3,432,659	$ 3,432,659	$ 2,859,532	$ 2,859,532
6	Operating Income Deficiency (L5 - L2)	$ 1,880,161	$ 1,880,161	$ 995,315	$ 995,315
7	Gross Revenue Conversion Factor	1.6496	1.6496	# 1.6473	1.6473
8	Required Revenue Increase (L7 * L6)	$ 3,101,546	$ 3,101,546	0 # $ 1,639,610	$ 1,639,610
9	Adjusted Test Year Revenue	$ 7,848,732	$ 7,848,732	$ 7,848,732	$ 7,848,732
10	Proposed Annual Revenue (L8 + L9)	$ 10,950,278	$ 10,950,278	# $ 9,488,342	$ 9,488,342
11	Required Increase in Revenue (%)	39.52%	39.52%	# 20.89%	20.89%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	# 10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2957%					
5	Subtotal (L3 - L4)	60.7043%					
6	**Revenue Conversion Factor (L1 / L5)**	1.647328					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.1348%					
22	Effective Property Tax Factor (L20*L21)		0.6968%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2957%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 2,859,532					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 42)	$ 1,864,218					
26	Required Increase in Operating Income (L24 - L25)		$ 995,315				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 1,016,355					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 390,666					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 625,690				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 9,488,342					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 286,035					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 267,428					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 18,606				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 1,639,610				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
		Paradise Valley Combined	Paradise Valley Only	Paradise Valley Only	Paradise Valley Combined	Paradise Valley Only	Paradise Valley Only
	Calculation of Income Tax:						
39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)			$ 7,848,732	$ 9,488,342		
40	Operating Expenses Excluding Income Taxes			$ 5,593,849	$ 5,612,455		
41	Synchronized Interest (L47)			$ 1,242,767	$ 1,242,767		
42	Arizona Taxable Income (L30 - L31 - L32)	$ -	$ -	$ 1,012,117	$ 2,633,121		$ -
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%		6.9680%
44	Arizona Income Tax (L33 x L34)	$ -	$ -	$ 70,524	$ 183,476		$ -
45	Federal Taxable Income (L33 - L35)	$ -	$ -	$ 941,592	$ 2,449,646		$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500		
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250		
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500		
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650		
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 206,241	$ 718,980		
51	Total Federal Income Tax	$ -	$ -	$ 320,141	$ 832,880		
52	Combined Federal and State Income Tax (L35 + L42)	$ -	$ -	$ 390,666	$ 1,016,355		$ -
53	Effective Tax Rate				34.0000%		
54							
55							

	Calculation of Interest Synchronization:	Combined	Paradise Valley	Paradise Valley
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 52,099,553	$ 13,141,349	$ 38,958,204
57	Weighted Average Cost of Debt	3.1900%	3.1900%	3.1900%
58	Synchronized Interest (L45 X L46)	$ 1,661,976	$ 419,209	$ 1,242,767

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 61,588,447	$ (180,916)	$ 61,407,531
2	Less: Accumulated Depreciation	12,099,985	(180,916)	11,919,069
3	Net Plant in Service	$ 49,488,461	$ -	$ 49,488,461
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 12,789,338	$ -	$ 12,789,338
5	Less: Accumulated Amortization	5,539,222	-	5,539,222
6	Net CIAC	7,250,116	-	7,250,116
7	Advances in Aid of Construction (AIAC)	1,704,269		1,704,269
8	Imputed Reg AIAC	-	233,188	233,188
9	Imputed Reg CIAC	-	-	-
10	Deferred Income Tax Credits (Debits)	1,600,604	-	1,600,604
	Customer Meter Deposits	12,600		12,600
	ADD:			
11	Cash Working Capital	549,034	(589,957)	(40,923)
12	Prepayments	117,955	-	117,955
13	Supplies Inventory	38,726	-	38,726
14	Projected Capital Expenditures		-	-
15	Deferred Debits	1,238,398	(1,083,637)	154,761
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 40,864,986	$ (1,906,782)	$ 38,958,204

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[F] STAFF ADJUSTED
		PLANT IN SERVICE:						
1	301000	Organization	15,350					$ 15,350
2	302000	Franchises	-					$ -
3	339600	Miscellaneous Intangibles	10,520					$ 10,520
4	303200	Land & Land Rights SS	-					$ -
5	303300	Land & Land Rights P	-					$ -
	303500	Land & Land Rights TD	8,324					$ 8,324
6	303600	Land & Land Rights AG	-					$ -
7	304100	Struct & Imp SS	16,976,165					$ 16,976,165
8	304200	Struct & Imp P	0					$ 0
9	304300	Struct & Imp WT	3,003,090					$ 3,003,090
10	304400	Struct & Imp TD	23,764					$ 23,764
	304500	Struct & Imp AG	5,732					$ 5,732
11	304600	Struct & Imp Offices	-					$ -
12	304700	Struct & Imp Store, Shop, Gar	3,036					$ 3,036
	304800	Struct & Imp Misc	(8,633)					$ (8,633)
13	305000	Collect & Impounding	-					$ -
14	307000	Wells & Springs	1,519,916					$ 1,519,916
15	310100	Power Generation Equip Other	554,631					$ 554,631
16	311200	Pump Equip Electric	3,600,015	(112,214)				$ 3,487,801
17	311300	Pump Equip Diesel	190					$ 190
18	311500	Pump Equip Other	-					$ -
19	320100	WT Equip Non-Media	9,826,155					$ 9,826,155
20	309000	Supply Mains	14,058					$ 14,058
21	330000	Dist Reservoirs & Standpipe	2,184,648	(68,702)				$ 2,115,946
22	331001	TD Mains Not Classified by Size	2,395,291					$ 2,395,291
23	331100	TD Mains 4in & Less	114,959					$ 114,959
24	331200	TD Mains 6in to 8in	5,046,296					$ 5,046,296
25	331300	TD Mains 10in to 16in	9,132,418					$ 9,132,418
26	332000	Fire Mains	14,058					$ 14,058
27	333000	Services	2,724,758					$ 2,724,758
28	334100	Meters	350,870					$ 350,870
29	334200	Meter Installations	148,304					$ 148,304
30	335000	Hydrants	1,054,322					$ 1,054,322
31	339100	Othber P/E Intangible	-					$ -
32	339500	Other P/E TD	-					$ -
33	340100	Office Furniture & Equip	58,812					$ 58,812
34	340200	Comp & Periph Equip	38,292					$ 38,292
35	340300	Computer Software	14,711					$ 14,711
36	340500	Other Office Equipment	674					$ 674
37	341100	Trans Equip Lt Duty Trks	(0)					$ (0)
38	341300	Trans Equip Autos	3,541					$ 3,541
39	341400	Trans Equip Other	27,905					$ 27,905
40	343000	Tools,Shop,Garage Equip	111,116					$ 111,116
41	344000	Laboratory Equipment	17,620					$ 17,620
42	345000	Power Operated Equipment	96,131					$ 96,131
43	346100	Comm Equip Non-Telephone	386,889					$ 386,889
44	346300	Comm Equip Other	58,841					$ 58,841
45			-					$ -
####	300000	Property Held for Future Use	34,409					$ 34,409
####		AFUDC Debt	1,778					$ 1,778
								$ -
	304620	Struct & Imp Leasehold	7,028					$ 7,028
	331001	Mains						$ -
	340100	Office Furniture & Equip	34,801					$ 34,801
	340200	Comp & Periph Equip	14,155					$ 14,155
	340300	Computer Software	55,697					$ 55,697
	340300	Computer Software-Other	1,447					$ 1,447
	343000	Tools,Shop,Garage Equip	1,190					$ 1,190
	346100	Comm Equip Non-Telephone	5,757					$ 5,757
	346300	Comm Equip Other	152					$ 152
								$ -
	Post TY Plant							$ -
		Redrilling Well #12 by Oct 2008						$ -
	307000	Wells & Springs	1,257,750					$ 1,257,750
	311200	Pump Equip Electric	877,250					$ 877,250
								$ -
		Removal of Existing Well #12						$ -
	307000	Wells & Springs	(109,294)					$ (109,294)
	311200	Pump Equip Electric	(50,679)					$ (50,679)
								$ -
		Rehabilitate Well #17						$ -
	304620	Struct & Imp Leasehold	650					$ 650
	304700	Struct & Imp Store, Shop, Gar	1,300					$ 1,300
	307000	Wells & Springs	169,390					$ 169,390
	309000	Supply Mains	8,450					$ 8,450
	311200	Pump Equip Electric	83,200					$ 83,200
	311500	Pump Equip Other	19,500					$ 19,500
	334100	Meters	5,590					$ 5,590
								$ -
		Removal of Existing Well #17						$ -
	307000	Wells & Springs	(163,649)					$ (163,649)
	311300	Pump Equip Diesel	(191)					$ (191)
								$ -
		Total Net Post TY Additions	1,899,267					$ 1,899,267
								$ -
								$ -
1		Total Plant in Service	61,588,448	(180,916)	-	-	-	61,407,532
1		Accumulated Depreciation	12,099,985	(180,916)				11,919,069
2		Net Plant in Service (L58 - L 59)	$ 49,488,463	$ -	$ -	$ -	$ -	$ 49,488,463
3								
4		*LESS:*						
5		Contributions in Aid of Construction (CIAC)	$ 12,789,338		$ -	$ -	$ -	$ 12,789,338
6		Less: Accumulated Amortization	5,539,222	-	-			5,539,222
7		Net CIAC (L63 - L64)	7,250,116	-	-	-	-	7,250,116
8		Advances in Aid of Construction (AIAC)	1,704,269	-				1,704,269
9		Imputed Reg Advances	-	-	-	233,188	-	233,188
10		Imputed Reg CIAC		-	-			-
11		Deferred Income Tax Credits (Debits)	1,600,604	-	-	-	-	1,600,604
12		Customer Meter Deposits	12,600					12,600
13		*ADD:*						-
14		Working Capital Allowance	549,034	-	(589,957) #	-	-	(40,923)
15		Pumping Power		-	-	-	-	-
16		Purchase Wastewater Treatment Charges		-	-	-	-	-
17		Material and Supplies Inventory	38,726	-	-	-	-	38,726
18		Prepayments	117,955	-	-	-	-	117,955
19		Projected Capital Expenditures		-	-	-	-	-
20		Deferred Debits	1,238,398	-	-	-	(1,083,637)	154,761
21		Original Cost Rate Base	$ 40,864,988	$ -	$ (589,957)	$ -	$ (1,083,637)	$ 38,958,206
22								
23								
24								
25								
26								
27								

ADJ #		References:
1	Plant, Accumulated Depreciation	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8

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Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	330.00	Dist Reservoirs & Standpipe Plant	68,702	(68,702)	-
		Dist Reservoirs & Standpipe Acc.Depreciation	68,702	(68,702)	-
	311.20	Pump Equip Electric	112,214	(112,214)	-
		Pump Equip Electric Acc Depreciation	112,214	(112,214)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB-6

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 715,859	$ -	715,859	12.00	$ 8,590,308
2	Purchased Water	$ -	-	-	86.87	$ -
3	Fuel & Power	$ 693,068	-	693,068	32.42	$ 22,469,271
4	Chemicals	$ 236,982		185,592	28.47	$ 5,283,804
5	Waste Disposal	$ (290)		(290)	30.00	$ (8,700)
6	Management Fees	$ 923,778		923,778	(3.88)	$ (3,584,259)
7	Group Insurance	$ 184,827		184,827	(4.64)	$ (857,599)
8	Pensions	$ 130,911		130,911	45.00	$ 5,890,998
9	Regulatory Expense	$ 21,283		21,283	30.00	$ 638,490 *
10	Insurance Other Than Group	$ 45,435		45,435	45.00	$ 2,044,575
11	Customer Accounting	$ 123,742		123,742	7.46	$ 923,115
12	Rents	$ 21,467		21,467	(10.68)	$ (229,268)
13	General Office Expense	$ 87,860		87,860	30.00	$ 2,635,800 *
14	Miscellaneous	$ 351,828		351,828	30.00	$ 10,554,840 *
15	Maintenance Expense	$ 578,292		124,831	30.00	$ 3,744,930 *
16	Taxes Other Than Income-Property Taxes	$ 268,996		267,428	212.50	$ 56,828,552
17	Taxes Other Than Income-Other	$ 67,972		67,972	15.65	$ 1,063,769
18	Income Taxes	$ 228,400		390,666	42.04	$ 16,423,586
19	Interest		1,242,767	1,242,767	106.52	132,379,511
20	**Total Operating Expenses**	4,680,411	1,242,767	5,579,025	764.73	264,791,725
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	47.46			
24	Revenue Lag	Company Workpapers	50.139			
25	Net Lag	Line 24 - 23	(2.68)			
26	Staff Adjusted Expenses	Line 20, Col 35	5,579,025			
27	Cash Working Capital	Line 25 * Line 26/365 day	(40,923)			
28	Company As Field	Co Schedule B-5	549,034			
29	Staff Adjustment	To GWB-4	(589,957)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY CIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 1,458,672		$1,458,672
2	None	2002	-	140,272	1,318,400
3	None	2003	-	145,867	1,172,533
4	None	2004	-	145,867	1,026,665
5	None	2005	-	137,075	889,590
6	Per Staff		$ 1,458,672	$ 569,082	$ 889,590
7	Company Proposed Imputed Reg. CIAC				656,402
8	Staff Adjustment			$ -	$ 233,188

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 10 year recovery period per Dec 0.235
Column [D]: CIAC per Decision No. 67093, less amortization. -
0

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Schedule GWB - 8

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	1,238,398	(1,083,637)	154,761
6			$ 1,238,398	$ (1,083,637)	$ 2,322,036

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 7,832,113	$ -	$ 7,832,113	$ 1,639,610	$ 9,471,723
3	Other Wastewater Revenues	16,619	-	16,619	-	16,619
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 7,848,732	$ -	$ 7,848,732	$ 1,639,610	$ 9,488,342
6						
7	Labor	$ 715,859	$ -	715,859	$ -	$ 715,859
8	Purchased Water	$ -	-	-	-	-
9	Fuel & Power	$ 693,068	-	693,068	-	693,068
10	Chemicals	$ 236,982	(51,390)	185,592	-	185,592
11	Waste Disposal	$ (290)	-	(290)	-	(290)
12	Management Fees	$ 923,778	-	923,778	-	923,778
13	Group Insurance	$ 184,827	-	184,827	-	184,827
14	Pensions	$ 130,911	-	130,911	-	130,911
15	Regulatory Expense	$ 21,283	-	21,283	-	21,283
16	Insurance Other Than Group	$ 45,435	(45,435)		-	-
17	Customer Accounting	$ 123,742	-	123,742	-	123,742
18	Rents	$ 21,467	-	21,467	-	21,467
19	General Office Expense	$ 87,860	-	87,860	-	87,860
20	Miscellaneous	$ 351,828	-	351,828	-	351,828
21	Maintenance Expense	$ 578,292	(453,461)	124,831	-	124,831
22	Depreciation & Amortization	$ 1,615,824	77,868	1,693,691	-	1,693,691
23	General Taxes-Property Taxes	$ 268,996	(1,567)	267,428	18,606	286,035
24	General Taxes-Other	$ 67,972	-	67,972	-	67,972
25	Income Taxes	$ 228,400	162,266	390,666	625,690	1,016,355
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41	**Total Operating Expenses**	6,296,235	(311,720)	5,984,514	644,296	6,628,810
42	**Operating Income (Loss)**	$ 1,552,497	$ 311,720	$ 1,864,218	$ 995,314	$ 2,859,532

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Chemicals Exp ADJ #3	[E] Property Taxes ADJ #4	[F] Income Taxes ADJ #5	[G] STAFF ADJUSTED
1								
2	Wastewater Revenues	$ 7,832,113	$ -	$ -	$ -	$ -	$ -	$ 7,832,113
3	Other Wastewater Revenues	16,619	-	-	-	-	-	$ 16,619
4	Other	-	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 7,848,732	$ -	$ -	$ -	$ -	$ -	$ 7,848,732
6								
7	Labor	$ 715,859	$ -	$ -	$ -	$ -	$ -	715,859
8	Purchased Water	-	-	-	-	-	-	-
9	Fuel & Power	693,068	-	-	-	-	-	693,068
10	Chemicals	236,982	-	-	(51,390)	-	-	185,592
11	Waste Disposal	(290)	-	-	-	-	-	(290)
12	Management Fees	923,778	-	-	-	-	-	923,778
13	Group Insurance	184,827	-	-	-	-	-	184,827
14	Pensions	130,911	-	-	-	-	-	130,911
15	Regulatory Expense	21,283	-	-	-	-	-	21,283
16	Insurance Other Than Group	45,435	-	-	-	-	-	45,435
17	Customer Accounting	123,742	-	-	-	-	-	123,742
18	Rents	21,467	-	-	-	-	-	21,467
19	General Office Expense	87,860	-	-	-	-	-	87,860
20	Miscellaneous	351,828	-	-	-	-	-	351,828
21	Maintenance Expense	578,292	(453,461)	-	-	-	-	124,831
22	Depreciation & Amortization	1,615,824	-	77,868	-	-	-	1,693,691
23	General Taxes-Property Taxes	268,996	-	-	-	(1,567)	-	267,428
24	General Taxes-Other	67,972	-	-	-	-	-	67,972
25	Income Taxes	228,400	-	-	-	-	162,266	390,666
26				-	-	-	-	-
27				-	-	-	-	-
28				-	-	-	-	-
29				-	-	-	-	-
30				-	-	-	-	-
31				-	-	-	-	-
32				-	-	-	-	-
33				-	-	-	-	-
34				-	-	-	-	-
35				-	-	-	-	-
36				-	-	-	-	-
38				-	-	-	-	-
39				-	-	-	-	-
40				-	-	-	-	-
41				-	-	-	-	-
42	**Total Operating Expenses**	$ 6,296,235	$ (453,461)	$ 77,868	$ (51,390)	$ (1,567)	$ 162,266	$ 6,029,949
43	**Operating Income (Loss)**	$ 1,552,497	$ 453,461	$ (77,868)	$ 51,390	$ 1,567	$(162,266)	$ 1,818,783

ADJ #		References:
1	Management Fees	GTM 12
2	Depreciation Expense	GTM 13
3	Chemicals Expense	GTM 14
4	Property Taxes	GTM 15
5	Income Taxes	GTM 16

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Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 578,292	$ (453,461)	$ 124,831

Repair and Maintenance Expenses	
Calendar year 2005	70,856
Calendar year 2006	124,255
Calendar year 2007	179,382
Total for three year period	374,493
Normalization Period	3
Normalized Amount	124,831

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec No. 68858 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	15,350	0.00%	-
3	302000	Franchises	-	0.00%	-
4	339600	Miscellaneous Intangibles	10,520	0.00%	-
5	303200	Land & Land Rights SS	-	0.00%	-
6	303300	Land & Land Rights P	-	0.00%	-
7	303500	Land & Land Rights TD	8,324	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	16,976,165	2.50%	424,404
10	304200	Struct & Imp P	0	3.99%	0
11	304300	Struct & Imp WT	3,003,090	2.00%	60,062
12	304400	Struct & Imp TD	23,764	1.50%	356
13	304500	Struct & Imp AG	5,732	3.99%	229
14	304600	Struct & Imp Offices	-	0.00%	-
15	304700	Struct & Imp Store, Shop, Gar	3,036	3.99%	121
16	304800	Struct & Imp Misc	(8,633)	3.99%	(344)
17	305000	Collect & Impounding	-		-
18	307000	Wells & Springs	1,519,916	2.48%	37,694
19	310100	Power Generation Equip Other	554,631	4.39%	24,348
20	311200	Pump Equip Electric	3,487,801	4.39%	153,114
21	311300	Pump Equip Diesel	190	4.39%	8
22	311500	Pump Equip Other	-		-
23	320100	WT Equip Non-Media	9,826,155	7.06%	693,727
24	309000	Supply Mains	14,058	2.00%	281
25	330000	Dist Reservoirs & Standpipe	2,115,946	3.15%	66,652
26	331001	TD Mains Not Classified by Size	2,395,291	2.52%	60,361
27	331100	TD Mains 4in & Less	114,959	4.17%	4,794
28	331200	TD Mains 6in to 8in	5,046,296	2.52%	127,167
29	331300	TD Mains 10in to 16in	9,132,418	2.34%	213,699
30	332000	Fire Mains	14,058	2.00%	281
31	333000	Services	2,724,758	4.72%	128,609
32	334100	Meters	350,870	2.51%	8,807
33	334200	Meter Installations	148,304	1.51%	2,239
34	335000	Hydrants	1,054,322	2.10%	22,141
35	339100	Other P/E Intangible	-		-
36	339500	Other P/E TD	-		-
37	340100	Office Furniture & Equip	58,812	4.04%	2,376
38	340200	Comp & Periph Equip	38,292	10.00%	3,829
39	340300	Computer Software	14,711	25.00%	3,678
40	340500	Other Office Equipment	674	7.13%	48
41	341100	Trans Equip Lt Duty Trks	(0)	22.00%	(0)
42	341300	Trans Equip Autos	3,541	7.80%	276
43	341400	Trans Equip Other	27,905	0.93%	260
44	343000	Tools,Shop,Garage Equip	111,116	3.61%	4,011
45	344000	Laboratory Equipment	17,620	10.00%	1,762
46	345000	Power Operated Equipment	96,131	4.64%	4,460
47	346100	Comm Equip Non-Telephone	386,889	9.76%	37,760
48	346300	Comm Equip Other	58,841	4.93%	2,901
49					
50					
51	300000	Property Held for Future Use	34,409	5.02%	1,727
52		AFUDC Debt	1,778	10.30%	183
53					
54	304620	Struct & Imp Leasehold	7,028	0.00%	-
55	331001	Mains	-		-
56	340100	Office Furniture & Equip	34,801	4.04%	1,406
57	340200	Comp & Periph Equip	14,155	10.00%	1,415
58	340300	Computer Software	55,697	25.00%	13,924
59	340300	Computer Software-Other	1,447	25.00%	362
60	343000	Tools,Shop,Garage Equip	1,190	3.61%	43
61	346100	Comm Equip Non-Telephone	5,757	9.76%	562
62	346300	Comm Equip Other	152	4.93%	7
63			-		
64	Post TY Plant		-		
65		Redrilling Well #12 by Oct 2008	-		
66	307000	Wells & Springs	1,257,750	0.00%	-
67	311200	Pump Equip Electric	677,250	4.39%	29,731
68			-		
69		Removal of Existing Well #12	-		
70	307000	Wells & Springs	(109,294)	2.48%	(2,710)
71	311200	Pump Equip Electric	(50,679)	4.39%	(2,225)
72			-		
73		Rehabilitate Well #17	-		
74	304620	Struct & Imp Leasehold	650		-
75	304700	Struct & Imp Store, Shop, Gar	1,300	3.99%	52
76	307000	Wells & Springs	169,390	2.48%	4,201
77	309000	Supply Mains	8,450	2.00%	169
78	311200	Pump Equip Electric	83,200	4.39%	3,652
79	311500	Pump Equip Other	19,500	4.39%	856
80	334100	Meters	5,590	2.51%	140
81			-		
82		Removal of Existing Well #17	-		
83	307000	Wells & Springs	(163,649)	2.48%	(4,059)
84	311300	Pump Equip Diesel	(191)	4.39%	(8)
85			-		
86		Total Net Post TY Additions	1,899,267		
87					
88			-		
89		Total Plant in Service	61,407,532	3.48%	2,139,541
90					
91					
92		Less Non Depreciable Plant			
93	301000	Organization	15,350	0.00%	-
94	339600	Miscellaneous Intangibles	10,520	0.00%	-
95	303500	Land & Land Rights TD	8,324	0.00%	-
96					
97		Net Depreciable Plant and Depreciation Amounts	$ 61,373,338		$ 2,139,541
98		Composite Depreciation Rate		3.49%	
99		Less			
100		Amortization of Regulatory CIAC at Settlement Rate			-
101		Amortization of CIAC at Composite Rate	$ 12,789,338		$ 445,850
102		Staff Recommended Depreciation Expense			$ 1,693,691
103		Company Proposed Depreciation Expense			1,615,824
104		Staff Adjustment			$ 77,868

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - CHEMICALS EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Chemicals	$ 236,982	$ (51,390)	$ 185,592

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Schedule GTM-15

OPERATING ADJUSTMENT #4 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 7,848,732	$ 7,848,732
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	15,697,464	15,697,464
4	Staff Recommended Revenue	7,848,732	9,488,342
5	Subtotal (Line 4 + Line 5)	23,546,196	25,185,806
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	7,848,732	8,395,269
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	15,697,464	16,790,537
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	15,710,918	16,803,991
13	Assessment Ratio	23.0%	23.0%
14	Assessment Value (Line 12 * Line 13)	3,613,511	3,864,918
15	Composite Property Tax Rate - Obtained from ADOR	7.40%	7.40%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 267,428	
17	Company Proposed Property Tax	$ 268,996	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (1,567)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 286,035
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 267,428
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 18,606**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 18,606
23	Increase in Revenue Requirement		$ 1,639,610
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.13479%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-16

OPERATING INCOME ADJUSTMENT #5 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ 228,400	$ 162,266	$ 390,666

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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GWB-	3	RATE BASE - ORIGINAL COST
GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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GWB-	7	RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC
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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 37,901,086	$ 37,901,086	$ 37,264,959	$ 37,264,959
2	Adjusted Operating Income (Loss)	$ 587,425	$ 587,425	$ 667,733	$ 667,733
3	Current Rate of Return (L2 / L1)	1.55%	1.55%	1.79%	1.79%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 3,183,691	$ 3,183,691	$ 2,735,248	$ 2,735,248
6	Operating Income Deficiency (L5 - L2)	$ 2,596,266	$ 2,596,266	$ 2,067,515	$ 2,067,515
7	Gross Revenue Conversion Factor	1.6471	1.6471	1.6460	1.6460
8	Required Revenue Increase (L7 * L6)	$ 4,276,301	$ 4,276,301	$ 3,403,087	$ 3,403,087
9	Adjusted Test Year Revenue	$ 5,701,431	$ 5,701,431	$ 5,701,431	$ 5,701,431
10	Proposed Annual Revenue (L8 + L9)	$ 9,977,732	$ 9,977,732	$ 9,104,518	$ 9,104,518
11	Required Increase in Revenue (%)	75.00%	75.00%	59.69%	59.69%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2459%					
5	Subtotal (L3 - L4)	60.7541%					
6	**Revenue Conversion Factor (L1 / L5)**	1.645980					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.0538%					
22	Effective Property Tax Factor (L20*L21)		0.6470%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2459%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 2,735,248					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 667,733					
26	Required Increase in Operating Income (L24 - L25)		$ 2,067,515				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ -					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (327,531)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 327,531				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 9,104,518					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 216,314					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 180,453					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 35,861				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 2,430,906				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				SCW Water	SCW Water		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 5,701,431	$ 9,104,518		
40	Operating Expenses Excluding Income Taxes			$ 5,361,228	$ 5,397,089		
41	Synchronized Interest (L56)			$ 1,188,752	$ 1,188,752		
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (848,550)	$ 2,518,678	$ -	$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (59,127)	$ 175,501	$ -	$ -
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (789,423)	$ 2,343,176	$ -	$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (7,500)	$ 7,500	$ -	$ -
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ (6,250)	$ 6,250	$ -	$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ (8,500)	$ 8,500	$ -	$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ (91,650)	$ 91,650	$ -	$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ (154,504)	$ 682,780	$ -	$ -
51	Total Federal Income Tax	$ -	$ -	$ (268,404)	$ 796,680		
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (327,531)	$ 972,181	$ -	$ -
53	Applicable Tax Rate				34.0000%		
54							
55							

		Sun City West
	Calculation of Interest Synchronization:	
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 37,264,959
57	Weighted Average Cost of Debt	3.1900%
58	Synchronized Interest (L45 X L46)	$ 1,188,752

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 48,893,385	$ 70,000	$ 48,963,385
2	Less: Accumulated Depreciation	10,514,488	70,000	10,584,488
3	Net Plant in Service	$ 38,378,897	$ -	$ 38,378,897
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 20,548	$ -	$ 20,548
5	Less: Accumulated Amortization	1,057	-	1,057
6	Net CIAC	19,491	-	19,491
7	Advances in Aid of Construction (AIAC)	1,175,373		1,175,373
8	Imputed Reg AIAC	-	1,006,408	1,006,408
9	Imputed Reg CIAC	392,368	-	392,368
10	Deferred Income Tax Credits (Debits)	(1,326,577)	-	(1,326,577)
	Customer Meter Deposits	1,225		1,225
	ADD:			
11	Cash Working Capital	480,140	(522,003)	(41,863)
12	Prepayments	24,906	-	24,906
13	Supplies Inventory	56,510	-	56,510
14	Projected Capital Expenditures ##		-	-
15	Deferred Debits	(777,486)	892,284	114,798
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 37,901,086	$ (636,127)	$ 37,264,959

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	20,086						$ 20,086
2	302000	Franchises	1,346						$ 1,346
3	303200	Land & Land Rights SS	11,651						$ 11,651
4	303300	Land & Land Rights P	44,957						$ 44,957
5	303500	Land & Land Rights TD	-						$ -
	303600	Land & Land Rights AG	-						$ -
6	304100	Struct & Imp SS	7,620,981						$ 7,620,981
7	304200	Struct & Imp P	224,821						$ 224,821
8	304300	Struct & Imp WT	90,867						$ 90,867
9	304400	Struct & Imp TD	-						$ -
10	304600	Struct & Imp Offices	16,828						$ 16,828
	304800	Struct & Imp Misc	-						$ -
11	305000	Collect & Impounding	-						$ -
12	307000	Wells & Springs	2,587,380						$ 2,587,380
	310100	Power Generation Equip Other	36,044						$ 36,044
13	311200	Pump Equip Electric	5,105,926						$ 5,105,926
14	311300	Pump Equip Diesel	4,505						$ 4,505
15	311500	Pump Equip Other	169,696						$ 169,696
16	320100	WT Equip Non-Media	6,346,603						$ 6,346,603
17	330000	Dist Reservoirs & Standpipe	760,063	70,000					$ 830,063
18	331001	TD Mains Not Classified by Size	13,055,020						$ 13,055,020
19	331100	TD Mains 4in & Less	616						$ 616
20	331200	TD Mains 6in to 8in	409,389						$ 409,389
21	331300	TD Mains 10in to 16in	252,698						$ 252,698
22	332000	Fire Mains	169						$ 169
23	333000	Services	7,342,742						$ 7,342,742
24	334100	Meters	1,756,083						$ 1,756,083
25	334200	Meter Installations	147,291						$ 147,291
26	335000	Hydrants	1,835,680						$ 1,835,680
27	339100	Othber P/E Intangible	-						$ -
28	339500	Other P/E TD	-						$ -
29	340100	Office Furniture & Equip	20,787						$ 20,787
30	340200	Comp & Periph Equip	46,715						$ 46,715
31	341100	Trans Equip Lt Duty Trks	225,177						$ 225,177
32	341200	Trans Equip Hvy Duty Trks	21,027						$ 21,027
33	342000	Stores Equipment	142						$ 142
34	343000	Tools,Shop,Garage Equip	19,641						$ 19,641
35	344000	Laboratory Equipment	1,606						$ 1,606
36	345000	Power Operated Equipment	161,885						$ 161,885
37	346100	Comm Equip Non-Telephone	163,135						$ 163,135
38	346300	Comm Equip Other	1,338						$ 1,338
39									$ -
40									$ -
41	304620	Struct & Imp Leasehold	22,828						$ 22,828
42	331001	Mains							$ -
43	340100	Office Furniture & Equip	113,033						$ 113,033
44	340200	Comp & Periph Equip	45,973						$ 45,973
45	340300	Computer Software	180,903						$ 180,903
46	340300	Computer Software-Other	4,699						$ 4,699
47	343000	Tools,Shop,Garage Equip	3,864						$ 3,864
48	346100	Comm Equip Non-Telephone	18,698						$ 18,698
49	346300	Comm Equip Other	493						$ 493
50									$ -
51		**Total Plant in Service**	48,893,385	70,000	-	-	-	-	48,963,385
		48,963,385							
1		*Accumulated Depreciation*	10,514,488	70,000				-	10,584,488
2		Net Plant in Service (L58 - L 59)	$ 38,378,897	$ -	$ -	$ -	$ -	$ -	$ 38,378,897
3									
4		*LESS:*							
5		Contributions in Aid of Construction (CIAC)	$ 20,548		$ -	$ -	$ -	$ -	$ 20,548
6		Less: Accumulated Amortization	1,057	-	-			-	1,057
7		Net CIAC (L63 - L64)	19,491	-	-	-	-	-	19,491
8		Advances in Aid of Construction (AIAC)	1,175,373	-					1,175,373
9		Imputed Reg Advances	-	-	-	1,006,408			1,006,408
10		Imputed Reg CIAC	392,368	-	-				392,368
11		Deferred Income Tax Credits (Debits)	(1,326,577)	-	-	-			(1,326,577)
12		Customer Meter Deposits	1,225						1,225
13		*ADD:*							-
14		Working Capital Allowance	480,140	-	(522,003)	-			(41,863)
15		Pumping Power		-	-	-			-
16		Purchase Wastewater Treatment Charges		-	-	-			-
17		Material and Supplies Inventory	56,510	-	-	-			56,510
18		Prepayments	24,906	-	-	-			24,906
19		Projected Capital Expenditures		-	-	-			-
20		Deferred Debits	(777,486)	-	-	-	892,284		114,798
21		**Original Cost Rate Base**	$ 37,901,086	$ -	$ (522,003)	$ -	$ 892,284	$ -	$ 37,264,959
22									
23			ADJ #			References:			
			1	Plant, Accumulated Depreciation and AI		Schedule GWB-5			
24			2	Working Capital		Schedule GWB-6			
25			3	Imputed Reg AIAC		Schedule GWB-7			
26			4	Deferred Debits		Schedule GWB-8			
27									

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Schedule GWB-5

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	330.00	Dist Reservoirs & Standpipe Plant	-	70,000	70,000
		Dist Reservoirs & Standpipe Acc.Depreciation	-	70,000	70,000

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 703,217	$ -	703,217	12.00	$ 8,438,609
2	Purchased Water	$ (2,690)	-	(2,690)	86.87	$ (233,682)
3	Fuel & Power	$ 830,074	-	830,074	32.42	$ 26,910,992
4	Chemicals	$ 227,889		227,889	28.47	$ 6,488,013
5	Waste Disposal	$ 4,391		4,391	30.00	$ 131,730
6	Management Fees	$ 999,903		999,903	(3.88)	$ (3,879,624)
7	Group Insurance	$ 191,120		191,120	(4.64)	$ (886,797)
8	Pensions	$ 137,699		137,699	45.00	$ 6,196,439
9	Regulatory Expense	$ 33,802		33,802	30.00	$ 1,014,060 *
10	Insurance Other Than Group	$ 58,622		58,622	45.00	$ 2,637,990
11	Customer Accounting	$ 133,476		133,476	7.46	$ 995,731
12	Rents	$ 14,331		14,331	(10.68)	$ (153,055)
13	General Office Expense	$ 57,226		57,226	30.00	$ 1,716,780 *
14	Miscellaneous	$ 232,408		232,408	30.00	$ 6,972,229 *
15	Maintenance Expense	$ 247,328		65,577	30.00	$ 1,967,310 *
16	Taxes Other Than Income-Property Taxes	$ 179,896		180,453	212.50	$ 38,346,249
17	Taxes Other Than Income-Other	$ 65,832		65,832	15.65	$ 1,030,267
18	Income Taxes	$ (324,059)	(3,472)	(327,531)	42.04	$ (13,769,389)
19	Interest		1,188,752	1,188,752	106.52	126,625,883
20	**Total Operating Expenses**	3,790,465	1,185,281	4,794,551	764.73	210,549,735
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	43.91			
24	Revenue Lag	Company Workpapers	47.10			
25	Net Lag	Line 24 - 23	(3.19)			
26	Staff Adjusted Expenses	Line 20, Col 35	4,794,551			
27	Cash Working Capital	Line 25 * Line 26/365 day	(41,863)			
28	Company As Field	Co Schedule B-5	480,140			
29	Staff Adjustment	To GWB-4	(522,003)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 12,151,160		$ 12,151,160
2	None	2002	-	1,797,706	10,353,454
3	None	2003	-	1,869,409	8,484,045
4	None	2004	-	1,869,409	6,614,636
5		2005		1,869,409	4,745,226
6		2006		1,869,409	2,875,817
7	None	2007	-	1,869,409	1,006,408
8	Per Staff		$ 12,151,160	$11,144,752	$ 1,006,408
9	Company Proposed Imputed Reg. AIAC				-
10	Staff Adjustment			$ -	$ 1,006,408

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	(777,486)	892,284	114,798
6			$ (777,486)	$ 892,284	$ (1,669,770)

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 5,661,030	$ -	$ 5,661,030	$ 3,403,087	$ 9,064,117
3	Other Wastewater Revenues	40,401	-	40,401	-	40,401
4	Other	-	-	-	-	-
5	Total Operating Revenues	$ 5,701,431	$ -	$ 5,701,431	$ 3,403,087	$ 9,104,518
6	Operating Expenses					
7	Labor	$ 703,217	$ -	703,217	$ -	$ 703,217
8	Purchased Water	$ (2,690)	-	(2,690)	-	(2,690)
9	Fuel & Power	$ 830,074	-	830,074	-	830,074
10	Chemicals	$ 227,889	-	227,889	-	227,889
11	Waste Disposal	$ 4,391	-	4,391	-	4,391
12	Management Fees	$ 999,903	-	999,903	-	999,903
13	Group Insurance	$ 191,120	-	191,120	-	191,120
14	Pensions	$ 137,699	-	137,699	-	137,699
15	Regulatory Expense	$ 33,802	-	33,802	-	33,802
16	Insurance Other Than Group	$ 58,622	(58,622)		-	-
17	Customer Accounting	$ 133,476	-	133,476	-	133,476
18	Rents	$ 14,331	-	14,331	-	14,331
19	General Office Expense	$ 57,226	-	57,226	-	57,226
20	Miscellaneous	$ 232,408	-	232,408	-	232,408
21	Maintenance Expense	$ 247,328	(181,751)	65,577	-	65,577
22	Depreciation & Amortization	$ 1,323,541	162,980	1,486,521	-	1,486,521
23	General Taxes-Property Taxes	$ 179,896	557	180,453	35,861	216,314
24	General Taxes-Other	$ 65,832	-	65,832	-	65,832
25	Income Taxes	$ (324,059)	(3,472)	(327,531)	1,299,712	972,181
26						
27						
28	Total Operating Expenses	5,114,006	(80,308)	5,033,698	1,335,573	6,369,271
29	Operating Income (Loss)	$ 587,425	$ 80,308	$ 667,733	$ 2,067,514	$ 2,735,248

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Wastewater Revenues	$ 5,661,030	$ -	$ -	$ -	$ -	$ 5,661,030
3	Other Wastewater Revenues	40,401	-	-	-	-	$ 40,401
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 5,701,431	$ -	$ -	$ -	$ -	$ 5,701,431
6							
7	Labor	$ 703,217	$ -	$ -	$ -	$ -	703,217
8	Purchased Water	(2,690)	-	-	-	-	(2,690)
9	Fuel & Power	830,074	-	-	-	-	830,074
10	Chemicals	227,889	-	-	-	-	227,889
11	Waste Disposal	4,391	-	-	-	-	4,391
12	Management Fees	999,903	-	-	-	-	999,903
13	Group Insurance	191,120	-	-	-	-	191,120
14	Pensions	137,699	-	-	-	-	137,699
15	Regulatory Expense	33,802	-	-	-	-	33,802
16	Insurance Other Than Group	58,622	-	-	-	-	58,622
17	Customer Accounting	133,476	-	-	-	-	133,476
18	Rents	14,331	-	-	-	-	14,331
19	General Office Expense	57,226	-	-	-	-	57,226
20	Miscellaneous	232,408	-	-	-	-	232,408
21	Maintenance Expense	247,328	(181,751)	-	-	-	65,577
22	Depreciation & Amortization	1,323,541	-	162,980	-	-	1,486,521
23	General Taxes-Property Taxes	179,896	-	-	557	-	180,453
24	General Taxes-Other	65,832	-	-	-	-	65,832
25	Income Taxes	(324,059)	-	-	-	(3,472)	(327,531)
26				-		-	-
27				-	-	-	-
28				-	-		-
29				-	-	-	-
30							
31							
32							
33							
34							
35							
36							
38							
39							
40							
41							
42	**Total Operating Expenses**	$ 5,114,006	$ (181,751)	$ 162,980	$ 557	$ (3,472)	$ 5,092,320
43	**Operating Income (Loss)**	$ 587,425	$ 181,751	$ (162,980)	$ (557)	$ 3,472	$ 609,111

ADJ #		References:
1	Management Fees	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 2

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Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 247,328	$ (181,751)	$ 65,577

Repair and Maintenance Expenses	
Calendar year 2005	37,609
Calendar year 2006	48,820
Calendar year 2007	110,302
Total for three year period	196,731

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Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec. No. 68310 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	20,086	0.00%	-
3	302000	Franchises	1,346	0.00%	-
4	303200	Land & Land Rights SS	11,651	0.00%	-
5	303300	Land & Land Rights P	44,957	0.00%	-
6	303500	Land & Land Rights TD	-	0.00%	-
7	303600	Land & Land Rights AG	-	0.00%	-
8	304100	Struct & Imp SS	7,620,981	2.50%	190,525
9	304200	Struct & Imp P	224,821	1.67%	3,755
10	304300	Struct & Imp WT	90,867	1.64%	1,490
11	304400	Struct & Imp TD	-	2.00%	-
12	304600	Struct & Imp Offices	16,828	4.63%	779
13	304800	Struct & Imp Misc	-	0.00%	-
14	305000	Collect & Impounding	-	0.00%	-
15	307000	Wells & Springs	2,587,380	2.52%	65,202
16	310100	Power Generation Equip Other	36,044	4.42%	1,593
17	311200	Pump Equip Electric	5,105,926	4.42%	225,682
18	311300	Pump Equip Diesel	4,505	4.42%	199
19	311500	Pump Equip Other	169,696	4.42%	7,501
20	320100	WT Equip Non-Media	6,346,603	7.06%	448,070
21	330000	Dist Reservoirs & Standpipe	830,063	1.67%	13,862
22	331001	TD Mains Not Classified by Size	13,055,020	1.53%	199,742
23	331100	TD Mains 4in & Less	616	1.53%	9
24	331200	TD Mains 6in to 8in	409,389	1.53%	6,264
25	331300	TD Mains 10in to 16in	252,698	1.53%	3,866
26	332000	Fire Mains	169	1.53%	3
27	333000	Services	7,342,742	2.48%	182,100
28	334100	Meters	1,756,083	2.51%	44,078
29	334200	Meter Installations	147,291	2.51%	3,697
30	335000	Hydrants	1,835,680	2.00%	36,714
31	339100	Othber P/E Intangible	-	0.00%	-
32	339500	Other P/E TD	-		-
33	340100	Office Furniture & Equip	20,787	4.59%	954
34	340200	Comp & Periph Equip	46,715	10.00%	4,672
35	341100	Trans Equip Lt Duty Trks	225,177	25.00%	56,294
36	341200	Trans Equip Hvy Duty Trks	21,027	15.00%	3,154
37	342000	Stores Equipment	142	3.91%	6
38	343000	Tools,Shop,Garage Equip	19,641	4.02%	790
39	344000	Laboratory Equipment	1,606	3.71%	60
40	345000	Power Operated Equipment	161,885	5.02%	8,127
41	346100	Comm Equip Non-Telephone	163,135	10.30%	16,803
42	346300	Comm Equip Other	1,338	4.93%	66
43					
44					
45	304620	Struct & Imp Leasehold	22,828	0.00%	-
46	331001	Mains	-		-
47	340100	Office Furniture & Equip	113,033	4.59%	5,188
48	340200	Comp & Periph Equip	45,973	10.00%	4,597
49	340300	Computer Software	180,903	25.00%	45,226
50	340300	Computer Software-Other	4,699	25.00%	1,175
51	343000	Tools,Shop,Garage Equip	3,864	4.02%	155
52	346100	Comm Equip Non-Telephone	18,698	10.30%	1,926
53	346300	Comm Equip Other	493	4.93%	24
54		**Total Plant In Service**	48,963,385	3.24%	1,584,345
55					
56					
57		Less Non Depreciable Plant			
58	301000	Organization	20,086	0.00%	-
59	302000	Franchises	1,346	0.00%	-
60	303200	Land & Land Rights SS	11,651	0.00%	-
61	303300	Land & Land Rights P	44,957	0.00%	-
62	304620	Struct & Imp Leasehold	22,828	0.00%	-
63		Net Depreciable Plant and Depreciation Amounts	$ 48,862,517		$ 1,584,345
64		Composite Depreciation Rate		3.24%	
65		Less			
66		Amortization of Regulatory CIAC at Settlement Rate			97,158
67		Amortization of CIAC at Composite Rate	$ 20,548		$ 666
68		Staff Recommended Depreciation Expense			$ 1,486,521
69		Company Proposed Depreciation Expense			1,323,541
70		Staff Adjustment			$ 162,980

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 5,701,431	$ 5,701,431
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	11,402,862	11,402,862
4	Staff Recommended Revenue	5,701,431	9,104,518
5	Subtotal (Line 4 + Line 5)	17,104,293	20,507,380
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	5,701,431	6,835,793
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	11,402,862	13,671,587
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	11,416,316	13,685,041
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	2,625,753	3,147,559
15	Composite Property Tax Rate - Obtained from ADOR	6.87%	6.87%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 180,453	
17	Company Proposed Property Tax	$ 179,896	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ 557**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 216,314
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 180,453
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 35,861**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 35,861
23	Increase in Revenue Requirement		$ 3,403,087
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.05377%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (324,059)	$ (3,472)	$ (327,531)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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DIRECT TESTIMONY OF GERALD BECKER

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Schedule GWB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 1,527,454	$ 1,527,454	$ 1,240,813	$ 1,240,813
2	Adjusted Operating Income (Loss)	$ (38,553)	$ (38,553)	$ (49,701)	$ (49,701)
3	Current Rate of Return (L2 / L1)	-2.52%	-2.52%	-4.01%	-4.01%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 128,306	$ 128,306	$ 91,076	$ 91,076
6	Operating Income Deficiency (L5 - L2)	$ 166,859	$ 166,859	$ 140,777	$ 140,777
7	Gross Revenue Conversion Factor	1.6674	1.6674	1.4198	1.4198
8	Required Revenue Increase (L7 * L6)	$ 278,209	$ 278,209	$ 199,881	$ 199,881
9	Adjusted Test Year Revenue	$ 426,900	$ 426,900	$ 426,900	$ 426,900
10	Proposed Annual Revenue (L8 + L9)	$ 705,109	$ 705,109	$ 626,781	$ 626,781
11	Required Increase in Revenue (%)	65.17%	65.17%	46.82%	46.82%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	29.5699%					
5	Subtotal (L3 - L4)	70.4301%					
6	**Revenue Conversion Factor (L1 / L5)**	1.419848					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	27.6219%					
9	One Minus Combined Income Tax Rate (L7 - L8)	72.3781%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	22.2009%					
16	Effective Federal Income Tax Rate (L14 x L15)	20.6539%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		27.6219%				0.019480227
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	27.6219%					
20	One Minus Combined Income Tax Rate (L18-L19)	72.3781%					
21	Property Tax Factor (GTM-14, L24)	3.1100%					
22	Effective Property Tax Factor (L20*L21)		1.9480%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			29.5699%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 91,076					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ (49,701)					
26	Required Increase in Operating Income (L24 - L25)		$ 140,777				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 15,600					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (38,529)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 54,130				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 626,781					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 29,235					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 25,341					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 3,894				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 198,800				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
		Tubac	Tubac	Tubac Only	Tubac Combined	Tubac Only	Tubac Only
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 426,900	$ 626,760		$ 626,760
40	Operating Expenses Excluding Income Taxes			$ 515,130	$ 519,025		$ 519,024
41	Synchronized Interest (L56)			$ 39,582	$ 39,582		$ 39,582
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (127,812)	$ 68,154		$ 68,154
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (8,906)	$ 4,749		$ 4,749
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (118,906)	$ 63,405		$ 63,405
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (7,500)	$ 7,500		$ 7,500
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ (6,250)	$ 3,351		$ 3,351
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ (8,500)	$ -		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ (7,373)	$ -		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ -	$ -		$ -
51	Total Federal Income Tax	$ -	$ -	$ (29,623)	$ 10,851		$ 10,851
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (38,529)	$ 15,600		$ 15,600
53	Effective Tax Rate					22.2009%	
54						#DIV/0!	
55							22.2009%

		Tubac Combined	Tubac	Tubac
v	*Calculation of Interest Synchronization:*			
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 14,382,161	$ 13,141,349	$ 1,240,813
57	Weighted Average Cost of Debt	3.1900%	3.1900%	3.1900%
58	Synchronized Interest (L45 X L46)	$ 458,791	$ 419,209	$ 39,582

		Rate Base	Percent
	Calculation of Rate Base Percentages		
59	(Col. [B], L 57)	$ 13,141,349	91.37%
60	(Col. [C], L57)	1,240,813	8.63%
61	Totals	$ 14,382,161	100.00%

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Schedule GWB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 3,423,384		$ 3,423,384
2	Less: Accumulated Depreciation	939,364	-	939,364
3	Net Plant in Service	$ 2,484,020	$ -	$ 2,484,020
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 195	$ -	$ 195
5	Less: Accumulated Amortization	17	-	17
6	Net CIAC	178	-	178
7	Advances in Aid of Construction (AIAC)	1,042,125		1,042,125
8	Imputed Reg AIAC	-	233,188	233,188
9	Imputed Reg CIAC	58,023	-	58,023
10	Deferred Income Tax Credits (Debits)	(46,088)	-	(46,088)
	Customer Meter Deposits	540		540
	ADD:			
11	Cash Working Capital	40,665	(2,332)	38,334
12	Prepayments	1,598	-	1,598
13	Supplies Inventory	1,445	-	1,445
14	Projected Capital Expenditures		-	-
15	Deferred Debits	54,503	(51,122)	3,381
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 1,527,454	$ (286,641)	$ 1,240,813

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[F] STAFF ADJUSTED
		PLANT IN SERVICE:					
1	301000	Organization	567				$ 567
2	302000	Franchises	2,030			$ -	$ 2,030
3	303200	Land & Land Rights SS	20,414			-	$ 20,414
4	303300	Land & Land Rights P	50			-	$ 50
5	303400	Land & Land Rights WT	50				$ 50
	303500	Land & Land Rights TD	422				$ 422
6	303600	Land & Land Rights AG	2,755				$ 2,755
7	304100	Struct & Imp SS	25,292				$ 25,292
8	304200	Struct & Imp P	14,608			-	$ 14,608
9	304300	Struct & Imp WT	-			-	$ -
10	304400	Struct & Imp TD	156			-	$ 156
	304600	Struct & Imp Offices	498				$ 498
11	304800	Struct & Imp Misc	-			-	$ -
12	305000	Collect & Impounding	-			-	$ -
	307000	Wells & Springs	238,951				$ 238,951
13	310100	Power Generation Equip Other	4,832				$ 4,832
14	311200	Pump Equip Electric	281,109			-	$ 281,109
15	311300	Pump Equip Diesel	879			-	$ 879
16	311500	Pump Equip Other	403,824			-	$ 403,824
17	320100	WT Equip Non-Media	55,863			-	$ 55,863
18	330000	Dist Reservoirs & Standpipe	151,203			-	$ 151,203
19	331001	TD Mains Not Classified by Size	301,123				$ 301,123
20	331100	TD Mains 4in & Less	874,455			-	$ 874,455
21	331200	TD Mains 6in to 8in	390,385				$ 390,385
22	331300	TD Mains 10in to 16in	-				$ -
23	333000	Services	401,618			-	$ 401,618
24	334100	Meters	99,052			-	$ 99,052
25	334200	Meter Installations	20,327			-	$ 20,327
26	335000	Hydrants	78,367				$ 78,367
27	339100	Othber P/E Intangible	-				$ -
28	339500	Other P/E TD	-			-	$ -
29	340100	Office Furniture & Equip	5,453				$ 5,453
30	340200	Comp & Periph Equip	1,336			-	$ 1,336
31	341100	Trans Equip Lt Duty Trks	17,166			-	$ 17,166
32	341200	Trans Equip Hvy Duty Trks	-				$ -
33	342000	Stores Equipment	0				$ 0
34	343000	Tools,Shop,Garage Equip	14,442				$ 14,442
35	344000	Laboratory Equipment	-			-	$ -
36	345000	Power Operated Equipment	-			-	$ -
37	346100	Comm Equip Non-Telephone	1,932			-	$ 1,932
38	346300	Comm Equip Other	659			-	$ 659
39							$ -
40		*CORPORATE ALLOCATION*					$ -
41	304620	Struct & Imp Leasehold	793				$ 793
42	331001	Mains					$ -
43	340100	Office Furniture & Equip	3,927				$ 3,927
44	340200	Comp & Periph Equip	1,597				$ 1,597
45	340300	Computer Software	6,285				$ 6,285
46	340300	Computer Software-Other	163				$ 163
47	343000	Tools,Shop,Garage Equip	134				$ 134
48	346100	Comm Equip Non-Telephone	650				$ 650
49	346300	Comm Equip Other	17				$ 17
50	0						$ -
51		**Total Plant in Service**	3,423,384	-	-	-	3,423,384
	13,567						
1		Accumulated Depreciation	939,364				939,364
2		Net Plant in Service (L58 - L 59)	$ 2,484,021	$ -	$ -	$ -	$ 2,484,021
3							
4		*LESS:*					
5		Contributions in Aid of Construction (CIAC)	$ 195		$ -	$ -	$ 195
6		Less: Accumulated Amortization	17	-	-		17
7		Net CIAC (L63 - L64)	178	-	-	-	178
8		Advances in Aid of Construction (AIAC)	1,042,125	-			1,042,125
9		Imputed Reg Advances	-	-	233,188		233,188
10		Imputed Reg CIAC	58,023	-	-		58,023
11		Deferred Income Tax Credits (Debits)	(46,088)	-	-	-	(46,088)
12		Meter Deposits	540				540
13		*ADD:*					-
14		Working Capital Allowance	40,665	(2,332)		-	38,334
15		Pumping Power		-	-	-	-
16		Purchase Wastewater Treatment Charges		-	-	-	-
17		Material and Supplies Inventory	1,445	-	-	-	1,445
18		Prepayments	1,598	-	-	-	1,598
19		Projected Capital Expenditures		-	-	-	-
20		Deferred Debits	54,503	-	-	(51,122)	3,381
21		**Original Cost Rate Base**	$ 1,527,455	$ (2,332)	$ (233,188)	$ (51,122)	$ 1,240,813
22							
23			ADJ #			References:	
			1	Working Capital		Schedule GWB-5	
24			2	Imputed Reg AIAC		Schedule GWB-6	
25			3	Deferred Debits		Schedule GWB-7	
26							
27							

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Schedule GWB 5

RATE BASE ADJUSTMENT #1 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 131,623	$ -	131,623	12.00	$ 1,579,471
2	Purchased Water	$ -	-	-	86.87	$ -
3	Fuel & Power	$ 25,631	-	25,631	32.42	$ 830,957
4	Chemicals	$ 2,190		2,190	28.47	$ 62,357
5	Waste Disposal	$ (27)		(27)	30.00	$ (810)
6	Management Fees	$ 87,180		87,180	(3.88)	$ (338,258)
7	Group Insurance	$ 24,921		24,921	(4.64)	$ (115,635)
8	Pensions	$ 28,546		28,546	45.00	$ 1,284,592
9	Regulatory Expense	$ 1,480		1,480	30.00	$ 44,400 *
10	Insurance Other Than Group	$ 5,049		5,049	45.00	$ 227,205
11	Customer Accounting	$ 11,644		11,644	7.46	$ 86,864
12	Rents	$ 4,146		4,146	(10.68)	$ (44,279)
13	General Office Expense	$ 8,811		8,811	30.00	$ 264,330 *
14	Miscellaneous	$ 49,935		49,935	30.00	$ 1,498,059 *
15	Maintenance Expense	$ 17,394		17,394	30.00	$ 521,820 *
16	Taxes Other Than Income-Property Taxes	$ 26,350	(1,008)	25,341	212.50	$ 5,385,060
17	Taxes Other Than Income-Other	$ 11,078		11,078	15.65	$ 173,370
18	Income Taxes	$ (52,178)	13,648	(38,529)	42.04	$ (1,619,778)
19	Interest		419,209	419,209	106.52	44,654,146
20	**Total Operating Expenses**	383,774	431,849	815,623	764.73	54,493,871
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	66.81			
24	Revenue Lag	Company Workpapers	49.66			
25	Net Lag	Line 24 - 23	17.15			
26	Staff Adjusted Expenses	Line 20, Col 35	815,623			
27	Cash Working Capital	Line 25 * Line 26/365 day	38,334			
28	Company As Field	Co Schedule B-5	40,665			
29	Staff Adjustment	To GWB-4	(2,332)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 6

RATE BASE ADJUSTMENT #2 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 1,458,672		$1,458,672
2	None	2002	-	140,272	1,318,400
3	None	2003	-	145,867	1,172,533
4	None	2004	-	145,867	1,026,665
5	None	2005	-	137,075	889,590
6	Per Staff		$ 1,458,672	$ 569,082	$ 889,590
7	Company Proposed Imputed Reg. CIAC				656,402
8	Staff Adjustment			$ -	$ 233,188

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 10 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB 7

RATE BASE ADJUSTMENT #3 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	54,503	(51,122)	3,381
6			$ 54,503	$ (51,122)	$ 105,625

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB-10

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 423,061	$ -	$ 423,061	$ 199,881	$ 622,942
3	Other Wastewater Revenues	3,839	-	3,839	-	3,839
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 426,900	$ -	$ 426,900	$ 199,881	$ 626,781
6						
7	Labor	$ 131,623	$ -	131,623	$ -	$ 131,623
8	Purchased Water	$ -	-	-	-	-
9	Fuel & Power	$ 25,631	-	25,631	-	25,631
10	Chemicals	$ 2,190	-	# 2,190	-	2,190
11	Waste Disposal	$ (27)	-	(27)	-	(27)
12	Management Fees	$ 87,180	-	87,180	-	87,180
13	Group Insurance	$ 24,921	-	24,921	-	24,921
14	Pensions	$ 28,546	-	28,546	-	28,546
15	Regulatory Expense	$ 1,480	-	1,480	-	1,480
16	Insurance Other Than Group	$ 5,049	-	5,049	-	5,049
17	Customer Accounting	$ 11,644	-	11,644	-	11,644
18	Rents	$ 4,146	-	4,146	-	4,146
19	General Office Expense	$ 8,811	-	8,811	-	8,811
20	Miscellaneous	$ 49,935	-	49,935	-	49,935
21	Maintenance Expense	$ 17,394	-	17,394	-	17,394
22	Depreciation & Amortization	$ 81,679	(1,492)	80,187		80,187
23	General Taxes-Property	$ 26,350	(1,008)	25,341	3,894	29,235
24	General Taxes-Other	$ 11,078	-	11,078	-	11,078
25	Income Taxes	$ (52,178)	13,648	(38,529)	54,130	15,600
26			-		-	-
28						
29	**Total Operating Expenses**	465,453	11,148	476,601	58,023	534,624
30	**Operating Income (Loss)**	$ (38,553)	$ (11,148)	$ (49,701)	$ 141,858	$ 92,157

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Depreciation Exp. ADJ #1	[C] Property Taxes ADJ #2	[D] Income Taxes ADJ #3	[E] STAFF ADJUSTED
1						
2	Wastewater Revenues	$ 423,061	$ -	$ -	$ -	$ 423,061
3	Other Wastewater Revenues	3,839	-	-	-	$ 3,839
4	Other	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 426,900	$ -	$ -	$ -	$ 426,900
6						
7	Labor	$ 131,623	$ -	$ -	$ -	131,623
8	Purchased Water	-	-	-	-	-
9	Fuel & Power	25,631	-	-	-	25,631
10	Chemicals	2,190	-	-	-	2,190
11	Waste Disposal	(27)	-	-	-	(27)
12	Management Fees	87,180	-	-	-	87,180
13	Group Insurance	24,921	-	-	-	24,921
14	Pensions	28,546	-	-	-	28,546
15	Regulatory Expense	1,480	-	-	-	1,480
16	Insurance Other Than Group	5,049	-	-	-	5,049
17	Customer Accounting	11,644	-	-	-	11,644
18	Rents	4,146	-	-	-	4,146
19	General Office Expense	8,811	-	-	-	8,811
20	Miscellaneous	49,935	-	-	-	49,935
21	Maintenance Expense	17,394	-	-	-	17,394
22	Depreciation & Amortization	81,679	(1,492)	-	-	80,187
23	General Taxes-Property	26,350	-	(1,008)	-	25,341
24	General Taxes-Other	11,078	-	-	-	11,078
25	Income Taxes	(52,178)	-	-	13,648	(38,529)
26						
27						
28	**Total Operating Expenses**	$ 465,453	$ (1,492)	$ (1,008)	$ 13,648	$ 476,601
29	**Operating Income (Loss)**	$ (38,553)	$ 1,492	$ 1,008	$ (13,648)	**$ (49,701)**

ADJ #		References:
1	Depreciation Expense	GTM 12
2	Property Taxes	GTM 13
3	Income Taxes	GTM 14

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GTM-12

OPERATING ADJUSTMENT #1- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	ACC Dec No. 67093 [B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	567	0.00%	-
3	302000	Franchises	2,030	0.00%	-
4	303200	Land & Land Rights SS	20,414	0.00%	-
5	303300	Land & Land Rights P	50	0.00%	-
6	303400	Land & Land Rights WT	50	0.00%	-
7	303500	Land & Land Rights TD	422	0.00%	-
8	303600	Land & Land Rights AG	2,755	0.00%	-
9	304100	Struct & Imp SS	25,292	2.21%	559
10	304200	Struct & Imp P	14,608	2.21%	323
11	304300	Struct & Imp WT	-	2.21%	-
12	304400	Struct & Imp TD	156	2.21%	3
13	304600	Struct & Imp Offices	498	2.21%	11
14	304800	Struct & Imp Misc	-		-
15	305000	Collect & Impounding	-	0.00%	-
16	307000	Wells & Springs	238,951	3.08%	7,360
17	310100	Power Generation Equip Other	4,832	4.24%	205
18	311200	Pump Equip Electric	281,109	4.24%	11,919
19	311300	Pump Equip Diesel	879	4.24%	37
20	311500	Pump Equip Other	403,824	4.24%	17,122
21	320100	WT Equip Non-Media	55,863	4.00%	2,235
22	330000	Dist Reservoirs & Standpipe	151,203	1.62%	2,449
23	331001	TD Mains Not Classified by Size	301,123	1.97%	5,932
24	331100	TD Mains 4in & Less	874,455	1.97%	17,227
25	331200	TD Mains 6in to 8in	390,385	1.97%	7,691
26	331300	TD Mains 10in to 16in	-	2.34%	-
27	333000	Services	401,618	2.45%	9,840
28	334100	Meters	99,052	2.42%	2,397
29	334200	Meter Installations	20,327	2.42%	492
30	335000	Hydrants	78,367	1.97%	1,544
31	339100	Othber P/E Intangible	-	0.00%	-
32	339500	Other P/E TD	-	0.00%	-
33	340100	Office Furniture & Equip	5,453	3.28%	179
34	340200	Comp & Periph Equip	1,336	10.83%	145
35	341100	Trans Equip Lt Duty Trks	17,166	25.00%	4,292
36	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
37	342000	Stores Equipment	0	3.59%	0
38	343000	Tools,Shop,Garage Equip	14,442	3.59%	518
39	344000	Laboratory Equipment	-	0.00%	-
40	345000	Power Operated Equipment	-	4.64%	-
41	346100	Comm Equip Non-Telephone	1,932	5.03%	97
42	346300	Comm Equip Other	659	4.93%	32
43					
44	*CORPORATE ALLOCATION*				
45	304620	Struct & Imp Leasehold	793	0.00%	-
46	331001	Mains	-		-
47	340100	Office Furniture & Equip	3,927	3.28%	129
48	340200	Comp & Periph Equip	1,597	10.83%	173
49	340300	Computer Software	6,285	25.00%	1,571
50	340300	Computer Software-Other	163	25.00%	41
51	343000	Tools,Shop,Garage Equip	134	3.59%	5
52	346100	Comm Equip Non-Telephone	650	5.03%	33
53	346300	Comm Equip Other	17	4.93%	1
54		**Total Plant in Service**	3,423,384	2.76%	94,561
55					
56					
57		Less Non Depreciable Plant			
58	301000	Organization	567	-	-
59	302000	Franchises	2,030	-	-
60	303200	Land & Land Rights SS	20,414	-	-
61	303300	Land & Land Rights P	50	-	-
62	303400	Land & Land Rights WT	50	-	-
63	303500	Land & Land Rights TD	422	-	-
64	303600	Land & Land Rights AG	2,755	-	-
65	304620	Struct & Imp Leasehold	793	-	-
66		Net Depreciable Plant and Depreciation Amounts	$ 3,396,303		$ 94,561
67		Composite Depreciation Rate		2.78%	
68		Less			
69		Amortization of Regulatory CIAC at Settlement Rate			14,368
70		Amortization of CIAC at Composite Rate	$ 195		$ 5
71		Staff Recommended Depreciation Expense			$ 80,187
72		Company Proposed Depreciation Expense			81,679
73		Staff Adjustment			$ (1,492)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GTM-13

OPERATING ADJUSTMENT #2 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 426,900	$ 426,900
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	853,800	853,800
4	Staff Recommended Revenue	426,900	626,781
5	Subtotal (Line 4 + Line 5)	1,280,700	1,480,581
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	426,900	493,527
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	853,800	987,054
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	867,254	1,000,508
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	199,468	230,117
15	Composite Property Tax Rate - Obtained from ADOR	12.70%	12.70%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 25,341	
17	Company Proposed Property Tax	$ 26,350	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (1,008)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 29,235
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 25,341
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 3,894**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 3,894
23	Increase in Revenue Requirement		$ 199,881
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.94802%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (52,178)	$ 13,648	$ (38,529)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

ALL-STATE LEGAL®
EXHIBIT
S-8
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

SURREBUTTAL

TESTIMONY

OF

GERALD BECKER

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 3, 2009

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Mohave Water System

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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NOS. W-01303A-08-0227 AND SW-01303A-08-0227

The Surrebuttal Testimony of Staff witness Gerald W. Becker addresses the following issues:

Revenue Requirement – The following table presents the test year revenue, Staff's recommended revenue, and the increase/(decrease) in dollars and percent.

	Staff As Adjust Test Year	Staff Recommended	Increase/Decrease in Dollars	Increase/Decrease in Percent
AF Water	$ 18,818,613	$ 21,377,068	$ 2,558,455	13.6%
Havasu	$ 1,026,587	$ 1,408,318	$ 381,731	37.2%
Mohave Water	$ 5,113,631	$ 5,345,121	$ 231,490	4.5%
Mohave Wastewater	$ 796,161	$ 722,274	$ (73,887)	-9.3%
Paradise Valley	$ 7,848,732	$ 9,470,254	$ 1,621,522	20.7%
Sun City West Water	$ 5,701,431	$ 9,153,703	$ 3,452,272	60.6%
Tubac	$ 426,900	$ 626,781	$ 216,734	50.8%
Overall	$ 39,732,055	$ 48,120,372	$ 8,388,317	21.1%

Rate Base – The following table presents the rate base as initially proposed in the Company's application, Staff's recommendation and the amount of Staff's adjustment in dollars and percent.

	Company Proposed (Per Application)	Staff Recommended	Staff Adjustment	Increase/Decrease in Percent
AF Water	$ 96,976,395	$ 59,516,712	$(37,459,683)	-38.6%
Havasu	$ 4,221,474	$ 3,791,385	$ (430,089)	-10.2%
Mohave Water	$ 12,041,310	$ 8,909,632	$ (3,131,678)	-26.0%
Mohave Wastewater	$ 4,740,149	$ 647,244	$ (4,092,905)	-86.3%
Paradise Valley	$ 40,864,986	$ 38,855,656	$ (2,009,330)	-4.9%
Sun City West Water	$ 37,901,086	$ 37,239,,151	$ (661,935)	-1.7%
Tubac	$ 1,527,454	$ 1,428,225	$ (99,229)	-6.5%
Overall	$ 198,272,854	$ 150,284,760	$(47,988,094)	-24.2%

Test Year Operating Income – Staff's adjusted test year operating income is discussed in the testimony of Gary McMurry and is shown for each system on the attached Surrebuttal Schedule GTM-11.

Response to the Rebuttal Testimony of Mr. Thomas M. Broderick –

1. Imputed Regulatory Advances in Aid of Construction ("IR AIAC") – Staff disagrees with the Company's request for post test year amortization of IR AIAC. Staff maintains that the amortization of IR AIAC should coincide with the end of the test year.

Staff response to Rebuttal Testimony of Ms. Linda J. Gutowski –

Agua Fria Water District:

1. Post Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $1,189,832 for the Rancho Cabrillo Subdivision.

2. Post Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $1,794,294 for the Sierra Montana 2.2 Mg Reservoir. The $1,794,294 is the updated amount of the $2,046,765 recommended for disallowance in Staff's direct testimony.

3. Post Test Year Plant ("CWIP") – Staff disagrees with the Company's rebuttal position to include in rate base $25,000,000 for the White Tanks Plant.

4. Accumulated Depreciation – Staff agrees with the Company's rebuttal position that the sign on the adjustment of $7,532 to Accumulated Depreciation in Staff's Direct Testimony should be reversed.

5. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Havasu Water District:

1. Test Year Plant – Staff accepts the Company's newly filed position to transfer the plant, accumulated depreciation and related AIAC/CIAC for the Gateway plant from Havasu Water to Mohave Water.

2. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Mohave Water District:

1. Post Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $643,127 for post test year plant. This is the update amount related to Staff's recommended adjustment of $610,731 in Staff's Direct Testimony.

2. Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $1,539,768 for three projects lacking invoices.

3. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Mohave Wastewater District:

1. Post Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $3,932,808 for post test year plant for costs associated with the upgrade and expansion of the Wishing Well Treatment Plant.

2. Test Year Plant – Staff disagrees with the Company's rebuttal position to include in rate base $306,362 for three projects lacking invoices.

3. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Paradise Valley Water District:

1. Accumulated Depreciation – Staff agrees with the Company's rebuttal position to increase accumulated depreciation by $100,554 to correct a math error in its filing.

2. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Sun City West Water District:

1. Test Year Plant – The Company states that Staff's adjustment of $70,000 to increase the balance in both the plant and accumulated depreciation accounts should be $76,672. Staff accepts the additional $6,672 for both, with no net impact on rate base.

2. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Tubac Water District:

1. AIAC/CIAC in Rate Base – Staff has revisited the Company's position that AIAC and CIAC pertaining to CWIP should not be included in the calculation of rate base because the offsetting plant is not in rate base, and Staff disagrees with the Company's position.

Staff response to Rebuttal Testimony of Ms. Sheryl L. Hubbard –

1. Cash Working Capital – The Company states that there are formulaic errors in Staff's calculation of cash working capital along with incorrect amounts for taxes in some districts. The Company also alleges Staff inappropriately used the expense lags of Mohave Water for the Mohave Wastewater calculation. Staff has corrected its formulaic errors and updated the tax amounts used to reflect the taxes on proposed revenues as opposed to test year revenues. However, Staff continues to apply the same expense lags for all districts.

2. White Tanks – The Company states that Staff's recommendation to excluded $25 million of CWIP from rate base will create dire consequences for the Company and that the Company may have to consider mothballing or selling the facility.

Arsenic Treatment Plant – Excess Capacity –

1. Staff has identified and adjusted for excess capacity in the Agua Fria, Havasu and Sun City West Water systems.

Tubac Arsenic Options –

1. The Company has described two options to remediate arsenic in its Tubac system. Staff has performed a financial analysis for informational purposes.

INTRODUCTION

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

A. My name is Gerald Becker. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Gerald Becker who previously submitted Direct Testimony in this case?

A. Yes, I am.

PURPOSE OF SURREBUTTAL TESTIMONY

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony in this proceeding is to respond, on behalf of Staff to the Rebuttal Testimonies of Mr. Thomas M. Broderick, Ms. Linda J. Gutowski, and Ms. Sheryl L. Hubbard who represent Arizona-American Water Company Inc. - ("Arizona American" or "Company").

Q. Do you attempt to address every issue raised by the Company in its Rebuttal Testimony?

A. No. I limit my discussion to certain issues as outlined below. My silence on any particular issue raised in the Company's Rebuttal Testimony does not indicate that Staff agrees with the Company's stated Rebuttal position on the issue. I rely on my Direct Testimony unless modified by this Surrebuttal Testimony.

Q. What issues will you address?

A. I address the issues listed below that are discussed in the Rebuttal Testimonies of Company witnesses Mr. Thomas M. Broderick, Ms. Linda J. Gutowski, and Ms. Sheryl L. Hubbard. In addition, I address the excess capacity in arsenic treatment plants. Further, I discuss a financial analysis of arsenic treatment alternatives in Tubac. I am also sponsoring the attached Schedules GWB-1 through GWB-10 for the various districts.

Thomas M Broderick:

1. Imputed Regulatory Advances ("IR AIAC").

Linda J. Gutowski:

Rate Base

1. Post Test Year Plant
2. Test Year Plant not supported by invoices
3. Accumulated Depreciation
4. Transfer of Gateway Plant from Havasu Water to Mohave Water
5. AIAC/CIAC in CWIP

Sheryl L. Hubbard:

1. Working Capital
2. White Tanks Plant

Overcapacity of arsenic treatment plant – Agua Fria, Havasu, and Sun City West.

Tubac Arsenic Remediation Options.

SUMMARY OF RECOMMENDATIONS

Q. Please provide a summary of Staff surrebuttal recommendations.

A. Table 1 shows Staff's adjusted test year revenue, Staff's recommended revenue requirement and the recommended revenue increase over the test year amounts in dollars and percent for each district. The recommended revenue for each district provides an operating income reflecting a 7.34 percent rate of return on the fair value rate base. The Company proposed (initial filing) and Staff recommended rate bases for each district are shown in Table 2 along with the Staff adjustments shown in dollars and percent.

Table 1

Staff Test Year and Recommended Revenue

	Staff As Adjust Test Year Revenue	Staff Recommended Revenue Requirement	Increase/Decrease in Dollars	Increase/Decrease in Percent
AF Water	$ 18,818,613	$ 21,377,068	$ 2,558,455	13.6%
Havasu	$ 1,026,587	$ 1,408,318	$ 381,731	37.2%
Mohave Water	$ 5,113,631	$ 5,345,121	$ 231,490	4.5%
Mohave Wastewater	$ 796,161	$ 722,274	$ (73,887)	-9.3%
Paradise Valley	$ 7,848,732	$ 9,470,254	$ 1,621,522	20.7%
Sun City West Water	$ 5,701,431	$ 9,153,703	$ 3,452,272	60.6%
Tubac	$ 426,900	$ 626,781	$ 216,734	50.8%
Overall	$ 39,732,055	$ 48,120,372	$ 8,388,317	21.1%

Table 2

Rate Base - Company Proposed and Staff Recommended

Rate Base	Per Application Company Proposed	Staff Surrebuttal Recommended	Difference	% Difference
AF Water	$ 96,976,395	$ 59,516,712	$37,459,683)	-38.6%
Havasu	$ 4,221,474	$ 3,791,385	$ (430,089)	-10.2%
Mohave Water	$ 12,041,310	$ 8,909,632	$(3,131,678)	-26.0%
Mohave Wastewater	$ 4,740,149	$ 647,244	$(4,092,905)	-86.3%
Paradise Valley	$ 40,864,986	$ 38,855,656	$(2,009,330)	-4.9%
Sun City West Water	$ 37,901,086	$ 37,239,151	$ (661,935)	-1.7%
Tubac	$ 1,527,454	$ 1,428,225	$ (99,229)	-6.5%
Overall	$ 198,272,854	$ 150,284,760	$ (47,988,094)	-24.2%

RESPONSE TO REBUTTAL TESTIMONY OF THOMAS M. BRODERICK

Imputed Regulatory Advances and Contributions

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company proposed amortization of IR AIAC beyond the end of the test year ending December 31, 2007, to extend the amortization through the date it anticipated rates in this proceeding would become effective.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. No. In accordance with ratemaking principles, Staff recommends that amortization not be extended after the end of the test year ending December 31, 2007.

Q. Is Staff now in agreement with the Company's amortization period?

A. No.

Q. What does Staff recommend?

A. Staff recommends IR AIAC amounts as shown on each system's rate base schedule.

RESPONSE TO REBUTTAL TESTIMONY OF LINDA J. GUTOWSKI

Agua Fria Water District:

Test Year Plant: Rancho Cabrillo

Q. Why did Staff remove $1,189,832 of plant pertaining to Rancho Cabrillo in its Direct Testimony?

A. During its examination of the Company's records, Staff selected capital additions pertaining to the Rancho Cabrillo subdivision. The Company was unable to provide adequate documentation for these plant additions and that the Company can demonstrate that it is used and useful. In a subsequent communication with Staff, the Company stated that it would agree to removal of the unsupported amounts from rate base. A copy of that e-mail is attached.

Q. What is the Company basis for again changing its position and now requesting to include the unsupported Rancho Cabrillo plant additions in rate base?

A. The Company asserts that the amounts should be included in rate base because the Staff engineer did not make any determination that the associated plant was not used and useful.

Q. Is a determination of used-and-useful the sole requirement for inclusion in rate base?

A. No. The issue at hand is one of valuation and adequate record keeping. Pursuant to the Commissions rules and regulations the Company is required to maintain adequate records to verify the cost of plant additions in accordance with the NARUC Uniform System of Accounts. The rules state that utility shall be required to furnish the Commission with the details to support the recorded valuation. The Company does not have records to support and verify the claimed cost of its plant additions in Rancho Cabrillo.

Q. What does Staff recommend?

A. In the absence of supporting documentation, Staff recommends disallowance of the amounts until the Company can provide adequate documentation or that the Company can demonstrate that the plant is in place and it is used and useful. Staff further recommends that the Company attempt to obtain missing documentation to support its plant amounts.

Post Test Year Plant - Sierra Montana

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company proposes to include in rate base $1,794,294 for the expansion of the Sierra Montana 2.2 Mg Reservoir as post test year plant.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. No. Staff recommended disallowance.

Q. What is reflected in the Company's rebuttal testimony for this amount?

A. The Company states that the associated plant is now valued at $1,794,295 versus the $2,046,765 in its filing and that this plant was placed in service in December 2008 and that it should be included.

Q. Does Staff agree with the Company's position?

A. No.

Q. Please explain.

A. Staff maintains the same positions as discussed in Staff's Direct Testimony:

"Post test year plant is usually mismatched with the revenues, expenses, and rate base of the test year. Matching is a fundamental principle of accounting and

rate-making. The absence of matching distorts the meaning of and reduces the usefulness of operating income and rate of return for measuring the fairness and reasonableness of rates. Accordingly, recognizing post test year plant in rate base is generally appropriate only in special and unusual cases where failure to do so would create an inequity. Staff had traditionally recognized two such cases:

1. When the magnitude of the investment relative to the utility's total investment is such that not including the post test year plant in the cost of service would jeopardize the utility's financial health; and

2. When conditions such as the following exist:
   a. The cost of the post test year plant is significant and substantial,
   b. The net impact on revenue and expenses for the post test year plant is known and insignificant, or is revenue neutral,
   c. The post test year plant is prudent and necessary for the provision of services and reflects appropriate, efficient, effective and timely decision-making."[1]

Q. Based on Staff's review, did the Company satisfy these criteria?

A. No. These criteria are not satisfied.

Q. What does Staff recommend?

A. Staff recommends disallowance of the post test year plant for the Sierra Montana 2.2 Mg reservoir.

Post Test Year Plant - White Tanks CWIP

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company proposes to include in rate base $25,000,000 of CWIP for its White Tanks Project.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. No. Staff recommended disallowance.

[1] Page 20 of Direct Testimony of Gerald Becker of January 13, 2009.

Q. What is reflected in the Company's rebuttal for this amount?

A. The Company still seeks $25,000,000 of CWIP for its White Tanks Project.

Q. Does Staff agree with the Company's position?

A. No.

Q. Did the Company propose alternatives to recover the cost of CWIP?

A. The Company proposes to recover these costs through a temporary surcharge to Agua Fria customers that is estimated to be $9.09 per month. Alternatively, the Company suggests the implementation of a valley wide 'renewable-water-supply surcharge' that would be assessed to all customers still on groundwater but the Company does not state the amount of the estimated surcharge.

Q. What does Staff recommend?

A. Staff recommends disallowance of the post test year plant for the White Tanks Plant as further discussed in response to Ms. Hubbard below. Additionally, Staff does not recommend any of the surcharges as alternatives to placing CWIP in rate base.

Accumulated Depreciation

Q. Did the Company identify an error in Staff's calculation of Accumulated Depreciation?

A. Yes. The Company correctly noted that Staff's adjustment to decrease accumulated depreciation in Schedule GWB-5 for the Agua Fria District was calculated as an increase to accumulated depreciation.

Q. Has Staff corrected the error?

A. Yes. Staff has made this correction in its surrebuttal schedules.

CIAC/AIAC in CWIP

Q. Please describe how CIAC and AIAC relates to plant in service and rate base.

A. CIAC and AIAC represent funds or plant provided to the Company by parties other than investors. Typically, funds received as CIAC or AIAC are used to build plant which may ultimately be in rate base. Plant that is used and useful for the provision of utility service is a components of rate base. CIAC and AIAC are also components of rate base. As components of rate base, plant differs from CIAC and AIAC in that plant increases rate base and CIAC and AIAC decrease rate base. Plant that is under construction ("CWIP") is normally not a component of the rate base calculation. Thus, funds received as CIAC or AIAC that are funding CWIP are included in the rate base calculation while the CWIP is not included in the rate base calculation. As a result, the plant included in the rate base calculation may not equal CIAC and AIAC funds received.

Q. Please describe the Company's position.

A. The Company asserts that it has received CIAC and AIAC for plant not yet completed and reflected in its rate base. The Company further states that since CWIP is not an addition to rate base, then related CIAC and AIAC should not be a reduction in the rate base calculation.

Q. Is the Company's position is a departure from traditional ratemaking practices?

A. Yes. The Company's position is a departure from traditional ratemaking practices.

Q. Please explain.

A. The Company has use of the funds advanced or contributed by others, regardless of how the funds are used, therefore, investors commit less funds for utility purposes. Accordingly, the Company's rate base should be reduced by the CIAC and AIAC regardless of how it is used. The fact that the associated CWIP is not in rate base is irrelevant. CWIP is one example of how not recognizing CIAC and AIAC as a deduction in the calculation of rate base results in excess earnings. The Company can record an allowance for funds used during construction ("AFUDC") to CWIP balances to earn a return on construction expenditure funded by CIAC and AIAC. AFUDC is a form of earnings. Thus, the Company is earning on funds not provided by investors. Reducing rate base by CIAC and AIAC preserves the ratemaking balance and removes this excess earnings potential.

Q. What does Staff recommend?

A. Staff recommends that the CIAC and AIAC funds the Company asserts are in CWIP be reflected in the CIAC and AIAC balances used to calculate and properly reflect a reduction to rate base. For the Agua Fria system, a $3,432,286 adjustment to increase CIAC is appropriate.

Havasu Water District

Transfer of Gateway Plant

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company proposes to transfer to $721,333 of plant, $14,000 of accumulated depreciation, and $656,267 of AIAC from its Havasu Water to Mohave Water for plant known as Gateway.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. No. The Company had not disclosed this adjustment to Staff.

Q. Does Staff agree with the Company's adjustment?

A. Staff agrees with the Company's proposal that transferring the plant from Havasu Water to Mohave Water is appropriate and that the proposed amounts for plant and AIAC are correct. However, Staff disagrees with the proposed amount as it relates to Accumulated Depreciation.

Q. Please explain.

A. The Company wishes to increase the Accumulated Depreciation on its Mohave Water District by $45,790 as compared with the $14,000 decrease on the Havasu Water system.

Q. Was the Company able to reconcile the amounts?

A. No. The Company was unable to provide a detailed explanation of the differences.

Q. What does Staff recommend?

A. Staff recommends a decrease to plant of $721,333, a decrease to Accumulated Depreciation in amount of $45,790, and a decrease to AIAC in the amount of $656,267, to the Havasu Water District with corresponding adjustments to the Mohave Water District.

CIAC/AIAC in CWIP

Q. Has the Company requested the exclusion of CIAC or AIAC associate with CWIP as in the Agua Fria District above?

A. Yes. The Company's excludes $10,645 from CIAC with a corresponding reduction to rate base.

Q. What does Staff recommend?

A. Staff recommends an increase to CIAC of $10,645 for the Havasu Water District.

Mohave Water District:

Post Test Year Plant

Q. Has the Company requested the inclusion of post test year plant as in the Agua Fria District above?

A. Yes. The Company's rebuttal position is to include in rate base $643,127 for post test year plant. This is the updated amount corresponding with Staff's Direct Testimony recommendation to disallow $610,731 of post test year plant.

Q. Does Staff recommend including post test year plant in this case?

A. No. For reasons described above in the Agua Fria section, Staff recommends disallowance of these amounts.

Test Year Plant – WinterHaven, Stonebridge and Mira Monte

Q. Has the Company requested the inclusion of test year plant that is not adequately supported by documentation?

A. Yes. The Company's rebuttal position is to include in rate base $1,539,768 for test year plant lacking invoices.

Q. Does Staff recommend including test year plant in this case?

A. No. For reasons described above in the Agua Fria section, Staff disagrees with the Company's rebuttal position to include in rate base $1,539,768. Staff recommends disallowance of the amounts until the Company can provide adequate documentation or that the Company can demonstrate that the plant is in place and it is used and useful. Staff

further recommends that the Company attempt to obtain missing documentation to support its plant amounts.

CIAC/AIAC in CWIP

Q. Has the Company requested to exclude CIAC or AIAC associate with CWIP?

A. Yes. The Company excludes $94,452 of CIAC and $291,909 of AIAC from its calculation of rate base. Since CIAC and AIAC reduce rate base the Company's exclusion overstates rate base.

Q. What does Staff recommend?

A. Staff recommends adjustments to increase to CIAC by $94,452 and AIAC by $291,909 for the Mohave Water system resulting in corresponding decreases to rate base.

Transfer of Gateway Plant

Q. Please describe the treatment proposed by the Company in this filing.

A. The Company now proposes to transfer to $721,333 of plant, $45,790 of accumulated depreciation, and $656,267 of AIAC from its Havasu Water to Mohave Water for plant known as Gateway.

Q. Did Staff recommend this treatment in its Direct Testimony?

A. No. The Company had not disclosed this adjustment to Staff in its initial filing.

Q. Does Staff agree with the Company's adjustment?

A. Staff agrees with that transferring the plant from Havasu Water is appropriate and that the proposed amounts for plant and AIAC are correct. However, Staff disagrees with the proposed amount for transferring Accumulated Depreciation.

Q. Please explain.

A. The Company wishes to increase the Accumulated Depreciation on its Mohave Water District by $45,790 as compared with the $14,000 decrease on the Havasu Water system.

Q. Was the Company able to reconcile the amounts?

A. No. The Company was unable to provide a detailed explanation of the differences.

Q. What does Staff recommend?

A. Staff recommends transferring the plant from Havasu resulting in an increase to plant of $721,333, an increase to Accumulated Depreciation in amount of $45,790, and an increase to AIAC in the amount of $656,267 and corresponding adjustments to the Havasu Water District as discussed above.

Mohave Wastewater District:

Post Test Year Plant-Wishing Well Treatment Plant

Q. Has the Company requested the inclusion of post test year plant as in the Agua Fria District above?

A. Yes. The Company's rebuttal position is to include in rate base $3,932,808 for post test year plant.

Q. Does Staff recommend including post test year plant in this case?

A. No. For reasons described above in the Agua Fria section, Staff recommends disallowance of these amounts.

Test Year Plant – Mesa Vista and Sage Hill

Q. Has the Company requested the inclusion of test year plant that is not adequately supported by documentation?

A. Yes. The Company's rebuttal position is to include in rate base $306,362 for test year plant lacking invoices.

Q. Does Staff recommend including test year plant in this case?

A. No. For reasons described above in the Agua Fria section, Staff disagrees with the Company's rebuttal position to include in rate base $306,362. Staff recommends disallowance of the amounts until the Company can provide adequate documentation or that the Company can demonstrate that the plant is in place and it is used and useful. Staff further recommends that the Company attempt to obtain missing documentation to support its plant amounts.

CIAC/AIAC in CWIP

Q. Has the Company requested to exclude CIAC or AIAC associate with CWIP as in the Agua Fria District above?

A. Yes. The Company proposes to exclude $65,395 of CIAC from its calculation of rate base. Since CIAC reduces rate base, the Company's exclusion overstates rate base.

Q. What does Staff recommend?

A. Staff recommends an adjustment to increase CIAC by $65,395 for the Mohave Wastewater District resulting in a corresponding decrease to rate base.

Paradise Valley Water District:

CIAC/AIAC in CWIP

Q. Has the Company requested to exclude CIAC or AIAC associate with CWIP as in the Agua Fria system above?

A. Yes. The Company excludes $322,588 of CIAC from its calculation of rate base. Since CIAC reduces rate base, the Company's exclusion overstates rate base.

Q. What does Staff recommend?

A. Staff recommends an adjustment to increase CIAC by $322,588 for the Paradise Valley District resulting in a corresponding decrease to rate base.

Accumulated Depreciation

Q. Please describe the Company's rebuttal position.

A. The Company states its filing contained an error that understates accumulated depreciation by $100,554 and proposes to correct the error by increasing accumulated depreciation $100,554.

Q. Does Staff agree?

A. Yes. Staff's surrebuttal schedules reflect the correction.

Sun City West Water District:

Q. Please describe the Company's rebuttal position.

A. The Company states plant and accumulated depreciation should be increased by $76,672 to correct an error in it records.

Q. Does Staff agree?

A. Yes. The Company had previously informed Staff that the amount of the adjustment should have been $70,000 but the Company further learned that $76,672 is the correct amount. Staff's surrebuttal schedules reflect the updated amount.

Tubac Water District:

CIAC/AIAC in CWIP

Q. Has the Company requested to exclude CIAC or AIAC associate with CWIP as in the Agua Fria system above?

A. Yes. The Company excludes $20,266 from AIAC from its calculation of rate base. Since AIAC reduces rate base, the Company's exclusion overstates rate base.

Q. What does Staff recommend?

A. Staff recommends an adjustment to increase AIAC by $20,266 for the Tubac District resulting in a corresponding decrease to rate base.

RESPONSE TO REBUTTAL TESTIMONY OF SHERYL L. HUBBARD

Working Capital

Q. What is the Company's rebuttal position?

A. The Company states that Staff's calculation of cash working capital contains formulaic errors along with some incorrect amounts for taxes in some districts. The Company also alleges that Staff inappropriately used the expense lags of Mohave Water for the Mohave Wastewater calculation.

Q. Does Staff agree with the Company's position?

A. Staff agrees that there were formulaic errors the calculation of working capital in Staff's Direct Testimony and that some tax expense amounts did not reflect the Company's prospective liabilities. Staff's surrebuttal schedules reflect corrections for the formulaic errors and tax values. Staff does not agree with the Company's contention that incorrect expense lags were used in one system versus another because Staff is using the same expense lags for all systems.

Q. What does Staff recommend?

A. Staff has recomputed the cash working capital on the attached surrebuttal schedules and recommends the amounts as shown.

White Tanks

Q. What is the Company's rebuttal position?

A. The Company requests the following:

1. That $25 million of CWIP for the White Tanks project be included in rate base. The Company states that this is necessary because hook up fees are far less than anticipated and that the Company will face dire financial consequences if there is not interim relief, "Arizona American must consider mothballing or selling the plant".[2]
2. That it needs an accounting order to defer post in service O&M until such expenses can be reflected in rates.

[2] Page 10 of Rebuttal Testimony of Company witness Christopher C. Buls

3. The Company further claims that FASB 92 will require a write down of the plant for financial statement purposes if the Commission does not grant it an accounting order.

4. As an alternative to CWIP in rate base, the Company requests surcharges as previously discussed.[3]

Q. What is Staff's position regarding the Company's proposal to include CWIP in rate base?

A. As discussed in the Direct Testimony, Staff does not support including CWIP in rate base. At the present time, the CWIP is not providing any benefit to current rate payers. Thus, current ratepayers should not bear the burden of this facility.

Q. What is Staff's position on an accounting order to defer O&M costs?

A. Staff's recommendation is consistent with its recommendation in its Direct Testimony:

> *"Staff believes that accounting orders should only be issued under very unusual or extraordinary conditions to prevent harm to either the Company or the ratepayers. In the case at hand, the Company has already been indemnified against harm for post in service AFUDC and depreciation expense via the accounting orders in the previous case. Staff further notes that the cost of the Central Arizona Project ("CAP") entitlement for AF Water is already included in the Company's O&M in this proceeding, further reducing the Company's exposure to un-recovered O&M.*
>
> *Staff does not see any evidence that the Company's net costs and O&M not subject to deferral mechanisms and future recovery will be extraordinary. Staff believes that the cost of providing treated water will be offset by cost savings attached to the present expenses of providing ground water which are reflected in present rates along with the CAP entitlement as discussed above. Thus, Stuff recommends denial of an additional `accounting order."*[4]

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[3] Page 8-9 of Rebuttal Testimony of Company witness Christopher C. Buls
[4] Page 27 of Direct Testimony of Gerald Becker of January 13, 2009.

Thus, Staff recommends denial of an accounting order to defer O&M.

Q. What is Staff's view of the potential need for the Company to record a write down in its external financial statements due to the requirements of FASB 92?

A. Although any potential detriment to the Company may be considered by the Commission, the financial statement presentation should not drive the regulatory process. The requirements for presentation of external financial statements do not alter the Commission's prescribed treatment of costs for ratemaking purposes nor do those requirements change the eligibility of recovery of any cost by the Company.

Q. What does Staff recommend?

A. Staff concludes that any concerns regarding the financial statement presentation constitutes inadequate justification to issue an accounting order. Thus, Staff recommends denial of the accounting order.

Joint Development Agreement

Q. Has Staff changed its position on the Joint Development Agreement with the Maricopa Water District ("MWD")?

A. No. Staff continues to have significant reservations regarding the Joint Development Agreement as discussed in its Direct Testimony.

Overcapacity of Arsenic Treatment Plant – Agua Fria, Havasu, Sun City West Water

Q. What is the Company proposing?

A. The Company asserts that all of its arsenic treatment plant in these districts is used and useful and proposes to include it in rate base.

Q. Does Staff agree?

A. No. The Staff has reviewed the capacity of the arsenic treatment plant for these systems and recommends a disallowance for each system as described in the Surrebuttal Testimony of Dorothy Hains. Staff's surrebuttal schedules reflect these adjustments to the rate base of the respective Districts. The disallowances for each District are:

Agua Fria	$126,352
Havasu	$143,485
Sun City West Water	$92,080

Q. Does this conclude your testimony on this topic?

A. Yes, it does.

TUBAC ARSENIC REMEDIATION OPTIONS

Q. What is the Company proposing?

A. The Company proposes to construct arsenic remediation plant to treat all water that it distributes as opposed to installing point of use treatment at customers' premises which would treat the water only at a designated point such as the kitchen sink.

Q. What is the nature of Staff's testimony?

A. Staff has calculated the revenue requirement for each option for the first year. Staff's analysis uses the Company's estimates of initial investment and annual operating expenses with exception of depreciation expense. Staff modified the depreciation rate to reflect a 20-year life for the central treatment plant for consistency with depreciation rates for similar plant in this proceeding, as compared with the 40-year life described by the Company.[5]

[5] Rebuttal testimony of Jeffrey W. Stuck, February 11, 2009, Page 3 line 17.

Q. According to the Company, what are the initial and ongoing costs for each type of system?

A. The Company states that the initial cost of a centralized treatment system is $2,300,000 as compared with $544,000 for the point of use system.[6] The annual operating costs excluding depreciation and property taxes are $173,000 for the central system and $349,000 for the point of use system.[7] The Company further states that the point of use system would have to be completely re-installed after 10 years at a cost of almost $2 million.[8]

Q. Has Staff conducted any analysis to assess the reasonableness of the Company's stated capital and operating costs of the two arsenic treatment alternatives?

A. No. Staff relies on the Company's representation of these costs for the purpose of this analysis except that Staff assumes a 20-year life for the central plant instead of the Company's 40-year life.

Q. What are the results of Staff's analysis?

A. Staff determined that the revenue requirements as shown below:

	Central Treatment	Point of Use
Revenue Requirements	$ 506,996	$ 455,547

Staff also notes that the amounts reflected in the above analysis indicate that the annual operating expenses are higher for the point of use system and would theoretically be subject to a greater amount of volatility. Further, the net plant value of the central plant is at its maximum at the outset and subsequently decreases over its useful life. Thus, the

[6] Rebuttal testimony of Jeffrey W. Stuck, February 11, 2009, Page 3 line 3.
[7] Rebuttal testimony of Jeffrey W. Stuck, February 11, 2009, Page 4 lines 4-5.
[8] Rebuttal testimony of Jeffrey W. Stuck, February 11, 2009, Page 4 line 9.

value of the rate base portion of the revenue requirement will decrease over time. In contrast, the point of use system will require replacement after 10 years and the rate base portion of the revenue requirement will be adjusted to the future cost.

Q. What is the purpose of Staff's financial analysis of the arsenic treatment alternatives?

A. Staff is presenting this analysis for information purposes only. Staff is not recommending that the Commission direct the Company to choose either alternative. The Company should make a decision based on a comprehensive analysis that include quantitative and qualitative factors.

Q. Does this conclude your testimony on this topic?

A. Yes, it does.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

Gerald Becker

From: Thomas.Broderick@amwater.com
Sent: Tuesday, November 04, 2008 3:24 PM
To: Gerald Becker
Cc: Linda.Gutowski@amwater.com
Subject: Plant additions follow up to DR13

Gerry,

We have at last (nearly) completed our internal review of the projects (DR 13) in Mohave and Agua Fria that lacked adequate support and we respond as follows:

Mohave Sewer:

If Staff recommends removal of Mesa Vista ($182k) and Sage Hill Tract ($147k) from plant in service and associated AIAC and depreciation expense, the Company will accept that recommendation because we do lack the supporting information for these projects.

Mohave Water:

For Villages at Stonebridge ($242k) and Winterhaven Estates ($177k), same as above.

For Mira Monte Fox Creek, the detail exists and will be provided to you as soon as we receive it from the developer. If we don't provide you this information before the hearing, we again would accept removal as per above.

Agua Fria Water:

For Clearwater Farms ($1.7 m), Linda has the supporting detail and you will shortly be provided it.

For Rancho Cabrillo ($1.2 m), the detail exists and we are waiting on it from the developer. We already have a lot of invoices for the off-site portion of this project, but its the on-site portion you indicated. If we don't provide you this information before the hearing, we again would accept removal.

We have not started refunding on any of these projects and if the Commission accepts a staff recommendation to remove, we would take the position with the developer(s) that we don't owe them any refunds otherwise due.

I think its understood that if we can later obtain supporting documentation as part of a future rate case, the affected project can be restored for ratemaking purposes.

Tom

ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

SURREBUTTAL TESTIMONY OF GERALD BECKER

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GTM-	12	OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL
GTM-	13	OPERATING INCOME ADJUSTMENT #2 - DEPRECIATION EXPENSE
GTM-	14	OPERATING INCOME ADJUSTMENT #3 - CHEMICALS EXPENSE
GTM-	15	OPERATING INCOME ADJUSTMENT #4 - PROPERTY TAX EXPENSE
GWB-	16	OPERATING INCOME ADJUSTMENT #5 - INCOME TAX EXPENSE

ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 96,976,395	$ 96,976,395	$ 59,516,712	$ 59,516,712
2	Adjusted Operating Income (Loss)	$ 2,601,288	$ 2,601,288	$ 2,819,140	$ 2,819,140
3	Current Rate of Return (L2 / L1)	2.68%	2.68%	4.74%	4.74%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 8,146,017	$ 8,146,017	$ 4,368,527	$ 4,368,527
6	Operating Income Deficiency (L5 - L2)	$ 5,544,729	$ 5,544,729	$ 1,549,387	$ 1,549,387
7	Gross Revenue Conversion Factor	1.6578	1.6578	1.6513	1.6513
8	Required Revenue Increase (L7 * L6)	$ 9,192,198	$ 9,192,198	$ 2,558,455	$ 2,558,455
9	Adjusted Test Year Revenue	$ 18,818,613	$ 18,818,613	$ 18,818,613	$ 18,818,613
10	Proposed Annual Revenue (L8 + L9)	$ 28,010,811	$ 28,010,811	$ 21,377,068	$ 21,377,068
11	Required Increase in Revenue (%)	48.85%	48.85%	13.60%	13.60%
12	Rate of Return on Common Equity (%)	10.75%	10.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

ARIZONA-AMERICAN WATER COMPANY - AGUA FRIA WATER
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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4405%					
5	Subtotal (L3 - L4)	60.5595%					
6	**Revenue Conversion Factor (L1 / L5)**	1.651269					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.3707%					
22	*Effective Property Tax Factor (L20*L21)*		0.8416%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4405%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 4,368,527					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 28)	$ 2,819,140					
26	Required Increase in Operating Income (L24 - L25)		$ 1,549,387				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 1,552,693					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 578,694					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 973,999				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 21,377,068					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 838,140					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 803,072					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 35,068				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 2,558,454				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				AF Water	AF Water		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 18,818,613	$ 21,377,068		$ 21,377,068
40	Operating Expenses Excluding Income Taxes			$ 15,420,780	$ 15,455,848		$ 15,455,848
41	Synchronized Interest (L56)			$ 1,898,583	$ 1,898,583		$ 1,898,583
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ 1,499,250	$ 4,022,638		$ 4,022,637
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ 104,468	$ 280,297		$ 280,297
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ 1,394,783	$ 3,742,341		$ 3,742,340
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500		$ 7,500
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250	$ -	$ 6,250
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500	$ -	$ 8,500
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650	$ -	$ 91,650
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 360,326	$ 1,158,496	$ -	$ 1,158,496
51	Total Federal Income Tax	$ -	$ -	$ 474,226	$ 1,272,396	$ -	$ 1,272,396
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ 578,694	$ 1,552,693	$ -	$ 1,552,693
53	Applicable Tax Rate						34.0000%

		AF Water
	Calculation of Interest Synchronization:	
54	Rate Base (Schedule GWB-3, Col. (C), Line 17)	$ 59,516,712
55	Weighted Average Cost of Debt	3.1900%
56	Synchronized Interest (L45 X L46)	$ 1,898,583

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 211,145,154	$ (3,362,949)	$ 207,782,205
	CWIP in Rate Base	$ 25,000,000	$ (25,000,000)	
2	Less: Accumulated Depreciation	20,033,433	(7,532)	20,025,901
3	Net Plant in Service	$ 216,111,721	$ (3,355,417)	$ 187,756,304
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 29,706,550	$ 3,432,286	$ 33,138,836
5	Less: Accumulated Amortization	1,435,287	-	1,435,287
6	Net CIAC	28,271,263	3,432,286	31,703,549
7	Advances in Aid of Construction (AIAC)	98,233,813	(1,189,832)	97,043,981
8	Imputed Reg AIAC	-	2,268,167	2,268,167
9	Imputed Reg CIAC	796,965	-	796,965
10	Deferred Income Tax Credits (Debits)	(2,839,311)	-	(2,839,311)
	Customer Meter Deposits	19,040		19,040
	ADD:			
11	Cash Working Capital	1,409,860	(1,272,529)	137,331
12	Prepayments	214,929	-	214,929
13	Supplies Inventory	192,139	-	192,139
14	Projected Capital Expenditures		-	-
15	Deferred Debits	3,529,517	(3,321,116)	208,401
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 96,976,395	$ (12,459,683)	$ 59,516,712

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5& 6	[F] ADJ #7	[G] ADJ #8	[F] STAFF ADJUSTED
		PLANT IN SERVICE:									$ 1,229
1	301000	Organization	1,229								$ 321,997
2	302000	Franchises	321,997	$ -		$ -	$ -	$ -	$ -	$ -	$ 1,429,017
3	303200	Land & Land Rights SS	1,429,017			-	-	-	-	-	$ (28,452)
4	303300	Land & Land Rights P	(28,462)	-		-	-	-	-	-	$ 624,652
5	303400	Land & Land Rights WT	624,652								$ -
6	303500	Land & Land Rights TD	-								$ -
7	303600	Land & Land Rights AG	-								$ 9,008,963
8	304100	Struct & Imp SS	9,008,963								$ 4,836,856
9	304200	Struct & Imp P	4,836,856			-	-	-	-	-	$ 1,162,010
10	304300	Struct & Imp WT	1,162,010			-	-	-	-	-	$ 3,550,952
11	304400	Struct & Imp TD	3,550,952			-	-	-	-	-	$ 173,284
12	304600	Struct & Imp Offices	173,284								$ -
13	304800	Struct & Imp Misc	-			-	-	-	-	-	$ -
14	305000	Collect & Impounding	-			-	-	-	-	-	$ 11,874,350
15	307000	Wells & Springs	11,874,350								$ 828,646
16	310100	Power Generation Equip Other	828,646								$ 21,166,169
17	311200	Pump Equip Electric	21,166,169			-	-	-	-	-	$ 11,872
18	311300	Pump Equip Diesel	11,872			-	-	-	-	-	$ 1,271,551
19	311500	Pump Equip Other	1,271,551	-		-	-	-	-	-	$ 9,373,581
20	320100	WT Equip Non-Media [1]	9,499,933			-	-	-	(126,352)	-	$ 8,065,767
21	330000	Dist Reservoirs & Standpipe	9,713,171	-		-	-	(1,647,404)	-	-	$ 5,710,217
22	331001	TD Mains Not Classified by Size	5,710,217								$ 21,371,152
23	331100	TD Mains 4in & Less	21,371,152			-	-			-	$ 31,329,478
24	331200	TD Mains 6in to 8in	31,329,478								$ 26,094,582
25	331300	TD Mains 10in to 16in	27,284,414	(1,189,832)							$ 13,375,039
26	331400	TD Mains 18in and Grtr.	13,774,400			-	-	(399,361)	-	-	$ 89,876
27	332000	Fire Mains	89,876			-	-	-	-	-	$ 11,273,032
28	333000	Services	11,273,032			-	-	-	-	-	$ 4,666,830
29	334100	Meters	4,666,830								$ 1,583,276
30	334200	Meter Installations	1,583,276								$ 11,793,410
31	335000	Hydrants	11,793,410			-	-	-	-	-	$ -
32	339100	Other P/E Intangible	-								$ -
33	339300	Other P/E Misc	-			-	-	-	-	-	$ -
34	339500	Other P/E TD	-			-	-	-	-	-	$ 92,864
35	340100	Office Furniture & Equip	92,864								$ 74,674
36	340200	Comp & Periph Equip	74,674								$ 202,657
37	341100	Trans Equip Lt Duty Trks	202,657								$ -
38	341200	Trans Equip Hvy Duty Trks	-			-	-	-	-	-	$ -
39	342000	Stores Equipment	-			-	-	-	-	-	$ 8,608
40	343000	Tools,Shop,Garage Equip	8,608			-	-	-	-	-	$ -
41	344000	Laboratory Equipment	-			-	-	-	-	-	$ 30,559
42	345000	Power Operated Equipment	30,559			-	-	-	-	-	$ 1,462,701
43	346100	Comm Equip Non-Telephone	1,462,701			-	-	-	-	-	$ 390,585
44	346300	Comm Equip Other	390,585			-	-	-	-	-	$ -
45	391100	Computer Equipment	-								$ -
46											$ -
47		*POST TY PLANT*									$ 1,647,404
48	330000	Dist Reservoirs & Standpipe	1,647,404								$ 399,361
49	331400	TD Mains 18in and Grtr.	399,361								$ -
50											$ 192,154
51	304400	Struct & Imp TD	192,154								$ 205,286
52	331200	TD Mains 6in to 8in	205,286								$ 748,152
53	331300	TD Mains 10in to 16in	748,152								$ 21,676
54	346190	Remote Control & Instrumentation	21,676								$ -
55											$ -
56		*CORPORATE ALLOCATION*									$ 48,860
57	304620	Struct & Imp Leasehold	48,860								$ 241,927
58	340100	Office Furniture & Equip	241,927								$ 98,398
59	340200	Comp & Periph Equip	98,398								$ 387,190
60	340300	Computer Software	387,190								$ 10,057
61	340300	Computer Software-Other	10,057								$ 8,270
62	343000	Tools,Shop,Garage Equip	8,270								$ 40,019
63	346100	Comm Equip Non-Telephone	40,019								$ 1,054
64	346300	Comm Equip Other	1,054								$ -
65											$ -
66		*REALLOCATION FROM CORPORATE*									$ 6,865
67	307000	Wells & Springs	6,865								$ 15,127
68	310100	Power Generation Equip Other	15,127								$ 52,898
69	311200	Pump Equip Electric	52,898								$ 218,139
70	320100	WT Equip Non-Media	218,139								$ 212,320
71	339300	Other P/E Misc	212,320								$ 5,078
72	340200	Comp & Periph Equip	5,078								$ -
73											$ -
74											$ -
75											$ -
76											-
77											-
78											
79		Total Plant in Service	211,145,154	(1,189,832)	-	-	-	(2,046,765)	(126,352)	-	207,782,205
80		CWIP In Rate Base	$ 25,000,000				-	$ (25,000,000)	-	-	$ -
81		Accumulated Depreciation	20,033,433	(7,532)				-	-	-	20,025,901
82		Net Plant in Service (L58 - L 59)	$216,111,721	$ (1,182,300)	$ -	$ -	$ -	$ (27,046,765)	$ (126,352)	$ -	$ 187,756,304
83											-
84		*LESS:*									-
85		Contributions in Aid of Construction (CIAC)	$ 29,706,550		$ -	$ -	$ -	$ -	$ -	$ 3,432,286	$ 33,138,836
86		Less: Accumulated Amortization	1,435,287	-	-			-	-	-	1,435,287
87		Net CIAC (L83 - L84)	28,271,263	-	-	-	-	-	-	3,432,286	31,703,549
88		Advances in Aid of Construction (AIAC)	98,233,813	(1,189,832)					-	-	97,043,981
89		Imputed Reg Advances	-	-	-	2,268,167	-			-	2,268,167
90		Imputed Reg CIAC	796,965	-	-					-	796,965
91		Deferred Income Tax Credits (Debits)	(2,839,311)	-	-	-	-	-		-	(2,839,311)
92		Meter Deposits	19,040								19,040
93		*ADD:*									-
94		Working Capital Allowance	1,409,860	-	(1,272,529)	-	-		-	-	137,331
95		Pumping Power		-	-	-	-		-	-	-
96		Purchase Wastewater Treatment Charges		-	-	-	-		-	-	-
97		Material and Supplies Inventory	192,139	-	-	-	-		-	-	192,139
98		Prepayments	214,929	-	-	-	-	-	-	-	214,929
99		CWIP in Rate Base		-	-	-		-	-	-	-
100		Deferred Debits	3,529,517	-	-	-	(3,321,116)	-	-	-	208,401
101		Original Cost Rate Base	$ 96,976,396	$ 7,532	$ (1,272,529)	$ (2,268,167)	$ (3,321,116)	$ (27,046,765)	$ (126,352)	$ (3,432,286)	$ 59,516,713

ADJ #		References:
1	Plant, Accumulated Depreciation and AIAC	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	White Tanks CWIP Adjustment	Schedule GWB-9A
6	Post Test Year Plant	Schedule GWB-9B
7	Overcapacity of Arsenic Treatment Plant	Schedule GWB-9C
8	CIAC/AIAC in CWIP	Schedule GWB-9D

[1] Company described asset as WT Equip non-media however per engineering report it should be Water Treatment Equipment-Media (which is for arsenic treatment plant).

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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	331.10	Mains 10" to 16"	1,189,832	(1,189,832)	-
		Mains 10" to 16" Accumulated Deprec.	(7,532)	(7,532)	-
		AIAC	1,189,832	(1,189,832)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 1,440,677	$ -	1,440,677	12.00	$ 17,288,126
2	Purchased Water	$ 901,467	-	901,467	86.87	$ 78,310,438
3	Fuel & Power	$ 1,954,815	-	1,954,815	32.42	$ 63,375,087
4	Chemicals	$ 1,121,555		981,930	28.47	$ 27,955,547
5	Waste Disposal	$ (870)		(870)	30.00	$ (26,100)
6	Management Fees	$ 2,775,604		2,775,604	(3.88)	$ (10,769,344)
7	Group Insurance	$ 396,645		396,645	(4.64)	$ (1,840,431)
8	Pensions	$ 240,413		240,413	45.00	$ 10,818,593
9	Regulatory Expense	$ 64,012		64,012	30.00	$ 1,920,360
10	Insurance Other Than Group	$ 158,153		158,153	45.00	$ 7,116,885
11	Customer Accounting	$ 370,806		370,806	7.46	$ 2,766,213
12	Rents	$ 63,217		63,217	(10.68)	$ (675,158)
13	General Office Expense	$ 161,107		161,107	30.00	$ 4,833,210
14	Miscellaneous	$ 787,967		787,967	30.00	$ 23,639,000
15	Maintenance Expense	$ 591,329		121,761	30.00	$ 3,652,820
16	Taxes Other Than Income-Property Taxes	$ 803,071		838,140	212.50	$ 178,104,847
17	Taxes Other Than Income-Other	$ 128,923		128,923	15.65	$ 2,017,649
18	Income Taxes	$ (138,756)		1,552,693	42.04	$ 65,275,227
19	Interest		1,898,583	1,898,583	106.52	202,237,075
20	**Total Operating Expenses**	11,820,135	1,898,583	14,836,043	764.73	676,000,045
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	45.56			
24	Revenue Lag	Company Workpapers	48.943			
25	Net Lag	Line 24 - 23	3.38			
26	Staff Adjusted Expenses	Line 20, Col 35	14,836,043			
27	Cash Working Capital	Line 25 * Line 26/365 day	137,331			
28	Company As Field	Co Schedule B-5	1,409,860			
29	Staff Adjustment	To GWB-4	(1,272,529)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 27,385,370		$ 27,385,370
2	None	2002	-	4,051,534	23,333,836
3	None	2003	-	4,213,134	19,120,702
4	None	2004	-	4,213,134	14,907,568
5		2005		4,213,134	10,694,434
6		2006		4,213,134	6,481,300
7	None	2007	-	4,213,134	2,268,167
8	Per Staff		$ 27,385,370	$25,117,203	$ 2,268,167
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 2,268,167

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	3,529,517	(3,321,116)	208,401
2			$ 3,529,517	$ (3,321,116)	$ 6,850,633

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB-9 A
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - WHITE TANKS PLANT IN CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	White Tanks Plant in CWIP	$ 25,000,000	$ (25,000,000)	$ -

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-9 B
SURREBUTTAL

RATE BASE ADJUSTMENT #6 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
330000	Dist Reservoirs	1,647,404	$ (1,647,404)	$ -
331400	Dist Reservoirs & Standpipe	399,361	(399,361)	-
		2,046,765	$ (2,046,765)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-9 C
SURREBUTTAL

RATE BASE ADJUSTMENT #7 - OVERCAPACITY OF ARESENIC TREATMENT PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
320100	WT Equip Non-Media	9,499,933	$ (126,352)	$ 9,373,581

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB and Dorothy Hains
Column (C): Column [A] plus Column [B]

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Schedule GWB-9 D
SURREBUTTAL

RATE BASE ADJUSTMENT #8 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	CIAC	28,271,263	$ 3,432,286	$ 31,703,549

References:
Column [A]: Amounts included Per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 17,913,497	$ -	$ 17,913,497	$ 2,558,455	$ 20,471,951
3	Other Revenues	905,117	-	905,117	-	905,117
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 18,818,613	$ -	$ 18,818,613	$ 2,558,455	$ 21,377,068
6						
7	Labor	$ 1,440,677	$ -	1,440,677	$ -	$ 1,440,677
8	Purchased Water	$ 901,467	-	901,467	-	901,467
9	Fuel & Power	$ 1,954,815	-	1,954,815	-	1,954,815
10	Chemicals	$ 1,121,555	(139,625)	981,930	-	981,930
11	Waste Disposal	$ (870)		(870)	-	(870)
12	Management Fees	$ 2,775,604		2,775,604	-	2,775,604
13	Group Insurance	$ 396,645		396,645	-	396,645
14	Pensions	$ 240,413		240,413	-	240,413
15	Regulatory Expense	$ 64,012		64,012	-	64,012
16	Insurance Other Than Group	$ 158,153		158,153	-	158,153
17	Customer Accounting	$ 370,806		370,806	-	370,806
18	Rents	$ 63,217		63,217	-	63,217
19	General Office Expense	$ 161,107		161,107	-	161,107
20	Miscellaneous	$ 787,967		787,967	-	787,967
21	Maintenance Expense	$ 591,329	(469,568)	121,761	-	121,761
22	Depreciation & Amortization	$ 4,397,190	(326,109)	4,071,081	-	4,071,081
23	Taxes Other Than Income-Property Taxes	$ 803,071		803,072	35,068	838,140
24	Taxes Other Than Income-Other	$ 128,923		128,923	-	128,923
25	Income Taxes	$ (138,756)	717,449	578,694	973,999	1,552,693
26						
27	**Total Operating Expenses**	16,217,325	(217,853)	15,999,474	1,009,067	17,008,541
28	**Operating Income (Loss)**	$ 2,601,288	$ 217,853	$ 2,819,140	$ 1,549,387	$ 4,368,527

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Chemicals ADJ #3	[E] Property Taxes ADJ #4	[F] Income Taxes ADJ #5	[G] STAFF ADJUSTED
1								
2	Water Revenues	$ 17,913,497	$ -	$ -	$ -	$ -	$ -	$ 17,913,497
3	Other Revenues	905,117	-	-	-	-	-	$ 905,117
4	Other	-	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 18,818,613	$ -	$ -	$ -	$ -	$ -	$ 18,818,613
6								
7								
8	Labor	$ 1,440,677	$ -	$ -	$ -	$ -	$ -	1,440,677
9	Purchased Water	901,467	-	-	-	-	-	901,467
10	Fuel & Power	1,954,815	-	-	-	-	-	1,954,815
11	Chemicals	1,121,555	-	-	(139,625)	-	-	981,930
12	Waste Disposal	(870)	-	-	-	-	-	(870)
13	Management Fees	2,775,604	-	-	-	-	-	2,775,604
14	Group Insurance	396,645	-	-	-	-	-	396,645
15	Pensions	240,413	-	-	-	-	-	240,413
16	Regulatory Expense	64,012	-	-	-	-	-	64,012
17	Insurance Other Than Group	158,153	-	-	-	-	-	158,153
18	Customer Accounting	370,806	-	-	-	-	-	370,806
19	Rents	63,217	-	-	-	-	-	63,217
20	General Office Expense	161,107	-	-	-	-	-	161,107
21	Miscellaneous	787,967	-	-	-	-	-	787,967
22	Maintenance Expense	591,329	(469,568)	-	-	-	-	121,761
23	Depreciation & Amortization	4,397,190	-	(326,109)	-	-	-	4,071,081
24	Taxes Other Than Income-Property Taxes	803,071	-	-	-	1	-	803,072
25	Taxes Other Than Income-Other	128,923	-	-	-	-	-	128,923
26	Income Taxes	(138,756)	-	-	-	-	717,449	578,694
27			-	-	-	-	-	-
28								
29	**Total Operating Expenses**	$ 16,217,325	$ (469,568)	$ (326,109)	$ (139,625)	$ 1	$ 717,449	$ 15,999,474
30	**Operating Income (Loss)**	$ 2,601,288	$ 469,568	$ 326,109	$ 139,625	$ (1)	$ (717,449)	$ 2,819,140

ADJ #		References:
1	Tank Maintenance	GTM 12
2	Depreciation Expense	GTM 13
3	Chemicals Expense	GTM 14
4	Property Taxes	GTM 15
5	Income Taxes	GTM 16

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Surrebuttal Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 591,329	$ (469,568)	$ 121,761

Repair and Maintenance Expenses	
Calendar year 2005	58,559
Calendar year 2006	153,213
Calendar year 2007	153,510
Total for three year period	365,282
Normalization Period	3
Normalized Amount	121,761

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1		*PLANT IN SERVICE:*			
2	301000	Organization	1,229	0.00%	-
3	302000	Franchises	321,997	0.00%	-
4	303200	Land & Land Rights SS	1,429,017	0.00%	-
5	303300	Land & Land Rights P	(28,462)	0.00%	-
6	303400	Land & Land Rights WT	624,652	0.00%	-
7	303500	Land & Land Rights TD	-	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	9,008,963	2.50%	225,224
10	304200	Struct & Imp P	4,836,856	1.67%	80,775
11	304300	Struct & Imp WT	1,162,010	1.67%	19,406
12	304400	Struct & Imp TD	3,550,952	1.67%	59,301
13	304600	Struct & Imp Offices	173,284	4.63%	8,023
14	304800	Struct & Imp Misc	-	0.00%	-
15	305000	Collect & Impounding	-	2.50%	-
16	307000	Wells & Springs	11,874,350	3.33%	395,416
17	310100	Power Generation Equip Other	828,646	4.42%	36,626
18	311200	Pump Equip Electric	21,166,169	4.42%	935,545
19	311300	Pump Equip Diesel	11,872	4.42%	525
20	311500	Pump Equip Other	1,271,551	4.42%	56,203
21	320100	Water Treatment Equipment non-media '	9,499,933	5.00%	474,997
22	330000	Dist Reservoirs & Standpipe	8,065,767	1.67%	134,698
23	331001	TD Mains Not Classified by Size	5,710,217	1.53%	87,366
24	331100	TD Mains 4in & Less	21,371,152	1.53%	326,979
25	331200	TD Mains 6in to 8in	31,329,478	1.53%	479,341
26	331300	TD Mains 10in to 16in	26,094,582	1.53%	399,247
27	331400	TD Mains 18in and Grtr.	13,375,039	2.00%	267,501
28	332000	Fire Mains	89,876	2.00%	1,798
29	333000	Services	11,273,032	2.48%	279,571
30	334100	Meters	4,666,830	2.51%	117,137
31	334200	Meter Installations	1,583,276	2.51%	39,740
32	335000	Hydrants	11,793,410	2.00%	235,868
33	339100	Other P/E Intangible	-	0.00%	-
34	339300	Other P/E Misc	-		-
35	339500	Other P/E TD	-		-
36	340100	Office Furniture & Equip	92,864	4.04%	3,752
37	340200	Comp & Periph Equip	74,674	10.00%	7,467
38	341100	Trans Equip Lt Duty Trks	202,657	20.00%	40,531
39	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
40	342000	Stores Equipment	-	3.92%	-
41	343000	Tools,Shop,Garage Equip	8,608	4.02%	346
42	344000	Laboratory Equipment	-	3.71%	-
43	345000	Power Operated Equipment	30,559	5.20%	1,589
44	346100	Comm Equip Non-Telephone	1,462,701	10.30%	150,658
45	346300	Comm Equip Other	390,585	4.93%	19,256
46	391100	Computer Equipment	-		-
47					
48		*POST TY PLANT*			
49	330000	Dist Reservoirs & Standpipe	1,647,404	1.67%	27,512
50	331400	TD Mains 18in and Grtr.	399,361	2.00%	7,987
51					
52	304400	Struct & Imp TD	192,154	1.67%	3,209
53	331200	TD Mains 6in to 8in	205,286	1.53%	3,141
54	331300	TD Mains 10in to 16in	748,152	1.53%	11,447
55	346190	Remote Control & Instrumentation	21,676	4.93%	1,069
56					
57		*CORPORATE ALLOCATION*			
58	304620	Struct & Imp Leasehold	48,860	14.28%	6,977
59	340100	Office Furniture & Equip	241,927	4.04%	9,774
60	340200	Comp & Periph Equip	98,398	10.00%	9,840
61	340300	Computer Software	387,190	25.00%	96,798
62	340300	Computer Software-Other	10,057	25.00%	2,514
63	343000	Tools,Shop,Garage Equip	8,270	4.02%	332
64	346100	Comm Equip Non-Telephone	40,019	10.30%	4,122
65	346300	Comm Equip Other	1,054	4.93%	52
66					
67		*REALLOCATION FROM CORPORATE*			
68	307000	Wells & Springs	6,865	3.33%	229
69	310100	Power Generation Equip Other	15,127	4.42%	669
70	311200	Pump Equip Electric	52,898	4.42%	2,338
71	320100	WT Equip Non-Media	218,139	7.06%	15,401
72	339300	Other P/E Misc	212,320	0.00%	-
73	340200	Comp & Periph Equip	5,078	10.00%	508
74					
75					
76		**Total Plant In Service**	207,908,557	2.45%	$ 5,088,803
77					
78					
79		Less Non Depreciable Plant			
80	301000	Organization	1,229	0.00%	-
81	302000	Franchises	321,997	0.00%	-
82	303200	Land & Land Rights SS	1,429,017	0.00%	-
83	303300	Land & Land Rights P	(28,462)	0.00%	-
84	303400	Land & Land Rights WT	624,652	0.00%	-
85	303500	Land & Land Rights TD	-	0.00%	-
86		Net Depreciable Plant and Depreciation Amounts	$ 205,560,124		$ 5,088,803
87		Composite Depreciation Rate		2.48%	
88		Less			
89		Amortization of Regulatory CIAC at Settlement Rate			(197,344)
90		Amortization of CIAC at Composite Rate	$ 33,138,836		$ (820,378)
91		Staff Recommended Depreciation Expense			$ 4,071,081
92		Company Proposed Depreciation Expense			4,397,190
93		Staff Adjustment			$ (326,109)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - CHEMICAL EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Chemicals	$ 1,121,555	$ (139,625)	$ 981,930

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM, GTM-8.12
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-15

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 18,818,613	$ 18,818,613
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	37,637,226	37,637,226
4	Staff Recommended Revenue	18,818,613	21,377,068
5	Subtotal (Line 4 + Line 5)	56,455,840	59,014,294
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	18,818,613	19,671,431
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	37,637,226	39,342,863
10	Plus: 10% of CWIP - 2005	1,422,630	1,422,630
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	39,059,856	40,765,493
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	8,983,767	9,376,063
15	Composite Property Tax Rate - Obtained from ADOR	8.94%	8.94%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 803,072	
17	Company Proposed Property Tax	$ 803,071	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ 1	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 838,140
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 803,072
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 35,068
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 35,068
23	Increase in Revenue Requirement		$ 2,558,455
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.37067%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-16

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (138,756)	$ 717,449	$ 578,694

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1 - WORKING CAPITAL
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 4,221,474	$ 4,221,474	$ 3,791,385	$ 3,791,385
2	Adjusted Operating Income (Loss)	$ (131,419)	$ (131,419)	$ 31,245	$ 31,245
3	Current Rate of Return (L2 / L1)	-3.11%	-3.11%	0.82%	0.82%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 354,604	$ 354,604	$ 278,288	$ 278,288
6	Operating Income Deficiency (L5 - L2)	$ (486,023)	$ 486,023	$ 247,042	$ 247,042
7	Gross Revenue Conversion Factor	1.6785	1.6785	1.5452	1.5452
8	Required Revenue Increase (L7 * L6)	$ (815,804)	$ 815,804	$ 381,731	$ 381,731
9	Adjusted Test Year Revenue	$ 1,026,586	$ 1,026,586	$ 1,026,586	$ 1,026,586
10	Proposed Annual Revenue (L8 + L9)	$ 210,782	$ 210,782	$ 1,408,317	$ 1,408,317
11	Required Increase in Revenue (%)	-79.47%	79.47%	37.18%	37.18%
12	Rate of Return on Common Equity (%)	11.50%	11.50%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)
	Calculation of Gross Revenue Conversion Factor:			
1	Revenue	100.0000%		
2	Uncollecible Factor (Line 11)	0.0000%		
3	Revenues (L1 - L2)	100.0000%		
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	35.2836%		
5	Subtotal (L3 - L4)	64.7164%		
6	**Revenue Conversion Factor (L1 / L5)**	1.545204		
	Calculation of Uncollecttible Factor:			
7	Unity	100.0000%		
8	Combined Federal and State Tax Rate (Line 17)	34.3479%		
9	One Minus Combined Income Tax Rate (L7 - L8)	65.6521%		
10	Uncollectible Rate	0.0000%		
11	Uncollectible Factor (L9 * L10)		0.0000%	
	Calculation of Effective Tax Rate:			
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
13	Arizona State Income Tax Rate	6.9680%		
14	Federal Taxable Income (L12 - L13)	93.0320%		
15	Applicable Federal Income Tax Rate (Line 44)	29.4306%		
16	Effective Federal Income Tax Rate (L14 x L15)	27.3799%		
17	Combined Federal and State Income Tax Rate (L13 +L16)		34.3479%	
	Calculation of Effective Property Tax Factor			
18	Unity	100.0000%		
19	Combined Federal and State Income Tax Rate (L17)	34.3479%		
20	One Minus Combined Income Tax Rate (L18-L19)	65.6521%		
21	Property Tax Factor (GTM-14, L24)	1.4253%		
22	Effective Property Tax Factor (L20*L21)		0.9357%	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			35.2836%
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 278,288		
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 27)	$ 31,245		
26	Required Increase in Operating Income (L24 - L25)		$ 247,042	
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 90,400		
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (38,847)		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 129,248	
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 1,408,317		
31	Uncollectible Rate (Line 10)	0.0000%		
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -		
33	Adjusted Test Year Uncollectible Expense	$ -		
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -	
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 49,625		
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 44,184		
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 5,441	
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 381,731	
39		Staff Adj. Test Year	Staff Recommeded	
40	Revenue (Sch GWB-1, Col. [C] L9 & 10)	$ 1,026,586	$ 1,408,317	
41	Operating Expenses Excluding Income Taxes	$ 1,034,188	$ 1,039,629	
42	Synchronized Interest (L56)	$ 120,945	$ 120,945	
43	Arizona Taxable Income (L39 - L40 - L41)	$ (128,547)	$ 247,743	
44	Arizona State Income Tax Rate	6.9680%	6.9680%	
45	Arizona Income Tax (L42 x L43)	$ (8,957)	$ 17,263	
46	Federal Taxable Income (L43 - L44)	$ (119,590)	$ 230,480	
47	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ (7,500)	$ 7,500	
48	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ (6,250)	$ 6,250	
49	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ (8,500)	$ 8,500	
50	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ (7,640)	$ 50,888	
51	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	
52	Total Federal Income Tax	$ (29,890)	$ 73,138	
53	Combined Federal and State Income Tax (L44 + L51)	$ (38,847)	$ 90,400	
54				
55			29.43%	
56	Applicable Federal Income Tax Rate			
57				
58	*Calculation of Interest Synchronization:*			
59	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 3,791,385	$ 3,791,385	
60	Weighted Average Cost of Debt	3.1900%	3.1900%	
61	Synchronized Interest (L45 X L46)	$ 120,945	$ 120,945	

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Schedule GWB-3
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RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 9,837,304	$ (865,017)	$ 8,972,287
2	Less: Accumulated Depreciation	$ 1,327,687	(45,790)	1,281,897
3	Net Plant in Service	$ 8,509,617	$ (819,227)	$ 7,690,390
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 1,361,843	$ 10,645	$ 1,372,488
5	Less: Accumulated Amortization	6,753	-	6,753
6	Net CIAC	1,355,090	10,645	1,365,735
7	Advances in Aid of Construction (AIAC)	3,217,334	(656,267)	2,561,067
8	Imputed Reg AIAC	-	34,679	34,679
9	Imputed Reg CIAC	113,427	-	113,427
10	Deferred Income Tax Credits (Debits)	(131,385)	-	(131,385)
	Customer Meter Deposits	512		512
	ADD:			
11	Cash Working Capital	102,420	(76,105)	26,315
12	Prepayments	4,556	-	4,556
13	Supplies Inventory	4,486	-	4,486
14	Projected Capital Expenditures		-	-
15	Deferred Debits	155,374	(145,701)	9,673
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 4,221,474	$ (430,089)	$ 3,791,385

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] ADJ #6	[F] STAFF ADJUSTED
		PLANT IN SERVICE:								
1	301000	Organization	10,144							$ 10,144
2	302000	Franchises	-			$ -	$ -	$ -	$ -	$ -
3	303200	Land & Land Rights SS	41,597			-	-	-	-	$ 41,597
4	303300	Land & Land Rights P	-			-	-	-	-	$ -
5	303500	Land & Land Rights TD	-							$ -
6	303600	Land & Land Rights AG	-							$ -
7	304100	Struct & Imp SS	2,096,895					(63,517)		$ 2,033,378
8	304200	Struct & Imp P	99,968							$ 99,968
9	304300	Struct & Imp WT	-			-	-	-	-	$ -
10	304400	Struct & Imp TD	-			-	-	-	-	$ -
11	304600	Struct & Imp Offices	20,698			-	-	-	-	$ 20,698
12	304800	Struct & Imp Misc	-							$ -
13	305000	Collect & Impounding	148,253			-	-	-	-	$ 148,253
14	307000	Wells & Springs	573,245			-	-	(258,428)	-	$ 314,817
15	310100	Power Generation Equip Other	50,935					(50,355)		$ 580
16	311200	Pump Equip Electric	1,352,954					(57,926)		$ 1,295,028
17	311300	Pump Equip Diesel	-			-	-	-	-	$ -
18	311500	Pump Equip Other	4,202			-	-	-	-	$ 4,202
19	320100	WT Equip Non-Media [1]	258,942			-	(143,685)	-	-	$ 115,257
20	330000	Dist Reservoirs & Standpipe	1,356,012			-	-	(99,695)	-	$ 1,256,317
21	331001	TD Mains Not Classified by Size	758,554			-	-		-	$ 758,554
22	331100	TD Mains 4in & Less	442,775							$ 442,775
23	331200	TD Mains 6in to 8in	959,064			-		(108,829)	-	$ 850,235
24	331300	TD Mains 10in to 16in	730,665							$ 730,665
25	333000	Services	278,916							$ 278,916
26	334100	Meters	175,586			-	-	-	-	$ 175,586
27	334200	Meter Installations	17,253			-	-	-	-	$ 17,253
28	335000	Hydrants	-			-	-	-	-	$ -
29	339100	Othber P/E Intangible	-							$ -
30	339250	Other P/E SS	116,045					(82,582)		$ 33,463
31	340100	Office Furniture & Equip	3,254			-	-		-	$ 3,254
32	340200	Comp & Periph Equip	23,678							$ 23,678
33	341100	Trans Equip Lt Duty Trks	76,510			-	-	-	-	$ 76,510
34	341200	Trans Equip Hvy Duty Trks	-			-	-	-	-	$ -
35	342000	Stores Equipment	-							$ -
36	343000	Tools,Shop,Garage Equip	17,822							$ 17,822
37	344000	Laboratory Equipment	460							$ 460
38	345000	Power Operated Equipment	33,093			-	-	-	-	$ 33,093
39	346100	Comm Equip Non-Telephone	11,702			-	-	-	-	$ 11,702
40	346300	Comm Equip Other	44,413			-	-	-	-	$ 44,413
41						-	-	-	-	$ -
42		*CORPORATION ALLOCATION*				-	-	-	-	$ -
43	304620	Struct & Imp Leasehold	2,261			-	-	-	-	$ 2,261
44	331001	Mains				-	-	-	-	$ -
45	340100	Office Furniture & Equip	11,195							$ 11,195
46	340200	Comp & Periph Equip	4,553							$ 4,553
47	340300	Computer Software	17,917							$ 17,917
48	340300	Computer Software-Other	465							$ 465
49	343000	Tools,Shop,Garage Equip	383							$ 383
50	346100	Comm Equip Non-Telephone	1,852							$ 1,852
51	346300	Comm Equip Other	49							$ 49
52										$ -
53		Post Test Year Arsenic O&M Deferral:								$ -
54		Cost for Media Replacement in Havasu (March, 2008)	$88,300							$ 88,300
55		Add AFUDC - Cost times rate times # of months	$6,696							$ 6,696
56		Subtotal $94,996								$ -
57										$ -
58										$ -
59										$ -
60										$ -
61										$ -
62										$ -
63										
64		**Total Plant in Service**	9,837,304	-	-	-	(143,685)	(721,332)	-	8,972,287
65										
66		Accumulated Depreciation	1,327,687					(45,790)	-	1,281,897
67		Net Plant in Service (L58 - L 59)	$ 8,509,617	$ -	$ -	$ -	$ (143,685)	$ (675,542)	$ -	$ 7,690,390
68										
69		*LESS:*								
70		Contributions in Aid of Construction (CIAC)	$ 1,361,843		$ -	$ -	$ -		$ 10,645	$ 1,372,488
71		Less: Accumulated Amortization	6,753	-	-			-	-	6,753
72		Net CIAC (L63 - L64)	1,355,090	-	-	-	-	-	10,645	1,365,735
73		Advances in Aid of Construction (AIAC)	3,217,334	-				(656,267)	-	2,561,067
74		Imputed Reg Advances	-	-	$34,679		-			34,679
75		Imputed Reg CIAC	113,427	-	-					113,427
76		Deferred Income Tax Credits (Debits)	(131,385)	-	-	-	-	-		(131,385)
77		Customer Meter Deposits	512							512
78		*ADD:*								-
79		Working Capital Allowance	102,420	(76,105)	-	-	-		-	26,315
80		Pumping Power		-	-	-	-		-	-
81		Purchase Wastewater Treatment Charges		-	-	-	-		-	-
82		Material and Supplies Inventory	4,486	-	-	-	-		-	4,486
83		Prepayments	4,556	-	-	-		-	-	4,556
84		Projected Capital Expenditures		-	-	-	-	-	-	-
85		Deferred Debits	155,374	-	-	(145,701)	-	-	-	9,673
86		Original Cost Rate Base	$ 4,221,474	$ (76,105)	$ (34,679)	$ (145,701)	$ (143,685)	$ (19,275)	$ (10,645)	$ 3,791,385

ADJ #		References:
1	Working Capital	Schedule GWB-5
2	Imputed Reg AIAC	Schedule GWB-6
3	Deferred Debits	Schedule GWB-7
4	Overcapacity of Arsenic Treatment Plant	Schedule GWB-8
5	Transfer of Plant to Mohave Water	Schedule GWB-9
6	CIAC removed on CWIP	Schedule GWB-9A

[1] Company described asset as WT Equip non-media however per engineering report it should be Water Treatment Equipment-Media (which is for arsenic treatment plant).

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Schedule GWB-5
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RATE BASE ADJUSTMENT #1 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 204,741	$ -	$ 204,741	12.00	$ 2,456,893
2	Purchased Water	$ -	-	$ -	86.87	$ -
3	Fuel & Power	$ 111,139	-	$ 111,139	32.42	$ 3,603,126
4	Chemicals	$ 88,249		$ 96,165	28.47	$ 2,737,818
5	Waste Disposal	$ (52)		$ (52)	30.00	$ (1,560)
6	Management Fees	$ 166,461		$ 166,461	(3.88)	$ (645,869)
7	Group Insurance	$ 63,729		$ 63,729	(4.64)	$ (295,701)
8	Pensions	$ 35,586		$ 35,586	45.00	$ 1,601,358
9	Regulatory Expense	$ 3,840		$ 3,840	30.00	$ 115,200 *
10	Insurance Other Than Group	$ 8,974		$ 8,974	45.00	$ 403,830
11	Customer Accounting	$ 22,062		$ 22,062	7.46	$ 164,583
12	Rents	$ 5,059		$ 5,059	(10.68)	$ (54,030)
13	General Office Expense	$ 13,616		$ 13,616	30.00	$ 408,480 *
14	Miscellaneous	$ 42,644		$ 42,644	30.00	$ 1,279,308 *
15	Maintenance Expense	$ 198,697		$ 10,747	30.00	$ 322,400 *
16	Taxes Other Than Income-Property Taxes	$ 44,112		$ 49,625	212.50	$ 10,545,373
17	Taxes Other Than Income-Other	$ 17,638		$ 17,638	15.65	$ 276,029
18	Income Taxes	$ (159,839)		$ 90,400	42.04	$ 3,800,435
19	Interest		120,566	120,566	106.52	12,842,694
20	**Total Operating Expenses**	866,655	120,566	1,062,939	764.73	39,560,365
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	37.22			
24	Revenue Lag	Company Workpapers	46.254			
25	Net Lag	Line 24 - 23	9.04			
26	Staff Adjusted Expenses	Line 20, Col 35	1,062,939			
27	Cash Working Capital	Line 25 * Line 26/365 day	26,315			
28	Company As Field	Co Schedule B-5	102,420			
29	Staff Adjustment	To GWB-4	(76,105)			
30						

31 References:
32 Column [A]: Company Schedule C-1
33 Column [B]: Staff adjustments to expenses, See Testimony GWB
34 Column [C]: Column [A] + Column [B]
35 Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372
36 Column [E]: Column [C] * Column [D]

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Schedule GWB- 6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 418,704		$ 418,704
2	None	2002	-	61,945	356,759
3	None	2003	-	64,416	292,343
4	None	2004	-	64,416	227,927
5		2005		64,416	163,511
6		2006		64,416	99,095
7	None	2007	-	64,416	34,679
8	Per Staff		$ 418,704	$ 384,025	$ 34,679
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 34,679

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	155,374	(145,701)	9,673
6			$ 155,374	$ (145,701)	$ 301,075

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - OVERCAPACITY OF ARESENIC TREATMENT PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
32010(	WT Equip Non-Media	258,942	$ (143,685)	$ 115,257

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB and Dorothy Hains
Column (C): Column [A] plus Column [B]

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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - TRANSFER OF PLANT AND CIAC TO MOHAVE WATER

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
304100	Struct & Imp SS	$ 2,096,895	$ (63,517)	$ 2,033,378
307000	Wells & Springs	573,245	(258,428)	314,816
310100	Power Generation Equip Other	50,935	(50,355)	580
311200	Pump Equip Electric	1,352,954	(57,926)	1,295,027
330000	Dist Reservoirs & Standpipe	1,356,012	(99,695)	1,256,317
331200	TD Mains 6in to 8in	959,064	(108,829)	850,235
339250	Other P/E SS	116,045	(82,582)	33,463
Grand Total		$ 6,505,149	$ (721,333)	5,783,816
	For Associated Plant:			
	ACCUMULATED DEPRECIATION	1,327,687	$ (45,790)	$ 1,281,897
	AIAC	3,217,334	$ (656,267)	$ 2,561,067

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB - 9A
SURREBUTTAL

RATE BASE ADJUSTMENT #6 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	AIAC	1,355,090	$ 10,645	$ 1,365,735

References:
Column [A]: Amounts included Per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 1,003,476	$ -	$ 1,003,476	$ 381,731	$ 1,385,207
3	Other Revenues	23,110	-	23,110	-	23,110
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 1,026,586	$ -	$ 1,026,586	$ 381,731	$ 1,408,317
6						
7	Labor	$ 204,741	$ -	204,741	$ -	$ 204,741
8	Purchased Water	-	-	-	-	-
9	Fuel & Power	111,139	-	111,139	-	111,139
10	Chemicals	88,249	7,916	96,165	-	96,165
11	Waste Disposal	(52)	-	(52)	-	(52)
12	Management Fees	166,461	-	166,461	-	166,461
13	Group Insurance	63,729	-	63,729	-	63,729
14	Pensions	35,586	-	35,586	-	35,586
15	Regulatory Expense	3,840	-	3,840	-	3,840
16	Insurance Other Than Group	8,974	-	8,974	-	8,974
17	Customer Accounting	22,062	-	22,062	-	22,062
18	Rents	5,059	-	5,059	-	5,059
19	General Office Expense	13,616	-	13,616	-	13,616
20	Miscellaneous	42,644	-	42,644	-	42,644
21	Maintenance Expense	198,697	(187,950)	10,747	-	10,747
22	Depreciation & Amortization	291,351	(103,694)	187,656	-	187,656
23	General Taxes-Property Taxes	44,112	73	44,184	5,441	49,625
24	General Taxes-Other	17,638	-	17,638	-	17,638
25	Income Taxes	(159,839)	120,992	(38,847)	129,248	90,400
26	**Total Operating Expenses**	1,158,005	(162,665)	995,341	134,689	1,130,029
27	**Operating Income (Loss)**	$ (131,419)	$ 162,665	$ 31,245	$ 247,042	$ 278,288

References:
Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[F] Chemicals ADJ #5	[G] STAFF ADJUSTED
1								
2	Water Revenues	$ 1,003,476	$ -	$ -	$ -	$ -	$ -	$ 1,003,476
3	Other Revenues	23,110	-	-	-	-	-	$ 23,110
4	Other	-	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 1,026,586	$ -	$ -	$ -	$ -	$ -	$ 1,026,586
6								
7	Labor	$ 204,741	$ -	$ -	$ -	$ -	$ -	204,741
8	Purchased Water	-	-	-	-	-	-	-
9	Fuel & Power	111,139	-	-	-	-	-	111,139
10	Chemicals	88,249	-	-	-	-	7,916	96,165
11	Waste Disposal	(52)	-	-	-	-	-	(52)
12	Management Fees	166,461	-	-	-	-	-	166,461
13	Group Insurance	63,729	-	-	-	-	-	63,729
14	Pensions	35,586	-	-	-	-	-	35,586
15	Regulatory Expense	3,840	-	-	-	-	-	3,840
16	Insurance Other Than Group	8,974	-	-	-	-	-	8,974
17	Customer Accounting	22,062	-	-	-	-	-	22,062
18	Rents	5,059	-	-	-	-	-	5,059
19	General Office Expense	13,616	-	-	-	-	-	13,616
20	Miscellaneous	42,644	-	-	-	-	-	42,644
21	Maintenance Expense	198,697	(187,950)	-	-	-	-	10,747
22	Depreciation & Amortization	291,351	-	(103,694)	-	-	-	187,656
23	General Taxes-Property Taxes	44,112	-	-	73	-	-	44,184
24	General Taxes-Other	17,638	-	-	-	-	-	17,638
25	Income Taxes	(159,839)	-	-	-	120,992	-	(38,847)
26	**Total Operating Expenses**	$ 1,158,005	$ (187,950)	$ (103,694)	$ 73	$ 120,992	$ 7,916	$ 995,341
27	**Operating Income (Loss)**	$ (131,419)	$ 187,950	$ 103,694	$ (73)	$ (120,992)	$ (7,916)	$ 31,245

ADJ #		References:
1	Tank Maintenance Accrual	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
5	Income Taxes	GTM15
5	Chemicals	GTM 16

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Surrebuttal Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 198,697	$ (187,950)	$ 10,747

Repair and Maintenance Expenses	
Calendar year 2005	16,662
Calendar year 2006	6,712
Calendar year 2007	8,866
Total for three year period	32,240
Normalization Period	3
Normalized Amount	10,747

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	10,144	0.00%	-
3	302000	Franchises	-	0.00%	-
4	303200	Land & Land Rights SS	41,597	0.00%	-
5	303300	Land & Land Rights P	-	0.00%	-
6	303500	Land & Land Rights TD	-	0.00%	-
7	303600	Land & Land Rights AG	-	0.00%	-
8	304100	Struct & Imp SS	2,033,378	2.58%	52,461
9	304200	Struct & Imp P	99,968	0.00%	-
10	304300	Struct & Imp WT	-	0.00%	-
11	304400	Struct & Imp TD	-	-	-
12	304600	Struct & Imp Offices	20,698	2.58%	534
13	304800	Struct & Imp Misc	-	0.00%	-
14	305000	Collect & Impounding	148,253	2.54%	3,766
15	307000	Wells & Springs	314,817	2.54%	7,996
16	310100	Power Generation Equip Other	580	3.83%	22
17	311200	Pump Equip Electric	1,295,028	3.83%	49,600
18	311300	Pump Equip Diesel	-		-
19	311500	Pump Equip Other	4,202	0.00%	-
20	320100	Water Treatment Equipment non-media [1]	258,942	5.00%	12,947
21	330000	Dist Reservoirs & Standpipe	1,256,317	2.33%	29,272
22	331001	TD Mains Not Classified by Size	758,554	2.10%	15,930
23	331100	TD Mains 4in & Less	442,775	2.10%	9,298
24	331200	TD Mains 6in to 8in	850,235	2.10%	17,855
25	331300	TD Mains 10in to 16in	730,665	2.10%	15,344
26	333000	Services	135,231	2.89%	3,908
27	334100	Meters	175,586	3.52%	6,181
28	334200	Meter Installations	17,253	3.52%	607
29	335000	Hydrants	-	1.99%	-
30	339100	Othber P/E Intangible	-		-
31	339250	Other P/E SS	33,463	0.00%	-
32	340100	Office Furniture & Equip	3,254	4.47%	145
33	340200	Comp & Periph Equip	23,678	10.00%	2,368
34	341100	Trans Equip Lt Duty Trks	76,510	20.00%	15,302
35	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
36	342000	Stores Equipment	-	3.93%	-
37	343000	Tools,Shop,Garage Equip	17,822	4.49%	800
38	344000	Laboratory Equipment	460	3.06%	14
39	345000	Power Operated Equipment	33,093	2.55%	844
40	346100	Comm Equip Non-Telephone	11,702	8.37%	979
41	346300	Comm Equip Other	44,413	6.19%	2,749
42			-		-
43	*CORPORATION ALLOCATION*		-		-
44	304620	Struct & Imp Leasehold	2,261	14.28%	323
45	331001	Mains	-	2.10%	-
46	340100	Office Furniture & Equip	11,195	4.47%	500
47	340200	Comp & Periph Equip	4,553	10.00%	455
48	340300	Computer Software	17,917	25.00%	4,479
49	340300	Computer Software-Other	465	25.00%	116
50	343000	Tools,Shop,Garage Equip	383	4.49%	17
51	346100	Comm Equip Non-Telephone	1,852	8.37%	155
52	346300	Comm Equip Other	49	6.19%	3
53					
54	*Post Test Year Arsenic O&M Deferral:*				
55	Cost for Media Replacement in Havasu (March, 2008)		88,300		-
56	Add AFUDC - Cost times rate times # of months		6,696		-
57			-		-
58		Rounding			-
59		**Total Plant in Service**	8,972,287	2.84%	254,973
60					
61					
62		Less Non Depreciable Plant			
63	301000	Organization	10,144	0.00%	-
64	303200	Land & Land Rights SS	41,597	0.00%	-
65	303600	Land & Land Rights AG	-	0.00%	-
66					
67		Net Depreciable Plant and Depreciation Amounts	$ 8,920,546		$ 254,973
68		Composite Depreciation Rate		2.86%	
69		Less			
70		Amortization of Regulatory CIAC at Settlement Rate			28,087
71		Amortization of CIAC at Composite Rate	$ 1,372,488		$ 39,229
72		Staff Recommended Depreciation Expense			$ 187,656
73		Company Proposed Depreciation Expense			291,351
74		Staff Adjustment			$ (103,694)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2005	$ 1,026,586	$ 1,026,586
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	2,053,172	2,053,172
4	Staff Recommended Revenue	1,026,586	1,408,317
5	Subtotal (Line 4 + Line 5)	3,079,758	3,461,489
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	1,026,586	1,153,830
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	2,053,172	2,307,659
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	2,066,626	2,321,113
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	475,324	533,856
15	Composite Property Tax Rate - Obtained from ADOR	9.30%	9.30%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 44,184	
17	Company Proposed Property Tax	$ 44,112	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ 73	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 49,625
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 44,184
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 5,441
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 5,441
23	Increase in Revenue Requirement		$ 381,731
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.42533%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (159,839)	$ 120,992	$ (38,847)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-16

OPERATING INCOME ADJUSTMENT #5 - CHEMICAL EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Chemicals	$ 88,249	$ 7,916	$ 96,165

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1- PLANT, ACCUMULATED DEPRECIATION & AIAC
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 12,041,310	$ 12,041,310	$ 8,909,632	$ 8,909,632
2	Adjusted Operating Income (Loss)	$ 37,140	$ 37,140	$ 513,875	$ 513,875
3	Current Rate of Return (L2 / L1)	0.31%	0.31%	5.77%	5.77%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 1,011,470	$ 1,011,470	$ 653,967	$ 653,967
6	Operating Income Deficiency (L5 - L2)	$ 974,330	$ 974,330	$ 140,092	$ 140,092
7	Gross Revenue Conversion Factor	1.6990	1.6990	1.6524	1.6524
8	Required Revenue Increase (L7 * L6)	$ 1,655,405	$ 1,655,405	$ 231,490	$ 231,490
9	Adjusted Test Year Revenue	$ 5,113,631	$ 5,113,631	$ 5,113,631	$ 5,113,631
10	Proposed Annual Revenue (L8 + L9)	$ 6,769,036	$ 6,769,036	$ 5,345,121	$ 5,345,121
11	Required Increase in Revenue (%)	32.37%	32.37%	4.53%	4.53%
12	Rate of Return on Common Equity (%)	11.50%	11.50%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4824%					
5	Subtotal (L3 - L4)	60.5176%					
6	**Revenue Conversion Factor (L1 / L5)**	1.652412					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.4390%					
22	Effective Property Tax Factor (L20*L21)		0.8835%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4824%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 653,967					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 513,875					
26	Required Increase in Operating Income (L24 - L25)		$ 140,092				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 232,438					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 144,371					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 88,067				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 5,345,121					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 224,370					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 221,039					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 3,331				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 231,491				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				Mohave Water	Mohave Water	Mohave Water Only	Mohave Water Only
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 5,113,631	$ 5,345,121		
40	Operating Expenses Excluding Income Taxes			$ 4,455,386	$ 4,458,717		
41	Synchronized Interest (L56)			$ 284,217	$ 284,217		
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ 374,028	$ 602,188	$ -	$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ 26,062	$ 41,960	$ -	$ -
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ 347,966	$ 560,228	$ -	$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500	$ -	$ -
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250	$ -	$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500	$ -	$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650	$ -	$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 4,408	$ 76,577	$ -	$ -
51	Total Federal Income Tax	$ -	$ -	$ 118,308	$ 190,477	$ -	
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ 144,371	$ 232,438	$ -	$ -
53	Effective Tax Rate				34.0000%		

		Mohave Water
	Calculation of Interest Synchronization:	
54	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 8,909,632
55	Weighted Average Cost of Debt	3.1900%
56	Synchronized Interest (L45 X L46)	$ 284,217

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 28,800,225	$ (408,375)	$ 28,391,850
2	Less: Accumulated Depreciation	13,084,198	21,895	13,106,093
3	Net Plant in Service	$ 15,716,027	$ (430,270)	$ 15,285,757
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 107,549	$ 94,452	$ 202,001
5	Less: Accumulated Amortization	4	-	4
6	Net CIAC	107,545	94,452	201,997
7	Advances in Aid of Construction (AIAC)	5,947,009	429,200	6,376,209
8	Imputed Reg AIAC	-	348,557	348,557
9	Imputed Reg CIAC	1,157,044	-	1,157,044
10	Deferred Income Tax Credits (Debits)	(1,360,455)	-	(1,360,455)
	Customer Meter Deposits	7,800		7,800
	ADD:			
11	Cash Working Capital	367,562	(179,227)	188,335
12	Prepayments	57,963	-	57,963
13	Supplies Inventory	8,897	-	8,897
14	Projected Capital Expenditures		-	-
15	Deferred Debits	1,749,805	(1,649,972)	99,833
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 12,041,310	$ (3,131,678)	$ 8,909,632

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] ADJ #6	[G] ADJ #7	[F] STAFF ADJUSTED
		PLANT IN SERVICE:									
1	301000	Organization	34,004								$ 34,004
2	302000	Franchises	37,061						$ -	$ -	$ 37,061
3	303200	Land & Land Rights SS	290,792						-	-	$ 290,792
4	303300	Land & Land Rights P	2,351						-	-	$ 2,351
5	303500	Land & Land Rights TD	9,609								$ 9,609
6	303600	Land & Land Rights AG	31,052								$ 31,052
7	304100	Struct & Imp SS	389,266							63,517	$ 452,783
8	304200	Struct & Imp P	1,687								$ 1,687
9	304300	Struct & Imp WT	47,846						-	-	$ 47,846
10	304400	Struct & Imp TD	4,583						-	-	$ 4,583
11	304510	Struct & Imp AG Cap Lease	-						-	-	$ -
12	304600	Struct & Imp Offices	457,148								$ 457,148
13	304700	Struct & Imp Store, Shop, Garage	29,223						-	-	$ 29,223
14	305000	Collect & Impounding	663,944						-	-	$ 663,944
15	307000	Wells & Springs	807,515							258,428	$ 1,065,943
16	310100	Power Generation Equip Other	137,874							50,355	$ 188,229
17	311200	Pump Equip Electric	2,264,799						-	57,926	$ 2,322,725
18	311300	Pump Equip Diesel	-						-	-	$ -
19	311500	Pump Equip Other	1,009						-	-	$ 1,009
20	320100	WT Equip Non-Media	50,870						-	-	$ 50,870
21	330000	Dist Reservoirs & Standpipe	1,584,129					(490,772)	-	99,695	$ 1,193,052
22	331001	TD Mains Not Classified by Size	49,470					(59,875)			$ (10,405)
23	331100	TD Mains 4in & Less	11,718,645						-		$ 11,718,645
24	331200	TD Mains 6in to 8in	2,367,285	(518,976)						108,829	$ 1,957,138
25	331300	TD Mains 10in to 16in	216,751					(60,084)			$ 156,667
26	333000	Services	3,447,830						-	-	$ 3,447,830
27	334100	Meters	1,770,642						-	-	$ 1,770,642
28	334200	Meter Installations	236,697						-	-	$ 236,697
29	335000	Hydrants	36,473								$ 36,473
30	339250	Other P/E SS	-							82,582	$ 82,582
31	339500	Other P/E TD	-						-	-	$ -
32	340100	Office Furniture & Equip	137,645								$ 137,645
33	340200	Comp & Periph Equip	66,842						-	-	$ 66,842
34	340300	Computer Software	833						-	-	$ 833
35	341100	Trans Equip Lt Duty Trks	343,147								$ 343,147
36	341200	Trans Equip Hvy Duty Trks	-								$ -
37	342000	Stores Equipment	2,400								$ 2,400
38	343000	Tools,Shop,Garage Equip	134,138						-	-	$ 134,138
39	344000	Laboratory Equipment	7,623						-	-	$ 7,623
40	345000	Power Operated Equipment	172,529						-	-	$ 172,529
41	346100	Comm Equip Non-Telephone	180,533						-	-	$ 180,533
42	346200	Comm Equip Telephone	49,678						-	-	$ 49,678
43	346300	Comm Equip Other	5,110						-	-	$ 5,110
44											$ -
45		*CORPORATE PLANT ALLOCATION*							-	-	$ -
46	304620	Struct & Imp Leasehold	23,411								$ 23,411
47	331001	Mains									$ -
48	340100	Office Furniture & Equip	115,919								$ 115,919
49	340200	Comp & Periph Equip	47,147								$ 47,147
50	340300	Computer Software	185,522								$ 185,522
51	340300	Computer Software-Other	4,819								$ 4,819
52	343000	Tools,Shop,Garage Equip	3,963								$ 3,963
53	346100	Comm Equip Non-Telephone	19,175								$ 19,175
54	346300	Comm Equip Other	505								$ 505
55											$ -
56		*POST TEST YEAR PLANT*									$ -
57	330000	Dist Reservoirs & Standpipe	490,772								$ 490,772
58	331300	TD Mains 10in to 16in	60,084								$ 60,084
59	331400	TD Mains Greater than 18"	59,875								$ 59,875
60											$ -
61											$ -
62											$ -
63		**Total Plant in Service**	28,800,226	(518,976)	-	-	-	(610,731)	-	721,332	28,391,851
64		28,281,250									
65		ACCUMULATED DEPRECIATION	13,084,198	(23,895)				-	-	45,790	13,106,093
66		Net Plant in Service (L58 - L 59)	$ 15,716,028	$ (495,081)	$ -	$ -	$ -	$ (610,731)	$ -	$ 675,542	$ 15,285,758
67											
68		*LESS:*									
69		Contributions in Aid of Construction (CIAC)	$ 107,549		$ -	$ -	$ -	$ -	$ 94,452	$ -	$ 202,001
70		Less: Accumulated Amortization	4	-	-			-	-	-	4
71		Net CIAC (L63 - L64)	107,545	-	-	-	-	-	94,452	-	201,997
72		Advances in Aid of Construction (AIAC)	5,947,009	(518,976)					291,909	656,267	6,376,209
73		Imputed Reg Advances	-	-	-	348,557	-			-	348,557
74		Imputed Reg CIAC	1,157,044	-	-					-	1,157,044
75		Deferred Income Tax Credits (Debits)	(1,360,455)	-	-	-	-	-		-	(1,360,455)
76		Customer Meter Deposits	7,800								7,800
77		*ADD:*									-
78		Working Capital Allowance	367,562	-	(179,227)	-	-		-	-	188,335
79		Pumping Power		-	-	-	-		-	-	-
80		Purchase Wastewater Treatment Charges		-	-	-	-		-	-	-
81		Material and Supplies Inventory	8,897	-	-	-	-		-	-	8,897
82		Prepayments	57,963	-	-	-	-	-	-	-	57,963
83		Projected Capital Expenditures		-	-	-	-	-	-	-	-
84		Deferred Debits	1,749,805	-	-	-	(1,649,972)		-	-	99,833
85		Original Cost Rate Base	$ 12,041,311	$ 23,895	$ (179,227)	$ -	$ (1,649,972)	$ (610,731)	$ (386,361)	$ 19,275	$ 8,909,632

ADJ #		References:
1	Plant, Accumulated Depreciation and AIA	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	Post Test Year Plant	Schedule GWB-9
6	CIAC/AIAC on CWIP	Schedule GWB-9A
7	Transfer of Plant from Havasu	Schedule GWB-9B

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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	331.20	WinterHaven Subdivision Plant	169,040	(169,040)	-
	Acc Deprec.	WinterHaven Subdivision Acc Dep	4,868	(4,868)	-
	AIAC	WinterHaven Subdivision AIAC	169,040	(169,040)	-
	331.20	Villages at Stonebridge Plants	239,069.00	(239,069)	
	Acc Deprec.	Villages at Stonebridge Acc Dep	12,999.00	(12,999)	
	AIAC	Villages at Stonebridge AIAC	239,069.00	(239,069)	
	331.20	Mira Monte Subdivision Plant	110,867.00	(110,867)	
	Acc Deprec.	Mira Monte Subdivision Acc Dep	6,028.00	(6,028)	
	AIAC	Mira Monte Subdivision AIAC	110,867.00	(110,867)	
	331.20	Plant Adjustment	518,976.00	(518,976.00)	-
	Acc. Depreci	Acc. Depreciation Total Adj.	23,895.00	(23,895.00)	-
		AIAC Total Adj.	518,976.00	(518,976.00)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 899,973	$ -	899,973	12.00	$ 10,799,671
2	Purchased Water	$ 44,384	-	44,384	86.87	$ 3,855,638
3	Fuel & Power	$ 501,877	-	501,877	32.42	$ 16,270,852
4	Chemicals	$ 7,846		7,846	28.47	$ 223,384
5	Waste Disposal	$ (295)		(295)	30.00	$ (8,850)
6	Management Fees	$ 940,899		940,899	(3.88)	$ (3,650,688)
7	Group Insurance	$ 209,312		209,312	(4.64)	$ (971,209)
8	Pensions	$ 127,879		127,879	45.00	$ 5,754,561
9	Regulatory Expense	$ 119,303		119,303	30.00	$ 3,579,090
10	Insurance Other Than Group	$ 51,991		51,991	45.00	$ 2,339,595
11	Customer Accounting	$ 132,002		132,002	7.46	$ 984,735
12	Rents	$ 15,559		15,559	(10.68)	$ (166,170)
13	General Office Expense	$ 103,944		103,944	30.00	$ 3,118,320
14	Miscellaneous	$ 354,017		354,017	30.00	$ 10,620,516
15	Maintenance Expense	$ 583,888	(488,307)	95,581	30.00	$ 2,867,430
16	Taxes Other Than Income-Property Taxes	$ 221,795		224,370	212.50	$ 47,678,677
17	Taxes Other Than Income-Other	$ 75,809		75,809	15.65	$ 1,186,412
18	Income Taxes	$ (196,927)		232,438	42.04	$ 9,771,690
19	Interest		284,217	284,217	106.52	30,274,820.93
20	**Total Operating Expenses**	4,193,256	(204,090)	4,421,107	765	144,528,475
21						144,528,475
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	32.69			
24	Revenue Lag	Company Workpapers	48.239			
25	Net Lag	Line 24 - 23	15.55			
26	Staff Adjusted Expenses	Line 20, Col C	4,421,107			
27	Cash Working Capital	Line 25 * Line 26/365 day	188,335			
28	Company As Field	Co Schedule B-5	367,562			
29	Staff Adjustment	To GWB-4	(179,227)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 4,208,406		$4,208,406
2	None	2002	-	622,613	3,585,793
3	None	2003	-	647,447	2,938,345
4	None	2004	-	647,447	2,290,898
5		2005		647,447	1,643,451
6		2006		647,447	996,004
7	None	2007	-	647,447	348,557
8	Per Staff		$ 4,208,406	$ 3,859,849	$ 348,557
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 348,557

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	1,749,805	(1,649,972)	99,833
2		$ 1,749,805	$ (1,649,972)	$ 3,399,777

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB- 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
330000	Distribution Reservoirs	490,772	$ (490,772)	$ -
331300	TD Mains 10"-16"	60,084	$ (60,084)	$ -
331001	TD Mains 18in and Grtr.	59,875	$ (59,875)	$ -
		610,731	(610,731)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB- 9A
SURREBUTTAL

RATE BASE ADJUSTMENT #6 - CIAC/AIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	CIAC	107,545	$ 94,452	$ 201,997
	AIAC	5,947,009	$ 291,909	$ 6,238,918

References:
Column [A]: Amounts included Per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB- 9B
SURREBUTTAL

RATE BASE ADJUSTMENT #7 - TRANSFER OF PLANT, ACCUMULATED DEPREC. AND CIAC FROM HAVASU

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
304100	Struct & Imp SS	$ 389,266	$ 63,517	$ 452,783
307000	Wells & Springs	807,515	$ 258,428	1,065,943
310100	Power Generation Equip Other	137,874	$ 50,355	188,229
311200	Pump Equip Electric	2,264,799	$ 57,926	2,322,725
330000	Dist Reservoirs & Standpipe	1,584,129	$ 99,695	1,683,824
331200	TD Mains 6in to 8in	2,367,285	$ 108,829	2,476,114
339250	Other P/E SS	-	82,582	82,582
Grand Total		$ 7,550,867	$ 721,333	$ 8,272,201
	For Associated Plant:			
	ACCUMULATED DEPRECIATION	13,084,198	$ 45,790	$13,129,988
	AIAC	5,947,009	$ 656,267	$ 6,603,276

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 4,932,608	$ -	$ 4,932,608	$ 231,490	$ 5,164,098
3	Other Revenues	181,023	-	181,023	-	181,023
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 5,113,631	$ -	$ 5,113,631	$ 231,490	$ 5,345,121
6						
7	Labor	$ 899,973	$ -	899,973	$ -	$ 899,973
8	Purchased Water	$ 44,384	-	44,384	-	44,384
9	Fuel & Power	$ 501,877	-	501,877	-	501,877
10	Chemicals	$ 7,846	-	7,846	-	7,846
11	Waste Disposal	$ (295)	-	(295)	-	(295)
12	Management Fees	$ 940,899	-	940,899	-	940,899
13	Group Insurance	$ 209,312	-	209,312	-	209,312
14	Pensions	$ 127,879	-	127,879	-	127,879
15	Regulatory Expense	$ 119,303	-	119,303	-	119,303
16	Insurance Other Than Group	$ 51,991	-	51,991	-	51,991
17	Customer Accounting	$ 132,002	-	132,002	-	132,002
18	Rents	$ 15,559	-	15,559	-	15,559
19	General Office Expense	$ 103,944	-	103,944	-	103,944
20	Miscellaneous	$ 354,017	-	354,017	-	354,017
21	Maintenance Expense	$ 583,888	(488,307)	95,581	-	95,581
22	Depreciation & Amortization	$ 883,235	(328,969)	554,265	-	554,265
23	General Taxes-Property Taxes	$ 221,795	(756)	221,039	3,331	224,370
24	General Taxes-Other	$ 75,809	-	75,809	-	75,809
25	Income Taxes	$ (196,927)	341,298	144,371	88,067	232,438
26						
27						
28	**Total Operating Expenses**	5,076,491	(476,735)	4,599,756	91,398	4,691,155
29	**Operating Income (Loss)**	$ 37,140	$ 476,735	$ 513,875	$ 140,092	$ 653,967

References:
Column (A): Company Schedule C-1
Column (B): Schedule GWB 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Surrebuttal Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Water Revenues	$ 4,932,608	$ -	$ -	$ -	$ -	$ 4,932,608
3	Other Revenues	181,023	-	-	-	-	$ 181,023
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 5,113,631	$ -	$ -	$ -	$ -	$ 5,113,631
6							
7	Labor	$ 899,973	$ -	$ -	$ -	$ -	899,973
8	Purchased Water	44,384	-	-	-	-	44,384
9	Fuel & Power	501,877	-	-	-	-	501,877
10	Chemicals	7,846	-	-	-	-	7,846
11	Waste Disposal	(295)	-	-	-	-	(295)
12	Management Fees	940,899	-	-	-	-	940,899
13	Group Insurance	209,312	-	-	-	-	209,312
14	Pensions	127,879	-	-	-	-	127,879
15	Regulatory Expense	119,303	-	-	-	-	119,303
16	Insurance Other Than Group	51,991	-	-	-	-	51,991
17	Customer Accounting	132,002	-	-	-	-	132,002
18	Rents	15,559	-	-	-	-	15,559
19	General Office Expense	103,944	-	-	-	-	103,944
20	Miscellaneous	354,017	-	-	-	-	354,017
21	Maintenance Expense	583,888	(488,307)	-	-	-	95,581
22	Depreciation & Amortization	883,235	-	(328,969)	-	-	554,265
23	General Taxes-Property Taxes	221,795	-	-	(756)	-	221,039
24	General Taxes-Other	75,809	-	-	-	-	75,809
25	Income Taxes	(196,927)	-	-	-	341,298	144,371
26							-
							-
27	**Total Operating Expenses**	$ 5,076,491	$ (488,307)	$ (328,969)	$ (756)	$ 341,298	$ 4,599,756
28	**Operating Income (Loss)**	$ 37,140	$ 488,307	$ 328,969	$ 756	$ (341,298)	$ 513,875

ADJ #		References:
1	Tank Maintenance Accrual	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 15

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Surrebuttal Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 583,888	$ (488,307)	$ 95,581

Repair and Maintenance Expenses	
Calendar year 2005	100,287
Calendar year 2006	91,056
Calendar year 2007	95,400
Total for three year period	286,743
Normalization Period	3
Normalized Amount	95,581

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	34,004	0.00%	-
3	302000	Franchises	37,061	0.00%	-
4	303200	Land & Land Rights SS	290,792	0.00%	-
5	303300	Land & Land Rights P	2,351	0.00%	-
6	303500	Land & Land Rights TD	9,609	0.00%	-
7	303600	Land & Land Rights AG	31,052	0.00%	-
8	304100	Struct & Imp SS	452,783	2.83%	12,814
9	304200	Struct & Imp P	1,687	2.39%	40
10	304300	Struct & Imp WT	47,846	2.50%	1,196
11	304400	Struct & Imp TD	4,583	1.81%	83
12	304510	Struct & Imp AG Cap Lease	-	4.63%	-
13	304600	Struct & Imp Offices	457,148	2.03%	9,280
14	304700	Struct & Imp Store, Shop, Garage	29,223	4.63%	1,353
15	305000	Collect & Impounding	663,944	2.54%	16,864
16	307000	Wells & Springs	1,065,943	2.70%	28,780
17	310100	Power Generation Equip Other	188,229	5.00%	9,411
18	311200	Pump Equip Electric	2,322,725	5.12%	118,923
19	311300	Pump Equip Diesel	-	5.00%	-
20	311500	Pump Equip Other	1,009	5.00%	50
21	320100	WT Equip Non-Media	50,870	7.06%	3,591
22	330000	Dist Reservoirs & Standpipe	1,193,052	1.81%	21,594
23	331001	TD Mains Not Classified by Size	(10,405)	1.53%	(159)
24	331100	TD Mains 4in & Less	11,718,645	1.53%	179,295
25	331200	TD Mains 6in to 8in	1,957,138	1.53%	29,944
26	331300	TD Mains 10in to 16in	156,667	1.53%	2,397
27	333000	Services	3,447,830	2.89%	99,642
28	334100	Meters	1,770,642	6.53%	115,623
29	334200	Meter Installations	236,697	6.53%	15,456
30	335000	Hydrants	36,473	1.99%	726
31	339250	Other P/E SS	82,582		-
32	339500	Other P/E TD	-		-
33	340100	Office Furniture & Equip	137,645	4.04%	5,561
34	340200	Comp & Periph Equip	66,842	10.00%	6,684
35	340300	Computer Software	833	25.00%	208
36	341100	Trans Equip Lt Duty Trks	343,147	20.00%	68,629
37	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
38	342000	Stores Equipment	2,400	3.93%	94
39	343000	Tools,Shop,Garage Equip	134,138	4.49%	6,023
40	344000	Laboratory Equipment	7,623	10.00%	762
41	345000	Power Operated Equipment	172,529	4.64%	8,005
42	346100	Comm Equip Non-Telephone	180,533	3.66%	6,608
43	346200	Comm Equip Telephone	49,678	9.76%	4,849
44	346300	Comm Equip Other	5,110	6.19%	316
45					
46	*CORPORATE PLANT ALLOCATION*				
47	304620	Struct & Imp Leasehold	23,411	14.28%	3,343
48	331001	Mains	-	1.53%	-
49	340100	Office Furniture & Equip	115,919	4.04%	4,683
50	340200	Comp & Periph Equip	47,147	10.00%	4,715
51	340300	Computer Software	185,522	25.00%	46,381
52	340300	Computer Software-Other	4,819	25.00%	1,205
53	343000	Tools,Shop,Garage Equip	3,963	4.49%	178
54	346100	Comm Equip Non-Telephone	19,175	3.66%	702
55	346300	Comm Equip Other	505	6.19%	31
56					
57	*POST TEST YEAR PLANT*				
58	330000	Dist Reservoirs & Standpipe	490,772	1.81%	8,883
59	331300	TD Mains 10in to 16in	60,084	1.53%	919
60	331400	TD Mains Greater than 18"	59,875	2.00%	1,198
61					
62		**Total Plant in Service**	28,391,851	2.98%	846,884
63					
64		Less Non Depreciable Plant			
65		Organization	34,004	0.00%	-
66		Franchises	37,061	0.00%	-
67		Land & Land Rights SS	290,792	0.00%	-
68		Land & Land Rights P	2,351	0.00%	-
69		Land & Land Rights TD	9,609	0.00%	-
70		Land & Land Rights AG	31,052	0.00%	-
71					
72		Net Depreciable Plant and Depreciation Amounts	$ 27,986,982		$ 846,884
73		Composite Depreciation Rate		3.03%	
74		Less			
75		Amortization of Regulatory CIAC at Settlement Rate			286,506
76		Amortization of CIAC at Composite Rate	$ 202,001		$ 6,113
77		Staff Recommended Depreciation Expense			$ 554,265
78		Company Proposed Depreciation Expense			883,235
79		Staff Adjustment			$ (328,969)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 5,113,631	$ 5,113,631
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	10,227,262	10,227,262
4	Staff Recommended Revenue	5,113,631	5,345,121
5	Subtotal (Line 4 + Line 5)	15,340,893	15,572,383
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	5,113,631	5,190,794
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	10,227,262	10,381,589
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	10,240,716	10,395,043
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	2,355,365	2,390,860
15	Composite Property Tax Rate - Obtained from ADOR	9.38%	9.38%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 221,039	
17	Company Proposed Property Tax	$ 221,795	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (756)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 224,370
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 221,039
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 3,331**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 3,331
23	Increase in Revenue Requirement		$ 231,490
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.43896%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (196,927)	$ 341,298	$ 144,371

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

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SCH #		TITLE
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GWB-	3	RATE BASE - ORIGINAL COST
GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 4,740,149	$ 4,740,149	$ 647,244	$ 647,244
2	Adjusted Operating Income (Loss)	$ 15,619	$ 15,619	$ 115,161	$ 115,161
3	Current Rate of Return (L2 / L1)	0.33%	0.33%	17.79%	17.79%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 398,173	$ 398,173	$ 47,508	$ 47,508
6	Operating Income Deficiency (L5 - L2)	$ 382,553	$ 382,553	$ (67,653)	$ (67,653)
7	Gross Revenue Conversion Factor	1.6786	1.6786	1.0921	1.0921
8	Required Revenue Increase (L7 * L6)	$ 642,143	$ 642,143	$ (73,887)	$ (73,887)
9	Adjusted Test Year Revenue	$ 796,161	$ 796,161	$ 796,161	$ 796,161
10	Proposed Annual Revenue (L8 + L9)	$ 1,438,304	$ 1,438,304	$ 722,274	$ 722,274
11	Required Increase in Revenue (%)	80.65%	80.65%	-9.28%	-9.28%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	8.4369%					
5	Subtotal (L3 - L4)	91.5631%					
6	**Revenue Conversion Factor (L1 / L5)**	1.092143					
	Calculation of Uncollectible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	6.9680%					
9	One Minus Combined Income Tax Rate (L7 - L8)	93.0320%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	0.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	0.0000%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		6.9680%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	6.9680%					
20	One Minus Combined Income Tax Rate (L18-L19)	93.0320%					
21	Property Tax Factor (GTM-14, L24)	1.5790%					
22	Effective Property Tax Factor (L20*L21)		1.4689%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			8.4369%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 47,508					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 115,161					
26	Required Increase in Operating Income (L24 - L25)		$ (67,653)				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 37,449					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 42,516					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ (5,067)				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 722,274					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 36,865					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 38,032					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ (1,167)				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ (73,887)				

	(A)	(B)	(C)	(D)	[E]	[F]
	Test Year			Staff Recommended		
	Mohave WW	Mohave WW	Mohave WW	Mohave WW	Mohave WW	Mohave WW
Calculation of Income Tax:						
39 Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 796,161			$ 722,274
40 Operating Expenses Excluding Income Taxes			$ 638,484			$ 637,318
41 Synchronized Interest (L56)			$ 20,647			$ 20,647
42 Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ 137,030			$ 64,309
43 Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%			6.9680%
44 Arizona Income Tax (L42 x L43)	$ -	$ -	$ 9,548			$ 4,481
45 Federal Taxable Income (L43 - L44)	$ -	$ -	$ 127,481			$ 59,828
46 Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500			$ 7,500
47 Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250			$ 6,250
48 Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500			$ 8,500
49 Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 10,718			$ 10,718
50 Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ -			$ -
51 Total Federal Income Tax	$ -	$ -	$ 32,968			$ 32,968
52 Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ 42,516			$ 37,449

53 Effective Tax Rate 0.0000%

	Mohave WW
Calculation of Interest Synchronization:	
54 Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 647,244
55 Weighted Average Cost of Debt	3.1900%
56 Synchronized Interest (L45 X L46)	$ 20,647

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 7,154,300	$ (4,238,442)	$ 2,915,858
2	Less: Accumulated Depreciation	367,213	(9,584)	357,629
3	Net Plant in Service	$ 6,787,087	$ (4,228,858)	$ 2,558,229
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 726,484	$ 65,395	$ 791,879
5	Less: Accumulated Amortization	57,539	-	57,539
6	Net CIAC	668,945	65,395	734,340
7	Advances in Aid of Construction (AIAC)	1,414,706	(306,362)	1,108,344
8	Imputed Reg AIAC	-	61,769	61,769
9	Imputed Reg CIAC	131,237	-	131,237
10	Deferred Income Tax Credits (Debits)	(105,590)	-	(105,590)
	Customer Meter Deposits			
	ADD:			
11	Cash Working Capital	58,358	(50,946)	7,412
12	Prepayments	3,661	-	3,661
13	Supplies Inventory	341	-	341
14	Projected Capital Expenditures		-	-
15	Deferred Debits	-	7,701	7,701
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 4,740,149	$ (4,092,905)	$ 647,244

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] ADJ #6	[G] ADJ #7	[H] ADJ #8	[F] STAFF ADJUSTED
		PLANT IN SERVICE:										
1	301000	Organization	-									$ -
2	352000	WW Franchises	364						$ -	$ -	$ -	$ 364
3	354200	WW Struct & Imp Coll	201,579						-	-	-	$ 201,579
4	360000	WW Collection Sewers Forced	5,382						-	-	-	$ 5,382
5	361100	WW Collecting Mains	1,615,707	(306,362)								$ 1,309,345
	362000	WW Special Coll Struct	74,760									$ 74,760
6	363000	WW Services Sewer	314,343									$ 314,343
7	364000	WW Flow Measuring Devices	23,113									$ 23,113
8	371100	WW Pump Equip Elect	18,935						-	-	-	$ 18,935
9	380100	WW Equip Sed Tanks/Acc	803,788						-	-	-	$ 803,788
10	380300	WW TD Equip Sldge Dry/Filt	8,807						-	-	-	$ 8,807
	380500	WW TD Equip Chem Trmt Plt	14,311									$ 14,311
11	380600	WW TD Equip Oth Disp	39,019						-	-	-	$ 39,019
12	393000	WW Tool Shop & Garage Equip	44,237						-	-	-	$ 44,237
	394000	WW Laboratory Equipment	587									$ 587
13	396000	Communication Equipment	26,205									$ 26,205
14	398000	Other Plant	-						-	-	-	$ -
15									-	-	-	$ -
16		*CORPORATE ALLOCATION*							-	-	-	$ -
17	304620	Struct & Imp Leasehold	1,817						-	-	-	$ 1,817
18	331001	Mains							-	-	-	$ -
19	340100	Office Furniture & Equip	8,997									$ 8,997
20	340200	Comp & Periph Equip	3,659						-	-	-	$ 3,659
21	340300	Computer Software	14,399									$ 14,399
22	340300	Computer Software-Other	374									$ 374
23	343000	Tools,Shop,Garage Equip	308						-	-	-	$ 308
24	346100	Comm Equip Non-Telephone	1,488						-	-	-	$ 1,488
25	346300	Comm Equip Other	39						-	-	-	$ 39
26												$ -
27	354500	WW Struct & Impr Gen	765,906					$ (765,906)				$ -
28	371100	WW Pump Equip Elect	813,581					$ (813,581)	-	-	-	$ -
29	380000	WW TD Equipment	2,352,593					$ (2,352,593)				$ -
30									-	-	-	$ -
31												$ -
32		**Total Plant in Service**	7,154,301	(306,362)	-	-	-	(3,932,080)	-	-	-	2,915,859
33												
34		Accumulated Depreication	367,213	(9,584)				-	-	-	-	357,629
35		Net Plant in Service	$ 6,787,088	$ (296,778)	$ -	$ -	$ -	$ (3,932,080)	$ -	$ -	$ -	$ 2,558,230
36												
37		*LESS:*										
38		Contributions in Aid of Construction (CIAC)	$ 726,484		$ -	$ -	$ -	$ -	$ 65,395	$ -	$ -	$ 791,879
39		Less: Accumulated Amortization	57,539	-	-			-	-	-	-	57,539
40		Net CIAC (L53 - L64)	668,945	-	-	-	-	-	65,395	-	-	734,340
41		Advances in Aid of Construction (AIAC)	1,414,706	(306,362)					-	-	-	1,108,344
42		Imputed Reg Advances	-	-	-	61,769	-			-	-	61,769
43		Imputed Reg CIAC	131,237	-	-					-	-	131,237
44		Deferred Income Tax Credits (Debits)	(105,590)	-	-	-	-	-		-	-	(105,590)
45		ITC										-
46		*ADD:*										-
47		Working Capital Allowance	58,358	-	(50,946)	-	-		-	-	-	7,412
48		Pumping Power		-	-	-	-		-	-	-	-
49		Purchase Wastewater Treatment Charges		-	-	-	-		-	-	-	-
50		Material and Supplies Inventory	341	-	-	-	-		-	-	-	341
51		Prepayments	3,661	-	-	-	-	-	-	-	-	3,661
52		Projected Capital Expenditures		-	-	-	-	-	-	-	-	-
53		Deferred Debits	-	-	-	-	7,701	-	-	-	-	7,701
54		Original Cost Rate Base	$ 4,740,150	$ 9,584	$ (50,946)	$ (61,769)	$ 7,701	$ (3,932,080)	$ (65,395)	$ -	$ -	$ 647,245

ADJ #		References:
1	Plant, Accumulated Depreciation and AIAC	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	Post Test Year Plant	Schedule GWB-9
6	CIAC/AIAC in CWIP	Schedule GWB-9A

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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	361.20	Mesa Vista Subdivision Plant	170,432	(170,432)	-
	Acc Deprec.	Mesa Vista Subdivision Acc Depr.	7,995	(7,995)	-
	AIAC	Mesa Vista Subdivision AIAC	170,432	(170,432)	-
	361.20	Sage Hill Subdivision Plant	135,930.00	(135,930)	
	Acc Deprec.	Sage Hill Subdivision Acc Dep	1,589.00	(1,589)	
	AIAC	Sage Hill Subdivision AIAC	135,930.00	(135,930)	
	361.20	Plant Adjustment	306,362.00	(306,362.00)	-
	Acc. Depreci	Acc. Depreciation Total Adj.	9,584.00	(9,584.00)	-
		AIAC Total Adj.	306,362.00	(306,362.00)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 108,996	$ -	108,996	12.00	$ 1,307,949
2	Fuel & Power	$ 73,650	-	73,650	86.87	$ 6,397,956
3	Chemicals	$ 9,214	-	9,214	32.42	$ 298,717
4	Waste Disposal	$ 126,228		126,228	28.47	$ 3,593,711
5	Management Fees	$ 123,665		123,665	30.00	$ 3,709,950
6	Group Insurance	$ 24,046		24,046	(3.88)	$ (93,298)
7	Pensions	$ 18,447		18,447	(4.64)	$ (85,595)
8	Regulatory Expense	$ 22,140		22,140	45.00	$ 996,316
9	Insurance Other Than Group	$ 7,294		7,294	30.00	$ 218,820 *
10	Customer Accounting	$ 16,497		16,497	45.00	$ 742,343
11	Rents	$ 1,613		1,613	7.46	$ 12,033
12	General Office Expense	$ 7,874		7,874	(10.68)	$ (84,094)
13	Miscellaneous	$ 16,726		16,726	30.00	$ 501,786 *
14	Maintenance Expense	$ 4,948		4,948	30.00	$ 148,440 *
15	General Taxes-Property Taxes	$ 37,922		36,865	212.50	$ 7,833,812
16	General Taxes-Other	$ 9,778		9,778	15.65	$ 153,028
17	Income Taxes	$ (76,894)	114,343	37,449	42.04	$ 1,574,350
18	Interest		20,647	20,647	106.52	2,199,328
19	**Total Operating Expenses**	532,144	134,990	666,077	734.73	29,425,551
20						
21						
22	Expense Lag	Line 21, Col. (E) / Col [C]	44.18			
23	Revenue Lag	Company Workpapers	48.239			
24	Net Lag	Line 24 - 23	4.06			
25	Staff Adjusted Expenses	Line 20, Col 35	666,077			
26	Cash Working Capital	Line 25 * Line 26/365 day	7,412			
27	Company As Field	Co Schedule B-5	58,358			
28	Staff Adjustment	To GWB-4	(50,946)			
29						

30 References:
31 Column [A]: Company Schedule C-1
32 Column [B]: Staff adjustments to expenses, See Testimony GWB
33 Column [C]: Column [A] + Column [B]
34 Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372
35 Column [E]: Column [C] * Column [D]

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 745,789		$ 745,789
2	None	2002	-	110,336	635,453
3	None	2003	-	114,737	520,716
4	None	2004	-	114,737	405,980
5	None	2005		114,737	291,243
6	None	2006		114,737	176,506
7	None	2007	-	114,737	61,769
8	Per Staff		$ 745,789	$ 684,020	$ 61,769
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 61,769

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	-	7,701	7,701
6			$ -	$ 7,701	$ (7,701)

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - POST TEST YEAR PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
354500	Structures & Imp Gen'l	765,906	$ (765,906)	$ -
371100	Pump Equip Electric	813,581	$ (813,581)	$ -
380000	TD Equipmen t	2,352,593	$ (2,352,593)	$ -
		3,932,080	(3,932,080)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB - 9A
SURREBUTTAL

RATE BASE ADJUSTMENT #6 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	CIAC	668,945	$ 65,395	$ 734,340

References:
Column [A]: Amounts included Per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Wastewater Revenues	$ 791,279	$ -	$ 791,279	$ (73,887)	$ 717,392
3	Other Wastewater Revenues	4,882	-	4,882	-	4,882
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 796,161	$ -	$ 796,161	$ (73,887)	$ 722,274
6						
7	Labor	$ 108,996	$ -	108,996	$ -	$ 108,996
8	Fuel & Power	73,650	-	73,650	-	73,650
9	Chemicals	9,214	-	9,214	-	9,214
10	Waste Disposal	126,228	-	126,228	-	126,228
11	Management Fees	123,665	-	123,665	-	123,665
12	Group Insurance	24,046	-	24,046	-	24,046
13	Pensions	18,447	-	18,447	-	18,447
14	Regulatory Expense	22,140	-	22,140	-	22,140
15	Insurance Other Than Group	7,294	-	7,294	-	7,294
16	Customer Accounting	16,497	-	16,497	-	16,497
17	Rents	1,613	-	1,613	-	1,613
18	General Office Expense	7,874	-	7,874	-	7,874
19	Miscellaneous	16,726	-	16,726	-	16,726
20	Maintenance Expense	4,948	-	4,948	-	4,948
21	Depreciation & Amortization	248,398	(219,061)	29,337	-	29,337
22	General Taxes-Property Taxes	37,922	109	38,032	(1,167)	36,865
23	General Taxes-Other	9,778	-	9,778	-	9,778
24	Income Taxes	(76,894)	119,410	42,516	(5,067)	37,449
25	0					
26	0					
27	**Total Operating Expenses**	780,542	(99,541)	681,000	(6,234)	674,766
28	**Operating Income (Loss)**	$ 15,619	$ 99,541	$ 115,161	$ (67,653)	$ 47,508

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Surrebuttal Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Depreciation Exp. ADJ #1	[C] Property Taxes ADJ #2	[D] Income Taxes ADJ #3	[G] STAFF ADJUSTED
1						
2	Wastewater Revenues	$ 791,279	$ -	$ -	$ -	$ 791,279
3	Other Wastewater Revenues	4,882	-	-	-	$ 4,882
4	Other	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 796,161	$ -	$ -	$ -	$ 796,161
6						
7	Labor	$ 108,996	$ -	$ -	$ -	108,996
8	Fuel & Power	73,650	-	-	-	73,650
9	Chemicals	9,214	-	-	-	9,214
10	Waste Disposal	126,228	-	-	-	126,228
11	Management Fees	123,665	-	-	-	123,665
12	Group Insurance	24,046	-	-	-	24,046
13	Pensions	18,447	-	-	-	18,447
14	Regulatory Expense	22,140	-	-	-	22,140
15	Insurance Other Than Group	7,294	-	-	-	7,294
16	Customer Accounting	16,497	-	-	-	16,497
17	Rents	1,613	-	-	-	1,613
18	General Office Expense	7,874	-	-	-	7,874
19	Miscellaneous	16,726	-	-	-	16,726
20	Maintenance Expense	4,948	-	-	-	4,948
21	Depreciation & Amortization	248,398	(219,061)	-	-	29,337
22	General Taxes-Property Taxes	37,922	-	109	-	38,032
23	General Taxes-Other	9,778	-	-	-	9,778
24	Income Taxes	(76,894)	-	-	74,283	(2,611)
25						-
26						-
27						
28	**Total Operating Expenses**	$ 780,542	$ (219,061)	$ 109	$ 74,283	$ 635,873
29	**Operating Income (Loss)**	$ 15,619	$ 219,061	$ (109)	$ (74,283)	**$ 160,288**

ADJ #		References:
1	Depreciation Expense	GTM 12
2	Property Taxes	GTM 13
3	Income Taxes	GTM 14

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Surrebuttal Schedule GTM-12

OPERATING ADJUSTMENT #1- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	-	0.00%	-
3	352000	WW Franchises	364	0.00%	-
4	354200	WW Struct & Imp Coll	201,579	2.80%	5,644
5	360000	WW Collection Sewers Forced	5,382	2.00%	108
6	361100	WW Collecting Mains	1,309,345	2.00%	26,187
7	362000	WW Special Coll Struct	74,760	2.00%	1,495
8	363000	WW Services Sewer	314,343	2.04%	6,413
9	364000	WW Flow Measuring Devices	23,113	10.00%	2,311
10	371100	WW Pump Equip Elect	18,935	5.42%	1,026
11	380100	WW Equip Sed Tanks/Acc	803,788	3.60%	28,936
12	380300	WW TD Equip Sldge Dry/Filt	8,807	5.00%	440
13	380500	WW TD Equip Chem Trmt Plt	14,311	5.00%	716
14	380600	WW TD Equip Oth Disp	39,019	5.00%	1,951
15	393000	WW Tool Shop & Garage Equip	44,237	4.47%	1,977
16	394000	WW Laboratory Equipment	587	3.71%	22
17	396000	Communication Equipment	26,205	10.30%	2,699
18	398000	Other Plant	-		-
19					
20	*CORPORATE ALLOCATION*				-
21	304620	Struct & Imp Leasehold	1,817	14.28%	259
22	331001	Mains	-	1.53%	-
23	340100	Office Furniture & Equip	8,997	4.04%	363
24	340200	Comp & Periph Equip	3,659	10.00%	366
25	340300	Computer Software	14,399	25.00%	3,600
26	340300	Computer Software-Other	374	25.00%	94
27	343000	Tools,Shop,Garage Equip	308	4.47%	14
28	346100	Comm Equip Non-Telephone	1,488	3.66%	54
29	346300	Comm Equip Other	39	6.19%	2
30					
31	*POST TEST YEAR PLANT*				-
32	354500	WW Struct & Impr Gen	-	2.00%	-
33	371100	WW Pump Equip Elect	-	5.42%	-
34	380000	WW TD Equipment	-	1.53%	-
35					-
36					-
37					-
38					-
39					-
40					-
41					-
42					-
43					-
44					-
45					-
46					-
47					-
48					-
49					-
50					-
51					-
52					-
53					-
54			-		-
55		**Total Plant in Service**	2,915,859	2.90%	84,679
56					
57					
58		Less Non Depreciable Plant			
59	352000	WW Franchises	364	0.00%	-
60	304620	Struct & Imp Leasehold	1817	14.28%	259.47
61					
62					363.48
63		Net Depreciable Plant and Depreciation Amounts	$ 2,913,678		$ 84,056
64		Composite Depreciation Rate		2.88%	
65		Less			
66		Amortization of Regulatory CIAC at Settlement Rate			32,497
67		Amortization of CIAC at Composite Rate	$ 791,879		$ 22,845
68		Staff Recommended Depreciation Expense			$ 29,337
69		Company Proposed Depreciation Expense			248,398
70		Staff Adjustment			$ (219,061)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 796,161	$ 796,161
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	1,592,322	1,592,322
4	Staff Recommended Revenue	796,161	722,274
5	Subtotal (Line 4 + Line 5)	2,388,483	2,314,596
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	796,161	771,532
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	1,592,322	1,543,064
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	1,605,776	1,556,518
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	369,328	357,999
15	Composite Property Tax Rate - Obtained from ADOR	10.30%	10.30%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 38,032	
17	Company Proposed Property Tax	$ 37,922	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ 109**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 36,865
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 38,032
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ (1,167)**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ (1,167)
23	Increase in Revenue Requirement		$ (73,887)
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.57895%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ 126,228	$ (83,712)	$ 42,516

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1- PLANT, ACCUMULATED DEPRECIATION & AIAC
GWB-	6	RATE BASE ADJUSTMENT #2 - WORKING CAPITAL
GWB-	7	RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC
GWB-	8	RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS
GWB-	9	RATE BASE ADJUSTMENT #5 - CIAC IN CWIP
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 37,901,086	$ 37,901,086	$ 37,239,151	$ 37,239,151
2	Adjusted Operating Income (Loss)	$ 587,425	$ 587,425	$ 635,956	$ 635,956
3	Current Rate of Return (L2 / L1)	1.55%	1.55%	1.71%	1.71%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 3,183,691	$ 3,183,691	$ 2,733,354	$ 2,733,354
6	Operating Income Deficiency (L5 - L2)	$ 2,596,266	$ 2,596,266	$ 2,097,397	$ 2,097,397
7	Gross Revenue Conversion Factor	1.6471	1.6471	1.6460	1.6460
8	Required Revenue Increase (L7 * L6)	$ 4,276,301	$ 4,276,301	$ 3,452,273	$ 3,452,273
9	Adjusted Test Year Revenue	$ 5,701,431	$ 5,701,431	$ 5,701,431	$ 5,701,431
10	Proposed Annual Revenue (L8 + L9)	$ 9,977,732	$ 9,977,732	$ 9,153,704	$ 9,153,704
11	Required Increase in Revenue (%)	75.00%	75.00%	60.55%	60.55%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollectible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2459%					
5	Subtotal (L3 - L4)	60.7541%					
6	**Revenue Conversion Factor (L1 / L5)**	1.645980					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.0538%					
22	Effective Property Tax Factor (L20*L21)		0.6470%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2459%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 2,733,354					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 635,956					
26	Required Increase in Operating Income (L24 - L25)		$ 2,097,397				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 971,508					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (346,989)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 1,318,497				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 9,153,704					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 216,832					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 180,453					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 36,379				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 3,452,274				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				SCW Water	SCW Water		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 5,701,431	$ 9,153,704		
40	Operating Expenses Excluding Income Taxes			$ 5,412,464	$ 5,448,843		
41	Synchronized Interest (L56)			$ 1,187,929	$ 1,187,929		
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (898,962)	$ 2,516,934	$ -	$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (62,640)	$ 175,380	$ -	$ -
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (836,322)	$ 2,341,554	$ -	$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (7,500)	$ 7,500	$ -	$ -
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ (6,250)	$ 6,250	$ -	$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ (8,500)	$ 8,500	$ -	$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ (91,650)	$ 91,650	$ -	$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ (170,450)	$ 682,228	$ -	$ -
51	Total Federal Income Tax	$ -	$ -	$ (284,350)	$ 796,128		
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (346,989)	$ 971,508	$ -	$ -
53	Applicable Tax Rate				34.0000%		
54							
55							

		Sun City West
	Calculation of Interest Synchronization:	
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 37,239,151
57	Weighted Average Cost of Debt	3.1900%
58	Synchronized Interest (L45 X L46)	$ 1,187,929

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 48,893,385	$ (15,408)	$ 48,877,977
2	Less: Accumulated Depreciation	10,514,488	76,672	10,591,160
3	Net Plant in Service	$ 38,378,897	$ (92,080)	$ 38,286,817
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 20,548	$ 17,318	$ 37,866
5	Less: Accumulated Amortization	1,057	-	1,057
6	Net CIAC	19,491	17,318	36,809
7	Advances in Aid of Construction (AIAC)	1,175,373		1,175,373
8	Imputed Reg AIAC	-	1,006,408	1,006,408
9	Imputed Reg CIAC	392,368	-	392,368
10	Deferred Income Tax Credits (Debits)	(1,326,577)	-	(1,326,577)
	Customer Meter Deposits	1,225		1,225
	ADD:			
11	Cash Working Capital	480,140	(438,413)	41,727
12	Prepayments	24,906	-	24,906
13	Supplies Inventory	56,510	-	56,510
14	Projected Capital Expenditures ##		-	-
15	Deferred Debits	(777,486)	892,284	114,798
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 37,901,086	$ (661,935)	$ 37,239,151

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] ADJ #6	[G] ADJ #7	[H] ADJ #8	[F] STAFF ADJUSTED
		PLANT IN SERVICE:											
1	301000	Organization		20,086									$ 20,086
2	302000	Franchises		1,346									$ 1,346
3	303200	Land & Land Rights SS		11,651						-	-	-	$ 11,651
4	303300	Land & Land Rights P		44,957						-	-	-	$ 44,957
5	303500	Land & Land Rights TD		-									$ -
6	303600	Land & Land Rights AG		-									$ -
7	304100	Struct & Imp SS		7,620,981									$ 7,620,981
8	304200	Struct & Imp P		224,821									$ 224,821
9	304300	Struct & Imp WT		90,867						-	-	-	$ 90,867
10	304400	Struct & Imp TD		-						-	-	-	$ -
11	304600	Struct & Imp Offices		16,828						-	-	-	$ 16,828
12	304800	Struct & Imp Misc		-									$ -
13	305000	Collect & Impounding		-						-	-	-	$ -
14	307000	Wells & Springs		2,587,380						-	-	-	$ 2,587,380
15	310100	Power Generation Equip Other		36,044									$ 36,044
16	311200	Pump Equip Electric		5,105,926									$ 5,105,926
17	311300	Pump Equip Diesel		4,505						-	-	-	$ 4,505
18	311500	Pump Equip Other		169,696						-	-	-	$ 169,696
19		WT Equip Media		-									$ -
20	320100	WT Equip Non-Media		6,346,603						(92,080)	-	-	$ 6,254,523
21	330000	Dist Reservoirs & Standpipe		760,063	76,672						-	-	$ 836,735
22	331001	TD Mains Not Classified by Size		13,055,020						-	-	-	$ 13,055,020
23	331100	TD Mains 4in & Less		616									$ 616
24	331200	TD Mains 6in to 8in		409,389							-	-	$ 409,389
25	331300	TD Mains 10in to 16in		252,698									$ 252,698
26	332000	Fire Mains		169									$ 169
27	333000	Services		7,342,742						-	-	-	$ 7,342,742
28	334100	Meters		1,756,083						-	-	-	$ 1,756,083
29	334200	Meter Installations		147,291						-	-	-	$ 147,291
30	335000	Hydrants		1,835,680									$ 1,835,680
31	339100	Othber P/E Intangible		-									$ -
32	339500	Other P/E SS		-						-	-	-	$ -
33	340100	Office Furniture & Equip		20,787									$ 20,787
34	340200	Comp & Periph Equip		46,715						-	-	-	$ 46,715
35	341100	Trans Equip Lt Duty Trks		225,177						-	-	-	$ 225,177
36	341200	Trans Equip Hvy Duty Trks		21,027									$ 21,027
37	342000	Stores Equipment		142									$ 142
38	343000	Tools,Shop,Garage Equip		19,641									$ 19,641
39	344000	Laboratory Equipment		1,606						-	-	-	$ 1,606
40	345000	Power Operated Equipment		161,885						-	-	-	$ 161,885
41	346100	Comm Equip Non-Telephone		163,135						-	-	-	$ 163,135
42	346300	Comm Equip Other		1,338						-	-	-	$ 1,338
43										-	-	-	$ -
44										-	-	-	$ -
45	304620	Struct & Imp Leasehold		22,828						-	-	-	$ 22,828
46	331001	Mains											$ -
47	340100	Office Furniture & Equip		113,033									$ 113,033
48	340200	Comp & Periph Equip		45,973									$ 45,973
49	340300	Computer Software		180,903									$ 180,903
50	340300	Computer Software-Other		4,699									$ 4,699
51	343000	Tools,Shop,Garage Equip		3,864									$ 3,864
52	346100	Comm Equip Non-Telephone		18,698									$ 18,698
53	346300	Comm Equip Other		493									$ 493
54													$ -
55		**Total Plant in Service**		48,893,385	76,672	-	-	-	-	(92,080)	-	-	48,877,977
56			48,970,057										
57		Accumulated Depreciation		10,514,488	76,672				-	-	-	-	10,591,160
58		Net Plant in Service (L58 - L 59)		$ 38,378,897	$ -	$ -	$ -	$ -	$ -	$ (92,080)	$ -	$ -	$ 38,286,817
59													
60		*LESS:*											
61		Contributions in Aid of Construction (CIAC)		$ 20,548		$ -	$ -	$ -	$ 17,318	$ -	$ -	$ -	$ 37,866
62		Less: Accumulated Amortization		1,057	-	-			-	-	-	-	1,057
63		Net CIAC (L63 - L64)		19,491	-	-	-	-	17,318	-	-	-	36,809
64		Advances in Aid of Construction (AIAC)		1,175,373	-					-	-	-	1,175,373
65		Imputed Reg Advances		-	-	-	1,006,408				-	-	1,006,408
66		Imputed Reg CIAC		392,368	-	-					-	-	392,368
67		Deferred Income Tax Credits (Debits)		(1,326,577)	-	-	-				-	-	(1,326,577)
68		Customer Meter Deposits		1,225									1,225
69		*ADD:*											-
70		Working Capital Allowance		480,140	-	(438,413)	-			-	-	-	41,727
71		Pumping Power			-	-	-			-	-	-	-
72		Purchase Wastewater Treatment Charges			-	-	-			-	-	-	-
73		Material and Supplies Inventory		56,510	-	-	-			-	-	-	56,510
74		Prepayments		24,906	-	-	-			-	-	-	24,906
75		Projected Capital Expenditures			-	-	-			-	-	-	-
76		Deferred Debits		(777,486)	-	-	-	892,284		-	-	-	114,798
77		Original Cost Rate Base		$ 37,901,086	$ -	$ (438,413)	$ -	$ 892,284	$ (17,318)	$ (92,080)	$ -	$ -	$ 37,239,151

ADJ #		References:
1	Plant, Accumulated Depreciation and AIA	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	CIAC/AIAC inn CWIP	Schedule GWB-9
6	Overcapacity of Arsenic Treatment Plant	Schedule GWB-9A

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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	330.00	Dist Reservoirs & Standpipe Plant	-	76,672	76,672
		Dist Reservoirs & Standpipe Acc.Depreciation	-	76,672	76,672

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 703,217	$ -	703,217	12.00	$ 8,438,609
2	Purchased Water	$ (2,690)	-	(2,690)	86.87	$ (233,682)
3	Fuel & Power	$ 830,074	-	830,074	32.42	$ 26,910,992
4	Chemicals	$ 227,889		227,889	28.47	$ 6,488,013
5	Waste Disposal	$ 4,391		4,391	30.00	$ 131,730
6	Management Fees	$ 999,903		999,903	(3.88)	$ (3,879,624)
7	Group Insurance	$ 191,120		191,120	(4.64)	$ (886,797)
8	Pensions	$ 137,699		137,699	45.00	$ 6,196,439
9	Regulatory Expense	$ 33,802		33,802	30.00	$ 1,014,060 *
10	Insurance Other Than Group	$ 58,622		58,622	45.00	$ 2,637,990
11	Customer Accounting	$ 133,476		133,476	7.46	$ 995,731
12	Rents	$ 14,331		14,331	(10.68)	$ (153,055)
13	General Office Expense	$ 57,226		57,226	30.00	$ 1,716,780 *
14	Miscellaneous	$ 232,408		232,408	30.00	$ 6,972,229 *
15	Maintenance Expense	$ 247,328		65,577	30.00	$ 1,967,310 *
16	Taxes Other Than Income-Property Taxes	$ 179,896		180,453	212.50	$ 38,346,249
17	Taxes Other Than Income-Other	$ 65,832		65,832	15.65	$ 1,030,267
18	Income Taxes	$ (324,059)	(22,930)	(346,989)	42.04	$ (14,587,427)
19	Interest		1,187,929	1,187,929	106.52	126,538,187
20	**Total Operating Expenses**	3,790,465	1,164,999	4,774,269	764.73	209,644,001
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	43.91			
24	Revenue Lag	Company Workpapers	47.10			
25	Net Lag	Line 24 - 23	3.19			
26	Staff Adjusted Expenses	Line 20, Col 35	4,774,269			
27	Cash Working Capital	Line 25 * Line 26/365 day	41,727			
28	Company As Field	Co Schedule B-5	480,140			
29	Staff Adjustment	To GWB-4	(438,413)			
30						

31 References:
32 Column [A]: Company Schedule C-1
33 Column [B]: Staff adjustments to expenses, See Testimony GWB
34 Column [C]: Column [A] + Column [B]
35 Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372
36 Column [E]: Column [C] * Column [D]

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 12,151,160		$ 12,151,160
2	None	2002	-	1,797,706	10,353,454
3	None	2003	-	1,869,409	8,484,045
4	None	2004	-	1,869,409	6,614,636
5		2005		1,869,409	4,745,226
6		2006		1,869,409	2,875,817
7	None	2007	-	1,869,409	1,006,408
8	Per Staff		$ 12,151,160	$ 11,144,752	$ 1,006,408
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 1,006,408

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	(777,486)	892,284	114,798
6			$ (777,486)	$ 892,284	$ (1,669,770)

REFERENCES:
Columns [A]: Company schedules
Column [B]: *Column [C] less Column [A]*
Column [C]: See testimony GWB

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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
CIAC		19,491	$ 17,318	$ 36,809

References:
Column [A]: Amounts included Per filing.

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Schedule GWB - 9A
SURREBUTTAL

RATE BASE ADJUSTMENT #7 - OVERCAPACITY OF ARESENIC TREATMENT PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
32010(	WT Equip Non-Media	760,063	$ (92,080)	$ 667,983

References:
Column [A]: Amounts included in plant balances per filing.

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 5,661,030	$ -	$ 5,661,030	$ 3,452,273	$ 9,113,303
3	Other Revenues	40,401	-	40,401	-	40,401
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 5,701,431	$ -	$ 5,701,431	$ 3,452,273	$ 9,153,704
6	**Operating Expenses**					
7	Labor	$ 703,217	$ -	703,217	$ -	$ 703,217
8	Purchased Water	$ (2,690)	-	(2,690)	-	(2,690)
9	Fuel & Power	$ 830,074	-	830,074	-	830,074
10	Chemicals	$ 227,889	-	227,889	-	227,889
11	Waste Disposal	$ 4,391	-	4,391	-	4,391
12	Management Fees	$ 999,903	-	999,903	-	999,903
13	Group Insurance	$ 191,120	-	191,120	-	191,120
14	Pensions	$ 137,699	-	137,699	-	137,699
15	Regulatory Expense	$ 33,802	-	33,802	-	33,802
16	Insurance Other Than Group	$ 58,622	-	58,622	-	58,622
17	Customer Accounting	$ 133,476	-	133,476	-	133,476
18	Rents	$ 14,331	-	14,331	-	14,331
19	General Office Expense	$ 57,226	-	57,226	-	57,226
20	Miscellaneous	$ 232,408	-	232,408	-	232,408
21	Maintenance Expense	$ 247,328	(181,751)	65,577	-	65,577
22	Depreciation & Amortization	$ 1,323,541	155,593	1,479,134	-	1,479,134
23	General Taxes-Property Taxes	$ 179,896	557	180,453	36,379	216,832
24	General Taxes-Other	$ 65,832	-	65,832	-	65,832
25	Income Taxes	$ (324,059)	(22,930)	(346,989)	1,318,497	971,508
26						
27						
28	**Total Operating Expenses**	5,114,006	(48,531)	5,065,475	1,354,876	6,420,351
29	**Operating Income (Loss)**	$ 587,425	$ 48,531	$ 635,956	$ 2,097,397	$ 2,733,353

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

Surrebuttal Schedule GTM-11

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SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Water Revenues	$ 5,661,030	$ -	$ -	$ -	$ -	$ 5,661,030
3	Other Revenues	40,401	-	-	-	-	$ 40,401
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 5,701,431	$ -	$ -	$ -	$ -	$ 5,701,431
6							
7	Labor	$ 703,217	$ -	$ -	$ -	$ -	703,217
8	Purchased Water	(2,690)	-	-	-	-	(2,690)
9	Fuel & Power	830,074	-	-	-	-	830,074
10	Chemicals	227,889	-	-	-	-	227,889
11	Waste Disposal	4,391	-	-	-	-	4,391
12	Management Fees	999,903	-	-	-	-	999,903
13	Group Insurance	191,120	-	-	-	-	191,120
14	Pensions	137,699	-	-	-	-	137,699
15	Regulatory Expense	33,802	-	-	-	-	33,802
16	Insurance Other Than Group	58,622	-	-	-	-	58,622
17	Customer Accounting	133,476	-	-	-	-	133,476
18	Rents	14,331	-	-	-	-	14,331
19	General Office Expense	57,226	-	-	-	-	57,226
20	Miscellaneous	232,408	-	-	-	-	232,408
21	Maintenance Expense	247,328	(181,751)	-	-	-	65,577
22	Depreciation & Amortization	1,323,541	-	155,593	-	-	1,479,134
23	General Taxes-Property Taxes	179,896	-	-	557	-	180,453
24	General Taxes-Other	65,832	-	-	-	-	65,832
25	Income Taxes	(324,059)	-	-	-	(22,930)	(346,989)
26				-		-	-
27				-	-	-	-
28				-	-		-
29				-	-	-	-
30							
31							
32							
33							
34							
35							
36							
38							
39							
40							
41							
42	**Total Operating Expenses**	$ 5,114,006	$ (181,751)	$ 155,593	$ 557	$ (22,930)	$ 5,065,475
43	**Operating Income (Loss)**	$ 587,425	$ 181,751	$ (155,593)	$ (557)	$ 22,930	$ 635,956

ADJ #		References:
1	Management Fees	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 2

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Surrebuttal Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 247,328	$ (181,751)	$ 65,577

Repair and Maintenance Expenses	
Calendar year 2005	37,609
Calendar year 2006	48,820
Calendar year 2007	110,302
Total for three year period	196,731

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	20,086	0.00%	-
3	302000	Franchises	1,346	0.00%	-
4	303200	Land & Land Rights SS	11,651	0.00%	-
5	303300	Land & Land Rights P	44,957	0.00%	-
6	303500	Land & Land Rights TD	-	0.00%	-
7	303600	Land & Land Rights AG	-	0.00%	-
8	304100	Struct & Imp SS	7,620,981	2.50%	190,525
9	304200	Struct & Imp P	224,821	1.67%	3,755
10	304300	Struct & Imp WT	90,867	1.67%	1,517
11	304400	Struct & Imp TD	-	2.00%	-
12	304600	Struct & Imp Offices	16,828	4.63%	779
13	304800	Struct & Imp Misc	-	0.00%	-
14	305000	Collect & Impounding	-	0.00%	-
15	307000	Wells & Springs	2,587,380	2.52%	65,202
16	310100	Power Generation Equip Other	36,044	4.42%	1,593
17	311200	Pump Equip Electric	5,105,926	4.42%	225,682
18	311300	Pump Equip Diesel	4,505	5.00%	225
19	311500	Pump Equip Other	169,696	5.01%	8,502
	0	WT Equip Media	-	5.00%	-
20	320100	WT Equip Non-Media	6,346,603	7.06%	448,070
21	330000	Dist Reservoirs & Standpipe	836,735	1.67%	13,973
22	331001	TD Mains Not Classified by Size	13,055,020	1.53%	199,742
23	331100	TD Mains 4in & Less	616	1.53%	9
24	331200	TD Mains 6in to 8in	409,389	1.53%	6,264
25	331300	TD Mains 10in to 16in	252,698	1.53%	3,866
26	332000	Fire Mains	169	1.53%	3
27	333000	Services	7,342,742	2.48%	182,100
28	334100	Meters	1,756,083	2.51%	44,078
29	334200	Meter Installations	147,291	2.51%	3,697
30	335000	Hydrants	1,835,680	2.00%	36,714
31	339100	Othber P/E Intangible	-	0.00%	-
32	339500	Other P/E SS	-	2.00%	-
33	340100	Office Furniture & Equip	20,787	4.59%	954
34	340200	Comp & Periph Equip	46,715	10.00%	4,672
35	341100	Trans Equip Lt Duty Trks	225,177	20.00%	45,035
36	341200	Trans Equip Hvy Duty Trks	21,027	15.00%	3,154
37	342000	Stores Equipment	142	3.91%	6
38	343000	Tools,Shop,Garage Equip	19,641	4.02%	790
39	344000	Laboratory Equipment	1,606	3.71%	60
40	345000	Power Operated Equipment	161,885	5.02%	8,127
41	346100	Comm Equip Non-Telephone	163,135	10.30%	16,803
42	346300	Comm Equip Other	1,338	4.93%	66
43					
44					
45	304620	Struct & Imp Leasehold	22,828	14.28%	3,260
46	331001	Mains	-	1.53%	-
47	340100	Office Furniture & Equip	113,033	4.59%	5,188
48	340200	Comp & Periph Equip	45,973	10.00%	4,597
49	340300	Computer Software	180,903	25.00%	45,226
50	340300	Computer Software-Other	4,699	25.00%	1,175
51	343000	Tools,Shop,Garage Equip	3,864	4.02%	155
52	346100	Comm Equip Non-Telephone	18,698	10.30%	1,926
53	346300	Comm Equip Other	493	4.93%	24
54		**Total Plant in Service**	48,970,057	3.22%	1,577,512
55					
56					
57		Less Non Depreciable Plant			
58	301000	Organization	20,086	0.00%	-
59	302000	Franchises	1,346	0.00%	-
60	303200	Land & Land Rights SS	11,651	0.00%	-
61	303300	Land & Land Rights P	44,957	0.00%	-
62	304620	Struct & Imp Leasehold	22,828	14.28%	3,260
63		Net Depreciable Plant and Depreciation Amounts	$ 48,869,189		$ 1,574,252
64		Composite Depreciation Rate		3.22%	
65		Less			
66		Amortization of Regulatory CIAC at Settlement Rate			97,158
67		Amortization of CIAC at Composite Rate	$ 37,866		$ 1,220
68		Staff Recommended Depreciation Expense			$ 1,479,134
69		Company Proposed Depreciation Expense			1,323,541
70		Staff Adjustment			**$ 155,593**

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 5,701,431	$ 5,701,431
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	11,402,862	11,402,862
4	Staff Recommended Revenue	5,701,431	9,153,704
5	Subtotal (Line 4 + Line 5)	17,104,293	20,556,566
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	5,701,431	6,852,189
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	11,402,862	13,704,378
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	11,416,316	13,717,832
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	2,625,753	3,155,101
15	Composite Property Tax Rate - Obtained from ADOR	6.87%	6.87%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 180,453	
17	Company Proposed Property Tax	$ 179,896	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ 557**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 216,832
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 180,453
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 36,379**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 36,379
23	Increase in Revenue Requirement		$ 3,452,273
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.05377%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

ARIZONA-AMERICAN WATER COMPANY - SUN CITY WEST WATER
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Surrebuttal Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (324,059)	$ (22,930)	$ (346,989)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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SUrREBUTTAL TESTIMONY OF GERALD BECKER

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GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 40,864,986	$ 40,864,986	$ 38,855,656	$ 38,855,656
2	Adjusted Operating Income (Loss)	$ 1,552,497	$ 1,552,497	$ 1,867,671	$ 1,867,671
3	Current Rate of Return (L2 / L1)	3.80%	3.80%	4.81%	4.81%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 3,432,659	$ 3,432,659	$ 2,852,005	$ 2,852,005
6	Operating Income Deficiency (L5 - L2)	$ 1,880,161	$ 1,880,161	$ 984,334	$ 984,334
7	Gross Revenue Conversion Factor	1.6496	1.6496	1.6473	1.6473
8	Required Revenue Increase (L7 * L6)	$ 3,101,546	$ 3,101,546	$ 1,621,522	$ 1,621,522
9	Adjusted Test Year Revenue	$ 7,848,732	$ 7,848,732	$ 7,848,732	$ 7,848,732
10	Proposed Annual Revenue (L8 + L9)	$ 10,950,278	$ 10,950,278	$ 9,470,254	$ 9,470,254
11	Required Increase in Revenue (%)	39.52%	39.52%	20.66%	20.66%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2957%					
5	Subtotal (L3 - L4)	60.7043%					
6	**Revenue Conversion Factor (L1 / L5)**	1.647328					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.1348%					
22	Effective Property Tax Factor (L20*L21)		0.6968%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2957%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 2,852,005					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 42)	$ 1,867,671					
26	Required Increase in Operating Income (L24 - L25)		$ 984,334				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 1,011,624					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ 392,836					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 618,787				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 9,470,254					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 285,829					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 267,428					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 18,401				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 1,621,523				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				Paradise Valley	Paradise Valley		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-9, Col.(C) L5, GWB-1, Col. (D), L9)			$ 7,848,732	$ 9,470,254		
40	Operating Expenses Excluding Income Taxes			$ 5,588,225	$ 5,606,626		
41	Synchronized Interest (L47)			$ 1,242,767	$ 1,242,767		
42	Arizona Taxable Income (L30 - L31 - L32)	$ -	$ -	$ 1,017,740	$ 2,620,862		$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L33 x L34)	$ -	$ -	$ 70,916	$ 182,622		$ -
45	Federal Taxable Income (L33 - L35)	$ -	$ -	$ 946,824	$ 2,438,241		$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ 7,500	$ 7,500		
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ 6,250	$ 6,250		
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ 8,500	$ 8,500		
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ 91,650	$ 91,650		
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ 208,020	$ 715,102		
51	Total Federal Income Tax	$ -	$ -	$ 321,920	$ 829,002		
52	Combined Federal and State Income Tax (L35 + L42)	$ -	$ -	$ 392,836	$ 1,011,624		$ -
53	Effective Tax Rate				34.0000%		
54							
55							

	Calculation of Interest Synchronization:	Paradise Valley
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 38,958,204
57	Weighted Average Cost of Debt	3.1900%
58	Synchronized Interest (L45 X L46)	$ 1,242,767

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 61,588,447	$ (180,916)	$ 61,407,531
2	Less: Accumulated Depreciation	12,099,985	(80,362)	12,019,623
3	Net Plant in Service	$ 49,488,461	$ (100,554)	$ 49,387,907
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 12,789,338	$ 322,588	$ 13,111,926
5	Less: Accumulated Amortization	5,539,222	-	5,539,222
6	Net CIAC	7,250,116	322,588	7,572,704
7	Advances in Aid of Construction (AIAC)	1,704,269		1,704,269
8	Imputed Reg AIAC	-	-	-
9	Imputed Reg CIAC	-	-	-
10	Deferred Income Tax Credits (Debits)	1,600,604	-	1,600,604
	Customer Meter Deposits	12,600		12,600
	ADD:			
11	Cash Working Capital	549,034	(502,551)	46,483
12	Prepayments	117,955	-	117,955
13	Supplies Inventory	38,726	-	38,726
14	Projected Capital Expenditures		-	-
15	Deferred Debits	1,238,398	(1,083,637)	154,761
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 40,864,986	$ (2,009,330)	$ 38,855,656

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ #1	(C) ADJ #2	(D) ADJ #3	(E) ADJ #4	(E) ADJ #5	(F) STAFF ADJUSTED
		PLANT IN SERVICE:							
1	301000	Organization	15,350						$ 15,350
2	302000	Franchises	-						$ -
3	339600	Miscellaneous Intangibles	10,520						$ 10,520
4	303200	Land & Land Rights SS	-						$ -
5	303300	Land & Land Rights P	-						$ -
6	303500	Land & Land Rights TD	8,324						$ 8,324
7	303600	Land & Land Rights AG	-						$ -
8	304100	Struct & Imp SS	16,976,165						$ 16,976,165
9	304200	Struct & Imp P	0						$ 0
10	304300	Struct & Imp WT	3,003,090						$ 3,003,090
11	304400	Struct & Imp TD	23,764						$ 23,764
12	304500	Struct & Imp AG	5,732						$ 5,732
13	304600	Struct & Imp Offices	-						$ -
14	304700	Struct & Imp Store, Shop, Gar	3,036						$ 3,036
15	304800	Struct & Imp Misc	(8,633)						$ (8,633)
16	305000	Collect & Impounding	-						$ -
17	307000	Wells & Springs	1,519,916						$ 1,519,916
18	310100	Power Generation Equip Other	554,631						$ 554,631
19	311200	Pump Equip Electric	3,600,015	(112,214)					$ 3,487,801
20	311300	Pump Equip Diesel	190						$ 190
21	311500	Pump Equip Other	-						$ -
22	320100	WT Equip Non-Media	9,826,155						$ 9,826,155
23	309000	Supply Mains	14,058						$ 14,058
24	330000	Dist Reservoirs & Standpipe	2,184,648	(68,702)					$ 2,115,946
25	331001	TD Mains Not Classified by Size	2,395,291						$ 2,395,291
26	331100	TD Mains 4in & Less	114,959						$ 114,959
27	331200	TD Mains 6in to 8in	5,046,296						$ 5,046,296
28	331300	TD Mains 10in to 16in	9,132,418						$ 9,132,418
29	332000	Fire Mains	14,058						$ 14,058
30	333000	Services	2,724,758						$ 2,724,758
31	334100	Meters	350,870						$ 350,870
32	334200	Meter Installations	148,304						$ 148,304
33	335000	Hydrants	1,054,322						$ 1,054,322
34	339100	Othber P/E Intangible	-						$ -
35	339500	Other P/E TD	-						$ -
36	340100	Office Furniture & Equip	58,812						$ 58,812
37	340200	Comp & Periph Equip	38,292						$ 38,292
38	340300	Computer Software	14,711						$ 14,711
39	340500	Other Office Equipment	674						$ 674
40	341100	Trans Equip Lt Duty Trks	(0)						$ (0)
41	341300	Trans Equip Autos	3,541						$ 3,541
42	341400	Trans Equip Other (golf carts only)	27,905						$ 27,905
43	343000	Tools,Shop,Garage Equip	111,118						$ 111,118
44	344000	Laboratory Equipment	17,620						$ 17,620
45	345000	Power Operated Equipment	98,131						$ 98,131
46	346100	Comm Equip Non-Telephone	386,889						$ 386,889
47	346300	Comm Equip Other	58,841						$ 58,841
48			-						$ -
49	300000	Property Held for Future Use	34,409						$ 34,409
50		AFUDC Debt	1,778						$ 1,778
51									$ -
52	304620	Struct & Imp Leasehold	7,028						$ 7,028
53	331001	Mains							$ -
54	340100	Office Furniture & Equip	34,801						$ 34,801
55	340200	Comp & Periph Equip	14,155						$ 14,155
56	340300	Computer Software	55,697						$ 55,697
57	340300	Computer Software-Other	1,447						$ 1,447
58	343000	Tools,Shop,Garage Equip	1,190						$ 1,190
59	346100	Comm Equip Non-Telephone	5,757						$ 5,757
60	346300	Comm Equip Other	152						$ 152
61									$ -
62	Post TY Plant								$ -
63		*Redrilling Well #12 by Oct 2008*							$ -
64	307000	Wells & Springs	1,257,750						$ 1,257,750
65	311200	Pump Equip Electric	677,250						$ 677,250
66									$ -
67		Removal of Existing Well #12							$ -
68	307000	Wells & Springs	(109,294)						$ (109,294)
69	311200	Pump Equip Electric	(50,679)						$ (50,679)
70									$ -
71		Rehabilitate Well #17							$ -
72	304620	Struct & Imp Leasehold	850						$ 850
73	304700	Struct & Imp Store, Shop, Gar	1,300						$ 1,300
74	307000	Wells & Springs	189,390						$ 189,390
75	309000	Supply Mains	8,450						$ 8,450
76	311200	Pump Equip Electric	83,200						$ 83,200
77	311500	Pump Equip Other	19,500						$ 19,500
78	334100	Meters	5,590						$ 5,590
79									$ -
80		Removal of Existing Well #17							$ -
81	307000	Wells & Springs	(163,649)						$ (163,649)
82	311300	Pump Equip Diesel	(191)						$ (191)
83									$ -
84		Total Net Post TY Additions	1,899,267						$ 1,899,267
85									$ -
86									$ -
87	Total Plant in Service		61,588,448	(180,916)	-	-	-	-	61,407,532
88									
89	Accumulated Depreciation		12,099,985	(180,916)				100,554	12,019,623
90	Net Plant in Service (L58 - L 59)		$ 49,488,463	$ -	$ -	$ -	$ -	$ (100,554)	$ 49,387,909
91									
92	*LESS:*								
93	Contributions in Aid of Construction (CIAC)		$ 12,789,338	-	$ -	$ 322,588	$ -	$ -	$ 13,111,926
94	Less: Accumulated Amortization		5,539,222	-	-			-	5,539,222
95	Net CIAC (L63 - L64)		7,250,116	-	-	322,588	-	-	7,572,704
96	Advances in Aid of Construction (AIAC)		1,704,269	-					1,704,269
97	Imputed Reg Advances		-	-	-	-	-		-
98	Imputed Reg CIAC			-	-				-
99	Deferred Income Tax Credits (Debits)		1,600,604	-	-	-	-	-	1,600,604
100	Customer Meter Deposits		12,600						12,600
101	*ADD:*								-
102	Working Capital Allowance		549,034	-	(502,551) #	-	-		46,483
103	Pumping Power			-	-	-	-		-
104	Purchase Wastewater Treatment Charges			-	-	-	-		-
105	Material and Supplies Inventory		38,726	-	-	-	-		38,726
106	Prepayments		117,955	-	-	-	-	-	117,955
107	Projected Capital Expenditures			-	-	-	-	-	-
108	Deferred Debits		1,238,398	-	-	-	(1,083,637)	-	154,761
109	Original Cost Rate Base		$ 40,864,988	$ -	$ (502,551)	$ (322,588)	$ (1,083,637)	$ (100,554)	$ 38,855,658

ADJ #		References:
1	Plant, Accumulated Depreciation	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	CIAC on CWIP	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	Error Correction per Co. Rebuttal Testimon	Schedule GWB-9

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	330.00	Dist Reservoirs & Standpipe Plant	68,702	(68,702)	-
		Dist Reservoirs & Standpipe Acc.Depreciation	68,702	(68,702)	-
	311.20	Pump Equip Electric	112,214	(112,214)	-
		Pump Equip Electric Acc Depreciation	112,214	(112,214)	-

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 715,859	$ -	715,859	12.00	$ 8,590,308
2	Purchased Water	$ -	-	-	86.87	$ -
3	Fuel & Power	$ 693,068	-	693,068	32.42	$ 22,469,271
4	Chemicals	$ 236,982		185,037	28.47	$ 5,268,003
5	Waste Disposal	$ (290)		(290)	30.00	$ (8,700)
6	Management Fees	$ 923,778		923,778	(3.88)	$ (3,584,259)
7	Group Insurance	$ 184,827		184,827	(4.64)	$ (857,599)
8	Pensions	$ 130,911		130,911	45.00	$ 5,890,998
9	Regulatory Expense	$ 21,283		21,283	30.00	$ 638,490 *
10	Insurance Other Than Group	$ 45,435		45,435	45.00	$ 2,044,575
11	Customer Accounting	$ 123,742		123,742	7.46	$ 923,115
12	Rents	$ 21,467		21,467	(10.68)	$ (229,268)
13	General Office Expense	$ 87,860		87,860	30.00	$ 2,635,800 *
14	Miscellaneous	$ 351,828		351,828	30.00	$ 10,554,840 *
15	Maintenance Expense	$ 578,292		124,831	30.00	$ 3,744,930 *
16	Taxes Other Than Income-Property Taxes	$ 268,996		285,829	212.50	$ 60,738,731
17	Taxes Other Than Income-Other	$ 67,972		67,972	15.65	$ 1,063,769
18	Income Taxes	$ 228,400		1,011,624	42.04	$ 42,528,654
19	Interest		1,242,767	1,242,767	106.52	132,379,510
20	Total Operating Expenses	4,680,411	1,242,767	6,217,829	764.73	294,791,171
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	47.41			
24	Revenue Lag	Company Workpapers	50.139			
25	Net Lag	Line 24 - 23	2.73			
26	Staff Adjusted Expenses	Line 20, Col 35	6,217,829			
27	Cash Working Capital	Line 25 * Line 26/365 day	46,483			
28	Company As Field	Co Schedule B-5	549,034			
29	Staff Adjustment	To GWB-4	(502,551)			
30						
31	References:					
32	Column [A]: Company Schedule C-1					
33	Column [B]: Staff adjustments to expenses, See Testimony GWB					
34	Column [C]: Column [A] + Column [B]					
35	Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372					
36	Column [E]: Column [C] * Column [D]					

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
CIAC		12,789,338	$ 322,588	$13,111,926

References:
Column [A]: Amounts included Per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] plus Column [B]

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	1,238,398	(1,083,637)	154,761
6			$ 1,238,398	$ (1,083,637)	$ 2,322,036

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

ARIZONA-AMERICAN WATER COMPANY - PARADISE VALLEY WATER
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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - ACCUMULATED DEPRECIATION CORRECTION

DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
Accumulated Depreciation	2007	12,099,985	100,554	12,200,539
		$ 12,099,985	$ 100,554	12,200,539

REFERENCES:
Columns [A]: Company schedules
Column [B]: Error Correction Per Co. Rebuttal
(See Gutowski, page vii)
Column [C]: Col [A] plus Col [B]

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 7,832,113	$ -	$ 7,832,113	$ 1,621,522	$ 9,453,635
3	Other Revenues	16,619	-	16,619	-	16,619
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 7,848,732	$ -	$ 7,848,732	$ 1,621,522	$ 9,470,254
6						
7	Labor	$ 715,859	$ -	715,859	$ -	$ 715,859
8	Purchased Water	$ -	-	-	-	-
9	Fuel & Power	$ 693,068	-	693,068	-	693,068
10	Chemicals	$ 236,982	(51,945)	185,037	-	185,037
11	Waste Disposal	$ (290)	-	(290)	-	(290)
12	Management Fees	$ 923,778	-	923,778	-	923,778
13	Group Insurance	$ 184,827	-	184,827	-	184,827
14	Pensions	$ 130,911	-	130,911	-	130,911
15	Regulatory Expense	$ 21,283	-	21,283	-	21,283
16	Insurance Other Than Group	$ 45,435	-	45,435	-	45,435
17	Customer Accounting	$ 123,742	-	123,742	-	123,742
18	Rents	$ 21,467	-	21,467	-	21,467
19	General Office Expense	$ 87,860	-	87,860	-	87,860
20	Miscellaneous	$ 351,828	-	351,828	-	351,828
21	Maintenance Expense	$ 578,292	(453,461)	124,831	-	124,831
22	Depreciation & Amortization	$ 1,615,824	27,364	1,643,187	-	1,643,187
23	General Taxes-Property Taxes	$ 268,996	(1,567)	267,428	18,401	285,829
24	General Taxes-Other	$ 67,972	-	67,972	-	67,972
25	Income Taxes	$ 228,400	164,437	392,836	618,787	1,011,624
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41	**Total Operating Expenses**	6,296,235	(315,173)	5,981,061	637,188	6,618,249
42	**Operating Income (Loss)**	$ 1,552,497	$ 315,173	$ 1,867,671	$ 984,334	$ 2,852,005

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Surrebuttal Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Chemicals Exp ADJ #3	[E] Property Taxes ADJ #4	[F] Income Taxes ADJ #5	[G] STAFF ADJUSTED
1								
2	Water Revenues	$ 7,832,113	$ -	$ -	$ -	$ -	$ -	$ 7,832,113
3	Other Revenues	16,619	-	-	-	-	-	$ 16,619
4	Other	-	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 7,848,732	$ -	$ -	$ -	$ -	$ -	$ 7,848,732
6								
7	Labor	$ 715,859	$ -	$ -	$ -	$ -	$ -	715,859
8	Purchased Water	-	-	-	-	-	-	-
9	Fuel & Power	693,068	-	-	-	-	-	693,068
10	Chemicals	236,982	-	-	(51,945)	-	-	185,037
11	Waste Disposal	(290)	-	-	-	-	-	(290)
12	Management Fees	923,778	-	-	-	-	-	923,778
13	Group Insurance	184,827	-	-	-	-	-	184,827
14	Pensions	130,911	-	-	-	-	-	130,911
15	Regulatory Expense	21,283	-	-	-	-	-	21,283
16	Insurance Other Than Group	45,435	-	-	-	-	-	45,435
17	Customer Accounting	123,742	-	-	-	-	-	123,742
18	Rents	21,467	-	-	-	-	-	21,467
19	General Office Expense	87,860	-	-	-	-	-	87,860
20	Miscellaneous	351,828	-	-	-	-	-	351,828
21	Maintenance Expense	578,292	(453,461)	-	-	-	-	124,831
22	Depreciation & Amortization	1,615,824	-	27,364	-	-	-	1,643,187
23	General Taxes-Property Taxes	268,996	-	-	-	(1,567)	-	267,428
24	General Taxes-Other	67,972	-	-	-	-	-	67,972
25	Income Taxes	228,400	-	-	-	-	164,437	392,836
26				-	-	-	-	-
27				-	-	-	-	-
28				-	-	-	-	-
29				-	-	-	-	-
30				-	-	-	-	-
31				-	-	-	-	-
32				-	-	-	-	-
33				-	-	-	-	-
34				-	-	-	-	-
35				-	-	-	-	-
36				-	-	-	-	-
38				-	-	-	-	-
39				-	-	-	-	-
40				-	-	-	-	-
41				-	-	-	-	-
42	**Total Operating Expenses**	$ 6,296,235	$ (453,461)	$ 27,364	$ (51,945)	$ (1,567)	$ 164,437	$ 5,981,061
43	**Operating Income (Loss)**	$ 1,552,497	$ 453,461	$ (27,364)	$ 51,945	$ 1,567	$ (164,437)	$ 1,867,671

ADJ #		References:
1	Management Fees	GTM 12
2	Depreciation Expense	GTM 13
3	Chemicals Expense	GTM 14
4	Property Taxes	GTM 15
5	Income Taxes	GTM 16

Surrebuttal Schedule GTM-12

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OPERATING INCOME ADJUSTMENT #1 - TANK MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 578,292	$ (453,461)	$ 124,831

Repair and Maintenance Expenses	
Calendar year 2005	70,856
Calendar year 2006	124,255
Calendar year 2007	179,382
Total for three year period	374,493
Normalization Period	3
Normalized Amount	124,831

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	15,350	0.00%	-
3	302000	Franchises	-	0.00%	-
4	339600	Miscellaneous Intangibles	10,520	0.00%	-
5	303200	Land & Land Rights SS	-	0.00%	-
6	303300	Land & Land Rights P	-	0.00%	-
7	303500	Land & Land Rights TD	8,324	0.00%	-
8	303600	Land & Land Rights AG	-	0.00%	-
9	304100	Struct & Imp SS	16,976,165	2.50%	424,404
10	304200	Struct & Imp P	0	3.99%	0
11	304300	Struct & Imp WT	3,003,090	2.00%	60,062
12	304400	Struct & Imp TD	23,764	1.50%	356
13	304500	Struct & Imp AG	5,732	3.99%	229
14	304600	Struct & Imp Offices	-	0.00%	-
15	304700	Struct & Imp Store, Shop, Gar	3,036	3.99%	121
16	304800	Struct & Imp Misc	(8,633)	3.99%	(344)
17	305000	Collect & Impounding	-		-
18	307000	Wells & Springs	1,519,916	2.48%	37,694
19	310100	Power Generation Equip Other	554,631	4.39%	24,348
20	311200	Pump Equip Electric	3,487,801	4.39%	153,114
21	311300	Pump Equip Diesel	190	4.39%	8
22	311500	Pump Equip Other	-		-
23	320100	WT Equip Non-Media	9,826,155	7.06%	693,727
24	309000	Supply Mains	14,058	2.00%	281
25	330000	Dist Reservoirs & Standpipe	2,115,946	3.15%	66,652
26	331001	TD Mains Not Classified by Size	2,395,291	0.00%	-
27	331100	TD Mains 4in & Less	114,959	4.17%	4,794
28	331200	TD Mains 6in to 8in	5,046,296	2.52%	127,167
29	331300	TD Mains 10in to 16in	9,132,418	2.34%	213,699
30	332000	Fire Mains	14,058	2.00%	281
31	333000	Services	2,724,758	4.72%	128,609
32	334100	Meters	350,870	2.51%	8,807
33	334200	Meter Installations	148,304	1.51%	2,239
34	335000	Hydrants	1,054,322	2.10%	22,141
35	339100	Othber P/E Intangible	-		-
36	339500	Other P/E TD	-		-
37	340100	Office Furniture & Equip	58,812	4.04%	2,376
38	340200	Comp & Periph Equip	38,292	10.00%	3,829
39	340300	Computer Software	14,711	25.00%	3,678
40	340500	Other Office Equipment	674	7.13%	48
41	341100	Trans Equip Lt Duty Trks	(0)	20.00%	(0)
42	341300	Trans Equip Autos	3,541	7.80%	276
43	341400	Trans Equip Other (golf carts only)	27,905	16.67%	4,652
44	343000	Tools,Shop,Garage Equip	111,116	3.61%	4,011
45	344000	Laboratory Equipment	17,520	10.00%	1,752
46	345000	Power Operated Equipment	96,131	4.64%	4,460
47	346100	Comm Equip Non-Telephone	386,889	9.76%	37,760
48	346300	Comm Equip Other	58,841	4.93%	2,901
49					
50					
51	300000	Property Held for Future Use	34,409	0.00%	-
52		AFUDC Debt	1,778	10.30%	183
53					
54	304620	Struct & Imp Leasehold	7,028	14.28%	1,004
55	331001	Mains	-		-
56	340100	Office Furniture & Equip	34,801	4.04%	1,406
57	340200	Comp & Periph Equip	14,155	10.00%	1,415
58	340300	Computer Software	55,697	25.00%	13,924
59	340300	Computer Software-Other	1,447	25.00%	362
60	343000	Tools,Shop,Garage Equip	1,190	3.61%	43
61	346100	Comm Equip Non-Telephone	5,757	9.76%	562
62	346300	Comm Equip Other	152	4.93%	7
63			-		
64	Post TY Plant		-		
65		Redrilling Well #12 by Oct 2008	-		
66	307000	Wells & Springs	1,257,750	0.00%	-
67	311200	Pump Equip Electric	677,250	4.39%	29,731
68			-		
69		Removal of Existing Well #12	-		
70	307000	Wells & Springs	(109,294)		-
71	311200	Pump Equip Electric	(50,679)	4.39%	(2,225)
72			-		
73		Rehabilitate Well #17	-		
74	304620	Struct & Imp Leasehold	650		-
75	304700	Struct & Imp Store, Shop, Gar	1,300	3.99%	52
76	307000	Wells & Springs	169,390	2.48%	4,201
77	309000	Supply Mains	8,450	2.00%	169
78	311200	Pump Equip Electric	83,200	4.39%	3,652
79	311500	Pump Equip Other	19,500	4.39%	856
80	334100	Meters	5,590	2.51%	140
81			-		
82		Removal of Existing Well #17	-		
83	307000	Wells & Springs	(163,649)	0.00%	-
84	311300	Pump Equip Diesel	(191)	4.39%	(8)
85			-		
86		Total Net Post TY Additions	1,899,267		
87					
88			-		
89		Total Plant in Service	61,407,532	3.40%	2,089,618
90					
91					
92		Less Non Depreciable Plant			
93	301000	Organization	15,350	0.00%	-
94	339600	Miscellaneous Intangibles	10,520	0.00%	-
95	303500	Land & Land Rights TD	8,324	0.00%	-
96					
97		Net Depreciable Plant and Depreciation Amounts	$ 61,373,338		$ 2,089,618
98		Composite Depreciation Rate		3.40%	
99		Less			
100		Amortization of Regulatory CIAC at Settlement Rate			-
101		Amortization of CIAC at Composite Rate	$ 13,111,926		$ 446,430
102		Staff Recommended Depreciation Expense			$ 1,643,187
103		Company Proposed Depreciation Expense			1,615,824
104		Staff Adjustment			$ 27,364

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - CHEMICALS EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Chemicals	$ 236,982	$ (51,945)	$ 185,037

References:
Column (A), Company Schedule C-1
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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Surrebuttal Schedule GTM-15

OPERATING ADJUSTMENT #4 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 7,848,732	$ 7,848,732
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	15,697,464	15,697,464
4	Staff Recommended Revenue	7,848,732	9,470,254
5	Subtotal (Line 4 + Line 5)	23,546,196	25,167,718
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	7,848,732	8,389,239
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	15,697,464	16,778,479
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	15,710,918	16,791,933
13	Assessment Ratio	23.0%	23.0%
14	Assessment Value (Line 12 * Line 13)	3,613,511	3,862,145
15	Composite Property Tax Rate - Obtained from ADOR	7.40%	7.40%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 267,428	
17	Company Proposed Property Tax	$ 268,996	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (1,567)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 285,829
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 267,428
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 18,401**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 18,401
23	Increase in Revenue Requirement		$ 1,621,522
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.13479%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-16

OPERATING INCOME ADJUSTMENT #5 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ 228,400	$ 164,437	$ 392,836

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

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GWB-	2	GROSS REVENUE CONVERSION FACTOR
GWB-	3	RATE BASE - ORIGINAL COST
GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
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GTM-	15	OPERATING INCOME ADJUSTMENT #4 - INCOME TAX EXPENSE

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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 37,901,086	$ 37,901,086	$ 37,239,151	$ 37,239,151
2	Adjusted Operating Income (Loss)	$ 587,425	$ 587,425	$ 635,956	$ 635,956
3	Current Rate of Return (L2 / L1)	1.55%	1.55%	1.71%	1.71%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 3,183,691	$ 3,183,691	$ 2,733,354	$ 2,733,354
6	Operating Income Deficiency (L5 - L2)	$ 2,596,266	$ 2,596,266	$ 2,097,397	$ 2,097,397
7	Gross Revenue Conversion Factor	1.6471	1.6471	1.6460	1.6460
8	Required Revenue Increase (L7 * L6)	$ 4,276,301	$ 4,276,301	$ 3,452,273	$ 3,452,273
9	Adjusted Test Year Revenue	$ 5,701,431	$ 5,701,431	$ 5,701,431	$ 5,701,431
10	Proposed Annual Revenue (L8 + L9)	$ 9,977,732	$ 9,977,732	$ 9,153,704	$ 9,153,704
11	Required Increase in Revenue (%)	75.00%	75.00%	60.55%	60.55%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2459%					
5	Subtotal (L3 - L4)	60.7541%					
6	**Revenue Conversion Factor (L1 / L5)**	1.645980					
	Calculation of Uncollectible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	38.5989%					
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	34.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	38.5989%					
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%					
21	Property Tax Factor (GTM-14, L24)	1.0538%					
22	Effective Property Tax Factor (L20*L21)		0.6470%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2459%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 2,733,354					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ 635,956					
26	Required Increase in Operating Income (L24 - L25)		$ 2,097,397				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 971,508					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (346,989)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 1,318,497				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 9,153,704					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 216,832					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 180,453					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 36,379				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 3,452,274				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
				SCW Water	SCW Water		
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 5,701,431	$ 9,153,704		
40	Operating Expenses Excluding Income Taxes			$ 5,412,464	$ 5,448,843		
41	Synchronized Interest (L56)			$ 1,187,929	$ 1,187,929		
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (898,962)	$ 2,516,934	$ -	$ -
43	Arizona State Income Tax Rate			6.9680%	6.9680%		
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (62,640)	$ 175,380	$ -	$ -
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (836,322)	$ 2,341,554	$ -	$ -
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (7,500)	$ 7,500	$ -	$ -
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ (6,250)	$ 6,250	$ -	$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ (8,500)	$ 8,500	$ -	$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ (91,650)	$ 91,650	$ -	$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ (170,450)	$ 682,228	$ -	$ -
51	Total Federal Income Tax	$ -	$ -	$ (284,350)	$ 796,128		
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (346,989)	$ 971,508	$ -	$ -
53	Applicable Tax Rate				34.0000%		
54							
55							

		Sun City West
	Calculation of Interest Synchronization:	
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)	$ 37,239,151
57	Weighted Average Cost of Debt	3.1900%
58	Synchronized Interest (L45 X L46)	$ 1,187,929

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 48,893,385	$ (15,408)	$ 48,877,977
2	Less: Accumulated Depreciation	10,514,488	76,672	10,591,160
3	Net Plant in Service	$ 38,378,897	$ (92,080)	$ 38,286,817
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 20,548	$ 17,318	$ 37,866
5	Less: Accumulated Amortization	1,057	-	1,057
6	Net CIAC	19,491	17,318	36,809
7	Advances in Aid of Construction (AIAC)	1,175,373		1,175,373
8	Imputed Reg AIAC	-	1,006,408	1,006,408
9	Imputed Reg CIAC	392,368	-	392,368
10	Deferred Income Tax Credits (Debits)	(1,326,577)	-	(1,326,577)
	Customer Meter Deposits	1,225		1,225
	ADD:			
11	Cash Working Capital	480,140	(438,413)	41,727
12	Prepayments	24,906	-	24,906
13	Supplies Inventory	56,510	-	56,510
14	Projected Capital Expenditures ##		-	-
15	Deferred Debits	(777,486)	892,284	114,798
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 37,901,086	$ (661,935)	$ 37,239,151

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[E] ADJ #5	[F] ADJ #6	[G] ADJ #7	[H] ADJ #8	[F] STAFF ADJUSTED
		PLANT IN SERVICE:										$ 20,086
1	301000	Organization	20,086									$ 1,346
2	302000	Franchises	1,346									$ 11,651
3	303200	Land & Land Rights SS	11,651						-	-	-	$ 44,957
4	303300	Land & Land Rights P	44,957						-	-	-	$ -
5	303500	Land & Land Rights TD	-									$ -
6	303600	Land & Land Rights AG	-									$ 7,620,981
7	304100	Struct & Imp SS	7,620,981									$ 224,821
8	304200	Struct & Imp P	224,821						-	-	-	$ 90,867
9	304300	Struct & Imp WT	90,867						-	-	-	$ -
10	304400	Struct & Imp TD	-						-	-	-	$ 16,828
11	304600	Struct & Imp Offices	16,828									$ -
12	304800	Struct & Imp Misc	-						-	-	-	$ -
13	305000	Collect & Impounding	-						-	-	-	$ 2,587,380
14	307000	Wells & Springs	2,587,380									$ 36,044
15	310100	Power Generation Equip Other	36,044									$ 5,105,926
16	311200	Pump Equip Electric	5,105,926						-	-	-	$ 4,505
17	311300	Pump Equip Diesel	4,505						-	-	-	$ 169,696
18	311500	Pump Equip Other	169,696									$ -
19		WT Equip Media	-						(92,080)	-	-	$ 6,254,523
20	320100	WT Equip Non-Media	6,346,603							-	-	$ 836,735
21	330000	Dist Reservoirs & Standpipe	760,063	76,672					-	-	-	$ 13,055,020
22	331001	TD Mains Not Classified by Size	13,055,020									$ 616
23	331100	TD Mains 4in & Less	616							-	-	$ 409,389
24	331200	TD Mains 6in to 8in	409,389									$ 252,698
25	331300	TD Mains 10in to 16in	252,698									$ 169
26	332000	Fire Mains	169						-	-	-	$ 7,342,742
27	333000	Services	7,342,742						-	-	-	$ 1,756,083
28	334100	Meters	1,756,083						-	-	-	$ 147,291
29	334200	Meter Installations	147,291									$ 1,835,680
30	335000	Hydrants	1,835,680									$ -
31	339100	Othber P/E Intangible	-						-	-	-	$ -
32	339500	Other P/E SS	-									$ 20,787
33	340100	Office Furniture & Equip	20,787						-	-	-	$ 46,715
34	340200	Comp & Periph Equip	46,715						-	-	-	$ 225,177
35	341100	Trans Equip Lt Duty Trks	225,177									$ 21,027
36	341200	Trans Equip Hvy Duty Trks	21,027									$ 142
37	342000	Stores Equipment	142									$ 19,641
38	343000	Tools,Shop,Garage Equip	19,641						-	-	-	$ 1,606
39	344000	Laboratory Equipment	1,606						-	-	-	$ 161,885
40	345000	Power Operated Equipment	161,885						-	-	-	$ 163,135
41	346100	Comm Equip Non-Telephone	163,135						-	-	-	$ 1,338
42	346300	Comm Equip Other	1,338						-	-	-	$ -
43									-	-	-	$ -
44									-	-	-	$ 22,828
45	304620	Struct & Imp Leasehold	22,828									$ -
46	331001	Mains										$ 113,033
47	340100	Office Furniture & Equip	113,033									$ 45,973
48	340200	Comp & Periph Equip	45,973									$ 180,903
49	340300	Computer Software	180,903									$ 4,699
50	340300	Computer Software-Other	4,699									$ 3,864
51	343000	Tools,Shop,Garage Equip	3,864									$ 18,698
52	346100	Comm Equip Non-Telephone	18,698									$ 493
53	346300	Comm Equip Other	493									$ -
54												
55		**Total Plant in Service**	48,893,385	76,672	-	-	-	-	(92,080)	-	-	48,877,977
56		48,970,057										
57		Accumulated Depreciation	10,514,488	76,672				-	-	-	-	10,591,160
58		Net Plant in Service (L58 - L 59)	$ 38,378,897	$ -	$ -	$ -	$ -	$ -	$ (92,080)	$ -	$ -	$ 38,286,817
59												
60		*LESS:*										
61		Contributions in Aid of Construction (CIAC)	$ 20,548		$ -	$ -	$ -	$ 17,318	$ -	$ -	$ -	$ 37,866
62		Less: Accumulated Amortization	1,057	-	-			-	-	-	-	1,057
63		Net CIAC (L63 - L64)	19,491	-	-	-	-	17,318	-	-	-	36,809
64		Advances in Aid of Construction (AIAC)	1,175,373	-					-	-	-	1,175,373
65		Imputed Reg Advances	-	-	-	1,006,408				-	-	1,006,408
66		Imputed Reg CIAC	392,368	-	-					-	-	392,368
67		Deferred Income Tax Credits (Debits)	(1,326,577)	-	-	-				-	-	(1,326,577)
68		Customer Meter Deposits	1,225									1,225
69		*ADD:*										-
70		Working Capital Allowance	480,140	-	(438,413)	-			-	-	-	41,727
71		Pumping Power		-	-	-			-	-	-	-
72		Purchase Wastewater Treatment Charges		-	-	-			-	-	-	-
73		Material and Supplies Inventory	56,510	-	-	-			-	-	-	56,510
74		Prepayments	24,906	-	-	-			-	-	-	24,906
75		Projected Capital Expenditures		-	-	-			-	-	-	-
76		Deferred Debits	(777,486)	-	-	-	892,284		-	-	-	114,798
77		**Original Cost Rate Base**	$ 37,901,086	$ -	$ (438,413)	$ -	$ 892,284	$ (17,318)	$ (92,080)	$ -	$ -	$ 37,239,151

ADJ #		References:
1	Plant, Accumulated Depreciation and AIA	Schedule GWB-5
2	Working Capital	Schedule GWB-6
3	Imputed Reg AIAC	Schedule GWB-7
4	Deferred Debits	Schedule GWB-8
5	CIAC/AIAC inn CWIP	Schedule GWB-9
6	Overcapacity of Arsenic Treatment Plant	Schedule GWB-9A

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Schedule GWB-5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - PLANT, ACCUMULATED DEPRECIATION, AND AIAC

LINE NO.	ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	330.00	Dist Reservoirs & Standpipe Plant	-	76,672	76,672
		Dist Reservoirs & Standpipe Acc.Depreciation	-	76,672	76,672

References:
Column [A]: Amounts included in plant balances per filing.
Column (B): Per Testimony GWB
Column (C): Column [A] less Column [B]

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Schedule GWB-6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 703,217	$ -	703,217	12.00	$ 8,438,609
2	Purchased Water	$ (2,690)	-	(2,690)	86.87	$ (233,682)
3	Fuel & Power	$ 830,074	-	830,074	32.42	$ 26,910,992
4	Chemicals	$ 227,889		227,889	28.47	$ 6,488,013
5	Waste Disposal	$ 4,391		4,391	30.00	$ 131,730
6	Management Fees	$ 999,903		999,903	(3.88)	$ (3,879,624)
7	Group Insurance	$ 191,120		191,120	(4.64)	$ (886,797)
8	Pensions	$ 137,699		137,699	45.00	$ 6,196,439
9	Regulatory Expense	$ 33,802		33,802	30.00	$ 1,014,060 *
10	Insurance Other Than Group	$ 58,622		58,622	45.00	$ 2,637,990
11	Customer Accounting	$ 133,476		133,476	7.46	$ 995,731
12	Rents	$ 14,331		14,331	(10.68)	$ (153,055)
13	General Office Expense	$ 57,226		57,226	30.00	$ 1,716,780 *
14	Miscellaneous	$ 232,408		232,408	30.00	$ 6,972,229 *
15	Maintenance Expense	$ 247,328		65,577	30.00	$ 1,967,310 *
16	Taxes Other Than Income-Property Taxes	$ 179,896		180,453	212.50	$ 38,346,249
17	Taxes Other Than Income-Other	$ 65,832		65,832	15.65	$ 1,030,267
18	Income Taxes	$ (324,059)	(22,930)	(346,989)	42.04	$ (14,587,427)
19	Interest		1,187,929	1,187,929	106.52	126,538,187
20	**Total Operating Expenses**	3,790,465	1,164,999	4,774,269	764.73	209,644,001
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	43.91			
24	Revenue Lag	Company Workpapers	47.10			
25	Net Lag	Line 24 - 23	3.19			
26	Staff Adjusted Expenses	Line 20, Col 35	4,774,269			
27	Cash Working Capital	Line 25 * Line 26/365 day	41,727			
28	Company As Field	Co Schedule B-5	480,140			
29	Staff Adjustment	To GWB-4	(438,413)			
30						

31 References:
32 Column [A]: Company Schedule C-1
33 Column [B]: Staff adjustments to expenses, See Testimony GWB
34 Column [C]: Column [A] + Column [B]
35 Column [D]: Expense Lags Used on Docket WS-01303A-08-0403, approved in Decision No. 70372
36 Column [E]: Column [C] * Column [D]

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Schedule GWB- 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 12,151,160		$ 12,151,160
2	None	2002	-	1,797,706	10,353,454
3	None	2003	-	1,869,409	8,484,045
4	None	2004	-	1,869,409	6,614,636
5		2005		1,869,409	4,745,226
6		2006		1,869,409	2,875,817
7	None	2007	-	1,869,409	1,006,408
8	Per Staff		$ 12,151,160	$ 11,144,752	$ 1,006,408
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 1,006,408

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

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Schedule GWB - 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	(777,486)	892,284	114,798
6			$ (777,486)	$ 892,284	$ (1,669,770)

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

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Schedule GWB - 9
SURREBUTTAL

RATE BASE ADJUSTMENT #5 - CIAC ON CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
CIAC		19,491	$ 17,318	$ 36,809

References:
Column [A]: Amounts included Per filing.

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Schedule GWB - 9A
SURREBUTTAL

RATE BASE ADJUSTMENT #7 - OVERCAPACITY OF ARESENIC TREATMENT PLANT

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
32010(	WT Equip Non-Media	760,063	$ (92,080)	$ 667,983

References:
Column [A]: Amounts included in plant balances per filing.

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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 5,661,030	$ -	$ 5,661,030	$ 3,452,273	$ 9,113,303
3	Other Revenues	40,401	-	40,401	-	40,401
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 5,701,431	$ -	$ 5,701,431	$ 3,452,273	$ 9,153,704
6	**Operating Expenses**					
7	Labor	$ 703,217	$ -	703,217	$ -	$ 703,217
8	Purchased Water	$ (2,690)	-	(2,690)	-	(2,690)
9	Fuel & Power	$ 830,074	-	830,074	-	830,074
10	Chemicals	$ 227,889	-	227,889	-	227,889
11	Waste Disposal	$ 4,391	-	4,391	-	4,391
12	Management Fees	$ 999,903	-	999,903	-	999,903
13	Group Insurance	$ 191,120	-	191,120	-	191,120
14	Pensions	$ 137,699	-	137,699	-	137,699
15	Regulatory Expense	$ 33,802	-	33,802	-	33,802
16	Insurance Other Than Group	$ 58,622	-	58,622	-	58,622
17	Customer Accounting	$ 133,476	-	133,476	-	133,476
18	Rents	$ 14,331	-	14,331	-	14,331
19	General Office Expense	$ 57,226	-	57,226	-	57,226
20	Miscellaneous	$ 232,408	-	232,408	-	232,408
21	Maintenance Expense	$ 247,328	(181,751)	65,577	-	65,577
22	Depreciation & Amortization	$ 1,323,541	155,593	1,479,134	-	1,479,134
23	General Taxes-Property Taxes	$ 179,896	557	180,453	36,379	216,832
24	General Taxes-Other	$ 65,832	-	65,832	-	65,832
25	Income Taxes	$ (324,059)	(22,930)	(346,989)	1,318,497	971,508
26						
27						
28	**Total Operating Expenses**	5,114,006	(48,531)	5,065,475	1,354,876	6,420,351
29	**Operating Income (Loss)**	$ 587,425	$ 48,531	$ 635,956	$ 2,097,397	$ 2,733,353

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

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Surrebuttal Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Tank Maint. ADJ #1	[C] Depreciation Exp. ADJ #2	[D] Property Taxes ADJ #3	[E] Income Taxes ADJ #4	[G] STAFF ADJUSTED
1							
2	Water Revenues	$ 5,661,030	$ -	$ -	$ -	$ -	$ 5,661,030
3	Other Revenues	40,401	-	-	-	-	$ 40,401
4	Other	-	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 5,701,431	$ -	$ -	$ -	$ -	$ 5,701,431
6							
7	Labor	$ 703,217	$ -	$ -	$ -	$ -	703,217
8	Purchased Water	(2,690)	-	-	-	-	(2,690)
9	Fuel & Power	830,074	-	-	-	-	830,074
10	Chemicals	227,889	-	-	-	-	227,889
11	Waste Disposal	4,391	-	-	-	-	4,391
12	Management Fees	999,903	-	-	-	-	999,903
13	Group Insurance	191,120	-	-	-	-	191,120
14	Pensions	137,699	-	-	-	-	137,699
15	Regulatory Expense	33,802	-	-	-	-	33,802
16	Insurance Other Than Group	58,622	-	-	-	-	58,622
17	Customer Accounting	133,476	-	-	-	-	133,476
18	Rents	14,331	-	-	-	-	14,331
19	General Office Expense	57,226	-	-	-	-	57,226
20	Miscellaneous	232,408	-	-	-	-	232,408
21	Maintenance Expense	247,328	(181,751)	-	-	-	65,577
22	Depreciation & Amortization	1,323,541	-	155,593	-	-	1,479,134
23	General Taxes-Property Taxes	179,896	-	-	557	-	180,453
24	General Taxes-Other	65,832	-	-	-	-	65,832
25	Income Taxes	(324,059)	-	-	-	(22,930)	(346,989)
26				-		-	-
27				-	-	-	-
28				-	-		-
29				-	-	-	-
30							
31							
32							
33							
34							
35							
36							
38							
39							
40							
41							
42	**Total Operating Expenses**	$ 5,114,006	$ (181,751)	$ 155,593	$ 557	$ (22,930)	$ 5,065,475
43	**Operating Income (Loss)**	$ 587,425	$ 181,751	$ (155,593)	$ (557)	$ 22,930	$ 635,956

ADJ #		References:
1	Management Fees	GTM 12
2	Depreciation Expense	GTM 13
3	Property Taxes	GTM 14
4	Income Taxes	GTM 2

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Surrebuttal Schedule GTM-12

OPERATING INCOME ADJUSTMENT #1 - MAINTENANCE ACCRUAL

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1	Maintenance Expense	$ 247,328	$ (181,751)	$ 65,577

Repair and Maintenance Expenses	
Calendar year 2005	37,609
Calendar year 2006	48,820
Calendar year 2007	110,302
Total for three year period	196,731

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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	20,086	0.00%	-
3	302000	Franchises	1,346	0.00%	-
4	303200	Land & Land Rights SS	11,651	0.00%	-
5	303300	Land & Land Rights P	44,957	0.00%	-
6	303500	Land & Land Rights TD	-	0.00%	-
7	303600	Land & Land Rights AG	-	0.00%	-
8	304100	Struct & Imp SS	7,620,981	2.50%	190,525
9	304200	Struct & Imp P	224,821	1.67%	3,755
10	304300	Struct & Imp WT	90,867	1.67%	1,517
11	304400	Struct & Imp TD	-	2.00%	-
12	304600	Struct & Imp Offices	16,828	4.63%	779
13	304800	Struct & Imp Misc	-	0.00%	-
14	305000	Collect & Impounding	-	0.00%	-
15	307000	Wells & Springs	2,587,380	2.52%	65,202
16	310100	Power Generation Equip Other	36,044	4.42%	1,593
17	311200	Pump Equip Electric	5,105,926	4.42%	225,682
18	311300	Pump Equip Diesel	4,505	5.00%	225
19	311500	Pump Equip Other	169,696	5.01%	8,502
	0	WT Equip Media	-	5.00%	-
20	320100	WT Equip Non-Media	6,346,603	7.06%	448,070
21	330000	Dist Reservoirs & Standpipe	836,735	1.67%	13,973
22	331001	TD Mains Not Classified by Size	13,055,020	1.53%	199,742
23	331100	TD Mains 4in & Less	616	1.53%	9
24	331200	TD Mains 6in to 8in	409,389	1.53%	6,264
25	331300	TD Mains 10in to 16in	252,698	1.53%	3,866
26	332000	Fire Mains	169	1.53%	3
27	333000	Services	7,342,742	2.48%	182,100
28	334100	Meters	1,756,083	2.51%	44,078
29	334200	Meter Installations	147,291	2.51%	3,697
30	335000	Hydrants	1,835,680	2.00%	36,714
31	339100	Othber P/E Intangible	-	0.00%	-
32	339500	Other P/E SS	-	2.00%	-
33	340100	Office Furniture & Equip	20,787	4.59%	954
34	340200	Comp & Periph Equip	46,715	10.00%	4,672
35	341100	Trans Equip Lt Duty Trks	225,177	20.00%	45,035
36	341200	Trans Equip Hvy Duty Trks	21,027	15.00%	3,154
37	342000	Stores Equipment	142	3.91%	6
38	343000	Tools,Shop,Garage Equip	19,641	4.02%	790
39	344000	Laboratory Equipment	1,606	3.71%	60
40	345000	Power Operated Equipment	161,885	5.02%	8,127
41	346100	Comm Equip Non-Telephone	163,135	10.30%	16,803
42	346300	Comm Equip Other	1,338	4.93%	66
43					
44					
45	304620	Struct & Imp Leasehold	22,828	14.28%	3,260
46	331001	Mains	-	1.53%	-
47	340100	Office Furniture & Equip	113,033	4.59%	5,188
48	340200	Comp & Periph Equip	45,973	10.00%	4,597
49	340300	Computer Software	180,903	25.00%	45,226
50	340300	Computer Software-Other	4,699	25.00%	1,175
51	343000	Tools,Shop,Garage Equip	3,864	4.02%	155
52	346100	Comm Equip Non-Telephone	18,698	10.30%	1,926
53	346300	Comm Equip Other	493	4.93%	24
54		**Total Plant in Service**	48,970,057	3.22%	1,577,512
55					
56					
57		Less Non Depreciable Plant			
58	301000	Organization	20,086	0.00%	-
59	302000	Franchises	1,346	0.00%	-
60	303200	Land & Land Rights SS	11,651	0.00%	-
61	303300	Land & Land Rights P	44,957	0.00%	-
62	304620	Struct & Imp Leasehold	22,828	14.28%	3,260
63		Net Depreciable Plant and Depreciation Amounts	$ 48,869,189		$ 1,574,252
64		Composite Depreciation Rate		3.22%	
65		Less			
66		Amortization of Regulatory CIAC at Settlement Rate			97,158
67		Amortization of CIAC at Composite Rate	$ 37,866		$ 1,220
68		Staff Recommended Depreciation Expense			$ 1,479,134
69		Company Proposed Depreciation Expense			1,323,541
70		Staff Adjustment			$ 155,593

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

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Surrebuttal Schedule GTM-14

OPERATING ADJUSTMENT #3 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 5,701,431	$ 5,701,431
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	11,402,862	11,402,862
4	Staff Recommended Revenue	5,701,431	9,153,704
5	Subtotal (Line 4 + Line 5)	17,104,293	20,556,566
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	5,701,431	6,852,189
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	11,402,862	13,704,378
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	11,416,316	13,717,832
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	2,625,753	3,155,101
15	Composite Property Tax Rate - Obtained from ADOR	6.87%	6.87%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 180,453	
17	Company Proposed Property Tax	$ 179,896	
18	Staff Test Year Adjustment (Line 16 - Line 17)	$ 557	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 216,832
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 180,453
21	Increase in Property Tax Due to Increase in Revenue Requirement		$ 36,379
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 36,379
23	Increase in Revenue Requirement		$ 3,452,273
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.05377%

0

REFERENCES:
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

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Surrebuttal Schedule GTM-15

OPERATING INCOME ADJUSTMENT #4 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (324,059)	$ (22,930)	$ (346,989)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

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SURREBUTTAL TESTIMONY OF GERALD BECKER

TABLE OF CONTENTS TO SCHEDULES :

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GWB-	3	RATE BASE - ORIGINAL COST
GWB-	4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
GWB-	5	RATE BASE ADJUSTMENT #1 - WORKING CAPITAL
GWB-	6	RATE BASE ADJUSTMENT #2 - IMPUTED REGULATORY AIAC
GWB-	7	RATE BASE ADJUSTMENT #3 - DEFERRED DEBITS
GWB-	8	RATE BASE ADJUSTMENT #4 - AIAC IN CWIP
GWB-	9	NOT USED
GWB-	10	OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED
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Schedule GWB-1
SURREBUTTAL

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST	(B) COMPANY FAIR VALUE	(C) STAFF ORIGINAL COST	(D) STAFF FAIR VALUE
1	Adjusted Rate Base	$ 1,527,454	$ 1,527,454	$ 1,428,225	$ 1,428,225
2	Adjusted Operating Income (Loss)	$ (38,553)	$ (38,553)	$ (47,649)	$ (47,649)
3	Current Rate of Return (L2 / L1)	-2.52%	-2.52%	-3.34%	-3.34%
4	Required Rate of Return	8.40%	8.40%	7.34%	7.34%
5	Required Operating Income (L4 * L1)	$ 128,306	$ 128,306	$ 104,832	$ 104,832
6	Operating Income Deficiency (L5 - L2)	$ 166,859	$ 166,859	$ 152,480	$ 152,480
7	Gross Revenue Conversion Factor	1.6674	1.6674	1.4214	1.4214
8	Required Revenue Increase (L7 * L6)	$ 278,209	$ 278,209	$ 216,734	$ 216,734
9	Adjusted Test Year Revenue	$ 426,900	$ 426,900	$ 426,900	$ 426,900
10	Proposed Annual Revenue (L8 + L9)	$ 705,109	$ 705,109	$ 643,634	$ 643,634
11	Required Increase in Revenue (%)	65.17%	65.17%	50.77%	50.77%
12	Rate of Return on Common Equity (%)	11.75%	11.75%	10.00%	10.00%

References:
Column [A]: Company Schedule A-1
Column (B): Company Schedule A-1
Column (C): Staff Schedules GWB-2, GWB-3, and GWB-10

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Schedule GWB-2
SURREBUTTAL

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	[E]	[F]
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollecible Factor (Line 11)	0.0000%					
3	Revenues (L1 - L2)	100.0000%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	29.6462%					
5	Subtotal (L3 - L4)	70.3538%					
6	**Revenue Conversion Factor (L1 / L5)**	1.421388					
	Calculation of Uncollecttible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (Line 17)	28.2485%					
9	One Minus Combined Income Tax Rate (L7 - L8)	71.7515%					
10	Uncollectible Rate	0.0000%					
11	Uncollectible Factor (L9 * L10)		0.0000%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	6.9680%					
14	Federal Taxable Income (L12 - L13)	93.0320%					
15	Applicable Federal Income Tax Rate (Line 44)	22.8744%					
16	Effective Federal Income Tax Rate (L14 x L15)	21.2805%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		28.2485%				0.019480227
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	28.2485%					
20	One Minus Combined Income Tax Rate (L18-L19)	71.7515%					
21	Property Tax Factor (GTM-14, L24)	1.9480%					
22	Effective Property Tax Factor (L20*L21)		1.3977%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			29.6462%			
24	Required Operating Income (Schedule GWB-1, Line 5)	$ 104,832					
25	AdjustedTest Year Operating Income (Loss) (Schedule GWB-10, Line 29)	$ (47,649)					
26	Required Increase in Operating Income (L24 - L25)		$ 152,480				
27	Income Taxes on Recommended Revenue (Col. (F), L52)	$ 18,504					
28	Income Taxes on Test Year Revenue (Col. (C), L52)	$ (41,522)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 60,026				
30	Recommended Revenue Requirement (Schedule GWB-1, Line 10)	$ 643,634					
31	Uncollectible Rate (Line 10)	0.0000%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ -					
33	Adjusted Test Year Uncollectible Expense	$ -					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ -				
35	Property Tax with Recommended Revenue (GTM-15, 20)	$ 29,563					
36	Property Tax on Test Year Revenue (GTM-15, Col A, L16)	$ 25,341					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 4,222				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 216,728				

		(A)	(B)	(C)	(D)	[E]	[F]
		Test Year			Staff Recommended		
		Tubac	Tubac	Tubac Only	Tubac Combined	Tubac Only	Tubac Only
	Calculation of Income Tax:						
39	Revenue (Sch GWB-1, Col. [C] L9 & 10)			$ 426,900	$ 643,634		$ 643,634
40	Operating Expenses Excluding Income Taxes			$ 516,070	$ 520,293		$ 520,292
41	Synchronized Interest (L56)			$ 45,560	$ 45,560		$ 45,560
42	Arizona Taxable Income (L39 - L40 - L41)	$ -	$ -	$ (134,731)	$ 77,760		$ 77,760
43	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ -	$ -	$ (9,388)	$ 5,418		$ 5,418
45	Federal Taxable Income (L43 - L44)	$ -	$ -	$ (125,343)	$ 72,342		$ 72,342
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ -	$ -	$ (7,500)	$ 7,500		$ 7,500
47	Federal Tax on Second Income Bracket ($50,001 - $75,000) @ 25%	$ -	$ -	$ (6,250)	$ 5,585		$ 5,585
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	$ -	$ (8,500)	$ -		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	$ -	$ (9,884)	$ -		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 -$10,000,000) @ 34%	$ -	$ -	$ -	$ -		$ -
51	Total Federal Income Tax	$ -	$ -	$ (32,134)	$ 13,085		$ 13,085
52	Combined Federal and State Income Tax (L44 + L51)	$ -	$ -	$ (41,522)	$ 18,504		$ 18,504
53	Effective Tax Rate				22.8744%		22.8744%
54							
55							

		Tubac Combined	Tubac	Tubac
v	*Calculation of Interest Synchronization:*			
56	Rate Base (Schedule GWB-3, Col. (C), Line 18)			$ 1,428,225
57	Weighted Average Cost of Debt			3.1900%
58	Synchronized Interest (L45 X L46)			$ 45,560

		Rate Base	Percent
	Calculation of Rate Base Percentages		
59	(Col. [B], L 57)	$ -	0.00%
60	(Col. [C], L57)	1,428,225	100.00%
61	Totals	$ 1,428,225	100.00%

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Schedule GWB-3
SURREBUTTAL

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 3,423,384		$ 3,423,384
2	Less: Accumulated Depreciation	939,364	-	939,364
3	Net Plant in Service	$ 2,484,020	$ -	$ 2,484,020
	LESS:			
4	Contributions in Aid of Construction (CIAC)	$ 195	$ -	$ 195
5	Less: Accumulated Amortization	17	-	17
6	Net CIAC	178	-	178
7	Advances in Aid of Construction (AIAC)	1,042,125	20,266	1,062,391
8	Imputed Reg AIAC	-	14,087	14,087
9	Imputed Reg CIAC	58,023	-	58,023
10	Deferred Income Tax Credits (Debits)	(46,088)	-	(46,088)
	Customer Meter Deposits	540		540
	ADD:			
11	Cash Working Capital	40,665	(13,754)	26,911
12	Prepayments	1,598	-	1,598
13	Supplies Inventory	1,445	-	1,445
14	Projected Capital Expenditures		-	-
15	Deferred Debits	54,503	(51,122)	3,381
16	Purchase Wastewater Treatment Charges	-	-	
17	**Original Cost Rate Base**	$ 1,527,454	$ (99,229)	$ 1,428,225

References:
Column (A), Company Schedule B-2
Column (B): Schedule GWB-4
Column (C): Column (A) + Column (B)

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Schedule GWB-4
SURREBUTTAL

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

LINE NO.	ACCT. NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1	[C] ADJ #2	[D] ADJ #3	[E] ADJ #4	[F] STAFF ADJUSTED
		PLANT IN SERVICE:						
1	301000	Organization	567					$ 567
2	302000	Franchises	2,030					$ 2,030
3	303200	Land & Land Rights SS	20,414			-	-	$ 20,414
4	303300	Land & Land Rights P	50			-	-	$ 50
5	303400	Land & Land Rights WT	50					$ 50
	303500	Land & Land Rights TD	422					$ 422
6	303600	Land & Land Rights AG	2,755					$ 2,755
7	304100	Struct & Imp SS	25,292					$ 25,292
8	304200	Struct & Imp P	14,608			-	-	$ 14,608
9	304300	Struct & Imp WT	-			-	-	$ -
10	304400	Struct & Imp TD	156			-	-	$ 156
	304600	Struct & Imp Offices	498					$ 498
11	304800	Struct & Imp Misc	-			-	-	$ -
12	305000	Collect & Impounding	-			-	-	$ -
	307000	Wells & Springs	238,951					$ 238,951
13	310100	Power Generation Equip Other	4,832					$ 4,832
14	311200	Pump Equip Electric	281,109			-	-	$ 281,109
15	311300	Pump Equip Diesel	879			-	-	$ 879
16	311500	Pump Equip Other	403,824			-	-	$ 403,824
17	320100	WT Equip Non-Media	55,863			-	-	$ 55,863
18	330000	Dist Reservoirs & Standpipe	151,203			-	-	$ 151,203
19	331001	TD Mains Not Classified by Size	301,123					$ 301,123
20	331100	TD Mains 4in & Less	874,455			-	-	$ 874,455
21	331200	TD Mains 6in to 8in	390,385					$ 390,385
22	331300	TD Mains 10in to 16in	-					$ -
23	333000	Services	401,618			-	-	$ 401,618
24	334100	Meters	99,052			-	-	$ 99,052
25	334200	Meter Installations	20,327			-	-	$ 20,327
26	335000	Hydrants	78,367					$ 78,367
27	339100	Othber P/E Intangible	-					$ -
28	339500	Other P/E TD	-			-	-	$ -
29	340100	Office Furniture & Equip	5,453					$ 5,453
30	340200	Comp & Periph Equip	1,336			-	-	$ 1,336
31	341100	Trans Equip Lt Duty Trks	17,166			-	-	$ 17,166
32	341200	Trans Equip Hvy Duty Trks	-					$ -
33	342000	Stores Equipment	0					$ 0
34	343000	Tools,Shop,Garage Equip	14,442					$ 14,442
35	344000	Laboratory Equipment	-			-	-	$ -
36	345000	Power Operated Equipment	-			-	-	$ -
37	346100	Comm Equip Non-Telephone	1,932			-	-	$ 1,932
38	346300	Comm Equip Other	659			-	-	$ 659
39								$ -
40		*CORPORATE ALLOCATION*						$ -
41	304620	Struct & Imp Leasehold	793					$ 793
42	331001	Mains						$ -
43	340100	Office Furniture & Equip	3,927					$ 3,927
44	340200	Comp & Periph Equip	1,597					$ 1,597
45	340300	Computer Software	6,285					$ 6,285
46	340300	Computer Software-Other	163					$ 163
47	343000	Tools,Shop,Garage Equip	134					$ 134
48	346100	Comm Equip Non-Telephone	650					$ 650
49	346300	Comm Equip Other	17					$ 17
50	0							$ -
51		**Total Plant in Service**	3,423,384	-	-	-	-	3,423,384
	13,567							
1		Accumulated Depreciation	939,364					939,364
2		Net Plant in Service (L58 - L 59)	$ 2,484,021	$ -	$ -	$ -	$ -	$ 2,484,021
3								
4		*LESS:*						
5		Contributions in Aid of Construction (CIAC)	$ 195		$ -	$ -	$ -	$ 195
6		Less: Accumulated Amortization	17	-	-			17
7		Net CIAC (L63 - L64)	178	-	-	-	-	178
8		Advances in Aid of Construction (AIAC)	1,042,125	-			20,266	1,062,391
9		Imputed Reg Advances	-	-	14,087			14,087
10		Imputed Reg CIAC	58,023	-	-			58,023
11		Deferred Income Tax Credits (Debits)	(46,088)	-	-	-	-	(46,088)
12		Meter Deposits	540					540
13		*ADD:*						-
14		Working Capital Allowance	40,665	(13,754)		-	-	26,911
15		Pumping Power		-	-	-	-	-
16		Purchase Wastewater Treatment Charges		-	-	-	-	-
17		Material and Supplies Inventory	1,445	-	-	-	-	1,445
18		Prepayments	1,598	-	-	-	-	1,598
19		Projected Capital Expenditures		-	-	-	-	-
20		Deferred Debits	54,503	-	-	(51,122)		3,381
21		**Original Cost Rate Base**	$ 1,527,455	$ (13,754)	$ (14,087)	$ (51,122)	$ (20,266)	$ 1,428,226
22								
23								
24								
25								
26								
27								

ADJ #		References:
1	Working Capital	Schedule GWB-5
2	Imputed Reg AIAC	Schedule GWB-6
3	Deferred Debits	Schedule GWB-7
4	CIAC/AIAC inn CWIP	Schedule GWB-8

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Schedule GWB 5
SURREBUTTAL

RATE BASE ADJUSTMENT #1 - WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] LEAD/LAG DAYS	[E] DOLLAR DAYS
1	Labor	$ 131,623	$ -	131,623	12.00	$ 1,579,471
2	Purchased Water	$ -	-	-	86.87	$ -
3	Fuel & Power	$ 25,631	-	25,631	32.42	$ 830,957
4	Chemicals	$ 2,190		2,190	28.47	$ 62,357
5	Waste Disposal	$ (27)		(27)	30.00	$ (810)
6	Management Fees	$ 87,180		87,180	(3.88)	$ (338,258)
7	Group Insurance	$ 24,921		24,921	(4.64)	$ (115,635)
8	Pensions	$ 28,546		28,546	45.00	$ 1,284,592
9	Regulatory Expense	$ 1,480		1,480	30.00	$ 44,400 *
10	Insurance Other Than Group	$ 5,049		5,049	45.00	$ 227,205
11	Customer Accounting	$ 11,644		11,644	7.46	$ 86,864
12	Rents	$ 4,146		4,146	(10.68)	$ (44,279)
13	General Office Expense	$ 8,811		8,811	30.00	$ 264,330 *
14	Miscellaneous	$ 49,935		49,935	30.00	$ 1,498,059 *
15	Maintenance Expense	$ 17,394		17,394	30.00	$ 521,820 *
16	Taxes Other Than Income-Property Taxes	$ 26,350	(1,008)	25,341	212.50	$ 5,385,060
17	Taxes Other Than Income-Other	$ 11,078		11,078	15.65	$ 173,370
18	Income Taxes	$ (52,178)	10,656	(41,522)	42.04	$ (1,745,572)
19	Interest		-	-	106.52	-
20	**Total Operating Expenses**	383,774	9,648	393,422	764.73	9,713,931
21						
22						
23	Expense Lag	Line 21, Col. (E) / Col [C]	24.69			
24	Revenue Lag	Company Workpapers	49.66			
25	Net Lag	Line 24 - 23	24.97			
26	Staff Adjusted Expenses	Line 20, Col 35	393,422			
27	Cash Working Capital	Line 25 * Line 26/365 day	26,911			
28	Company As Field	Co Schedule B-5	40,665			
29	Staff Adjustment	To GWB-4	(13,754)			
30						

31 References:
32 Column [A]: Company Schedule C-1
33 Column [B]: Staff adjustments to expenses, See Testimony GWB
34 Column [C]: Column [A] + Column [B]
35 Column [D]: Expense Lags Used on Docket WS-01303A-06-0403, approved in Decision No. 70372
36 Column [E]: Column [C] * Column [D]

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
Docket No. WS-01303A-08-0227
Test Year Ended December 31, 2007

Schedule GWB- 6
SURREBUTTAL

RATE BASE ADJUSTMENT #2 - IMPUTED REGULATORY AIAC

LINE NO.	DESCRIPTION	[A] YEAR OF ADVANCE	[B] ADVANCE AMOUNT	[C] CIAC AMORTIZED	(D) CIAC REMAING BALANCE
1	Beginning Balance Per Decision No. 67093	2001	$ 170,081		$ 170,081
2	None	2002	-	25,163	144,918
3	None	2003	-	26,166	118,752
4	None	2004	-	26,166	92,586
5		2005		26,166	66,419
6		2006		26,166	40,253
7	None	2007	-	26,166	14,087
8	Per Staff		$ 170,081	$ 155,994	$ 14,087
9	Company Proposed Imputed Reg. AIAC				-
10	**Staff Adjustment**			$ -	$ 14,087

REFERENCES:
Columns [A]: Fiscal Years
Column [B]: Beginning Balance per Decision No. 67093
Column [C]: Annual Amortization of Col [B] using 6.5 year recovery period per Decision No. 67093
Column [D]: CIAC per Decision No. 67093, less amortization.

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Schedule GWB 7
SURREBUTTAL

RATE BASE ADJUSTMENT #3 - DEFERRED DEBITS

LINE NO.	DESCRIPTION		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	At December 31, 2007	2007	54,503	(51,122)	3,381
6			$ 54,503	$ (51,122)	$ 105,625

REFERENCES:
Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Schedule GWB 8
SURREBUTTAL

RATE BASE ADJUSTMENT #4 - AIAC IN CWIP

ACCT NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
	AIAC	1,042,125	$ 20,266	$ 1,062,391

Columns [A]: Company schedules
Column [B]: Column [C] less Column [A]
Column [C]: See testimony GWB

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Schedule GWB-10
SURREBUTTAL

OPERATING INCOME STATEMENT - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF RECOMMENDED CHANGES	[E] STAFF RECOMMENDED
1						
2	Water Revenues	$ 423,061	$ -	$ 423,061	$ 216,734	$ 639,795
3	Other Revenues	3,839	-	3,839	-	3,839
4	Other	-	-	-	-	-
5	**Total Operating Revenues**	$ 426,900	$ -	$ 426,900	$ 216,734	$ 643,634
6						
7	Labor	$ 131,623	$ -	131,623	$ -	$ 131,623
8	Purchased Water	$ -	-	-	-	-
9	Fuel & Power	$ 25,631	-	25,631	-	25,631
10	Chemicals	$ 2,190	-	# 2,190	-	2,190
11	Waste Disposal	$ (27)	-	(27)	-	(27)
12	Management Fees	$ 87,180	-	87,180	-	87,180
13	Group Insurance	$ 24,921	-	24,921	-	24,921
14	Pensions	$ 28,546	-	28,546	-	28,546
15	Regulatory Expense	$ 1,480	-	1,480	-	1,480
16	Insurance Other Than Group	$ 5,049	-	5,049	-	5,049
17	Customer Accounting	$ 11,644	-	11,644	-	11,644
18	Rents	$ 4,146	-	4,146	-	4,146
19	General Office Expense	$ 8,811	-	8,811	-	8,811
20	Miscellaneous	$ 49,935	-	49,935	-	49,935
21	Maintenance Expense	$ 17,394	-	17,394	-	17,394
22	Depreciation & Amortization	$ 81,679	(552)	81,127		81,127
23	General Taxes-Property	$ 26,350	(1,008)	25,341	4,222	29,563
24	General Taxes-Other	$ 11,078	-	11,078	-	11,078
25	Income Taxes	$ (52,178)	10,656	(41,522)	60,026	18,504
26			-		-	-
28						
29	**Total Operating Expenses**	465,453	9,096	474,549	64,248	538,796
30	**Operating Income (Loss)**	$ (38,553)	$ (9,096)	$ (47,649)	$ 152,486	$ 104,838

References:
Column (A): Company Schedule C-1
Column (B): Schedule GTM 11
Column (C): Column (A) + Column (B)
Column (D): Schedules GWB 2, Lines 29 and 37
Column (E): Column (C) + Column (D)

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Surrebuttal Schedule GTM-11

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] Depreciation Exp. ADJ #1	[C] Property Taxes ADJ #2	[D] Income Taxes ADJ #3	[E] STAFF ADJUSTED
1						
2	Water Revenues	$ 423,061	$ -	$ -	$ -	$ 423,061
3	Other Revenues	3,839	-	-	-	$ 3,839
4	Other	-	-	-	-	$ -
5	**Total Operating Revenues**	$ 426,900	$ -	$ -	$ -	$ 426,900
6						
7	Labor	$ 131,623	$ -	$ -	$ -	131,623
8	Purchased Water	-	-	-	-	-
9	Fuel & Power	25,631	-	-	-	25,631
10	Chemicals	2,190	-	-	-	2,190
11	Waste Disposal	(27)	-	-	-	(27)
12	Management Fees	87,180	-	-	-	87,180
13	Group Insurance	24,921	-	-	-	24,921
14	Pensions	28,546	-	-	-	28,546
15	Regulatory Expense	1,480	-	-	-	1,480
16	Insurance Other Than Group	5,049	-	-	-	5,049
17	Customer Accounting	11,644	-	-	-	11,644
18	Rents	4,146	-	-	-	4,146
19	General Office Expense	8,811	-	-	-	8,811
20	Miscellaneous	49,935	-	-	-	49,935
21	Maintenance Expense	17,394	-	-	-	17,394
22	Depreciation & Amortization	81,679	(552)	-	-	81,127
23	General Taxes-Property	26,350	-	(1,008)	-	25,341
24	General Taxes-Other	11,078	-	-	-	11,078
25	Income Taxes	(52,178)	-	-	10,656	(41,522)
26						
27						
28	**Total Operating Expenses**	$ 465,453	$ (552)	$ (1,008)	$ 10,656	$ 474,549
29	**Operating Income (Loss)**	$ (38,553)	$ 552	$ 1,008	$ (10,656)	**$ (47,649)**

ADJ #		References:
1	Depreciation Expense	GTM 12
2	Property Taxes	GTM 13
3	Income Taxes	GTM 14

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Surrebuttal Schedule GTM-12

OPERATING ADJUSTMENT #1- DEPRECIATION EXPENSE

LINE NO.	ACCT. NO.	DESCRIPTION	[A] PLANT BALANCE	[B] DEPRECIATION RATE	[C] DEPRECIATION EXPENSE
1	*PLANT IN SERVICE:*				
2	301000	Organization	567	0.00%	-
3	302000	Franchises	2,030	0.00%	-
4	303200	Land & Land Rights SS	20,414	0.00%	-
5	303300	Land & Land Rights P	50	0.00%	-
6	303400	Land & Land Rights WT	50	0.00%	-
7	303500	Land & Land Rights TD	422	0.00%	-
8	303600	Land & Land Rights AG	2,755	0.00%	-
9	304100	Struct & Imp SS	25,292	2.21%	559
10	304200	Struct & Imp P	14,608	2.21%	323
11	304300	Struct & Imp WT	-	2.21%	-
12	304400	Struct & Imp TD	156	2.21%	3
13	304600	Struct & Imp Offices	498	2.21%	11
14	304800	Struct & Imp Misc	-		-
15	305000	Collect & Impounding	-	0.00%	-
16	307000	Wells & Springs	238,951	3.08%	7,360
17	310100	Power Generation Equip Other	4,832	4.24%	205
18	311200	Pump Equip Electric	281,109	4.24%	11,919
19	311300	Pump Equip Diesel	879	4.24%	37
20	311500	Pump Equip Other	403,824	4.24%	17,122
21	320100	WT Equip Non-Media	55,863	7.06%	3,944
22	330000	Dist Reservoirs & Standpipe	151,203	1.62%	2,449
23	331001	TD Mains Not Classified by Size	301,123	1.97%	5,932
24	331100	TD Mains 4in & Less	874,455	1.97%	17,227
25	331200	TD Mains 6in to 8in	390,385	1.97%	7,691
26	331300	TD Mains 10in to 16in	-	2.34%	-
27	333000	Services	401,618	2.45%	9,840
28	334100	Meters	99,052	2.42%	2,397
29	334200	Meter Installations	20,327	2.42%	492
30	335000	Hydrants	78,367	1.97%	1,544
31	339100	Othber P/E Intangible	-	0.00%	-
32	339500	Other P/E TD	-	0.00%	-
33	340100	Office Furniture & Equip	5,453	3.28%	179
34	340200	Comp & Periph Equip	1,336	10.00%	134
35	341100	Trans Equip Lt Duty Trks	17,166	20.00%	3,433
36	341200	Trans Equip Hvy Duty Trks	-	15.00%	-
37	342000	Stores Equipment	0	3.59%	0
38	343000	Tools,Shop,Garage Equip	14,442	3.59%	518
39	344000	Laboratory Equipment	-	0.00%	-
40	345000	Power Operated Equipment	-	4.64%	-
41	346100	Comm Equip Non-Telephone	1,932	5.03%	97
42	346300	Comm Equip Other	659	4.93%	32
43					
44	*CORPORATE ALLOCATION*				
45	304620	Struct & Imp Leasehold	793	14.28%	113
46	331001	Mains	-	1.97%	-
47	340100	Office Furniture & Equip	3,927	3.28%	129
48	340200	Comp & Periph Equip	1,597	10.00%	160
49	340300	Computer Software	6,285	25.00%	1,571
50	340300	Computer Software-Other	163	25.00%	41
51	343000	Tools,Shop,Garage Equip	134	3.59%	5
52	346100	Comm Equip Non-Telephone	650	5.03%	33
53	346300	Comm Equip Other	17	4.93%	1
54		**Total Plant In Service**	3,423,384	2.79%	95,501
55					
56					
57		Less Non Depreciable Plant			
58	301000	Organization	567	-	-
59	302000	Franchises	2,030	-	-
60	303200	Land & Land Rights SS	20,414	-	-
61	303300	Land & Land Rights P	50	-	-
62	303400	Land & Land Rights WT	50	-	-
63	303500	Land & Land Rights TD	422	-	-
64	303600	Land & Land Rights AG	2,755	-	-
65	304620	Struct & Imp Leasehold	793	0	113
66		Net Depreciable Plant and Depreciation Amounts	$ 3,396,303		$ 95,387
67		Composite Depreciation Rate		2.81%	
68		Less			
69		Amortization of Regulatory CIAC at Settlement Rate			14,368
70		Amortization of CIAC at Composite Rate	$ 195		$ 5
71		Staff Recommended Depreciation Expense			$ 81,127
72		Company Proposed Depreciation Expense			81,679
73		Staff Adjustment			$ (552)

	References:
Col A	Schedule GWB-4
Col B	Proposed Rates per Staff Engineering Report for Non Allocated Plant
Col C	Col [A] times Col [B]

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
Docket No. WS-01303A-08-0227
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Surrebuttal Schedule GTM-13

OPERATING ADJUSTMENT #2 - PROPERTY TAX EXPENSE

LINE NO.	DESCRIPTION	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2007	$ 426,900	$ 426,900
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	853,800	853,800
4	Staff Recommended Revenue	426,900	643,634
5	Subtotal (Line 4 + Line 5)	1,280,700	1,497,434
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	426,900	499,145
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	853,800	998,289
10	Plus: 10% of CWIP - 2005	13,454	13,454
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	867,254	1,011,743
13	Assessment Ratio	0.23	0.230
14	Assessment Value (Line 12 * Line 13)	199,468	232,701
15	Composite Property Tax Rate - Obtained from ADOR	12.70%	12.70%
16	Staff Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 25,341	
17	Company Proposed Property Tax	$ 26,350	
18	Staff Test Year Adjustment (Line 16 - Line 17)	**$ (1,008)**	
19	Property Tax on Staff Recommended Revenue (Line 14 * Line 15)		$ 29,563
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 25,341
21	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 4,222**
22	Increase in Property Tax Due to Increase in Revenue Requirement (Line 21)		$ 4,222
23	Increase in Revenue Requirement		$ 216,734
24	Increase in Property Tax Per Dollar Increase in Revenue (Line 22 / Line 23)		1.94802%

REFERENCES: 0
Line 15: Composite Tax Rate obtained from Arizona Department of Revenue
Line 17: Company Schedule C-1, Line 24
Line 21: Line 19 - Line 20
Line 23: Schedule GWB-1, Line 8

ARIZONA-AMERICAN WATER COMPANY - TUBAC WATER
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Surrebuttal Schedule GTM-14

OPERATING INCOME ADJUSTMENT #3 - INCOME TAXES

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED
1		Income Taxes	$ (52,178)	$ 10,656	$ (41,522)

References:
Column (A), Company Schedule C-2
Column (B): Testimony GTM
Column (C): Column (A) + Column (B)

ALL-STATE LEGAL®
EXHIBIT
S-10
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

DIRECT

TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

JANUARY 12, 2009

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ATTACHMENT

David Parcell Resume ..... ATTACHMENT 1

INTRODUCTION

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

A. My name is David C. Parcell. I am President and Senior Economist of Technical Associates, Inc. My business address is Suite 601, 1051 East Cary Street, Richmond, Virginia 23219.

Q. Please summarize your educational background and professional experience.

A. I hold B.A. (1969) and M.A. (1970) degrees in economics from Virginia Polytechnic Institute and State University (Virginia Tech) and a M.B.A. (1985) from Virginia Commonwealth University. I have been a consulting economist with Technical Associates since 1970. I have provided cost of capital testimony in public utility ratemaking proceedings, dating back to 1972. In connection with this, I have previously filed testimony and/or testified in over 400 utility proceedings before about 40 regulatory agencies in the United States and Canada. Attachment 1 provides a more complete description of my education and relevant work experience.

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

A. I have been retained by the Utilities Division Staff to evaluate the cost of capital aspects of the current filing of Arizona-American Water Company ("AAWC" or "Company"). I have performed independent studies and am making recommendations of the current cost of capital for AAWC. In addition, since AAWC is a subsidiary of American Water Works Company, Inc. ("AWW"), I have also evaluated this entity in my analyses.

Q. Have you prepared an Exhibit in support of your testimony?

A. Yes, I have prepared one exhibit, made up of twelve Schedules, identified as Schedule 1 through Schedule ~~14~~ 12. These Schedules were prepared either by me or under my direction.

The information contained in these schedules is correct to the best of my knowledge and belief.

SUMMARY OF TESTIMONY AND RECOMMENDATIONS

Q. What are your recommendations in this proceeding?

A. My overall cost of capital recommendations for AAWC are:

	Percent	Cost	Return
Short-Term Debt	10.98%	5.367%	0.59%
Long-Term Debt	47.70%	5.463%	2.59%
Common Equity	41.62%	9.5-10.5%	3.95-4.37%
Total	100.00%		7.13-7.55%

AAWC's application requests a return on common equity of 11.75 percent and overall rate of return of 8.40 percent. I propose a return on common equity of 10.0 percent and an overall rate of return of 7.34 percent.

Q. Please summarize your cost analyses and related conclusions for AAWC.

A. This proceeding is concerned with AAWC's regulated water utility operations in Arizona. My analyses are concerned with the Company's total cost of capital. The first step in performing an analysis of the Company's cost of capital is the development of the appropriate capital structure. AAWC's proposed capital structure is comprised of 46.75 percent common equity and 53.25 percent long-term debt. This capital structure is the projected December 1, 2008, capital structure of the Company. I use a capital structure in my cost of capital analyses that contains short-term debt.

The second step in a cost of capital calculation is a determination of the embedded cost rates of debt. AAWC's application uses a long-term debt cost rate of 5.463 percent, which

reflects the Company's projected cost at December 31, 2008. I have used the same rate for this item as is proposed by the Company. For the cost of short-term debt, I use the rate cited in the Company's filing.

The third step in the cost of capital calculation is the estimation of the cost of common equity. I have employed three recognized methodologies to estimate the cost of equity for AAWC. Each of these methodologies is applied to three groups of proxy water utilities. These three methodologies and my findings are:

Methodology	Range
Discounted Cash Flow	~~9.5-10.5%~~ 9.0-10.0%
Capital Asset Pricing Model	~~10.2-10.5%~~ 9.8-10.4%
Comparable Earnings	9.5-10.5%

Based upon these findings, I conclude that the cost of common equity for AAWC is within a range of 9.5 percent to 10.5 percent. I recommend the mid-point of my cost of equity range (10.0 %).

Combining these three steps into a weighted cost of capital results in an overall rate of return range of 7.13 percent to 7.55 percent. My recommended 10.0 percent cost of equity results in an overall cost of capital of 7.34 percent.

ECONOMIC/LEGAL PRINCIPLES AND METHODOLOGIES

Q. What are the primary economic and legal principles that establish the standards for determining a fair rate of return for a regulated utility?

A. Public utility rates are normally established in a manner designed to allow the recovery of their costs, including capital costs. This is frequently referred to as "cost of service" ratemaking. Rates for regulated public utilities traditionally have been primarily

established using the "rate base - rate of return" concept. Under this method, utilities are allowed to recover a level of operating expenses, taxes, and depreciation deemed reasonable for rate-setting purposes, and are granted an opportunity to earn a fair rate of return on the assets used and useful (*i.e.*, rate base) in providing service to their customers.

The rate base is derived from the asset side of the utility's balance sheet as a dollar amount and the rate of return is developed from the liabilities/owners' equity side of the balance sheet as a percentage. The revenue impact of the cost of capital is thus derived by multiplying the rate base by the rate of return (including income taxes).

The rate of return is developed from the cost of capital, which is estimated by weighting the capital structure components (*i.e.*, debt, preferred stock, and common equity) by their percentages in the capital structure and multiplying these by their cost rates. This is also known as the weighted cost of capital.

Technically, "fair rate of return" is a legal and accounting concept that refers to an *ex post* (after the fact) earned return on an asset base, while the cost of capital is an economic and financial concept which refers to an *ex ante* (before the fact) expected or required return on a liability base. In regulatory proceedings, however, the two terms are often used interchangeably, as I have done in my testimony.

From an economic standpoint, a fair rate of return is normally interpreted to mean that an efficient and economically managed utility will be able to maintain its financial integrity, attract capital, and establish comparable returns for similar risk investments. These concepts are derived from economic and financial theory and are generally implemented using financial models and economic concepts.

Although I am not a lawyer and I do not offer a legal opinion, my testimony is based on my understanding that two United States Supreme Court decisions provide the main standards for a fair rate of return. The first decision is Bluefield Water Works and Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923). In this decision, the Court stated:

> *What annual rate will constitute **just compensation** depends upon many circumstances and must be **determined by** the **exercise of fair and enlightened judgment**, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to **earn a return** on the value of the property which it employs for the convenience of the public equal to that **generally being made** at the same time and in the same general part of the country on **investments in other business undertakings** which are **attended by corresponding risks and uncertainties**; but it has no **constitutional right to profits** such as are realized or anticipated in **highly profitable enterprises or speculative ventures**. The **return** should be reasonably sufficient to assure confidence in the **financial soundness** of the utility, and should be adequate, **under efficient and economical management**, to maintain and **support its credit** and **enable it to raise the money** necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.* **[Emphasis added.]**

It is my understanding that the Bluefield decision established the following standards for a fair rate of return: comparable earnings, financial integrity, and capital attraction. It also noted the changing level of required returns over time as well as an underlying assumption that the utility be operated in an efficient manner.

The second decision is Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1942). In that decision, the Court stated:

> *The rate-making process under the [Natural Gas] Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the **investor** and **consumer interests** . . . . From the investor or company point of view it is*

> *important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the* ***return*** *to the equity* ***owner*** *should be* ***commensurate*** *with* ***returns*** *on* ***investments*** *in* ***other enterprises having corresponding risks****. That return, moreover, should be sufficient to assure confidence in the* ***financial integrity*** *of the enterprise, so as to* ***maintain its credit*** *and to* ***attract capital****.* **[Emphasis added.]**

The three economic and financial parameters in the Bluefield and Hope decisions - comparable earnings, financial integrity, and capital attraction - reflect the economic criteria encompassed in the "opportunity cost" principle of economics. The opportunity cost principle provides that a utility and its investors should be afforded an opportunity (not a guarantee) to earn a return commensurate with returns they could expect to achieve on investments of similar risk. The opportunity cost principle is consistent with the fundamental premise, on which regulation rests, namely, that it is intended to act as a surrogate for competition.

I understand that because Arizona is a "Fair Value" state, Hope and Bluefield do not set forth the legal requirements applicable to determining fair rate of return in Arizona. In Simms v. Round Valley Light & Power Co., 294 P.2d 378 (1956), the Arizona Supreme Court took exception to application of the following principle in Arizona since the Constitution mandates consideration of fair value:

> *"In the Hope case the court, in testing the reasonableness of rates fixed by the Federal Power Commission under the Natural Gas Act, 15 U.S.C.A. Section 717 et seq., after holding that congress had provided no formula by which just and reasonable rates were to be determined, ruled that it was the final result reached and not the method used in reaching the result that was controlling and that it was unimportant to 'determine the various permissible ways in which any rate base on which the return in computed might be arrived at."*

My testimony does not advocate that the Commission ignore the Simms holding in this regard, or the fair value of AAWC's property, which it is required to consider under article 15, section 14 of the Arizona Constitution. Rather, I find the Hope and Bluefield decisions to be helpful in their discussion of comparable earnings, financial integrity and capital attraction.

Q. How can these parameters be employed to estimate the cost of capital for a utility?

A. Neither the courts nor economic/financial theory have developed exact and mechanical procedures for precisely determining the cost of capital. This is the case because the cost of capital is an opportunity cost and is prospective-looking, which dictates that it must be estimated.

There are several useful models that can be employed to assist in estimating the cost of equity capital, which is the capital structure item that is the most difficult to determine. These include the Discounted Cash Flow ("DSC"), Capital Asset Pricing Model ("CAPM"), Comparable Earnings ("CE") and Risk Premium ("RP") methods. Each of these methods (or models) differs from the others and each, if properly employed, can be a useful tool in estimating the cost of common equity for a regulated utility.

Q. Which methods have you employed in your analyses of the cost of common equity in this proceeding?

A. I have utilized three methodologies to determine AAWC's cost of common equity: the DCF, CAPM, and CE methods. I have not employed a RP model in my analyses although, as I indicate later, my CAPM analysis is a form of the RP methodology. Each of these methodologies will be described in more detail in my testimony that follows.

GENERAL ECONOMIC CONDITIONS

Q. Why are economic and financial conditions important in determining the costs of capital?

A. The costs of capital, for both fixed-cost (debt and preferred stock) components and common equity, are determined in part by current and prospective economic and financial conditions. At any given time, each of the following factors has an influence on the costs of capital: the level of economic activity (*i.e.*, growth rate of the economy), the stage of the business cycle (*i.e.*, recession, expansion, or transition), and the level of inflation, and expected economic conditions. My understanding is that this position is consistent with the Supreme Court Bluefield decision that noted "[a] rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally."

Q. What indicators of economic and financial activity have you evaluated in your analyses?

A. I have examined several sets of economic statistics from 1975 to the present. I chose this time period because it permits the evaluation of economic conditions over three full business cycles plus the current cycle to date, allowing for an assessment of changes in long-term trends. This period also approximates the beginning and continuation of active rate case activities by public utilities.

A business cycle is commonly defined as a complete period of expansion (recovery and growth) and contraction (recession). A full business cycle is a useful and convenient period over which to measure levels and trends in long-term capital costs because it incorporates the cyclical (*i.e.*, stage of business cycle) influences, and thus, permits a comparison of structural (or long-term) trends.

Q. Please describe the timeframe of the three prior business cycles and the most recent cycle.

A. The three prior complete cycles and current cycle cover the following periods:

Business Cycle	Expansion Cycle	Contraction Period
1975-1982	Mar. 1975-July 1981	Aug. 1981-Oct. 1982
1982-1991	Nov. 1982-July 1990	Aug. 1990-Mar. 1991
1991-2001	Apr. 1991-Mar. 2001	Apr. 2001-Nov. 2001
Current	Dec. 2001-Nov. 2007	Dec. 2007-Present

Q. Do you have any general observations concerning the recent trends in economic conditions and their impact on capital costs over this broad period?

A. Yes, I do. As I will describe below, until recently the U.S. economy has enjoyed general prosperity and stability over the period since the early 1980s. This period has been characterized by longer economic expansions, relatively tame contractions, relatively low and declining inflation, and declining interest rates and other capital costs. The current business cycle began in late 2001, following a somewhat modest recession earlier in the year.

Over the past two years, on the other hand, the economy has slowed significantly, initially as a result of the 2007 collapse of the "sub-prime" mortgage market and related liquidity crises in the financial sector of the economy. During 2008, this financial crisis intensified with a more broad-based decline, initially based on an intensive increase in petroleum prices and an increasing decline in the U.S. financial sector culminating with the collapse and/or bailouts of a substantial number of long-standing institutions such as Bear Stearns, Lehman Brothers, Merrill Lynch, Freddie Mac, Fannie Mae and AIG. This crisis has recently been described as the worst financial crisis since the Great Depression. The U.S. government is in the process of implementing unprecedented actions to attempt to correct

or minimize this crisis. As of this time the effects of these potential actions are unclear. There is presently a general acceptance that the economy is already in a recession. Should the economy incur a significant recession, which is increasingly evident, the impacts on cost of capital would likely be characterized by lower utility growth and declining capital costs due to a decline in corporate profits and expected earnings growth. It is also clear that a serious recession would have negative impacts on AAWC's customers, in terms of income levels, unemployment and profits. Clearly, this is no environment in which to increase the profit levels for a regulated monopoly such as AAWC.

Q. Please describe recent and current economic and financial conditions and their impact on the costs of capital.

A. Schedule 2 shows several sets of economic data. Pages 1 and 2 contain general macroeconomic statistics while pages 4 through 6 contain financial market statistics. Pages 1 and 2 show that the U.S. economy ended 2007 as the sixth year of an economic expansion although, as indicated previously, the economy apparently entered a recession at the end of the year. This is indicated by the growth in real (*i.e.*, adjusted for inflation) Gross Domestic Product, industrial production, and the unemployment rate. This recent expansion was characterized as slower growth, in comparison to prior expansions. This resulted in lower inflationary pressures and interest rates. Economic indicators in 2008 reflect significantly declining growth in GDP and industrial production and a substantial increase in the unemployment rate, all of which are indicative of a recession.

The rate of inflation is also shown on pages 1 and 2. As is reflected in the Consumer Price Index ("CPI"), for example, inflation rose significantly during the 1975-1982 business cycle and reached double-digit levels in 1979-1980. The rate of inflation declined substantially in 1981 and remained at or below 6.1 percent during the 1983-1991 business

cycle. Since 1991, the CPI has been 4.1 percent or lower. The 4.1 percent rate of inflation in 2007 was slightly above the levels since 2000, but is well below the levels of the past thirty years. Inflation increased in the first half of 2008, largely as a result of a significant increase in petroleum costs. However, consistent with an economic contraction and lower equity returns, both petroleum prices and inflation in general have dramatically declined in recent months.

Q. What have been the trends in interest rates?

A. Pages 3 and 4 show several series of interest rates. Rates rose sharply to record levels in 1975-1981 when the inflation rate was high and generally rising. Interest rates declined substantially in conjunction with inflation rates throughout the remainder of the 1980s and throughout the 1990s. Interest rates declined even further from 2000-2005 and generally recorded their lowest levels since the 1960s.

During the past several years, long-term interest rates have remained low by historic standards. During the 2001 recession and early in the succeeding expansion, the Federal Reserve lowered interest rates (*i.e.*, Federal Funds rate) eleven times in 2001 and twice in 2003 in an effort to stimulate the economy. Following this, the Federal Reserve increased short-term interest rates on seventeen occasions between 2004 and 2006, although each time by only 0.25 percent, in an attempt to ensure that any perceived inflationary expectations would not stifle continued economic growth. Nevertheless, the Federal Reserve actions did not result in a pronounced increase in long-term rates. Most recently, however, the Federal Reserve has lowered the Federal Funds rate (*i.e.*, short-term rate) on several occasions and it presently is 0.25 percent, an all-time low. Over the past few years, long-term interest rates have remained relatively stable, by historic standards. The first several months of 2008 have experienced declines in short-term rates and in long-

term U.S. Treasury Securities, and an increase in corporate bond yields. This apparent contradiction reflects a "flight to quality," as cautious (or concerned) investors are avoiding corporate securities (stocks and debt) and are placing their funds in more secure government securities. This has the effect of driving yields on government securities to extremely low levels and the yields on corporate debt to high levels. Such a "flight to quality" will likely remain until the economy and investor confidence returns.

Q. What have been the trends in common share prices?

A. Pages 5 and 6 show several series of common stock prices and ratios. These indicate that share prices were essentially stagnant during the high inflation/interest rate environment of the late 1970s and early 1980s. On the other hand, the 1983-1991 business cycle and the most recent cycles witnessed a significant upward trend in stock prices. Since the beginning of the current financial crisis, on the other hand, stock prices have declined precipitously and have been very volatile. Stock prices in 2008 are down significantly from 2007 levels, reflecting the financial/economic crises.

Q. What conclusions do you draw from this discussion of economic and financial conditions?

A. It is apparent that capital costs are volatile and inconsistent with relationships in comparison to the levels that have prevailed over the past three decades. In addition, the current weakness in the economy has resulted in a decline in capital costs, as measured by the expected returns of competitive firms. Therefore, it can reasonably be expected that cost of equity models currently indicate returns that are lower than returns experienced in prior years. As noted elsewhere in my testimony, this is a factor that should be considered in establishing the current cost of equity for AAWC.

AAWC'S OPERATIONS AND RISKS

Q. Please summarize AAWC and its operations.

A. AAWC is a public utility that delivers water and wastewater through its services distribution system in Arizona. AAWC provides service to about 100,000 water customers and 50,000 sewer customers in about ten districts in the state. AAWC is a subsidiary of AWW.

Q. Please describe AWW.

A. AWW is a holding company whose major subsidiaries provide water and wastewater services in nineteen states subsidiaries. AWW is the largest investor-owned water and wastewater company in the United States.

AWW has undertaken several ownership changes over the past several years. Until 2003, AWW was a publicly-traded company headquartered in Voorhees, N.J. In 2003, AWW's stock was acquired by RWE Aktiengesellschaft (a German company) and became a wholly-owned subsidiary of RWE. In 2005, RWE announced its intention to exit its water activities in the U.S. and elsewhere and, in connection with this, sold about 63.2 million shares in an initial public offering ("IPO") of AWW's shares. This sale amounted to approximately 40 percent of AWW's shares now being owned by the investing public and the remaining 60 still owned by RWE. RWE intends to divest its remaining ownership of AWW through the consummation of additional public offerings in the future as dictated by market conditions.

As noted above, AWW owns a number of water and wastewater subsidiaries that operate in thirty two states throughout the U.S. One of these is AAWC. AWW also owns non-

regulated subsidiaries. AWW raises debt capital for its subsidiaries through its financing subsidiary American Water Capital Corp.

CAPITAL STRUCTURE AND COST OF DEBT

Q. What is the importance of determining a proper capital structure in a regulatory framework?

A. A utility's capital structure is important because the concept of rate base – rate of return regulation requires that a utility's capital structure be determined and utilized in estimating the total cost of capital. Within this framework, it is proper to ascertain whether the utility's capital structure is appropriate relative to its level of business risk and relative to other utilities.

As discussed in section III of my testimony, the purpose of determining the proper capital structure for a utility is to help ascertain its capital costs. The rate base – rate of return concept recognizes the assets employed in providing utility services and provides for a return on these assets by identifying the liabilities and common equity (and their cost rates) used to finance the assets. In this process, the rate base is derived from the asset side of the balance sheet and the cost of capital is derived from the liabilities/owners' equity side of the balance sheet. The inherent assumption in this procedure is that the dollar values of the capital structure and the rate base are approximately equal and the former is utilized to finance the latter.

The common equity ratio (*i.e.*, the percentage of common equity in the capital structure) is the capital structure item which normally receives the most attention. This is the case because common equity: (1) usually commands the highest cost rate; (2) generates

associated income tax liabilities; and, (3) causes the most controversy since its cost cannot be precisely determined.

Q. How have you evaluated the capital structure of AAWC?

A. All of AAWC's capital is provided by AWW. The reported capital of AAWC is actually "allocated" to the Company from AWW. I have therefore examined the historic (2006-2008) capital structure ratios of AWW. These are shown on Schedule 3. I have summarized below the common equity ratios for AWW:

	Including S-T Debt	Excluding S-T Debt
2006	39.4%	43.9%
2007	47.5%	49.3%
Sept. 30, 2008	44.8%	47.0%

Q. How do these capital structures compare to those of investor-owned water utilities?

A. Schedule 4 shows the common equity ratios (including short-term debt in capitalization) for the three groups of water utilities utilized in my cost of equity analyses. These are:

Year	Value Line Group	AUS Utility Group	Villadsen Group
2003	46%	46%	48%
2004	52%	50%	51%
2005	49%	48%	49%
2006	50%	50%	51%
2007	51%	50%	50%

These common equity ratios are slightly higher than those of AWW.

Q. What capital structure ratios has AAWC requested in this proceeding?

A. The Company requests use of the following capital structure:

Long-Term Debt	53.25%
Common Equity	46.75%

According to schedule D-1 of AAWC's filing, this is the projected capital structure of the Company at December 31, 2008.

Q. What capital structure do you propose to use in this proceeding?

A. I use the capital structure ratios as proposed by AAWC, with one exception. I have included short-term debt, which is consistent with this Commission's practice. I have used the amounts of capital for AAWC as contained in Schedule D-2 of the Company's application.

Q. What are the cost rates of debt in the company's application?

A. The Company's filing cites a cost of long-term debt of 5.463 percent. This is represented to be the Company's projected cost at December 31, 2008. I also use this cost of long-term debt in my cost of capital analyses. For the cost of short-term debt, I use the 5.367 percent rate shown on Schedule D-2.

Q. Can the cost of common equity be determined with the same degree of precision as the costs of debt?

A. No. The cost rates of debt are largely determined by interest payments, issue prices, and related expenses. The cost of common equity, on the other hand, cannot be precisely quantified, primarily because this cost is an opportunity cost. There are, however, several

models which can be employed to estimate the cost of common equity. Three of the primary methods – DCF, CAPM, and CE – are developed in the following sections of my testimony.

SELECTION OF PROXY GROUPS

Q. How have you estimated the cost of common equity for AAWC?

A. AAWC is not a publicly-traded company. AWW, AAWC's parent company, is a publicly-traded company. Consequently, it is possible to directly apply cost of equity models to AWW. However, it is generally desirable to analyze groups of comparison or "proxy" companies as a substitute for AAWC to determine its cost of common equity.

I have examined three such groups for comparison to AAWC. I have first selected the group of four water utilities that are contained in the Standard Edition of Value Line. Second, I have used the group of eight water utilities covered in AUS utility Reports. Third, I have conducted studies of the cost of equity for the proxy group of water utilities selected by AAWC's witness Bente Villadsen.

DISCOUNT CASH FLOW ANALYSIS

Q. What is the theory and methodological basis of the DCF model?

A. The DCF model is one of the oldest, as well as the most commonly-used, models for estimating the cost of common equity for public utilities. The DCF model is based on the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows.

The most common variant of the DCF model assumes that dividends are expected to grow at a constant rate. This variant of the dividend discount model is known as the constant

growth or Gordon DCF model. In this framework cost of capital is derived by the following formula:

$$K = \frac{D}{P} + g$$

where: K = discount rate (cost of capital)
P = current price
D = current dividend rate
g = constant rate of expected growth

This formula essentially recognizes that the return expected or required by investors is comprised of two factors: the dividend yield (current income) and expected growth in dividends (future income).

Q. Please explain how you have employed the DCF model.

A. I have utilized the constant growth DCF model. In doing so, I have combined the current dividend yield for each group of proxy utility stocks described in the previous section with several indicators of expected dividend growth.

Q. How did you derive the dividend yield component of the DCF equation?

A. There are several methods that can be used for calculating the dividend yield component. These methods generally differ in the manner in which the dividend rate is employed; *i.e.*, current versus future dividends or annual versus quarterly compounding of dividends. I believe the most appropriate dividend yield component is the version listed below:

$$Yield = \frac{D_0(1+0.5g)}{P_0}$$

This dividend yield component recognizes the timing of dividend payments and dividend increases.

The P_0 in my yield calculation is the average (of high and low) stock price for each proxy company for the most recent three month period (September-November, 2008). The D_0 is the current annualized dividend rate for each proxy company.

Q. How have you estimated the dividend growth component of the DCF equation?

A. The dividend growth rate component of the DCF model is usually the most crucial and controversial element involved in using this methodology. The objective of estimating the dividend growth component is to reflect the growth expected by investors that is embodied in the price (and yield) of a company's stock. As such, it is important to recognize that individual investors have different expectations and consider alternative indicators in deriving their expectations. This is evidenced by the fact that every investment decision resulting in the purchase of a particular stock is matched by another investment decision to sell that stock. Obviously, since two investors reach different decisions at the same market price, their expectations differ.

A wide array of indicators exists for estimating the growth expectations of investors. As a result, it is evident that no single indicator of growth is always used by all investors. It therefore is necessary to consider alternative indicators of dividend growth in deriving the growth component of the DCF model.

I have considered five indicators of growth in my DCF analyses. These are:

1. 2003-2007 (5-year average) earnings retention, or fundamental growth (per Value Line);
2. 5-year average of historic growth in earnings per share ("EPS"), dividends per share ("DPS"), and book value per share ("BVPS") (per Value Line);
3. 2008, 2009, and 2011-2013 projections of earnings retention growth (per Value Line);
4. 2005-2007 to 2011-2013 projections of EPS, DPS, and BVPS (per Value Line); and
5. 5-year projections of EPS growth as reported in First Call (per Yahoo! Finance).

I believe this combination of growth indicators is a representative and appropriate set with which to begin the process of estimating investor expectations of dividend growth for the groups of proxy companies. I also believe that these growth indicators reflect the types of information that investors consider in making their investment decisions. As I indicated previously, investors have an array of information available to them, all of which should be expected to have some impact on their decision-making process.

Q. Please describe your initial DCF calculations.

A. Schedule 5 presents my DCF analysis. Page 1 shows the calculation of the "raw" (i.e., prior to adjustment for growth) dividend yield for each proxy company. Pages 2 and 3 show the growth rate for the groups of proxy companies. Page 4 shows the "raw" DCF calculations, which are presented on several bases: mean, median, and high values. These results can be summarized as follows:

	Mean	Median	Mean High[1]	Median High[2]
Value Line Group	7.8%	7.6%	9.2%	9.2%
AUS Group	8.8%	9.1%	11.4%	11.5%
Villadsen Group	8.8%	9.2%	11.6%	11.5%

I note that the individual DCF calculations shown on Schedule 5 should not be interpreted to reflect the expected cost of capital for the proxy group; rather, the individual values shown should be interpreted as alternative information considered by investors. The individual DCF calculations also demonstrate how the focus on a single growth rate, such as EPS projections, can produce a DCF conclusion that is not reflective of a broader perspective of available information.

The results in Schedule 5 indicate average (mean and median) DCF cost rates of 7.8 percent to 9.2 percent. The "high" DCF rates (i.e., using the highest growth rates only) are about 9.2 percent to 11.6 percent on an average basis and 9.2 percent to 11.5 percent on a median basis.

Q. What do you conclude from your DCF analyses?

A. This analysis reflects a broad DCF range of about 7.8 percent to about 11.6 percent for the proxy groups. This is approximated by the average/mean values for the proxy groups examined in the previous analysis. I give less weight to the extreme upper and lower ends of the groups which are impacted by outlier results. I believe that 9.0 percent to 10.0 percent reflects the proper DCF cost for AAWC.

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1 Using only the highest growth rate.

2 Using only the highest growth rate.

CAPITAL ASSET PRICING MODEL ANALYSIS

Q. Please describe the theory and methodological basis of the CAPM.

A. The CAPM is a version of the RP method. The CAPM describes and measures the relationship between a security's investment risk and its market rate of return. The CAPM was developed in the 1960s and 1970s as an extension of modern portfolio theory ("MPT"), which studies the relationships among risk, diversification, and expected returns.

Q. How is the CAPM derived?

A. The general form of the CAPM is:

$$K = R_f + \beta(R_m - R_f)$$

where: K = cost of equity

R_f = risk free rate

Rm = return on market

β = beta

R_m-R_f = market risk premium

As noted previously, the CAPM is a variant of the RP method. I believe the CAPM is generally superior to the simple RP method because the CAPM specifically recognizes the risk of a particular company or industry (*i.e.*, beta), whereas the simple RP method assumes the same risk premium for all companies exhibiting similar bond ratings.

Q. What groups of companies have you utilized to perform your CAPM analyses?

A. I have performed CAPM analyses for the same groups of proxy utilities evaluated in my DCF analyses.

Q. Please explain the risk-free rate as used in your CAPM and indicate what rate you employed.

A. The first term of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level of return that can be achieved without accepting any risk.

In CAPM applications, the risk-free rate is generally recognized by use of U.S. Treasury securities. Two general types of U.S. Treasury securities are often utilized as the R_f component - short-term U.S. Treasury bills and long-term U.S. Treasury bonds.

I have performed CAPM calculations using the three-month average yield (September-November, 2008) for 20-year U.S. Treasury bonds. Over this three-month period, these bonds had an average yield of 4.35 percent.

Q. What is beta and what betas did you employ in your CAPM?

A. Beta is a measure of the relative volatility (and thus risk) of a particular stock in relation to the overall market. Betas of less than 1.0 are considered less risky than the market, whereas betas greater than 1.0 are more risky. Utility stocks traditionally have had betas below 1.0. I utilized the most recent Value Line betas for each company in the groups of proxy utilities.

Q. How did you estimate the market risk premium component in your CAPM analysis?

A. The market risk premium component (R_m-R_f) represents the investor-expected premium of common stocks over the risk-free rate, or government bonds. For the purpose of estimating the market risk premium, I considered alternative measures of returns of the Standard & Poor's ("S&P") 500 (a broad-based group of large U.S. companies) and 20-year U.S. Treasury bonds.

First, I have compared the actual annual returns on equity of the S&P 500 with the actual annual yields of U.S. Treasury bonds. Schedule 6 shows the return on equity for the S&P 500 group for the period 1978-2007 (all available years reported by S&P). This schedule also indicates the annual yields on 20-year U.S. Treasury bonds, as well as the annual differentials (*i.e.*, risk premiums) between the S&P 500 and U.S. Treasury 20-year bonds. Based upon these returns, I conclude that this version of the risk premium is about 6.46 percent.

I have also considered the total returns (i.e., dividends/interest plus capital gains/losses) for the S&P 500 group as well as for the long-term government bonds, as tabulated by Morningstar (formerly Ibbotson Associates), using both arithmetic and geometric means. I have considered the total returns for the entire 1926-2007 period, which are as follows:

	S&P 500	L-T Gov't Bonds	Risk Premium
Arithmetic	12.3%	5.8%	6.5%
Geometric	10.4%	5.5%	4.9%

I conclude from this that the expected risk premium is about 5.9 percent (i.e., average of all three risk premiums). I believe that a combination of arithmetic and geometric means

is appropriate since investors have access to both types of means and, presumably, both types are reflected in investment decisions and thus stock prices and cost of capital.

Schedule 7 shows my CAPM calculations using the risk premium. The results are:

	Mean	Median
Value Line Group	10.4%	10.4%
AUS Group	9.8%	10.1%
Villadsen Group	9.8%	10.1%

Q. What is your conclusion concerning the CAPM cost of equity?

A. The CAPM results collectively indicate a cost of 9.8 percent to 10.4 percent for the groups of comparison utilities. I conclude that the CAPM cost of equity for AAWC is 9.8 percent to 10.4 percent.

COMPARABLE EARNINGS ANALYSIS

Q. Please describe the basis of the CE methodology.

A. The CE method is derived from the "corresponding risk" standard of the Bluefield and Hope cases. This method is thus based upon the economic concept of opportunity cost. As previously noted, the cost of capital is an opportunity cost: the prospective return available to investors from alternative investments of similar risk.

The CE method is designed to measure the returns expected to be earned on the original cost book value of similar risk enterprises. Thus, this method provides a direct measure of the fair return, because the CE method translates into practice the competitive principle upon which regulation is based.

The CE method normally examines the experienced and/or projected returns on book common equity. The logic for examining returns on book equity follows from the use of original cost rate base regulation for public utilities, which uses a utility's book common equity to determine the cost of capital. This cost of capital is, in turn, used as the fair rate of return which is then applied (multiplied) to the book value of rate base to establish the dollar level of capital costs to be recovered by the utility. This technique is thus consistent with the rate base methodology used to set utility rates.

Q. How have you employed the CE methodology in your analysis of AAWC's common equity cost?

A. I conducted the CE methodology by examining realized returns on equity for several groups of companies and evaluating the investor acceptance of these returns by reference to the resulting market-to-book ratios. In this manner it is possible to assess the degree to which a given level of return equates to the cost of capital. It is generally recognized for utilities that market-to-book ratios of greater than one (*i.e.*, 100%) reflect a situation where a company is able to attract new equity capital without dilution (*i.e.*, above book value). As a result, one objective of a fair cost of equity is the maintenance of stock prices above book value.

I would further note that the CE analysis, as I have employed it, is based upon market data (through the use of market-to-book ratios) and is thus essentially a market test. As a result, my analysis is not subject to the criticisms occasionally made by some who maintain that past earned returns do not represent the cost of capital. In addition, my analysis uses prospective returns and thus is not confined to historical data.

Q. What time periods have you examined in your CE analysis?

A. My CE analysis considers the experienced equity returns of the proxy groups of utilities for the period 1992-2007 (*i.e.,* the last sixteen years). The CE analysis requires that I examine a relatively long period of time in order to determine trends in earnings over at least a full business cycle. Further, in estimating a fair level of return for a future period, it is important to examine earnings over a diverse period of time in order to avoid any undue influence from unusual or abnormal conditions that may occur in a single year or shorter period. Therefore, in forming my judgment of the current cost of equity I have focused on two periods: 2003-2007 (the last five years - the average length of a business cycle) and 1992-2001 (the most recent complete business cycle).

Q. Please describe your CE analysis.

A. Schedules 8 and 9 contain summaries of experienced returns on equity for several groups of companies, while Schedule 10 presents a risk comparison of utilities versus unregulated firms.

Schedule 7 shows the earned returns on average common equity and market-to-book ratios for the groups of proxy utilities. These can be summarized as follows:

	Value Line Group	AUS Group	Villadsen Group
Historic ROE			
Mean	8.0-10.5%	9.2-11.0%	9.2-11.0%
Median	8.6-11.0%	9.5-11.1%	9.8-11.3%
Historic M/B			
Mean	177-238%	178-236%	178-241%
Median	173-220%	178-225%	175-229%
Prospective ROE			
Mean	8.4-11.4%	8.4-11.4%	8.4-11.4%
Median	9.0-11.5%	9.0-11.5%	9.0-11.5%

These results indicate that historic returns of 8.0-11.1 percent have been adequate to produce market-to-book ratios of 171-241 percent for the groups of proxy utilities. Furthermore, projected returns on equity for 2008, 2009, and 2011-2013 are within a range of 8.4 percent to 11.5 percent for the utility groups. These relate to 2007 market-to-book ratios of 200 percent or higher.

Q. Have you also reviewed earnings of unregulated firms?

A. Yes. As an alternative, I also examined a group of largely unregulated firms. I have examined the S&P 500 Composite group, since this is a well-recognized group of firms that is widely utilized in the investment community and is indicative of the competitive sector of the economy. Schedule 8 presents the earned returns on equity and market-to-book ratios for the S&P 500 group over the past sixteen years. As this Schedule indicates, over the two periods this group's average earned returns ranged from 14.7 percent to 15.0 percent with market-to-book ratios ranging between 288 percent and 341 percent.

Q. How can the above information be used to estimate the cost of equity for AAWC?

A. The recent earnings of the proxy utility and S&P 500 groups can be utilized as an indication of the level of return realized and expected in the regulated and competitive sectors of the economy. In order to apply these returns to the cost of equity for proxy utilities, however, it is necessary to compare the risk levels of the utility industry with those of the competitive sector. I have done this in Schedule 10, which compares several risk indicators for the S&P 500 group and the utility groups. The information in this schedule indicates that the S&P 500 group is more risky than the utility proxy groups.

Q. What return on equity is indicated by the CE analysis?

A. Based on the recent earnings and market-to-book ratios, I believe the CE analysis indicates that the cost of equity for the proxy utilities is no more than 9.5 percent to 10.5 percent. Recent returns of 8.0 percent to 11.1 percent have resulted in market-to-book ratios of 170 and greater. Prospective returns of 8.8 percent to 11.5 percent result in anticipated market-to-book ratios of over 200 percent. As a result, it is apparent that returns below this level would result in market-to-book ratios of well above 100 percent. An earned return of 9.5 percent to 10.5 percent should thus result in a market-to-book ratio of over 100 percent. As I indicated earlier, the fact that market-to-book ratios substantially exceed 100 percent indicates that historic and prospective returns of over 10 percent reflect earnings levels that exceed the cost of equity for those regulated companies.

Please also note that my CE analysis is not based on a mathematic formula approach, as are the DCF and CAPM methodologies. Rather, it is based on recent trends and current conditions in equity markets. Further, it is based on the direct relationship between returns on common stock and market-to-book ratios of common stock. In utility rate setting, a fair rate of return is based on the utility's assets (*i.e.*, rate base) and the book value of the utility's capital structure. As stated earlier, maintenance of a financially stable utility's market-to-book ratio at 100 percent, or a bit higher, is fully adequate to maintain the utility's financial stability. On the other hand, a market price of a utility's common stock that is 170 percent or more above the stock's book value is indicative of earnings that exceed the utility's reasonable cost of capital. Thus, actual or projected earnings do not directly translate into a utility's reasonable cost of equity. Rather, they must be viewed in relation to the market-to-book ratios of the utility's common stock.

My 9.5 percent to 10.5 percent CE recommendation is not designed to result in market-to-book ratios as low as 1.0 for AAWC. Rather, it is based on current market conditions and the proposition that ratepayers should not be required to pay rates based on earnings levels that result in excessive market-to-book ratios.

RETURN ON EQUITY RECOMMENDATIONS

Q. Please summarize the results of your three cost of equity analyses.

A. My three methodologies produce the following:

Discounted Cash Flow	9.0-10.0%
Capital Asset Pricing Model	9.8-10.4%
Comparable Earnings	9.5-10.5%

Q. What is your cost of equity recommendation for AAWC?

A. I recommend a cost of equity of 9.5 percent to 10.5 percent for AAWC. This reflects each of my three cost of equity model results. Within this range, I recommend the 10.0 percent mid-point level.

Q. Please explain how the recent and current economic and financial crisis impacts the cost of equity for AAWC.

A. It is well chronicled that, over the past year and especially over the past few months, the United States and global financial markets have been in turmoil. The impacts of this have been far-reaching and extreme, with global credit markets virtually coming to a standstill. This crisis and its impact, however, do not imply that the cost of equity for water utilities such as AAWC have increased. I say this for the following reasons.

First, it must be emphasized that depressed economic conditions and the financial crisis affects virtually all sectors of the economy – households, small businesses, larger

commercial and industrials – and, in most cases, the impact is greater than is the case for AAWC. AAWC is a regulated utility that sells a product that has no real substitutes and is a product that consumers can do little to control the amount they use. As such, AAWC and utilities are partially, if not largely, insulated from the impacts of depressed economic conditions.

Second, if a recession is a significant one, the major impact will be to depress the profits of most enterprises. As a result, it is to be expected that capital costs will decrease if a significant recession occurs. There is no justification for increasing the profit level of a regulated utility such as AAWC at the same time that other enterprises are experiencing lower profits.

Third, even if AAWC were to incur higher costs of debt and/or other capital costs, these costs can be passed along to ratepayers at the next rate proceeding. Unregulated firms cannot do this.

Fourth, the United States and global governments have taken, and continue to take, extraordinary measures to avoid a further worsening of the current market turmoil. Most of these measures are designed to put liquidity into the credit markets and make credit more accessible again and, in the process, restore more confidence to the financial markets. All of these measures are clearly designed to lower the cost of capital. In this environment, it would be counter-productive to make any claim that AAWC should have a higher return at this time due to the above-cited market turmoil.

TOTAL COST OF CAPITAL

Q. What is the total cost of capital for AAWC?

A. Schedule 1 reflects the total cost of capital for the Company using AAWC's capital structure and costs of debt along with the range of common equity costs my analyses support. The resulting total cost of capital is a range from 7.13 percent to 7.55 percent. I recommend that a 7.34 percent total cost of capital be established for AAWC.

Q. Does your cost of capital recommendation provide the Company with a sufficient level of earnings to maintain its financial integrity?

A. Yes, it does. Schedule 11 shows the pre-tax coverage that would result if AAWC earned my cost of capital recommendation. As the results indicate, my recommended range would produce a coverage level within the benchmark range for a BBB[3] rated utility. In addition, the debt ratio (which reflects the Company's proposed capital structure) is within the benchmark for a BBB rated utility.

Q. Are you proposing a fair value rate of return in this proceeding?

A. No, I am not. In several recent testimonies I have filed before this Commission, I developed a fair value rate of return ("FVROR") that was to be used in conjunction with a fair value rate base ("FVRB"). In the present proceeding, AAWC is not requesting a FVRB that differs from its original cost rate base; thus there is no reason to develop a FVROR.

COMMENTS ON COMPANY TESTIMONY

Q. Have you reviewed the testimony of AAWC witness Bente Villadsen?

A. Yes, I have. Dr. Villadsen is the Company's cost of equity witness.

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[3] A rating indicating medium grade investment quality.

Q. Please summarize your understanding of Dr. Villadsen's methodologies and conclusions.

A. Dr. Villadsen's cost of equity analyses begins with the application of two methodologies (DCF and Risk-Positioning [CAPM]) which are performed for two groups of proxy utilities (a group of eight water utilities and a group of ten natural gas local distribution companies ["LDC"s]). Her ultimate recommendation, however, relies primarily on the risk-positioning results for the LDC sample.[4]

Next, she used her cost of equity estimates for each proxy company, along with the respective market costs of debt and preferred stock, to calculate each firm's overall cost of capital ("WTWACC") using the company market value capital structure. Then, she calculates the samples' average ATWACC and the cost of equity for a capital structure with 46.9 percent common equity (i.e., common equity ratio of AAWC).

Her conclusion is a cost of equity range of 11.5 percent to 12.5 percent. The request of AAWC of 11.75 percent is within this range and at the mid-point.[5]

Q. Do you agree with parts of Dr. Villadsen's analyses?

A. Yes, I do. The first step in her cost of equity analyses, as noted above, is the application of DCF and CAPM (risk-positioning) methods to the two groups of proxy utilities. I have prepared Schedule 12 to summarize the results of her DCF and CAPM analyses to the water utility and LDC samples. These DCF and CAPM results all generally fall within a range of 9 percent to 10 percent, which are consistent with my cost of equity results.

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4 Page 2, lines 15-25.

5 Page 3, lines 23-28.

Q. Do you agree with the second step of Dr. Villadsen's cost of equity analyses?

A. No, I do not. I note that her development of WTWACC is an unnecessary step in the cost of capital development for a utility and is clearly unconventional. I further note that use of a market value capital structure is inappropriate and inconsistent with several decades of public utility regulation.

Q. Why is it improper to employ a market value capital structure, rather than a book value capital structure, in developing the cost of capital for a utility?

A. Virtually every regulatory commission in the U.S. uses the book value of utility capital structures to calculate the total cost of capital for ratemaking purposes. This is also the case for this Commission. In addition, AAWC proposes to use its book value capital structure to develop its total cost of capital.

It is inconsistent to use market value capital structures to develop a cost of equity that is to be applied to a book value capital structure. It also improperly inflates the required cost of equity for regulated utilities.

Q. Does Dr. Villadsen's testimony provide any indications that her methodologies produce excessive results?

A. Yes. Page 46 of her testimony indicates that recent (2002-2008) cost of equity awards of this Commission have averaged 9.2 percent, with the vast majority being below 10.0 percent. This contrasts sharply with her 11.75 percent recommendation in this proceeding.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

BACKGROUND AND EXPERIENCE PROFILE
DAVID C. PARCELL, MBA, CRRA
PRESIDENT/SENIOR ECONOMIST

EDUCATION

1985	M.B.A., Virginia Commonwealth University
1970	M.A., Economics, Virginia Polytechnic Institute and State University, (Virginia Tech)
1969	B.A., Economics, Virginia Polytechnic Institute and State University, (Virginia Tech)

POSITIONS

2007-Present	President, Technical Associates, Inc.
1995-2007	Executive Vice President and Senior Economist, Technical Associates, Inc.
1993-1995	Vice President and Senior Economist, C. W. Amos of Virginia
1972-1993	Vice President and Senior Economist, Technical Associates, Inc.
1969-1972	Research Economist, Technical Associates, Inc.
1968-1969	Research Associate, Department of Economics, Virginia Polytechnic Institute and State University

ACADEMIC HONORS

Omicron Delta Epsilon - Honor Society in Economics
Beta Gamma Sigma - National Scholastic Honor Society of Business Administration
Alpha Iota Delta - National Decision Sciences Honorary Society
Phi Kappa Phi - Scholastic Honor Society

PROFESSIONAL DESIGNATIONS

Certified Rate of Return Analyst - Founding Member
Member of Association for Investment Management and Research (AIMR)

RELEVANT EXPERIENCE

Financial Economics -- Advised and assisted many Virginia banks and savings and loan associations on organizational and regulatory matters. Testified approximately 25 times before the Virginia State Corporation Commission and the Regional Administrator of National Banks on matters related to branching and organization for banks, savings and loan associations, and consumer finance companies. Advised financial institutions on interest rate structure and loan maturity. Testified before Virginia State Corporation Commission on maximum rates for consumer finance companies.

Testified before several committees and subcommittees of Virginia General Assembly on numerous banking matters.

Clients have included First National Bank of Rocky Mount, Patrick Henry National Bank, Peoples Bank of Danville, Blue Ridge Bank, Bank of Essex, and Signet Bank.

Published articles in law reviews and other periodicals on structure and regulation of banking/financial services industry.

Utility Economics -- Performed numerous financial studies of regulated public utilities. Testified in over 300 cases before some thirty state and federal regulatory agencies.

Prepared numerous rate of return studies incorporating cost of equity determination based on DCF, CAPM, comparable earnings and other models. Developed procedures for identifying differential risk characteristics by nuclear construction and other factors.

Conducted studies with respect to cost of service and indexing for determining utility rates, the development of annual review procedures for regulatory control of utilities, fuel and power plant cost recovery adjustment clauses, power supply agreements among affiliates, utility franchise fees, and use of short-term debt in capital structure.

Presented expert testimony before federal regulatory agencies Federal Energy Regulatory Commission, Federal Power Commission, and National Energy Board (Canada), state regulatory agencies in Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Ontario (Canada), Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, West Virginia, Washington, Wisconsin, and Yukon Territory (Canada).

Published articles in law reviews and other periodicals on the theory and purpose of regulation and other regulatory subjects.

Clients served include state regulatory agencies in Alaska, Arizona, Delaware, Missouri, North Carolina, Ontario (Canada), and Virginia; consumer advocates and attorneys general in Alabama, Arizona, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maryland, Nevada, New Mexico, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, and West Virginia; federal agencies including Defense Communications Agency, the Department of Energy, Department of the Navy, and General Services Administration; and various organizations such as Bath Iron Works, Illinois Citizens' Utility Board, Illinois Governor's Office of Consumer Services, Illinois Small Business Utility Advocate, Wisconsin's Environmental Decade, Wisconsin's Citizens Utility Board, and Old Dominion Electric Cooperative.

Insurance Economics -- Conducted analyses of the relationship between the investment income earned by insurance companies on their portfolios and the premiums charged for insurance. Analyzed impact of diversification on financial strength of Blue Cross/Blue Shield Plans in Virginia.

Conducted studies of profitability and cost of capital for property/casualty insurance industry. Evaluated risk of and required return on surplus for various lines of insurance business.

Presented expert testimony before Virginia State Corporation Commission concerning cost of capital and expected gains from investment portfolio. Testified before insurance bureaus of Maine, New Jersey, North Carolina, Rhode Island, South Carolina and Vermont concerning cost of equity for insurance companies.

Prepared cost of capital and investment income return analyses for numerous insurance companies concerning several lines of insurance business. Analyses used by Virginia Bureau of Insurance for purposes of setting rates.

Special Studies -- Conducted analyses which evaluated the financial and economic implications of legislative and administrative changes. Subject matter of analyses include returnable bottles, retail beer sales, wine sales regulations, taxi-cab taxation, and bank regulation. Testified before several Virginia General Assembly subcommittees.

Testified before Virginia ABC Commission concerning economic impact of mixed beverage license.

Clients include Virginia Beer Wholesalers, Wine Institute, Virginia Retail Merchants Association, and Virginia Taxicab Association.

Franchise, Merger & Anti-Trust Economics -- Conducted studies on competitive impact on market structures due to joint ventures, mergers, franchising and other business restructuring. Analyzed the costs and benefits to parties involved in mergers. Testified in federal courts and before banking and other regulatory bodies concerning the structure and performance of markets, as well as on the impact of restrictive practices.

Clients served include Dominion Bankshares, asphalt contractors, and law firms.

Transportation Economics -- Conducted cost of capital studies to assess profitability of oil pipelines, trucks, taxicabs and railroads. Analyses have been presented before the Federal Energy Regulatory Commission and Alaska Pipeline Commission in rate proceedings. Served as a consultant to the Rail Services Planning Office on the reorganization of rail services in the U.S.
Economic Loss Analyses -- Testified in federal courts, state courts, and other adjudicative forums regarding the economic loss sustained through personal and business injury whether due to bodily harm, discrimination, non-performance, or anticompetitive practices. Testified on economic loss to a

commercial bank resulting from publication of adverse information concerning solvency. Testimony has been presented on behalf of private individuals and business firms.

MEMBERSHIPS

American Economic Association
Virginia Association of Economists
Richmond Society of Financial Analysts
Financial Analysts Federation
Society of Utility and Regulatory Financial Analysts

Board of Directors	1992-2000
Secretary/Treasurer	1994-1998
President	1998-2000

RESEARCH ACTIVITY

Books and Major Research Reports

"Stock Price As An Indicator of Performance," Master of Arts Thesis, Virginia Tech, 1970

"Revision of the Property and Casualty Insurance Ratemaking Process Under Prior Approval in the Commonwealth of Virginia," prepared for the Bureau of Insurance of the Virginia State Corporation Commission, with Charles Schotta and Michael J. Ileo, 1971

"An analysis of the Virginia Consumer Finance Industry to Determine the Need for Restructuring the Rate and Size Ceilings on Small Loans in Virginia and the Process by which They are Governed," prepared for the Virginia Consumer Finance Association, with Michael J. Ileo, 1973

State Banks and the State Corporation Commission: A Historical Review, Technical Associates, Inc., 1974

"A Study of the Implications of the Sale of Wine by the Virginia Department of Alcoholic Beverage Control", prepared for the Virginia Wine Wholesalers Association, Virginia Retail Merchants Association, Virginia Food Dealers Association, Virginia Association of Chain Drugstores, Southland Corporation, and the Wine Institute, 1983.

"Performance and Diversification of the Blue Cross/Blue Shield Plans in Virginia: An Operational Review", prepared for the Bureau of Insurance of the Virginia State Corporation Commission, with Michael J. Ileo and Alexander F. Skirpan, 1988.

The Cost of Capital - A Practitioners' Guide, Society of Utility and Regulatory Financial

Analysts, 1997 (previous editions in 1991, 1992, 1993, 1994, and 1995).

Papers Presented and Articles Published

"The Differential Effect of Bank Structure on the Transmission of Open Market Operations," Western Economic Association Meeting, with Charles Schotta, 1971

"The Economic Objectives of Regulation: The Trend in Virginia," (with Michael J. Ileo), William and Mary Law Review, Vol. 14, No. 2, 1973

"Evolution of the Virginia Banking Structure, 1962-1974: The Effects of the Buck-Holland Bill", (with Michael J. Ileo), William and Mary Law Review, Vol. 16, No. 3, 1975

"Banking Structure and Statewide Branching: The Potential for Virginia", William and Mary Law Review, Vol. 18, No. 1, 1976

"Bank Expansion and Electronic Banking: Virginia Banking Structure Changes Past, Present, and Future," William and Mary Business Review," Vol. 1, No. 2, 1976

"Electronic Banking - Wave of the Future?" (with James R. Marchand), Journal of Management and Business Consulting, Vol. 1, No. 1, 1976

"The Pricing of Electricity" (with James R. Marchand), Journal of Management and Business Consulting, Vol. 1, No. 2, 1976

"The Public Interest - Bank and Savings and Loan Expansion in Virginia" (with Richard D. Rogers), University of Richmond Law Review, Vol. 11, No. 3, 1977

"When Is It In the 'Public Interest' to Authorize a New Bank?", University of Richmond Law Review, Vol. 13, No. 3, 1979

"Banking Deregulation and Its Implications on the Virginia Banking Structure," William and Mary Business Review, Vol. 5, No. 1, 1983

"The Impact of Reciprocal Interstate Banking Statutes on The Performance of Virginia Bank Stocks", with William B. Harrison, Virginia Social Science Journal, Vol. 23, 1988

"The Financial Performance of New Banks in Virginia", Virginia Social Science Journal, Vol. 24, 1989

"Identifying and Managing Community Bank Performance After Deregulation", with William B. Harrison, Journal of Managerial Issues, Vol. II, No. 2, Summer 1990

"The Flotation Cost Adjustment To Utility Cost of Common Equity - Theory, Measurement and Implementation," presented at Twenty-Fifth Financial Forum, National Society of Rate of Return Analysts, Philadelphia, Pennsylvania, April 28, 1993.

Biography of Myon Edison Bristow, Dictionary of Virginia Biography, Volume 2, 2001.

Exhibit___(DCP-1)
Schedule 1

ARIZONA-AMERICAN WATER COMPANY
TOTAL COST OF CAPITAL

Item	Amount	Percent	Cost		Weighted Cost	
Short-Term Debt	$43,811,094.00	10.98%	5.367%		0.59%	
Long-Term Debt	$189,208,140.00	47.40%	5.463%		2.59%	
Common Equity	$166,123,326.00	41.62%	9.50%	10.50%	3.95%	4.37%
Total	$399,142,560.00	100.00%			**7.13%**	**7.55%**
					Mid-Point	**7.34%**

ECONOMIC INDICATORS

Year	Real GDP Growth*	Industrial Production Growth	Unemployment Rate	Consumer Price Index	Producer Price Index
		1975 - 1982 Cycle			
1975	-1.1%	-8.9%	8.5%	7.0%	6.6%
1976	5.4%	10.8%	7.7%	4.8%	3.7%
1977	5.5%	5.9%	7.0%	6.8%	6.9%
1978	5.0%	5.7%	6.0%	9.0%	9.2%
1979	2.8%	4.4%	5.8%	13.3%	12.8%
1980	-0.2%	-1.9%	7.0%	12.4%	11.8%
1981	1.8%	1.9%	7.5%	8.9%	7.1%
1982	-2.1%	-4.4%	9.5%	3.8%	3.6%
		1983 - 1991 Cycle			
1983	4.0%	3.7%	9.5%	3.8%	0.6%
1984	6.8%	9.3%	7.5%	3.9%	1.7%
1985	3.7%	1.7%	7.2%	3.8%	1.8%
1986	3.1%	0.9%	7.0%	1.1%	-2.3%
1987	2.9%	4.9%	6.2%	4.4%	2.2%
1988	3.8%	4.5%	5.5%	4.4%	4.0%
1989	3.5%	1.8%	5.3%	4.6%	4.9%
1990	1.8%	-0.2%	5.6%	6.1%	5.7%
1991	-0.5%	-2.0%	6.8%	3.1%	-0.1%
		1992 - 2001 Cycle			
1992	3.0%	3.1%	7.5%	2.9%	1.6%
1993	2.7%	3.3%	6.9%	2.7%	0.2%
1994	4.0%	5.4%	6.1%	2.7%	1.7%
1995	2.5%	4.8%	5.6%	2.5%	2.3%
1996	3.7%	4.3%	5.4%	3.3%	2.8%
1997	4.5%	7.2%	4.9%	1.7%	-1.2%
1998	4.2%	5.9%	4.5%	1.6%	0.0%
1999	4.5%	4.3%	4.2%	2.7%	2.9%
2000	3.7%	4.2%	4.0%	3.4%	3.6%
2001	0.8%	-3.4%	4.7%	1.6%	-1.6%
		Current Cycle			
2002	1.6%	-0.1%	5.8%	2.4%	1.2%
2003	2.5%	1.2%	6.0%	1.9%	4.0%
2004	3.6%	2.5%	5.5%	3.3%	4.2%
2005	2.9%	3.3%	5.1%	3.4%	5.4%
2006	2.8%	2.2%	4.6%	2.5%	1.1%
2007	2.0%	1.7%	4.6%	4.1%	6.2%

*GDP=Gross Domestic Product

Source: Council of Economic Advisors, Economic Indicators, various issues.

ECONOMIC INDICATORS

Year	Real GDP Growth*	Industrial Production Growth	Unemploy-ment Rate	Consumer Price Index	Producer Price Index
2002					
1st Qtr.	2.7%	-3.8%	5.6%	2.8%	4.4%
2nd Qtr.	2.2%	-1.2%	5.9%	0.9%	-2.0%
3rd Qtr.	2.4%	0.8%	5.8%	2.4%	1.2%
4th Qtr.	0.2%	1.4%	5.9%	1.6%	0.4%
2003					
1st Qtr.	1.2%	1.1%	5.8%	4.8%	5.6%
2nd Qtr.	3.5%	-0.9%	6.2%	0.0%	-0.5%
3rd Qtr.	7.5%	-0.9%	6.1%	3.2%	3.2%
4th Qtr.	2.7%	1.5%	5.9%	-0.3%	2.8%
2004					
1st Qtr.	3.0%	2.8%	5.6%	5.2%	5.2%
2nd Qtr.	3.5%	4.9%	5.6%	4.4%	4.4%
3rd Qtr.	3.6%	4.6%	5.4%	0.8%	0.8%
4th Qtr.	2.5%	4.3%	5.4%	3.6%	7.2%
2005					
1st Qtr.	3.0%	3.8%	5.3%	4.4%	5.6%
2nd Qtr.	2.6%	3.0%	5.1%	1.6%	-0.4%
3rd Qtr.	3.8%	2.7%	5.0%	8.8%	14.0%
4th Qtr.	1.3%	2.9%	4.9%	-2.0%	4.0%
2006					
1st Qtr.	4.8%	3.4%	4.7%	4.8%	-0.2%
2nd Qtr.	2.7%	4.5%	4.6%	4.8%	5.6%
3rd Qtr.	0.8%	5.2%	4.7%	0.4%	-4.4%
4th Qtr.	1.5%	3.5%	4.5%	0.0%	3.6%
2007					
1st Qtr.	0.1%	2.5%	4.5%	4.8%	6.4%
2nd Qtr.	4.8%	1.6%	4.5%	5.2%	6.8%
3rd Qtr.	4.8%	1.8%	4.6%	1.2%	1.2%
4th Qtr.	-0.2%	2.2%	4.8%	6.4%	10.8%
2008					
1st Qtr.	0.9%	1.8%	4.9%	2.8%	9.6%
2nd Qtr.	2.8%	0.3%	5.3%	7.6%	14.0%
3rd Qtr.	-0.3%	-2.1%	6.0%	2.8%	-0.4%

Source: Council of Economic Advisors, Economic Indicators, various issues.

INTEREST RATES

Year	Prime Rate	US Treas T Bills 3 Month	US Treas T Bonds 10 Year	Utility Bonds Aaa	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa
			1975 - 1982 Cycle				
1975	7.86%	5.84%	7.99%	9.03%	9.44%	10.09%	10.96%
1976	6.84%	4.99%	7.61%	8.63%	8.92%	9.29%	9.82%
1977	6.83%	5.27%	7.42%	8.19%	8.43%	8.61%	9.06%
1978	9.06%	7.22%	8.41%	8.87%	9.10%	9.29%	9.62%
1979	12.67%	10.04%	9.44%	9.86%	10.22%	10.49%	10.96%
1980	15.27%	11.51%	11.46%	12.30%	13.00%	13.34%	13.95%
1981	18.89%	14.03%	13.93%	14.64%	15.30%	15.95%	16.60%
1982	14.86%	10.69%	13.00%	14.22%	14.79%	15.86%	16.45%
			1983 - 1991 Cycle				
1983	10.79%	8.63%	11.10%	12.52%	12.83%	13.66%	14.20%
1984	12.04%	9.58%	12.44%	12.72%	13.66%	14.03%	14.53%
1985	9.93%	7.48%	10.62%	11.68%	12.06%	12.47%	12.96%
1986	8.33%	5.98%	7.68%	8.92%	9.30%	9.58%	10.00%
1987	8.21%	5.82%	8.39%	9.52%	9.77%	10.10%	10.53%
1988	9.32%	6.69%	8.85%	10.05%	10.26%	10.49%	11.00%
1989	10.87%	8.12%	8.49%	9.32%	9.56%	9.77%	9.97%
1990	10.01%	7.51%	8.55%	9.45%	9.65%	9.86%	10.06%
1991	8.46%	5.42%	7.86%	8.85%	9.09%	9.36%	9.55%
			1992 - 2001 Cycle				
1992	6.25%	3.45%	7.01%	8.19%	8.55%	8.69%	8.86%
1993	6.00%	3.02%	5.87%	7.29%	7.44%	7.59%	7.91%
1994	7.15%	4.29%	7.09%	8.07%	8.21%	8.31%	8.63%
1995	8.83%	5.51%	6.57%	7.68%	7.77%	7.89%	8.29%
1996	8.27%	5.02%	6.44%	7.48%	7.57%	7.75%	8.16%
1997	8.44%	5.07%	6.35%	7.43%	7.54%	7.60%	7.95%
1998	8.35%	4.81%	5.26%	6.77%	6.91%	7.04%	7.26%
1999	8.00%	4.66%	5.65%	7.21%	7.51%	7.62%	7.88%
2000	9.23%	5.85%	6.03%	7.88%	8.06%	8.24%	8.36%
2001	6.91%	3.45%	5.02%	7.47%	7.59%	7.78%	8.02%
			Current Cycle				
2002	4.67%	1.62%	4.61%	[1]	7.19%	7.37%	8.02%
2003	4.12%	1.02%	4.01%		6.40%	6.58%	6.84%
2004	4.34%	1.38%	4.27%		6.04%	6.16%	6.40%
2005	6.19%	3.16%	4.29%		5.44%	5.65%	5.93%
2006	7.96%	4.73%	4.80%		5.84%	6.07%	6.32%
2007	8.05%	4.41%	4.63%		5.94%	6.07%	6.33%

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

INTEREST RATES

Year	Prime Rate	US Treas T Bills 3 Month	US Treas T Bonds 10 Year	Utility Bonds Aaa [1]	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa
2003							
Jan	4.25%	1.17%	4.05%	[1]	6.87%	7.06%	7.47%
Feb	4.25%	1.16%	3.90%		6.66%	6.93%	7.17%
Mar	4.25%	1.13%	3.81%		6.56%	6.79%	7.05%
Apr	4.25%	1.14%	3.96%		6.47%	6.64%	6.94%
May	4.25%	1.08%	3.57%		6.20%	6.36%	6.47%
June	4.00%	0.95%	3.33%		6.12%	6.21%	6.30%
July	4.00%	0.90%	3.98%		6.37%	6.57%	6.67%
Aug	4.00%	0.96%	4.45%		6.48%	6.78%	7.08%
Sept	4.00%	0.95%	4.27%		6.30%	6.56%	6.87%
Oct	4.00%	0.93%	4.29%		6.28%	6.43%	6.79%
Nov	4.00%	0.94%	4.30%		6.26%	6.37%	6.69%
Dec	4.00%	0.90%	4.27%		6.18%	6.27%	6.61%
2004							
Jan	4.00%	0.89%	4.15%		6.08%	6.15%	6.47%
Feb	4.00%	0.92%	4.08%		6.10%	6.15%	6.28%
Mar	4.00%	0.94%	3.83%		5.93%	5.97%	6.12%
Apr	4.00%	0.94%	4.35%		6.33%	6.35%	6.46%
May	4.00%	1.04%	4.72%		6.66%	6.62%	6.75%
June	4.00%	1.27%	4.73%		6.30%	6.46%	6.84%
July	4.25%	1.35%	4.50%		6.09%	6.27%	6.67%
Aug	4.50%	1.48%	4.28%		5.95%	6.14%	6.45%
Sept	4.75%	1.65%	4.13%		5.79%	5.98%	6.27%
Oct	4.75%	1.75%	4.10%		5.74%	5.94%	6.17%
Nov	5.00%	2.06%	4.19%		5.79%	5.97%	6.16%
Dec	5.25%	2.20%	4.23%		5.78%	5.92%	6.10%
2005							
Jan	5.25%	2.32%	4.22%		5.68%	5.78%	5.95%
Feb	5.50%	2.53%	4.17%		5.55%	5.61%	5.76%
Mar	5.75%	2.75%	4.50%		5.76%	5.83%	6.01%
Apr	5.75%	2.79%	4.34%		5.56%	5.64%	5.95%
May	6.00%	2.86%	4.14%		5.39%	5.53%	5.88%
June	6.25%	2.99%	4.00%		5.05%	5.40%	5.70%
July	6.25%	3.22%	4.18%		5.18%	5.51%	5.81%
Aug	6.50%	3.45%	4.26%		5.23%	5.50%	5.80%
Sept	6.75%	3.47%	4.20%		5.27%	5.52%	5.83%
Oct	6.75%	3.70%	4.46%		5.50%	5.79%	6.08%
Nov	7.00%	3.90%	4.54%		5.59%	5.88%	6.19%
Dec	7.25%	3.89%	4.47%		5.55%	5.80%	6.14%
2006							
Jan	7.50%	4.20%	4.42%		5.50%	5.75%	6.06%
Feb	7.50%	4.41%	4.57%		5.55%	5.82%	6.11%
Mar	7.75%	4.51%	4.72%		5.71%	5.98%	6.26%
Apr	7.75%	4.59%	4.99%		6.02%	6.29%	6.54%
May	8.00%	4.72%	5.11%		6.16%	6.42%	6.59%
June	8.25%	4.79%	5.11%		6.16%	6.40%	6.61%
July	8.25%	4.96%	5.09%		6.13%	6.37%	6.61%
Aug	8.25%	4.98%	4.88%		5.97%	6.20%	6.43%
Sept	8.25%	4.82%	4.72%		5.81%	6.00%	6.26%
Oct	8.25%	4.89%	4.73%		5.80%	5.98%	6.24%
Nov	8.25%	4.95%	4.60%		5.61%	5.80%	6.04%
Dec	8.25%	4.85%	4.56%		5.62%	5.81%	6.05%
2007							
Jan	8.25%	4.96%	4.78%		5.78%	5.96%	6.16%
Feb	8.25%	5.02%	4.72%		5.73%	5.90%	6.10%
Mar	8.25%	4.97%	4.56%		5.66%	5.85%	6.10%
Apr	8.25%	4.88%	4.69%		5.83%	5.97%	6.24%
May	8.25%	4.77%	4.75%		5.86%	5.99%	6.23%
June	8.25%	4.63%	5.10%		6.18%	6.30%	6.54%
July	8.25%	4.84%	5.00%		6.11%	6.25%	6.49%
Aug	8.25%	4.34%	4.67%		6.11%	6.24%	6.51%
Sept	7.75%	4.01%	4.52%		6.10%	6.18%	6.45%
Oct	7.50%	3.97%	4.53%		6.04%	6.11%	6.36%
Nov	7.50%	3.49%	4.15%		5.87%	5.97%	6.27%
Dec	7.25%	3.08%	4.10%		6.03%	6.16%	6.51%
2008							
Jan	6.00%	2.86%	3.74%		5.87%	6.02%	6.35%
Feb	6.00%	2.21%	3.74%		6.04%	6.21%	6.60%
Mar	5.25%	1.38%	3.51%		5.99%	6.21%	6.68%
Apr	5.00%	1.32%	3.68%		5.99%	6.29%	6.82%
May	5.00%	1.71%	3.88%		6.07%	6.27%	6.79%
June	5.00%	1.90%	4.10%		6.19%	6.38%	6.93%
July	5.00%	1.72%	4.01%		6.13%	6.40%	6.97%
Aug	5.00%	1.79%	3.89%		6.09%	6.37%	6.98%
Sept	5.00%	1.46%	3.69%		6.13%	6.49%	7.15%
Oct	4.00%	0.84%	3.81%		6.95%	7.56%	8.58%
Nov	4.00%				6.83%	7.60%	8.98%

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

STOCK PRICE INDICATORS

Year	S&P Composite [1]	NASDAQ Composite [1]	DJIA	S&P D/P	S&P E/P
		1975 - 1982 Cycle			
1975			802.49	4.31%	9.15%
1976			974.92	3.77%	8.90%
1977			894.63	4.62%	10.79%
1978			820.23	5.28%	12.03%
1979			844.40	5.47%	13.46%
1980			891.41	5.26%	12.66%
1981			932.92	5.20%	11.96%
1982			884.36	5.81%	11.60%
		1983 - 1991 Cycle			
1983			1,190.34	4.40%	8.03%
1984			1,178.48	4.64%	10.02%
1985			1,328.23	4.25%	8.12%
1986			1,792.76	3.49%	6.09%
1987			2,275.99	3.08%	5.48%
1988	[1]	[1]	2,060.82	3.64%	8.01%
1989	322.84		2,508.91	3.45%	7.41%
1990	334.59		2,678.94	3.61%	6.47%
1991	376.18	491.69	2,929.33	3.24%	4.79%
		1992 - 2001 Cycle			
1992	$415.74	$599.26	3,284.29	2.99%	4.22%
1993	$451.21	715.16	3,522.06	2.78%	4.46%
1994	$460.42	751.65	3,793.77	2.82%	5.83%
1995	541.72	925.19	4,493.76	2.56%	6.09%
1996	670.50	1,164.96	5,742.89	2.19%	5.24%
1997	873.43	1,469.49	7,441.15	1.77%	4.57%
1998	1,085.50	1,794.91	8,625.52	1.49%	3.46%
1999	1,327.33	2,728.15	10,464.88	1.25%	3.17%
2000	1,427.22	3,783.67	10,734.90	1.15%	3.63%
2001	1,194.18	2,035.00	10,189.13	1.32%	2.95%
		Current Cycle			
2002	993.94	1,539.73	9,226.43	1.61%	2.92%
2003	965.23	1,647.17	8,993.59	1.77%	3.84%
2004	1,130.65	1,986.53	10,317.39	1.72%	4.89%
2005	1,207.23	2,099.32	10,547.67	1.83%	5.36%
2006	1,310.46	2,263.41	11,408.67	1.87%	5.78%
2007	1,477.19	2,578.47	13,169.98	1.86%	5.29%

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAQ Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

STOCK PRICE INDICATORS

YEAR	S&P Composite	NASDAQ Composite	DJIA	S&P D/P	S&P E/P
2002					
1st Qtr.	1,131.56	1,879.85	10,105.27	1.39%	2.15%
2nd Qtr.	1,068.45	1,641.53	9,912.70	1.49%	2.70%
3rd Qtr.	894.65	1,308.17	8,487.59	1.76%	3.68%
4th Qtr.	887.91	1,346.07	8,400.17	1.79%	3.14%
2003					
1st Qtr.	860.03	1,350.44	8,122.83	1.89%	3.57%
2nd Qtr.	938.00	1,521.92	8,684.52	1.75%	3.55%
3rd Qtr.	1,000.50	1,765.96	9,310.57	1.74%	3.87%
4th Qtr.	1,056.42	1,934.71	9,856.44	1.69%	4.38%
2004					
1st Qtr.	1,133.29	2,041.95	10,488.43	1.64%	4.62%
2nd Qtr.	1,122.87	1,984.13	10,289.04	1.71%	4.92%
3rd Qtr.	1,104.15	1,872.90	10,129.85	1.79%	5.18%
4th Qtr.	1,162.07	2,050.22	10,362.25	1.75%	4.83%
2005					
1st Qtr.	1,191.98	2,056.01	10,648.48	1.77%	5.11%
2nd Qtr.	1,181.65	2,012.24	10,382.35	1.85%	5.32%
3rd Qtr.	1,225.91	2,144.61	10,532.24	1.83%	5.42%
4th Qtr.	1,262.07	2,246.09	10,827.79	1.86%	5.60%
2006					
1st Qtr.	1,283.04	2,287.97	10,996.04	1.85%	5.61%
2nd Qtr.	1,281.77	2,240.46	11,188.84	1.90%	5.86%
3rd Qtr.	1,288.40	2,141.97	11,274.49	1.91%	5.88%
4th Qtr.	1,389.48	2,390.26	12,175.30	1.81%	5.75%
2007					
1st Qtr.	1,425.30	2,444.85	12,470.97	1.84%	5.85%
2nd Qtr.	1,496.43	2,552.37	13,214.26	1.82%	5.65%
3rd Qtr.	1,490.81	2,609.68	13,488.43	1.86%	5.15%
4th Qtr.	1,494.09	2,701.59	13,502.95	1.91%	4.51%
2008					
1st Qtr.	1,350.19	2,332.91	12,383.86	2.11%	4.55%
2nd Qtr.	1,371.65	2,426.26	12,508.59	2.10%	4.01%
3rd Qtr.	1,251.94	2,290.87	11,322.40	2.29%	

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAC Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

Exhibit___(DCP-1)
Schedule 3

AMERICAN WATER WORKS
CAPITAL STRUCTURE RATIOS
2006 - 2008

YEAR	COMMON EQUITY	PREFERRED STOCK	LONG-TERM DEBT	SHORT-TERM DEBT
2006	$3,817,397	$1,779,043	$3,096,404	$1,007,128
	39.4%	18.3%	31.9%	10.4%
	43.9%	20.5%	35.6%	
2007	$4,542,046	$28,864	$4,674,837	$316,969
	47.5%	0.3%	48.9%	3.3%
	49.1%	0.3%	50.6%	
Sept. 30, 2008	$4,162,357	$28,774	$4,669,502	$423,021
	44.8%		50.3%	4.6%
	47.0%		52.7%	

Source: American Water Capital Corp. Prospectus for Senior Notes dated November 21, 2008.

Exhibit___(DCP-1)
Schedule 4

PROXY WATER UTILITIES
COMMON EQUITY RATIOS

COMPANY	2003	2004	2005	2006	2007
Value Line Water Group					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
California Water Service Group	46%	51%	51%	55%	57%
Southwest Water Co.	51%	63%	53%	56%	52%
Average	46%	52%	49%	50%	51%
AUS Utility Reports Group					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
Artesian Resources Corp.	37%	36%	38%	38%	48%
California Water Service Group	46%	51%	51%	55%	57%
Connecticut Water Service, Inc.	52%	53%	55%	54%	50%
Middlesex Water	41%	46%	42%	49%	48%
SJW Corporation	54%	56%	57%	56%	52%
Southwest Water Co.	51%	63%	53%	56%	52%
York Water Company	50%	48%	46%	51%	48%
Average	46%	50%	48%	50%	50%
Villadsen Water Sample					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
California Water Service Group	46%	51%	51%	55%	57%
Connecticut Water Service, Inc.	52%	53%	55%	54%	50%
Middlesex Water	41%	46%	42%	49%	48%
SJW Corporation	54%	56%	57%	56%	52%
Southwest Water Co.	51%	63%	53%	56%	52%
York Water Company	50%	48%	46%	51%	48%
Average	48%	51%	49%	51%	50%

Source: AUS Utilitly Reports.

PROXY WATER UTILITIES
DIVIDEND YIELD

COMPANY	DPS	September - November, 2008 HIGH	LOW	AVERAGE	YIELD
Value Line Water Group					
American States Water Co.	$1.00	$41.20	$27.00	$34.10	2.9%
Aqua America, Inc.	$0.54	$19.14	$12.20	$15.67	3.4%
California Water Service Group	$1.17	$42.50	$27.68	$35.09	3.3%
Southwest Water Co.	$0.24	$13.40	$3.81	$8.61	2.8%
Average					**3.1%**
AUS Utility Reports Group					
American States Water Co.	$1.00	$41.20	$27.00	$34.10	2.9%
Aqua America, Inc.	$0.54	$19.14	$12.20	$15.67	3.4%
Artesian Resources Corp.	$0.71	$17.53	$13.00	$15.27	4.7%
California Water Service Group	$1.17	$42.50	$27.68	$35.09	3.3%
Connecticut Water Service, Inc.	$0.89	$28.95	$19.26	$24.11	3.7%
Middlesex Water	$0.71	$17.95	$12.05	$15.00	4.7%
SJW Corporation	$0.64	$30.42	$20.05	$25.24	2.6%
Southwest Water Co.	$0.24	$13.40	$3.81	$8.61	2.8%
York Water Company	$0.48	$14.66	$10.25	$12.46	3.9%
Average					**3.6%**
Villadsen Water Sample					
American States Water Co.	$1.00	$41.20	$27.00	$34.10	2.9%
Aqua America, Inc.	$0.54	$19.14	$12.20	$15.67	3.4%
California Water Service Group	$1.17	$42.50	$27.68	$35.09	3.3%
Connecticut Water Service, Inc.	$0.89	$28.95	$19.26	$24.11	3.7%
Middlesex Water	$0.71	$17.95	$12.05	$15.00	4.7%
SJW Corporation	$0.64	$30.42	$20.05	$25.24	2.6%
Southwest Water Co.	$0.24	$13.40	$3.81	$8.61	2.8%
York Water Company	$0.48	$14.66	$10.25	$12.46	3.9%
Average					**3.4%**

Source: Yahoo! Finance.

PROXY WATER UTILITIES
RETENTION GROWTH RATES

COMPANY	2003	2004	2005	2006	2007	Average	2008	2009	'11-'13	Average
Value Line Water Group										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	4.5%	5.5%	7.5%	5.8%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.0%	3.5%	4.0%	3.5%
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	2.5%	4.0%	5.5%	4.0%
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%	0.5%	1.5%	4.5%	2.2%
Average						**2.5%**				**3.9%**
AUS Utility Reports Group										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	4.5%	5.5%	7.5%	5.8%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.0%	3.5%	4.0%	3.5%
Artesian Resources Corp.	1.5%	2.0%	2.8%	4.0%	2.4%	2.5%				
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	2.5%	4.0%	5.5%	4.0%
Connecticut Water Service, Inc.	3.0%	3.1%	0.6%	-0.4%	1.6%	1.6%				
Middlesex Water	-0.5%	0.8%	0.5%	1.5%	1.8%	0.8%				
SJW Corporation	4.5%	4.7%	6.1%	9.5%	3.4%	5.6%				
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%	0.5%	1.5%	4.5%	2.2%
York Water Company	2.5%	2.5%	3.0%	2.4%	1.5%	2.4%				
Average						**2.6%**				**3.9%**
Villadsen Water Sample										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	4.5%	5.5%	7.5%	5.8%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.0%	3.5%	4.0%	3.5%
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	2.5%	4.0%	5.5%	4.0%
Connecticut Water Service, Inc.	3.0%	3.1%	0.6%	-0.4%	1.6%	1.6%				
Middlesex Water	-0.5%	0.8%	0.5%	1.5%	1.8%	0.8%				
SJW Corporation	4.5%	4.7%	6.1%	9.5%	3.4%	5.6%				
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%	0.5%	1.5%	4.5%	2.2%
York Water Company	2.5%	2.5%	3.0%	2.4%	1.5%	2.4%				
Average						**2.6%**				**4.4%**

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
PER SHARE GROWTH RATES

COMPANY	5-Year Historic Growth Rates				Est'd '05-'07 to '11-'13 Growth Rates			
	EPS	DPS	BVPS	Average	EPS	DPS	BVPS	Average
Value Line Water Group								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%	9.5%	6.0%	1.0%	5.5%
Average				**4.9%**				**5.8%**
AUS Utility Reports Group								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
Artesian Resources Corp.	3.4%	5.3%	7.0%	5.2%				
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Connecticut Water Service, Inc.	-0.4%	1.2%	3.6%	1.5%				
Middlesex Water	3.6%	1.8%	6.3%	3.9%				
SJW Corporation	5.9%	5.8%	9.0%	6.9%				
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%	9.5%	6.0%	1.0%	5.5%
York Water Company	7.3%	6.5%	8.9%	7.6%				
Average				**4.9%**				**5.8%**
Villadsen Water Sample								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Connecticut Water Service, Inc.	-0.4%	1.2%	3.6%	1.5%				
Middlesex Water	3.6%	1.8%	6.3%	3.9%				
SJW Corporation	5.9%	5.8%	9.0%	6.9%				
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%	9.5%	6.0%	1.0%	5.5%
York Water Company	7.3%	6.5%	8.9%	7.6%				
Average				**4.9%**				**5.8%**

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
DCF COST RATES

COMPANY	ADJUSTED YIELD	HISTORIC RETENTION GROWTH	PROSPECTIVE RETENTION GROWTH	HISTORIC PER SHARE GROWTH	PROSPECTIVE PER SHARE GROWTH	FIRST CALL EPS GROWTH	AVERAGE GROWTH	DCF RATES
Value Line Water Group								
American States Water Co.	3.0%	2.0%	5.8%	3.5%	6.2%	4.0%	4.3%	7.3%
Aqua America, Inc.	3.5%	4.4%	3.5%	8.3%	6.2%	7.0%	5.9%	9.4%
California Water Service Group	3.4%	1.4%	4.0%	3.8%	5.3%	8.0%	4.5%	7.9%
Southwest Water Co.	2.8%	2.3%	2.2%	3.8%	5.5%	5.0%	3.8%	6.6%
Mean	3.2%	2.5%	3.9%	4.9%	5.8%	6.0%	4.6%	7.8%
Median	3.2%	2.2%	3.8%	3.8%	5.8%	6.0%	4.4%	7.6%
Composite-Mean		5.7%	7.1%	8.1%	9.0%	9.2%	7.8%	
Composite-Median		5.4%	7.0%	7.0%	9.0%	9.2%	7.6%	
AUS Utility Reports Group								
American States Water Co.	3.0%	2.0%	5.8%	3.5%	6.2%	4.0%	4.3%	7.3%
Aqua America, Inc.	3.5%	4.4%	3.5%	8.3%	6.2%	7.0%	5.9%	9.4%
Artesian Resources Corp.	4.8%	2.5%		5.2%		5.0%	4.2%	9.0%
California Water Service Group	3.4%	1.4%	4.0%	3.8%	5.3%	8.0%	4.5%	7.9%
Connecticut Water Service, Inc.	3.8%	1.6%		1.5%		15.0%	6.0%	9.8%
Middlesex Water	4.8%	0.8%		3.9%		8.0%	4.2%	9.1%
SJW Corporation	2.6%	5.6%		6.9%		10.0%	7.5%	10.2%
Southwest Water Co.	2.8%	2.3%	2.2%	3.8%	5.5%	5.0%	3.8%	6.6%
York Water Company	4.0%	2.4%		7.6%		8.0%	6.0%	10.0%
Mean	3.7%	2.6%	3.9%	4.9%	5.8%	7.8%	5.2%	8.8%
Median	3.5%	2.3%	3.8%	3.9%	5.8%	8.0%	4.5%	9.1%
Composite-Mean		6.2%	7.5%	8.6%	9.4%	11.4%	8.8%	
Composite-Median		5.9%	7.3%	7.5%	9.4%	11.5%	8.1%	
Villadsen Water Sample								
American States Water Co.	3.0%	2.0%	5.8%	3.5%	6.2%	4.0%	4.3%	7.3%
Aqua America, Inc.	3.5%	4.4%	3.5%	8.3%	6.2%	7.0%	5.9%	9.4%
California Water Service Group	3.4%	1.4%	4.0%	3.8%	5.3%	8.0%	4.5%	7.9%
Connecticut Water Service, Inc.	3.8%	1.6%		1.5%		15.0%	6.0%	9.8%
Middlesex Water	4.8%	0.8%		3.9%		8.0%	4.2%	9.1%
SJW Corporation	2.6%	5.6%		6.9%		10.0%	7.5%	10.2%
Southwest Water Co.	2.8%	2.3%		3.8%		5.0%	3.7%	6.5%
York Water Company	4.0%	2.4%		7.6%		8.0%	6.0%	10.0%
Mean	3.5%	2.6%	4.4%	4.9%	5.9%	8.1%	5.3%	8.8%
Median	3.5%	2.2%	4.0%	3.9%	6.2%	8.0%	5.2%	9.2%
Composite-Mean		6.1%	8.0%	8.4%	9.4%	11.6%	8.8%	
Composite-Median		5.7%	7.5%	7.4%	9.6%	11.5%	8.7%	

Note: negative average growth rates excluded from above DCF analyses.

STANDARD & POOR'S 500 COMPOSITE
20-YEAR U.S. TREASURY BOND YIELDS
RISK PREMIUMS

Year	EPS	BVPS	ROE	20-YEAR T-BOND	RISK PREMIUM
$1,977.00		$79.07			
$1,978.00	$12.33	$85.35	15.00%	7.90%	7.10%
$1,979.00	$14.86	$94.27	16.55%	8.86%	7.69%
$1,980.00	$14.82	$102.48	15.06%	9.97%	5.09%
$1,981.00	$15.36	$109.43	14.50%	11.55%	2.95%
$1,982.00	$12.64	$112.46	11.39%	13.50%	-2.11%
$1,983.00	$14.03	$116.93	12.23%	10.38%	1.85%
$1,984.00	$16.64	$122.47	13.90%	11.74%	2.16%
$1,985.00	$14.61	$125.20	11.80%	11.25%	0.55%
$1,986.00	$14.48	$126.82	11.49%	8.98%	2.51%
$1,987.00	$17.50	$134.04	13.42%	7.92%	5.50%
$1,988.00	$23.75	$141.32	17.25%	8.97%	8.28%
$1,989.00	$22.87	$147.26	15.85%	8.81%	7.04%
$1,990.00	$21.73	$153.01	14.47%	8.19%	6.28%
$1,991.00	$16.29	$158.85	10.45%	8.22%	2.23%
$1,992.00	$19.09	$149.74	12.37%	7.26%	5.11%
$1,993.00	$21.89	$180.88	13.24%	7.17%	6.07%
$1,994.00	$30.60	$193.06	16.37%	6.59%	9.78%
$1,995.00	$33.96	$215.51	16.62%	7.60%	9.02%
$1,996.00	$38.73	$237.08	17.11%	6.18%	10.93%
$1,997.00	$39.72	$249.52	16.33%	6.64%	9.69%
$1,998.00	$37.71	$266.40	14.62%	5.83%	8.79%
$1,999.00	$48.17	$290.68	17.29%	5.57%	11.72%
$2,000.00	$50.00	$325.80	16.22%	6.50%	9.72%
$2,001.00	$24.69	$338.37	7.43%	5.53%	1.90%
$2,002.00	$27.59	$321.72	8.36%	5.59%	2.77%
$2,003.00	$48.73	$367.17	14.15%	4.80%	9.35%
$2,004.00	$58.55	$414.75	14.98%	5.02%	9.96%
$2,005.00	$69.93	$453.06	16.12%	4.69%	11.43%
$2,006.00	$81.51	$504.39	17.03%	4.68%	12.35%
$2,007.00	$66.17	$529.59	12.80%	4.86%	7.94%
Average			**14.09%**	**7.69%**	**6.45%**

Sources: Standard & Poor's Analysts' Handbook and Morningstar 2008 Yearbook.

Exhibit___(DCP-1)
Schedule 7

PROXY WATER UTILITIES
CAPM COST RATES

COMPANY	RISK-FREE RATE	BETA	RISK PREMIUM	CAPM RATES
Value Line Water Group				
American States Water Co.	4.35%	0.95	5.90%	10.0%
Aqua America, Inc.	4.35%	1.00	5.90%	10.3%
California Water Service Group	4.35%	1.10	5.90%	10.8%
Southwest Water Co.	4.35%	1.05	5.90%	10.5%
Mean				**10.4%**
Median				**10.4%**
AUS Utility Reports Group				
American States Water Co.	4.35%	0.95	5.90%	10.0%
Aqua America, Inc.	4.35%	1.00	5.90%	10.3%
Artesian Resources Corp.	4.35%		5.90%	
California Water Service Group	4.35%	1.10	5.90%	10.8%
Connecticut Water Service, Inc.	4.35%	0.80	5.90%	9.1%
Middlesex Water	4.35%	0.90	5.90%	9.7%
SJW Corporation	4.35%	1.15	5.90%	11.1%
Southwest Water Co.	4.35%	1.05	5.90%	10.5%
York Water Company	4.35%	0.50	5.90%	7.3%
Mean				**9.8%**
Median				**10.1%**
Villadsen Water Sample				
American States Water Co.	4.35%	0.95	5.90%	10.0%
Aqua America, Inc.	4.35%	1.00	5.90%	10.3%
California Water Service Group	4.35%	1.10	5.90%	10.8%
Connecticut Water Service, Inc.	4.35%	0.80	5.90%	9.1%
Middlesex Water	4.35%	0.90	5.90%	9.7%
SJW Corporation	4.35%	1.15	5.90%	11.1%
Southwest Water Co.	4.35%	1.05	5.90%	10.5%
York Water Company	4.35%	0.50	5.90%	7.3%
Mean				**9.8%**
Median				**10.1%**

Sources: Value Line Investment Survey, Standard & Poor's Analysts' Handbook, Morningstar 2008 Yearbook.

PROXY WATER UTILITIES
RATES OF RETURN ON AVERAGE COMMON EQUITY

COMPANY	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1992-2001 Average	2003-2007 Average	2008	2009	2011-2013
Value Line Water Group																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	9.5%	11.0%	13.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	11.0%	11.5%	12.0%
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	8.5%	9.5%	11.0%
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%	4.5%	6.0%	9.0%
Mean	10.9%	9.0%	8.8%	9.3%	10.2%	11.2%	11.2%	12.7%	11.3%	11.0%	11.3%	9.2%	9.0%	9.1%	8.1%	4.8%	10.5%	8.0%	8.4%	9.5%	11.4%
Median	10.7%	11.6%	10.1%	10.0%	10.9%	11.0%	10.5%	12.6%	11.3%	11.3%	10.9%	9.5%	8.9%	9.9%	7.9%	7.1%	11.0%	8.6%	9.0%	10.3%	11.5%
AUS Utility Reports Group																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	9.5%	11.0%	13.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	11.0%	11.5%	12.0%
Artesian Resources Corp.							9.8%	9.7%	8.1%	9.4%	9.6%	7.4%	7.8%	8.9%	10.2%	8.5%		8.5%			
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	8.5%	9.5%	11.0%
Connecticut Water Service, Inc.	12.1%	12.5%	12.6%	12.7%	12.4%	12.3%	12.2%	12.4%	11.8%	13.3%	11.6%	11.2%	11.4%	12.0%	7.5%	8.9%	12.4%	10.2%			
Middlesex Water	11.7%	12.6%	12.1%	12.0%	10.3%	11.2%	10.7%	10.2%	6.5%	9.0%	9.8%	8.2%	8.3%	8.4%	8.6%	8.8%	10.6%	8.5%			
SJW Corporation	11.8%	11.8%	9.6%	10.8%	16.2%	12.0%	11.6%	11.1%	9.6%	9.5%	9.4%	9.8%	11.3%	11.5%	18.2%	8.3%	11.4%	11.8%			
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%	4.5%	6.0%	9.0%
York Water Company	11.9%	12.6%	11.7%	10.7%	11.1%	10.9%	10.3%	10.3%	11.9%	11.5%	16.7%	11.7%	12.2%	11.8%	10.5%	9.7%	11.3%	11.2%			
Mean	11.4%	10.7%	10.1%	10.4%	11.4%	11.4%	11.0%	11.6%	10.3%	10.7%	11.4%	9.5%	9.6%	9.9%	9.7%	7.0%	11.0%	9.2%	8.4%	9.5%	11.4%
Median	11.8%	12.2%	10.9%	10.8%	11.5%	11.6%	10.7%	11.1%	10.3%	10.5%	9.8%	9.8%	9.8%	10.4%	8.6%	8.8%	11.1%	9.5%	9.0%	10.3%	11.5%
Villadsen Water Sample																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	9.5%	11.0%	13.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	11.0%	11.5%	12.0%
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	8.5%	9.5%	11.0%
Connecticut Water Service, Inc.	12.1%	12.5%	12.6%	12.7%	12.4%	12.3%	12.2%	12.4%	11.8%	13.3%	11.6%	11.2%	11.4%	12.0%	7.5%	8.9%	12.4%	10.2%			
Middlesex Water	11.7%	12.6%	12.1%	12.0%	10.3%	11.2%	10.7%	10.2%	6.5%	9.0%	9.8%	8.2%	8.3%	8.4%	8.6%	8.8%	10.6%	8.5%			
SJW Corporation	11.8%	11.8%	9.6%	10.8%	16.2%	12.0%	11.6%	11.1%	9.6%	9.5%	9.4%	9.8%	11.3%	11.5%	18.2%	8.3%	11.4%	11.8%			
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%	4.5%	6.0%	9.0%
York Water Company	11.9%	12.6%	11.7%	10.7%	11.1%	10.9%	10.3%	10.3%	11.9%	11.5%	16.7%	11.7%	12.2%	11.8%	10.5%	9.7%	11.3%	11.2%			
Mean	11.4%	10.7%	10.1%	10.4%	11.4%	11.4%	11.2%	11.9%	10.6%	10.9%	11.6%	9.7%	9.9%	10.0%	9.7%	6.9%	11.0%	9.2%	8.4%	9.5%	11.4%
Median	11.8%	12.2%	10.9%	10.8%	11.5%	11.6%	10.9%	11.3%	11.1%	11.0%	10.7%	10.0%	10.6%	11.0%	8.4%	8.9%	11.3%	9.8%	9.0%	10.3%	11.5%

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
MARKET TO BOOK RATIOS

COMPANY	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1992-2001 Average	2003-2007 Average
Value Line Water Group																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.	140%	158%	151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	227%	323%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
Mean	137%	150%	129%	115%	148%	180%	211%	222%	231%	247%	220%	224%	216%	293%	240%	215%	177%	238%
Median	141%	157%	138%	122%	147%	172%	191%	213%	226%	221%	201%	220%	200%	253%	214%	214%	173%	220%
AUS Utility Reports Group																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.	140%	158%	151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	227%	323%
Artesian Resources Corp.							156%	168%	149%	183%	159%	207%	198%	215%	198%	150%		194%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Connecticut Water Service, Inc.	162%	180%	154%	149%	158%	168%	193%	218%	226%	304%	275%	266%	233%	216%	211%	199%	191%	225%
Middlesex Water	111%	184%	169%	150%	150%	164%	176%	218%	222%	248%	225%	265%	214%	214%	178%	184%	179%	211%
SJW Corporation	113%	124%	117%	108%	113%	133%	137%	193%	195%	162%	155%	193%	175%	240%	307%	236%	139%	230%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
York Water Company	169%	174%	87%	197%	195%	226%	198%	174%	154%	284%	277%	335%	275%	367%	309%	266%	186%	310%
Mean	138%	158%	131%	133%	151%	176%	189%	207%	208%	241%	219%	240%	217%	269%	240%	210%	176%	236%
Median	141%	165%	138%	132%	153%	168%	176%	202%	195%	240%	202%	250%	214%	240%	211%	209%	171%	225%
Villadsen Water Sample																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.			151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	246%	323%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Connecticut Water Service, Inc.	162%	180%	154%	149%	158%	168%	193%	218%	226%	304%	275%	266%	233%	216%	211%	199%	191%	225%
Middlesex Water	111%	184%	169%	150%	150%	164%	176%	218%	222%	248%	225%	265%	214%	214%	178%	184%	179%	211%
SJW Corporation	113%	124%	117%	108%	113%	133%	137%	193%	195%	162%	155%	193%	175%	240%	307%	236%	139%	230%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
York Water Company	169%	174%	87%	197%	195%	226%	198%	174%	154%	284%	277%	335%	275%	367%	309%	266%	186%	310%
Mean	137%	157%	131%	133%	151%	176%	193%	212%	215%	248%	227%	245%	220%	276%	246%	218%	178%	241%
Median	142%	172%	138%	132%	153%	168%	185%	210%	209%	244%	214%	258%	218%	241%	217%	214%	175%	229%

Source: AUS Utility Reports and Value Line Investment Survey.

STANDARD & POOR'S 500 COMPOSITE RETURNS AND MARKET-TO-BOOK RATIOS 1992 - 2007

YEAR	RETURN ON AVERAGE EQUITY	MARKET-TO BOOK RATIO
1992	12.2%	271%
1993	13.2%	272%
1994	16.4%	246%
1995	16.6%	264%
1996	17.1%	299%
1997	16.3%	354%
######	14.6%	421%
######	17.3%	481%
######	16.2%	453%
######	7.5%	353%
######	8.4%	296%
######	14.2%	278%
######	15.0%	291%
######	16.1%	278%
######	17.0%	277%
######	12.8%	284%
Averages:		
1992-2001	14.7%	341%
2003-2007	15.0%	282%

Source: Standard & Poor's Analyst's Handbook, 2008 edition, page 1.

RISK INDICATORS

GROUP	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FIN STR	S & P STK RANK
S & P's 500 Composite	2.7	1.05	B++	B+
Value Line Water Group	3.0	1.03	B+	B+/A-
AUS Utility Reports Group	2.9	0.93	B+	B+/A-
Villadsen Water Sample	2.9	0.93	B+	B+/A-

Sources: Value Line Investment Survey, Standard & Poor's Stock Guide.

Definitions:

Safety rankings are in a range of 1 to 5, with 1 representing the highest safety or lowest risk.

Beta reflects the variability of a particular stock, relative to the market as a whole. A stock with a beta of 1.0 moves in concert with the market, a stock with a beta below 1.0 is less variable than the market, and a stock with a beta above 1.0 is more variable than the market.

Financial strengths range from C to A++, with the latter representing the highest level.

Common stock rankings range from D to A+, with the later representing the highest level.

RISK INDICATORS

COMPANY	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FINANCIAL STRENGTH		S& P STOCK RANKING	
Value Line Water Group						
American States Water Co.	3	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3	1.00	B+	3.33	A	4.00
California Water Service Group	3	1.10	B++	3.67	B+	3.33
Southwest Water Co.	3	1.05	B	3.00	B+	3.33
Average	3.0	1.03	**B+**	**3.42**	B+/A-	3.50
AUS Utility Reports Group						
American States Water Co.	3	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3	1.00	B+	3.33	A	4.00
Artesian Resources Corp.						
California Water Service Group	3	1.10	B++	3.67	B+	3.33
Connecticut Water Service, Inc.	2	0.80	B+	3.33	A-	3.67
Middlesex Water	3	0.90	B+	3.33	B+	3.33
SJW Corporation	3	1.15	B+	3.33	A-	3.67
Southwest Water Co.	3	1.05	B	3.00	B+	3.33
York Water Company	3	0.50	B+	3.33		
Average	2.9	0.93	**B+**	**3.37**	B+/A-	3.52
Villadsen Water Sample						
American States Water Co.	3.0	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3.0	1.00	B+	3.33	A	4.00
California Water Service Group	3.0	1.10	B++	3.67	B+	3.33
Connecticut Water Service, Inc.	2.0	0.80	B+	3.33	A-	3.67
Middlesex Water	3.0	0.90	B+	3.33	B+	3.33
SJW Corporation	3.0	1.15	B+	3.33	A-	3.67
Southwest Water Co.	3.0	1.05	B	3.00	B+	3.33
York Water Company	3.0	0.50	B+	3.33		
Average	2.9	0.93	**B+**	**3.37**	B+/A-	3.52

Sources: Standard & Poor's Stock Guide and Value Line Investment Survey.

Exhibit___(DCP-1)
Schedule 11

ARIZONA-AMERICAN WATER COMPANY
PRE-TAX COVERAGE

ITEM	PERCENT	COST RATE	WEIGHTED COST	PRE-TAX COST	
Short-Term Debt	10.98%	5.37%	0.59%	0.59%	
Long-Term Debt	47.40%	5.46%	2.59%	2.59%	
Common Equity	41.62%	10.000%	4.16%	6.94%	(1)
TOTAL CAPITAL	100.00%		7.34%	10.12%	

(1) Post-tax weighted cost divided by .60 (composite tax factor)

Pre-tax coverage = 10.12%/(0.59% + 2.59%)
3.18 X

Standard & Poor's Utility Benchmark Ratios:

	A	BBB
Pre-tax coverage (X) Business Position:		
3	2.8x - 3.4x	1.8x - 2.8x
Total Debt to Total Capital (%) Business Position		
3	50% - 55%	55% - 65%

Note: Standard & Poor's no longer employs the pre-tax coverage ratios as one of its qualitative ratings criteria. The above-cited S&P benchmark ratios reflect the 1999 criteria reported by S&P.

Exhibit___(DCP-1)
Schedule 12

SUMMARY OF DISCOUNTED CASH FLOW AND CAPITAL ASSET PRICING MODEL RESULTS AS DEVELOPED IN ARIZONA-AMERICAN WATER COMPANY WITNESS VILLADSEN'S TESTIMONY

Group/Company	Simple DCF Results	Multi-Stage DCF Results	Long-Term Risk-Free Rate			Short-Term Risk-Free Rate			
			CAPM Results	ECAPM Results (0.5%)	ECAPM Results (1.5%)	CAPM Results	ECAPM Results (1.0%)	ECAPM Results (2%)	ECAPM Results (3%)
Water Sample									
American States Water Co.	9.0%	8.1%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
Aqua America, Inc.	13.1%	8.6%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
California Water Service Group	12.1%	9.2%	12.1%	12.0%	11.8%	11.8%	11.6%	11.4%	11.2%
Connecticut Water Service, Inc.	4.8%	7.8%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Middlesex Water	4.7%	7.9%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
SJW Corporation	12.4%	7.9%	11.6%	11.5%	11.4%	11.2%	11.0%	10.9%	10.8%
Southwest Water Co.	15.6%	8.5%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
York Water Company	3.8%	7.3%	5.8%	6.1%	6.9%	4.0%	4.8%	5.5%	6.3%
Mean	9.4%	8.2%	9.9%	9.9%	10.1%	9.1%	9.2%	9.3%	9.5%
Median	10.6%	8.0%	10.1%	10.2%	10.3%	9.4%	9.5%	9.6%	9.7%
Gas LDC Sample									
AGL Resources	9.9%	9.6%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Atmos Energy	10.1%	9.8%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Nicor	8.5%	9.3%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
Laclede Grojp	7.7%	9.0%	10.1%	10.2%	10.3%	9.4%	9.5%	9.6%	9.7%
New Jersey Resources	8.1%	8.3%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Northwest Natural Gas	8.4%	8.2%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
Piedmont Natural Gas	9.1%	9.0%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
South Jersey Industries	10.4%	8.5%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Southwest Gas	8.4%	8.1%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
WGL Resources	7.9%	8.9%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Mean	8.9%	8.9%	9.5%	9.6%	9.8%	8.6%	8.8%	9.0%	9.2%
Median	8.5%	9.0%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%

Sources: Villadsen testimony, Table Nos. BV-6, BV-7, BV-10, BV-19, and BV-22.

ALL-STATE LEGAL®
EXHIBIT
S-11
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

SURREBUTTAL

TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF

UTILITIES DIVISION STAFF

ARIZONA CORPORATION COMMISSION

MARCH 3, 2009

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INTRODUCTION

Q. Please state your name and address.

A. My name is David C. Parcell. I am President and Senior Economist of Technical Associates, Inc. My business address is 1051 East Cary Street, Suite 601, Richmond, Virginia 23219.

Q. Are you the same David C. Parcell who filed Direct Testimony on behalf of the Commission Staff in this proceeding?

A. Yes, I am.

Q. What is the purpose of your current testimony?

A. My current testimony is Surrebuttal Testimony in response to the Rebuttal Testimony of Arizona-American Water witness Bente Villadsen.

Q. How is your Surrebuttal Testimony organized?

A. My Surrebuttal Testimony first responds to the Rebuttal Testimony of Dr. Villadsen. Next, I update my Exhibits contained in my Direct Testimony and update my DCF, CAPM, and CE analyses.

RESPONSE TO REBUTTAL TESTIMONY OF BENTE VILLADSEN

Q. Please describe the issues raised in Dr. Villadsen's Rebuttal Testimony that you are responding to in this Surrebuttal Testimony.

A. My response to Dr. Villadsen's Rebuttal Testimony generally follows the format she utilizes and is organized into the following topics:

- General comments
- Financial risk issues

- Discounted Cash Flow Issues
- Capital Asset Pricing Model Issues
- Comparable Earnings Method Issues

General Comments

Q. Do you have any general comments about the Rebuttal Testimony of Dr. Villadsen?

A. Yes, I do. Dr. Villadsen makes several references to a November 28, 2008 long-term debt issuance by American Water Capital Corporation ("AWC" the financing affiliate of AAWC) at a cost rate of 10 percent. She then repeatedly implies that this 10 percent cost rate for this long-term debt issue provides a standard for the cost of common equity for AAWC in this proceeding.

Q. Do you agree with this proposed connection between AWC's cost of this debt issuance and the cost of equity for AAWC?

A. No, I do not. The relevant cost of long-term debt to AAWC, relative to this proceeding, is the 5.463 percent embedded cost of long-term debt, which was represented by AAWC to be its total cost of long-term debt as projected to December 31, 2008. This cost rate is properly and completely included in the total cost of capital for AAWC that I and other cost of capital witnesses are proposing in this proceeding.

The November 2008 long-term debt issued by AWC may be included in the total cost of long-term debt to AAWC in this or some future proceeding(s) but should not be singled out as a standard for the cost of equity for AAWC in this or any other proceeding.

Q. Is there anything about this debt issue by AWC that makes its use as a "standard" for AAWC's cost of equity to be particularly improper?

A. Yes, there is. This debt issue, dated November 28, 2008, took place at virtually the peak of the interest rate levels of late 2008 during which the U.S. and global economies were undergoing the "flight to quality" associated with the stock market collapse and the movement of significant amounts of investment dollars into "safe" shelters such as U.S. Treasury Bonds. During this period, which continues at the present time, the movement of funds into U.S. Treasury Bonds has driven the yield on government debt to low levels and the yield on corporate and utility debt to high levels.

Most corporations, including utilities, chose to stay out of the new debt issuance market during this period due to the high interest rates that were prevailing. This was not the case for AWC, who sold some $75 million of 30-year bonds at what amounted to the peak of the interest rate levels of 2008.

I have reviewed the prospectus that was issued in connection with this debt issue. Based upon this, as well as the on-going efforts of American Water Works Company ("AWW") to divest itself from RWE, it is apparent that AWW and AWC have engaged in several financial transactions over the past two years in connection with the divestiture. As I indicated in my Direct Testimony, AWW was only able to sell a 40 percent stake in itself through its initial public offering ("IPO"). In addition, RWE and AWW have entered into several financial transactions, including the issuance of preferred stock to RWE by AWC, issuance of "redemption notes" to redeem the preferred stock, and issuance of senior debt to retire the redemption notes. As a result, it is my perception that AWC chose to sell the above-cited high-cost debt at the time it did due at least in part to considerations of its

divestiture from RWE. To the extent this is true, this should not be used as a standard for AAWC's cost of equity.

Q. Dr. Villadsen claims, on page 4 lines 7-8, that your 10.0 percent cost of equity recommendation is "below the return allowed to other utilities prior to the financial crisis..." Do you have any response to this assertion?

A. Yes, I do have comments concerning this assertion. I was involved in two utility proceedings before this Commission in 2008 in which a litigated decision was made concerning the cost of common equity. These were:

UNS Electric – Docket No. E-04204A-06-0783
Southwest Gas – Docket No. G-01551A-07-0504

In both of these proceedings, the Commission made a finding that 10.0 percent was the proper cost of common equity. In addition, the capital structures for both of these utilities contained less than 45 percent common equity.

Q. On page 8, lines 10-12, Dr. Villadsen claims "There is ample evidence that the cost of both debt and equity capital has increased, and it is dangerous and incorrect to focus on the risk-free rates which are 'low by historical standards.'" What is your response to this assertion?

A. I disagree with Dr. Villadsen on this. She seems to be equating the decline in stock prices with an increase in the cost of equity capital. A more likely explanation for a decline in stock prices is the obvious fact that the increasingly severe recession is having an effect of reducing current and future corporate profits. A reduction in corporate profits represents a

decline in the opportunity cost of capital, or the expected return on alternative investment opportunities.

Dr. Villadsen appears to be taking the position that, even though other types of enterprises are expected to earn a lower rate of return, this should be used as a rationale for a regulated utility like AAWC to earn a higher return through a higher cost of capital. I note that it is evident that the Arizona economy is very depressed currently, as the financial press is describing the housing market here as among the weakest in the U.S. This is hardly an environment for a nation-wide utility organization such as AWC to claim that Arizona ratepayers should pay a higher cost of capital based upon the same set of economic circumstances that are negatively impacting the ratepayers.

Financial Risk Issues

Q. Please describe Dr. Villadsen's position on the issue of AAWC's capital structure and the impact of this on the Company's cost of equity.

A. Dr. Villadsen maintains, on pages 16 to 21, that AAWC should be awarded a higher cost of equity because the Company has a lower equity ratio, and thus higher financial risk. In this regard, she seems to be maintaining that the "Hamada" methodology, or some variant of this methodology, be utilized to modify the market-derived cost of equity for the proxy water utilities in applying this to AAWC's cost of equity.

Q. Do you agree that some modification to the market derived cost of equity for the water proxy groups be made in developing AAWC's cost of equity?

A. No, I do not. This proposal is focusing on a single perceived risk and suggesting an adjustment be made to the cost of equity to account for this singular risk. In doing so, this

proposal ignores other risks of the Company that may be less than those of the proxy group.

Q. Can you give an example of any lower risks of AAWC that Dr. Villadsen's proposal does not recognize?

A. Yes, I can. AAWC is part of the AWW system, and in fact is substantially funded as an integral part of this system. AWW is the largest publicly-traded water system in the U.S. As a result, it generally faces lower risk than smaller water systems. In addition, the fact that AWW operates in a large number of states, with multiple divisions in many states, indicates that it has less risk than less diversified water systems.

It is noteworthy that Dr. Villadsen does not acknowledge these lower-risk attributes of AAWC/AWW and instead focuses on a single risk factor that she maintains should be used to inflate the Company's cost of equity. This is improper and should not be adopted.

Discounted Cash Flow Method Issues

Q. What are Dr. Villadsen's comments concerning your DCF methodology?

A. She disagrees with two aspects of my DCF analyses. First, she disagrees with the use of a single-stage DCF model, instead preferring the use of a multi-stage DCF model. Second, she continues to maintain that only a single indicator be used to estimate the short-term growth rate – analysts' estimates of EPS.

Q. Why does Dr. Villadsen maintain that a single-stage DCF model is inferior to a multi-stage DCF model?

A. On pages 21 to 22, she criticizes the single-stage DCF model because of her perception that some level of long-term growth will eventually prevail.

Q. Is this a compelling reason to use a multi-stage DCF model?

A. No, it is not. Most utilities, including AAWC, have rate proceedings every few years, where it is possible to re-evaluate the impact of current and/or changing economic and financial conditions. As a result, it is the short-term expectations that are more likely to govern investor expectations.

Furthermore, it should be apparent that estimates of long-term growth are less precise than short-term estimates. As a result, it is not proper to give significant weight to long-term growth rate estimates.

Q. What is Dr. Villadsen's complaint with your DCF growth rates?

A. She first mistakenly indicates that my DCF analyses are based on an average of several growth rates. This is incorrect. My DCF analyses consider several growth rates individually, as well as an average of all the growth rates. It is evident from my Schedule 5, page 4, that most of the DCF results for the individual growth rates are either within my recommended range or are below it.

Q. What growth rate does Dr. Villadsen maintain should be used in a DCF analysis?

A. She maintains, as she did in her direct testimony, that the only growth rate that has any significance is analysts' estimates of EPS growth.

Q. Do you agree with this assertion?

A. No, I do not. As I indicated in my DCF analysis, it is customary and proper to use alternative measures of growth, not just EPS projections. Dr. Villadsen's DCF analyses implicitly assume that investors rely exclusively on EPS projections when making short-term investment decisions. This is a very dubious assumption, and she has offered no

evidence that it is correct. I note, for example, the Value Line publication – one of the sources of the growth rate estimates – contains many statistics, of both a historic and projected nature, for the benefit of Value Line subscribers, who presumably make investment decisions based at least in part from the information contained in Value Line. For example, Value Line publishes both historic and projected growth rates in numerous financial indicators such as EPS, DPS, BVPS, and retention growth. Yet, Dr. Villadsen would have us believe that Value Line subscribers and investors focus exclusively on one single number from this publication.

I note in this regard that the DCF model is a "cash flow" model. The cash flow to investors in a DCF framework is dividends. Dr. Villadsen's DCF analysis, in contrast, does not even consider dividend growth rates.

Q. Dr. Villadsen also disagrees with your dividend yield adjustment. What is your response to this?

A. The dividend yield adjustment I use recognizes that dividends are increased at various times during the year and, on average, each company in the proxy group will have its "new" dividend rate during half of the coming year. This is a common dividend yield adjustment and, in fact, is specifically employed by the Federal Energy Regulatory Commission in its preferred DCF methodology.

Capital Asset Pricing Model Issues

Q. What are Dr. Villadsen's comments about your CAPM methodology?

A. Her only apparent disagreement with my CAPM method is her perception that I use only geometric growth rates in developing my risk premium component. She maintains that only the arithmetic growth rate should be use.

Q. Is it correct that you only use geometric means in developing your CAPM risk premium component?

A. No, it is not. In developing my risk premium component, I use three growth rates. Two of these are, in fact, arithmetic growth rates, and one is a geometric growth rate.

Q. Why is it proper to use geometric growth rates in a risk premium development?

A. This is the case since investors have access to, and presumably rely upon, both types of averages. In fact, it is likely that more information is provided to investors in the form of geometric averages than arithmetic averages. For example, mutual funds report returns based on geometric averages. In addition, Value Line reports both historic and projected growth rates on a geometric basis.

Comparable Earnings Method Issues

Q. What issues does Dr. Villadsen take with your comparable earnings analysis?

A. She claims that there are two problems with my comparable earnings analysis. First, she maintains that the comparable earnings method relies upon accounting data. Second, she maintains that returns of regulated water utilities should not be used as a standard for AAWC.

Q. What is your response to her first clam?

A. Contrary to the perception provided by Dr. Villadsen, it is quite proper that a comparable earnings analysis utilize accounting data. This is the case since virtually all of the information utilized in developing the revenue requirement for a regulated utility relies on accounting data. This includes rate base (even in a fair value State such as Arizona), revenues, expenses, capital structure and cost of debt. It is not only logical but proper that

a comparable earnings analysis be utilized as one cost of capital model in developing the revenue requirement.

I also note that the comparable earnings method is the oldest cost of capital model, as it goes back at least several decades. The basis of the comparable earnings method is also grounded in the language of the Bluefield U.S. Supreme Court decision that I cited in my Direct Testimony.

Q. Do you have any response to Dr. Villadsen's second criticism of your comparable earnings method?

A. Yes, I do. Dr. Villadsen indicates her belief that the returns of regulated water utilities should not be used as a standard for AAWC. I disagree with her assertion. The types of companies that are most comparable to AAWC, in terms of operations and risks, are publicly-traded water and wastewater utilities.

UPDATE OF COST OF CAPITAL ANALYSES

Q. Please describe the updates to the schedules that were contained in your Direct Testimony.

A. I have updated the schedules to my Direct Testimony. Attached to this Surrebuttal Testimony is a complete set of schedules, with the schedules that are being updated being identified as "Updated."

Q. Please describe your updated DCF results.

A. My updated DCF results use average stock prices for the period November 2008 - January 2009 and the most recent Value Line and analysts' projections. The updated DCF results, along with my original DCF results, are as follows:

Original – Direct Testimony

	Mean	Median	Mean High	Median High
Value Line Group	7.8%	7.6%	9.2%	9.2%
AUS Group	8.8%	9.1%	11.4%	11.5%
Villadsen Group	8.8%	9.2%	11.6%	11.5%

Updated – Surrebuttal Testimony

	Mean	Median	Mean High	Median High
Value Line Group	7.4%	7.6%	9.3%	9.1%
AUS Group	8.7%	9.0%	11.5%	11.25
Villadsen Group	8.6%	8.9%	11.7%	11.0%

It is apparent from this comparison that the updated DCF results are very similar to the original DCF results.

Q. Please now describe your updated CAPM results.

A. I have updated my CAPM results by using a risk-free rate for the period November 2008 - January 2009 and the most current beta values. My updated CAPM results, along with my original CAPM results, are as follows:

Original – Direct Testimony

	Mean	Median
Value Line Group	10.4%	10.4%
AUS Group	9.8%	10.1%
Villadsen Group	9.8%	10.1%

Updated – Surrebuttal Testimony

	Mean	Median
Value Line Group	9.5%	9.5%
AUS Group	9.0%	9.1%
Villadsen Group	9.0%	9.1%

It is apparent from this comparison that the updated CAPM results are somewhat lower than the original CAPM results.

Q. Have you also updated your CE analyses?

A. Yes, I have, although only the projected (i.e., 2008, 2009 and 2011-2013) returns on equity are updated. As a result, my updated CE analyses are largely the same as the original CE analyses.

Q. What is your conclusion from the updates of your cost of equity analyses?

A. It is my conclusion that the updated DCF and CE analyses are the same as was the case in my Direct Testimony, while the CAPM results are lower. Given that two of the three cost of equity models produce virtually the same results when updated, I conclude that the cost of equity has not changed since my direct testimony was prepared. As a result, I am not changing my cost of equity recommendation in this proceeding.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

Exhibit___(DCP-1)
Schedule 1

ARIZONA-AMERICAN WATER COMPANY
TOTAL COST OF CAPITAL

Item	Amount	Percent	Cost		Weighted Cost	
Short-Term Debt	$43,811,094.00	10.98%	5.367%		0.59%	
Long-Term Debt	$189,208,140.00	47.40%	5.463%		2.59%	
Common Equity	$166,123,326.00	41.62%	9.50%	10.50%	3.95%	4.37%
Total	$399,142,560.00	100.00%			**7.13%**	**7.55%**
					Mid-Point	**7.34%**

ECONOMIC INDICATORS

Year	Real GDP Growth*	Industrial Production Growth	Unemploy-ment Rate	Consumer Price Index	Producer Price Index
		1975 - 1982 Cycle			
1975	-1.1%	-8.9%	8.5%	7.0%	6.6%
1976	5.4%	10.8%	7.7%	4.8%	3.7%
1977	5.5%	5.9%	7.0%	6.8%	6.9%
1978	5.0%	5.7%	6.0%	9.0%	9.2%
1979	2.8%	4.4%	5.8%	13.3%	12.8%
1980	-0.2%	-1.9%	7.0%	12.4%	11.8%
1981	1.8%	1.9%	7.5%	8.9%	7.1%
1982	-2.1%	-4.4%	9.5%	3.8%	3.6%
		1983 - 1991 Cycle			
1983	4.0%	3.7%	9.5%	3.8%	0.6%
1984	6.8%	9.3%	7.5%	3.9%	1.7%
1985	3.7%	1.7%	7.2%	3.8%	1.8%
1986	3.1%	0.9%	7.0%	1.1%	-2.3%
1987	2.9%	4.9%	6.2%	4.4%	2.2%
1988	3.8%	4.5%	5.5%	4.4%	4.0%
1989	3.5%	1.8%	5.3%	4.6%	4.9%
1990	1.8%	-0.2%	5.6%	6.1%	5.7%
1991	-0.5%	-2.0%	6.8%	3.1%	-0.1%
		1992 - 2001 Cycle			
1992	3.0%	3.1%	7.5%	2.9%	1.6%
1993	2.7%	3.3%	6.9%	2.7%	0.2%
1994	4.0%	5.4%	6.1%	2.7%	1.7%
1995	2.5%	4.8%	5.6%	2.5%	2.3%
1996	3.7%	4.3%	5.4%	3.3%	2.8%
1997	4.5%	7.2%	4.9%	1.7%	-1.2%
1998	4.2%	5.9%	4.5%	1.6%	0.0%
1999	4.5%	4.3%	4.2%	2.7%	2.9%
2000	3.7%	4.2%	4.0%	3.4%	3.6%
2001	0.8%	-3.4%	4.7%	1.6%	-1.6%
		Current Cycle			
2002	1.6%	-0.1%	5.8%	2.4%	1.2%
2003	2.5%	1.2%	6.0%	1.9%	4.0%
2004	3.6%	2.5%	5.5%	3.3%	4.2%
2005	2.9%	3.3%	5.1%	3.4%	5.4%
2006	2.8%	2.2%	4.6%	2.5%	1.1%
2007	2.0%	1.7%	4.6%	4.1%	6.2%
2008			5.8%		

*GDP=Gross Domestic Product

Source: Council of Economic Advisors, Economic Indicators, various issues.

ECONOMIC INDICATORS

Year	Real GDP Growth*	Industrial Production Growth	Unemploy-ment Rate	Consumer Price Index	Producer Price Index
2002					
1st Qtr.	2.7%	-3.8%	5.6%	2.8%	4.4%
2nd Qtr.	2.2%	-1.2%	5.9%	0.9%	-2.0%
3rd Qtr.	2.4%	0.8%	5.8%	2.4%	1.2%
4th Qtr.	0.2%	1.4%	5.9%	1.6%	0.4%
2003					
1st Qtr.	1.2%	1.1%	5.8%	4.8%	5.6%
2nd Qtr.	3.5%	-0.9%	6.2%	0.0%	-0.5%
3rd Qtr.	7.5%	-0.9%	6.1%	3.2%	3.2%
4th Qtr.	2.7%	1.5%	5.9%	-0.3%	2.8%
2004					
1st Qtr.	3.0%	2.8%	5.6%	5.2%	5.2%
2nd Qtr.	3.5%	4.9%	5.6%	4.4%	4.4%
3rd Qtr.	3.6%	4.6%	5.4%	0.8%	0.8%
4th Qtr.	2.5%	4.3%	5.4%	3.6%	7.2%
2005					
1st Qtr.	3.0%	3.8%	5.3%	4.4%	5.6%
2nd Qtr.	2.6%	3.0%	5.1%	1.6%	-0.4%
3rd Qtr.	3.8%	2.7%	5.0%	8.8%	14.0%
4th Qtr.	1.3%	2.9%	4.9%	-2.0%	4.0%
2006					
1st Qtr.	4.8%	3.4%	4.7%	4.8%	-0.2%
2nd Qtr.	2.7%	4.5%	4.6%	4.8%	5.6%
3rd Qtr.	0.8%	5.2%	4.7%	0.4%	-4.4%
4th Qtr.	1.5%	3.5%	4.5%	0.0%	3.6%
2007					
1st Qtr.	0.1%	2.5%	4.5%	4.8%	6.4%
2nd Qtr.	4.8%	1.6%	4.5%	5.2%	6.8%
3rd Qtr.	4.8%	1.8%	4.6%	1.2%	1.2%
4th Qtr.	-0.2%	2.2%	4.8%	6.4%	10.8%
2008					
1st Qtr.	0.9%	1.8%	4.9%	2.8%	9.6%
2nd Qtr.	2.8%	0.3%	5.3%	7.6%	14.0%
3rd Qtr.	-0.5%	-3.0%	6.0%	2.8%	-0.4%
4th Qtr.			6.9%		

Source: Council of Economic Advisors, Economic Indicators, various issues.

INTEREST RATES

Year	Prime Rate	US Treas T Bills 3 Month	US Treas T Bonds 10 Year	Utility Bonds Aaa	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa
			1975 - 1982 Cycle				
1975	7.86%	5.84%	7.99%	9.03%	9.44%	10.09%	10.96%
1976	6.84%	4.99%	7.61%	8.63%	8.92%	9.29%	9.82%
1977	6.83%	5.27%	7.42%	8.19%	8.43%	8.61%	9.06%
1978	9.06%	7.22%	8.41%	8.87%	9.10%	9.29%	9.62%
1979	12.67%	10.04%	9.44%	9.86%	10.22%	10.49%	10.96%
1980	15.27%	11.51%	11.46%	12.30%	13.00%	13.34%	13.95%
1981	18.89%	14.03%	13.93%	14.64%	15.30%	15.95%	16.60%
1982	14.86%	10.69%	13.00%	14.22%	14.79%	15.86%	16.45%
			1983 - 1991 Cycle				
1983	10.79%	8.63%	11.10%	12.52%	12.83%	13.66%	14.20%
1984	12.04%	9.58%	12.44%	12.72%	13.66%	14.03%	14.53%
1985	9.93%	7.48%	10.62%	11.68%	12.06%	12.47%	12.96%
1986	8.33%	5.98%	7.68%	8.92%	9.30%	9.58%	10.00%
1987	8.21%	5.82%	8.39%	9.52%	9.77%	10.10%	10.53%
1988	9.32%	6.69%	8.85%	10.05%	10.26%	10.49%	11.00%
1989	10.87%	8.12%	8.49%	9.32%	9.56%	9.77%	9.97%
1990	10.01%	7.51%	8.55%	9.45%	9.65%	9.86%	10.06%
1991	8.46%	5.42%	7.86%	8.85%	9.09%	9.36%	9.55%
			1992 - 2001 Cycle				
1992	6.25%	3.45%	7.01%	8.19%	8.55%	8.69%	8.86%
1993	6.00%	3.02%	5.87%	7.29%	7.44%	7.59%	7.91%
1994	7.15%	4.29%	7.09%	8.07%	8.21%	8.31%	8.63%
1995	8.83%	5.51%	6.57%	7.68%	7.77%	7.89%	8.29%
1996	8.27%	5.02%	6.44%	7.48%	7.57%	7.75%	8.16%
1997	8.44%	5.07%	6.35%	7.43%	7.54%	7.60%	7.95%
1998	8.35%	4.81%	5.26%	6.77%	6.91%	7.04%	7.26%
1999	8.00%	4.66%	5.65%	7.21%	7.51%	7.62%	7.88%
2000	9.23%	5.85%	6.03%	7.88%	8.06%	8.24%	8.36%
2001	6.91%	3.45%	5.02%	7.47%	7.59%	7.78%	8.02%
			Current Cycle				
2002	4.67%	1.62%	4.61%	[1]	7.19%	7.37%	8.02%
2003	4.12%	1.02%	4.01%		6.40%	6.58%	6.84%
2004	4.34%	1.38%	4.27%		6.04%	6.16%	6.40%
2005	6.19%	3.16%	4.29%		5.44%	5.65%	5.93%
2006	7.96%	4.73%	4.80%		5.84%	6.07%	6.32%
2007	8.05%	4.41%	4.63%		5.94%	6.07%	6.33%
2008	5.09%	1.48%	3.66%		6.18%	6.53%	7.25%

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

INTEREST RATES

Year	Prime Rate	US Treas T Bills 3 Month	US Treas T Bonds 10 Year	Utility Bonds Aaa [1]	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa
2003							
Jan	4.25%	1.17%	4.05%	[1]	6.87%	7.06%	7.47%
Feb	4.25%	1.16%	3.90%		6.66%	6.93%	7.17%
Mar	4.25%	1.13%	3.81%		6.56%	6.79%	7.05%
Apr	4.25%	1.14%	3.96%		6.47%	6.64%	6.94%
May	4.25%	1.08%	3.57%		6.20%	6.36%	6.47%
June	4.00%	0.95%	3.33%		6.12%	6.21%	6.30%
July	4.00%	0.90%	3.98%		6.37%	6.57%	6.67%
Aug	4.00%	0.96%	4.45%		6.48%	6.78%	7.08%
Sept	4.00%	0.95%	4.27%		6.30%	6.56%	6.87%
Oct	4.00%	0.93%	4.29%		6.28%	6.43%	6.79%
Nov	4.00%	0.94%	4.30%		6.26%	6.37%	6.69%
Dec	4.00%	0.90%	4.27%		6.18%	6.27%	6.61%
2004							
Jan	4.00%	0.89%	4.15%		6.06%	6.15%	6.47%
Feb	4.00%	0.92%	4.08%		6.10%	6.15%	6.28%
Mar	4.00%	0.94%	3.83%		5.93%	5.97%	6.12%
Apr	4.00%	0.94%	4.35%		6.33%	6.35%	6.46%
May	4.00%	1.04%	4.72%		6.66%	6.62%	6.75%
June	4.00%	1.27%	4.73%		6.30%	6.46%	6.84%
July	4.25%	1.35%	4.50%		6.09%	6.27%	6.67%
Aug	4.50%	1.48%	4.28%		5.95%	6.14%	6.45%
Sept	4.75%	1.65%	4.13%		5.79%	5.98%	6.27%
Oct	4.75%	1.75%	4.10%		5.74%	5.94%	6.17%
Nov	5.00%	2.06%	4.19%		5.79%	5.97%	6.16%
Dec	5.25%	2.20%	4.23%		5.78%	5.92%	6.10%
2005							
Jan	5.25%	2.32%	4.22%		5.68%	5.78%	5.95%
Feb	5.50%	2.53%	4.17%		5.55%	5.61%	5.76%
Mar	5.75%	2.75%	4.50%		5.76%	5.83%	6.01%
Apr	5.75%	2.79%	4.34%		5.56%	5.64%	5.95%
May	6.00%	2.86%	4.14%		5.39%	5.53%	5.88%
June	6.25%	2.99%	4.00%		5.05%	5.40%	5.70%
July	6.25%	3.22%	4.18%		5.18%	5.51%	5.81%
Aug	6.50%	3.45%	4.26%		5.23%	5.50%	5.80%
Sept	6.75%	3.47%	4.20%		5.27%	5.52%	5.83%
Oct	6.75%	3.70%	4.46%		5.50%	5.79%	6.08%
Nov	7.00%	3.90%	4.54%		5.59%	5.88%	6.19%
Dec	7.25%	3.89%	4.47%		5.55%	5.80%	6.14%
2006							
Jan	7.50%	4.20%	4.42%		5.50%	5.75%	6.06%
Feb	7.50%	4.41%	4.57%		5.55%	5.82%	6.11%
Mar	7.75%	4.51%	4.72%		5.71%	5.98%	6.26%
Apr	7.75%	4.59%	4.99%		6.02%	6.29%	6.54%
May	8.00%	4.72%	5.11%		6.16%	6.42%	6.59%
June	8.25%	4.79%	5.11%		6.16%	6.40%	6.61%
July	8.25%	4.96%	5.09%		6.13%	6.37%	6.61%
Aug	8.25%	4.98%	4.88%		5.97%	6.20%	6.43%
Sept	8.25%	4.82%	4.72%		5.81%	6.00%	6.26%
Oct	8.25%	4.89%	4.73%		5.80%	5.98%	6.24%
Nov	8.25%	4.95%	4.60%		5.61%	5.80%	6.04%
Dec	8.25%	4.85%	4.56%		5.62%	5.81%	6.05%
2007							
Jan	8.25%	4.96%	4.76%		5.78%	5.96%	6.16%
Feb	8.25%	5.02%	4.72%		5.73%	5.90%	6.10%
Mar	8.25%	4.97%	4.56%		5.66%	5.85%	6.10%
Apr	8.25%	4.88%	4.69%		5.83%	5.97%	6.24%
May	8.25%	4.77%	4.75%		5.86%	5.99%	6.23%
June	8.25%	4.63%	5.10%		6.18%	6.30%	6.54%
July	8.25%	4.84%	5.00%		6.11%	6.25%	6.49%
Aug	8.25%	4.34%	4.67%		6.11%	6.24%	6.51%
Sept	7.75%	4.01%	4.52%		6.10%	6.18%	6.45%
Oct	7.50%	3.97%	4.53%		6.04%	6.11%	6.36%
Nov	7.50%	3.49%	4.15%		5.87%	5.97%	6.27%
Dec	7.25%	3.08%	4.10%		6.03%	6.16%	6.51%
2008							
Jan	6.00%	2.88%	3.74%		5.87%	6.02%	6.35%
Feb	6.00%	2.21%	3.74%		6.04%	6.21%	6.60%
Mar	5.25%	1.38%	3.51%		5.99%	6.21%	6.68%
Apr	5.00%	1.32%	3.68%		5.99%	6.29%	6.82%
May	5.00%	1.71%	3.88%		6.07%	6.27%	6.79%
June	5.00%	1.90%	4.10%		6.19%	6.38%	6.93%
July	5.00%	1.72%	4.01%		6.13%	6.40%	6.97%
Aug	5.00%	1.79%	3.89%		6.09%	6.37%	6.98%
Sept	5.00%	1.46%	3.69%		6.13%	6.49%	7.15%
Oct	4.00%	0.84%	3.81%		6.95%	7.56%	8.58%
Nov	4.00%	0.30%	3.53%		6.83%	7.60%	8.98%
Dec	3.25%	0.04%	2.42%		5.93%	6.54%	8.13%
2009							
Jan					6.01%	6.39%	7.90%

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

STOCK PRICE INDICATORS

Year	S&P Composite [1]	NASDAQ Composite [1]	DJIA	S&P D/P	S&P E/P
		1975 - 1982 Cycle			
1975			802.49	4.31%	9.15%
1976			974.92	3.77%	8.90%
1977			894.63	4.62%	10.79%
1978			820.23	5.28%	12.03%
1979			844.40	5.47%	13.46%
1980			891.41	5.26%	12.66%
1981			932.92	5.20%	11.96%
1982			884.36	5.81%	11.60%
		1983 - 1991 Cycle			
1983			1,190.34	4.40%	8.03%
1984			1,178.48	4.64%	10.02%
1985			1,328.23	4.25%	8.12%
1986			1,792.76	3.49%	6.09%
1987			2,275.99	3.08%	5.48%
1988	[1]	[1]	2,060.82	3.64%	8.01%
1989	322.84		2,508.91	3.45%	7.41%
1990	334.59		2,678.94	3.61%	6.47%
1991	376.18	491.69	2,929.33	3.24%	4.79%
		1992 - 2001 Cycle			
1992	$415.74	$599.26	3,284.29	2.99%	4.22%
1993	$451.21	715.16	3,522.06	2.78%	4.46%
1994	$460.42	751.65	3,793.77	2.82%	5.83%
1995	541.72	925.19	4,493.76	2.56%	6.09%
1996	670.50	1,164.96	5,742.89	2.19%	5.24%
1997	873.43	1,469.49	7,441.15	1.77%	4.57%
1998	1,085.50	1,794.91	8,625.52	1.49%	3.46%
1999	1,327.33	2,728.15	10,464.88	1.25%	3.17%
2000	1,427.22	3,783.67	10,734.90	1.15%	3.63%
2001	1,194.18	2,035.00	10,189.13	1.32%	2.95%
		Current Cycle			
2002	993.94	1,539.73	9,226.43	1.61%	2.92%
2003	965.23	1,647.17	8,993.59	1.77%	3.84%
2004	1,130.65	1,986.53	10,317.39	1.72%	4.89%
2005	1,207.23	2,099.32	10,547.67	1.83%	5.36%
2006	1,310.46	2,263.41	11,408.67	1.87%	5.78%
2007	1,477.19	2,578.47	13,169.98	1.86%	5.29%
2008	1,220.04	2,161.65	11,252.62	2.37%	

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAQ Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

STOCK PRICE INDICATORS

YEAR	S&P Composite	NASDAQ Composite	DJIA	S&P D/P	S&P E/P
2002					
1st Qtr.	1,131.56	1,879.85	10,105.27	1.39%	2.15%
2nd Qtr.	1,068.45	1,641.53	9,912.70	1.49%	2.70%
3rd Qtr.	894.65	1,308.17	8,487.59	1.76%	3.68%
4th Qtr.	887.91	1,346.07	8,400.17	1.79%	3.14%
2003					
1st Qtr.	860.03	1,350.44	8,122.83	1.89%	3.57%
2nd Qtr.	938.00	1,521.92	8,684.52	1.75%	3.55%
3rd Qtr.	1,000.50	1,765.96	9,310.57	1.74%	3.87%
4th Qtr.	1,056.42	1,934.71	9,856.44	1.69%	4.38%
2004					
1st Qtr.	1,133.29	2,041.95	10,488.43	1.64%	4.62%
2nd Qtr.	1,122.87	1,984.13	10,289.04	1.71%	4.92%
3rd Qtr.	1,104.15	1,872.90	10,129.85	1.79%	5.18%
4th Qtr.	1,162.07	2,050.22	10,362.25	1.75%	4.83%
2005					
1st Qtr.	1,191.98	2,056.01	10,648.48	1.77%	5.11%
2nd Qtr.	1,181.65	2,012.24	10,382.35	1.85%	5.32%
3rd Qtr.	1,225.91	2,144.61	10,532.24	1.83%	5.42%
4th Qtr.	1,262.07	2,246.09	10,827.79	1.86%	5.60%
2006					
1st Qtr.	1,283.04	2,287.97	10,996.04	1.85%	5.61%
2nd Qtr.	1,281.77	2,240.46	11,188.84	1.90%	5.86%
3rd Qtr.	1,288.40	2,141.97	11,274.49	1.91%	5.88%
4th Qtr.	1,389.48	2,390.26	12,175.30	1.81%	5.75%
2007					
1st Qtr.	1,425.30	2,444.85	12,470.97	1.84%	5.85%
2nd Qtr.	1,496.43	2,552.37	13,214.26	1.82%	5.65%
3rd Qtr.	1,490.81	2,609.68	13,488.43	1.86%	5.15%
4th Qtr.	1,494.09	2,701.59	13,502.95	1.91%	4.51%
2008					
1st Qtr.	1,350.19	2,332.91	12,383.86	2.11%	4.55%
2nd Qtr.	1,371.65	2,426.26	12,508.59	2.10%	4.01%
3rd Qtr.	1,251.94	2,290.87	11,322.40	2.29%	3.94%
4th Qtr.	909.80	1,599.64	8,795.61	2.98%	

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAC Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

Exhibit___(DCP-1)
Schedule 3

AMERICAN WATER WORKS
CAPITAL STRUCTURE RATIOS
2006 - 2008

YEAR	COMMON EQUITY	PREFERRED STOCK	LONG-TERM DEBT	SHORT-TERM DEBT
2006	$3,817,397	$1,779,043	$3,096,404	$1,007,128
	39.4%	18.3%	31.9%	10.4%
	43.9%	20.5%	35.6%	
2007	$4,542,046	$28,864	$4,674,837	$316,969
	47.5%	0.3%	48.9%	3.3%
	49.1%	0.3%	50.6%	
Sept. 30, 2008	$4,162,357	$28,774	$4,669,502	$423,021
	44.8%		50.3%	4.6%
	47.0%		52.7%	

Source: American Water Capital Corp. Prospectus for Senior Notes dated November 21, 2008.

Exhibit___(DCP-1)
Schedule 4

PROXY WATER UTILITIES
COMMON EQUITY RATIOS

COMPANY	2003	2004	2005	2006	2007
Value Line Water Group					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
California Water Service Group	46%	51%	51%	55%	57%
Southwest Water Co.	51%	63%	53%	56%	52%
Average	46%	52%	49%	50%	51%
AUS Utility Reports Group					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
Artesian Resources Corp.	37%	36%	38%	38%	48%
California Water Service Group	46%	51%	51%	55%	57%
Connecticut Water Service, Inc.	52%	53%	55%	54%	50%
Middlesex Water	41%	46%	42%	49%	48%
SJW Corporation	54%	56%	57%	56%	52%
Southwest Water Co.	51%	63%	53%	56%	52%
York Water Company	50%	48%	46%	51%	48%
Average	46%	50%	48%	50%	50%
Villadsen Water Sample					
American States Water Co.	43%	48%	47%	50%	50%
Aqua America, Inc.	44%	45%	44%	38%	43%
California Water Service Group	46%	51%	51%	55%	57%
Connecticut Water Service, Inc.	52%	53%	55%	54%	50%
Middlesex Water	41%	46%	42%	49%	48%
SJW Corporation	54%	56%	57%	56%	52%
Southwest Water Co.	51%	63%	53%	56%	52%
York Water Company	50%	48%	46%	51%	48%
Average	48%	51%	49%	51%	50%

Source: AUS Utilitly Reports.

PROXY WATER UTILITIES
DIVIDEND YIELD

COMPANY	DPS	November, 2008 - January, 2009 HIGH	LOW	AVERAGE	YIELD
Value Line Water Group					
American States Water Co.	$1.00	$35.72	$27.56	$31.64	3.2%
Aqua America, Inc.	$0.54	$22.00	$17.07	$19.54	2.8%
California Water Service Group	$1.17	$48.28	$35.81	$42.05	2.8%
Southwest Water Co.	$0.10	$8.74	$2.67	$5.71	1.8%
Average					**2.6%**
AUS Utility Reports Group					
American States Water Co.	$1.00	$35.72	$27.56	$31.64	3.2%
Aqua America, Inc.	$0.54	$22.00	$17.07	$19.54	2.8%
Artesian Resources Corp.	$0.71	$16.91	$13.82	$15.37	4.6%
California Water Service Group	$1.17	$48.28	$35.81	$42.05	2.8%
Connecticut Water Service, Inc.	$0.89	$26.99	$19.26	$23.13	3.9%
Middlesex Water	$0.71	$17.93	$12.05	$14.99	4.7%
SJW Corporation	$0.64	$30.44	$20.41	$25.43	2.5%
Southwest Water Co.	$0.10	$8.74	$2.67	$5.71	1.8%
York Water Company	$0.50	$13.50	$10.50	$12.00	4.2%
Average					**3.4%**
Villadsen Water Sample					
American States Water Co.	$1.00	$35.72	$27.56	$31.64	3.2%
Aqua America, Inc.	$0.54	$22.00	$17.07	$19.54	2.8%
California Water Service Group	$1.17	$48.28	$35.81	$42.05	2.8%
Connecticut Water Service, Inc.	$0.89	$26.99	$19.26	$23.13	3.9%
Middlesex Water	$0.71	$17.93	$12.05	$14.99	4.7%
SJW Corporation	$0.64	$30.44	$20.41	$25.43	2.5%
Southwest Water Co.	$0.10	$8.74	$2.67	$5.71	1.8%
York Water Company	$0.50	$13.50	$10.50	$12.00	4.2%
Average					**3.2%**

Source: Yahoo! Finance.

PROXY WATER UTILITIES
RETENTION GROWTH RATES

COMPANY	2003	2004	2005	2006	2007	Average	2008	2009	'11-'13	Average
Value Line Water Group										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	2.5%	3.5%	6.5%	4.2%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.5%	3.5%	3.0%	3.3%
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	4.0%	5.0%	6.0%	5.0%
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%				
Average						**2.5%**				**4.2%**
AUS Utility Reports Group										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	2.5%	3.5%	6.5%	4.2%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.5%	3.5%	3.0%	3.3%
Artesian Resources Corp.	1.5%	2.0%	2.8%	4.0%	2.4%	2.5%				
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	4.0%	5.0%	6.0%	5.0%
Connecticut Water Service, Inc.	3.0%	3.1%	0.6%	-0.4%	1.6%	1.6%				
Middlesex Water	-0.5%	0.8%	0.5%	1.5%	1.8%	0.8%				
SJW Corporation	4.5%	4.7%	6.1%	9.5%	3.4%	5.6%				
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%				
York Water Company	2.5%	2.5%	3.0%	2.4%	1.5%	2.4%				
Average						**2.6%**				**4.2%**
Villadsen Water Sample										
American States Water Co.	-0.7%	1.2%	3.3%	2.6%	3.8%	2.0%	2.5%	3.5%	6.5%	4.2%
Aqua America, Inc.	4.8%	4.8%	5.0%	4.1%	3.2%	4.4%	3.5%	3.5%	3.0%	3.3%
California Water Service Group	0.7%	2.2%	2.1%	1.1%	1.1%	1.4%	4.0%	5.0%	6.0%	5.0%
Connecticut Water Service, Inc.	3.0%	3.1%	0.6%	-0.4%	1.6%	1.6%				
Middlesex Water	-0.5%	0.8%	0.5%	1.5%	1.8%	0.8%				
SJW Corporation	4.5%	4.7%	6.1%	9.5%	3.4%	5.6%				
Southwest Water Co.	6.5%	1.5%	2.2%	2.7%	-1.3%	2.3%				
York Water Company	2.5%	2.5%	3.0%	2.4%	1.5%	2.4%				
Average						**2.6%**				**4.2%**

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
PER SHARE GROWTH RATES

COMPANY	5-Year Historic Growth Rates				Est'd '05-'07 to '11-'13 Growth Rates			
	EPS	DPS	BVPS	Average	EPS	DPS	BVPS	Average
Value Line Water Group								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%				
Average				**4.9%**				**5.9%**
AUS Utility Reports Group								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
Artesian Resources Corp.	3.4%	5.3%	7.0%	5.2%				
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Connecticut Water Service, Inc.	-0.4%	1.2%	3.6%	1.5%				
Middlesex Water	3.6%	1.8%	6.3%	3.9%				
SJW Corporation	5.9%	5.8%	9.0%	6.9%				
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%				
York Water Company	7.3%	6.5%	8.9%	7.6%				
Average				**4.9%**				**5.9%**
Villadsen Water Sample								
American States Water Co.	3.9%	2.0%	4.5%	3.5%	11.0%	5.0%	2.5%	6.2%
Aqua America, Inc.	5.6%	8.5%	10.9%	8.3%	7.5%	5.5%	5.5%	6.2%
California Water Service Group	3.7%	0.7%	7.1%	3.8%	10.0%	2.0%	4.0%	5.3%
Connecticut Water Service, Inc.	-0.4%	1.2%	3.6%	1.5%				
Middlesex Water	3.6%	1.8%	6.3%	3.9%				
SJW Corporation	5.9%	5.8%	9.0%	6.9%				
Southwest Water Co.	-4.5%	8.9%	7.0%	3.8%				
York Water Company	7.3%	6.5%	8.9%	7.6%				
Average				**4.9%**				**5.9%**

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
DCF COST RATES

COMPANY	ADJUSTED YIELD	HISTORIC RETENTION GROWTH	PROSPECTIVE RETENTION GROWTH	HISTORIC PER SHARE GROWTH	PROSPECTIVE PER SHARE GROWTH	FIRST CALL EPS GROWTH	AVERAGE GROWTH	DCF RATES
Value Line Water Group								
American States Water Co.	3.2%	2.0%	4.2%	3.5%	6.2%	4.0%	4.0%	7.2%
Aqua America, Inc.	2.8%	4.4%	3.3%	8.3%	6.2%	7.5%	5.9%	8.8%
California Water Service Group	2.9%	1.4%	5.0%	3.8%	5.3%	10.0%	5.1%	8.0%
Southwest Water Co.	1.8%	2.3%		3.8%		5.0%	3.7%	5.5%
Mean	2.7%	2.5%	4.2%	4.9%	5.9%	6.6%	4.7%	7.4%
Median	2.9%	2.2%	4.2%	3.8%	6.2%	6.3%	4.5%	7.6%
Composite-Mean		5.2%	6.8%	7.5%	8.6%	9.3%	7.4%	
Composite-Median		5.0%	7.0%	6.7%	9.0%	9.1%	7.4%	
AUS Utility Reports Group								
American States Water Co.	3.2%	2.0%	4.2%	3.5%	6.2%	4.0%	4.0%	7.2%
Aqua America, Inc.	2.8%	4.4%	3.3%	8.3%	6.2%	7.5%	5.9%	8.8%
Artesian Resources Corp.	4.7%	2.5%		5.2%		5.0%	4.2%	9.0%
California Water Service Group	2.9%	1.4%	5.0%	3.8%	5.3%	10.0%	5.1%	8.0%
Connecticut Water Service, Inc.	4.0%	1.6%		1.5%		15.0%	6.0%	10.0%
Middlesex Water	4.9%	0.8%		3.9%		8.0%	4.2%	9.1%
SJW Corporation	2.6%	5.6%		6.9%		10.0%	7.5%	10.1%
Southwest Water Co.	1.8%	2.3%		3.8%		5.0%	3.7%	5.5%
York Water Company	4.3%	2.4%		7.6%		8.0%	6.0%	10.3%
Mean	3.5%	2.6%	4.2%	4.9%	5.9%	8.1%	5.2%	8.7%
Median	3.2%	2.3%	4.2%	3.9%	6.2%	8.0%	5.1%	9.0%
Composite-Mean		6.0%	7.6%	8.4%	9.4%	11.5%	8.7%	
Composite-Median		5.5%	7.4%	7.1%	9.4%	11.2%	8.3%	
Villadsen Water Sample								
American States Water Co.	3.2%	2.0%	4.2%	3.5%	6.2%	4.0%	4.0%	7.2%
Aqua America, Inc.	2.8%	4.4%	3.3%	8.3%	6.2%	7.5%	5.9%	8.8%
California Water Service Group	2.9%	1.4%	5.0%	3.8%	5.3%	10.0%	5.1%	8.0%
Connecticut Water Service, Inc.	4.0%	1.6%		1.5%		15.0%	6.0%	10.0%
Middlesex Water	4.9%	0.8%		3.9%		8.0%	4.2%	9.1%
SJW Corporation	2.6%	5.6%		6.9%		10.0%	7.5%	10.1%
Southwest Water Co.	1.8%	2.3%		3.8%		5.0%	3.7%	5.5%
York Water Company	4.3%	2.4%		7.6%		8.0%	6.0%	10.3%
Mean	3.3%	2.6%	4.2%	4.9%	5.9%	8.4%	5.3%	8.6%
Median	3.0%	2.2%	4.2%	3.9%	6.2%	8.0%	5.5%	8.9%
Composite-Mean		5.9%	7.5%	8.2%	9.2%	11.7%	8.6%	
Composite-Median		5.2%	7.2%	6.9%	9.2%	11.0%	8.6%	

Note: negative average growth rates excluded from above DCF analyses.

STANDARD & POOR'S 500 COMPOSITE
20-YEAR U.S. TREASURY BOND YIELDS
RISK PREMIUMS

Year	EPS	BVPS	ROE	20-YEAR T-BOND	RISK PREMIUM
1977		$79.07			
1978	$12.33	$85.35	15.00%	7.90%	7.10%
1979	$14.86	$94.27	16.55%	8.86%	7.69%
1980	$14.82	$102.48	15.06%	9.97%	5.09%
1981	$15.36	$109.43	14.50%	11.55%	2.95%
1982	$12.64	$112.46	11.39%	13.50%	-2.11%
1983	$14.03	$116.93	12.23%	10.38%	1.85%
1984	$16.64	$122.47	13.90%	11.74%	2.16%
1985	$14.61	$125.20	11.80%	11.25%	0.55%
1986	$14.48	$126.82	11.49%	8.98%	2.51%
1987	$17.50	$134.04	13.42%	7.92%	5.50%
1988	$23.75	$141.32	17.25%	8.97%	8.28%
1989	$22.87	$147.26	15.85%	8.81%	7.04%
1990	$21.73	$153.01	14.47%	8.19%	6.28%
1991	$16.29	$158.85	10.45%	8.22%	2.23%
1992	$19.09	$149.74	12.37%	7.26%	5.11%
1993	$21.89	$180.88	13.24%	7.17%	6.07%
1994	$30.60	$193.06	16.37%	6.59%	9.78%
1995	$33.96	$215.51	16.62%	7.60%	9.02%
1996	$38.73	$237.08	17.11%	6.18%	10.93%
1997	$39.72	$249.52	16.33%	6.64%	9.69%
1998	$37.71	$266.40	14.62%	5.83%	8.79%
1999	$48.17	$290.68	17.29%	5.57%	11.72%
2000	$50.00	$325.80	16.22%	6.50%	9.72%
2001	$24.69	$338.37	7.43%	5.53%	1.90%
2002	$27.59	$321.72	8.36%	5.59%	2.77%
2003	$48.73	$367.17	14.15%	4.80%	9.35%
2004	$58.55	$414.75	14.98%	5.02%	9.96%
2005	$69.93	$453.06	16.12%	4.69%	11.43%
2006	$81.51	$504.39	17.03%	4.68%	12.35%
2007	$66.17	$529.59	12.80%	4.86%	7.94%
Average			**14.09%**	**7.69%**	**6.45%**

Sources: Standard & Poor's Analysts' Handbook and Morningstar 2008 Yearbook.

Exhibit___(DCP-1)
Schedule 7
Updated

PROXY WATER UTILITIES
CAPM COST RATES

COMPANY	RISK-FREE RATE	BETA	RISK PREMIUM	CAPM RATES
Value Line Water Group				
American States Water Co.	3.64%	0.95	5.90%	9.2%
Aqua America, Inc.	3.64%	0.90	5.90%	9.0%
California Water Service Group	3.64%	1.05	5.90%	9.8%
Southwest Water Co.	3.64%	1.10	5.90%	10.1%
Mean				**9.5%**
Median				**9.5%**
AUS Utility Reports Group				
American States Water Co.	3.64%	0.95	5.90%	9.2%
Aqua America, Inc.	3.64%	0.90	5.90%	9.0%
Artesian Resources Corp.	3.64%		5.90%	
California Water Service Group	3.64%	1.05	5.90%	9.8%
Connecticut Water Service, Inc.	3.64%	0.80	5.90%	8.4%
Middlesex Water	3.64%	0.80	5.90%	8.4%
SJW Corporation	3.64%	1.05	5.90%	9.8%
Southwest Water Co.	3.64%	1.05	5.90%	9.8%
York Water Company	3.64%	0.65	5.90%	7.5%
Mean				**9.0%**
Median				**9.1%**
Villadsen Water Sample				
American States Water Co.	3.64%	0.95	5.90%	9.2%
Aqua America, Inc.	3.64%	0.90	5.90%	9.0%
California Water Service Group	3.64%	1.05	5.90%	9.8%
Connecticut Water Service, Inc.	3.64%	0.80	5.90%	8.4%
Middlesex Water	3.64%	0.80	5.90%	8.4%
SJW Corporation	3.64%	1.05	5.90%	9.8%
Southwest Water Co.	3.64%	1.05	5.90%	9.8%
York Water Company	3.64%	0.65	5.90%	7.5%
Mean				**9.0%**
Median				**9.1%**

Sources: Value Line Investment Survey, Standard & Poor's Analysts' Handbook, Morningstar 2008 Yearbook.

PROXY WATER UTILITIES
RATES OF RETURN ON AVERAGE COMMON EQUITY

COMPANY	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1992-2001 Average	2003-2007 Average	2008	2009	2011-2013
Value Line Water Group																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	8.0%	9.0%	12.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	10.0%	11.0%	11.0%
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	10.0%	11.0%	12.5%
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%			
Mean	10.9%	9.0%	8.8%	9.3%	10.2%	11.2%	11.2%	12.7%	11.3%	11.0%	11.3%	9.2%	9.0%	9.1%	8.1%	4.8%	10.5%	8.0%	9.3%	10.3%	12.0%
Median	10.7%	11.6%	10.1%	10.0%	10.9%	11.0%	10.5%	12.6%	11.3%	11.3%	10.9%	9.5%	8.9%	9.9%	7.9%	7.1%	11.0%	8.6%	10.0%	11.0%	12.5%
AUS Utility Reports Group																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	8.0%	9.0%	12.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	10.0%	11.0%	11.0%
Artesian Resources Corp.							9.8%	9.7%	8.1%	9.4%	9.6%	7.4%	7.6%	8.9%	10.2%	8.5%		8.5%			
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	10.0%	11.0%	12.5%
Connecticut Water Service, Inc.	12.1%	12.5%	12.6%	12.7%	12.4%	12.3%	12.2%	12.4%	11.8%	13.3%	11.6%	11.2%	11.4%	12.0%	7.5%	8.9%	12.4%	10.2%			
Middlesex Water	11.7%	12.6%	12.1%	12.0%	10.3%	11.2%	10.7%	10.2%	6.5%	9.0%	9.8%	8.2%	8.3%	8.4%	8.6%	8.8%	10.6%	8.5%			
SJW Corporation	11.8%	11.8%	9.6%	10.8%	16.2%	12.0%	11.6%	11.1%	9.6%	9.5%	9.4%	9.8%	11.3%	11.5%	18.2%	8.3%	11.4%	11.8%			
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%			
York Water Company	11.9%	12.6%	11.7%	10.7%	11.1%	10.9%	10.3%	10.3%	11.9%	11.5%	16.7%	11.7%	12.2%	11.8%	10.5%	9.7%	11.3%	11.2%			
Mean	11.4%	10.7%	10.1%	10.4%	11.4%	11.4%	11.0%	11.6%	10.3%	10.7%	11.4%	9.5%	9.6%	9.9%	9.7%	7.0%	11.0%	9.2%	9.3%	10.3%	12.0%
Median	11.8%	12.2%	10.9%	10.8%	11.5%	11.6%	10.7%	11.1%	10.3%	10.5%	9.8%	9.8%	9.8%	10.4%	8.6%	8.8%	11.1%	9.5%	10.0%	11.0%	12.5%
Villadsen Water Sample																					
American States Water Co.	14.0%	11.7%	9.5%	10.0%	10.0%	9.4%	9.5%	10.2%	9.6%	10.5%	9.6%	5.6%	8.0%	10.4%	8.2%	9.3%	10.4%	8.3%	8.0%	9.0%	12.5%
Aqua America, Inc.	11.0%	11.4%	11.2%	12.0%	11.8%	12.5%	14.2%	13.8%	13.0%	14.0%	13.9%	12.3%	11.4%	11.5%	11.0%	10.0%	12.5%	11.2%	10.0%	11.0%	11.0%
California Water Service Group	10.4%	12.6%	10.6%	10.0%	12.6%	14.5%	11.0%	11.4%	10.3%	7.5%	9.6%	8.7%	9.8%	9.3%	7.6%	4.9%	11.1%	8.1%	10.0%	11.0%	12.5%
Connecticut Water Service, Inc.	12.1%	12.5%	12.6%	12.7%	12.4%	12.3%	12.2%	12.4%	11.8%	13.3%	11.6%	11.2%	11.4%	12.0%	7.5%	8.9%	12.4%	10.2%			
Middlesex Water	11.7%	12.6%	12.1%	12.0%	10.3%	11.2%	10.7%	10.2%	6.5%	9.0%	9.8%	8.2%	8.3%	8.4%	8.6%	8.8%	10.6%	8.5%			
SJW Corporation	11.8%	11.8%	9.6%	10.8%	16.2%	12.0%	11.6%	11.1%	9.6%	9.5%	9.4%	9.8%	11.3%	11.5%	18.2%	8.3%	11.4%	11.8%			
Southwest Water Co.	8.0%	0.4%	3.7%	5.0%	6.5%	8.3%	10.0%	15.5%	12.2%	12.0%	12.1%	10.2%	6.8%	5.4%	5.6%	-5.0%	8.2%	4.6%			
York Water Company	11.9%	12.6%	11.7%	10.7%	11.1%	10.9%	10.3%	10.3%	11.9%	11.5%	16.7%	11.7%	12.2%	11.8%	10.5%	9.7%	11.3%	11.2%			
Mean	11.4%	10.7%	10.1%	10.4%	11.4%	11.4%	11.2%	11.9%	10.6%	10.9%	11.6%	9.7%	9.9%	10.0%	9.7%	6.9%	11.0%	9.2%	9.3%	10.3%	12.0%
Median	11.8%	12.2%	10.9%	10.8%	11.5%	11.6%	10.9%	11.3%	11.1%	11.0%	10.7%	10.0%	10.6%	11.0%	8.4%	8.9%	11.3%	9.8%	10.0%	11.0%	12.5%

Source: AUS Utility Reports and Value Line Investment Survey.

PROXY WATER UTILITIES
MARKET TO BOOK RATIOS

COMPANY	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1992-2001 Average	2003-2007 Average
Value Line Water Group																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.	140%	158%	151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	227%	323%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
Mean	137%	150%	129%	115%	148%	180%	211%	222%	231%	247%	220%	224%	216%	293%	240%	215%	177%	238%
Median	141%	157%	138%	122%	147%	172%	191%	213%	226%	221%	201%	220%	200%	253%	214%	214%	173%	220%
AUS Utility Reports Group																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.	140%	158%	151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	227%	323%
Artesian Resources Corp.							156%	168%	149%	183%	159%	207%	198%	215%	198%	150%		194%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Connecticut Water Service, Inc.	162%	180%	154%	149%	156%	168%	193%	218%	226%	304%	275%	266%	233%	216%	211%	199%	191%	225%
Middlesex Water	111%	184%	169%	150%	150%	164%	176%	218%	222%	248%	225%	265%	214%	214%	178%	184%	179%	211%
SJW Corporation	113%	124%	117%	106%	113%	133%	137%	193%	195%	162%	155%	193%	175%	240%	307%	236%	139%	230%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
York Water Company	169%	174%	87%	197%	195%	226%	198%	174%	154%	284%	277%	335%	275%	367%	309%	266%	186%	310%
Mean	138%	158%	131%	133%	151%	176%	189%	207%	208%	241%	219%	240%	217%	269%	240%	210%	175%	238%
Median	141%	165%	138%	132%	153%	166%	176%	202%	195%	240%	202%	250%	214%	240%	211%	209%	171%	225%
Villadsen Water Sample																		
American States Water Co.	142%	156%	124%	120%	134%	137%	148%	177%	168%	182%	176%	178%	181%	230%	205%	209%	149%	201%
Aqua America, Inc.			151%	124%	189%	237%	313%	287%	302%	365%	304%	280%	307%	436%	332%	259%	246%	323%
California Water Service Group	147%	172%	157%	140%	160%	191%	207%	202%	186%	201%	199%	189%	218%	264%	223%	219%	176%	223%
Connecticut Water Service, Inc.	162%	180%	154%	149%	156%	168%	193%	218%	226%	304%	275%	266%	233%	216%	211%	199%	191%	225%
Middlesex Water	111%	184%	169%	150%	150%	164%	176%	218%	222%	248%	225%	265%	214%	214%	178%	184%	179%	211%
SJW Corporation	113%	124%	117%	106%	113%	133%	137%	193%	195%	162%	155%	193%	175%	240%	307%	236%	139%	230%
Southwest Water Co.	118%	112%	85%	75%	109%	153%	174%	223%	266%	240%	202%	250%	156%	241%	201%	172%	156%	204%
York Water Company	169%	174%	87%	197%	195%	226%	198%	174%	154%	284%	277%	335%	275%	367%	309%	266%	186%	310%
Mean	137%	157%	131%	133%	151%	176%	193%	212%	215%	248%	227%	245%	220%	276%	246%	218%	178%	241%
Median	142%	172%	138%	132%	153%	168%	185%	210%	209%	244%	214%	258%	216%	241%	217%	214%	175%	229%

Source: AUS Utility Reports and Value Line Investment Survey.

STANDARD & POOR'S 500 COMPOSITE RETURNS AND MARKET-TO-BOOK RATIOS 1992 - 2007

YEAR	RETURN ON AVERAGE EQUITY	MARKET-TO BOOK RATIO
1992	12.2%	271%
1993	13.2%	272%
1994	16.4%	246%
1995	16.6%	264%
1996	17.1%	299%
1997	16.3%	354%
1998	14.6%	421%
1999	17.3%	481%
2000	16.2%	453%
2001	7.5%	353%
2002	8.4%	296%
2003	14.2%	278%
2004	15.0%	291%
2005	16.1%	278%
2006	17.0%	277%
2007	12.8%	284%
Averages:		
1992-2001	14.7%	341%
2003-2007	15.0%	282%

Source: Standard & Poor's Analyst's Handbook, 2008 edition, page 1.

RISK INDICATORS

GROUP	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FIN STR	S & P STK RANK
S & P's 500 Composite	2.7	1.05	B++	B+
Value Line Water Group	3.0	0.99	B+	B+/A-
AUS Utility Reports Group	2.6	0.91	B+	B+/A-
Villadsen Water Sample	2.6	0.91	B+	B+/A-

Sources: Value Line Investment Survey, Standard & Poor's Stock Guide.

Definitions:

Safety rankings are in a range of 1 to 5, with 1 representing the highest safety or lowest risk.

Beta reflects the variability of a particular stock, relative to the market as a whole. A stock with a beta of 1.0 moves in concert with the market, a stock with a beta below 1.0 is less variable than the market, and a stock with a beta above 1.0 is more variable than the market.

Financial strengths range from C to A++, with the latter representing the highest level.

Common stock rankings range from D to A+, with the later representing the highest level.

RISK INDICATORS

COMPANY	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FINANCIAL STRENGTH		S& P STOCK RANKING	
Value Line Water Group						
American States Water Co.	3	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3	0.90	B+	3.33	A	4.00
California Water Service Group	3	1.05	B++	3.67	B+	3.33
Southwest Water Co.	3	1.05	B	3.00	B+	3.33
Average	**3.0**	**0.99**	**B+**	**3.42**	**B+/A-**	**3.50**
AUS Utility Reports Group						
American States Water Co.	3	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3	0.90	B+	3.33	A	4.00
Artesian Resources Corp.						
California Water Service Group	3	1.05	B++	3.67	B+	3.33
Connecticut Water Service, Inc.	2	0.80	B+	3.33	A-	3.67
Middlesex Water	2	0.80	B+	3.33	B+	3.33
SJW Corporation	3	1.05	B+	3.33	A-	3.67
Southwest Water Co.	3	1.05	B	3.00	B+	3.33
York Water Company	2	0.65	B++	3.67		
Average	**2.6**	**0.91**	**B+**	**3.42**	**B+/A-**	**3.52**
Villadsen Water Sample						
American States Water Co.	3.0	0.95	B++	3.67	B+	3.33
Aqua America, Inc.	3.0	0.90	B+	3.33	A	4.00
California Water Service Group	3.0	1.05	B++	3.67	B+	3.33
Connecticut Water Service, Inc.	2.0	0.80	B+	3.33	A-	3.67
Middlesex Water	2.0	0.80	B+	3.33	B+	3.33
SJW Corporation	3.0	1.05	B+	3.33	A-	3.67
Southwest Water Co.	3.0	1.05	B	3.00	B+	3.33
York Water Company	2.0	0.65	B+	3.33		
Average	**2.6**	**0.91**	**B+**	**3.37**	**B+/A-**	**3.52**

Sources: Standard & Poor's Stock Guide and Value Line Investment Survey.

ARIZONA-AMERICAN WATER COMPANY
PRE-TAX COVERAGE

ITEM	PERCENT	COST RATE	WEIGHTED COST	PRE-TAX COST	
Short-Term Debt	10.98%	5.37%	0.59%	0.59%	
Long-Term Debt	47.40%	5.46%	2.59%	2.59%	
Common Equity	41.62%	10.000%	4.16%	6.94%	(1)
TOTAL CAPITAL	100.00%		7.34%	10.12%	

(1) Post-tax weighted cost divided by .60 (composite tax factor)

Pre-tax coverage = 10.12%/(0.59% + 2.59%)
3.18 X

Standard & Poor's Utility Benchmark Ratios:

	A	BBB
Pre-tax coverage (X) Business Position:		
3	2.8x - 3.4x	1.8x - 2.8x
Total Debt to Total Capital (%) Business Position		
3	50% - 55%	55% - 65%

Note: Standard & Poor's no longer employs the pre-tax coverage ratios as one of its qualitative ratings criteria. The above-cited S&P benchmark ratios reflect the 1999 criteria reported by S&P.

Exhibit___(DCP-1)
Schedule 12

SUMMARY OF DISCOUNTED CASH FLOW AND CAPITAL ASSET PRICING MODEL RESULTS AS DEVELOPED IN ARIZONA-AMERICAN WATER COMPANY WITNESS VILLADSEN'S TESTIMONY

Group/Company	Simple DCF Results	Multi-Stage DCF Results	Long-Term Risk-Free Rate			Short-Term Risk-Free Rate			
			CAPM Results	ECAPM Results (0.5%)	ECAPM Results (1.5%)	CAPM Results	ECAPM Results (1.0%)	ECAPM Results (2%)	ECAPM Results (3%)
Water Sample									
American States Water Co.	9.0%	8.1%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
Aqua America, Inc.	13.1%	8.6%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
California Water Service Group	12.1%	9.2%	12.1%	12.0%	11.8%	11.8%	11.6%	11.4%	11.2%
Connecticut Water Service, Inc.	4.8%	7.8%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Middlesex Water	4.7%	7.9%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
SJW Corporation	12.4%	7.9%	11.6%	11.5%	11.4%	11.2%	11.0%	10.9%	10.8%
Southwest Water Co.	15.6%	8.5%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
York Water Company	3.8%	7.3%	5.8%	6.1%	6.9%	4.0%	4.8%	5.5%	6.3%
Mean	9.4%	8.2%	9.9%	9.9%	10.1%	9.1%	9.2%	9.3%	9.5%
Median	10.6%	8.0%	10.1%	10.2%	10.3%	9.4%	9.5%	9.6%	9.7%
Gas LDC Sample									
AGL Resources	9.9%	9.6%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Atmos Energy	10.1%	9.8%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Nicor	8.5%	9.3%	10.6%	10.6%	10.7%	10.0%	10.0%	10.0%	10.1%
Laclede Grojp	7.7%	9.0%	10.1%	10.2%	10.3%	9.4%	9.5%	9.6%	9.7%
New Jersey Resources	8.1%	8.3%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Northwest Natural Gas	8.4%	8.2%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
Piedmont Natural Gas	9.1%	9.0%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
South Jersey Industries	10.4%	8.5%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Southwest Gas	8.4%	8.1%	9.6%	9.7%	9.9%	8.8%	8.9%	9.1%	9.3%
WGL Resources	7.9%	8.9%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%
Mean	8.9%	8.9%	9.5%	9.6%	9.8%	8.6%	8.8%	9.0%	9.2%
Median	8.5%	9.0%	9.2%	9.3%	9.5%	8.2%	8.4%	8.7%	8.9%

Sources: Villadsen testimony, Table Nos. BV-6, BV-7, BV-10, BV-19, and BV-22.

ALL-STATE LEGAL®
EXHIBIT
S-12
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT,HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT AND TUBAC WATER DISTRICT.	)	DOCKET NO. W-01303A-08-0227

DIRECT

TESTIMONY

OF

MARVIN E. MILLSAP

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 20, 2009

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Rate Design MEM-1
Typical Residential Bill Analysis MEM-2

EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY, INC.
DOCKET NO. W-01303A-08-0227

Arizona-American Water Company ("AAWC" or "Company") is a certificated Arizona public service corporation that provided water utility service in various communities throughout the state. On May 1, 2008, AAWC filed an application for a permanent rate increase. This filing originally included 10 of the Company's systems but the Company withdrew 3 of them, leaving 7 systems. The Company utilized a test year ended December 31, 2007.

Agua Fria Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 7,400 gallons per month paying $31.47, or $7.32 more than the current $24.16 for a 30.28 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 7,400 gallons per month under the Company's proposed rates would be billed $38.48, or $14.32 more than the current $24.16 for a 59.28 percent increase.

Havasu Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 9,705 gallons per month paying $51.61, or $15.02 more than the current $36.59 for a 41.06 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 9,705 gallons per month under the Company's proposed rates would be billed $68.07, or $31.48 more than the current $36.59 for an 86.04 percent increase.

Mohave Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 8,073 gallons per month paying $18.40, or $0.96 more than the current $17.44 for a 5.49 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 8,073 gallons per month under the Company's proposed rates would be billed $24.50, or $7.06 more than the current $17.44 for a 40.46 percent increase.

Paradise Valley Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 20,493 gallons per month paying $58.12, or $8.93 more than the current $49.20 for a 18.14 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 20,493 gallons per month under the Company's proposed rates would be billed $70.54, or $21.34 more than the current $49.20 for a 43.37 percent increase.

Sun City West Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 6,704 gallons per month paying $32.01, or $12.49 more than the current $19.51 for a 64.01 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 6,704 gallons per month under the Company's proposed rates would be billed $35.09, or $15.58 more than the current $19.51 for a 79.83 percent increase.

Tubac Water District:

Staff's recommended rates would have a residential 5/8 x 3/4 inch meter customer consuming the average usage of 11,797 gallons per month paying $70.19, or $20.73 more than the current $49.46 for a 41.90 percent increase. By comparison, a residential 5/8 x 3/4-inch meter customer consuming the average usage of 11,797 gallons per month under the Company's proposed rates would be billed $85.44, or $35.97 more than the current $49.46 for a 72.73 percent increase.

Staff recommends approval of its rates and charges.

INTRODUCTION

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

A. My name is Marvin E. Millsap. I am a Public Utilities Analyst IV employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst IV.

A. In my capacity as a Public Utilities Analyst IV, I analyze and examine accounting, financial, statistical and other information and prepare reports based on my analyses that present Staff's recommendations to the Commission on utility revenue requirements, rate design and other matters.

Q. Please describe your educational background and professional experience.

A. In 1991, I received a Masters degree in Business Administration, with a major in management. My studies included courses in economics, finance, research, information systems, entrepreneurship and marketing. In 1970, I graduated from Arizona State University, receiving a Bachelor of Science degree in Accounting. I am a Certified Public Accountant licensed to practice Public Accounting with the Arizona State Board of Accountancy. I have previously been licensed to practice Public Accounting with the Kansas and South Carolina State Boards of Accountancy. In addition, I am a Certified Government Financial Manager ("CGFM") as designated by the Association of Government Accountants ("AGA"). I have attended various seminars and classes on such subjects as accounting, auditing, financial reporting, management of people and organizations, taxation, financing of water and wastewater systems and utility regulatory issues sponsored by the National Association of Regulatory Utility Commissioners', American Institute of Certified Public Accountants and the AGA. I am a member of the

American Institute of Certified Public Accountants and the Association of Government Accountants. I have also attained the designations of "Competent Communicator" and "Competent Leader" with Toastmasters, International.

I joined the Commission as a Public Utilities Analyst in October of 2007. Previously, I was employed by the Kansas Corporation Commission from May 1993 to May 1997, as a Managing Regulatory Utility Auditor and the Arizona Corporation Commission from November 1989 through May 1993, first as a Utilities Auditor and subsequently as a Rate Analyst and Senior Rate Analyst. In May 1997, I began working as a Senior Auditor with the Federal Communications Commission in Washington, DC, and subsequently became a Public Utilities Specialist with the Western Area Power Administration in Phoenix where I worked in Power Marketing and purchased power contract management. Most recently I worked for the U. S. State Department in Charleston, SC, as a Post Allotment Accountant and assisted with training of the Budget and Finance Staff at several Embassies in Europe, Africa and South America.

Prior to accepting State regulatory positions, I was employed with national and local Certified Public Accounting firms for approximately 12 years performing financial and operational audits, as well as providing tax and accounting services. Additionally, I was involved with municipal electric, natural gas, water and waste water utility system operations and accounting for approximately 8 years at the City of Mesa and the Town of Wickenburg, Arizona. My experience includes being Chief Financial Officer of a construction company and a real estate development company, as well as managing commercial and residential construction projects. I have also been a Business Law instructor for the Lambers CPA Review Course.

Q. Have you previously testified as an expert witness?

A. Yes. I have testified before the Kansas Corporation Commission in several electric and gas utilities' rate cases, and regarding telecommunications issues. In addition, I have testified before the Arizona Corporation Commission. I have also testified as an expert witness before the Interstate Commerce Commission.

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

A. I am presenting Staff's testimony and schedules addressing rate design of the six water systems included in this case.

Q. What is the basis of your testimony in this case?

A. A regulatory audit of the Company's application and records was performed by Staff. The regulatory audit consisted of examining and testing financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission adopted National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA").

RATE DESIGN

Agua Fria Water District

Q. Have you prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. A summary of the present, Company proposed, and Staff recommended rates and service charges for the Agua Fria, Havasu, Mohave, Paradise Valley, Sun City West and Tubac Districts, or water systems, are provided on Schedule MEM-1 for each district.

Q. Would you please summarize the present rate design for the Agua Fria Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $10.45; 1-inch $26.74; 1 ½-inch $55.90; 2-inch $83.84; 3-inch $164.02; 4-inch $220.63; 6-inch $425.22. This district does not have 8-inch, 10-inch or 12-inch meters. No gallons are included in the monthly minimum charge. The present residential commodity rate is $1.53 per thousand gallons for zero to 4,000 gallons, $2.22 per thousand gallons for 4,001 to 13,000 gallons, and $2.65 per thousand gallons for any consumption over 13,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $2.22 per thousand gallons for the first tier, and $2.65 per thousand gallons for any consumption over the first tier.

The monthly charge for fire sprinkler service varies depending on meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize the Company's proposed rate design for the Agua Fria Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $15.00; 1-inch $38.38; 1 ½-inch $80.24; 2-inch $120.34; 3-inch $235.44; 4-inch $316.99; 6-inch $610.36. This district does not have 8-inch, 10-inch or 12-inch meters. Zero gallons are included in the monthly minimum charge. The Company proposes a residential commodity rate of $2.926 per thousand gallons for zero to 4,000 gallons, $3.463 per thousand gallons for 4,001 to 13,000 gallons, and $3.670 per thousand gallons for any consumption over 13,000 gallons. The proposed commercial and industrial commodity rate tiers vary by meter size, but are generally $3.463 per thousand gallons for the first tier, and $3.670 per thousand gallons for any consumption over the first tier.

The proposed monthly charge for fire sprinkler service varies by meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize Staff's recommended rate design for the Agua Fria Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $14.55; 1-inch $36.38; 1 ½-inch $72.75; 2-inch $116.40; 3-inch $232.80; 4-inch $363.75; 6-inch $727.50; 8-inch $1,164.00; 10-inch $1,673.25; and 12-inch $3,128.25. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $2.02 per thousand gallons for zero to 4,000 gallons, $2.60 per thousand gallons for 4,001 to 13,000 gallons, and $3.10 per thousand gallons for any consumption over 13,000 gallons. The additional tier for the residential 5/8 x 3/4-inch meters is for the first 4,000 gallons, an estimate of residential non-discretionary use. Except for the 4,000 gallon break-over point for the non-discretionary tier, break-over points increase by meter size. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $2.60 per thousand gallons for the first tier, and $3.10 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8 x ¾-inch meter residential customer using an average consumption of 7,400 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 7,400 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $14.32 or 59.28 percent increase in his/her monthly bill from $24.16 to $38.38 under the Company's proposed rates and a $7.32 or 30.28 percent increase in his/her monthly bill from $24.16 to $31.47 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Havasu Water District

Q. Would you please summarize the present rate design for the Havasu Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $17.40; 1-inch $29.84; 2-inch $58.91; 3-inch $80.15; 4-inch $101.39. This district does not have 11/2-inch, 6-inch, 8-inch, 10-inch or 12-inch meters. No gallons are included in the monthly minimum charge. The present residential commodity rate is $1.68 per thousand gallons for zero to 4,000 gallons, $2.19 per thousand gallons for 4,001 to 13,000 gallons, and $2.50 per thousand gallons for any consumption over 13,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $2.10 per thousand gallons for the first tier, and $2.50 per thousand gallons for any consumption over the first tier.

Q. Would you please summarize the Company's proposed rate design for the Havasu Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $28.00; 1-inch $48.18; 2-inch $94.80; 3-inch $128.98; 4-inch $163.16. This district does not have 11/2-inch, 6-inch, 8-inch, 10-inch or 12-inch meters. Zero gallons

are included in the monthly minimum charge. The Company proposes a residential commodity rate of $4.033 per thousand gallons for zero to 4,000 gallons, $4.196 per thousand gallons for 4,001 to 13,000 gallons, and $4.555 per thousand gallons for any consumption over 13,000 gallons. The proposed commercial commodity rate tiers vary by meter size, but are generally $4.196 per thousand gallons for the first tier, and $4.555 per thousand gallons for any consumption over the first tier.

Q. Would you please summarize Staff's recommended rate design for the Havasu Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $24.54; 1-inch $61.36; 1 ½-inch $122.71; 2-inch $196.34; 3-inch $392.68; 4-inch $613.57; 6-inch $1,227.14; 8-inch $1,963.42 10-inch $2,822.41; and 12-inch $5,276.68. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $2.37 per thousand gallons for zero to 4,000 gallons, $3.08 per thousand gallons for 4,001 to 13,000 gallons, and $3.53 per thousand gallons for any consumption over 13,000 gallons. The additional tier for the residential 5/8 x 3/4-inch meters is for the first 4,000 gallons, an estimate of residential non-discretionary use. Except for the 4,000 gallon break-over point for the non-discretionary tier, break-over points increase by meter size. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $3.08 per thousand gallons for the first tier, and $3.53 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8-inch x ¾-inch meter residential customer using an average consumption of 9,705 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 9,705 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $31.48 or 86.04 percent increase in his/her monthly bill from $36.59 to $68.07 under the Company's proposed rates and a $15.02 or 41.06 percent increase in his/her monthly bill from $36.59 to $51.61 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Mohave Water District

Q. Would you please summarize the present rate design for the Mohave Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $8.75; 1-inch $21.25; 1 ½-inch $42.50; 2-inch $68.00; 3-inch $136.00; 4-inch $215.00; 6-inch $425.00. In addition to these rates for the Bullhead system, the Havasu system has the following monthly minimum charges: 2-inch $39.68 and 4-inch $68.64. This district does not have 8-inch, 10-inch or 12-inch meters. No gallons are included in the monthly minimum charge. The present residential commodity rate is $0.85 per thousand gallons for zero to 4,000 gallons, $1.30 per thousand gallons for 4,001 to 13,000 gallons, and $1.50 per thousand gallons for any consumption over 13,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $1.30 per thousand gallons for the first tier, and $1.50 per thousand gallons for any consumption over the first tier for the Bullhead system. The present commercial commodity rate tiers for the Havasu

system are generally $1.55 per thousand gallons for the first tier, and $1.87 per thousand gallons for any consumption over the first tier.

The monthly charge for fire sprinkler service varies depending on meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize the Company's proposed rate design for the Mohave Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $12.00; 1-inch $29.14; 1 ½-inch $58.29; 2-inch $93.26; 3-inch $188.51; 4-inch $294.86; 6-inch $582.86. In addition to these proposed rates for the Bullhead system, the Havasu system has the following proposed monthly minimum charges: 2-inch $54.69 and 4-inch $94.13. This district does not have 8-inch, 10-inch or 12-inch meters. Zero gallons are included in the monthly minimum charge. The Company proposes a residential commodity rate of $1.471 per thousand gallons for zero to 4,000 gallons, $1.625 per thousand gallons for 4,001 to 13,000 gallons, and $1.744 per thousand gallons for any consumption over 13,000 gallons. The proposed commercial commodity rate tiers vary by meter size, but are generally $1.625 per thousand gallons for the first tier, and $1.744 per thousand gallons for any consumption over the first tier for the Bullhead system. The proposed commercial commodity rate tiers for the Havasu system are generally $1.944 per thousand gallons for the first tier, and $2.174 per thousand gallons for any consumption over the first tier.

The proposed monthly charge for fire sprinkler service varies by meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize Staff's recommended rate design for the Mohave Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $9.10; 1-inch $22.75; 1 ½-inch $45.60; 2-inch $72.80; 3-inch $145.60; 4-inch $227.50; 6-inch $455.00; 8-inch $728.00; 10-inch $1,046.50; and 12-inch $1,956.50. In addition to these recommended rates for the Bullhead system, the Havasu system has the following recommended monthly minimum charges: 2-inch $41.52 and 4-inch $71.45. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $0.90 per thousand gallons for zero to 4,000 gallons, $1.40 per thousand gallons for 4,001 to 13,000 gallons, and $1.66 per thousand gallons for any consumption over 13,000 gallons. The additional tier for the residential 5/8 x 3/4-inch meters is for the first 4,000 gallons, an estimate of residential non-discretionary use. Except for the 4,000 gallon break-over point for the non-discretionary tier, break-over points increase by meter size. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $1.40 per thousand gallons for the first tier, and $1.66 per thousand gallons for any consumption over the first tier for the Bullhead system. The proposed commercial commodity rate tiers for the Havasu system are generally $1.60 per thousand gallons for the first tier, and $1.94 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8 x ¾-inch meter residential customer using an average consumption of 8,073 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 8,073 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $7.06 or 40.46 percent increase in his/her monthly bill from $17.44 to $24.50 under the Company's proposed rates and a $0.96 or 5.49 percent increase in his/her monthly bill from $17.44 to $18.40 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Paradise Valley Water District

Q. Would you please summarize the present rate design for the Paradise Valley Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $24.34; ¾-inch $25.18; 1-inch $40.60; 1 ½-inch $81.98; 2-inch $130.65; 3-inch $242.09; 4-inch $402.85; 6-inch $806.97. This district does not have 8-inch, 10-inch or 12-inch meters. No gallons are included in the monthly minimum charge. The present residential commodity rate is $1.213 per thousand gallons for zero to 25,000 gallons, $2.103 per thousand gallons for 25,001 to 80,000 gallons, and $2.633 per thousand gallons for any consumption over 80,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $2.103 per thousand gallons for the first tier, and $2.633 per thousand gallons for any consumption over the first tier.

The monthly charge for fire sprinkler service varies depending on meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize the Company's proposed rate design for the Paradise Valley Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $28.00; ¾-inch $28.97; 1-inch $46.71; 1 ½-inch $94.31; 2-inch $150.30; 3-inch $278.49; 4-inch $463.43; 6-inch $928.31. This district does not have 8-inch, 10-inch or 12-inch meters. Zero gallons are included in the monthly minimum charge. The Company proposes a residential commodity rate of $1.288 per thousand gallons for zero to 4,000 gallons, $2.233 per thousand gallons for 4,001 to 20,000 gallons, $2.796 per thousand gallons for 20,001 to 65,000 gallons, $3.359 per thousand gallons for 65,001 to 125,000 and $3.879 per thousand gallons for any consumption over 125,000 gallons. The proposed commercial commodity rate tiers vary by meter size, but are generally $2.233 per thousand gallons for the first tier, and $2.980 per thousand gallons for any consumption over the first tier.

The proposed monthly charge for fire sprinkler service varies by meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize Staff's recommended rate design for the Paradise Valley Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $28.00; ¾-inch $28.95; 1-inch $55.00; 1 ½-inch $107.00; 2-inch $170.00; 3-inch $293.00; 4-inch $488.00; 6-inch $976.00; 8-inch $2,256.61; 10-inch $3,243.88; and 12-inch $6,064.64. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $1.47 per thousand gallons for zero to 25,000 gallons, $2.55 per

thousand gallons for 25,001 to 80,000 gallons, and $3.12 per thousand gallons for any consumption over 80,000 gallons. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $2.55 per thousand gallons for the first tier, and $3.12 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. Staff did not adopt the Company's proposed five tier methodology because the increments between the tiers were not large enough to get the customers' attention. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8 x ¾-inch meter residential customer using an average consumption of 20,493 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 20,493 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $21.34 or 43.37 percent increase in his/her monthly bill from $49.20 to $70.54 under the Company's proposed rates and a $8.93 or 18.14 percent increase in his/her monthly bill from $49.20 to $58.12 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Sun City West Water District

Q. Would you please summarize the present rate design for the Sun City West Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $9.57; 1-inch $24.40; 1 ½-inch $52.28; 2-inch $76.68; 3-inch $132.43; 4-inch $196.90; 6-inch $270.08. This district does not have ¾-inch, 8-inch, 10-inch or 12-inch meters. No

gallons are included in the monthly minimum charge. The present residential commodity rate is $1.31 per thousand gallons for zero to 4,000 gallons, $1.74 per thousand gallons for 4,001 to 15,000 gallons, and $2.01 per thousand gallons for any consumption over 15,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $1.74 per thousand gallons for the first tier, and $2.01 per thousand gallons for any consumption over the first tier.

The monthly charge for fire sprinkler service varies depending on meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize the Company's proposed rate design for the Sun City West Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $15.00; 1-inch $38.24; 1 ½-inch $81.94; 2-inch $120.19; 3-inch $207.57; 4-inch $308.62; 6-inch $423.32. This district does not have ¾-inch. 8-inch, 10-inch or 12-inch meters. Zero gallons are included in the monthly minimum charge. The Company proposes a residential commodity rate of $2.880 per thousand gallons for zero to 4,000 gallons, $3.171 per thousand gallons for 4,001 to 15,000 gallons, and $3.413 per thousand gallons for any consumption over 15,000 gallons. The proposed commercial commodity rate tiers vary by meter size, but are generally $3.171 per thousand gallons for the first tier, and $3.413 per thousand gallons for any consumption over the first tier.

The proposed monthly charge for fire sprinkler service varies by meter size. There are zero gallons included in the monthly minimum charge.

Q. Would you please summarize Staff's recommended rate design for the Sun City West Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $15.30; 1-inch $38.25; 1 ½-inch $76.50; 2-inch $122.40; 3-inch $244.80; 4-inch $382.50; 6-inch $765.00; 8-inch $1224.00; 10-inch $1,759.50; and 12-inch $3,289.50. This district does not have ¾-inch meters. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $2.25 per thousand gallons for zero to 4,000 gallons, $2.85 per thousand gallons for 4,001 to 15,000 gallons, and $3.40 per thousand gallons for any consumption over 15,000 gallons. The additional tier for the residential 5/8 x 3/4-inch meters is for the first 4,000 gallons, an estimate of residential non-discretionary use. Except for the 4,000 gallon break-over point for the non-discretionary tier, break-over points increase by meter size. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $2.85 per thousand gallons for the first tier, and $3.40 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8 x ¾-inch meter residential customer using an average consumption of 6,704 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 6,704 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $15.58 or 79.83 percent increase in his/her monthly bill from $19.51 to $35.09 under the Company's

proposed rates and a $12.49 or 64.01 percent increase in his/her monthly bill from $19.51 to $32.01 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Tubac Water District

Q. Would you please summarize the present rate design for the Tubac Water District?

A. The present monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $19.68; 1-inch $29.63; 1 ½-inch $59.26; 2-inch $97.49; 3-inch $115.65. This district does not have ¾-inch meters nor 4-inch through 12-inch meters. No gallons are included in the monthly minimum charge. The present residential commodity rate is $1.89 per thousand gallons for zero to 4,000 gallons, $2.85 per thousand gallons for 4,001 to 20,000 gallons, and $3.41 per thousand gallons for any consumption over 20,000 gallons. The present commercial commodity rate tiers vary by meter size, but are generally $2.85 per thousand gallons for the first tier, and $3.41 per thousand gallons for any consumption over the first tier.

Q. Would you please summarize the Company's proposed rate design for the Tubac Water District?

A. The Company's proposed monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $32.50; 1-inch $48.63; 1 ½-inch $97.86; 2-inch $161.00; 3-inch $190.99. This district does not have ¾-inch meters nor 4-inch through 12-inch meters. Zero gallons are included in the monthly minimum charge. The Company proposes a residential commodity rate of $3.780 per thousand gallons for zero to 4,000 gallons, $4.850 per thousand gallons for 4,001 to 20,000 gallons, and $4.950 per thousand gallons for any consumption over 20,000 gallons. The proposed commercial commodity rate tiers vary by

meter size, but are generally $4.850 per thousand gallons for the first tier, and $4.950 per thousand gallons for any consumption over the first tier.

Q. Would you please summarize Staff's recommended rate design for the Tubac Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Schedule MEM-1. Briefly, Staff's recommended monthly minimum charges by meter size are as follows: 5/8 x ¾-inch $28.73; 1-inch $71.83; 1 ½-inch $143.66; 2-inch $229.86; 3-inch $459.72; 4-inch $718.32; 6-inch $1,436.64; 8-inch $2,298.62; 10-inch $3,304.27; and 12-inch $6,177.55. This district does not have ¾-inch meters. Zero gallons are included in the monthly minimum charge. Staff recommends an inverted tier rate design that consists of three tiers for the residential commodity rate of $2.76 per thousand gallons for zero to 4,000 gallons, $3.90 per thousand gallons for 4,001 to 20,000 gallons, and $4.98 per thousand gallons for any consumption over 20,000 gallons. The additional tier for the residential 5/8 x 3/4-inch meters is for the first 4,000 gallons, an estimate of residential non-discretionary use. Except for the 4,000 gallon break-over point for the non-discretionary tier, break-over points increase by meter size. Staff's recommended commercial commodity rate tiers vary by meter size, but are generally $3.90 per thousand gallons for the first tier, and $4.98 per thousand gallons for any consumption over the first tier.

Efficiency in water use is encouraged by producing a higher customer bill with increased consumption or use of a larger meter. A typical bill analysis for residential 5/8 x ¾ inch meter customers is provided in Schedule MEM-2.

Q. What is the rate impact on a 5/8 x ¾-inch meter residential customer using an average consumption of 11,797 gallons?

A. The average usage of residential 5/8 x ¾-inch meter customers is 11,797 gallons per month. The average residential 5/8 x ¾-inch meter customer would experience a $35.97 or 72.73 percent increase in his/her monthly bill from $49.46 to $85.44 under the Company's proposed rates and a $20.73 or 41.90 percent increase in his/her monthly bill from $49.46 to $70.19 under Staff's recommended rates. Please see Staff's Schedule MEM-2, typical bill analysis for residential 5/8 x ¾ inch meter customers.

Q. Does this conclude your direct testimony?

A. Yes, it does.

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x x3/4-inch Meter		$ 10.45	$ 15.00	$ 14.55
3	1-inch Meter		$ 26.74	$ 38.38	$ 36.38
4	11/2-inch Meter		$ 55.90	$ 80.24	$ 72.75
5	2-inch Meter		$ 83.84	$ 120.34	$ 116.40
6	3-inch Meter		$ 164.02	$ 235.44	$ 232.80
7	4-inch Meter		$ 220.63	$ 316.69	$ 363.75
8	6-inch Meter		$ 425.22	$ 610.36	$ 727.50
9	8-inch Meter		N/A	N/A	$ 1,164.00
10	10-inch Meter		N/A	N/A	$ 1,673.25
11	12-inch Meter		N/A	N/A	$ 3,128.25
12					
13	Other Public Entities - State Prision		$ 191.75	$ 275.24	$ 222.43
14					
15	Monthly Service Charge for Fire Sprinkler				
16	4-inch Meter		$ 27.25	$ 49.60	$ 31.64
17	6-inch Meter		$ 40.86	$ 74.37	$ 47.40
18	8-inch Meter		$ 54.48	$ 99.15	$ 63.20
19	12-inch Meter		$ 163.44	$ 297.48	$ 189.59
20					
21					
22	Gallons in the Minimum		-	-	-
23					
24					
25	Commodity Rates			Per 1,000 Gallons	
26	(Residential, Commercial, Industrial)	Block			
27					
28	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.53	$ 2.926	$ 2.02
29		4,001 - 13,000 Gallons	$ 2.22	$ 3.463	$ 2.60
30		Over 13,000 Gallons	$ 2.65	$ 3.670	$ 3.10
31					
32	5/8 x 3/4-inch Meter Commercial	0 to 13,000 Gallons	$ 2.22	$ 3.463	$ 2.60
33		Over 13,000 Gallons	$ 2.65	$ 3.670	$ 3.10
34					
35	1-inch Meter:	0 to 45,000 Gallons	$ 2.22	$ 3.463	$ 2.60
36		Over 45,000 Gallons	$ 2.65	$ 3.670	$ 3.10
37					
38	1 1/2-inch Meter:	0 to 100,000 Gallons	$ 2.22	$ 3.463	$ 2.60
39		Over 100,000 Gallons	$ 2.65	$ 3.670	$ 3.10
40					
41	2-inch Meter	0 to 150,000 Gallons	$ 2.22	$ 3.463	$ 2.60
42		Over 150,000 Gallons	$ 2.65	$ 3.670	$ 3.10
43					
44	3-inch Meter	0 to 300,000 Gallons	$ 2.22	$ 3.463	$ 2.60
45		Over 300,000 Gallons	$ 2.65	$ 3.670	$ 3.10
46					
47	4-inch Meter	0 to 400,000 Gallons	$ 2.22	$ 3.463	$ 2.60
48		Over 400,000 Gallons	$ 2.65	$ 3.670	$ 3.10
49					
50	6-inch Meter	0 to 800,000 Gallons	$ 2.22	$ 3.463	$ 2.60
51		Over 800,000 Gallons	$ 2.65	$ 3.670	$ 3.10
52					
53	8-inch Meter	0 to 1,125,000 Gallons	$ 2.22	$ 3.463	$ 2.60
54		Over 1,125,000 Gallons	$ 2.65	$ 3.670	$ 3.10
55					
56	10-inch Meter	0 to 1,500,000 Gallons	$ 2.22	$ 3.463	$ 2.60
57		Over 1,500,000 Gallons	$ 2.65	$ 3.670	$ 3.10
58					
59	12-inch Meter	0 to 2,250,000 Gallons	$ 2.22	$ 3.463	$ 2.60
60		Over 2,250,000 Gallons	$ 2.65	$ 3.670	$ 3.10
61					
62	Arizona Water Contract	0 to 8,000 Gallons	$ 1.78	$ 2.926	$ 2.02
63		Over 8,000 Gallons	$ 2.24	$ 3.463	$ 2.60
64					
65	Other Public Entities - State Prision	All Gallons	$ 1.93	$ 3.463	$ 2.24
66					
67	OWU - PI Surprise	All Gallons	$ 1.00	$ 1.00	$ 1.20
68					
69	Private Fire Service	All Gallons	$ 1.38	$ 1.38	$ 1.38
70					
71	Irrigation/Bulk - Raw	All Gallons	$ 0.50	$ 1.000	$ 2.60
72					
73	Irrigation - Non Potable	All Gallons	$ 0.62	$ 1.240	$ 2.60
74					
75					

ARIZONA-AMERICAN - AGUA FRIA WATER
Docket No. W01303A-08-0227
Test Year Ended: 12/31/07

Service Charges	Present Rates	Company Proposed	Staff Recommended
Establishment Re-establishment and/reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Water Meter Test (If Correct)	$ 10.00	$ 81.00	$ 81.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 10.00
Late Fee Charge	1.5% Per Mon	1.5% Per Mont	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	N/A
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Company Proposed Service Line Charge	Company Proposed Meter Installation Charge	Company Total Proposed Charge	Staff Recommended Service Line Charge	Staff Recommended Meter Installation Charge	Staff Total Recommended Charge
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	. Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	. Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 765.00	$ 2,195.00	$ 2,960.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA-AMERICAN - AGUA FRIA WATER
Docket No. W01303A-08-0227
Test Year Ended December 31, 2007

Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	7,400	$ 24.16	$ 38.48	$ 14.32	59.28%
Median Usage	N/A				
Staff Recommended					
Average Usage	7,400	$ 24.16	$ 31.47	$ 7.32	30.28%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff recommended Rates	% Increase
-	$ 10.45	$ 15.00	43.54%	$ 14.55	39.23%
1,000	11.99	17.93	49.51%	16.57	38.17%
2,000	13.53	20.85	54.12%	18.58	37.35%
3,000	15.07	23.78	57.78%	20.60	36.69%
4,000	16.61	26.70	60.77%	22.61	36.16%
5,000	18.83	30.17	60.21%	25.22	33.94%
6,000	21.05	33.63	59.76%	27.82	32.19%
7,000	23.27	37.09	59.40%	30.43	30.78%
8,000	25.49	40.55	59.11%	33.03	29.61%
9,000	27.71	44.02	58.86%	35.64	28.62%
7,400	24.16	38.48	59.28%	31.47	30.28%
10,000	29.93	47.48	58.65%	38.24	27.79%
11,000	32.15	50.94	58.46%	40.85	27.07%
12,000	34.37	54.41	58.30%	43.45	26.44%
13,000	36.59	57.87	58.17%	46.06	25.89%
14,000	39.23	61.54	56.85%	49.16	25.36%
15,000	41.88	65.21	55.70%	52.26	24.78%
16,000	44.53	68.88	54.69%	55.36	24.33%
17,000	47.17	72.55	53.79%	58.46	23.92%
18,000	49.82	76.22	52.98%	61.56	23.56%
19,000	52.47	79.89	52.26%	64.66	23.24%
20,000	55.12	83.56	51.61%	67.76	22.95%
25,000	68.35	101.91	49.10%	83.26	21.82%
30,000	81.58	120.26	47.40%	98.76	21.06%
35,000	94.82	138.60	46.18%	114.27	20.51%
40,000	108.05	156.95	45.26%	129.77	20.10%
45,000	121.29	175.30	44.54%	145.27	19.77%
50,000	134.52	193.65	43.96%	160.77	19.51%
75,000	200.69	285.40	42.21%	238.28	18.73%
100,000	266.86	377.14	41.33%	315.78	18.33%

ARIZONA AMERICAN - HAVASU WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 17.40	$ 28.00	$ 24.54
3	1-inch Meter		$ 29.84	$ 48.18	$ 61.36
4	11/2-inch Meter		N/A	N/A	$ 122.71
5	2-inch Meter		$ 58.91	$ 94.80	$ 196.34
6	3-inch Meter		$ 80.15	$ 128.98	$ 392.68
7	4-inch Meter		$ 101.39	$ 163.16	$ 613.57
8	6-inch Meter		N/A	N/A	$ 1,227.14
9	8-inch Meter		N/A	N/A	$ 1,963.42
10	10-inch Meter		N/A	N/A	$ 2,822.41
11	12-inch Meter		N/A	N/A	$ 5,276.68
12					
13	6-inch, or smaller, Meter for Apartments, RV Parks and Resorts		$ 8.70	$ 14.00	$ 13.00
14					
15					
16	Gallons in the Minimum		-	-	-
17					
18					
19	Commodity Rates			Per 1,000 Gallons	
20	(Residential and Commercial)	Block			
21					
22	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.68	$ 4.033	$ 2.37
23		4,001 - 13,000 Gallons	$ 2.19	$ 4.196	$ 3.08
24		Over 13,000 Gallons	$ 2.50	$ 4.555	$ 3.53
25					
26	5/8 x 3/4-inch Meter Commercial and Indus	0 to 13,000 Gallons	$ 2.19	$ 4.20	$ 3.08
27		Over 13,000 Gallons	$ 2.50	$ 4.56	$ 3.53
28					
29	1-inch Meter:	0 to 30,000 Gallons	$ 2.19	$ 4.20	$ 3.08
30		Over 30,000 Gallons	$ 2.50	$ 4.56	$ 3.53
31					
32	1 1/2-inch Meter:	N/A	N/A	N/A	$ 3.08
33		N/A	N/A	N/A	$ 3.53
34					
35	2-inch Meter	0 to 60,000 Gallons	$ 2.19	$ 4.20	$ 3.08
36		Over 60,000 Gallons	$ 2.50	$ 4.56	$ 3.53
37					
38	3-inch Meter	0 to 90,000 Gallons	$ 2.19	$ 4.20	$ 3.08
39		Over 90,000 Gallons	$ 2.50	$ 4.56	$ 3.53
40					
41	4-inch Meter	0 to 110,000 Gallons	$ 2.19	$ 4.20	$ 3.08
42		Over 110,000 Gallons	$ 2.50	$ 4.56	$ 3.53
43					
44	6-inch Meter	0 to 500,000 Gallons	$ 2.19	$ 4.20	$ 3.08
45		Over 500,000 Gallons	$ 2.50	$ 4.56	$ 3.53
46					
47	8-inch Meter	N/A	N/A	N/A	$ 3.08
48		N/A	N/A	N/A	$ 3.53
49					
50	10-inch Meter	N/A	N/A	N/A	$ 3.08
51		N/A	N/A	N/A	$ 3.53
52					
53	12-inch Meter	N/A	N/A	N/A	$ 3.08
54		N/A	N/A	N/A	$ 3.53
55					
56					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 25.00	$ 25.00	$ 25.00
After Hours	$ 34.00	$ 34.00	$ 34.00
Water Meter Test (If Correct)	$ 10.00	$ 10.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - HAVASU WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	9,705	$ 36.59	$ 68.07	$ 31.48	86.04%
Median Usage	N/A				
Staff Recommended					
Average Usage	9,705	$ 36.59	$ 51.61	$ 15.02	41.06%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff recommended Rates	% Increase
-	$ 17.40	$ 28.00	60.92%	$ 24.54	41.05%
1,000	19.08	32.03	67.88%	26.91	41.05%
2,000	20.76	36.07	73.72%	29.28	41.05%
3,000	22.44	40.10	78.68%	31.65	41.05%
4,000	24.12	44.13	82.95%	34.02	41.05%
5,000	26.31	48.33	83.71%	37.11	41.05%
6,000	28.49	52.52	84.34%	40.19	41.05%
7,000	30.68	56.72	84.89%	43.27	41.05%
8,000	32.86	60.91	85.36%	46.35	41.05%
9,000	35.05	65.11	85.77%	49.44	41.06%
9,705	36.59	68.07	86.04%	51.61	41.06%
10,000	37.23	69.30	86.14%	52.52	41.06%
11,000	39.42	73.50	86.46%	55.60	41.06%
12,000	41.60	77.69	86.76%	58.68	41.06%
13,000	43.79	81.89	87.02%	61.77	41.06%
14,000	46.29	86.45	86.76%	65.29	41.06%
15,000	48.79	91.00	86.52%	68.82	41.06%
16,000	51.29	95.56	86.31%	72.35	41.06%
17,000	53.79	100.11	86.12%	75.87	41.06%
18,000	56.29	104.67	85.95%	79.40	41.06%
19,000	58.79	109.22	85.79%	82.93	41.06%
20,000	61.29	113.78	85.64%	86.45	41.06%
25,000	73.79	136.56	85.06%	104.09	41.06%
30,000	86.29	159.33	84.65%	121.72	41.06%
35,000	98.79	182.11	84.34%	139.35	41.06%
40,000	111.29	204.89	84.10%	156.99	41.06%
45,000	123.79	227.66	83.90%	174.62	41.06%
50,000	136.30	250.44	83.75%	192.26	41.06%
75,000	198.80	364.33	83.26%	280.43	41.06%
100,000	261.31	478.21	83.01%	368.60	41.06%

Arizona-American - Mohave Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

RATE DESIGN

Line No.	Monthly Minimum	System	Present Rates	Company Proposed	Staff Recommended
1	5/8 x 3/4-inch Meter	Bullhead	$ 8.75	$ 12.00	$ 9.10
2	1-inch Meter	Bullhead	$ 21.25	$ 29.14	$ 22.75
3	11/2-inch Meter	Bullhead	$ 42.50	$ 58.29	$ 45.50
4	2-inch Meter	Bullhead	$ 68.00	$ 93.26	$ 72.80
5	2-inch Meter	Havasu	$ 39.68	$ 54.69	$ 41.52
5	3-inch Meter	Bullhead	$ 136.00	$ 188.51	$ 145.60
6	4-inch Meter	Bullhead	$ 215.00	$ 294.86	$ 227.50
7	4-inch Meter	Havasu	$ 68.64	$ 94.13	$ 71.45
8	6-inch Meter	Bullhead	$ 425.00	$ 582.86	$ 455.00
9	8-inch Meter	Bullhead	N/A	N/A	$ 728.00
10	10-inch Meter	Bullhead	N/A	N/A	$ 1,046.50
11	12-inch Meter	Bullhead	N/A	N/A	$ 1,956.50
12					
13					
14	Monthly Service Charge for Fire Sprinkler				
15	2-inch Meter No Usage		$ 3.23	$ 9.69	$ 3.36
16	4-inch Meter No Usage		$ 6.45	$ 19.35	$ 6.71
17	6-inch Meter No Usage		$ 9.68	$ 29.04	$ 10.08
18	8-inch Meter No Usage		$ 12.91	$ 38.76	$ 13.49
19	10-inch Meter No Usage		$ 16.13	$ 48.39	$ 16.79
20	Hydrant No Usage		$ 8.22	$ 24.66	$ 8.56
21					
22					
23	Gallons in the Minimum		-	-	-
24					
25					
26	Commodity Rates			Per 1,000 Gallons	
27	(Residential, Commercial, Industrial)	Block			
28					
29	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 0.85	$ 1.471	$ 0.90
30		4,001 -10,000 Gallons	$ 1.30	$ 1.625	$ 1.40
31		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.66
32					
33	5/8 x 3/4-inch Meter - Apartment	0 to 10,000 Gallons	$ 1.30	$ 1.625	$ 1.40
34		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.66
35					
34	5/8 x 3/4-inch Meter Commercial	0 to 10,000 Gallons	$ 1.30	$ 1.625	$ 1.40
35		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.66
36					
37	1-inch Meter:	0 to 25,000 Gallons	$ 1.30	$ 1.625	$ 1.40
38		Over 25,000 Gallons	$ 1.50	$ 1.744	$ 1.66
39					
40	1 1/2-inch Meter:	0 to 50,000 Gallons	$ 1.30	$ 1.625	$ 1.40
41		Over 50,000 Gallons	$ 1.50	$ 1.744	$ 1.66
42					
43	2-inch Meter - Havasu	0 to 60,000 Gallons	$ 1.55	$ 1.944	$ 1.60
44		Over 60,000 Gallons	$ 1.87	$ 2.174	$ 1.94
45					
43	2-inch Meter	0 to 80,000 Gallons	$ 1.30	$ 1.625	$ 1.40
44		Over 80,000 Gallons	$ 1.50	$ 1.744	$ 1.66
45					
46	3-inch Meter	0 to 150,000 Gallons	$ 1.30	$ 1.625	$ 1.40
47		Over 150,000 Gallons	$ 1.50	$ 1.744	$ 1.66
48					
49	4-inch Meter - Havasu	0 to110,000 Gallons	$ 1.55	$ 1.944	$ 1.60
50		Over 110,000 Gallons	$ 1.87	$ 2.174	$ 1.94
48					
49	4-inch Meter	0 to 250,000 Gallons	$ 1.30	$ 1.625	$ 1.40
50		Over 250,000 Gallons	$ 1.50	$ 1.744	$ 1.66
51					
52	6-inch Meter	0 to 500,000 Gallons	$ 1.30	$ 1.625	$ 1.40
53		Over 500,000 Gallons	$ 1.50	$ 1.744	$ 1.66
54					
55	8-inch Meter	0 to 1,125,000 Gallons	N/A	N/A	$ 1.40
56		Over 1,125,000 Gallons	N/A	N/A	$ 1.66
57					
58	10-inch Meter	0 to 1,500,000 Gallons	N/A	N/A	$ 1.40
59		Over 1,500,000 Gallons	N/A	N/A	$ 1.66
60					
61	12-inch Meter	0 to 2,250,000 Gallons	N/A	N/A	$ 1.40
62		Over 2,250,000 Gallons	N/A	N/A	$ 1.66
63					
64	Other Public Authorities - Monthly				
65	base charge per above meter size	All Usage	$ 1.355	$ 1.694	$ 1.40
66					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment or re-establishment of Service:			
Including Sewer Service	$ 25.00	$ 25.00	$ 25.00
No Including Sewer Service	$ 20.00	$ 20.00	$ 20.00
Reconnection of Service (Delinquent):			
Regular Hours	$ 25.00	$ 35.00	$ 35.00
After Hours	$ 40.00	$ 50.00	$ 50.00
Water Meter Test (If Correct)	$ 25.00	$ 35.00	$ 35.00
Meter Re-Read (If Correct)	$ 25.00	$ 25.00	$ 25.00
NSF Check Charge	$ 25.00	$ 25.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	N/A	N/A	*
Deposit Requirements Non-Residential	N/A	N/A	*
Deposit Interest	N/A	N/A	**

* Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00
8-inch or Larger	N/A	N/A	N/A	N/A	N/A	N/A	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona-American - Mohave Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	8,073	$ 17.44	$ 24.50	$ 7.06	40.46%
Median Usage	N/A				

Staff Recommended					
Average Usage	8,073	$ 17.44	$ 18.40	$ 0.96	5.49%
Median Usage	N/A				

Consumption	Rates	Rates	Increase	Rates	Increase
-	$ 8.75	$ 12.00	37.14%	$ 9.10	4.00%
1,000	9.60	13.47	40.32%	10.00	4.17%
2,000	10.45	14.94	42.99%	10.90	4.31%
3,000	11.30	16.41	45.25%	11.80	4.42%
4,000	12.15	17.88	47.19%	12.70	4.53%
5,000	13.45	19.51	45.05%	14.10	4.83%
6,000	14.75	21.13	43.28%	15.50	5.08%
7,000	16.05	22.76	41.80%	16.90	5.30%
8,000	17.35	24.38	40.54%	18.30	5.48%
9,000	18.65	26.01	39.46%	19.70	5.63%
8,073	17.44	24.50	40.46%	18.40	5.49%
10,000	19.95	27.63	38.52%	21.10	5.78%
11,000	21.45	29.38	36.96%	22.75	6.11%
12,000	22.95	31.12	35.61%	24.42	6.41%
13,000	24.45	32.87	34.42%	26.08	6.67%
14,000	25.95	34.61	33.37%	27.74	6.90%
15,000	27.45	36.35	32.44%	29.40	7.10%
16,000	28.95	38.10	31.60%	31.06	7.29%
17,000	30.45	39.84	30.84%	32.72	7.45%
18,000	31.95	41.59	30.16%	34.38	7.61%
19,000	33.45	43.33	29.54%	36.04	7.74%
20,000	34.95	45.07	28.97%	37.70	7.87%
25,000	42.45	53.79	26.72%	46.00	8.36%
30,000	49.95	62.51	25.15%	54.30	8.71%
35,000	57.45	71.23	23.99%	62.60	8.96%
40,000	64.95	79.95	23.10%	70.90	9.16%
45,000	72.45	88.67	22.39%	79.20	9.32%
50,000	79.95	97.39	21.82%	87.50	9.44%
75,000	117.45	140.99	20.05%	129.00	9.83%
100,000	154.95	184.59	19.13%	170.50	10.04%

ARIZONA AMERICAN - PARADISE VALLEY WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 24.34	$ 28.00	$ 28.00
3	3/4-inch Meter		$ 25.18	$ 28.97	$ 28.95
4	1-inch Meter		$ 40.60	$ 46.71	$ 55.00
5	1 1/2-inch Meter		$ 81.98	$ 94.31	$ 107.00
6	2-inch Meter		$ 130.65	$ 150.30	$ 170.00
7	3-inch Meter		$ 242.09	$ 278.49	$ 293.00
8	4-inch Meter		$ 402.85	$ 463.43	$ 488.00
9	6-inch Meter		$ 806.97	$ 928.31	$ 976.00
10	8-inch Meter		N/A	N/A	$ 2,256.61
11	10-inch Meter		N/A	N/A	$ 3,243.88
12	12-inch Meter		N/A	N/A	$ 6,064.64
13					
14	Monthly Service Charge for Fire Sprinkler		$ 5.00	$ 25.00	$ 10.00
15					
16	Gallons in the Minimum		-	-	-
17					
18	Commodity Rates			Per 1,000 Gallons	
19	(Residential, Commercial, Industrial) -	Block			
20					
21	5/8 x 3/4-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		1.47
22		25,001 - 80,000 Gallons	$ 2.103		2.55
23		Over 80,000 Gallons	$ 2.633		3.12
24		0 - 4,000 Gallons		$ 1.288	
25		4,001 - 20,000 Gallons		$ 2.233	
26		20,001 - 65,000 Gallons		$ 2.796	
27		65,001 - 125,000 Gallons		$ 3.359	
28		Over 125,000 Gallons		$ 3.879	
29					
30	3/4-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		1.47
31		25,001 - 80,000 Gallons	$ 2.103		2.55
32		Over 80,000 Gallons	$ 2.633		3.12
33		0 - 4,000 Gallons		$ 1.288	
34		4,001 - 20,000 Gallons		$ 2.233	
35		20,001 - 65,000 Gallons		$ 2.796	
36		65,001 - 125,000 Gallons		$ 3.359	
37		Over 125,000 Gallons		$ 3.879	
38					
39	1-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		1.47
40		25,001 - 80,000 Gallons	$ 2.103		2.55
41		Over 80,000 Gallons	$ 2.633		3.12
42		0 - 4,000 Gallons		$ 1.288	
43		4,001 - 20,000 Gallons		$ 2.233	
44		20,001 - 65,000 Gallons		$ 2.796	
45		65,001 - 125,000 Gallons		$ 3.359	
46		Over 125,000 Gallons		$ 3.879	
47					
48	1-1/2-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		1.47
49		25,001 - 80,000 Gallons	$ 2.103		2.55
50		Over 80,000 Gallons	$ 2.633		3.12
51		0 - 4,000 Gallons		$ 1.288	
52		4,001 - 20,000 Gallons		$ 2.233	
53		20,001 - 65,000 Gallons		$ 2.796	
54		65,001 - 125,000 Gallons		$ 3.359	
55		Over 125,000 Gallons		$ 3.879	
56					
57	2-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		1.47
58		25,001 - 80,000 Gallons	$ 2.103		2.55
59		Over 80,000 Gallons	$ 2.633		3.12
60		0 - 4,000 Gallons		$ 1.288	
61		4,001 - 20,000 Gallons	—	$ 2.233	
62		20,001 - 65,000 Gallons		$ 2.796	
63		65,001 - 125,000 Gallons		$ 3.359	
64		Over 125,000 Gallons		$ 3.879	
65					
66	5/8-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
67		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
68					
69	3/4-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
70		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
71					
72	1-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
73		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
74					
75	1 1/2-inch Meter Commercial:	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
76		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
77					
78	2-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
79		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
80					
81	3-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
82		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
83					
84	4-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
85		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
86					
87	6-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.08
88		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
89					
90	3-inch Meter Turf Customer	All Gallons	$ 1.453	$ 1.883	$ 1.76
91					
92	4-inch Meter Turf Customer	All Gallons	$ 1.453	$ 1.883	$ 1.76
93					
94	6-inch Meter Paradise Valley Country Club	All Gallons	$ 1.235	$ 1.828	$ 1.56
95					
96	Other Public Authorities - Monthly				
97	base charge per above meter size	All Usage	$ 1.913	$ 2.832	$ 2.01
98					

Service Charges	Present Rates	Company Proposed	Staff Recommended
Establishment of Service:			
Regular Hours	$ 20.00	$ 20.00	$ 20.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Re-establishment of Service within 12 Months:			
Monthly Minimum times Months Disconnected			
From the Water System [Per ACC Rule 14-2-403(D)]			
Reconnection of Service (Delinquent):			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 60.00	$ 60.00	$ 60.00
Water Meter Test (If Correct)	$ 15.00	$ 15.00	$ 15.00
Meter Re-Read (If Correct)	$ 10.00	$ 10.00	$ 10.00
NSF Check Charge	$ 12.00	$ 12.00	$ 12.00
Late Fee Charge	1.5% Per Mont	1.5% Per Montl	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Total Present Charge	Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
5/8 x 3/4-inch Meter	$ 480.00	Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 560.00	Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 650.00	Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 895.00	Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Meter	$ 1,555.00	Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
3-inch Meter	$ 2,235.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Meter	$ 3,440.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 6,195.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	N/A	Actual Cost	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - PARADISE VALLEY WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Schedule MEM-2

Typical Bill Analysis
General Service 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	20,493	$ 49.20	$ 70.54	$ 21.34	43.37%
Median Usage	N/A				
Staff Recommended					
Average Usage	20,493	$ 49.20	$ 58.12	$ 8.93	18.14%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff recommended Rates	% Increase
-	$ 24.34	$ 28.00	15.04%	$ 28.00	15.04%
1,000	25.55	29.29	14.62%	29.47	15.33%
2,000	26.77	30.58	14.23%	30.94	15.59%
3,000	27.98	31.86	13.89%	32.41	15.84%
4,000	29.19	33.15	13.57%	33.88	16.06%
5,000	30.41	35.39	16.38%	35.35	16.26%
6,000	31.62	37.62	18.98%	36.82	16.45%
7,000	32.83	39.85	21.38%	38.29	16.63%
8,000	34.04	42.08	23.62%	39.76	16.79%
9,000	35.26	44.32	25.70%	41.23	16.94%
20,493	49.20	70.54	43.37%	58.12	18.14%
10,000	36.47	46.55	27.64%	42.70	17.08%
11,000	37.68	48.78	29.46%	44.17	17.21%
12,000	38.90	51.02	31.16%	45.64	17.34%
13,000	40.11	53.25	32.76%	47.11	17.45%
14,000	41.32	55.48	34.27%	48.58	17.56%
15,000	42.54	57.72	35.69%	50.05	17.67%
16,000	43.75	59.95	37.03%	51.52	17.77%
17,000	44.96	62.18	38.30%	52.99	17.86%
18,000	46.17	64.41	39.50%	54.46	17.95%
19,000	47.39	66.65	40.64%	55.93	18.03%
20,000	48.60	68.88	41.73%	57.40	18.11%
25,000	54.67	85.68	56.73%	64.75	18.45%
30,000	65.18	102.47	57.21%	77.55	18.98%
35,000	75.70	119.27	57.56%	90.35	19.36%
40,000	86.21	136.06	57.82%	103.15	19.65%
45,000	96.73	152.86	58.03%	115.95	19.88%
50,000	107.24	169.65	58.20%	128.75	20.06%
75,000	159.82	253.63	58.70%	192.75	20.61%
100,000	210.99	337.60	60.01%	267.95	27.00%

Arizona American Water Company - Sun City West Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

Schedule MEM-1

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 9.57	$ 15.00	$ 15.30
3	1-inch Meter		$ 24.40	$ 38.24	$ 38.25
4	11/2-inch Meter		$ 52.28	$ 81.94	$ 76.50
5	2-inch Meter		$ 76.68	$ 120.19	$ 122.40
6	3-inch Meter		$ 132.43	$ 207.57	$ 244.80
7	4-inch Meter		$ 196.90	$ 308.62	$ 382.50
8	6-inch Meter		$ 270.08	$ 423.32	$ 765.00
9	8-inch Meter		N/A	N/A	$ 1,224.00
10	10-inch Meter		N/A	N/A	$ 1,759.50
11	12-inch Meter		N/A	N/A	$ 3,289.50
12					
13					
14	Monthly Service Charge for Fire Sprinkler				
15	4-inch or Smaller Meter	No Usage	$ 35.22	$ 70.44	$ 56.24
16	6-inch Meter	No Usage	$ 52.84	$ 105.68	$ 84.38
17	8-inch Meter	No Usage	$ 70.45	$ 140.90	$ 112.50
18					
19					
20	Gallons in the Minimum		-	-	-
21					
22					
23	Commodity Rates			Per 1,000 Gallons	
24	(Residential, Commercial, Industrial)	Block			
25					
26	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.31	$ 2.880	$ 2.25
27		4,001 - 15,000 Gallons	$ 1.74	$ 3.171	$ 2.85
28		Over 15,000 Gallons	$ 2.01	$ 3.413	$ 3.40
29					
30	5/8 x 3/4-inch Meter Commercial	0 to 15,000 Gallons	$ 1.74	$ 3.171	$ 2.85
31		Over 15,000 Gallons	$ 2.01	$ 3.413	$ 3.40
32					
33	1-inch Meter:	0 to 40,000 Gallons	$ 1.74	$ 3.171	$ 2.85
34		Over 40,000 Gallons	$ 2.01	$ 3.413	$ 3.40
35					
36	1 1/2-inch Meter:	0 to 100,000 Gallons	$ 1.74	$ 3.171	$ 2.85
37		Over 100,000 Gallons	$ 2.01	$ 3.413	$ 3.40
38					
39	2-inch Meter	0 to 150,000 Gallons	$ 1.74	$ 3.171	$ 2.85
40		Over 150,000 Gallons	$ 2.01	$ 3.413	$ 3.40
41					
42	3-inch Meter	0 to 275,000 Gallons	$ 1.74	$ 3.171	$ 2.85
43		Over 275,000 Gallons	$ 2.01	$ 3.413	$ 3.40
44					
45	4-inch Meter	0 to 400,000 Gallons	$ 1.74	$ 3.171	$ 2.85
46		Over 400,000 Gallons	$ 2.01	$ 3.413	$ 3.40
47					
48	6-inch Meter	0 to 550,000 Gallons	$ 1.74	$ 3.171	$ 2.85
49		Over 550,000 Gallons	$ 2.01	$ 3.413	$ 3.40
50					
51	8-inch Meter	0 to 1,402,000 Gallons	$ 1.74	$ 3.171	$ 2.85
52		Over 1,402,000 Gallons	$ 2.01	$ 3.413	$ 3.40
53					
54	10-inch Meter	0 to 2,100,000 Gallons	$ 1.74	$ 3.171	$ 2.85
55		Over 2,100,000 Gallons	$ 2.01	$ 3.413	$ 3.40
56					
57	12-inch Meter	0 to 4,110,000 Gallons	$ 1.74	$ 3.171	$ 2.85
58		Over 4,110,000 Gallons	$ 2.01	$ 3.413	$ 3.40
59					

Service Charges	Present Rates	Company Proposed	Staff Recommended
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Water Meter Test (If Correct)	$ 10.00	$ 81.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	1.5% Per Month	1.5% Per Month	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(=) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00
8-inch or Larger	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona American Water Company - Sun City West Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,704	$ 19.51	$ 35.09	$ 15.58	79.83%
Median Usage	N/A				
Staff Recommended					
Average Usage	6,704	$ 19.51	$ 32.01	$ 12.49	64.01%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff recommended Rates	% Increase
-	$ 9.57	$ 15.00	56.74%	$ 15.30	59.87%
1,000	10.88	17.88	64.34%	17.55	61.31%
2,000	12.19	20.76	70.30%	19.80	62.43%
3,000	13.50	23.64	75.11%	22.05	63.33%
4,000	14.81	26.52	79.07%	24.30	64.08%
5,000	16.55	29.69	79.40%	27.15	64.05%
6,000	18.29	32.86	79.67%	30.00	64.02%
7,000	20.03	36.03	79.90%	32.85	64.00%
8,000	21.77	39.20	80.08%	35.70	63.99%
9,000	23.51	42.38	80.24%	38.55	63.97%
6,704	19.51	35.09	79.83%	32.01	64.01%
10,000	25.25	45.55	80.38%	41.40	63.96%
11,000	26.99	48.72	80.50%	44.25	63.95%
12,000	28.73	51.89	80.61%	47.10	63.94%
13,000	30.47	55.06	80.70%	49.95	63.93%
14,000	32.21	58.23	80.78%	52.80	63.92%
15,000	33.95	61.40	80.86%	55.65	63.92%
16,000	35.96	64.81	80.24%	59.05	64.21%
17,000	37.97	68.23	79.69%	62.45	64.47%
18,000	39.98	71.64	79.19%	65.85	64.71%
19,000	41.99	75.05	78.74%	69.25	64.92%
20,000	44.00	78.47	78.33%	72.65	65.11%
25,000	54.05	95.53	76.75%	89.65	65.88%
30,000	64.10	112.60	75.66%	106.65	66.38%
35,000	74.15	129.66	74.86%	123.65	66.76%
40,000	84.20	146.73	74.26%	140.65	67.04%
45,000	94.25	163.79	73.78%	157.65	67.27%
50,000	104.30	180.86	73.40%	174.65	67.45%
75,000	154.55	266.18	72.23%	259.65	68.00%
100,000	204.80	351.51	71.63%	344.65	68.29%

Arizona American Water Company - Tubac Water
Docket No. W-01303A-08-0227
Test Year Ended: 12/31/07

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 19.68	$ 32.50	$ 28.73
3	1-inch Meter		$ 29.63	$ 48.63	$ 71.83
4	11/2-inch Meter		$ 59.26	$ 97.86	$ 143.66
5	2-inch Meter		$ 97.49	$ 161.00	$ 229.86
6	3-inch Meter		$ 115.65	$ 190.99	$ 459.72
7	4-inch Meter		$ 169.18	N/A	$ 718.32
8	6-inch Meter		$ 231.30	N/A	$ 1,436.64
9	8-inch Meter		$ 1,577.08	N/A	$ 2,298.62
10	10-inch Meter		N/A	N/A	$ 3,304.27
11	12-inch Meter		N/A	N/A	$ 6,177.55
12					
13					
14	Gallons in the Minimum		-	-	-
15					
16					
17	Commodity Rates			Per 1,000 Gallons	
18	(Residential and Commercial)	Block			
19					
20	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.89	$ 3.780	$ 2.76
21		4,001 - 20,000 Gallons	$ 2.85	$ 4.850	$ 3.90
22		Over 20,000 Gallons	$ 3.41	$ 4.950	$ 4.98
23					
24	5/8 x 3/4-inch Meter Commercial	0 to 20,000 Gallons	$ 2.85	$ 4.85	$ 3.90
25		Over 20,000 Gallons	$ 3.41	$ 4.95	$ 4.98
26					
27	1-inch Meter:	0 to 35,000 Gallons	$ 2.85	$ 4.85	$ 3.90
28		Over 35,000 Gallons	$ 3.41	$ 4.95	$ 4.98
29					
30	1 1/2-inch Meter:	0 to 85,000 Gallons	$ 2.85	$ 4.85	$ 3.90
31		Over 85,000 Gallons	$ 3.41	$ 4.95	$ 4.98
32					
33	2-inch Meter	0 to 150,000 Gallons	$ 2.85	$ 4.85	$ 3.90
34		Over 150,000 Gallons	$ 3.41	$ 4.95	$ 4.98
35					
36	3-inch Meter	0 to 175,000 Gallons	$ 2.85	$ 4.85	$ 3.90
37		Over 175,000 Gallons	$ 3.41	$ 4.95	$ 4.98
38					
39	4-inch Meter	0 to 250,000 Gallons	$ 2.85	N/A	$ 3.90
40		Over 250,000 Gallons	$ 3.41	N/A	$ 4.98
41					
42	6-inch Meter	0 to 350,000 Gallons	$ 2.85	N/A	$ 3.90
43		Over 350,000 Gallons	$ 3.41	N/A	$ 4.98
44					
45	8-inch Meter	0 to 900,000 Gallons	$ 2.85	N/A	$ 3.90
46		Over 900,000 Gallons	$ 3.41	N/A	$ 4.98
47					
48	10-inch Meter	0 to 1,500,000 Gallons	N/A	N/A	$ 3.90
49		Over 1,500,000 Gallons	N/A	N/A	$ 4.98
50					
51	12-inch Meter	0 to 2,250,000 Gallons	N/A	N/A	$ 3.90
52		Over 2,250,000 Gallons	N/A	N/A	$ 4.98
53					
54					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 45.00	$ 45.00	$ 45.00
Water Meter Test (If Correct)	$ 10.00	$ 10.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	. Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	. Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	At Cost	At Cost	At Cost	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona American Water Company - Tubac Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	11,797	$ 49.46	$ 85.44	$ 35.97	72.73%
Median Usage	N/A				
Staff Recommended					
Average Usage	11,797	$ 49.46	$ 70.19	$ 20.73	41.90%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	recommended Staff Recommended Rates	% Increase
-	$ 19.68	$ 32.50	65.14%	$ 28.73	46.00%
1,000	21.57	36.28	68.20%	31.49	46.00%
2,000	23.46	40.06	70.76%	34.25	46.00%
3,000	25.35	43.84	72.94%	37.01	46.00%
4,000	27.24	47.62	74.82%	39.77	46.00%
5,000	30.09	52.47	74.38%	43.67	45.14%
6,000	32.94	57.32	74.01%	47.57	44.42%
7,000	35.79	62.17	73.71%	51.47	43.82%
8,000	38.64	67.02	73.45%	55.37	43.31%
9,000	41.49	71.87	73.22%	59.28	42.87%
11,797	49.46	85.44	72.73%	70.19	41.90%
10,000	44.34	76.72	73.03%	63.18	42.48%
11,000	47.19	81.57	72.85%	67.08	42.14%
12,000	50.04	86.42	72.70%	70.98	41.84%
13,000	52.89	91.27	72.57%	74.88	41.58%
14,000	55.74	96.12	72.44%	78.78	41.34%
15,000	58.59	100.97	72.33%	82.68	41.12%
16,000	61.44	105.82	72.23%	86.58	40.92%
17,000	64.29	110.67	72.14%	90.48	40.74%
18,000	67.14	115.52	72.06%	94.38	40.58%
19,000	69.99	120.37	71.98%	98.29	40.43%
20,000	72.84	125.22	71.91%	102.19	40.29%
25,000	89.89	149.97	66.84%	127.08	41.37%
30,000	106.94	174.72	63.38%	151.97	42.11%
35,000	123.99	199.47	60.88%	176.87	42.64%
40,000	141.04	224.22	58.98%	201.76	43.05%
45,000	158.09	248.97	57.49%	226.65	43.37%
50,000	175.14	273.72	56.29%	251.54	43.62%
75,000	260.39	397.47	52.64%	376.01	44.40%
100,000	345.64	521.22	50.80%	500.47	44.80%

EXHIBIT
S-13
ADMITTED
ALL-STATE LEGAL®

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT,HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT AND TUBAC WATER DISTRICT.	)	DOCKET NO. W-01303A-08-0227

SURREBUTTAL

TESTIMONY

OF

MARVIN E. MILLSAP

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 03, 2009

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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY, INC.
DOCKET NO. W-01303A-08-0227

The Surrebuttal Testimony of Staff witness Marvin E. Millsap considers revised revenue requirements for each water district and makes changes to the rates recommended in his Direct Testimony.

Agua Fria Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 7,400 gallons per month under the Company's proposed rates would be billed $38.48, or $14.32 more than the current $24.16 for a 59.28 percent increase. By comparison, Staff's recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 7,400 gallons per month paying $29.87, or $5.71 more than the current $24.16 for a 23.64 percent increase.

Havasu Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 9,705 gallons per month under the Company's proposed rates would be billed $68.07, or $31.48 more than the current $36.59 for an 86.04 percent increase. By comparison, Staff's recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 9,705 gallons per month paying $48.64, or $12.06 more than the current $36.59 for a 32.95 percent increase.

Mohave Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 8,073 gallons per month under the Company's proposed rates would be billed $24.50, or $7.06 more than the current $17.44 for a 40.46 percent increase. By comparison, Staff's recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 8,073 gallons per month paying $18.45, or $1.01 more than the current $17.44 for a 5.81 percent increase.

Paradise Valley Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 20,493 gallons per month under the Company's proposed rates would be billed $70.54, or $21.34 more than the current $49.20 for a 43.37 percent increase. By comparison, Staff's recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 20,493 gallons per month paying $57.99, or $8.79 more than the current $49.20 for a 17.86 percent increase.

Sun City West Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 6,704 gallons per month under the Company's proposed rates would be billed $35.09, or $15.58 more than the current $19.51 for a 79.83 percent increase. By comparison, Staff's

recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 6,704 gallons per month paying $32.33, or $12.81 more than the current $19.51 for a 65.65 percent increase.

Tubac Water District:

A residential 5/8 x 3/4-inch meter customer consuming the average usage of 11,797 gallons per month under the Company's proposed rates would be billed $85.44, or $35.97 more than the current $49.46 for a 72.73 percent increase. By comparison, Staff's recommended rates would have a residential 5/8 x 3/4-inch meter customer consuming the average usage of 11,797 gallons per month paying $71.40, or $21.94 more than the current $49.46 for a 44.35 percent increase.

Staff recommends approval of its rates and charges.

INTRODUCTION

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

A. My name is Marvin E. Millsap. I am a Public Utilities Analyst IV employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Marvin E. Millsap who filed Direct Testimony in this case?

A. Yes I am.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony in this proceeding is to present updates to Staff's recommended rates for the six water systems in Arizona-American Water Company, Inc.'s ("Arizona-American" or "Company") addressed in my Direct Testimony due to changes in the revenue requirements for the various systems.

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

A. I am presenting Staff's testimony and schedules addressing rate design of the six water systems included in this case.

RATE DESIGN

Q. Have you prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. A summary of the present, Company proposed, and Staff recommended rates and service charges for the Agua Fria, Havasu, Mohave, Paradise Valley, Sun City West and Tubac Districts ("water systems") are provided on Surrebuttal Schedule MEM-1 for each district.

Agua Fria Water District

Q. Would you please summarize the Company's proposed rate design for the Agua Fria Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Agua Fria Water District.

Q. Would you please summarize Staff's recommended rate design for the Agua Fria Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Agua Fria Water District. Staff's recommended rates will produce revenues of approximately $21,377,068 ($20,471,951 water revenues, $905,117 other water revenues).

Q. What is the rate impact on a 5/8 x 3/4-inch meter residential customer using an average consumption of 7,400 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 7,400 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $14.32 or 59.28 percent increase in his/her monthly bill from $24.16 to $38.48 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience a $5.71 or 23.64 percent increase in his/her monthly bill from $24.16 to $29.87 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Havasu Water District

Q. Would you please summarize the Company's proposed rate design for the Havasu Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Havasu Water District.

Q. Would you please summarize Staff's recommended rate design for the Havasu Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Havasu Water District. Staff's recommended rates will produce revenues of approximately $1,408,317 ($1,385,207 water revenues, $23,110 other water revenues).

Q. What is the rate impact on a 5/8-inch x 3/4-inch meter residential customer using an average consumption of 9,705 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 9,705 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $31.48 or 86.04 percent increase in his/her monthly bill from $36.59 to $68.07 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience a $12.06 or 32.95 percent increase in his/her monthly bill from $36.59 to $48.64 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Mohave Water District

Q. Would you please summarize the Company's proposed rate design for the Mohave Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Mohave Water District.

Q. Would you please summarize Staff's recommended rate design for the Mohave Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Mohave Water District. Staff's recommended rates will produce revenues of approximately $5,345,121 ($5,164,098 water revenues, $181,023 other water revenues).

Q. What is the rate impact on a 5/8 x 3/4-inch meter residential customer using an average consumption of 8,073 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 8,073 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $7.06 or 40.46 percent increase in his/her monthly bill from $17.44 to $24.50 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience a $1.01 or 5.81 percent increase in his/her monthly bill from $17.44 to $18.45 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Paradise Valley Water District

Q. Would you please summarize the Company's proposed rate design for the Paradise Valley Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Paradise Valley Water District.

Q. Would you please summarize Staff's recommended rate design for the Paradise Valley Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Paradise Valley Water District. Staff's recommended rates will produce revenues of approximately $9,470,254 ($9,453,635 water revenues, $16,619 other water revenues).

Q. What is the rate impact on a 5/8 x 3/4-inch meter residential customer using an average consumption of 20,493 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 20,493 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $21.34 or 43.37 percent increase in his/her monthly bill from $49.20 to $70.54 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience an $8.79 or 17.86 percent increase in his/her monthly bill from $49.20 to $57.99 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Sun City West Water District

Q. Would you please summarize the Company's proposed rate design for the Sun City West Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Sun City West Water District.

Q. Would you please summarize Staff's recommended rate design for the Sun City West Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Sun City West Water District. The rate design described in my Direct Testimony has not changed. Staff's recommended rates will produce revenues of approximately $9,153,704 ($9,113,303 water revenues, $40,401 other water revenues).

Q. What is the rate impact on a 5/8 x 3/4-inch meter residential customer using an average consumption of 6,704 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 6,704 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $15.58 or 79.83 percent increase in his/her monthly bill from $19.51 to $35.09 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience a $12.81 or 65.65 percent increase in his/her monthly bill from $19.51 to $32.33 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Tubac Water District

Q. Would you please summarize the Company's proposed rate design for the Tubac Water District?

A. Yes. The Company's proposed rates and charges are presented on Surrebuttal Schedule MEM-1 for the Tubac Water District.

Q. Would you please summarize Staff's recommended rate design for the Tubac Water District?

A. Yes. Staff recommends Staff's rates and charges presented on Surrebuttal Schedule MEM-1 for the Tubac Water District. Staff's recommended rates will produce revenues of approximately $643,634 ($639,795 water revenues, $3,839 other water revenues).

Q. What is the rate impact on a 5/8 x 3/4-inch meter residential customer using an average consumption of 11,797 gallons?

A. The average usage of residential 5/8 x 3/4-inch meter customers is 11,797 gallons per month. The average residential 5/8 x 3/4-inch meter customer would experience a $35.97 or 72.73 percent increase in his/her monthly bill from $49.46 to $85.44 under the Company's proposed rates. By comparison, the average residential 5/8 x 3/4-inch meter customer would experience a $21.94 or 44.35 percent increase in his/her monthly bill from $49.46 to $71.40 under Staff's recommended rates. Please see Staff's Surrebuttal Schedule MEM-2, typical bill analysis for residential 5/8 x 3/4-inch meter customers.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

ARIZONA-AMERICAN - AGUA FRIA WATER
Docke No. W-01303A-08-0227
Test Year Ended: 12/31/07

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x x3/4-inch Meter		$ 10.45	$ 15.00	$ 13.50
3	1-inch Meter		$ 26.74	$ 38.38	$ 33.77
4	11/2-inch Meter		$ 55.90	$ 80.24	$ 67.50
5	2-inch Meter		$ 83.84	$ 120.34	$ 108.00
6	3-inch Meter		$ 164.02	$ 235.44	$ 216.00
7	4-inch Meter		$ 220.63	$ 316.69	$ 337.45
8	6-inch Meter		$ 425.22	$ 610.36	$ 674.85
9	8-inch Meter		N/A	N/A	$ 1,079.75
10	10-inch Meter		N/A	N/A	$ 1,552.10
11	12-inch Meter		N/A	N/A	$ 2,901.75
12					
13	Other Public Entities - State Prision		$ 191.75	$ 275.24	$ 222.43
14					
15	Monthly Service Charge for Fire Sprinkler				
16	4-inch Meter		$ 27.25	$ 49.60	$ 31.64
17	6-inch Meter		$ 40.86	$ 74.37	$ 47.40
18	8-inch Meter		$ 54.48	$ 99.15	$ 63.20
19	12-inch Meter		$ 163.44	$ 297.48	$ 189.59
20					
21					
22	Gallons in the Minimum		-	-	-
23					
24					
25	Commodity Rates			Per 1,000 Gallons	
26	(Residential, Commercial, Industrial)	Block			
27					
28	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.53	$ 2.926	$ 1.90
29		4,001 - 13,000 Gallons	$ 2.22	$ 3.463	$ 2.57
30		Over 13,000 Gallons	$ 2.65	$ 3.670	$ 3.37
31					
32	5/8 x 3/4-inch Meter Commercial	0 to 13,000 Gallons	$ 2.22	$ 3.463	$ 2.57
33		Over 13,000 Gallons	$ 2.65	$ 3.670	$ 3.37
34					
35	1-inch Meter:	0 to 45,000 Gallons	$ 2.22	$ 3.463	$ 2.57
36		Over 45,000 Gallons	$ 2.65	$ 3.670	$ 3.37
37					
38	1 1/2-inch Meter:	0 to 100,000 Gallons	$ 2.22	$ 3.463	$ 2.57
39		Over 100,000 Gallons	$ 2.65	$ 3.670	$ 3.37
40					
41	2-inch Meter	0 to 150,000 Gallons	$ 2.22	$ 3.463	$ 2.57
42		Over 150,000 Gallons	$ 2.65	$ 3.670	$ 3.37
43					
44	3-inch Meter	0 to 300,000 Gallons	$ 2.22	$ 3.463	$ 2.57
45		Over 300,000 Gallons	$ 2.65	$ 3.670	$ 3.37
46					
47	4-inch Meter	0 to 400,000 Gallons	$ 2.22	$ 3.463	$ 2.57
48		Over 400,000 Gallons	$ 2.65	$ 3.670	$ 3.37
49					
50	6-inch Meter	0 to 800,000 Gallons	$ 2.22	$ 3.463	$ 2.57
51		Over 800,000 Gallons	$ 2.65	$ 3.670	$ 3.37
52					
53	8-inch Meter	0 to 1,125,000 Gallons	$ 2.22	$ 3.463	$ 2.57
54		Over 1,125,000 Gallons	$ 2.65	$ 3.670	$ 3.37
55					
56	10-inch Meter	0 to 1,500,000 Gallons	$ 2.22	$ 3.463	$ 2.57
57		Over 1,500,000 Gallons	$ 2.65	$ 3.670	$ 3.37
58					
59	12-inch Meter	0 to 2,250,000 Gallons	$ 2.22	$ 3.463	$ 2.57
60		Over 2,250,000 Gallons	$ 2.65	$ 3.670	$ 3.37
61					
62	Arizona Water Contract	0 to 8,000 Gallons	$ 1.78	$ 2.926	$ 2.02
63		Over 8,000 Gallons	$ 2.24	$ 3.463	$ 2.57
64					
65	Other Public Entities - State Prision	All Gallons	$ 1.93	$ 3.463	$ 2.24
66					
67	OWU - PI Surprise	All Gallons	$ 1.00	$ 1.00	$ 1.20
68					
69	Private Fire Service	All Gallons	$ 1.38	$ 1.38	$ 1.38
70					
71	Irrigation/Bulk - Raw	All Gallons	$ 0.50	$ 1.000	$ 2.57
72					
73	Irrigation - Non Potable	All Gallons	$ 0.62	$ 1.240	$ 2.57
74					
75					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Water Meter Test (If Correct)	$ 10.00	$ 81.00	$ 81.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 10.00
Late Fee Charge	1.5% Per Mont	1.5% Per Montl	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	N/A
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Company Proposed Service Line Charge	Company Proposed Meter Installation Charge	Company Total Proposed Charge	Staff Recommended Service Line Charge	Staff Recommended Meter Installation Charge	Staff Total Recommended Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	. Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	. Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 765.00	$ 2,195.00	$ 2,960.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA-AMERICAN - AGUA FRIA WATER
Docke No. W-01303A-08-0227
Test Year Ended December 31, 2007

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	7,400	$ 24.16	$ 38.48	$ 14.32	59.28%
Median Usage	N/A				
Staff Recommended					
Average Usage	7,400	$ 24.16	$ 29.87	$ 5.71	23.64%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff recommended Rates	% Increase
-	$ 10.45	$ 15.00	43.54%	$ 13.50	29.15%
1,000	11.99	17.93	49.51%	15.40	28.45%
2,000	13.53	20.85	54.12%	17.30	27.90%
3,000	15.07	23.78	57.78%	19.21	27.47%
4,000	16.61	26.70	60.77%	21.11	27.12%
5,000	18.83	30.17	60.21%	23.69	25.81%
6,000	21.05	33.63	59.76%	26.26	24.77%
7,000	23.27	37.09	59.40%	28.84	23.94%
8,000	25.49	40.55	59.11%	31.41	23.24%
9,000	27.71	44.02	58.86%	33.99	22.66%
7,400	24.16	38.48	59.28%	29.87	23.64%
10,000	29.93	47.48	58.65%	36.56	22.17%
11,000	32.15	50.94	58.46%	39.14	21.74%
12,000	34.37	54.41	58.30%	41.71	21.37%
13,000	36.59	57.87	58.17%	44.29	21.05%
14,000	39.23	61.54	56.85%	47.65	21.46%
15,000	41.88	65.21	55.70%	51.02	21.82%
16,000	44.53	68.88	54.69%	54.38	22.13%
17,000	47.17	72.55	53.79%	57.75	22.42%
18,000	49.82	76.22	52.98%	61.11	22.67%
19,000	52.47	79.89	52.26%	64.48	22.89%
20,000	55.12	83.56	51.61%	67.84	23.10%
25,000	68.35	101.91	49.10%	84.67	23.88%
30,000	81.58	120.26	47.40%	101.50	24.41%
35,000	94.82	138.60	46.18%	118.32	24.79%
40,000	108.05	156.95	45.26%	135.15	25.08%
45,000	121.29	175.30	44.54%	151.98	25.31%
50,000	134.52	193.65	43.96%	168.80	25.49%
75,000	200.69	285.40	42.21%	252.94	26.03%
100,000	266.86	377.14	41.33%	337.07	26.31%

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 17.40	$ 28.00	$ 23.00
3	1-inch Meter		$ 29.84	$ 48.18	$ 57.50
4	11/2-inch Meter		N/A	N/A	$ 115.00
5	2-inch Meter		$ 58.91	$ 94.80	$ 184.00
6	3-inch Meter		$ 80.15	$ 128.98	$ 368.10
7	4-inch Meter		$ 101.39	$ 163.16	$ 575.00
8	6-inch Meter		N/A	N/A	$ 1,149.95
9	8-inch Meter		N/A	N/A	$ 1,839.91
10	10-inch Meter		N/A	N/A	$ 2,644.87
11	12-inch Meter		N/A	N/A	$ 4,944.76
12					
13	6-inch, or smaller, Meter for Apartments, RV Parks and Resorts		$ 8.70	$ 14.00	$ 13.00
14					
15					
16	Gallons in the Minimum		-	-	-
17					
18					
19	Commodity Rates			Per 1,000 Gallons	
20	(Residential and Commercial)	Block			
21					
22	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.68	$ 4.033	$ 2.30
23		4,001 - 13,000 Gallons	$ 2.19	$ 4.196	$ 2.88
24		Over 13,000 Gallons	$ 2.50	$ 4.555	$ 3.47
25					
26	5/8 x 3/4-inch Meter Commercial and Indus	0 to 13,000 Gallons	$ 2.19	$ 4.20	$ 2.88
27		Over 13,000 Gallons	$ 2.50	$ 4.56	$ 3.47
28					
29	1-inch Meter:	0 to 30,000 Gallons	$ 2.19	$ 4.20	$ 2.88
30		Over 30,000 Gallons	$ 2.50	$ 4.56	$ 3.47
31					
32	1 1/2-inch Meter:	N/A	N/A	N/A	$ 2.88
33		N/A	N/A	N/A	$ 3.47
34					
35	2-inch Meter	0 to 60,000 Gallons	$ 2.19	$ 4.20	$ 2.88
36		Over 60,000 Gallons	$ 2.50	$ 4.56	$ 3.47
37					
38	3-inch Meter	0 to 90,000 Gallons	$ 2.19	$ 4.20	$ 2.88
39		Over 90,000 Gallons	$ 2.50	$ 4.56	$ 3.47
40					
41	4-inch Meter	0 to 110,000 Gallons	$ 2.19	$ 4.20	$ 2.88
42		Over 110,000 Gallons	$ 2.50	$ 4.56	$ 3.47
43					
44	6-inch Meter	0 to 500,000 Gallons	$ 2.19	$ 4.20	$ 2.88
45		Over 500,000 Gallons	$ 2.50	$ 4.56	$ 3.47
46					
47	8-inch Meter	N/A	N/A	N/A	$ 2.88
48		N/A	N/A	N/A	$ 3.47
49					
50	10-inch Meter	N/A	N/A	N/A	$ 2.88
51		N/A	N/A	N/A	$ 3.47
52					
53	12-inch Meter	N/A	N/A	N/A	$ 2.88
54		N/A	N/A	N/A	$ 3.47
55					
56					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 25.00	$ 25.00	$ 25.00
After Hours	$ 34.00	$ 34.00	$ 34.00
Water Meter Test (If Correct)	$ 10.00	$ 10.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - HAVASU WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	9,705	$ 36.59	$ 68.07	$ 31.48	86.04%
Median Usage	N/A				
Staff Recommended					
Average Usage	9,705	$ 36.59	$ 48.64	$ 12.06	32.95%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 17.40	$ 28.00	60.92%	$ 23.00	32.18%
1,000	19.08	32.03	67.88%	25.30	32.61%
2,000	20.76	36.07	73.72%	27.61	32.97%
3,000	22.44	40.10	78.68%	29.91	33.28%
4,000	24.12	44.13	82.95%	32.21	33.54%
5,000	26.31	48.33	83.71%	35.09	33.40%
6,000	28.49	52.52	84.34%	37.97	33.28%
7,000	30.68	56.72	84.89%	40.85	33.17%
8,000	32.86	60.91	85.36%	43.73	33.08%
9,000	35.05	65.11	85.77%	46.61	33.00%
9,705	36.59	68.07	86.04%	48.64	32.95%
10,000	37.23	69.30	86.14%	49.49	32.93%
11,000	39.42	73.50	86.46%	52.37	32.87%
12,000	41.60	77.69	86.76%	55.25	32.82%
13,000	43.79	81.89	87.02%	58.14	32.77%
14,000	46.29	86.45	86.76%	61.61	33.09%
15,000	48.79	91.00	86.52%	65.07	33.38%
16,000	51.29	95.56	86.31%	68.54	33.65%
17,000	53.79	100.11	86.12%	72.01	33.88%
18,000	56.29	104.67	85.95%	75.48	34.10%
19,000	58.79	109.22	85.79%	78.95	34.30%
20,000	61.29	113.78	85.64%	82.42	34.48%
25,000	73.79	136.56	85.06%	99.77	35.21%
30,000	86.29	159.33	84.65%	117.12	35.73%
35,000	98.79	182.11	84.34%	134.47	36.11%
40,000	111.29	204.89	84.10%	151.82	36.41%
45,000	123.79	227.66	83.90%	169.17	36.65%
50,000	136.30	250.44	83.75%	186.52	36.85%
75,000	198.80	364.33	83.26%	273.26	37.46%
100,000	261.31	478.21	83.01%	360.01	37.77%

RATE DESIGN

Line No.	Monthly Minimum	System	Present Rates	Company Proposed	Staff Recommended
1	5/8 x 3/4-inch Meter	Bullhead	$ 8.75	$ 12.00	$ 9.15
2	1-inch Meter	Bullhead	$ 21.25	$ 29.14	$ 22.88
3	11/2-inch Meter	Bullhead	$ 42.50	$ 58.29	$ 45.75
4	2-inch Meter	Bullhead	$ 68.00	$ 93.26	$ 73.20
5	2-inch Meter	Havasu	$ 39.68	$ 54.69	$ 41.52
5	3-inch Meter	Bullhead	$ 136.00	$ 188.51	$ 146.40
6	4-inch Meter	Bullhead	$ 215.00	$ 294.86	$ 228.75
7	4-inch Meter	Havasu	$ 68.64	$ 94.13	$ 71.45
8	6-inch Meter	Bullhead	$ 425.00	$ 582.86	$ 457.50
9	8-inch Meter	Bullhead	N/A	N/A	$ 732.00
10	10-inch Meter	Bullhead	N/A	N/A	$ 1,052.25
11	12-inch Meter	Bullhead	N/A	N/A	$ 1,967.25
12					
13					
14	Monthly Service Charge for Fire Sprinkler				
15	2-inch Meter No Usage		$ 3.23	$ 9.69	$ 3.36
16	4-inch Meter No Usage		$ 6.45	$ 19.35	$ 6.71
17	6-inch Meter No Usage		$ 9.68	$ 29.04	$ 10.08
18	8-inch Meter No Usage		$ 12.91	$ 38.76	$ 13.49
19	10-inch Meter No Usage		$ 16.13	$ 48.39	$ 16.79
20	Hydrant No Usage		$ 8.22	$ 24.66	$ 8.56
21					
22					
23	Gallons in the Minimum		-	-	-
24					
25					
26	Commodity Rates			Per 1,000 Gallons	
27	(Residential, Commercial, Industrial)	Block			
28					
29	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 0.85	$ 1.471	$ 0.95
30		4,001 -10,000 Gallons	$ 1.30	$ 1.625	$ 1.35
31		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.64
32					
33	5/8 x 3/4-inch Meter - Apartment	0 to 10,000 Gallons	$ 1.30	$ 1.625	$ 1.35
34		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.64
35					
34	5/8 x 3/4-inch Meter Commercial	0 to 10,000 Gallons	$ 1.30	$ 1.625	$ 1.35
35		Over 10,000 Gallons	$ 1.50	$ 1.744	$ 1.64
36					
37	1-inch Meter:	0 to 25,000 Gallons	$ 1.30	$ 1.625	$ 1.35
38		Over 25,000 Gallons	$ 1.50	$ 1.744	$ 1.64
39					
40	1 1/2-inch Meter:	0 to 50,000 Gallons	$ 1.30	$ 1.625	$ 1.35
41		Over 50,000 Gallons	$ 1.50	$ 1.744	$ 1.64
42					
43	2-inch Meter - Havasu	0 to 60,000 Gallons	$ 1.55	$ 1.944	$ 1.35
44		Over 60,000 Gallons	$ 1.87	$ 2.174	$ 1.64
45					
43	2-inch Meter	0 to 80,000 Gallons	$ 1.30	$ 1.625	$ 1.35
44		Over 80,000 Gallons	$ 1.50	$ 1.744	$ 1.64
45					
46	3-inch Meter	0 to 150,000 Gallons	$ 1.30	$ 1.625	$ 1.35
47		Over 150,000 Gallons	$ 1.50	$ 1.744	$ 1.64
48					
49	4-inch Meter - Havasu	0 to110,000 Gallons	$ 1.55	$ 1.944	$ 1.35
50		Over 110,000 Gallons	$ 1.87	$ 2.174	$ 1.64
48					
49	4-inch Meter	0 to 250,000 Gallons	$ 1.30	$ 1.625	$ 1.35
50		Over 250,000 Gallons	$ 1.50	$ 1.744	$ 1.64
51					
52	6-inch Meter	0 to 500,000 Gallons	$ 1.30	$ 1.625	$ 1.35
53		Over 500,000 Gallons	$ 1.50	$ 1.744	$ 1.64
54					
55	8-inch Meter	0 to 1,125,000 Gallons	N/A	N/A	$ 1.35
56		Over 1,125,000 Gallons	N/A	N/A	$ 1.64
57					
58	10-inch Meter	0 to 1,500,000 Gallons	N/A	N/A	$ 1.35
59		Over 1,500,000 Gallons	N/A	N/A	$ 1.64
60					
61	12-inch Meter	0 to 2,250,000 Gallons	N/A	N/A	$ 1.35
62		Over 2,250,000 Gallons	N/A	N/A	$ 1.64
63					
64	Other Public Authorities - Monthly				
65	base charge per above meter size	All Usage	$ 1.355	$ 1.694	$ 1.35
66					

Arizona-American - Mohave Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment or re-establishment of Service:			
Including Sewer Service	$ 25.00	$ 25.00	$ 25.00
No Including Sewer Service	$ 20.00	$ 20.00	$ 20.00
Reconnection of Service (Delinquent):			
Regular Hours	$ 25.00	$ 35.00	$ 35.00
After Hours	$ 40.00	$ 50.00	$ 50.00
Water Meter Test (If Correct)	$ 25.00	$ 35.00	$ 35.00
Meter Re-Read (If Correct)	$ 25.00	$ 25.00	$ 25.00
NSF Check Charge	$ 25.00	$ 25.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	N/A	N/A	*
Deposit Requirements Non-Residential	N/A	N/A	*
Deposit Interest	N/A	N/A	**

* Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00
8-inch or Larger	N/A	N/A	N/A	N/A	N/A	N/A	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona-American - Mohave Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	8,073	$ 17.44	$ 24.50	$ 7.06	40.46%
Median Usage	N/A				
Staff Recommended					
Average Usage	8,073	$ 17.44	$ 18.45	$ 1.01	5.81%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 8.75	$ 12.00	37.14%	$ 9.15	4.57%
1,000	9.60	13.47	40.32%	10.10	5.21%
2,000	10.45	14.94	42.99%	11.05	5.74%
3,000	11.30	16.41	45.25%	12.00	6.19%
4,000	12.15	17.88	47.19%	12.95	6.58%
5,000	13.45	19.51	45.05%	14.30	6.32%
6,000	14.75	21.13	43.28%	15.65	6.10%
7,000	16.05	22.76	41.80%	17.00	5.92%
8,000	17.35	24.38	40.54%	18.35	5.76%
9,000	18.65	26.01	39.46%	19.70	5.63%
8,073	17.44	24.50	40.46%	18.45	5.75%
10,000	19.95	27.63	38.52%	21.05	5.51%
11,000	21.45	29.38	36.96%	22.69	5.76%
12,000	22.95	31.12	35.61%	24.32	5.97%
13,000	24.45	32.87	34.42%	25.96	6.16%
14,000	25.95	34.61	33.37%	27.59	6.32%
15,000	27.45	36.35	32.44%	29.23	6.47%
16,000	28.95	38.10	31.60%	30.86	6.60%
17,000	30.45	39.84	30.84%	32.50	6.72%
18,000	31.95	41.59	30.16%	34.13	6.82%
19,000	33.45	43.33	29.54%	35.77	6.92%
20,000	34.95	45.07	28.97%	37.40	7.01%
25,000	42.45	53.79	26.72%	45.58	7.36%
30,000	49.95	62.51	25.15%	53.75	7.61%
35,000	57.45	71.23	23.99%	61.93	7.79%
40,000	64.95	79.95	23.10%	70.10	7.93%
45,000	72.45	88.67	22.39%	78.28	8.04%
50,000	79.95	97.39	21.82%	86.45	8.13%
75,000	117.45	140.99	20.05%	127.33	8.41%
100,000	154.95	184.59	19.13%	168.20	8.55%

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 24.34	$ 28.00	$ 27.90
3	3/4-inch Meter		$ 25.18	$ 28.97	$ 29.80
4	1-inch Meter		$ 40.60	$ 46.71	$ 54.75
5	11/2-inch Meter		$ 81.98	$ 94.31	$ 96.50
6	2-inch Meter		$ 130.65	$ 150.30	$ 149.20
7	3-inch Meter		$ 242.09	$ 278.49	$ 291.40
8	4-inch Meter		$ 402.85	$ 463.43	$ 485.50
9	6-inch Meter		$ 806.97	$ 928.31	$ 971.00
10	8-inch Meter		N/A	N/A	$ 2,231.81
11	10-inch Meter		N/A	N/A	$ 3,208.23
12	12-inch Meter		N/A	N/A	$ 5,997.99
13					
14	Monthly Service Charge for Fire Sprinkler		$ 5.00	$ 25.00	$ 10.00
15					
16	Gallons in the Minimum		-	-	-
17					
18	Commodity Rates			Per 1,000 Gallons	
19	(Residential, Commercial, Industrial)	Block			
20					
21	5/8 x 3/4-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		$ 1.47
22		25,001 - 80,000 Gallons	$ 2.103		$ 2.55
		Over 80,000 Gallons	$ 2.633		$ 3.51
23		0 - 4,000 Gallons		$ 1.288	
24		4,001 - 20,000 Gallons		$ 2.233	
25		20,001 - 65,000 Gallons		$ 2.796	
26		65,001 - 125,000 Gallons		$ 3.359	
27		Over 125,000 Gallons		$ 3.879	
28					
29					
30	3/4-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		$ 1.47
31		25,001 - 80,000 Gallons	$ 2.103		$ 2.55
32		Over 80,000 Gallons	$ 2.633		$ 3.51
33		0 - 4,000 Gallons		$ 1.288	
34		4,001 - 20,000 Gallons		$ 2.233	
35		20,001 - 65,000 Gallons		$ 2.796	
36		65,001 - 125,000 Gallons		$ 3.359	
37		Over 125,000 Gallons		$ 3.879	
38					
39	1-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		$ 1.47
40		25,001 - 80,000 Gallons	$ 2.103		$ 2.55
41		Over 80,000 Gallons	$ 2.633		$ 3.51
42		0 - 4,000 Gallons		$ 1.288	
43		4,001 - 20,000 Gallons		$ 2.233	
44		20,001 - 65,000 Gallons		$ 2.796	
45		65,001 - 125,000 Gallons		$ 3.359	
46		Over 125,000 Gallons		$ 3.879	
47					
48	1-1/2-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		$ 1.47
49		25,001 - 80,000 Gallons	$ 2.103		$ 2.55
50		Over 80,000 Gallons	$ 2.633		$ 3.51
51		0 - 4,000 Gallons		$ 1.288	
52		4,001 - 20,000 Gallons		$ 2.233	
53		20,001 - 65,000 Gallons		$ 2.796	
54		65,001 - 125,000 Gallons		$ 3.359	
55		Over 125,000 Gallons		$ 3.879	
56					
57	2-inch Meter Residential	0 - 25,000 Gallons	$ 1.213		$ 1.47
58		25,001 - 80,000 Gallons	$ 2.103		$ 2.55
59		Over 80,000 Gallons	$ 2.633		$ 3.51
60		0 - 4,000 Gallons		$ 1.288	
61		4,001 - 20,000 Gallons		$ 2.233	
62		20,001 - 65,000 Gallons		$ 2.796	
63		65,001 - 125,000 Gallons		$ 3.359	
64		Over 125,000 Gallons		$ 3.879	
65					
66	5/8-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
67		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
68					
69	3/4-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
70		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
71					
72	1-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
73		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
74					
75	1 1/2-inch Meter Commercial	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
76		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
77					
78	2-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
79		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
80					
81	3-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
82		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
83					
84	4-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
85		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
86					
87	6-inch Meter	0 to 400,000 Gallons	$ 1.723	$ 2.233	$ 2.02
88		Over 400,000 Gallons	$ 2.013	$ 2.980	$ 2.43
89					
90	3-inch Meter Turf Customer	All Gallons	$ 1.453	$ 1.883	$ 1.76
91					
92	4-inch Meter Turf Customer	All Gallons	$ 1.453	$ 1.883	$ 1.76
93					
94	6-inch Meter Paradise Valley Country Club	All Gallons	$ 1.235	$ 1.828	$ 1.25
95					
96	Other Public Authorities - Monthly				
97	base charge per above meter size	All Usage	$ 1.913	$ 2.832	$ 1.95
98					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment of Service:			
Regular Hours	$ 20.00	$ 20.00	$ 20.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Re-establishment of Service within 12 Months:			
Monthly Minimum times Months Disconnected			
From the Water System [Per ACC Rule 14-2-403(D)]			
Reconnection of Service (Delinquent):			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 60.00	$ 60.00	$ 60.00
Water Meter Test (If Correct)	$ 15.00	$ 15.00	$ 15.00
Meter Re-Read (If Correct)	$ 10.00	$ 10.00	$ 10.00
NSF Check Charge	$ 12.00	$ 12.00	$ 12.00
Late Fee Charge	1.5% Per Mont	1.5% Per Montl	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Total Present Charge	Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges					
5/8 x 3/4-inch Meter	$ 480.00	Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 560.00	Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 650.00	Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 895.00	Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Meter	$ 1,555.00	Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
3-inch Meter	$ 2,235.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Meter	$ 3,440.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 6,195.00	Actual Cost	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	N/A	Actual Cost	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - PARADISE VALLEY WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	20,493	$ 49.20	$ 70.54	$ 21.34	43.37%
Median Usage	N/A				
Staff Recommended					
Average Usage	20,493	$ 49.20	$ 57.99	$ 8.79	17.86%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 24.34	$ 28.00	15.04%	$ 27.90	14.62%
1,000	25.55	29.29	14.62%	29.37	14.92%
2,000	26.77	30.58	14.23%	30.83	15.20%
3,000	27.98	31.86	13.89%	32.30	15.45%
4,000	29.19	33.15	13.57%	33.77	15.68%
5,000	30.41	35.39	16.38%	35.24	15.90%
6,000	31.62	37.62	18.98%	36.71	16.09%
7,000	32.83	39.85	21.38%	38.18	16.28%
8,000	34.04	42.08	23.62%	39.64	16.45%
9,000	35.26	44.32	25.70%	41.11	16.61%
20,493	49.20	70.54	43.37%	57.99	17.86%
10,000	36.47	46.55	27.64%	42.58	16.75%
11,000	37.68	48.78	29.46%	44.05	16.89%
12,000	38.90	51.02	31.16%	45.52	17.02%
13,000	40.11	53.25	32.76%	46.98	17.14%
14,000	41.32	55.48	34.27%	48.45	17.26%
15,000	42.54	57.72	35.69%	49.92	17.36%
16,000	43.75	59.95	37.03%	51.39	17.47%
17,000	44.96	62.18	38.30%	52.86	17.56%
18,000	46.17	64.41	39.50%	54.33	17.65%
19,000	47.39	66.65	40.64%	55.79	17.74%
20,000	48.60	68.88	41.73%	57.26	17.82%
25,000	54.67	85.68	56.73%	64.60	18.18%
30,000	65.18	102.47	57.21%	77.33	18.64%
35,000	75.70	119.27	57.56%	90.05	18.97%
40,000	86.21	136.06	57.82%	102.78	19.22%
45,000	96.73	152.86	58.03%	115.51	19.42%
50,000	107.24	169.65	58.20%	128.23	19.57%
75,000	159.82	253.63	58.70%	191.86	20.05%
100,000	210.99	337.60	60.01%	274.71	30.20%

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 9.57	$ 15.00	$ 15.30
3	1-inch Meter		$ 24.40	$ 38.24	$ 38.00
4	11/2-inch Meter		$ 52.28	$ 81.94	$ 80.00
5	2-inch Meter		$ 76.68	$ 120.19	$ 125.00
6	3-inch Meter		$ 132.43	$ 207.57	$ 240.00
7	4-inch Meter		$ 196.90	$ 308.62	$ 375.00
8	6-inch Meter		$ 270.08	$ 423.32	$ 750.00
9	8-inch Meter		N/A	N/A	$ 1,200.00
10	10-inch Meter		N/A	N/A	$ 1,725.00
11	12-inch Meter		N/A	N/A	$ 3,225.00
12					
13					
14	Monthly Service Charge for Fire Sprinkler				
15	4-inch or Smaller Meter	No Usage	$ 35.22	$ 70.44	$ 56.24
16	6-inch Meter	No Usage	$ 52.84	$ 105.68	$ 84.38
17	8-inch Meter	No Usage	$ 70.45	$ 140.90	$ 112.50
18					
19					
20	Gallons in the Minimum		-	-	-
21					
22					
23	Commodity Rates			Per 1,000 Gallons	
24	(Residential, Commercial, Industrial)	Block			
25					
26	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.31	$ 2.880	$ 2.33
27		4,001 - 15,000 Gallons	$ 1.74	$ 3.171	$ 2.85
28		Over 15,000 Gallons	$ 2.01	$ 3.413	$ 3.44
29					
30	5/8 x 3/4-inch Meter Commercial	0 to 15,000 Gallons	$ 1.74	$ 3.171	$ 2.85
31		Over 15,000 Gallons	$ 2.01	$ 3.413	$ 3.44
32					
33	1-inch Meter:	0 to 40,000 Gallons	$ 1.74	$ 3.171	$ 2.85
34		Over 40,000 Gallons	$ 2.01	$ 3.413	$ 3.44
35					
36	1 1/2-inch Meter:	0 to 100,000 Gallons	$ 1.74	$ 3.171	$ 2.85
37		Over 100,000 Gallons	$ 2.01	$ 3.413	$ 3.44
38					
39	2-inch Meter	0 to 150,000 Gallons	$ 1.74	$ 3.171	$ 2.85
40		Over 150,000 Gallons	$ 2.01	$ 3.413	$ 3.44
41					
42	3-inch Meter	0 to 275,000 Gallons	$ 1.74	$ 3.171	$ 2.85
43		Over 275,000 Gallons	$ 2.01	$ 3.413	$ 3.44
44					
45	4-inch Meter	0 to 400,000 Gallons	$ 1.74	$ 3.171	$ 2.85
46		Over 400,000 Gallons	$ 2.01	$ 3.413	$ 3.44
47					
48	6-inch Meter	0 to 550,000 Gallons	$ 1.74	$ 3.171	$ 2.85
49		Over 550,000 Gallons	$ 2.01	$ 3.413	$ 3.44
50					
51	8-inch Meter	0 to 1,402,000 Gallons	$ 1.74	$ 3.171	$ 2.85
52		Over 1,402,000 Gallons	$ 2.01	$ 3.413	$ 3.44
53					
54	10-inch Meter	0 to 2,100,000 Gallons	$ 1.74	$ 3.171	$ 2.85
55		Over 2,100,000 Gallons	$ 2.01	$ 3.413	$ 3.44
56					
57	12-inch Meter	0 to 4,110,000 Gallons	$ 1.74	$ 3.171	$ 2.85
58		Over 4,110,000 Gallons	$ 2.01	$ 3.413	$ 3.44
59					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 40.00	$ 40.00	$ 40.00
Water Meter Test (If Correct)	$ 10.00	$ 81.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	1.5% Per Month	1.5% Per Month	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00	$ 370.00	$ 130.00	$ 500.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00	$ 370.00	$ 205.00	$ 575.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00	$ 420.00	$ 240.00	$ 660.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00	$ 450.00	$ 450.00	$ 900.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00	$ 580.00	$ 945.00	$ 1,525.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00	$ 580.00	$ 1,640.00	$ 2,220.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00	$ 745.00	$ 1,420.00	$ 2,165.00
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00	$ 465.00	$ 2,195.00	$ 2,660.00
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00	$ 1,090.00	$ 2,270.00	$ 3,360.00
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00	$ 1,120.00	$ 3,145.00	$ 4,265.00
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00	$ 1,610.00	$ 4,425.00	$ 6,035.00
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00	$ 1,630.00	$ 6,120.00	$ 7,750.00
8-inch or Larger	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5)

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona American Water Company - Sun City West Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2007

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	6,704	$ 19.51	$ 35.09	$ 15.58	79.83%
Median Usage	N/A				
Staff Recommended					
Average Usage	6,704	$ 19.51	$ 32.33	$ 12.81	65.65%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 9.57	$ 15.00	56.74%	$ 15.30	59.87%
1,000	10.88	17.88	64.34%	17.63	62.06%
2,000	12.19	20.76	70.30%	19.97	63.78%
3,000	13.50	23.64	75.11%	22.30	65.17%
4,000	14.81	26.52	79.07%	24.63	66.31%
5,000	16.55	29.69	79.40%	27.48	66.02%
6,000	18.29	32.86	79.67%	30.32	65.79%
7,000	20.03	36.03	79.90%	33.17	65.60%
8,000	21.77	39.20	80.08%	36.02	65.44%
9,000	23.51	42.38	80.24%	38.86	65.30%
6,704	19.51	35.09	79.83%	32.33	65.65%
10,000	25.25	45.55	80.38%	41.71	65.18%
11,000	26.99	48.72	80.50%	44.55	65.08%
12,000	28.73	51.89	80.61%	47.40	64.99%
13,000	30.47	55.06	80.70%	50.25	64.91%
14,000	32.21	58.23	80.78%	53.09	64.84%
15,000	33.95	61.40	80.86%	55.94	64.77%
16,000	35.96	64.81	80.24%	59.38	65.13%
17,000	37.97	68.23	79.69%	62.82	65.45%
18,000	39.98	71.64	79.19%	66.26	65.73%
19,000	41.99	75.05	78.74%	69.70	65.99%
20,000	44.00	78.47	78.33%	73.14	66.23%
25,000	54.05	95.53	76.75%	90.34	67.14%
30,000	64.10	112.60	75.66%	107.54	67.77%
35,000	74.15	129.66	74.86%	124.74	68.23%
40,000	84.20	146.73	74.26%	141.94	68.58%
45,000	94.25	163.79	73.78%	159.14	68.85%
50,000	104.30	180.86	73.40%	176.34	69.07%
75,000	154.55	266.18	72.23%	262.35	69.75%
100,000	204.80	351.51	71.63%	348.35	70.09%

RATE DESIGN

Line No.			Present Rates	Company Proposed	Staff Recommended
1	Monthly Minimum				
2	5/8 x 3/4-inch Meter		$ 19.68	$ 32.50	$ 28.00
3	1-inch Meter		$ 29.63	$ 48.63	$ 70.00
4	11/2-inch Meter		$ 59.26	$ 97.86	$ 140.00
5	2-inch Meter		$ 97.49	$ 161.00	$ 224.00
6	3-inch Meter		$ 115.65	$ 190.99	$ 448.00
7	4-inch Meter		$ 169.18	N/A	$ 700.00
8	6-inch Meter		$ 231.30	N/A	$ 1,400.00
9	8-inch Meter		$ 1,577.08	N/A	$ 2,240.00
10	10-inch Meter		N/A	N/A	$ 3,220.00
11	12-inch Meter		N/A	N/A	$ 6,020.00
12					
13					
14	Gallons in the Minimum		-	-	-
15					
16					
17	Commodity Rates			Per 1,000 Gallons	
18	(Residential and Commercial)	Block			
19					
20	5/8 x 3/4-inch Meter Residential	0 - 4,000 Gallons	$ 1.89	$ 3.780	$ 2.76
21		4,001 - 20,000 Gallons	$ 2.85	$ 4.850	$ 4.15
22		Over 20,000 Gallons	$ 3.41	$ 4.950	$ 5.25
23					
24	5/8 x 3/4-inch Meter Commercial	0 to 20,000 Gallons	$ 2.85	$ 4.85	$ 4.15
25		Over 20,000 Gallons	$ 3.41	$ 4.95	$ 5.25
26					
27	1-inch Meter:	0 to 35,000 Gallons	$ 2.85	$ 4.85	$ 4.15
28		Over 35,000 Gallons	$ 3.41	$ 4.95	$ 5.25
29					
30	1 1/2-inch Meter:	0 to 85,000 Gallons	$ 2.85	$ 4.85	$ 4.15
31		Over 85,000 Gallons	$ 3.41	$ 4.95	$ 5.25
32					
33	2-inch Meter	0 to 150,000 Gallons	$ 2.85	$ 4.85	$ 4.15
34		Over 150,000 Gallons	$ 3.41	$ 4.95	$ 5.25
35					
36	3-inch Meter	0 to 175,000 Gallons	$ 2.85	$ 4.85	$ 4.15
37		Over 175,000 Gallons	$ 3.41	$ 4.95	$ 5.25
38					
39	4-inch Meter	0 to 250,000 Gallons	$ 2.85	N/A	$ 4.15
40		Over 250,000 Gallons	$ 3.41	N/A	$ 5.25
41					
42	6-inch Meter	0 to 350,000 Gallons	$ 2.85	N/A	$ 4.15
43		Over 350,000 Gallons	$ 3.41	N/A	$ 5.25
44					
45	8-inch Meter	0 to 900,000 Gallons	$ 2.85	N/A	$ 4.15
46		Over 900,000 Gallons	$ 3.41	N/A	$ 5.25
47					
48	10-inch Meter	0 to 1,500,000 Gallons	N/A	N/A	$ 4.15
49		Over 1,500,000 Gallons	N/A	N/A	$ 5.25
50					
51	12-inch Meter	0 to 2,250,000 Gallons	N/A	N/A	$ 4.15
52		Over 2,250,000 Gallons	N/A	N/A	$ 5.25
53					
54					

	Present Rates	Company Proposed	Staff Recommended
Service Charges			
Establishment Re-establishment and/or reconnection of Service:			
Regular Hours	$ 30.00	$ 30.00	$ 30.00
After Hours	$ 45.00	$ 45.00	$ 45.00
Water Meter Test (If Correct)	$ 10.00	$ 10.00	$ 10.00
Meter Re-Read (If Correct)	$ 5.00	$ 5.00	$ 5.00
NSF Check Charge	$ 10.00	$ 10.00	$ 25.00
Late Fee Charge	N/A	N/A	1.5% Per Month
Deferred Payment Finance Charge	N/A	N/A	1.5% Per Month
Deposit Requirements Residential	**	**	**
Deposit Requirements Non-Residential	**	**	**
Deposit Interest	***	***	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	(a) Total Proposed Charge	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
Meter and Service Line Installation Charges									
5/8 x 3/4-inch Meter	$ 370.00	$ 130.00	$ 500.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 370.00	$ 205.00	$ 575.00	Actual Cost	Actual Cost	. Actual Cost	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 420.00	$ 240.00	$ 660.00	Actual Cost	Actual Cost	. Actual Cost	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 450.00	$ 450.00	$ 900.00	Actual Cost	Actual Cost	. Actual Cost	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 580.00	$ 945.00	$ 1,525.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 580.00	$ 1,640.00	$ 2,220.00	Actual Cost	Actual Cost	. Actual Cost	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	$ 745.00	$ 1,420.00	$ 2,165.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	$ 465.00	$ 2,195.00	$ 2,660.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	$ 1,090.00	$ 2,270.00	$ 3,360.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	$ 1,120.00	$ 3,145.00	$ 4,265.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	$ 1,610.00	$ 4,425.00	$ 6,035.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	$ 1,630.00	$ 6,120.00	$ 7,750.00	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	At Cost	At Cost	At Cost	Actual Cost	Actual Cost	. Actual Cost	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and meter.

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona American Water Company - Tubac Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

Surrebuttal Schedule MEM-2

Typical Bill Analysis
General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	11,797	$ 49.46	$ 85.44	$ 35.97	72.73%
Median Usage	N/A				
Staff Recommended					
Average Usage	11,797	$ 49.46	$ 71.40	$ 21.94	44.35%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Recommended Rates	% Increase
-	$ 19.68	$ 32.50	65.14%	$ 28.00	42.29%
1,000	21.57	36.28	68.20%	30.76	42.62%
2,000	23.46	40.06	70.76%	33.52	42.89%
3,000	25.35	43.84	72.94%	36.28	43.12%
4,000	27.24	47.62	74.82%	39.04	43.32%
5,000	30.09	52.47	74.38%	43.19	43.54%
6,000	32.94	57.32	74.01%	47.34	43.72%
7,000	35.79	62.17	73.71%	51.49	43.87%
8,000	38.64	67.02	73.45%	55.64	44.00%
9,000	41.49	71.87	73.22%	59.79	44.11%
11,797	49.46	85.44	72.73%	71.40	44.35%
10,000	44.34	76.72	73.03%	63.94	44.20%
11,000	47.19	81.57	72.85%	68.09	44.29%
12,000	50.04	86.42	72.70%	72.24	44.37%
13,000	52.89	91.27	72.57%	76.39	44.43%
14,000	55.74	96.12	72.44%	80.54	44.49%
15,000	58.59	100.97	72.33%	84.69	44.55%
16,000	61.44	105.82	72.23%	88.84	44.60%
17,000	64.29	110.67	72.14%	92.99	44.64%
18,000	67.14	115.52	72.06%	97.14	44.68%
19,000	69.99	120.37	71.98%	101.29	44.72%
20,000	72.84	125.22	71.91%	105.44	44.76%
25,000	89.89	149.97	66.84%	131.69	46.50%
30,000	106.94	174.72	63.38%	157.94	47.69%
35,000	123.99	199.47	60.88%	184.19	48.55%
40,000	141.04	224.22	58.98%	210.44	49.21%
45,000	158.09	248.97	57.49%	236.69	49.72%
50,000	175.14	273.72	56.29%	262.94	50.13%
75,000	260.39	397.47	52.64%	394.19	51.38%
100,000	345.64	521.22	50.80%	525.44	52.02%

ALL-STATE LEGAL®
EXHIBIT
S-14
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

DIRECT

TESTIMONY

OF

STEVE IRVINE

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JANUARY 20, 2009

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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NO. SW-01303A-08-0227

On May 1, 2008, Arizona-American Water Company ("Arizona-American" or "Company") filed a general rate application. Arizona-American is a for-profit company providing water and wastewater service to customers throughout the State of Arizona. The Company's current filing requests permanent rates for six water systems and one wastewater system. The testimony of Mr. Steve Irvine presents Staff's recommended rate design for the Mohave Wastewater District ("Mohave") with approximately 1,235 customers in the area south of Bullhead City.

The present rate design is based largely on flat monthly rates. Commercial customers in the Gateway area pay a volumetric rate in addition to a flat monthly rate. Effluent is also sold with volumetric pricing.

Mohave's proposed rate design is a continuation of the rate design adopted in the prior rate case. Mohave's proposed rates spread the proposed increase in revenue across all the customer classes. The increase is accomplished by increasing monthly usage charges and commodity charges. The Company recommends no changes to miscellaneous service charges, but recommends that service line connection charges change from a stated cost to an at cost rate with the money being paid as a refundable advance-in-aid-of-construction.

Staff's recommended revenue requirement of $796,161 represents an increase of $0, or 0.00 percent. Because there is no change to revenue requirement, Staff recommends that the presently approved rates remain in place. Staff recommends adoption of the Company's proposed changes for Service Line Connection Charges.

The Company proposes an increase of $40.15 or 80.87 percent increase in the monthly usage charge, from $49.65 to $89.80. Staff recommends an increase of $0.00 or 0.00 percent increase in the monthly usage charge, maintaining the charge at $49.65.

INTRODUCTION

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

A. My name is Steve Irvine. I am a Public Utilities Analyst IV employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. In my capacity as a Public Utilities Analyst, I conduct studies to estimate the cost of capital component used to determine the overall revenue requirement in rate proceedings, design rates to generate the revenue requirement in rate proceedings and perform other econometric analyses.

Q. Please describe your educational background and professional experience.

A. In 1994, I graduated from Arizona State University, receiving a Bachelor of Science degree in Business Marketing. In 1997, I received a Masters degree in Public Administration from Arizona State University. I began employment with the Commission in May of 2001 and have worked in the Utilities Division since September of 2002.

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

A. Arizona-American Water Company ("Arizona-American" or "Company") is a for-profit public service company providing water and wastewater service to customers throughout the State of Arizona. On May 1, 2008, Arizona-American filed a general rate application requesting permanent rates for six water systems and one wastewater system. My testimony provides Staff's recommended rate design for the Mohave Wastewater District ("Mohave") that serves approximately 1,200 customers in the area south of Bullhead City.

Q. Have you reviewed the application submitted by Arizona-American in this case?

A. Yes.

SUMMARY OF TESTIMONY AND RECOMMENDATIONS

Q. Briefly summarize how your rate design testimony is organized.

A. Staff's rate design testimony is organized to present a discussion of the present rates, the Company's proposed rates, and Staff's recommended rates for Mohave. Schedules SPI-1 and SPI-2 are provided to further describe Staff's rate design.

Present Rate Design

Q. Please provide an overview of the Company's present rates.

A. The following is a general description of the present rate design. Details of the rate designs are presented on Staffs Direct Testimony Schedule SPI-1. The present rate design is based largely on flat monthly rates. Commercial customers in the Gateway area pay a volumetric rate in addition to a flat monthly rate. Effluent rates are based on volumetric pricing.

Q. Have you prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?

A. Yes. A summary of the present, Company proposed, and Staff recommended rates and service charges are provided on Schedule SPI-1.

Proposed Rate Design

Q. Would you please summarize the Company's proposed rate design?

A. Mohave's proposed rate design is a continuation of the rate design adopted in the prior rate case. The Company's proposed rates spread the proposed increase in revenue across

all the customer classes. The increase is accomplished by increasing monthly usage charges and commodity charges. The Company recommends no changes to miscellaneous service charges, but recommends that service line connection charges change from a stated cost to an at cost rate with the money being paid as a refundable advance-in-aid-of-construction.

Q. Would you please summarize Staff's recommended rate design?

A. Staff's recommended revenue requirement of $796,161 represents an increase of $0, or 0.00 percent. Because there is no change to revenue requirement, Staff recommends that the presently approved rates remain in place. However, Staff recommends adoption of the changes proposed by the Company for Service Line Connection Charges. Discussion of this recommendation is included in the testimony of Staff witness Dorothy Haines. As Service Line Connection Charges are advances-in-aid-of-construction, changes to their rates have no effect on the revenue requirement in this case.

Q. Has Staff prepared a typical bill analysis to reflect the effects of the proposed and recommended rate changes?

A. Yes. The typical bill analysis is shown in Schedule SPI-2. The Company proposes an increase of $40.15, or 80.87 percent, in the monthly usage charge from $49.65 to $89.80. Staff recommends an increase of $0.00 or 0.00 percent increase in the monthly usage charge, maintaining the charge at $49.65. Staff is not recommending an alternative rate design using commodity rates for the wastewater district as the customer base is different for the water and wastewater districts. Without access to the water usage data for the wastewater district customers, it is difficult to develop a rate design based on customer water usage. Because of this, Staff recommends a flat rate design for the wastewater district.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

Arizona-American Water Company
Mohave Wastewater District
Docket No. WS-01303A-08-0227
Test Year Ended December 31,2007

RATE DESIGN

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Residential (Per ERU)	$ 49.65	$ 89.80	$ 49.65
Commercial (Per ERU)	49.65	89.80	49.65
Public Auhority (Per ERU)	49.65	89.80	49.65
Large Commercial	64.00	115.75	64.00
Commodity Charge			
Residential	$ -	$ -	$ -
Commercial	-	-	-
Public Auhority	-	-	-
Large Commercial	2.00	8.00	2.00
Effluent (Per Acre Foot)			
0 to 24	$ 200.00	$ 250.00	$ 200.00
25 to 99	200.00	250.00	200.00
100 to 199	200.00	250.00	200.00
200 & Above	200.00	250.00	200.00
Service Line Connection Charges (Non-Refundable)			
Residential	$ 250.00	Cost	Cost
Commercial	250.00	Cost	Cost
School	250.00	Cost	Cost
Multiple Dwelling	Cost	Cost	Cost
Mobile Home Park	Cost	Cost	Cost
Effluent	250.00	Cost	Cost
Treatment Plant Availability Fee			
Per New Connection	$ 785.00	$ 785.00	$ 785.00
Service Charges:			
Establishment	$ 20.00	$ 20.00	$ 20.00
Establishment (After Hours)	30.00	30.00	30.00
Reconnection (Deliquent)	30.00	30.00	30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (With-in 12 Months)	**	**	**
NSF Check	25.00	25.00	25.00
Late Payment Charge	***	***	***

* Per Commission Rules (R-14-2-603.B)
** Months off system times minimum (R14-2-603.D)
*** Per Commissions Rules (R14-2-608.D)

Arizona-American Water Company
Mohave Wastewater District
Docket No. SW-01303A-08-0227
Test Year Ended December 31, 2007

TYPICAL BILL ANALYSIS AVERAGE AND MEDIAN COST COMPARISONS

LINE NO.	CUSTOMER CLASS	CURRENT RATES			
		AVERAGE		MEDIAN	
		USAGE	DOLLARS	USAGE	DOLLARS
1	Residential		$ 49.65		$ 49.65
2	Commerical		$ 49.65		$ 49.65
3	Public Authority		$ 49.65		$ 49.65
4	Large Commercial	214,945	$ 493.89	* see note below	

LINE NO.	CUSTOMER CLASS	COMPANY RECOMMENDED					
		AVERAGE			MEDIAN		
		AVERAGE	CHANGE	PERCENT	MEDIAN	CHANGE	PERCENT
5	Residential	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
6	Commerical	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
7	Public Authority	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
8	Large Commercial	$ 1,835.31	$ 1,341.42	271.60%	* see note below		

LINE NO.	CUSTOMER CLASS	STAFF RECOMMENDED					
		AVERAGE			MEDIAN		
		AVERAGE	CHANGE	PERCENT	MEDIAN	CHANGE	PERCENT
9	Residential	$ 49.65	$ -	0.00%	$ 49.65	$ -	0.00%
10	Commerical	$ 49.65	$ -	0.00%	$ 49.65	$ -	0.00%
11	Public Authority	$ 49.65	$ -	0.00%	$ 49.65	$ -	0.00%
12	Large Commercial	$ 493.89	$ -	0.00%	* see note below		

* Median Large Commercial figures omitted as there are only 2 test year Large Commercial customers

EXHIBIT
S-15
ADMITTED
ALL-STATE LEGAL®

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	)	DOCKET NO. SW-01303A-08-0227

SURREBUTTAL

TESTIMONY

OF

STEVE IRVINE

PUBLIC UTILITIES ANALYST IV

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 3, 2009

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EXECUTIVE SUMMARY
ARIZONA-AMERICAN WATER COMPANY
DOCKET NO. SW-01303A-08-0227

The Surrebuttal Testimony of Staff witness Steve Irvine addresses the following issues:

Staff's updated rate design – Staff's recommended Mohave wastewater rate design would generate Staff's recommended $722,274 revenue requirement, a decrease of 9.28 percent from the test year. Staff's Surrebuttal Testimony includes Treatment Plant Availability Fee's for 6 and 8-inch service lines that were inadvertently not included in Direct Testimony for rate design.

The Company's Rebuttal Testimony did not include a proposed change to Mohave wastewater rate design from that proposed in the application. The Company continues to propose an increase of $40.15, or 80.87 percent, in the monthly customer charge, from $49.65 to $89.80. Staff recommends a decrease of $4.69, or 9.44 percent, in the monthly customer charge, reducing the monthly bill from $49.65 to $44.96.

INTRODUCTION

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

A. My name is Steve Irvine. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Did you previously file Direct Testimony pertaining to the rate design for the Mohave Wastewater District in this case?

A. Yes.

Q. What matters are addressed in your Surrebuttal Testimony?

A. This Surrebuttal Testimony provides updated rates (Surrebuttal Schedule SPI-3) to reflect Staff's surrebuttal revenue requirement. Staff also submits a new typical billing analysis (Surrebuttal Schedule SPI-4) to reflect its updated rates. This testimony also corrects an omission in the Treatment Plant Availability Fee section of Schedule SPI-1 in my Direct Testimony.

Q. What comments does the Company make in Rebuttal Testimony regarding Staff's proposed Mohave wastewater rate design?

A. The Company's Rebuttal Testimony does not appear to discuss Staff's proposed Mohave wastewater rate design. It also does not appear to offer a revised rate design for the Mohave Wastewater District.

UPDATED RATE DESIGN

Q. Is Staff's updated rate structure the same as that recommended in its Direct Testimony?

A. Yes. The rate structure is the same, however, the specific rates are different.

Q. Why is Staff recommending rates that differ from its Direct Testimony (SPI-1)?

A. Since Staff's surrebuttal revenue requirement changed from that of its direct position, it is necessary to adjust the rates. At the time of filing of pre-filed Direct Testimony Staff had recommended no change in revenue requirement. Staff now recommends a decrease in revenue requirement, as discussed in the Surrebuttal Testimony of Gerald Becker, and consequently now recommends a decrease in rates. Staff's updated rate design is included as Surrebuttal Schedule SPI-3. An updated typical bill analysis is included as Surrebuttal Schedule SPI-4.

Q. Does Staff's updated rate design include any changes other than a decrease in rates?

A. Yes. SPI-1 had included a line item for Treatment Plant Availability Fee of $785.00 Per New Connection. The number was correct, but did not provide complete information by addressing fees for the various sizes of connections. The pre-filed Direct Testimony of Dorothy Hains at Figure 7, page 23, of Exhibit DMH-7 included a table that listed Staff's recommended Treatment Plant Availability Fees for the various connection sizes. The table from Ms. Hains' pre-filed Direct Testimony is as seen below:

TREATMENT PLANT HOOK-UP FEE TARIFF TABLE		
Service Lateral Size	Factor	Fee
4-inch	1	$785*
6-inch	2	$1,570
8-inch	3½	$2,748

* Established per Decision No. 69440.

Fees for the 6-inch and 8-inch connections were inadvertently not included in SPI-1. The fees contained in this table are included in Surrebuttal Schedule SPI-3 in order to reflect Staff's Treatment Plant Availability Fee recommendation. As Service Line Connection Charges are advances-in-aid-of-construction, changes to those fees did not provide revenue.

Q. What revenue would Staff's updated rate design generate?

A. Staff's recommend rate design would generate Staff's recommended $722,274 revenue requirement, a decrease of 9.28 percent from the test year. As shown on Surrebuttal Schedule GWB-10, the revenue requirement is composed of Wastewater Revenue ($717,392) and Other Wastewater Revenue ($4,882) components.

Q. Would you please summarize Staff's recommended rate structure?

A. Staff's proposed rate structure is simply the existing rates with the monthly customer charges, the large commercial commodity charge, and the effluent rate each reduced by 9.44 percent. A summary of the present, Company proposed, and Staff recommended rates and service charges are provided on Surrebuttal Schedule SPI-3.

Q. Why is a 9.44 percentage reduction used to reduce these rates if there is a 9.28 percent reduction in revenue requirement?

A. The percentage reduction in total revenue requirement differs slightly from the percentage reduction used in Staff's rate design as Staff made no change to the service charges portion of rates.

Q. What are the effects of Staff's proposed rates on a customer's bill?

A. Staff's recommended rate design results in a decrease of $4.69, or 9.44 percent, in the monthly customer charge, reducing the monthly bill from $49.65 to $44.96.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

Arizona-American Water Company
Mohave Wastewater District
Docket No. WS-01303A-08-0227
Test Year Ended December 31,2007

RATE DESIGN

Monthly Usage Charge	Present	Company Proposed Rates	Staff Recommended Rates
Residential (Per ERU)	$ 49.65	$ 89.80	$ 44.96
Commercial (Per ERU)	49.65	89.80	44.96
Public Auhority (Per ERU)	49.65	89.80	44.96
Large Commercial	64.00	115.75	57.96
Commodity Charge			
Residential	$ -	$ -	$ -
Commercial	-	-	-
Public Auhority	-	-	-
Large Commercial	2.00	8.00	1.81
Effluent (Per Acre Foot)			
0 to 24	$ 200.00	$ 250.00	$ 181.13
25 to 99	200.00	250.00	181.13
100 to 199	200.00	250.00	181.13
200 & Above	200.00	250.00	181.13
Service Line Connection Charges (Non-Refundable)			
Residential	$ 250.00	Cost	Cost
Commercial	250.00	Cost	Cost
School	250.00	Cost	Cost
Multiple Dwelling	Cost	Cost	Cost
Mobile Home Park	Cost	Cost	Cost
Effluent	250.00	Cost	Cost
Treatment Plant Availability Fee			
Per New Connection	$ 785.00	$ 785.00	
4-Inch			$ 785.00
6-Inch			1,570.00
8-Inch			2,748.00
Service Charges:			
Establishment	$ 20.00	$ 20.00	$ 20.00
Establishment (After Hours)	30.00	30.00	30.00
Reconnection (Deliquent)	30.00	30.00	30.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (With-in 12 Months)	**	**	**
NSF Check	25.00	25.00	25.00
Late Payment Charge	***	***	***

* Per Commission Rules (R-14-2-603.B)
** Months off system times minimum (R14-2-603.D)
*** Per Commissions Rules (R14-2-608.D)

Arizona-American Water Company
Mohave Wastewater District
Docket No. SW-01303A-08-0227
Test Year Ended December 31, 2007

TYPICAL BILL ANALYSIS AVERAGE AND MEDIAN COST COMPARISONS

LINE NO.	CUSTOMER CLASS	CURRENT RATES			
		AVERAGE		MEDIAN	
		USAGE	DOLLARS	USAGE	DOLLARS
1	Residential		$ 49.65		$ 49.65
2	Commerical		$ 49.65		$ 49.65
3	Public Authority		$ 49.65		$ 49.65
4	Large Commercial	214,945	$ 493.89	* see note below	

LINE NO.	CUSTOMER CLASS	COMPANY RECOMMENDED					
		AVERAGE			MEDIAN		
		AVERAGE	CHANGE	PERCENT	MEDIAN	CHANGE	PERCENT
5	Residential	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
6	Commerical	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
7	Public Authority	$ 89.80	$ 40.15	80.87%	$ 89.80	$ 40.15	80.87%
8	Large Commercial	$ 1,835.31	$ 1,341.42	271.60%	* see note below		

LINE NO.	CUSTOMER CLASS	STAFF RECOMMENDED					
		AVERAGE			MEDIAN		
		AVERAGE	CHANGE	PERCENT	MEDIAN	CHANGE	PERCENT
9	Residential	$ 44.96	$ (4.69)	-9.44%	$ 44.96	$ (4.69)	-9.44%
10	Commerical	$ 44.96	$ (4.69)	-9.44%	$ 44.96	$ (4.69)	-9.44%
11	Public Authority	$ 44.96	$ (4.69)	-9.44%	$ 44.96	$ (4.69)	-9.44%
12	Large Commercial	$ 447.28	$ (46.61)	-9.44%	* see note below		

* Median Large Commercial figures omitted as there are only 2 test year Large Commercial customers

EXHIBIT S-16 ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

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2009 MAR 27 A 10: 13

AZ CORP COMMISSION
DOCKET CONTROL

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT AND TUBAC WATER DISTRICT.	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTIIITY PLANT AND PROPERTY AND FOR INCRESES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT.	DOCKET NO. SW-01303A-08-0227

RECEIVED

MAR 27 2009

LEGAL DIV.
ARIZ. CORPORATION COMMISSION

NOTICE OF FILING

Attached to this notice is Staff's alternative rate design for Paradise Valley Water District and Tubac Water District.

RESPECTFULLY SUBMITTED this 27th day of March, 2009.

Robin R. Mitchell, Attorney
Nancy L. Scott, Attorney
Ayesha Vohra, Attorney
Arizona Corporation Commission
1200 W. Washington St.
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(602) 542-3402

Original and thirteen (13) copies of the foregoing were filed this 27th day of March, 2009 with:

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Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85008

Copy of the foregoing mailed this 27th day of March, 2009 to:

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Ashley Gladys

THREE TIER ALTERNATE RATE DESIGN

Line No.				
1	Monthly Minimum			
2	5/8 x 3/4-inch Meter		$	26.00
3	3/4-inch Meter		$	27.00
4	1-inch Meter		$	52.00
5	11/2-inch Meter		$	92.00
6	2-inch Meter		$	142.00
7	3-inch Meter		$	277.00
8	4-inch Meter		$	463.00
9	6-inch Meter		$	926.00
10	8-inch Meter		$	2,232.00
11	10-inch Meter		$	3,208.00
12	12-inch Meter		$	5,998.00
13				
14	Monthly Service Charge for Fire Sprinkler		$	10.00
15				
16	Gallons in the Minimum			-
17				
18	Commodity Rates		Per 1,000 Gallons	
19	(Residential, Commercial, Industrial)	Block		
20				
21	5/8 x 3/4-inch Meter Residential	0 - 15,000 Gallons	$	1.200
22		15,001 - 50,000 Gallons	$	2.200
23		Over 50,000 Gallons	$	3.700
24				
25	3/4-inch Meter Residential	0 - 15,000 Gallons	$	1.200
26		15,001 - 50,000 Gallons	$	2.200
27		Over 50,000 Gallons	$	3.700
28				
29	1-inch Meter Residential	0 - 15,000 Gallons	$	1.200
30		15,001 - 50,000 Gallons	$	2.200
31		Over 50,000 Gallons	$	3.700
32				
33	1-1/2-inch Meter Residential	0 - 15,000 Gallons	$	1.200
34		15,001 - 50,000 Gallons	$	2.200
35		Over 50,000 Gallons	$	3.700
36				
37	2-inch Meter Residential	0 - 15,000 Gallons	$	1.200
38		15,001 - 50,000 Gallons	$	2.200
39		Over 50,000 Gallons	$	3.700
40				
41	5/8-inch Meter Commercial	0 to 400,000 Gallons	$	2.08
42		Over 400,000 Gallons	$	2.43
43				
44	3/4-inch Meter Commercial	0 to 400,000 Gallons	$	2.08
45		Over 400,000 Gallons	$	2.43
46				
47	1-inch Meter Commercial	0 to 400,000 Gallons	$	2.08
48		Over 400,000 Gallons	$	2.43
49				
50	1 1/2-inch Meter Commercial:	0 to 400,000 Gallons	$	2.08
51		Over 400,000 Gallons	$	2.43
52				
53	2-inch Meter	0 to 400,000 Gallons	$	2.08
54		Over 400,000 Gallons	$	2.43
55				
56	3-inch Meter	0 to 400,000 Gallons	$	2.08
57		Over 400,000 Gallons	$	2.43
58				
59	4-inch Meter	0 to 400,000 Gallons	$	2.08
60		Over 400,000 Gallons	$	2.43
61				
62	6-inch Meter	0 to 400,000 Gallons	$	2.08
63		Over 400,000 Gallons	$	2.43
64				
65	3-inch Meter Turf Customer	All Gallons	$	1.76
66				
67	4-inch Meter Turf Customer	All Gallons	$	1.76
68				
69	6-inch Meter Paradise Valley Country Club	All Gallons	$	1.56
70				
71	Other Public Authorities - Monthly			
72	base charge per above meter size	All Usage	$	2.01

Service Charges	Staff Recommended
Establishment of Service:	
Regular Hours	$ 20.00
After Hours	$ 40.00
Re-establishment of Service within 12 Months:	
Monthly Minimum times Months Disconnected	
From the Water System [Per ACC Rule 14-2-403(D)]	
Reconnection of Service (Delinquent):	
Regular Hours	$ 30.00
After Hours	$ 60.00
Water Meter Test (If Correct)	$ 15.00
Meter Re-Read (If Correct)	$ 10.00
NSF Check Charge	$ 12.00
Late Fee Charge	1.5% Per Month
Deposit Requirements Residential	**
Deposit Requirements Non-Residential	**
Deposit Interest	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
5/8 x 3/4-inch Meter	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 550.00	$ 525.00	$ 1,075.00
2-inch Meter	$ 830.00	$ 1,045.00	$ 1,875.00
3-inch Meter	Actual Cost	Actual Cost	Actual Cost
4-inch Meter	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - PARADISE VALLEY WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

3 Tier Alternative Schedule MEM-2

Typical Bill Analysis - 3 Tier Alternative Rate Design
General Service 5/8-Inch Meter

	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	20,493	$ 49.20	$ 56.08	$ 6.89	14.00%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Staff Recommended Rates	% Increase
-	$ 24.34	$ 26.00	6.82%
1,000	25.55	27.20	6.45%
2,000	26.77	28.40	6.10%
3,000	27.98	29.60	5.79%
4,000	29.19	30.80	5.51%
5,000	30.41	32.00	5.25%
6,000	31.62	33.20	5.00%
7,000	32.83	34.40	4.78%
8,000	34.04	35.60	4.57%
9,000	35.26	36.80	4.38%
10,000	36.47	38.00	4.20%
11,000	37.68	39.20	4.03%
12,000	38.90	40.40	3.87%
13,000	40.11	41.60	3.72%
14,000	41.32	42.80	3.58%
15,000	42.54	44.00	3.44%
16,000	43.75	46.20	5.60%
17,000	44.96	48.40	7.65%
18,000	46.17	50.60	9.59%
19,000	47.39	52.80	11.42%
20,000	48.60	55.00	13.17%
20,493	49.20	56.08	14.00%
25,000	54.67	66.00	20.74%
30,000	65.18	77.00	18.13%
35,000	75.70	88.00	16.26%
40,000	86.21	99.00	14.84%
45,000	96.73	110.00	13.72%
50,000	107.24	121.00	12.83%
75,000	159.82	213.50	33.59%
100,000	210.99	306.00	45.03%

FIVE TIER ALTERNATE RATE DESIGN

Line No.			
1	Monthly Minimum		
2	5/8 x 3/4-inch Meter		$ 26.00
3	3/4-inch Meter		$ 27.00
4	1-inch Meter		$ 52.00
5	11/2-inch Meter		$ 92.00
6	2-inch Meter		$ 142.00
7	3-inch Meter		$ 277.00
8	4-inch Meter		$ 463.00
9	6-inch Meter		$ 926.00
10	8-inch Meter		$ 2,232.00
11	10-inch Meter		$ 3,208.00
12	12-inch Meter		$ 5,998.00
13			
14	Monthly Service Charge for Fire Sprinkler		$ 10.00
15			
16	Gallons in the Minimum		-
17			
18	Commodity Rates		Per 1,000 Gallons
19	(Residential, Commercial, Industrial)	Block	
20			
21	5/8 x 3/4-inch Meter Residential	0 - 5,000 Gallons	$ 1.200
22		5,001 - 15,000 Gallons	$ 2.000
23		15,001 - 40,000 Gallons	$ 2.700
24		40,001 - 80,000 Gallons	$ 3.250
25		Over 80,000 Gallons	$ 3.500
26			
27	3/4-inch Meter Residential	0 - 5,000 Gallons	$ 1.200
28		5,001 - 15,000 Gallons	$ 2.000
29		15,001 - 40,000 Gallons	$ 2.700
30		40,001 - 80,000 Gallons	$ 3.250
31		Over 80,000 Gallons	$ 3.500
32			
33	1-inch Meter Residential	0 - 5,000 Gallons	$ 1.200
34		5,001 - 15,000 Gallons	$ 2.000
35		15,001 - 40,000 Gallons	$ 2.700
36		40,001 - 80,000 Gallons	$ 3.250
37		Over 80,000 Gallons	$ 3.500
38			
39	1-1/2-inch Meter Residential	0 - 5,000 Gallons	$ 1.200
40		5,001 - 15,000 Gallons	$ 2.000
41		15,001 - 40,000 Gallons	$ 2.700
42		40,001 - 80,000 Gallons	$ 3.250
43		Over 80,000 Gallons	$ 3.500
44			
45	2-inch Meter Residential	0 - 5,000 Gallons	$ 1.200
46		5,001 - 15,000 Gallons	$ 2.000
47		15,001 - 40,000 Gallons	$ 2.700
48		40,001 - 80,000 Gallons	$ 3.250
49		Over 80,000 Gallons	$ 3.500
50			
51	5/8-inch Meter Commercial	0 to 400,000 Gallons	$ 2.08
52		Over 400,000 Gallons	$ 2.43
53			
54	3/4-inch Meter Commercial	0 to 400,000 Gallons	$ 2.08
55		Over 400,000 Gallons	$ 2.43
56			
57	1-inch Meter Commercial	0 to 400,000 Gallons	$ 2.08
58		Over 400,000 Gallons	$ 2.43
59			
60	1 1/2-inch Meter Commercial:	0 to 400,000 Gallons	$ 2.08
61		Over 400,000 Gallons	$ 2.43
62			
63	2-inch Meter	0 to 400,000 Gallons	$ 2.08
64		Over 400,000 Gallons	$ 2.43
65			
66	3-inch Meter	0 to 400,000 Gallons	$ 2.08
67		Over 400,000 Gallons	$ 2.43
68			
69	4-inch Meter	0 to 400,000 Gallons	$ 2.08
70		Over 400,000 Gallons	$ 2.43
71			
72	6-inch Meter	0 to 400,000 Gallons	$ 2.08
73		Over 400,000 Gallons	$ 2.43
74			
75	3-inch Meter Turf Customer	All Gallons	$ 1.76
76			
77	4-inch Meter Turf Customer	All Gallons	$ 1.76
78			
79	6-inch Meter Paradise Valley Country Club	All Gallons	$ 1.56
80			
81	Other Public Authorities - Monthly		
82	base charge per above meter size	All Usage	$ 2.01

Service Charges	Staff Recommended
Establishment of Service:	
Regular Hours	$ 20.00
After Hours	$ 40.00
Re-establishment of Service within 12 Months:	
Monthly Minimum times Months Disconnected	
From the Water System [Per ACC Rule 14-2-403(D)]	
Reconnection of Service (Delinquent):	
Regular Hours	$ 30.00
After Hours	$ 60.00
Water Meter Test (If Correct)	$ 15.00
Meter Re-Read (If Correct)	$ 10.00
NSF Check Charge	$ 12.00
Late Fee Charge	1.5% Per Month
Deposit Requirements Residential	**
Deposit Requirements Non-Residential	**
Deposit Interest	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Staff Proposed Service Line Charge	Staff Proposed Meter Installation Charge	Staff Total Proposed Charge
5/8 x 3/4-inch Meter	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 550.00	$ 525.00	$ 1,075.00
2-inch Meter	$ 830.00	$ 1,045.00	$ 1,875.00
3-inch Meter	Actual Cost	Actual Cost	Actual Cost
4-inch Meter	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	Actual Cost	Actual Cost	Actual Cost
Over 6-inch	Actual Cost	Actual Cost	Actual Cost

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

ARIZONA AMERICAN - PARADISE VALLEY WATER
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

5 Tier Alternative Schedule MEM-2

Typical Bill Analysis - 5 Tier Alternative Rate Design
General Service 5/8-Inch Meter

	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	20,493	$ 49.20	$ 66.83	$ 17.63	35.84%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Staff Recommended Rates	% Increase
-	$ 24.34	$ 26.00	6.82%
1,000	25.55	27.20	6.45%
2,000	26.77	28.40	6.10%
3,000	27.98	29.60	5.79%
4,000	29.19	30.80	5.51%
5,000	30.41	32.00	5.25%
6,000	31.62	34.00	7.53%
7,000	32.83	36.00	9.65%
8,000	34.04	38.00	11.62%
9,000	35.26	40.00	13.45%
10,000	36.47	42.00	15.16%
11,000	37.68	44.00	16.76%
12,000	38.90	46.00	18.26%
13,000	40.11	48.00	19.67%
14,000	41.32	50.00	21.00%
15,000	42.54	52.00	22.25%
16,000	43.75	54.70	25.03%
17,000	44.96	57.40	27.67%
18,000	46.17	60.10	30.16%
19,000	47.39	62.80	32.53%
20,000	48.60	65.50	34.77%
20,493	49.20	66.83	35.84%
25,000	54.67	79.00	44.52%
30,000	65.18	92.50	41.91%
35,000	75.70	106.00	40.04%
40,000	86.21	119.50	38.62%
45,000	96.73	133.00	37.50%
50,000	107.24	146.50	36.61%
75,000	159.82	249.50	56.12%
100,000	210.99	319.50	51.43%

FOUR TIER ALTERNATE RATE DESIGN

Line No.			
1	Monthly Minimum		
2	5/8 x 3/4-inch Meter		$ 25.00
3	1-inch Meter		$ 70.00
4	11/2-inch Meter		$ 140.00
5	2-inch Meter		$ 224.00
6	3-inch Meter		$ 448.00
7	4-inch Meter		$ 700.00
8	6-inch Meter		$ 1,400.00
9	8-inch Meter		$ 2,240.00
10	10-inch Meter		$ 3,220.00
11	12-inch Meter		$ 6,020.00
12			
13			
14	Gallons in the Minimum		-
15			
16			
17	Commodity Rates		Per 1,000 Gallons
18	(Residential and Commercial)	Block	
19			
20	5/8 x 3/4-inch Meter Residential	0 - 3,000 Gallons	$ 1.90
21		3,001 - 10,000 Gallons	$ 2.85
22		10,001 - 20,000 Gallons	$ 3.50
23		Over 20,000 Gallons	$ 6.00
24			
25	5/8 x 3/4-inch Meter Commercial	0 to 20,000 Gallons	$ 4.15
26		Over 20,000 Gallons	$ 5.25
27			
28	1-inch Meter:	0 to 35,000 Gallons	$ 4.15
29		Over 35,000 Gallons	$ 5.25
30			
31	1 1/2-inch Meter:	0 to 85,000 Gallons	$ 4.15
32		Over 85,000 Gallons	$ 5.25
33			
34	2-inch Meter	0 to 150,000 Gallons	$ 4.15
35		Over 150,000 Gallons	$ 5.25
36			
37	3-inch Meter	0 to 175,000 Gallons	$ 4.15
38		Over 175,000 Gallons	$ 5.25
39			
40	4-inch Meter	0 to 250,000 Gallons	$ 4.15
41		Over 250,000 Gallons	$ 5.25
42			
43	6-inch Meter	0 to 350,000 Gallons	$ 4.15
44		Over 350,000 Gallons	$ 5.25
45			
46	8-inch Meter	0 to 900,000 Gallons	$ 4.15
47		Over 900,000 Gallons	$ 5.25
48			
49	10-inch Meter	0 to 1,500,000 Gallons	$ 4.15
50		Over 1,500,000 Gallons	$ 5.25
51			
52	12-inch Meter	0 to 2,250,000 Gallons	$ 4.15
53		Over 2,250,000 Gallons	$ 5.25

Service Charges	Staff Recommended
Establishment Re-establishment and/or reconnection of Service:	
Regular Hours	$ 30.00
After Hours	$ -
Water Meter Test (If Correct)	$ 10.00
Meter Re-Read (If Correct)	$ 5.00
NSF Check Charge	$ 25.00
Late Fee Charge	1.5% Per Month
Deferred Payment Finance Charge	1.5% Per Month
Deposit Requirements Residential	**
Deposit Requirements Non-Residential	**
Deposit Interest	***

** Residential - two times the average bill. Non-residential - two and one-half times the estimated maximum bill.

*** Interest per [Per ACC Rule 14-2-403(B)]

Meter and Service Line Installation Charges	Staff Proposed *Service Line* Charge	Staff Proposed Meter *Installation* Charge	Staff Total Proposed Charge
5/8 x 3/4-inch Meter	$ 445.00	$ 155.00	$ 600.00
3/4-inch Meter	$ 445.00	$ 255.00	$ 700.00
1-inch Meter	$ 495.00	$ 315.00	$ 810.00
11/2-inch Meter	$ 550.00	$ 525.00	$ 1,075.00
2-inch Turbine Meter	$ 830.00	$ 1,045.00	$ 1,875.00
2-inch Compound Meter	$ 830.00	$ 1,890.00	$ 2,720.00
3-inch Turbine Meter	Actual Cost	Actual Cost	Actual Cost
3-inch Compound Meter	Actual Cost	Actual Cost	Actual Cost
4-inch Turbine Meter	Actual Cost	Actual Cost	Actual Cost
4-inch Compound Meter	Actual Cost	Actual Cost	Actual Cost
6-inch Turbine Meter	Actual Cost	Actual Cost	Actual Cost
6-inch Compound Meter	Actual Cost	Actual Cost	Actual Cost
8-inch or Larger	Actual Cost	Actual Cost	Actual Cost

An applicant for water service shall pay to the Company, as a refundable advance in aid of construction the full cost to provide the new service line and me

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM IT CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES,USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D(5).

ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES, IF APPLICABLE.

Arizona American Water Company - Tubac Water
Docket No. W-01303A-08-0227
Test Year Ended December 31, 2006

4 TierAlternative Schedule MEM-2

Typical Bill Analysis - 4 Tier Alternative Rate Design
General Service 5/8 x 3/4-Inch Meter

Company Propose	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	11,797	$ 49.46	$ 56.94	$ 7.48	15.12%
Median Usage	N/A				

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

Gallons Consumption	Present Rates	Staff Recommended Rates	% Increase
-	$ 19.68	$ 25.00	27.03%
1,000	21.57	26.90	24.71%
2,000	23.46	28.80	22.76%
3,000	25.35	30.70	21.10%
4,000	27.24	33.55	23.16%
5,000	30.09	36.40	20.97%
6,000	32.94	39.25	19.16%
7,000	35.79	42.10	17.63%
8,000	38.64	44.95	16.33%
9,000	41.49	47.80	15.21%
11,797	49.46	56.94	15.12%
10,000	44.34	50.65	14.23%
11,000	47.19	54.15	14.75%
12,000	50.04	57.65	15.21%
13,000	52.89	61.15	15.62%
14,000	55.74	64.65	15.98%
15,000	58.59	68.15	16.32%
16,000	61.44	71.65	16.62%
17,000	64.29	75.15	16.89%
18,000	67.14	78.65	17.14%
19,000	69.99	82.15	17.37%
20,000	72.84	85.65	17.59%
25,000	89.89	115.65	28.66%
30,000	106.94	145.65	36.20%
35,000	123.99	175.65	41.66%
40,000	141.04	205.65	45.81%
45,000	158.09	235.65	49.06%
50,000	175.14	265.65	51.68%
75,000	260.39	415.65	59.63%
100,000	345.64	565.65	63.65%

S-17

ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

2009 MAR 13 P 1: 1

AZ CORP COMMISSION
DOCKET CONTROL

EXHIBIT S-17 ADMITTED

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT AND TUBAC WATER DISTRICT.	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTIIITY PLANT AND PROPERTY AND FOR INCRESES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT.	DOCKET NO. SW-01303A-08-0227

Arizona Corporation Commission
DOCKETED
MAR 13 2009
DOCKETED BY

STAFF'S NOTICE OF FILING SURREBUTTAL TESTIMONY

Staff of the Arizona Corporation Commission ("Staff") hereby files the Surrebuttal Testimony of Elijah O. Abinah of the Utilities Division in the above-referenced matter.

RESPECTFULLY SUBMITTED this 13th day of March, 2009.

Robin R. Mitchell, Attorney
Nancy L. Scott, Attorney
Ayesha Vohra, Attorney
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, AZ 85007
(602) 542-3402

Original and thirteen (13) copies
of the foregoing were filed this
13th day of March, 2009 with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85008

Copy of the foregoing mailed this
13th day of March, 2009 to:

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DOES NOT WISH TO RECEIVE COPIES OF FILINGS MADE BY ANY PARTY IN THIS DOCKET

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SURREBUTTAL

TESTIMONY

OF

ELIJAH O. ABINAH

DOCKET NOS. W-01303A-08-0227
SW-01303A-08-0227

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANYFOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT

MARCH 13, 2009

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY FOR DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, AND TUBAC WATER DISTRICT	)	DOCKET NO. W-01303A-08-0227
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SURREBUTTAL

TESTIMONY

OF

ELIJAH O. ABINAH

ASSISTANT DIRECTOR

UTILITES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 13, 2009

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INTRODUCTION

Q. Please state your name and business address.

A. My name is Elijah O. Abinah. My business address is 1200 West Washington Street, Phoenix, Arizona, 85007.

Q. Where are you employed and in what capacity?

A. I am employed by the Utilities Division ("Staff") of the Arizona Corporation Commission ("ACC" or "Commission") as the Assistant Director.

Q. How long have you been employed with the Utilities Division?

A. I have been employed with the Utilities Division since January 2003.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Accounting from the University of Central Oklahoma in Edmond, Oklahoma. I also received a Master of Management degree from Southern Nazarene University in Bethany, Oklahoma. Prior to my employment with the ACC, I was employed by the Oklahoma Corporation Commission for approximately eight and a half years in various capacities in the Telecommunications Division.

Q. What are your current responsibilities?

A. As the Assistant Director, I review submissions that are filed with the Commission and make policy recommendations to the Director regarding those filings.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to Chairman Mayes letter docketed on November 12, 2008. In her letter, Chairman Mayes requested that the parties to this

docket provide the Commission as part of their testimony, "an analysis addressing the predicted impact of statewide and select consolidation of Arizona-American's water system".

In addition, I will respond to the testimony filed by Mr. Townsley on behalf of Arizona-American Water Company ("Arizona-American" or "Company") regarding what the Company calls systems benefits charges.

RATE CONSOLIDATION/SYSTEM INTERCONNECTION

Q. Does Staff support rate consolidation and/or system interconnection?

A. Yes, in appropriate circumstances. Staff believes where and when it makes sense and where it is technically and financially feasible, rate consolidation and system interconnections should be seriously considered by the Commission.

Q. Can you please define rate consolidation and system interconnection?

A. Rate consolidation also known as Single Tariff Prices ("STP") is "the use of a unified rate structure for multiple utility systems that are owned and operated by a single utility, but that may or may not be contiguous or physically interconnected." Whereas, system interconnection is when two or more systems or districts owned and operated by a single utility are physically connected or tied together. When a system or district is interconnected, in most instances, they share storage tanks, pipelines, etc. The Company's systems/districts, in most instances, are contiguous.

Q. When a company is physically interconnected, is it appropriate to have a STP?

A. Yes. Staff believes that, when a company is physically interconnected an STP is appropriate.

Q. Please explain.

A. Staff believes that prior to rate consolidation, the Company should first consider whether two or more systems can and should be physically interconnected. If interconnection is technically and financially feasible, then the Company should interconnect and thereafter, propose to consolidate the rates for those systems or propose an STP.

Q. Does a utility have to interconnect in order to have a rate consolidation or STP?

A. No. Staff believes that in some instances physical interconnection is not technically or financially feasible, while rate consolidation may be.

Q. Did the Company propose consolidation in its Direct Testimony?

A. No. In its Direct Testimony, the Company did not propose any rate consolidation. The Company did address or propose some form of consolidation in its Rebuttal Testimony.

Q. What is Staff's recommendation in this proceeding?

A. As stated earlier, Staff supports rate consolidation and/or system interconnection where appropriate. In this instance, Staff recommends that the Commission order Arizona-American, in its next rate case, to propose detailed rate consolidation and/or system interconnection plans where the Company believes it is technically and financially feasible.

Q. What is Staff's rationale for this recommendation?

A. As stated earlier, Staff supports rate consolidation and/or system interconnection where and when it is technically and financially feasible. As noted, the Company for ratemaking purposes, has 13 systems/districts, consisting of eight water and five wastewater districts. Currently, the Company has a rate case pending for seven of the 13 systems: six water and

one wastewater, (Mohave Wastewater). Staff believes that in order to adequately analyze the issue, the Company needs to file rate, financial, and operational information for all its systems/districts at one time.

Also, Staff believes that the Commission should proceed with caution and be mindful of any unintended consequences of rate consolidation and/or system interconnection.

Q. Please explain what you meant by unintended consequences.

A. As noted in Attachment 1, if such consolidation were to be approved, the residents of Sun City would have higher bills than the residents of Sun City West, while today the opposite is true, even though such consolidation would lower the bills for Sun City West.

Q. Please explain.

A. Based on the response from Arizona-American, a quick analysis of the effect of rate consolidation for Sun City and Sun City West will lead to disproportionate rates. (Please see Attachment 1.) Currently, an average monthly bill for a 5/8" meter in Sun City is $14.17, while in Sun City West it is $35.33. If the rates for these systems were to be consolidated Sun City's average monthly bill would increase from $14.17 to $21.49, while Sun City West's average monthly bill would decrease from $35.33 to $18.09.

Q. Does Staff have any other concerns regarding rate consolidation in this docket?

A. Yes. In addition to the other concerns listed above, A.A.C R14-2-105(A) requires that notice be given to customers affected by a rate application.

Because of the lack of notice to all of the Company's customers, Staff believes that rate consolidation cannot be undertaken in this docket. The administrative rules, as well as due process concerns, require proper notice be given.

Q. Does rate consolidation and/or system interconnection have to be statewide?

A. No. Rate consolidation and/or system interconnection does not necessarily have to be statewide. It could be statewide, it could be a combination of two or more systems/districts, rate consolidation will be achieve on countywide basis, or a combination of counties.

Q. Please explain.

A. The Commission can consider a statewide rate consolidation without taking into consideration whether the system/district is physically connected or not. Another alternative is to implement rate consolidation on a county-wide basis. For example, the Commission, if so inclined, could order the Company, in its next rate case, to propose rate consolidation for Sun City Water district, Sun City West Water district, Agua Fria Water district, Anthem Water district, and Paradise Valley Water district. For rate making purposes this would be classified as the Maricopa County Water District.

In addition, the Commission could order a single proposal for the Company's wastewater systems/districts.

The Commission, could also issue an order directing Arizona-American to propose a STP for Mohave County by consolidating the Havasu Water system/district and Mohave Water system/district and classify these as the Mohave County Water District. The Commission

could also issue a similar proposal for the Havasu Wastewater and Mohave Wastewater and classify it as Mohave County Wastewater District.

The Commission, if so inclined, could also order one rate for La Paz County, or require that the Tubac system be consolidated with Mohave County.

Q. Does Staff believe that rate consolidation and/or system interconnection is possible for all systems/districts?

A. No. Sometimes rate consolidation and/or system interconnection is not technically or financially feasible.

Q. Should rate consolidation and/or system interconnection be considered based on the type of services provided?

A. Yes. Staff believes that rate consolidation and/or system interconnection should be considered just for the type of services provided. For instance, if there is to be a rate consolidation, the Company should propose one for its water systems/districts and another or different rates for its wastewater systems/districts.

Q. How many rate making districts are within Arizona-American?

A. Staff believes that for rate making purposes, Arizona-American has 13 districts/systems, 8 water and 5 wastewater.

Q. Can you please list these districts?

A. Yes:

- Agua Fria Water district
- Agua Fria Wastewater district
- Sun City Water
- Sun City Wastewater

- Sun City West Water
- Sun City West Wastewater
- Anthem Water
- Anthem Wastewater
- Mohave Water district
- Mohave Wastewater district
- Paradise Valley Water
- Tubac Water district
- Havasu Water

Q. If the Commission is inclined to consider rate consolidation and/or system interconnection, do you have a recommendation?

A. As stated above, Staff is not recommending rate consolidation and/or system interconnection in this case. However, if the Commission is inclined to adopt rate consolidation/system interconnection, Staff recommends that the Commission consider the options listed below.

Q. Based on the location and proximity, could two or more systems/districts within Arizona-American be physically interconnected?

A. Yes. Based on the location and proximity, Staff believes the Sun City district, Sun City West district and Agua Fria district could be interconnected and thereafter, have their rates consolidated. Please see Attachment 2.

Q. Based on the location and proximity, does Staff believe other systems/districts within Arizona-American could be physically interconnected?

A. No. As noted on page 1 of Attachment 2, the distance between Anthem and Sun City West is 9.64 miles, in addition, Staff believes that due to the terrain, it would not be technically feasible to physically interconnect.

The distance between Paradise Valley and Sun City is 16.09 miles and from Paradise Valley to Agua Fria is 25.28 miles. In both scenarios, because of the location proximity and distance, it may not be financially feasible to physically interconnect.

In addition, as noted on page 2, Attachment 2, the distance between the Mohave system/district and the Havasu system is 35.27 miles. In this instance, Staff believes it is not financially and or technically feasible to physically interconnect.

Also, page 3 of Attachment 2 indicates that the Company has one system, in this case there will be no need for interconnection.

Q. Should location and proximity of the district or system be the only deciding factor?

A. No. Staff believes other factors such as cost of interconnection, and the terrain be considered prior to physical interconnection.

Q. Should the Commission establish, at a minimum, a set of criteria in considering rate consolidation and/or system interconnection?

A. Yes. Staff believes that, at a minimum, the Commission should establish certain criteria for rate consolidation and/or system interconnection.

Q. What criteria should be considered in recommending rate consolidation?

A. Staff believes that the following criteria should be utilized at the minimum:

- Public health and safety – These issues come into play with small, troubled water systems that are not currently a part of a larger system. Small troubled systems often need substantial investment to alleviate health or public safety issues such as water

quality. Upgrades to such systems can be significant and substantial, since this may be spread over only a few customers, rates will move up drastically. One of the most valuable outcomes of consolidated rates is that it allows the purchase of these systems by larger, more stable companies who can in turn spread this investment over a much larger customer base. For example, if a small, 300 customer system needed to make an investment of $1.0 million each customer would face an increase of roughly a $50 per month, just to meet the revenue requirement for this investment. If on the other hand, we had a consolidated tariff and could spread that same revenue requirement over 100,000 customers, each customer would face an increase of only $0.15 per month.

- Proximity and location – Proximity may help psychologically getting people to accept single tariffs, but it certainly is not a requirement. Physical interconnection should be required when systems/districts are closer and it is technically and financially feasible.

- Community of interest – Staff believes that prior to rate consolidation and/or system interconnection, the Company should consider whether those districts/systems have a common interest such as, schools, hospitals, recreational parks, churches, etc. If the districts have those things in common, and it is technically and financially feasible, then system interconnection could make sense.

- Economies of scale/rate case expense – One area where there would be significant economies of scale would be in the preparation of rate cases. Preparing, analyzing and litigating the consolidated cases could be much more efficient than processing with individual cases. Issues which have caused delays and added costs such as allocating

shared plant or other costs between districts could disappear as there would be only a single number for rate base or expenses.

- Price shock/mitigation – Price shock is an issue during the transition period and, in reality, is relative to the prices people pay now. It is also important to remember that there will be communities that clearly benefit from this and others that do not.

  For example, if Sun City and Sun City West consolidate, the average price would be roughly $20 per month. For Sun City customers, this would amount to an increase of roughly $7 per month which is substantial but not insurmountable. On a relative basis however, this is a 54 percent increase and this figure is bound to garner unfavorable publicity. For the Sun City West residents, this would represent a decrease from current rates and a significant decrease from the proposed average rate of $35 per month demonstrating the clear benefit these residents would experience.

  Mitigating efforts can occur on several fronts. First, the focus needs to stay on the absolute not the relative amounts, as the absolute amounts are what people will actually need to pay out of pocket.

  Secondly, a low income program could be initiated. Currently, the areas in the most need are least able to fund the program and the more affluent areas, where the need is lower, are more able to fund programs.

- Public policy – Public policy will be a key part of tariff consolidation. There are several examples of public policy driving regulatory decisions that differ from a purely theoretical view on regulatory practices. Public policy on water conservation is one of

the key drivers behind the increasing block tariffs used to promote conservation even though, in a traditional "cost of service" model, one might expect to see the opposite. Public policy is also behind the push to switch water use from non-renewable ground water to renewable sources like surface water even though ground water may be less expensive in the short term. The key public benefits related to tariff consolidation include:

1. The opportunity for efficient consolidation of small troubled water companies, some of which may be some distance from other companys' current footprint.
2. The ability to minimize severe price shocks experienced by one or two communities as a new facility or major upgrade is undertaken.
3. Improving the effectiveness of certain key programs such as low income tariffs by including resources from across the state.

- Other jurisdictions/municipalities – Staff believes that the Commission should examine how and if this issue is being addressed by other jurisdictions.

Q. Have you reviewed the testimony file by Arizona-American with regard to systems benefits charges?

A. Yes.

Q. Can you briefly discuss the Company's request or recommendation?

A. Yes. On page 17, lines 1 - 9, Mr. Townsley suggested that "the Commission could consider implementing a surcharge across all districts to pay down the investment levels in higher level districts over time". He also suggested that the proceeds from these

surcharges would be used as Contributions in Aid of Construction ("CIAC") and credited to Arizona-American. Thereby, reducing its net-plant (rate base) in a district.

In addition, he compares the proposed surcharge to what has been used by electric utilities as systems benefit charges.

Q. Does Staff agree with such recommendations?

A. No. Staff believes the proposal is premature. A detailed analysis needs to be performed and other mechanisms need to be examined. Without adequate discussion and analysis, Staff will not support such a proposal. Staff believes it would be more appropriate to consider and examine the issue in the Company's next rate case.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes it does.

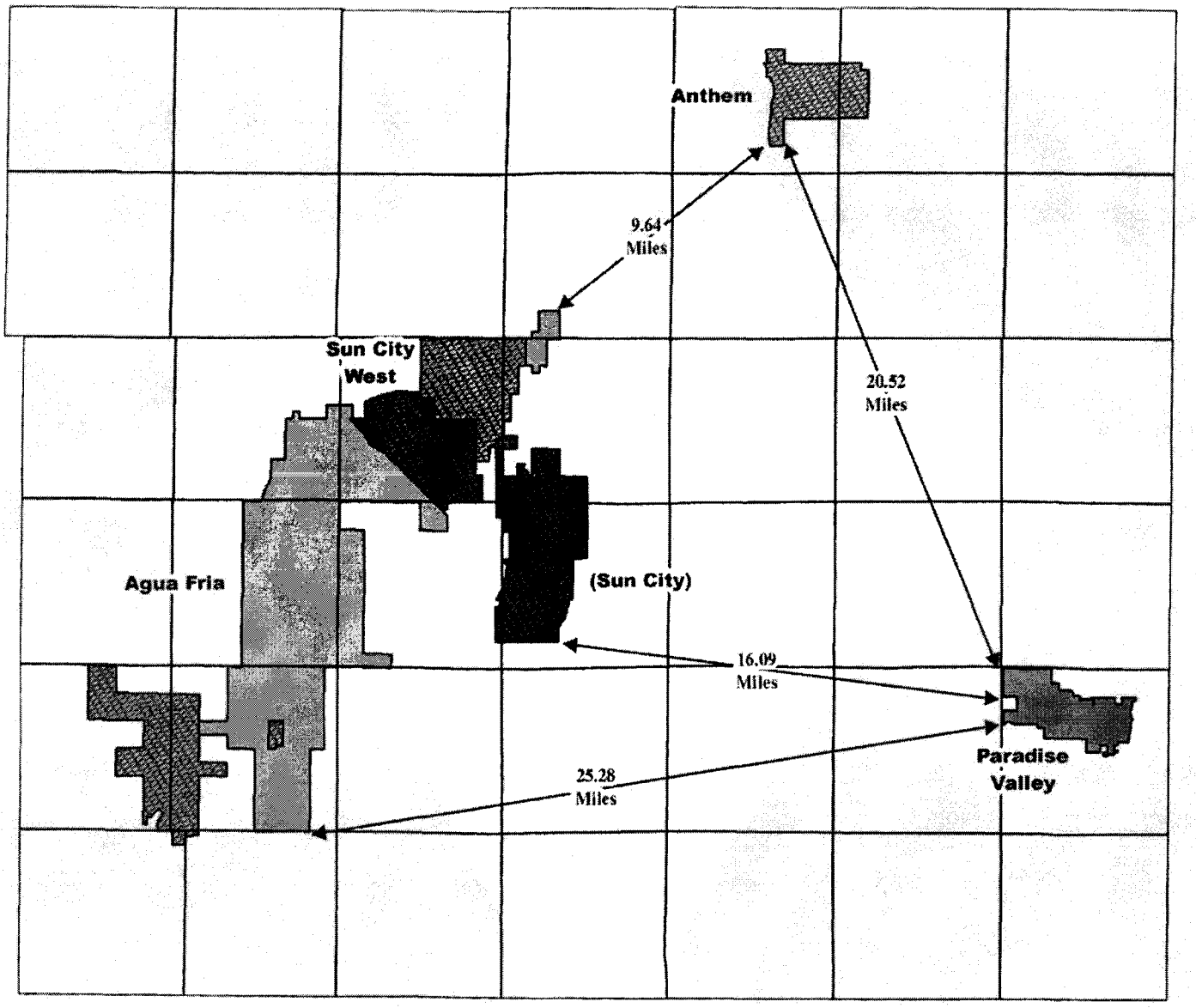
SCENARIO: 2 DISTRICT RESIDENTIAL RATE CONSOLIDATION

Meter Size	Anthem	Aqua Fria	Havasu	Mohave	Paradise Valley	Sun City	Sun City West	Tubac	Total
Average Gallons 5/8"	10,101	7,679	9,796	8,121	20,458	8,280	6,702	11,740	
UNCONSOLIDATED RESIDENTIAL RATES									
5/8 & 3/4	$0	$0	$0	$0	$0	$3,389,239	$5,957,328	$0	$9,346,568
1	$0	$0	$0	$0	$0	$127,597	$157,769	$0	$285,366
1.5	$0	$0	$0	$0	$0	$1,788,716	$1,469,445	$0	$3,258,161
2	$0	$0	$0	$0	$0	$825,185	$538,188	$0	$1,363,374
3	$0	$0	$0	$0	$0	$14,350	$0	$0	$14,350
4	$0	$0	$0	$0	$0	$0	$368,296	$0	$368,296
6	$0	$0	$0	$0	$0	$6,185	$0	$0	$6,185
8	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL	$0	$0	$0	$0	$0	$6,151,273	$8,491,027	$0	$14,642,300
Average Monthly Bill 5/8"	$0.00	$0.00	$0.00	$0.00	$0.00	$14.17	$35.33	$0.00	
CONSOLIDATED RESIDENTIAL RATES									
5/8 & 3/4	$0	$0	$0	$0	$0	$5,139,088	$3,050,765	$0	$8,189,853
1	$0	$0	$0	$0	$0	$199,618	$86,036	$0	$285,654
1.5	$0	$0	$0	$0	$0	$3,132,360	$914,867	$0	$4,047,227
2	$0	$0	$0	$0	$0	$1,428,689	$332,192	$0	$1,760,882
3	$0	$0	$0	$0	$0	$26,249	$0	$0	$26,249
4	$0	$0	$0	$0	$0	$0	$319,673	$0	$319,673
6	$0	$0	$0	$0	$0	$12,745	$0	$0	$12,745
8	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL	$0	$0	$0	$0	$0	$9,938,750	$4,703,532	$0	$14,642,283
Average Monthly Bill 5/8"	$0.00	$0.00	$0.00	$0.00	$0.00	$21.49	$18.09	$0.00	
INCREASE/(DECREASE) IN RESIDENTIAL RATES NEEDED TO CONSOLIDATE									
5/8 & 3/4	$0	$0	$0	$0	$0	$1,749,849	($2,906,564)	$0	($1,156,715)
1	$0	$0	$0	$0	$0	$72,021	($71,733)	$0	$288
1.5	$0	$0	$0	$0	$0	$1,343,644	($554,579)	$0	$789,066
2	$0	$0	$0	$0	$0	$603,504	($205,996)	$0	$397,508
3	$0	$0	$0	$0	$0	$11,899	$0	$0	$11,899
4	$0	$0	$0	$0	$0	$0	($48,623)	$0	($48,623)
6	$0	$0	$0	$0	$0	$6,560	$0	$0	$6,560
8	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL	$0	$0	$0	$0	$0	$3,787,477	($3,787,495)	$0	($17)
	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	61.5723%	-44.6058%	0.0000%	-0.0001%
Change in Monthly Bill 5/8"	$0.00	$0.00	$0.00	$0.00	$0.00	$7.32	($17.24)	$0.00	

Assumptions: Sun City based on existing rates, Sun City West based on 5-1-08 proposed rate case

WS-01303A Sewer
Arizona American Water Company

Maricopa County



Arizona American Water Company

Mohave County

ATTACHMENT 2
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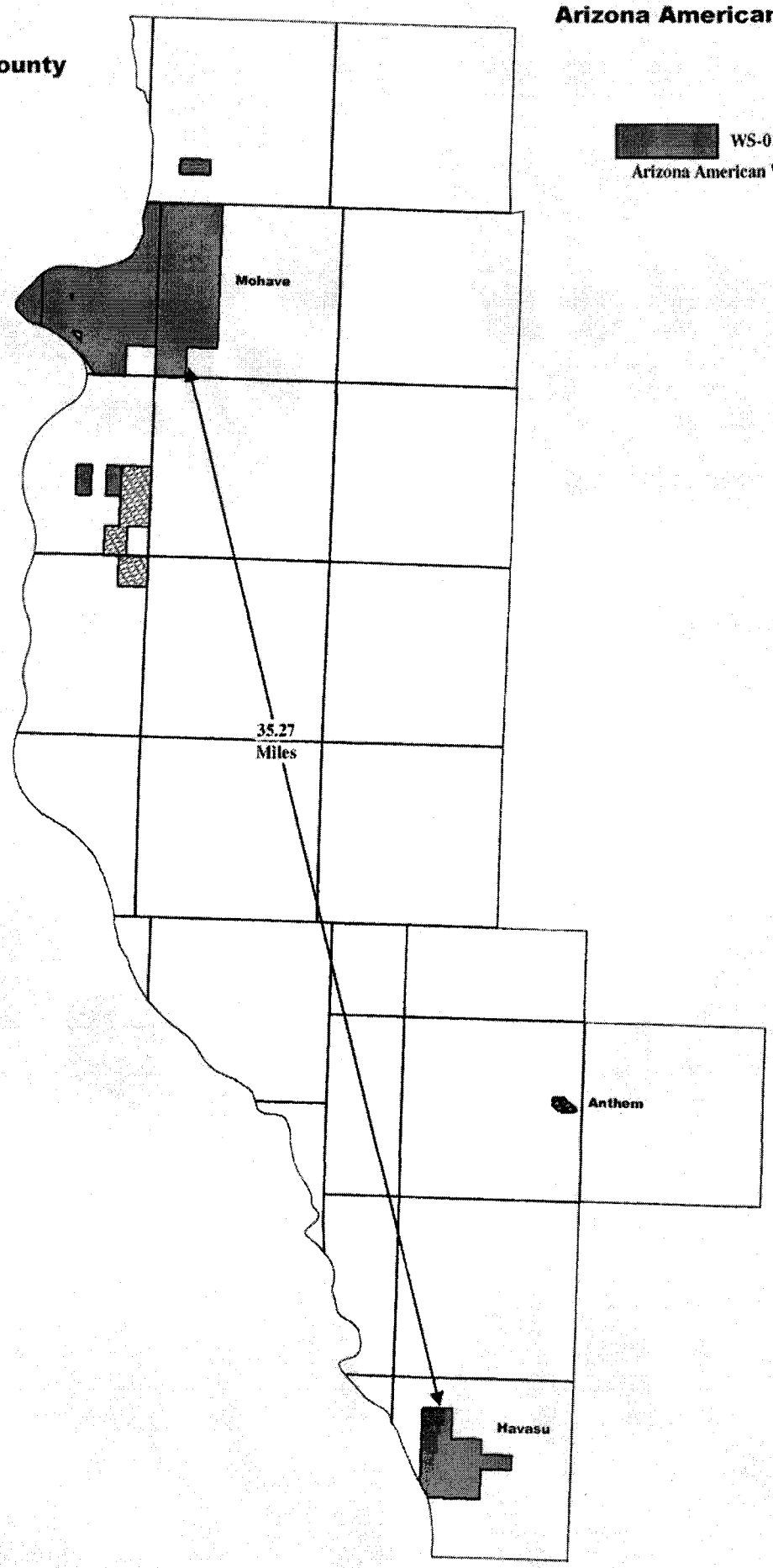

WS-01303A
Arizona American Water Company

Santa Cruz County

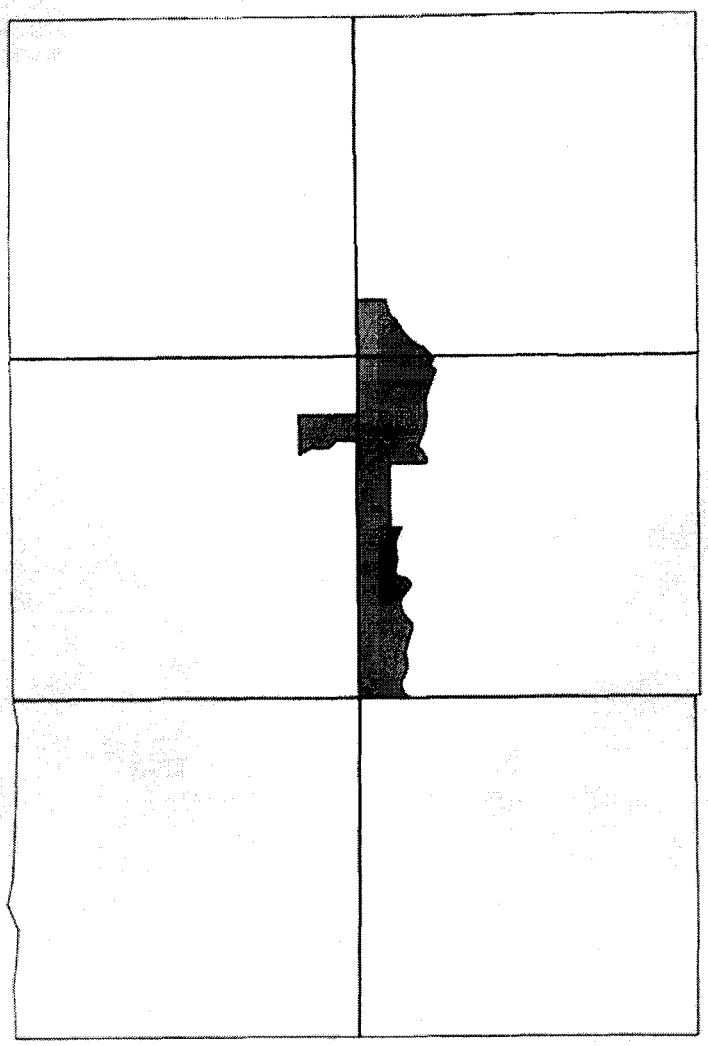

EXHIBIT
A-1
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

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

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT.	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REVISED DIRECT TESTIMONY
OF
JOSEPH E. GROSS, P. E.
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
JUNE 20, 2008

REVISED DIRECT TESTIMONY
OF
JOSEPH E. GROSS, P. E.
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
JUNE 20, 2008

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EXECUTIVE SUMMARY

Mr. Gross testifies as follows:

Arizona-American has three major capital projects under way for which it seeks to recover associated post-test-year investment:

1. White Tanks Regional Water Treatment Plant. The White Tanks Regional Water Treatment Plant ("White Tanks Plant"), currently under construction, is a 13.5 MGD surface water treatment facility to treat CAP water for distribution to customers in the Agua Fria Water District. Construction of the White Tanks Plant began in November 2007. As of March 31, 2008, total White Tanks Plant investment, including pre-construction costs, was $13 million. By September 30, 2008, the total investment should total $31 million. The overall project budget is estimated at $61.5 million.

2. Mohave Wastewater Treatment Plant Expansion. In September 2007, Arizona-American began expanding the capacity of the Wishing Well Wastewater Treatment Plant ("Mohave Treatment Plant") that treats wastewater for Mohave Wastewater District customers. Based on growth projections, demands will approach the 250,000 gpd design capacity of the Mohave Treatment Plant in 2008. The expansion of the Mohave Treatment Plant will add 250,000-gallons-per-day in new treatment capacity, allowing service for up to 1,500 additional service connections. Arizona-American expects to place the Mohave Treatment Plant Expansion in service in July 2008. As of the end of the test year, Arizona-American had invested $1.5 million in the Mohave Treatment Plant Expansion. The total investment is expected to be $4.0 million.

3. Paradise Valley Fire Flow Project, Phase 3. In its Paradise Valley Water District, Arizona-American is in the midst of a multi-year, phased, program to upgrade main capacity, add fire hydrants, increase water storage and pumping capacity. Arizona-American expects to complete Phase 3 of its fire-flow projects by September 30, 2008, at a cost of $3.6 million. In 2007, we began constructing one-half mile of 24" water main in McDonald Drive. Phase 3 construction will continue in 2008, with one-half mile of 16" water main in Lincoln Drive, and one-third mile of 8" water main in Tatum Boulevard.

Arizona-American also has five smaller projects underway, which should be completed in time for the Commission Staff's engineering report.

1. Well 12 Replacement (Paradise Valley Water). The existing Well 12 is being replaced due to a failure in its casing, which restricted its production to approximately 50% of the original 2200 gallons per minute. The replacement well will allow the facility to regain its original production capacity, and should be completed by December 2008, at a cost of $1.93 million.

2. Big Bend Acres Tank (Mohave Water). This storage tank is being built to replace an old existing tank which has experienced severe structural problems and has inadequate capacity. The new 250,000 gallon tank should be completed by August 31, 2008, at a cost of $611,000.

3. Sierra Montana Tank (Agua Fria Water). This 2.2 million gallon storage tank is being built to increase storage capacity at Arizona-American's Water Plant 8. The tank should be completed in August 2008, at a cost of $2.05 million.

4. Distribution System Improvements, Phase 2 (Agua Fria Water). This consists of essential projects needed for groundwater distribution and storage improvements before the 2010 completion of the White Tanks Plant. The components of this project involve connecting an MWD well to the reservoir at Water Plant 8, adding a water line to serve the Cool Well subdivision, and eliminating a pipeline bottleneck at Bell and Reems Roads. The three components of this project should be completed in October 2008, at a total cost of $1.19 million.

Tubac Arsenic Treatment Facility. Arizona-American is also planning to build an arsenic-treatment facility for its Tubac Water District to comply with the new arsenic mcl. The EPA denied our request for a three-year exemption. The current plan is to partner with the developer of Tubac Marketplace, a commercial project in the downtown area. The partnership reduces the expected cost of the facilities by approximately $1 million. The developer will provide the required site, storage, and pumping capacity; and Arizona-American will provide the water-supply and arsenic-treatment facilities. The present cost estimate is $2.3 million. Design will begin this summer (2008), with construction to begin in spring 2009 and be completed approximately one year later.

Mohave County Comprehensive Planning Study. This study lays out a five-year plan for prioritized improvements required to provide adequate water supply, storage, and pumping capacity within the Bullhead City and Havasu service areas. In Bullhead City, site procurement is underway this year for one well, which should be operational in 2009. Also, the Big Bend Acres 250,000-gallon storage tank will be completed in August 2008. Future projects include additional wells, storage, and an interconnection with Bermuda Water. In the Havasu Water District, an interconnection with the City of Lake Havasu will be completed this year. Future projects include upgrades to Well No. 9, additional storage facilities, and SCADA improvements.

Agua Fria Water Supplies. Because of the construction of the White Tanks Plant, developer are now only being required to supply water to satisfy average-day demand for the development, rather than maximum-day demand. New groundwater supplies will still be required to meet customer demands during the annual scheduled outage of the Beardsley Canal, scheduled outages of the White Tanks Plant, and any unscheduled outages of the Canal, Plant, or associated facilities. There is no longer any need for the 3.5-mile contingency pipeline.

Agua Fria District Projected Growth. Arizona-American previously forecast 4200 new hook-ups in 2008. Because of the recent real-estate slowdown, the Company now expects many fewer hook-ups in 2008, with the downward trend expected to continue. Further, many existing projects are grandfathered, so these customers will not be responsible for the increased hook-up fee. A forecast of new customers that will actually be subject to the increased hook-up fees follows:

Year	2008	2009	2010	2011	2012	2013
Customers	134	615	764	1030	1031	2180

Therefore the proceeds generated by hook-up fees to fund the White Tanks Plant will also be much less.

I INTRODUCTION AND QUALIFICATIONS

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

A. My name is Joseph E. Gross. My business address is 19820 N. 7th Street, Suite 201, Phoenix, Arizona 85024, and my telephone number is 623-445-2401.

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

A. I am employed by Arizona-American Water Company ("Arizona-American") as Director of Engineering for Arizona, New Mexico, Hawaii, and Texas.

Q. PLEASE BRIEFLY OUTLINE YOUR RESPONSIBILITIES IN ARIZONA AS THE DIRECTOR OF ENGINEERING.

A. I am responsible for the planning, programming, and project delivery of Arizona-American's capital program; first providing input to the budgeting process, then providing oversight of the design and construction contracts to ensure compliance with assigned budget and schedule.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science degree from the United States Military Academy in civil engineering and a Master of Science degree from the Ohio State University in Geodetic Science.

Q. HAVE YOU HAD ANY OTHER FORMAL TRAINING?

A. I attended two-week senior executive management training programs at Carnegie Mellon University in 1986 and at Arizona State University in 1994.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. I joined Arizona-American in October 2004. I was previously employed by the City of Scottsdale for fourteen years in the positions of Capital Project Management Director, Water Campus Project Director, and Water Resources Director. Before that, I had extensive field-level and executive-level experience in the US Army Corps of Engineers, including large projects located in the United States, Iran, and Saudi Arabia. Among other responsibilities, I supervised the Corps' extensive flood-control projects in the Phoenix metropolitan area from 1979 to 1982.

Q. ARE YOU A REGISTERED PROFESSIONAL ENGINEER?

A. Yes, I am a registered Professional Engineer in the states of Arizona and Pennsylvania.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. I submitted testimony in Arizona-American's White Tanks hook-up fee case (Docket No. W-1303A-05-0718), its arsenic-cost-recovery mechanism ("ACRM") case for its Agua Fria, Sun City West, and Havasu Water Districts (Docket No. W-01303A-05-0280, *et. al*), its Paradise Valley Water District rate case (Docket No. W-01303A-05-0405), and in its Sun City Water District rate case (Docket No. W-01303A-07-0209).

II PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. Please refer to the Executive Summary, which precedes my testimony.

III MAJOR CONTINUING CAPITAL PROJECTS

Q. PLEASE DESCRIBE ARIZONA-AMERICAN'S MAJOR CONTINUING CAPITAL PROJECTS.

A. The following major capital projects were begun during the test year (2007) and are still under construction:

- White Tanks Regional Water Treatment Plant;

- Mohave Wastewater Treatment Plant Expansion; and
- Paradise Valley Fire Flow Project, Phase 3.

I will next discuss each project in greater detail.

A WHITE TANKS REGIONAL WATER TREATMENT PLANT

Q. WHAT IS THE WHITE TANKS REGIONAL WATER TREATMENT PLANT?

A. The White Tanks Regional Water Treatment Plant ("White Tanks Plant"), currently under construction, is a surface-water treatment facility. Arizona-American holds a Central Arizona Project ("CAP") water subcontract for 11,093 acre-feet per year, and has designed the White Tanks Plant to treat CAP water for distribution to customers in the Agua Fria Water District. The White Tanks Plant is designed to treat 13.5 million gallons per day ("MGD") in Phase I(a). It is expandable to 20 MGD in Phase I(b) with the addition of one more treatment-unit train. Eventually the White Tanks Plant can accommodate the addition of three additional 20-MGD phases, for a total treatment capacity of 80 MGD at the 45-acre plant site. With expansion, the White Tanks Plant will be able to treat additional CAP water or other surface-water supplies.

Q. WHAT IS THE STATUS OF THE WHITE TANKS PLANT?

A. The White Tanks Plant is located on an Arizona-American-owned parcel near the intersection of Cactus Road and Perryville Road, adjacent to the Beardsley Canal. Facilities will include a new raw water intake, a water treatment plant, and a high-service pumping station.

Construction of the White Tanks Plant began in November 2007, with Garney Construction as the prime contractor. Before construction actually began, $6 million had already been invested in pre-construction costs, primarily project design, site acquisition, legal, and internal costs.

As of March 31, 2008, total White Tanks Plant investment, including pre-construction costs, was $13 million. By September 30, 2008, the total investment should reach $31 million.

Q. WHEN WILL THE WHITE TANKS PLANT BEGIN SERVING AGUA FRIA WATER CUSTOMERS?

A. Arizona-American expects to place the White Tanks Plant in service in the second quarter of 2010. Arizona-American will then be able to use the full Phase IA capacity (13.5 MGD) to serve Agua Fria Water District customers with treated CAP Water.

Q. WHAT IS THE EXPECTED TOTAL COST OF THE WHITE TANKS PLANT?

A. The overall project budget is estimated at $61.5 million. Mr. Townsley and Mr. Broderick are requesting various Commission authorizations pertaining to cost recovery of the White Tanks Plant.

B <u>MOHAVE WASTEWATER TREATMENT PLANT EXPANSION</u>

Q. WHY IS ARIZONA-AMERICAN EXPANDING ITS MOHAVE WASTEWATER TREATMENT PLANT?

A. Mohave Wastewater District customers are served by the Wishing Well Wastewater Treatment Plant ("Mohave Treatment Plant").[1] The Mohave Treatment Plant experienced peak demands of over 200,000 gallons per day in 2007, and has an existing design capacity of 250,000 gallons per day. Based on growth projections, demands will approach the design capacity of the Mohave Treatment Plant in 2008.

In September 2007, Arizona-American began expanding the capacity of the Mohave Treatment Plant, based on a final design and low bid submitted by Technology

[1] There is another small wastewater treatment system that treats wastewater produced by three commercial customers.

Construction, Inc. An Aquifer Protection Permit has already been issued and the Arizona Department of Environmental Quality has approved adding 250,000-gallons-per-day in new treatment capacity. The expansion of the Mohave Treatment Plant will allow service for up to 1,500 additional service connections.

Q. WHEN WILL THE MOHAVE TREATMENT PLANT EXPANSION BEGIN SERVING MOHAVE WASTEWATER CUSTOMERS?

A. Arizona-American expects to place the Mohave Treatment Plant Expansion in service in July 2008.

Q. WHAT IS THE EXPECTED TOTAL COST OF THE MOHAVE TREATMENT PLANT EXPANSION?

A. As of the end of the test year, Arizona-American had invested $1.5 million in the Mohave Treatment Plant Expansion. The total investment is expected to be $4.0 million. This project is included in Schedule B-2 rate base adjustment LJG-8.

C <u>PARADISE VALLEY FIRE FLOW PROGRAM (PHASE 3)</u>

Q. WHAT IS THE PARADISE VALLEY FIRE-FLOW PROGRAM?

A. In its Paradise Valley Water District, Arizona-American is in the midst of a multi-year, phased, program to upgrade main capacity, add fire hydrants, increase water storage and pumping capacity.

Q. WHAT INVESTMENTS ARE SCHEDULED FOR 2008?

A. Arizona-American expects to complete Phase 3 of its fire-flow projects by September 30, 2008, at a cost of $3.6 million. In 2007, we began constructing one-half mile of 24" water main in McDonald Drive. Phase 3 construction will continue in 2008, with one-half mile of 16" water main in Lincoln Drive, and one-third mile of 8" water main in Tatum Boulevard.

Q. WHAT PROJECTS ARE SCHEDULED AFTER 2008?

A. Design is basically complete for the projects scheduled for 2009 and 2010. Arizona-American is working closely with the Town concerning scheduling and traffic impact of the construction projects.

Q. HOW DOES ARIZONA-AMERICAN PROPOSE TO RECOVER ITS PHASE 3 FIRE-FLOW INVESTMENTS?

Mr. Broderick proposes to recover investments for Phase 3 and subsequent phases through a re-design of the existing Public Safety surcharge. Please see his testimony for more details.

IV <u>OTHER POST-TEST YEAR CAPITAL PROJECTS</u>

Q. ARE THERE ANY OTHER CAPITAL PROJECTS THAT ARIZONA-AMERICAN EXPECTS TO COMPLETE BEFORE COMMISSION STAFF COMPLETES ITS ENGINEERING AUDIT?

A. Yes. The four projects below should be completed in time for the Commission Staff engineering report in this case.

1. Well 12 Replacement (Paradise Valley Water)
2. Big Bend Acres Tank (Mohave Water)
3. Sierra Montana Tank (Agua Fria Water)
4. Distribution System Improvements, Phase 2 (Agua Fria Water)

Arizona-American requests that these projects be included in rates established in this case and each project is displayed within the B Schedules for each respective district. However, all capital projects are under evaluation, which may delay some of these projects. Arizona-American will update the status of these projects in its rebuttal testimony.

Q. PLEASE BRIEFLY DISCUSS EACH PROJECT, ITS COST, AND ITS EXPECTED COMPLETION DATE.

A. Certainly. I will briefly discuss each project in turn.

Well 12 Replacement (Paradise Valley Water). The existing Well 12 is being replaced due to a failure in its casing, which restricted its production to approximately 50% of the original 2200 gallons per minute. The replacement well, on the site of the arsenic-treatment plant and 140 feet from the existing well, will allow the facility to regain its original production capacity needed to serve our customers. This replacement well should be completed by December 2008 at a cost of $1.93 million.

Big Bend Acres Tank (Mohave Water). This storage tank is being built to replace an old existing tank which has experienced severe structural problems and has inadequate capacity. The new 250,000 gallon tank, to be constructed on the same site, should be completed by August 31, 2008, at a cost of $611,000.

Sierra Montana Tank (Agua Fria Water). This 2.2 million gallon storage tank is being built to increase storage capacity at Arizona-American's Water Plant 8. The added capacity is needed to accommodate future growth and fire-flow requirements. The tank should be completed in August 2008, at a cost of $2.05 million.

Distribution System Improvements, Phase 2 (Agua Fria Water). This project began in 2007 as a result of Arizona-American's 2004 Source-of-Supply Study, which determined essential projects needed for groundwater distribution and storage improvements before the 2010 completion of the White Tanks Plant. The components of this project involve connecting an MWD well to the reservoir at Water Plant 8, adding a water line to serve the Cool Well subdivision, and eliminating a pipeline bottleneck at Bell and Reems Roads. This bottleneck consisted of a 12" pipe connecting two 16"

pipes, which severely restricted distribution of water from north to south. The project is being constructed in partnership with a City of Surprise roadway project, thus reducing costs to our customers. The three components of this project should be completed in October 2008 at a total cost of $1.19 million.

V TUBAC ARSENIC-TREATMENT FACILITY

Q. IS ARSENIC TREATMENT REQUIRED IN THE TUBAC WATER DISTRICT?

A. Yes. As discussed by Mr. Cole, the U. S. Environmental Protection Agency has denied our request for a three-year exemption and now Arizona-American must construct an arsenic-treatment facility for its Tubac Water customers in order to comply with the new federal arsenic standards.

Q. HOW WILL ARIZONA-AMERICAN TREAT ARSENIC IN TUBAC?

A. In 2004, Arizona-American designed a treatment project to comply with the new EPA Arsenic Rule. This project was opposed by citizens, primarily due to the impact on water rates and the project location. Since that time, the Company has investigated a number of options, including point-of-use treatment in homes, and partnering with developers needing additional storage and pumping capacity. The current plan is to partner with the developer of Tubac Marketplace, a commercial project in the downtown area.

Q. HOW DOES PARTNERING WITH THE TUBAC MARKETPLACE DEVELOPER BENEFIT TUBAC WATER CUSTOMERS?

A. The partnership reduces the expected cost of the facilities by approximately $1 million. The developer will provide the required site, storage, and pumping capacity; and Arizona-American will provide the water-supply and arsenic-treatment facilities.

Q. WHAT IS ARIZONA-AMERICAN'S REVISED ESTIMATE FOR ITS SHARE OF THE TUBAC ARSENIC TREATMENT FACILITY?

A. The present estimate is $2.3 million.

Q. HOW DOES ARIZONA-AMERICAN PROPOSE TO RECOVER THE COST OF THE TUBAC ARSENIC TREATMENT FACILITY?

A. Mr. Broderick discusses Arizona-American's proposal to recover the facility's cost through an ACRM mechanism similar to that currently in effect in other districts.

Q. WHAT IS THE SCHEDULE FOR CONSTRUCTING THE TUBAC ARSENIC TREATMENT FACILITY?

A. Design will begin this summer (2008), with construction to begin in spring 2009 and completed approximately one year later.

VI MOHAVE COUNTY COMPREHENSIVE PLANNING STUDY

Q. WHAT IS THE MOHAVE COUNTY COMPREHENSIVE PLANNING STUDY?

A. This study was completed in 2007 and lays out a five-year plan for prioritized improvements required to provide adequate water supply, storage, and pumping capacity within the Bullhead City and Havasu service areas.

Q. WHAT IS ARIZONA-AMERICAN DOING TO IMPLEMENT THE STUDY'S RECOMMENDATIONS?

A. In Bullhead City, site procurement is underway this year for one well, which should be operational in 2009. Also, the Big Bend Acres 250,000-gallon storage tank will be completed in August 2008. Future projects include additional wells, storage, and an interconnection with Bermuda Water. In the Havasu Water District, an interconnection with the City of Lake Havasu will be completed this year. Future projects include upgrades to Well No. 9, additional storage facilities, and SCADA improvements.

VII AGUA FRIA WATER SUPPLIES

Q. IN DECISION NO. 69914, DATED SEPTEMBER 27, 2007, THE COMMISSION ORDERED THAT ARIZONA-AMERICAN TAKE SEVERAL ACTIONS CONCERNING WATER SUPPLIES IN THE COMPANY'S AGUA FRIA WATER DISTRICT. ARE YOU FAMILIAR WITH THAT DECISION?

A. Yes. The Commission ordered (page 30):

> IT IS FURTHER ORDERED that Arizona-American Water Company shall review its existing line extension agreements in the Agua Fria Water District that require developers to drill new wells, in order to determine whether it is feasible to amend those line extension agreements to reduce the number of required wells, in cooperation with the parties to those line extension agreements.
>
> IT IS FURTHER ORDERED that, in conjunction with the review of line extension agreements required by the previous Ordering Paragraph, Arizona-American Water Company shall consider whether there exist less costly alternatives for the utility and the developers to supply water for new developments in order to minimize and otherwise supplant the number of new wells that will need to be drilled in the Agua Fria District. In the course of this review, Arizona-American Water Company shall consider a proposed 3.5 mile contingency pipeline alternative in relation to the requirement for new wells to be drilled in the southern portion of the Agua Fria District.

Q. HAS ARIZONA-AMERICAN EVALUATED WHETHER IT CAN REDUCE THE "NUMBER OF NEW WELLS THAT WILL NEED TO BE DRILLED IN THE AGUA FRIA DISTRICT"?

A. Yes. Completion of the White Tanks Plant will allow Arizona-American to treat its 11,093 acre-feet per year CAP water allotment and to supply this renewable water supply to our Agua Fria customers. This will benefit existing and future customers by substantially reducing the need for new wells in the district. As a result, developers will now be required to only supply water to satisfy <u>average</u>-day demand for the development,

rather than maximum-day demand. Changing from a maximum-day to average-day demand requirement for RED Development's Prasada Mixed Use Gateway, located at Cactus Road and the 303 Freeway, reduced the number of required wells from six to two. Similarly, at Fulton Homes' Prasada Lakes Development, located on Cactus Road from Perryville to Citrus, the changed demand requirement dropped the number of needed wells from four to two.

Q. WHY ARE ANY NEW WELLS STILL REQUIRED?

A. Groundwater supplies will still be required to meet customer demands during the annual scheduled outage of the Beardsley Canal, scheduled outages of the White Tanks Plant, and any unscheduled outages of the Canal, Plant, or associated facilities.

Q. HAS ARIZONA-AMERICAN CONSIDERED THE 3.5-MILE CONTINGENCY PIPELINE ALTERNATIVE DISCUSSED BY THE COMMISSION?

A. Yes. The 3.5-mile pipeline was considered as a possible contingency if the White Tanks Plant could not be constructed in a timely manner. Now that Plant construction is underway, there is no need for that contingency pipeline.

VIII AGUA FRIA DISTRICT PROJECTED GROWTH

Q. TO SUPPORT ITS EARLIER REQUEST TO INCREASE WATER HOOK-UP FEES IN ITS AGUA FRIA WATER DISTRICT, ARIZONA-AMERICAN INCLUDED A FORECAST OF CUSTOMER GROWTH, NEW WATER-SUPPLY PROJECT COSTS, AND HOOK-UP FEE REVENUES. ARE YOU FAMILIAR WITH THAT FORECAST?

A. Yes. This projection was provided to the Commission in Docket No. W-01303A-05-0718, the docket that culminated in Decision No. 69914, dated September 27, 2007.

Arizona-American used this projection to support its request for an increased hook-up fee.

Q. IS THIS CUSTOMER GROWTH PROJECTION STILL ACCURATE?

A. No. Because of the current real-estate slow-down, Arizona-American evaluated the impact of the current housing-market decline on projected proceeds from hook-up fees required to finance the White Tanks Plant and other improvements in the district.

Q. WHAT IS THE UPDATED (LOWER) CUSTOMER-GROWTH FORECAST FOR THE AGUA FRIA WATER DISTRICT AS A RESULT OF THE REAL ESTATE SLOW-DOWN?

A. The new customer-growth forecast follows:

Year	2008	2009	2010	2011	2012	2013
Customers	1447	1564	1848	2330	2601	2630

However, it is important to note that not all these customers will be subject to the increased water-facilities hook-up fee. Many of the customers that will be added to the system will be grandfathered, primarily because the associated on-site facilities were completed before the effective date of the new tariff.

Q. WHAT IS THE UPDATED FORECAST OF CUSTOMERS THAT WILL ACTUALLY BE SUBJECT TO THE INCREASED HOOK-UP FEE?

A. The forecast of new customers that will actually be subject to the increased hook-up fee follows:

Year	2008	2009	2010	2011	2012	2013
Customers	134	615	764	1030	1031	2180

Mr. Broderick's Exhibit TMB-4 uses this lower forecast to project the proceeds that will be available to fund the White Tanks Plant and for other purposes.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes and I look forward to working with Commission Staff engineers as they prepare for and conduct their field audit of the projects I discussed herein.

EXHIBIT
A-2
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REBUTTAL TESTIMONY
OF
JOSEPH E. GROSS
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
DATED FEBRUARY 10, 2009

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I EXECUTIVE SUMMARY

Mr. Gross testifies as follows:

Arizona-American's White Tanks Water Treatment has been under construction for over one year and is on schedule to be in service by December 2009, at a total project cost of approximately $62 million. Because of the current economy, customer growth has continued to slow. Arizona-American now projects the following number of additional customers will be subject to the Agua Fria Water District Hook-Up fee:

Year	2008	2009	2010	2011	2012	2013
Customers	48	98	154	293	545	645

Staff witness Dorothy Hains proposes disallowance of one adsorber vessel at each of three of Arizona-American's arsenic-treatment plants, Agua Fria Water Plant No. 5, Havasu Water Plant No. 4, and Sun City West Water Plant No. 2. This would be improper. Without these adsorber vessels, the plants could not treat the full output of the associated wells, which would jeopardize the water supplies in these districts.

The 2.2 million gallon Sierra Montana Reservoir was placed in service as post-test-year plant on December 8, 2008, at a cost of $1,794,728.

The Agua Fria Phase 2 distribution system improvements project was placed into service as post-test-year plant on October 6, 2008 at a cost of $1,389,895.

The .25 million gallon Big Bend Acres Reservoir was placed into service on November 26, 2008, at a cost of $643,127.

Arizona-American is currently designing an arsenic treatment facility at Water Plant No. 5, which should be in service by summer 2010. This facility is required to comply with the EPA revised arsenic standards of 10 parts per billion, issued in January 2001. Mr. Magruder's interpretation of the EPA standards is incorrect. Arizona-American is no longer planning on receiving developer funds toward the project. The arsenic facility project has been reduced in scope and designed to fit within the existing walls of Tubac Water Plant #5.

At the Mohave Wastewater Wishing Well Treatment Plant, new plant construction entered service in summer 2008 at a cost of $4,276,039. A portion of the new construction was to replace or upgrade existing plant components, with a portion designed to increase plant capacity. The decision to increase the plant capacity was based on daily flows exceeding existing capacity and significant requests for capacity assurance letters. These additional requests far exceeded existing capacity. The decision was also consistent with ADEQ and Commission standards. The decision to upgrade and expand the Wishing Well Plant was prudent.

Phase 3a of the Paradise Valley Fire Flow project was placed in service on August 14, 2008 at a cost of $1,502,882. This project installed a 24" waterline in McDonald Drive from Miller Road to Scottsdale Road. Charges for planning and design remain for the suspended Phase 3b of that project in the amount of $514,223.23. Phase 3b was to construct a 16" waterline in Lincoln Drive and an 8" waterline in Tatum Boulevard, but was cancelled just prior to construction.

II INTRODUCTION AND QUALIFICATIONS

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

A. My name is Joseph E. Gross. My business address is 19820 N. 7th Street, Suite 201, Phoenix, Arizona 85024, and my telephone number is 623-445-2401.

Q. ARE YOU THE SAME JOSEPH E. GROSS WHO PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. First, I will report on the status of the White Tanks Water Treatment Plant. Second, I will respond to Staff and intervener testimony concerning certain water and wastewater facilities. Third, I will provide the status of several other projects that I discussed in my direct testimony.

III WHITE TANKS WATER TREATMENT PLANT

Q. WHAT IS THE STATUS OF THE WHITE TANKS WATER TREATMENT PLANT?

A. The White Tanks Water Treatment Plant has been under construction for over one year and is on schedule to be in service by December 2009, at a total project cost of approximately $62 million. Through December 2008, over $30 million has been paid to Garney Construction, the construction contractor. Maricopa Water District is constructing the water-supply intake on the Beardsley Canal, which should be completed by spring 2009. In the late spring of 2009, Arizona-American will begin construction of the $2.5 million water-transmission main to connect the White Tanks Plant to Arizona-American's existing transmission system. Construction of the transmission main should be completed by fall 2009, in time for start-up of the White Tanks Plant.

Q. HOW DOES THIS PROJECT FACILITATE THE TRANSITION TO RENEWABLE AND SUSTAINABLE SURFACE WATER?

A. Over the years, ground water levels have been declining in the West Valley. Previous regional studies recommended the construction of a regional surface water treatment facility; which is under construction by Arizona-American. Upon completion, the White Tanks Plant will immediately reduce the withdrawal of ground water by up to 13.5 million gallons per day (mgd). Arizona-American plans to utilize the capacity of the plant to meet a portion of the base-load demand in the service area and will continue to utilize existing wells to assist in meeting that base load, and for peaking during summer months.

Q. HOW WILL THIS HELP YOUR EXISTING CUSTOMERS?

A. As the water table has dropped, Arizona-American has experienced declining water quality and increasing well rehabilitation and pumping costs. New wells in this area almost always require expensive arsenic-treatment facilities to comply with federal water quality standards. Even without adding new customers, groundwater levels would continue to drop as the current demand on the aquifer outstrips groundwater replenishment. This project is necessary to insure our current customers in the Agua Fria Water District have a reliable, sustainable source of potable water, now and into the future.

Q. AS PART OF YOUR DIRECT TESTIMONY, YOU PROVIDED A CUSTOMER GROWTH FORECAST FOR ARIZONA-AMERICAN'S AGUA FRIA WATER DISTRICT. CAN YOU PROVIDE AN UPDATED FORECAST?

A. Yes. Our current growth projections are much lower, due to the deteriorating economy, and are shown below. As stated in my direct testimony, not all these customers are subject to the increased water facilities hook-up fee.

Year	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Customers	539	455	594	720	986	1014

Q. IN YOUR DIRECT TESTIMONY, YOU ALSO DISCUSSED A HOOK-UP FEE FORECAST THAT USES YOUR CUSTOMER GROWTH FORECAST AS AN INPUT. WILL ARIZONA-AMERICAN BE UPDATING THAT FORECAST?

A. Yes. Mr. Broderick is providing a revised hook-up fee forecast as part of his Rebuttal Testimony. His forecast is based upon the number of customers actually subject to the increased hook-up fee, as shown below.

Year	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Customers	48	98	154	293	545	645

IV <u>RESPONSE TO COMMISSION STAFF</u>

A <u>AGUA FRIA WATER PLANT NO. 5</u>

Q. COMMISSION STAFF WITNESS DOROTHY HAINS CONTENDS THAT THE ARSENIC TREATMENT PLANT AT AGUA FRIA WATER PLANT NO. 5 ONLY REQUIRES THREE 11-FOOT DIAMETER ADSORBER VESSELS, RATHER THAN THE FOUR THAT WERE INSTALLED. AS A RESULT, STAFF RECOMMENDS A DISALLOWANCE OF THE COST OF ONE VESSEL. IS THIS PROPER?

A. No. The system was designed to treat the combined flows from Wells 5.1 and 5.2 (1,400 gpm) using either of the following two modes of operation:

1. All four vessels could operate in single-stage or parallel mode at a manufacturer's recommended surface loading rate of 5 gpm/sf; or
2. The vessels could operate in two-vessel pairs in a series or lead/lag mode at a manufacturer's recommended surface loading rate of 8 gpm/sf.

Q. HOW DOES ARIZONA-AMERICAN OPERATE THE ARSENIC TREATMENT FACILITIES AT AGUA FRIA WATER PLANT NO. 5?

A. Arizona-American operates the arsenic-treatment plant in lead/lag mode, because it results in more efficient usage of the adsorptive-iron media, and therefore a lower life-cycle cost and smaller rate impact. However, in either mode, the system must be capable of operating with one vessel out of service for an extended time because periodic replacement of the adsorptive iron media is required. This media change-out process takes several days to complete. With the vessels operating in single-stage mode with one unit out of service, the system has a reliable treatment capacity of 1,425 gpm. With the system operating in the lead/lag mode, the system has a nominal rated capacity of 1,235 gpm, assuming that the train with the vessel out of service would operate at 5 gpm/sf and the other train would operate at 8 gpm/sf. During such periods, the system could either revert to single-stage treatment to achieve full plant capacity, or a small percentage of the raw water could be by-passed and blended with effluent from the ATP.

Q. WHAT WOULD HAPPEN IF THE ARSENIC TREATMENT FACILITIES CONTAINED ONLY THREE VESSELS AS RECOMMENDED BY STAFF?

A. If only three vessels were provided as Staff suggests, treatment capacity would be limited to a maximum of 950 gpm with one vessel out of service for required repair or media replacement. Because of the high concentration of arsenic in the raw water from the two wells feeding the treatment facility, 950 gpm would be insufficient to treat the 1400 gpm capacity of Wells No. 5.1 and 5.2. Four vessels are required for reliable capacity to fully

treat the well water during media replacement or required repairs. In addition, ADEQ Bulletin 10, Guidelines for the Construction of Water Systems, states "With one unit or item out of service, the remaining units or items shall meet the design capacity of the plant." However, if Agua Fria Water Plant #5 had only three vessels, as Staff suggests, and one was out of service for maintenance or repairs, the plant could not meet capacity requirements for its service area.

B AGUA FRIA SIERRA MONTANA RESERVOIR

Q. WHAT IS THE STATUS OF AGUA FRIA'S SIERRA MONTANA RESERVOIR?

A. The 2.2 million gallon Sierra Montana Reservoir was placed in service as post-test-year plant on December 8, 2008, at a cost of $1,794,728.

C AGUA FRIA DISTRIBUTION SYSTEM IMPROVEMENTS, PHASE 2

Q. WHAT IS THE STATUS OF AGUA FRIA DISTRIBUTION SYSTEM IMPROVEMENTS, PHASE 2?

A. This project was placed into service as post-test-year plant on October 6, 2008, at a cost of $1,389,895.

D HAVASU WATER PLANT NO. 4

Q. COMMISSION STAFF WITNESS DOROTHY HAINS CONTENDS THAT THE ARSENIC TREATMENT PLANT AT LAKE HAVASU CITY WATER PLANT NO. 4 ONLY REQUIRES TWO 9-FOOT DIAMETER ADSORBER VESSELS OR ONE 14-FOOT DIAMETER VESSEL, RATHER THAN THE TWO 14-FOOT DIAMETER VESSELS THAT WERE INSTALLED. AS A RESULT, STAFF RECOMMENDS A DISALLOWANCE OF THE COST OF ONE VESSEL. IS THIS PROPER?

A. No. Staff is correct that the system is required to treat a combined total of 600 gpm from Wells 8 and 9, but Staff is wrong that the plant could operate with less than two 14-foot diameter vessels. The system was designed for two modes of operation:

1. Both vessels could operate in single-stage or parallel mode at a manufacturer's recommended surface loading rate of 5 gpm/sf; or
2. The two vessels could operate in a series or lead/lag mode at a manufacturer's recommended surface loading rate of 8 gpm/sf.

Q. HOW DOES ARIZONA-AMERICAN OPERATE THE ARSENIC TREATMENT FACILITIES AT LAKE HAVASU CITY PLANT NO. 4?

A. Arizona-American operates the arsenic-treatment plant in lead/lag mode, because it results in more efficient usage of the adsorptive-iron media, and therefore a lower life-cycle cost and smaller rate impact. However, in either mode, the system must be capable of operating with one vessel out of service for an extended time because periodic replacement of the adsorptive iron media is required. This media change-out process takes several days to complete.

Q. WHAT WOULD HAPPEN IF THE ARSENIC TREATMENT FACILITIES HAD BEEN CONSTRUCTED AS RECOMMENDED BY STAFF?

A. If only one 14-foot diameter vessel were provided as suggested by Staff for Lake Havasu City Water Plant No. 4, there would be no arsenic treatment at all when the vessel is out of service for extended periods (multiple days) during media change-outs or equipment repair. Similarly, if two 9-foot diameter vessels had been installed, reliable treatment capacity (one vessel out of service) would be limited to only 320 gpm, 280 gpm less than required to treat the output of Wells No. 8 and 9.

With one unit out of service, i.e., single-vessel operation, the existing system has a reliable rated treatment capacity of 770 gpm. Although this slightly exceeds the rated

capacity of the existing wells, no smaller standard pressure vessel size (12 feet or smaller) is available to meet the combined capacity of Wells 8 and 9 with one of the two vessels out of service. Therefore, the installed system provides the most cost-effective size and configuration available to reliably meet the arsenic treatment needs for this facility. In September 2007, a rupture of one vessel's under drain system occurred, rendering that vessel out of service for two weeks. Without the redundancy provided by the second vessel, Arizona-American would most likely have received a Notice of Violation from ADEQ for violating the Federal arsenic standard.

E <u>MOHAVE WATER DESERT FOOTHILLS WELL NO. 1</u>

Q. WHAT IS THE STATUS OF THE PLANNED MOHAVE WATER DESERT FOOTHILLS WELL NO. 1?

A. Please refer to Mr. Stuck's testimony.

F <u>MOHAVE WATER BIG BEND ACRES RESERVOIR</u>

Q. WHAT IS THE STATUS OF THE POST-TEST-YEAR MOHAVE WATER BIG BEND ACRES RESERVOIR?

A. The .25 million gallon Big Bend Acres Reservoir was placed into service on November 26, 2008, at a cost of $643,127.

G <u>SUN CITY WEST WATER PLANT NO. 2</u>

Q. COMMISSION STAFF WITNESS DOROTHY HAINS CONTENDS THAT THE ARSENIC TREATMENT PLANT AT SUN CITY WEST WATER PLANT NO. 2 ONLY REQUIRES THREE 12-FOOT DIAMETER ADSORBER VESSELS, RATHER THAN THE FOUR 12-FOOT DIAMETER VESSELS THAT WERE INSTALLED. AS A RESULT, STAFF RECOMMENDS A DISALLOWANCE OF THE COST OF ONE VESSEL IS THIS PROPER?

A. No. First, the system was designed to treat a combined capacity of 1,790 gpm from Wells 2.4 and 2.5, which is slightly greater than the 1,760 gpm value referenced in Staff's comments. Second, the system was designed for two modes of operation:

1. All four vessels could operate in single-stage or parallel mode at a manufacturer's recommended surface loading rate of 5 gpm/sf; or
2. The vessels could operate in two-vessel pairs in a series or lead/lag mode at a recommended surface loading rate of 8 gpm/sf.

Q. HOW DOES ARIZONA-AMERICAN OPERATE THE ARSENIC TREATMENT FACILITIES AT SUN CITY WEST WATER PLANT NO. 2?

A. Arizona-American operates the arsenic-treatment plant in lead/lag mode, because it results in more efficient usage of the adsorptive-iron media, and therefore a lower life-cycle cost and smaller rate impact. However, in either mode, the system must be capable of operating with one vessel out of service for an extended time because periodic replacement of the adsorptive iron media is required. This media change-out process takes several days to complete. With the vessels operating in single-stage mode with one unit out of service, the system has a reliable treatment capacity of approximately 1,700 gpm. With the system operating in the lead/lag mode, capacity would be reduced to 1,470 gpm, because the train with the vessel out of service would operate at 5 gpm/sf and the complete lead/lag train would operate at 8 gpm/sf. Since the combined capacity of the two wells exceeds both of these ratings, a percentage of the raw water must be by-passed and blended with effluent from the arsenic-treatment plant in order to allow the wells to operate at their maximum rated capacities and not exceed the manufacturer's loading rate recommendations. With by-passing about 20 percent of the raw water flow, the system can still achieve the target finished water arsenic concentration of 8 ppb with one vessel out of service for media replacement.

Q. WHAT WOULD HAPPEN IF THE ARSENIC TREATMENT FACILITIES CONTAINED ONLY THREE VESSELS AS RECOMMENDED BY STAFF?

A. If only three vessels were provided as suggested by Staff, the capacity for arsenic removal would be limited to a maximum of 1,130 gpm during periods when one vessel was out of service. Under such a scenario, the production capacity from Wells 2.4 and/or 2.5 would have to be reduced by about 375 gpm (0.5 MGD) to ensure that the arsenic concentration in the blended water exiting the ATP remained reliably below the MCL. However, these wells are relied upon as part of a MCESD-approved blending plan to control the concentration of nitrate and fluoride from the other three wells that combine at the site. Therefore, if the output from Wells 2.4 and 2.5 was reduced, a corresponding capacity reduction from the other wells would also be necessary, which would prevent the Sun City West Water Treatment Plant No. 2 from being able to meet system demands on a reliable basis.

There are no alternative configurations of vessel sizes or number of units that would more cost-effectively provide the reliable capacity required for the wells that must be treated at this facility.

H <u>TUBAC WATER PLANT NO. 5</u>

Q. WHAT IS THE STATUS OF THE PLANNED ARSENIC TREATMENT FACILITIES AT THE TUBAC WATER PLANT NO. 5

A. Arizona-American is currently designing an arsenic treatment facility at Water Plant No. 5, which should be in service by summer 2010. This facility is required to comply with the EPA revised arsenic standards of 10 parts per billion, issued in January 2001.

Q. HAVE YOU READ MR. MAGRUDER'S DIRECT TESTIMONY?

A. Yes.

Q. ARE THE ARSENIC LEVELS IN TUBAC WELLS DECLINING?

A. No. Arsenic readings in Tubac Well #4 have actually increased to 41 parts per billion (ppb), which is why EPA denied the company's request for a three-year exemption. Mr. Magruder's numbers are based upon the system's running annual average, while EPA's final rule requiring 10 ppb is based upon the running annual average at each well.

Q. HAS THE TREATMENT PLANT DESIGN BEEN PRESENTED TO LOCAL RATEPAYERS?

A. No. Arizona American is working diligently to reduce the scope of the project in order to lessen the impact on ratepayers. Once the amended design is completed, it will be described to interested ratepayers. A 60% design was available to the attendees at the community meeting in Tubac; held last fall.

Q. IS THE TUBAC ARSENIC REMOVAL FACILITY INCLUDED IN THE TEST YEAR FOR THIS CASE?

A. No. The project is scheduled to be completed in the spring of 2010. Mr. Broderick discusses this topic.

Q. WILL A DEVELOPER CONTRIBUTE APPROXIMATELY $1 MILLION TO THE FACILITY?

A. No. Initial discussions with the developer of Tubac Marketplace in early 2008 involving this project envisioned a storage reservoir and a booster pump station, which would provide water service meeting arsenic standards and fire-flow protection to that development. The developer was also to provide land for those facilities. The developer subsequently decided to provide storage for fire flow protection within the development. With current economic conditions, Arizona American is unsure of the developer's time line or intent to proceed with Tubac Marketplace. Therefore, the planned arsenic facility

has been reduced in scope and designed to fit within the existing walls of Tubac Water Plant #5. This scope reduction will allow the project to proceed in a timely manner, not dependent upon further negotiations with the developer, to comply with federal arsenic standards as soon as possible.

V MOHAVE WASTEWATER TREATMENT PLANT CONSTRUCTION

Q. WHAT IS THE STATUS OF THE MOHAVE WASTEWATER TREATMENT PLANT CONSTRUCTION?

A. As noted by Staff, the new plant construction entered service in summer 2008 at a cost of $4,276,039.

Q. WHY WAS THE CONSTRUCTION NEEDED?

A. The Wishing Well Wastewater Treatment Plant was built many years ago by Sorenson Utilities. Sorenson Utilities was acquired by Citizens Utilities in March 1999. Then, in 2001 Arizona-American acquired Citizens Utilities' Arizona water and wastewater assets. By 2005, it became obvious to Arizona American that the Wishing Well Plant needed to be upgraded for two reasons. First, several of the plant's components needed to be replaced. Although the Wishing Well Plant was permitted by ADEQ at 0.500 mgd, the design capacity was only 0.250 mgd, and the operational capacity was approximately 0.200 mgd, due to degraded plant components. To restore the design capacity, many plant components needed to be replaced. Second, the plant needed to be expanded to the permitted capacity of 0.500 mgd to serve customer growth, which was projected at that time to be substantial.

Q. WHAT WAS DONE TO IMPROVE PLANT CAPACITY?

A. Arizona-American hired a consulting engineer to perform an evaluation of the existing plant, and prepare a design report to determine the most cost effective upgrades to meet

the permit requirements of 0.500 mgd. It was determined that the aeration basin, filters and chlorine contact basin could already treat 0.500 mgd. However, the clarifier and sludge holding tank were undersized. Therefore, the final design included improvements to current plant operations, as well as capacity expansion. Plant improvements are listed below:

1. New clarifiers were designed to treat up to 0.500 mgd, and the existing undersized clarifier was converted to provide additional sludge holding volume.
2. The blowers were upgraded. Existing blowers were aged and provided no redundancy.
3. The aeration system was upgraded. The existing system was aged and had many leaks in the air piping.
4. A screwpress was added to reduce the high operational costs of hauling liquid sludge. Operational savings in sludge hauling was projected to pay for the cost of the new screwpress within three years.
5. New headworks were constructed, which included a microstrainer and grit chamber. This replaces the extremely inefficient bar screen basket at the head of the existing aeration basin. This new headworks significantly reduces grit and debris accumulation in the aeration basins, which had decreased plant capacity to under 0.200 mgd.

Existing customers are currently benefitting from the improved efficiency and reduced O&M costs of the completed plant.

Q. PLEASE PROVIDE A BREAKOUT OF COSTS FOR PLANT IMPROVEMENTS AND PLANT EXPANSION.

A. Please see the table below:

NARUC Acct #	Description	Total Cost(s)	Plant Improvement	Plant Expansion
354	Structure & Improvement	$ 976,643.00	$ 627,108.29	$ 349,535.33
355	Power Generation Equipment	$ 186,696.08	$ 163,146.65	$ 23,549.43
361	Sewer Collection	$ 146,946.40	$ 73,473.20	$ 73,473.20
364	Flow Meter Device	$ 18,487.70	$ 15,964.06	$ 2,520.64
371	Pumping Equipment	$ 6,611.73	$ 3,305.86	$ 3,305.86
380	Treatment & Disposal Equip	$ 2,819,517.15	$1,922,609.24	$ 896,907.91
396	Communication Equipment	$ 110,425.89	$ 55,212.94	$ 55,212.94
397	Misc Equipment	$ 10,713.43	$ 10,713.43	$ -
	Total(s)	**$ 4,276,039.00**	**$2,871,533.66**	**$ 1,404,505.34**

Q. WHAT O&M SAVINGS RESULT FROM THE IMPROVED PLANT?

A. Please refer to Mr. Stuck's testimony. These savings have also been reflected in the calculation of the revenue increase for Mohave Wastewater Treatment Plant by Company witness Ms. Sheryl Hubbard.

Q. WHY WAS IT NECESSARY TO RESTORE THE WISHING WELL PLANT'S CAPACITY TO 0.250 MGD?

A. More than half the months of 2007 and 2008 had peak days of over 0.200 mgd, with some months reaching 0.250 mgd. To temporarily address this situation, Arizona-American brought a portable tank onsite to allow treatment when flows exceeded plant capacity. This temporary fix was required to avoid a Notice of Violation from ADEQ. Since peak flows from existing customers were exceeding plant capacity, and many of

the plant's components had deteriorated, upgrades to serve existing customers were urgently needed.

Q. WHY DID ARIZONA-AMERICAN BELIEVE THAT TREATMENT CAPACITY NEEDED TO BE EXPANDED TO 0.5 MGD AT THE WISHING WELL TREATMENT PLANT?

A. In 2005, Arizona-American began receiving numerous requests from developers for ADEQ Capacity Assurance Letters to ensure that their developments would have wastewater treatment capacity at the plant. However, based on continuing high growth rates in Mohave County, Arizona-American did not believe that the existing Wishing Well Plant design capacity would be able to satisfy the expected growth, especially given the time required for design, procuring equipment, and construction of an expansion. Projections in 2005 showed that the existing plant's capacity would be exhausted by 2008.

	PROJECTED YEARLY GROWTH & WWTP FLOW						
	Q107	2007	2008	2009	2010	2011	Total
New Connections per Year	132 ('06)	143	156	200	162	121	783
Gallons/Day/Connection	168	168	168	168	168	168	
Total Active Connections	1,189	1,332	1,488	1,689	1,851	1,972	1,972
WWTP Flow GPD	200,000	224,121	250,362	284,071	311,320	331,707	331,707

This projection was validated by peak flows in September, November, and December 2008, which have exceeded 0.250 mgd. Page 4 of Exhibit DMH-7 to Ms. Hain's testimony shows more recent growth projections, which also indicate that the plant's actual capacity of .200 mgd would be exceeded in 2008.

Arizona American subsequently signed ADEQ Capacity Assurance Forms for the following developers:

Development Name	Total Units	Design Flow (ADF, MGD)
Greens at Los Lagos	389	0.072
Brett Canyon Estates	55	0.013
Desert Lakes Estates D,E	240	0.040
Everglade Estates	154	0.039
Mesa Vista	131	0.024
Patriot Estates	119	0.030
Sage Hill A & B	99	0.037
Twin Palm Estates	144	0.036
Stetson Ranch	57	0.011
Valley Springs Estates	132	0.025
Total Units	1520	0.317
		0.134 <-- Average Daily Plant Flow
		0.442 <-- Required Future Plant Flow

ADEQ Permit Limit	0.50 mgd
- existing plant capacity	0.20 mgd
- expansion complete Aug 2008 to	0.50 mgd

In 2007-2008, while the plant was under construction, development slowed; however, the commitments to serve these developments remain in force today.

Q. COULD THE WISHING WELL PLANT EXPANSION HAVE BEEN SMALLER?

A. Even if it were possible to piecemeal plant expansion, it would not have been cost-effective, or fair to ratepayers, to increase treatment plant capacity in small .050-.100 mgd increments; since frequent design and construction contracts would be necessary, with the resulting high overhead, contractor mobilization costs, and disruption to ongoing plant operations. The plant was already permitted for 0.5 MGD and Arizona-American had committed to provide capacity for 0.442 MGD of customer needs.

Q. WHAT IS THE CURRENT DEVELOPMENT ACTIVITY IN MOHAVE COUNTY?

A. Recently, development in Mohave County has slowed considerably. However, there are several active projects in the service area and there remains the potential for rapid growth when market conditions become more favorable, because these projects are in an

advanced stage of development. The service area has the ultimate potential of developing over 3,000 homes based on the active and proposed developments.

Q. WHAT IS THE NORMAL PLANNING HORIZON FOR WASTEWATER TREATMENT PLANTS?

A. There are commonly accepted industry standards for timing of design and construction of wastewater treatment facilities. Arizona-American adheres to the standards quoted below from the Maricopa County Environmental Services Division:

> The rated capacity of a wastewater treatment plant is critical in determining when an expansion of a plant is required. Two stipulations that are normally included in a wastewater treatment plant's operating permit are based on the rated capacity of the plant. Those stipulations are:
>
> - "By the time the average day maximum month flow to the Facility reaches eighty percent (80%) of the Facility's rated capacity, the Owner shall have initiated planning and design of the next expansion of the Facility."
> - "By the time the average day maximum month flow to the Facility reaches ninety percent (90%) of the Facility's rated capacity, the Owner shall have initiated construction of the next expansion of the Facility."
>
> Besides being used in determining when an expansion of a facility is required, the rated capacity is also used as a basis of design for determining peaking factors. Since short term (instantaneous) influent flows may exceed the rated capacity of the facility, peaking factors are used during the design process to determine if flow equalization or additional equipment is required to handle the peak flows to the plant.

As mentioned above, the actual capacity of the Wishing Well plant was approximately 0.200 mgd when decisions were made to move forward with this project. Since previous flows had exceeded this capacity, and the total commitment to serve required 0.442 mgd, based on existing customers and developers' plans, the correct course was to implement plant improvements and increase capacity immediately.

The Arizona Department of Environmental Quality has also issued guidance in ADEQ Bulletin 11 on the design of wastewater treatment facilities, which appears below:

CHAPTER VI - SEWAGE TREATMENT WORKS DESIGN CONSIDERATIONS

The treatment plant should be designed to provide for the estimated population of 15 to 25 years. In general, if the growth rate and interest rates are low, a 20 to 25 year design period is recommended. When growth and interest rates are high, a 10 to 15 year design period may be more feasible.

2. Plant Upgrading - Upgrading of sewage treatment works may be required for several reasons including the following:

a. Meet more stringent effluent quality standards.

b. Increase hydraulic and/or organic loading capacity.

c. Improve poor performance due to improper plant design and/or operation. It is recommended that the Engineer define the following aspects of the existing facility.

1) Efficiency of treatment
2) Normal operational and maintenance procedures
3) Condition of structures
4) Condition of equipment
5) Staffing pattern and operator skill

Based on ADEQ's standard, in a high growth area like Mohave County we were to use a 10-15-year planning requirement.

Q. HAS THE COMMISSION PROVIDED ANY GUIDANCE CONCERNING THE APPROPRIATE PLANNING HORIZON FOR A WASTEWATER-PLANT EXPANSION?

A. Yes. I have attached as Exhibit JEG-R1, page 12 of Commission Decision 70372 in Docket Number WS-01303A-06-0403, which concerned the capacity expansion of the Northwest Valley Wastewater Treatment Plant. This decision states that a "five-year planning horizon … is the generally accepted means for utilities to make wastewater plant investment decisions."

Q. DID ARIZONA-AMERICAN COMPLY WITH A FIVE-YEAR PLANNING HORIZON?

A. Yes. Based on the commitments we made at the requests of developers, Arizona-American planned the expansion to satisfy our treatment-capacity requirements within five years of undertaking the project.

Q. WAS IT PRUDENT FOR ARIZONA-AMERICAN TO EXPAND THE WISHING WELL TREATMENT PLANT TO 0.500 MGD?

A. Absolutely. Based on the information we knew at the time, Arizona-American had no choice but to improve and expand the Wishing Well Plant. The actual plant capacity was 0.05 mgd less that its design capacity of 0.250 mgd. In turn, actual peak demands had been exceeding the design capacity, which could not be allowed to continue. Finally, in response to developer requests, we had committed to serve an additional 0.317 of future demand within the Commission's five-year planning horizon, and well within ADEQ's 10-15-year planning horizon.

A <u>PARADISE VALLEY WATER</u>

Q. WHAT IS THE STATUS OF THE PARADISE VALLEY FIRE FLOW PROJECT?

A. As reported by Staff, Phase 3a of the Paradise Valley Fire Flow project was placed in service on August 14, 2008 at a cost of $1,502,882. This project installed a 24" waterline in McDonald Drive from Miller Road to Scottsdale Road. Charges for planning and design remain for the suspended Phase 3b of that project in the amount of $514,223.23. Phase 3b was to construct a 16" waterline in Lincoln Drive and an 8" waterline in Tatum Boulevard, but was cancelled just prior to construction.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

useful prior to including it in the rate base of a regulated utility. In our consideration of whether the entire Northwest Plant expansion is used and useful, reliance on RUCO's own stated position in the Sun City West Wastewater case[7] provides support for Staff's position, based on Staff's engineering analysis expertise, that the entire Northwest Plant is 100 percent used and useful. RUCO alleges in this case that the admitted uncertainties in Staff's growth projections will lead to inequitable rates under the rate base allocation treatment of the Northwest Plant, but RUCO has not offered alternative projections or recommended any alternative percentage of the allocation. While projections are, by their nature, uncertain, Staff used a scientifically accepted method for projecting growth. A bare declaration that the uncertainty inherent to growth projections will "almost ensure" inequitable and unfair rates, is not sufficient to support excluding from rate base capacity that the Company prudently built and that Staff and the Company advocate is necessary to meet the needs of the Northeast Agua Fria service area. [redacted]

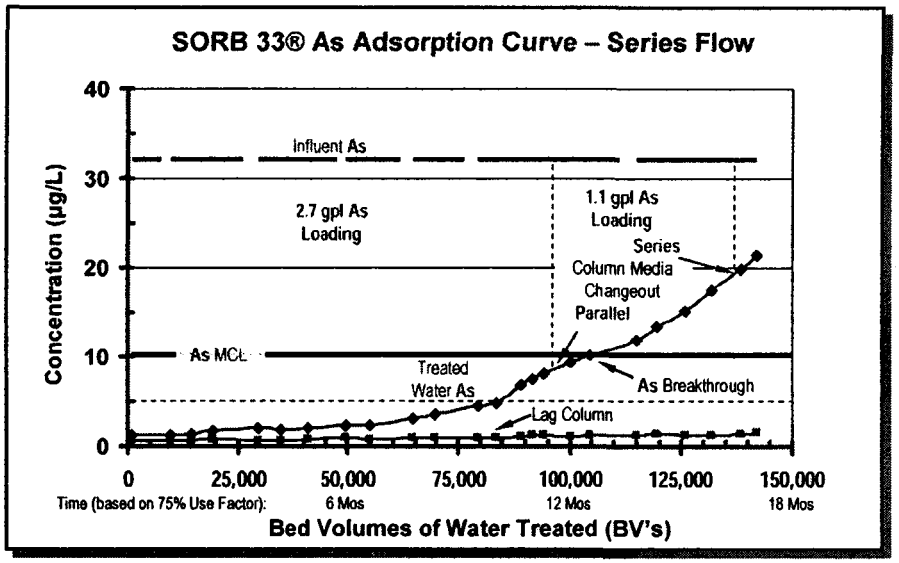
Credible evidence was presented, in the form of Staff's engineering expertise and RUCO's position in the Sun City West Wastewater case, that the Northwest Plant expansion was prudent under Commission rules, and that the capacity is used and useful. The weight of the evidence supports the conclusion that 32 percent of the total capacity of the Northwest Plant has been built to serve Anthem/Agua Fria Wastewater customers. Allocation of 32 percent of the costs of the Northwest Plant to the Anthem/Agua Fria Wastewater District as proposed by the Company and Staff is therefore reasonable and appropriate, and will be adopted. Appropriate adjustments to accumulated depreciation, operating expense, and depreciation expense are also necessary, as addressed in discussion below. We will order the Company to report the results of plant operations in the

EXHIBIT
A-3
ADMITTED

SERIES FLOW CONFIGURATION

Unlike breakthrough curves for water softening resins or some other adsorbents, As will continue to be adsorbed even after it exceeds the MCL. Softening resin breakthrough curves breakthrough rapidly to the influent levels (within <1,000 BV's on the above curve) leaving little time to schedule media change-out, etc. However, in the illustration above, As continues to be adsorbed from partially "spent" E33 media for over 50,000 BV's after the 10 μg/L breakthrough point.

The advantage of an "extended adsorption" media like E33 is that its As capacity can be increased in a lead/lag series flow configuration. Effluent water from the primary, or "lead", column can contain as much as 15-25 μg/L As because this partially treated water is further treated in a "lag", or polishing, column where the final As level is reduced to <3 μg/L. The net result of this flow configuration is an increase in the media's adsorption capacity of 15-50%. This increase translates into a proportional reduction in operating costs. The second As Adsorption curve below depicts the effect of series flow configuration.



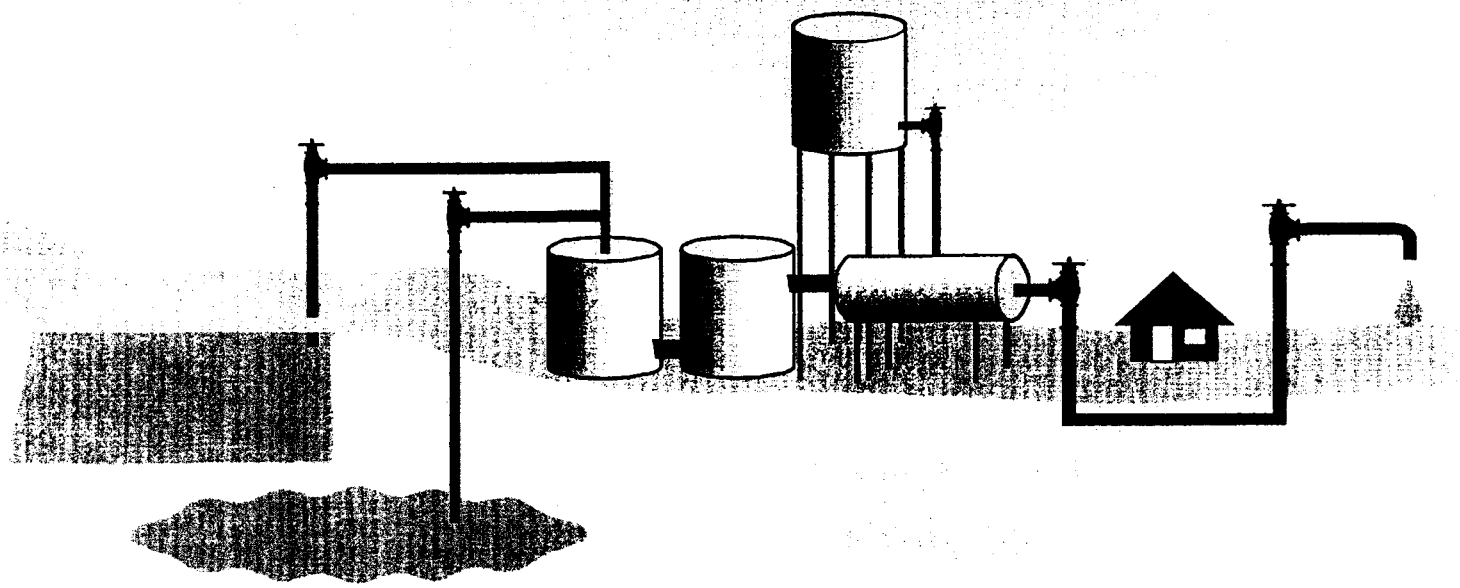
With a lag column receiving the lead adsorber's effluent water, the treated water now contains less As (1 μg/L) than in the latter stages of parallel treatment. If the lead adsorber was in parallel configuration and taken off line at 98,000 BV's, the E33 would have adsorbed 2.7 grams As per liter (gpl) of media. In the series flow con-figuration, the media treats an additional 41,000 BV's, adsorbing an additional 1.1 gpl As until its effluent contains 19 μg/L As. The lag column removes the remainder of the water's As producing a water quality below 2 μg/L As. In this example, the E33 media treated an additional 42% water volume and adsorbed an additional 41% of the water's As.

With the lead column out of service for media changeout, the lag column is operated in parallel flow configuration until its effluent As level reaches 5 μg/L and is then placed into lead position with a lag column behind it.

EXHIBIT
A-4
ADMITTED

EPA
United States
Environmental Protection
Agency

Arsenic Treatment Technology Evaluation Handbook for Small Systems



The alternative for utilities considering AA adsorption is the use of throwaway media, operated with or without pH adjustment. The savings in O&M requirements and residuals disposal may offset the cost of periodically replacing the media. For this option, systems must provide an equalization basin for backwash water (if applicable) and a staging area to store spent media prior to disposal. Throwaway AA media is expected to not exceed any TCs, enabling it to be disposed of in a municipal solid waste landfill (Wang et al., 2000). As an added convenience to small systems, media suppliers may offer a media disposal service with the purchase of their media.

Information on the design of an AA system can be found in Section 6, *Sorption Process Design Considerations*. Information on POU systems can be found in Section 8.1.1, *Adsoprtion Point-of-Use Treatment*.

2.3.3 Iron Based Sorbents

Adsorption on IBS is an emerging treatment technique for arsenic. Examples of IBS products currently available with NSF 61 approval are shown in Table 2-4. The sorption process has been described as chemisorption (Selvin et al., 2000), which is typically considered to be irreversible. It can be applied in fixed bed pressure columns, similar to those for AA. Due to limited performance research at the time the Arsenic Rule was promulgated, it was not designated as a BAT or a SSCT by the USEPA.

Table 2-4. Examples of Iron Based Sorbents. [1]

Product Name	Company	Material Type
G2	ADI International	Modified Iron
SMI III	SMI	Iron/Sulfur
GFH	U.S. Filter/General Filter Products	Granular Ferric Hydroxide
Bayoxide E 33	Bayer AG	Iron Oxide

[1] Examples are taken from Rubel 2003.

The few studies conducted with IBS media have revealed that the affinity of this media for arsenic is strong under natural pH conditions, relative to AA. This feature allows IBS to treat much higher bed volumes without the need for pH adjustment. However, similar to AA, optimal IBS performance is obtained at lower pH values. The recommended operating conditions include an EBCT of 5 minutes and a hydraulic loading rate of 5 gpm/sft.

Phosphate has been shown to compete aggressively with As(V) for adsorption sites. Each 0.5 mg/L increase in phosphate above 0.2 mg/L will reduce adsorption capacity by roughly 30% (Tumalo, 2002).

In previous studies, exhausted IBS media has not exceeded any TCs, enabling it to be disposed of in a municipal solid waste landfill (MacPhee et al., 2001). As an added convenience to small systems, media suppliers may offer a media disposal service with the purchase of their media.

Table 6-1. Typical Sorption Treatment Design and Operating Parameters.

Parameter	IX	AA	IBS	Units
Media Bulk Density	40-44	40-47	72-75	lbs/cft
Minimum Column Layers				
Freeboard	90% [1,2]	50% [3]	50%	-
Media	36-60 [2]	36-60 [3]	32-40	in.
Operating Conditions				
Hydraulic Loading Rate	8-12 [2]	4-9 [3]	5-8	gpm/sft
Empty Bed Contact Time	1.5-5	5 [3]	5-10	min.
Downflow Pressure Drop [4]	0.7-1.3 [2]	0.1 [6]	N/A	psi/ft
Maximum Pressure Differential	14	5	3.5	psi
Backwash Conditions				
Backwashing Flow Rate	3-4 [2]	7 [3]	-	gpm/sft
Backwashing Duration	5-20 [2]	10 [3]	-	min
Regeneration Conditions [1]				
Brine Strength	6-10 [2]	-	-	wt%
Downflow Rate	2-6	-	-	gpm/sft
Regenerant Volume	20 [2]	-	-	gal/cft resin
Rinsing Conditions				
Slow Rinse Rate	0.4-4	-	-	gpm/sft
Fast Rinse Rate	2-20	-	-	gpm/sft
Displacement Requirements	4-6	-	-	bed volumes

[1] This will be very resin specific. Check with the resin manufacturer before design.
[2] Rubel, 2001a Draft.
[3] Rubel, 2001b Draft.
[4] This depends on temperature, type of media, and hydraulic loading rate.
[5] For strong base anion exchange resin at 70°F and 10 gpm/sft.
[6] For AA at 2 gpm/sft.
N/A - Not Available.

6.5 Column Design

The vessels should be made from typical, well-known materials of construction such as carbon steel or fiberglass and must be NSF approved. The vessels should have distribution and collector systems that provide a uniform distribution of fluids during all phases of the operation. More detail on these accessories is provided in Section 7. Also, it is advisable to install sight-glasses in order to check resin levels.

Columns placed in series are referred to as a treatment train. The utility should evaluate the number of parallel treatment trains based on the desired redundancy and state design standards. Figure 6-6 shows a commercially available multiple-column IX treatment train.

Section 6
Sorption Process Design Considerations

This section describes the design of sorptive processes, including AA, modified AA, IBS, and IX. For reasons previously cited, the discussion about AA, modified-AA, and IBS are restricted to non-regenerable applications. Conversely IX is most economically feasible when used in a regenerable process.

6.1 Process Flow

Despite the availability of several different types of sorptive treatment processes, the overall treatment approach for each is similar. Pre-treatment can consist of oxidation, to convert As(III) to As(V), and pre-filtration stages when turbidity is high, as well as optional pH adjustment and pre-filtration backwash. Next, the water is fed through a column packed with sorptive media. Post-treatment consists of an optional pH re-adjustment stage and some media have an option for regenerating the media. Typically, the entire process is carried out under pressure. Figure 6-1 shows a typical sorption treatment process while Figure 6-2 shows the same flow diagram with the optional media regeneration and pH adjustment and re-adjustment. Dashed lines and boxes indicate optional streams and processes.

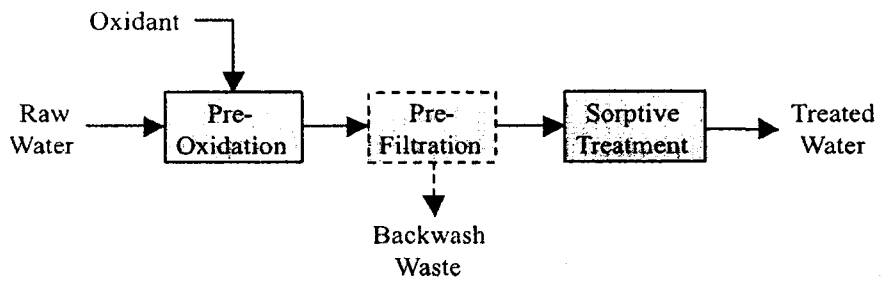


Figure 6-1. Sorption Treatment Process Flow Diagram w/o pH Adjustment and Regeneration.

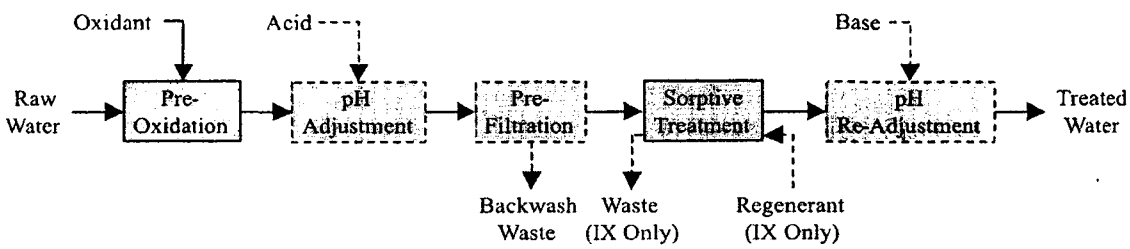


Figure 6-2. Sorption Treatment Process Flow Diagram w/ pH Adjustment and Regeneration.

Pre-filtration is strongly recommended when the source water turbidity is above 0.3 NTU. Suspended solids in the feed water can clog sorption sites and impair process hydraulics. One prefiltration option for smaller systems is backwashable cartridge filters.

The performance of AA treatment is highly pH-sensitive. Treatment conducted under acidic conditions (pH 5.5-6.0) can be expected to produce run lengths 5 to 20 times longer than treatment conducted under natural pH conditions. As a result, in the decisions trees in Section 3, conventional AA is only recommended over IBS when the pH is naturally low or the system is willing to adjust the pH below 6.0. In most cases, pH adjustment will require chemical addition of a strong acid, such as sulfuric (H_2SO_4) or hydrochloric (HCl) acid. Dose requirements depend on the background pH and buffering capacity of the water.

6.2 Column Rotation

Sorption processes are conducted using two or more columns in series. The first column in the treatment process is referred to as the roughing column, and the last sorption column is referred to as the guard column. Frequently, there is an additional column on standby. The roughing column serves as the primary arsenic removal column. The guard column is intended to capture arsenic breakthrough as soon as it occurs from the roughing column.

The columns are operated in this manner until arsenic breakthrough of the roughing column occurs, which is detected by periodic grab samples. Breakthrough is generally defined as the time when the effluent arsenic concentration is equal to 50% of the feed water arsenic level. However, this number can be adjusted after piloting or operation to optimize the economics of the process. At this point, adsorptive sites on the roughing column have become saturated and the column should be taken off-line for media replacement or regeneration, after which it is placed in standby mode to wait for the next column rotation. The guard column is then promoted to the roughing column position and the standby column becomes the guard column in the series. Figure 6-3 illustrates how the columns' positions are rotated between roughing, guard, and standby operation modes.

The number of columns to be placed in series depends on the estimated lifetime of each column and the desired monitoring and media change-out or regeneration frequency. IX processes operating with sulfate in the feed may have a sulfate roughing column at the head of the operation to remove sulfate before arsenic is removed by the arsenic roughing column.

Typically two parallel process trains are used. This provides operational redundancy and, by staggering their operation, chromatographic peaking may be reduced.

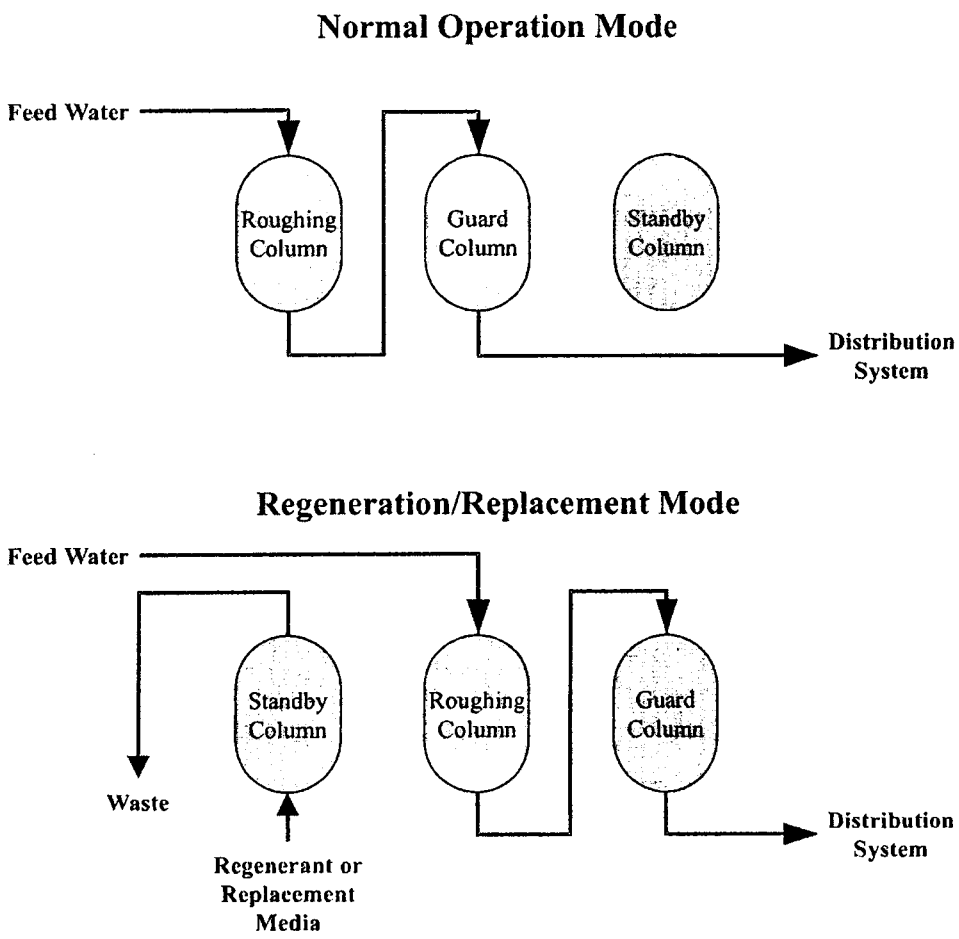


Figure 6-3. Sorption Column Operation Modes.

6.3 Sorption Theory

To understand operation of sorption processes, it is important to understand fundamental ion exchange theory. An important consideration in sorption processes is the mass transfer zone (MTZ), which can be viewed as a wave or a zone of activity (i.e., non-equilibrium between liquid and media phases) for a particular contaminant. As depicted in Figure 6-4, the MTZ also represents the front of the exhaustion zone for a particular contaminant. Exhaustion zones and MTZ waves are typically considered for the target contaminant (i.e., arsenic) and any species that have a higher exchange affinity for the media. Arsenic must compete with other anions for exchange sites according to the selectivity sequence for the particular media (see Section 2). Previously sorbed arsenic can be displaced by anions of higher selectivity. Exhaustion and MTZs order themselves according to the selectivity sequence, as illustrated in Figure 6-4. Other sorbed contaminants, such as carbonate (CO_3^{2-}) and nitrate (NO_3^-), would be present further down from the As(V) MTZ.

EXHIBIT
A-5
ADMITTED

American Water

(A copy of this letter has been sent to the attached list of Vendors.)

June 4, 2004

Re: Arizona American Water
Request for Proposal – Granular Iron Media Treatment Systems

Dear Colleague:

In February 2002, the U.S. Environmental Protection Agency (EPA) adopted a new standard of 10 ug/L as the maximum contaminant level (MCL) for arsenic in drinking water. American Water has been assisting Arizona American Water (AAW) with the evaluation and selection of alternatives for each of its systems that are impacted by the new MCL. As a result of these evaluations, AAW is planning to construct arsenic removal facilities in a number of the communities it serves across the State of Arizona. It was determined that granular iron-based adsorbent media would be the most cost-effective alternative for six (6) of AAW's systems that require arsenic treatment. The purpose of this Request for Proposal (RFP) is to solicit firm price proposals and equipment delivery schedule guarantees for granular iron media treatment systems for each of these six facilities.

Enclosed as Attachment A is a memorandum outlining performance requirements and design specifications for the granular iron media treatment systems for each facility. AAW requests that your company submit a lump sum price proposal (one original and three copies), including a guaranteed equipment delivery schedule, for the proposed treatment systems by 3:00 PM local time on Wednesday, June 30, 2004. The proposals shall be addressed and sent to:

Mr. Timothy F. Friday, P.E.
Arizona American Water
19820 N. 7th Street, Suite 201
Phoenix, AZ 85024
Phone: (623) 445-2400

Faxed copies of the proposal will not be accepted.

American Water
1025 Laurel Oak Road
Voorhees, NJ 08043
USA
T +1 856 346 8201
F +1 856 346 8372
I www.amwater.com

RWE GROUP

receipt of final drawing approval. There shall be no restrictions on the use of the electronic shop drawings by the OWNER.

B. O&M Manuals: The granular iron media system supplier shall provide the OWNER with written operating and maintenance (O&M) instructions for the system.

1. The O&M manual shall be organized in a logical manner with a detailed table of contents and tab dividers to make information easy to locate.

2. Submit two (2) copies of the draft O&M manual for OWNER review at least eight (8) weeks prior to delivery of the equipment.

3. Submit four (4) paper copies of the final approved O&M manual within 30 days of receipt of the OWNER'S comments on the draft. Final O&M manuals shall be bound in a heavy-duty three ring binder. Each bound copy of the O&M manual shall also include a CD with an electronic copy (PDF form) of the entire O&M manual.

C. Installation Certificates: After completion of the system installation, the granular iron media system supplier shall provide to the OWNER a complete signed report verifying that the system has been installed in conformance with the Contract Documents and that nothing in the installation will render the manufacturer's warranty null or void.

1.03 PROCESS DESIGN CRITERIA

A. The granular iron media treatment systems shall be sized to meet the following design criteria at each system's respective maximum design flow rate:

1. Maximum Surface Loading Rate:

a. Series Operation Mode = 8 gpm/ft^2

b. Parallel Operation Mode = 5 gpm/ft^2

2. Minimum Empty Bed Contact Time Per Stage:

a. Series Operation Mode = 2.5 minutes

b. Parallel Operation Mode = 5 minutes

B. System Design Summary

1. Table 2 presents a summary of the equipment sizing requirements and process configurations for each system. The process design criteria presented in the preceding section shall be met at the system design capacity.

2. Process piping and valves shall be provided to allow the individual vessels within a single train to operate in either a series or parallel mode.

3. Process piping and valves shall also be provided/configured to allow any of the vessels within a single train to be removed from service for repairs/maintenance or media replacement while the other vessel(s) in that train remain in service.

4. Appendix B-1 through B-6 includes preliminary process flow diagrams for the proposed treatment facilities at each site. Appendix C-1 through C-6 includes preliminary site plans for each facility. Appendix D-1 through D-6 includes a preliminary process and instrumentation diagram (P&ID) for each granular iron media system, including identification of tie-points that represent the interface between vendor-supplied and OWNER-supplied system piping.

Table 2
Granular Iron Media
Preliminary System Sizing Requirements

System Design Parameter	AAW System					
	AF WP 1	AF WP 2	AF WP 5	LHC WP 4	SCW WP 2	TBC WP 1
Current Design Capacity (gpm)	3,600	2,400	1,400	600	1,800	500
Future Design Capacity (gpm)	3,600	3,600	1,400	1,100	3,000	500
Peak Capacity/Vessel (gpm)[1]	1,200	1,200	700	1,100	1,000	500
By-Pass Capacity (gpm)[2]	1,200	1,200	800	300	750	200
Current No. of Trains	3	2	2	1	2	1
Current No. of Vessels/Train	2	2	2	2	2	2
Current No. of Vessels	6	4	4	2	4	2
Future No. of Trains	3	3	2	1	3	1
Future No. of Vessels/Train	2	2	2	3	2	3
Future No. of Vessels	6	6	4	3	6	3
Vessel Diameter (ft)	14	14	11	14	12	9
Granular Iron Media						
Min. Bed Depth (in)	32	32	32	32	32	32
Nom. Volume/Vessel (cf)[3]	420	420	260	420	310	170

1. Peak hydraulic capacity based on series operation of vessels and an even flow split between parallel trains.
2. Bypass piping shall be designed and furnished by OWNER.
3. Nominal required media volume rounded up to nearest ten cubic feet.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

EXHIBIT
A-6
ADMITTED

IN THE MATTER OF THE APPLICATION OF ARIZONA -AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REJOINDER TESTIMONY
OF
IAN C. CROOKS
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
MARCH 11, 2009

REJOINDER TESTIMONY
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EXECUTIVE SUMMARY

Mr. Crooks testifies as follows:

Mr. Crooks answers the eleven questions posed by Mr. Olea in his rebuttal testimony concerning Arizona-American's proposal to amend its Water Facilities Hook-Up Fee WHU-1, for its Agua Fria Water District. The responses to questions 5, 9 and 10 discuss the core issues. Generally, most of the other changes in Arizona-American's proposed tariff were to conform the existing tariff to the Off-Site Water Hook-up Fee tariff ("ACC HUF Template"), dated January 8, 2009, as posted on the Commission's website.

Arizona-American believes the term "Common Facilities" is more descriptive and less subject to confusion or misinterpretation than is "Off-Site Facilities." The physical location of water facilities constructed and/or funded by the HUF does not necessarily determine whether the facilities are for the exclusive benefit of a particular development or are for the benefit of multiple developments.

Arizona-American is proposing to split within a single tariff the current unified hook-up fee into two components, the original 2004 HUF amount as "Component A" and the incremental increase in the current 2007 HUF as "Component B". Component A will continue to be used to pay for Arizona-American's existing and future investment in Common Facilities and will be eligible for offset against Applicant built Common Facilities. Component B will be solely used to pay for Arizona-American's White Tanks Surface Water Treatment Facility ("WTSWTF") investment and will not be eligible for offset against Applicant built Common Facilities. If this change is not made, the cash receipts to Arizona-American needed to pay for the WTSWTF will be delayed out many years.

I

II **INTRODUCTION**

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

A. My name is Ian C. Crooks. My business address is 19820 N. 7th Street, Suite 201, Phoenix, Arizona 85024, and my telephone number is 623-445-2404.

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

A. I am employed by Arizona-American Water Company ("Arizona-American") as Engineering Manager of Developer Services for Arizona and New Mexico.

Q. PLEASE BRIEFLY OUTLINE YOUR RESPONSIBILITIES IN ARIZONA AS THE ENGINEERING MANAGER OF DEVELOPER SERVICES.

A. I am responsible for the developer agreements ("LXA/MXA"), design, planning, construction, budgeting, and compliance related to development activity.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science degree from Pennsylvania State University in environmental engineering.

Q. HAVE YOU HAD ANY OTHER FORMAL TRAINING?

A. I am currently certified as an ADEQ Grade 2 Water Distribution System Operator and I have completed several masters-degree level courses.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. I joined Arizona-American in October 2006. I was previously employed from 2005 to 2006 by Ryan Homes, a home builder in Pennsylvania, as the Land Development Manager. Before that, I was employed by Pennsylvania-American Water Company as Sr. Engineer for the Coatesville, Pennsylvania district. Prior to that, I was employed

from 1996 in the same role and as IT Manager for the City of Coatesville Authority, which was acquired by Pennsylvania-American Water Company. Before that, I was Engineering Supervisor for Erie City Water Authority. Throughout my career I've gained extensive experience in water and wastewater operations, management, and administration.

Q. ARE YOU A REGISTERED PROFESSIONAL ENGINEER?

A. Yes, I am a registered Professional Engineer in the states of Arizona and Pennsylvania.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?

A. The purpose of my rejoinder testimony is to answer the eleven questions posed by Mr. Olea in his Surrebuttal testimony concerning Arizona-American's proposal to amend its Water Facilities Hook-Up Fee WHU-1, for its Agua Fria Water District. In general, I now sponsor the details of a proposal which was first presented in Mr. Broderick's Rebuttal testimony which started on page 3, line 22 thru page 4, line 26.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. I will answer Mr. Olea's eleven questions in order, although questions 5, 9 and 10 are the core issues.

III <u>ANSWERS TO QUESTIONS POSED BY STEVEN M. OLEA</u>

Q. 1. WHAT IS THE PURPOSE OF COMBINING THE APPLICABILITY AND PURPOSE PORTIONS OF THE TARIFF AND CHANGING THE WORDING?

A: Arizona-American based the proposed revised Water Facilities Hook-up Fee WHU-1 tariff ("AAW Proposed HUF") on the Off-Site Water Hook-up Fee tariff ("ACC HUF Template"), dated January 8, 2009, as posted on the Commission's website. Arizona-

American assumes the structure and language of the ACC HUF Template is to be used as the base for new HUF tariffs. In addition, the ACC HUF Template clarified policies and vague language contained in Arizona-American's existing Water Facilities Hook-up Fee WHU-1 tariff. Comparing the AAW Proposed HUF to the ACC HUF Template addresses this question and several of Mr. Olea's following questions.

The Applicability and Purpose is combined in the ACC HUF Template. Arizona-American is proposing only minor changes to this paragraph to be consistent with subsequent changes in the AAW Proposed HUF.

Q: 2. WHAT IS THE PURPOSE OF CHANGING THE WORDING IN THE FIRST PARAGRAPH UNDER DEFINITIONS?

A: Please see my response to question 1. No changes were made to the wording of the first paragraph between the AAW Proposed HUF and the ACC HUF Template.

Q: 3. WHAT IS THE PURPOSE OF ADDING APPLICANT TO THE DEFINITIONS?

A: Please see my response to question 1. The Applicant definition was part of the ACC HUF Template.

Q: 4. WHAT IS THE PURPOSE OF CHANGING THE WORDING IN THE DEFINITION OF MAIN EXTENSION AGREEMENT ("MXA")?

A: Please see my response to question 1. The definition of Main Extension Agreement ("MXA") is part of the ACC HUF template. Arizona-American made only minor changes to this paragraph to be consistent with subsequent changes in the AAW Proposed HUF tariff.

Q: 5. WHAT IS THE PURPOSE OF REPLACING THE TERM OFF-SITE FACILITIES WITH COMMON FACILITIES AND CHANGING THE WORDING?

A: The purpose is to clarify that physical location of water facilities constructed and/or funded by the HUF does not necessarily determine whether the facilities are for the exclusive benefit of a particular development or are for the benefit of multiple developments. The term "Off-Site Facilities", as used in the ACC HUF Template appears to reference facilities that, despite their physical location, are to benefit multiple developments. For that reason, Arizona-American believes the term "Common Facilities" is more descriptive and less subject to confusion or misinterpretation than is "Off-Site Facilities."

Q: 6. WHAT IS THE PURPOSE OF CHANGING THE WORDING IN THE DEFINITION OF SERVICE CONNECTION?

A: Please see my response to question 1. No changes were made to the definition of Service Connection between the AAW Proposed HUF and the ACC HUF Template.

Q: 7. WHAT IS THE PURPOSE OF CHANGING THE WORDING IN THE DEFINITION OF SERVICE CONNECTION?

A: This is a repeat of question 1.6. Please see my answer to that question.

Q: 8. IN THE FIRST PARAGRAPH UNDER TIME OF PAYMENT, WHY IS PAYMENT REQUIRED 15 DAYS AFTER THE MXA IS APPROVED AND NOT AT THE TIME OF THE PAYMENT FOR THE MXA?

A: Please see my response to question 1. The change was part of the ACC HUF Template. Arizona-American made only minor changes to this paragraph to be consistent with subsequent changes in the AAW Proposed HUF tariff.

Q: 9. WHY IS THE COMPANY PROPOSING THAT ONLY COMPONENT A BE ELIGIBLE FOR OFFSET? DOES THIS MEAN THAT THE MXAS ENTERED INTO BY THE COMPANY WILL NOT REQUIRE AN APPLICANT TO PROVIDE ANY SOURCE OF WATER, SINCE AN APPLICANT WILL ALREADY BE PROVIDING FOR ITS SOURCE OF WATER UNDER COMPONENT B (THE PORTION PAYING FOR THE WHITE TANKS SURFACE WATER TREATMENT FACILITY)?.

A: The White Tanks surface water treatment facility will reduce the need as much as possible for new wells and related infrastructure to meet growing demand - filling a significant portion of that demand with renewable surface water - but, it will not eliminate the need for new ground water entirely. In certain cases, the individual developer (i.e., applicant) will continue to be required to provide a source of water and related infrastructure. The benefits of the White Tanks surface water treatment facility to the Applicant, depending on the Applicant's development water demands, timing and location within the service area, include the following: (1) no requirement for a water source at all; (2) water source required but only to meet average day demands versus maximum day demand; and (3) no requirement for a redundant water source (i.e. second well).

Under the current hook-up fee tariff, the hook-up fee is a unified fee varying by meter size. That unified fee was developed by combining the original 2004 hook-up fee and the increase to the hook-up fee approved in 2007 to pay for the White Tanks surface water treatment facility. While the Company internally bifurcates the accounting of the hook-up fee to track the amount received for the White Tanks surface water treatment facility, the overall fee is administered as a single fee to the customer. Under this single fee administration of the hook-up fee, the offset of the cost of applicant-provided common facilities is resulting in the offsets being applied against the entire amount of the hook-up

fee, including the portion of the hook-up fee intended to pay for the White Tanks surface water treatment facility. The Company believes the correct application of the common facilities offset is that the offsets be applicable only to the portion of the hook-up fee that represents the original hook-up fee, and that the offsets are not to be applicable to that portion of the hook-up fee that is intended to pay for the White Tanks surface water treatment facility. Because most development occurring in the Agua Fria district requires the developer to provide some level of contributed infrastructure, this unintended complete offset is delaying the cash receipts to the Company to pay for the White Tanks surface water treatment plant. (Please see example below.)

To address this issue and to make it transparent for developers, the Company is proposing to split the current unified hook-up fee into two components. The original 2004 HUF amount will be "Component A" and the incremental increase to pay for the White Tanks surface water treatment facility will be "Component B". Component A will continue to be used to pay for the Company's existing and future investment in common facilities and will be eligible for offset against Applicant-provided common facilities. Component B will be solely used to pay for the Company's White Tanks surface water treatment facility investment and will not be eligible for offset against Applicant-provided common facilities.

In some cases, namely those instances where the developer is required to provide common facilities with a cost in excess of the total anticipated amount of the Component A portion of the hook-up fees, the Company will continue to provide a "true up" payment to the developer. This true-up payment will effectively cap the developer's cost for common facilities (other than the White Tanks surface water treatment facility) at the aggregate Component A hook-up fee. Thus, by itself, the bifurcation of the hook-up fee that is being proposed will affect only the Company's cash flow from the hook-up fees; it

will not increase the total obligations of developers under the hook-up fees and with respect to contributed infrastructure.

Shown below is a development example to illustrate the cash flow difference between the current HUF tariff and the AWW Proposed HUF tariff.

XYZ Development

Lots:	1,000, assume 125 lots per year, 8 year build-out
Meter Size:	Assume ¾" for all lots
Common Facility Cost:	$1,500,000 in HUF offsets/credits
Current HUF ¾" fee:	$4,920 * 1,000 meters = $4,920,000
AWW Proposed HUF ¾" fee:	Component A: $1,725 * 1,000 meters = $1,725,000 Total Component B: $4,920,000 $3,195 * 1,000 meters = $3,195,000

	Year 1	Year 2	Year 3	Year 4
Current HUF				
Offset Credit	$ 615,000	$ 615,000	$ 270,000	$ 0
Offset Credit Remaining Bal.	$ 885,000	$ 270,000	$ 0	$ 0
HUF Paid	$ 0	$ 0	$ 345,000	$ 615,000
Cumulative Cash to AAW	$ 0	$ 0	$ 345,000	$ 960,000

	Year 5	Year 6	Year 7	Year 8
Offset Credit Applied	$ 0	$ 0	$ 0	$ 0
Offset Credit Remaining Bal.	$ 0	$ 0	$ 0	$ 0
HUF Paid	$ 615,000	$ 615,000	$ 615,000	$ 615,000
Cumulative Cash to AAW	$1,575,000	$2,190,000	$2,805,000	$3,420,000

	Year 1	Year 2	Year 3	Year 4
AAW Proposed HUF				
Offset Credit (Component A)	$ 215,625	$ 215,625	$ 215,625	$ 215,625
Offset Credit Remaining Bal.	$1,284,375	$1,068,750	$ 853,125	$ 637,500
HUF Paid (Component A)	$ 0	$ 0	$ 0	$ 0
HUF Paid (Component B)	$ 399,375	$ 399,375	$ 399,375	$ 399,375
Cumulative Cash to AAW	$ 399,375	$ 798,750	$1,198,125	$1,597,500

	Year 5	Year 6	Year 7	Year 8
Offset Credit (Component A)	$ 215,625	$ 215,625	$ 206,250	$ 215,625
Offset Credit Remaining Bal.	$ 421,875	$ 206,250	$ 0	$ 0
HUF Paid (Component A)	$ 0	$ 0	$ 9,375	$ 215,625
HUF Paid (Component B)	$ 399,375	$ 399,375	$ 399,375	$ 399,375
Cumulative Cash to AAW	$1,996,875	$2,396,250	$2,805,000	$3,420,000

Q: 10. THE PROPOSED TARIFF STATES (SECTION IV.D.), "THE COMPANY AND APPLICANT MAY AGREE TO CONSTRUCTION OF ADDITIONAL FACILITIES, WHETHER ON-SITE OR OFF-SITE OF THE APPLICANT'S DEVELOPMENT, THAT ARE REQUIRED TO SERVE ONLY THE APPLICANT'S DEVELOPMENT, BUT WHICH ARE NOT DISTRIBUTION MAINS UNDER R14-2-401 AND WHICH ARE NOT SUBJECT TO REFUND UNDER R14-2-406(D)." WHAT TYPE OF FACILITIES IS THE COMPANY REFERRING TO THAT WOULD NOT BE REFUNDABLE UNDER COMMISSION RULES?

A: The Company is referring to water facilities such as storage tanks, booster pumps, treatment facilities and transmission mains that are required for, and constructed and built for, the exclusive use of a particular development. These items are not Distribution Mains subject to refund under R14-2-406(D). In cases where these items are required only for a single development, and not as part of an overall master area development plan encompassing multiple developments, the Company is proposing that such exclusive-use facilities be treated as contributions, the cost of which will not be eligible for offset against hook-up fees. The Company's rationale for this proposed treatment is that the facilities do not benefit any other properties. Therefore, the cost of the facilities should be borne by only those property owners who will receive the benefit of the facilities.

For example, a storage tank may be required to serve only a particular development or it may be required as part of a more comprehensive master area development to serve multiple developments. The Company is proposing that only the latter instances be treated as "Common Facilities" subject to offset against hook-up fee payments. In cases where infrastructure is required and will be used only to serve a single development, the Company is proposing that the cost of that infrastructure be treated as a contribution by

the developer not subject to offset against any hook-up fees. Therefore, in those cases where a developer is required to contribute exclusive-use infrastructure without offset of hook-up fees, the overall obligations of that developer to the Company will be increased by the cost of such contributed infrastructure.

Q: 11. UNDER LARGE SUBDIVISION PROJECTS (SECTION IV.F.), THE COMPANY USES THE WORD "MAY" AND "SHOULD" IN SEVERAL PLACES. WHY DID THE COMPANY NOT USE THE WORD "SHALL" INSTEAD?

A: Please see my response to Question 1. The "may" and "should" are directly from the ACC HUF template. Arizona-American made only minor changes to this paragraph to be consistent with subsequent changes in the AAW Proposed HUF tariff and to add additional clarification.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

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

EXHIBIT
A-7
ADMITTED

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT.	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REVISED DIRECT TESTIMONY
OF
BRADLEY J. COLE
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
JUNE 20, 2008

REVISED DIRECT TESTIMONY
OF
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ARIZONA-AMERICAN WATER COMPANY
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EXHIBIT BJC-1 – Estimated White Tanks Deferred O&M Costs.

EXHIBIT BJC-2 – Letter Denying Request for an Arsenic Compliance Exemption.

EXHIBIT BJC-3 – Tank Maintenance Schedule

EXHIBIT BJC-4 – Estimated Service Line and Meter Installation Charges

EXECUTIVE SUMMARY

Bradley J. Cole testifies as follows:

Water District Descriptions

Mr. Cole first describes the service areas and facilities for each of Arizona-American's six water districts that are included in this case: Agua Fria Water; Havasu Water; Mohave Water; Paradise Valley Water; Sun City West Water and Tubac Water.

White Tanks Deferred O&M Recovery

Mr. Cole supports Mr. Broderick's request for a mechanism to recover deferred first-year O&M costs for the White Tanks Regional Treatment Facility. Exhibit BJC-1 estimates these costs.

Tubac Arsenic-Treatment Facility

Mr. Cole discusses the need for an arsenic-treatment facility for the Tubac Water District. Exhibit BJC-2 is a copy of a January 18, 2008 letter from the U.S. Environmental Protection Agency, which denied Arizona-American's request for an exemption from the new federal arsenic standard.

Storage-Tank Maintenance Program

Mr. Cole discusses Arizona-American's new storage-tank maintenance program and supports Ms. Hubbard's request to fund this program. Exhibit BJC-3 provides the cost and schedule of all tanks scheduled for maintenance in the districts.

Chemicals

Mr. Cole explains why chemical expenses have increased in recent years. The first reason is the chemical cost has risen from year-to-year, typically tracking the Consumer Price Index. Second, we are now operating arsenic-treatment facilities located in the Agua Fria, Havasu, Sun City West and Paradise Valley water districts. New chemicals used in these facilities include Ferric Chloride, Polymer, Sodium Chloride, Sodium Hydroxide, Sodium Hypochlorite, and Sulfuric Acid. The third and final reason is growth, particularly in the Agua Fria and Mohave Water districts.

Service Charges

Mr. Cole explains why Arizona-American proposes to increase various service charges:

1. For the Agua Fria, Havasu, Mohave, Paradise Valley, Sun City West water districts, Arizona-American proposes to increase the service and meter-installation fees for meters 1 ½-inch or smaller from $660 to the amounts consistent with Staff's recommendations;
2. Revise its service and meter-installation fees for meter size 2-inch or larger from $660 to the actual cost of installing the service line and meters (Exhibit BJC-4 details the cost estimates for installing service lines and meter);
3. Increase its meter-test charge to $81 per meter; and
4. Standardize its after-hours reconnect charge in each district at $90.00.

Mohave Wastewater

Mr. Cole describes the service areas and facilities for Arizona-American's Mohave Wastewater District.

Sun City Water - Fire Hydrant Inspection

Mr. Cole supports Arizona-American's request to terminate the annual fire-hydrant inspection compliance report requirement for the Sun City Water District.

I INTRODUCTION

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

A. My name is Bradley J. Cole. My business address is 15626 N. Del Webb Boulevard, Sun City, Arizona, 85351, and my business phone is 623-815-3136.

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

A. I am employed by Arizona-American Water Company ("Arizona-American") and I am the Director of Operations for Central Arizona, which includes the Sun City Water and Wastewater Districts, Sun City West Water and Wastewater Districts, and Agua Fria Water and Wastewater Districts.

Q. WHAT ARE YOUR RESPONSIBILITIES AS THE DIRECTOR OF OPERATIONS?

A. I am responsible for water treatment, wastewater treatment, customer service, water distribution, and wastewater-collection operations.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Master of Science in Business Administration from California Lutheran University in 2002. I received my Bachelor of Science in Business Administration from the University of La Verne in 1998. I have also completed various water-related technical courses that include water treatment, wastewater treatment, water distribution system operations and maintenance, water quality protection and cross-connection control, and water and wastewater management.

I am also an Arizona Department of Environmental Quality ("ADEQ") Grade III Water Distribution System Operator and a Grade II Water Treatment Plant Operator (#22916).

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. I have been employed by Arizona-American for approximately three years and in my present capacity as the Director of Operations for Central Arizona for the past ten months. As the Director of Operations, I oversee and manage Arizona-American's water and wastewater services in the Sun City, Sun City West, and Agua Fria districts. Prior to becoming the Director of Operations, I was employed as the General Manager of Arizona-American's Eastern Operations for a period of two years, and my responsibilities included overseeing the water and wastewater operations in the communities of Tubac, Paradise Valley, Anthem, Bullhead City, and Lake Havasu. Prior to becoming the General Manager of Arizona-American's Eastern Division, I held the role of Arizona Production Manager overseeing Arizona-American's water and wastewater treatment plants in the communities of Sun City, Paradise Valley, and Anthem.

Prior to my employment with Arizona-American, I was employed for nearly 15 years by California-American Water Company ("California-American"). Like Arizona-American, California-American is a subsidiary of American Water. Before being promoted and transferred to the Arizona-American operations as the Production Manager, I held the position of Operations Manager for almost three years in California-American's Ventura County operations located in the City of Thousand Oaks. Before that, I held the position of Operations Supervisor for nearly four years and the remainder of my prior experience with California-American included the positions of Laborer, Utility Worker, and Distribution Clerk.

Q. DO YOU HAVE ANY PROFESSIONAL AFFILIATIONS?

A. Yes. I am an active member of the American Water Works Association (#424352) and a member of the Arizona Water and Pollution Control Association (#5776).

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY UTILITY COMMISSION?

A. Yes. I sponsored testimony and testified in Arizona-American's Anthem/Agua Fria water and wastewater rate case (Docket No. WS-01303A-06-0405), Arizona-American's Mohave Water and Wastewater rate case (Docket No. WS-01303A-06-0014), and Arizona-American's Sun City Water rate case (Docket No. W-01303A-07-0209).

II PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

A. Please refer to the Executive Summary, which precedes my direct testimony.

III WATER DISTRICTS

A AGUA FRIA WATER DISTRICT

Q. PLEASE DESCRIBE THE AGUA FRIA WATER DISTRICT

A. Arizona-American's Agua Fria Water service area ("Agua Fria Water") comprises approximately 70 square miles located in Maricopa County. It is bounded by Grand Avenue/US Route 60 on the north, McDowell Road/Interstate 10 on the south, State Route 303 and Reems Road on the east, and the Beardsley Canal/Perryville Road to the west. The system also includes the Verrado Development, which is bounded by Northern Avenue and Glendale Avenues on the north, US Route 10 on the south, Tuthill Road on the east, and 235th Avenue and 227th Avenues on the west.

The service area includes portions of unincorporated Maricopa County, the City of Surprise, the City of Goodyear, the Town of Buckeye and the City of Glendale.

A majority of the service area is still undeveloped. Within the developed area, the land use is predominantly residential. Most of the existing commercial use in the north is comprised of strip malls along Grand Avenue. The central portion of the service area

consists of large, irrigated lots and agricultural land that is rapidly being replaced by residential developments. Luke Air Force Base is located in the southeast part of the service area. The area of high noise contours surrounding Luke Air Force Base is restricted to non-residential use.

At the end of 2007 there were approximately 33,000 service connections in the Aqua Fria Water District. In 2007, we saw an increase of approximately 2,300 new service connections, which is down from previous year's growth during the recent real-estate boom. We expect continued slow growth for the next couple of years.

At build out, the number of service connections in the Agua Fria Water District should approach 90,000 with an average annual daily production of 43 million gallons per day.

Q. PLEASE DESCRIBE THE AGUA FRIA WATER DISTRICT'S PRODUCTION, TREATMENT, AND DISTRIBUTION SYSTEM.

A. There are 38 groundwater production wells in the district. In 2007, we pumped over 5.8 billion gallons of water from Arizona-American owned wells and purchased nearly 146 million gallons from other sources. At present, there are approximately 3,888,835 linear feet of water mains (736.52 miles), 6,120 fire hydrants, and 15,342 gate valves. The district's 15 water tanks provide over 18 million gallons of storage. Other than chlorination, most wells do not require water treatment. The district provides arsenic removal at four locations: Agua Fria Water Plants 1, 2, and 5, and at Agua Fria Trunk Line Well No. 1. Each location uses an absorptive media technology that effectively removes arsenic from the water before it enters the distribution system.

Q. HOW MANY PEOPLE ARE CURRENTLY CHARGED WITH OPERATING THE WATER FACILITIES OF THE AGUA FRIA WATER SYSTEM?

A. There are four water operators dedicated to operating Agua Fria Water's 38 wells, booster stations and water storage facilities, with assistance from Sun City and Sun City West operators from time to time. In addition to the operators, Agua Fria Water also shares with the Sun City and Sun City West Water Districts a pool of 12 maintenance operators, three line locators, eleven meter readers, eight field customer-service representatives, 12 utility workers and dedicated supervisory and supportive management staff. When the pooled employees work on Agua Fria Water-related matters, they appropriately charge their time and expenses to that district. Arizona-American's ability to share employees among three districts allows Arizona-American to reduce expenses without compromising the high quality of service we provide to customers in Sun City, Sun City West and Agua Fria Water Districts.

Q. DOES ARIZONA-AMERICAN PROPOSE A MECHANISM TO DEFER AND RECOVER OPERATIONS AND MAINTENANCE EXPENSES ASSOCIATED WITH THE WHITE TANKS PLANT UNTIL SUCH EXPENSES CAN BE PLACED IN RATE BASE?

A. Yes. Mr. Gross discusses the planned White Tanks Plant and how it will serve Agua Fria customers by treating renewable surface-water resources. Mr. Broderick proposes a mechanism to recover the deferred White Tanks Plant first-year O&M costs. Exhibit BJC-1, which was done under my supervision in September of 2007, estimates these costs to be $1.927 million.

Q. HOW DID YOU ESTIMATE THE WHITE TANKS PLANT-RELATED OPERATIONS AND MAINTENANCE EXPENSE?

A. The labor-related expenses in Exhibit BJC-1 consist of the estimated salaries, benefits, and training expenses for six full-time employees dedicated to the operation of the White

Tanks Plant. The estimated non-labor O&M costs, such as chemical and power costs, are based on treatment capacity of 13.5 MGD.

B HAVASU WATER DISTRICT

Q. PLEASE DESCRIBE THE HAVASU WATER DISTRICT?

A. The Havasu Water District covers approximately 3,486 acres (5.45 square miles). Topography within the area currently serviced ranges in elevation from 475-770 feet. The pipe network consists of approximately 30.8 miles of main, ranging in size from two to 16 inches. The Havasu Water District's water production facilities include three production wells, five ground level storage tanks, five booster pump stations, and five pressure regulating valves.

Q. HOW MANY EMPLOYEES ARE CURRENTLY PROVIDING SERVICE TO THE HAVASU WATER DISTRICT?

A. There are currently three employees providing service to the 1,525 customers in the Havasu Water. One employee was brought on-board in 2007 to help operate and maintain the water distribution system, its wells, pumps, and its new arsenic removal facility. We do not plan to bring on any new other employees in the near future.

C MOHAVE WATER DISTRICT

Q. PLEASE DESCRIBE THE MOHAVE WATER DISTRICT.

A. The Mohave Water District is located within Bullhead City and unincorporated areas of Mohave County. The overall service area covers approximately 17,397 acres (27.19 square miles). There are approximately 15,800 customers in the district. The topography within the service area ranges in elevation from 590-1,260 feet. The Mohave Water District has one operating center and five separate water systems:

- The Bullhead City water system (PWS # 08-032), also known as the Main System, serves a majority of the Bullhead City area in Mohave County, with a certificated area of approximately 25 square-miles.
- The Camp Mohave water system (PWS # 08-037) serves an unincorporated portion of southern Bullhead City, Mohave County, with a 0.5 square-mile certificated area.
- Lake Mohave Highlands system (PWS # 08-062) serves an area located to the north of the main Bullhead City service area, with a service area of approximately 0.6 square miles.
- Desert Foothills system (PWS # 08-137) serves an area in the northwest corner of the main Bullhead City service area, with a service area of approximately 0.6 square miles.
- Rio Vista Ranches system (PWS # 08-333) serves a subdivision in southern Bullhead City, Mohave County, with a 0.5 square-mile certificated area.

Q. PLEASE DESCRIBE THE MOHAVE WATER DISTRICT'S WATER PRODUCTION, TREATMENT, AND DISTRIBUTION SYSTEM.

A. The five systems within the Mohave water are not interconnected; each has its own water production, storage, and distribution facilities. All of Mohave Water's water is provided from wells. The terrain of this service territory is varied, rocky and desert; thus, maintaining proper pressure in the many pressure zones is the primary operational challenge. The water distribution system consists of approximately 199.7 miles of main, ranging in size from 2-inches to 18-inches. The only treatment provided in the Mohave Water system is in the form of chlorination before the water enters the distribution system.

The Bullhead City system consists of six groundwater production wells, ten storage tanks, two booster station sites, and a distribution system serving 14,300 customers. The

storage tanks provide a combination of both gravity and pumped storage for the system. There are currently 3.2 Million Gallons ("MG") of gravity storage and 1.48 MG of pumped storage in the Main System. There are currently no emergency interconnections with other water purveyors to supplement the supply from the wells.

The Camp Mohave system has one pumping site consisting of a well, storage tank, pumping facilities and a distribution system serving 97 customers. This system is interconnected with Bermuda Water Company.

The Lake Mohave Highlands system has two production wells, three ground storage tanks, three booster pump stations, and a distribution network serving 249 customers. The storage tanks provide pumped storage for the system with total volume of 0.49 MG. This system has an emergency tie-in through a 4-inch meter with North Mohave Valley Water Company.

The Desert Foothills system is supplied by one production well, two storage tanks, two booster pump stations,, and a distribution network serving 1,028 customers. The storage tanks provide a combination of both gravity and pumped storage for the system with a total volume of 0.5 MG.

The Rio Vista Ranches receives its water from the Bermuda Water Company. This system only has a distribution system serving approximately 97 customers.

Q. HOW MANY EMPLOYEES ARE CURRENTLY CHARGED WITH OPERATING THE MOHAVE WATER SYSTEM?

There are 15 employees who operate and maintain, read meters, and provide customer service to more than 15,800 customers in the Mohave Water.

D PARADISE VALLEY WATER DISTRICT

Q. PLEASE DESCRIBE THE PARADISE VALLEY WATER DISTRICT.

A. The Paradise Valley District is located in Maricopa County. It serves approximately half of the Town of Paradise Valley and portions of the City of Scottsdale. There are approximately 4,750 customers in the district.

Q. PLEASE DESCRIBE PARADISE VALLEY'S WATER PRODUCTION, TREATMENT, AND DISTRIBUTION SYSTEM.

A. Our Paradise Valley customers currently receive treated water from six wells located on the eastern edge of the service area. The wells range in depth from 1,000 to 1,740 feet and have flow rates from 1,300 to 2,500 gallons per minute. The distribution system, which covers about 8.5 square miles, consists of approximately 121 miles of mains ranging in size from two to thirty inches in diameter. The system has nine pressure zones due to the varying elevations in the service area. The combined capacity of the thirteen ground storage tanks is 4.529 million gallons.

All the water from our Paradise Valley wells is pumped to the Paradise Valley Arsenic Removal Facility ("PVARF") for chlorination, storage, and arsenic-removal treatment.

Q. HOW DOES THE PVARF REMOVE ARSENIC FROM PARADISE VALLEY'S WATER SUPPLY?

A. The PVARF entered service in September 2006 and treats water to satisfy the new federal drinking-water standard of 10 micrograms per liter. The PVARF utilizes a coagulation/filtration process to reduce the arsenic concentration in the drinking water supply. Ferric chloride is used to adsorb the arsenic in the raw water. The arsenic is then captured in the granular media, where it is settled out as sludge, dewatered with a plate filter press, and hauled off to a landfill.

Q. WILL ARIZONA-AMERICAN USE THE PCX-1 WELL TO SUPPLY WATER IN THE PARADISE VALLEY WATER DISTRICT?

A. No. As discussed by Mr. Lenderking, Arizona-American Water permanently disconnected the PCX-1 well in January, so water from that well will no longer be used to serve our customers

Q. HOW MANY EMPLOYEES CURRENTLY OPERATE THE PARADISE VALLEY WATER SYSTEM?

A. There are 14 employees who operate and maintain the water distribution system, PVARF, wells, booster stations, and MRTF. In addition, these employees also read meters and provide customer service.

Q. DOES ARIZONA-AMERICAN INCLUDE ANY POST-TEST-YEAR PLANT IN SERVICE IN THIS APPLICATION?

A. Yes, Arizona-American proposes to include in its rate base the replacement well for the existing Well No. 12 and a new turbine for Well No. 17. The Well No. 12 replacement will be in service by December 2008 and Well No.17 will be online by summer 2008. Please see page 12 of Paradise Valley's Schedule B for the post-test rate base adjustment relating to Well Nos. 12 and 17.

Q. WHY IS ARIZONA-AMERICAN REPLACING WELL NO. 12?

A. As stated by Mr. Gross, Well No. 12 is being replaced due to a failure in its casing, which restricted its production to approximately 50% of the original 2200 gallons per minute. Well No. 12 has been in service since 1962 and was scheduled for replacement in 2009 - 2010, however, due to the need to meet customer demands in summer 2009 and regain its original production capacity, we have moved up the planned replacement. The

permitting process began in April 2008 and the well replacement should be completed by December 2008. The approximate replacement cost is $1,930,000.

Q. WHY IS ARIZONA-AMERICAN REPLACING THE PUMP FOR WELL NO. 17?

A. This is a capital project to replace the aging submersible pump with a new turbine. The replacement is necessary because submersible pump parts are difficult to find and it takes twice as long to repair as a turbine. It also takes 7 to 10 weeks to find a replacement if the submersible pump needs to be replaced entirely.

Q. ARE THE REPLACEMENT WELLS INTENDED TO SERVE ANY NEW GROWTH?

A. No. The Paradise Valley Water District experiences very minimal growth. The replacement wells are needed to meet the current customers' demands.

E <u>SUN CITY WEST WATER DISTRICT</u>

Q. PLEASE DESCRIBE THE SUN CITY WEST WATER DISTRICT.

A. The Sun City West Water District is located in the northwest portion of the Phoenix metropolitan area, Maricopa County, and provides water service to approximately 15,400 customers in the unincorporated community of Sun City West. The certificated area is substantially built-out, with only minor in-fill growth occurring.

Q. PLEASE DESCRIBE THE SUN CITY WEST WATER DISTRICT'S PRODUCTION AND DISTRIBUTION SYSTEM.

A. The water distribution system consists of 1,003,254 linear feet (195 miles) of water distribution mains, with 1,142 fire hydrants, and over 2,600 gate vales. Ten wells feed two water plants (combination booster stations and water tanks). Located at each of the two water plants are two water tanks with a total combined storage capacity of 4.0 million gallons.

The Sun City West Water District is located in the Phoenix Active Management Area. The primary source of supply is groundwater withdrawn from wells within its certificated service territory and recovered CAP water. Arizona-American acquired, as part of the Citizen's acquisition, contracts for the delivery of 2,372 acre-feet CAP water. The CAP water is delivered to the Maricopa County Municipal Water Conservation District Number One ("MWD") Groundwater Saving Facility and legally recovered from Arizona-American's wells in the district.

Q. HOW MANY EMPLOYEES ARE CURRENTLY CHARGED WITH OPERATING THE SUN CITY WEST WATER SYSTEM?

A. There are five dedicated water operators operating the district's production facilities, with additional assistance from Sun City Water and Agua Fria Water operators from time to time. Sun City West also shares with the Agua Fria Water and Sun City Water districts a pool of 12 maintenance operators, three line locators, eleven meter readers, eight field customer service representatives, 12 utility workers, and dedicated supervisory and supportive management staff. When these employees work on Sun City West-related matters, they appropriately charge their time and expenses to that district. Arizona-American's ability to share employees among three districts reduces expenses without compromising our high quality of service.

F <u>TUBAC WATER DISTRICT</u>

Q. PLEASE DESCRIBE THE TUBAC WATER DISTRICT.

A. The Tubac Water District is located in Santa Cruz County in the southern Arizona.

Q. PLEASE DESCRIBE THE TUBAC WATER DISTRICT'S PRODUCTION AND DISTRIBUTION SYSTEM.

A. Tubac Water provides water to 535 customers in three difference pressure zones. The water is pumped from four groundwater wells and disinfected with sodium hypochlorite. The treated water is then delivered to our customers.

Q. DOES TUBAC WATER'S WATER SUPPLY MEET THE FEDERAL ARSENIC STANDARD?

A. No. As the Commission knows, the new federal standard for arsenic is 10 µg/L. Unfortunately, Tubac Water's running annual average for the fourth quarter of 2007 was 31 µg/L.

Q. DID ARIZONA-AMERICAN SEEK AN EXEMPTION FROM THE ARSENIC STANDARD?

A. Yes. At the urging of our Tubac customers, Arizona-American sought to delay enforcement and gain an exemption from the arsenic standard. Exhibit BJC-2 is a copy of a January 18, 2008, letter from the U.S. Environmental Protection Agency, which denied our request for an exemption. We are now required to provide drinking water that meets the 10 µg/L arsenic standard.

Q. WHAT DOES ARIZONA-AMERICAN PLAN TO DO TO MEET THE FEDERAL ARSENIC STANDARD?

A. As discussed by Mr. Gross, Arizona-American plans to build an arsenic-removal facility, which was originally designed in 2004. To reduce the capital investment in the facility, Arizona-American now plans to partner with the developer of the Tubac Marketplace, a commercial project in the downtown area.

Q. HAS ARIZONA-AMERICAN SOUGHT OTHER SOLUTIONS TO RESOLVE THE ARSENIC ISSUE IN TUBAC?

A. Yes. In 2004, we designed an arsenic-removal facility after considering seven different treatment technologies and selecting the absorptive media technology. At that time, there was significant opposition by the citizens of Tubac due to the potential rate impact and site location. We decided to halt the construction of the arsenic-removal facility while exploring other possible alternatives. First and foremost, we worked with ADEQ on getting an exemption from the rule. Unfortunately, ADEQ failed to grant the exemption.

Second, we investigated Point-of-Use ("POU") devices, which would be located at the customer's premises. We determined that this alternative was not cost effective. There are too many customers, such as a school and various restaurants, that would require specially fabricated devices. With over 500 other customers, a POU solution would not be affordable and manageable. Furthermore, while a POU solution has a lower capital costs, the operation and maintenance costs are significantly higher. Over time the option with the higher O&M costs will eventually eclipse the option with the higher capital cost.

Third, we also looked at the possibility of blending the water with other nearby sources of water with low arsenic level. This option would not work because there was not enough low-arsenic water source within or near the Tubac area to blend with.

Q. HOW MANY EMPLOYEES ARE CURRENTLY OPERATING THE TUBAC WATER SYSTEM?

There are currently two full-time employees who work for in the district, performing system operations and maintenance, meter reading, and customer service. There are no immediate plans to increase staffing levels.

G COMMON WATER ISSUES

1 Tank Maintenance

Q. WHAT IS ARIZONA-AMERICAN'S TANK MAINTENACE STRATEGY?

A. Arizona-American's strategy for tank maintenance is to provide the right maintenance for the right tank at the right time. The program's objective is to extend the life of the asset and avoid costly repairs or replacements. To achieve this strategy, Arizona-American established a ten-year tank maintenance program beginning 2009. Maintenance needs, which can include repainting the interior or exterior surfaces, structural repairs, and cathodic protection, are typically identified through routine inspection schedules. We typically plan on repainting the tanks every ten years, but inspection results can either accelerate or push back planned maintenance. For example, if a tank was last painted ten years ago and the inspection results provided that repainting can be delayed another three years, we will do so. That goes toward providing the right maintenance on the right tank at the right time.

We try to program the maintenance activities over a ten-year period to avoid expense shock to any single particular district. In doing this, we might only program these expensive maintenance activities on two or three tanks a year so that the total cost of the program for all tanks is spread out over a ten-year period. It would be very costly to any single district if all of its tanks were maintained in one year.

Q. WHAT ARE THE TEN-YEAR TANK MAINTENANCE SCHEDULES FOR THE AGUA FRIA, HAVASU, MOHAVE, PARADISE VALLEY, SUN CITY WEST AND TUBAC WATER DISTRICTS?

A. Exhibit BJC-3 provides the cost and schedule of all tanks scheduled for maintenance in the districts.

Q. HOW DOES ARIZONA-AMERICAN PROPOSE TO FUND THE SCHEDULED TANK MAINTENACE?

A. It is very difficult to annualize the cost of the ten-year maintenance schedule because we often adjust the schedule based on the condition the tanks. As I stated earlier, our regular inspections of our tanks may reveal certain tank conditions requiring acceleration or delay of planned maintenance. The tank maintenance reserve account proposed by Ms. Hubbard is an appropriate way to fund the ten-year maintenance plan.

2 Chemicals

Q. WHAT HAS HAPPENED TO CHEMICAL EXPENSE IN RECENT YEARS?

A. Chemical expenses have increased, for three primary reasons. The first reason is the cost of chemicals has risen from year-to-year, typically tracking the Consumer Price Index. Second, we are now operating arsenic-treatment facilities located in the Agua Fria, Havasu, Sun City West and Paradise Valley water districts. New chemicals used in these facilities include Ferric Chloride, Polymer, Sodium Chloride, Sodium Hydroxide, Sodium Hypochlorite, and Sulfuric Acid. The third and final reason is growth, particularly in the Agua Fria and Mohave Water districts. As our customer base has increased, we have had to treat more water and there use more chemicals

3 Service Line, Meter Installation, Meter Test Charges and After-Hour Connection Charges

Q. IS ARIZONA-AMERICAN ASKING TO INCREASE SERVICE AND METER-INSTALLATION FEES?

A. Yes. For the Agua Fria, Havasu, Mohave, Paradise Valley, and Sun City West water districts, Arizona-American proposes to increase the service and meter-installation fees for meters 1 ½-inch or smaller from $660 to the amounts consistent with Staff's recommendations (Staff Memorandum Re: Update Of State's Typical Service Line And Meter Installation Charges, dated February 21, 2008), and from $660 to the actual cost of installing the service line and meters for meter 2-inch or larger.

Q. WHAT IS THE ESTIMATED COST OF INSTALLING SERVICE LINES AND METERS?

A. The cost of installing a 20-foot service line in an established area with paved streets is approximately $4,130 to $5,700, depending on factors such as whether we use outside contractors or in-house labor, and whether re-paving is required.

Q. WHAT ARE THE PROPOSED SERVICE AND METER INSTALLATION, METER TESTING, AND ESTABLISHMENT CHARGES?

A. Please see Exhibit BJC-4, which details the cost estimates for installing service lines and meter. We are asking to modify the existing Service Line and Meter Installation Charge to obtain full-cost payment from the customer as an advance in aid of construction. The tariff should be changed to read "An applicant for water service shall pay to the Company, as a refundable advance in aid of construction, the full cost to provide the new service line and meter." The Company would provide an up-front cost estimate for each project and then provide a true-up against actual costs once the project is completed.

Q. IS ARIZONA-AMERICAN ASKING TO INCREASE THE SERVICE LINE AND METER CHARGES FOR ITS SUN CITY WATER DISTRICT?

A. No. The Sun City Water District is not part of this case. Further, it is a built-out district with very few new connections. If necessary, we can revise the Sun City Water District's Service Line, Meter, and Service Charges in a future rate case.

Q. IS ARIZONA-AMERICAN ASKING FOR NEW METER-TEST CHARGES?

A. Yes. Arizona-American asks to raise the meter test charge to $81 per meter. The current meter-test charge is $10 for our Agua Fria, Sun City, and Sun City West water districts, and $15 for our Paradise Valley Water District.

Q. WHY IS ARIZONA-AMERICAN ASKING TO INCREASE ITS METER-TEST CHARGES?

A. The current meter test charge only recovers a fraction of the true cost. It takes Arizona-American an average of four-and-one half man-hours to perform this activity and each employee involved in the testing earns approximately $18.00/hour in wages and benefits. Therefore, the cost of doing a meter testing is approximately $81.

Q. IS ARIZONA-AMERICAN ASKING FOR NEW AFTER-HOUR RECONNECTION CHARGES?

A. Yes. Commission Rule 14-2-403-D authorizes a water utility to charge an after-hour charge for a service connection/reconnection. Currently, the approved after-hours reconnection charges range from $35.00 in our Havasu Water District to $90.00 in our Anthem Water District, although the costs to provide this service should not vary significantly.

We typically turn off service for nonpayment of utility bills typically during normal business hours. Therefore, the reconnection requests typically arrive after 5:00 pm when the customer has returned home for the day. If the customer wants to reconnect service that evening, we have to call someone in to return back to work, on overtime pay, to make the service reconnection. Because an employee is paid at 1.5 times his regular pay and the process takes as much as two hours to complete, it makes sense to raise the after-hours reconnect charge in each district to the level set in the Anthem water tariff - $90.00. This would provide consistency among the six water districts, discourage late payments of bills, discourage after-hours reconnects, and provide for a full-cost recovery of direct labor expenses incurred plus overhead.

IV MOHAVE WASTEWATER

Q. PLEASE BRIEFLY DESCRIBE THE MOHAVE WASTEWATER DISTRICT?

A. The Mohave Wastewater System is comprised of two distinct service areas located in Mohave Valley and at the Arizona Gateway development. The Mohave Valley area is served by our Wishing Wells Treatment Plant, located south of Bullhead City. This is a 250,000 gpd extended aeration plant that serves a collection system. As discussed by Mr. Gross, the plant is being expanded to 500,000 gpd. The treatment process consists of influent entering into the headworks, aeration basin and clarifier tanks, aerobic digester, trickling filters, and a chlorine contact tank. The treated effluent is then disposed into ponds on a golf course, where it is used primarily for turf irrigation. The Mohave Valley service area is approximately 3.5 square-miles.

Arizona Gateway Treatment Plant ("Gateway Plant") is located at the intersection of Highway 95 and Interstate 40 and is approximately 12 miles north of Lake Havasu City. The Gateway Plant is an underground 112,000 gpd extended aeration plant that serves a collection system for a commercial development block that includes a truck stop, fast-food chains, a gas station, storage buildings, and other structures. Influent enters into a flow-equalization basin, and is treated in two separate train aeration reactors with a sludge holding tank. The effluent is then disinfected using chlorination/de-chlorination and disposed into an evaporation pond located within the compound of the treatment plant site. This service area is approximately 0.25 square-miles.

Q. HOW MANY EMPLOYEES ARE CURRENTLY OPERATING THE MOHAVE WASTEWATER DISTRICT?

A. At present, there is only one employee that operates and maintains the Wishing Well Wastewater Treatment Plant and associated sewer collection system. If needed, additional support is provided by Water Operators from the Mohave Water system.

Periodic sewer main cleaning and inspection services are provided from the Sun City staff on an as-needed basis.

V SUN CITY WATER DISTRICT ANNUAL FIRE HYDRANT INSPECTION COMPLIANCE REPORT

Q. ARE YOU PROPOSING TO TERMINATE THE ANNUAL FIRE HYDRANT INSPECTION COMPLIANCE REPORT REQUIREMENT FOR THE SUN CITY WATER DISTRICT?

A. Yes. In Decision 67093, the Commission ordered Arizona-American, in conjunction with the fire department serving Youngtown and Sun City, to test the fire hydrants in the Sun City Water District, and file annual reports detailing whether the hydrants are operational. Arizona-American submitted inspection schedules for all the fire hydrants in the Sun City Water District in the past three years and all are operational. Therefore, the annual inspection requirement is no longer needed. Furthermore, Arizona-American commits to assist the fire department to ensure that hydrants within our service territories are operational.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Arizona American Water Company
Test Year Ended December 31, 2007
Estimated White Tanks Deferred O&M Costs

WHITE TANKS REGIONAL WATER TREATMENT PLANT

ESTIMATED O&M COSTS

							Operating Period								
LABOR	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	BUDGET
500101 Direct Salaries	$372,963	$380,422	$388,030	$395,791	$403,707	$411,781	$420,016	$428,417	$436,985	$445,725	$454,639	$463,732	$473,007	$6,199,344
500136 Project Manager (CAPITAL)														$0
500111 Overtime	$27,927	$28,486	$29,056	$29,637	$30,230	$30,834	$31,451	$32,080	$32,721	$33,376	$34,043	$34,724	$35,419	$464,207
500107 Bonuses														$0
Benefits	$132,212	$134,856	$137,553	$140,304	$143,110	$146,973	$148,892	$151,870	$154,907	$158,005	$161,166	$164,389	$167,677	$2,197,612
Labor Subtotal	$533,102	$543,764	$554,639	$565,732	$577,047	$588,588	$600,359	$612,367	$624,614	$637,106	$649,848	$662,845	$676,102	$8,861,163
Task 001 Other														
500304 Auto Rentals	$718	$732	$747	$762	$777	$793	$808	$825	$841	$858	$875	$893	$910	$11,932
500352 Rewards and Recognition	$187	$191	$195	$199	$203	$207	$211	$215	$219	$224	$228	$233	$238	$3,113
500306 Meals	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Start-up and Relocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500310 Air Travel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500308 Auto Mileage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500303 Lodging	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500307 Special Functions	$208	$212	$216	$221	$225	$230	$234	$239	$244	$249	$254	$259	$264	$3,459
500446 Advertising	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500501 Vehicle Expense	$2,847	$2,903	$2,962	$3,021	$3,081	$3,143	$3,206	$3,270	$3,335	$3,402	$3,470	$3,539	$3,610	$47,315
500502 Leased Auto	$15,906	$15,918	$16,236	$16,561	$16,892	$17,230	$17,575	$17,926	$18,285	$18,651	$19,024	$19,404	$19,792	$259,401
500506 Computer Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500441 Telephone and Telemetry	$5,616	$5,731	$5,845	$5,962	$6,081	$6,203	$6,327	$6,453	$6,583	$6,714	$6,849	$6,985	$7,125	$93,364
500442 Postage and Freight	$4,054	$4,135	$4,218	$4,302	$4,388	$4,476	$4,566	$4,657	$4,750	$4,845	$4,942	$5,041	$5,142	$67,388
500443 Office Rent	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500308 Other Travel	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500444 Operating Supplies	$4,054	$4,135	$4,218	$4,302	$4,388	$4,476	$4,566	$4,657	$4,750	$4,845	$4,942	$5,041	$5,142	$67,388
500651 Other Utilities	$44,199	$45,080	$45,982	$46,901	$47,839	$48,796	$49,772	$50,768	$51,783	$52,819	$53,875	$54,952	$56,051	$734,624
500576 Equipment Rental Out	$4,370	$4,457	$4,546	$4,637	$4,730	$4,824	$4,921	$5,019	$5,120	$5,222	$5,327	$5,433	$5,542	$72,632
500741 Client Plant & Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500571 Tools	$1,040	$1,061	$1,082	$1,104	$1,126	$1,149	$1,172	$1,195	$1,219	$1,243	$1,268	$1,294	$1,319	$17,293
500572 Chemicals	$704,288	$718,373	$732,741	$747,396	$762,343	$777,590	$793,142	$809,005	$825,185	$841,689	$858,523	$875,693	$893,207	$11,706,592
500701 Taxes and Licenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500573 Uniforms Expense	$2,497	$2,547	$2,598	$2,650	$2,703	$2,757	$2,812	$2,868	$2,926	$2,984	$3,044	$3,105	$3,167	$41,504
500574 Maintenance Supplies	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500575 Laboratory Supplies	$5,202	$5,306	$5,412	$5,520	$5,631	$5,743	$5,858	$5,975	$6,095	$6,217	$6,341	$6,468	$6,597	$86,467
500577 Fuel Oil	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500578 Safety Supplies	$1,821	$1,857	$1,894	$1,932	$1,971	$2,010	$2,050	$2,091	$2,133	$2,176	$2,219	$2,264	$2,309	$30,263
500621 Outside Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500623 Consultants	$1,644	$1,677	$1,710	$1,744	$1,779	$1,815	$1,851	$1,888	$1,926	$1,965	$2,004	$2,044	$2,085	$27,324
500624 Contract Hauling	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500629 Contract Lab	$26,010	$26,530	$27,061	$27,602	$28,154	$28,717	$29,291	$29,877	$30,475	$31,084	$31,706	$32,340	$32,987	$432,335
500542 Dues and Membership	$1,248	$1,273	$1,299	$1,325	$1,351	$1,378	$1,406	$1,434	$1,463	$1,492	$1,522	$1,552	$1,583	$20,752
500544 Books and Publications	$520	$531	$541	$552	$563	$574	$586	$598	$609	$622	$634	$647	$660	$8,647
500545 Training and Tuition	$1,561	$1,592	$1,624	$1,656	$1,689	$1,723	$1,757	$1,793	$1,828	$1,865	$1,902	$1,940	$1,979	$25,940
500731 Community Involvement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500541 Meetings and Conventions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500445 Insurance Expense	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500652 Natural gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500653 Electricity	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500654 UV Royalty	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Task 001 Subtotal	$827,689	$844,243	$861,128	$878,350	$895,917	$913,835	$932,112	$950,754	$969,769	$989,165	$1,008,948	$1,029,127	$1,049,710	$13,757,756
Task 006 Solids Disposal														
500501 Vehicle Expense														$0
500444 Operating Supplies														$0
500576 Equipment Rental Out														$0
500574 Maintenance Supplies														$0
500572 Chemicals	$9,677	$9,871	$10,068	$10,269	$10,475	$10,684	$10,898	$11,116	$11,338	$11,565	$11,796	$12,032	$12,273	$160,853
500577 Fuel Oil														$0
500628 Ouside Services (tipping fee)														$0
500624 Contract Hauling	$56,100	$57,222	$58,366	$59,533	$60,724	$61,938	$63,177	$64,441	$65,730	$67,044	$68,385	$69,753	$71,148	$932,481
Task 006 Subtotal	$65,777	$67,092	$68,434	$69,803	$71,199	$72,623	$74,075	$75,557	$77,068	$78,609	$80,181	$81,785	$83,421	$1,093,334
Tasks Subtotal	$1,426,568	$1,455,099	$1,484,201	$1,513,886	$1,544,163	$1,575,046	$1,606,547	$1,638,678	$1,671,451	$1,704,880	$1,738,976	$1,773,757	$1,809,233	$23,712,253
Repairs Budget														
500576 Equipment Rental	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
500579 R&R	$11,282	$11,487	$186,845	$98,595	$68,264	$211,374	$620,170	$567,039	$65,974	$262,444	$211,406	$529,991	$1,547,046	$4,433,567
500574 Annual Maintenance	$114,522	$116,813	$119,149	$133,574	$136,246	$138,970	$141,750	$144,585	$164,547	$167,638	$160,791	$164,007	$167,287	$2,014,403
500621 Outside Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Repairs Subtotal	$125,784	$128,300	$305,794	$232,169	$204,509	$350,344	$761,920	$731,623	$220,521	$430,083	$372,200	$693,998	$1,714,335	$6,447,969
Insurance & Bonding														
LOI for D/B L/C														$0
D/B L/C														$0
Op's L/C	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Primary (AWS)Construction Bond														$0
Subcontractor Bond														$0
Property Insurance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal - Insurance & bonding	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Purchases														$0
CMMS														$0
Start-up Tools														$0
Start-up Lab Equipment														$0
REGIONAL OVERHEAD														$0
Subtotal - Capital Purchases	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Energy	$337,325	$344,071	$350,953	$357,972	$365,131	$372,434	$379,883	$387,480	$395,230	$403,134	$411,197	$419,421	$427,809	$5,806,977
Budget Subtotal	$1,889,676	$1,927,470	$2,140,948	$2,104,026	$2,113,803	$2,297,824	$2,748,349	$2,757,781	$2,287,202	$2,528,097	$2,522,375	$2,887,177	$3,951,377	$35,767,200

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

JAN 1 8 2008

Nina Miller
Environmental Compliance Manager
Arizona American Water Company
19820 N. 7th Street – Suite 201
Phoenix, AZ 85024

Dear Ms. Milleri:

We are in receipt of the arsenic exemption request forwarded by the Arizona Department of Environmental Quality (ADEQ) on your behalf for the following public water system:

- Arizona American Water Company, Tubac Public Water System (PWS ID AZ 0412001)

As provided under Section 1416 of the Safe Drinking Water Act, EPA will evaluate the request in accordance with 40 Code of Federal Regulations (CFR) 142.50, Subpart F, Exemptions Issued by the Administrator. We will also coordinate our review with ADEQ to ensure that they are kept informed of the status of your exemption request.

Exemptions are administrative tools that allow eligible water systems additional time to develop long-term strategies to achieve and maintain regulatory compliance while continuing to provide acceptable levels of public health protection. In order for the EPA to consider issuing an exemption, all the following criteria are to be met:

- demonstration of compelling factors;
- demonstration of PWS operational data;
- demonstration of no unreasonable risk to public health;
- demonstration of management or restructuring changes;
- demonstration of taking practicable steps to meet the MCL; and
- demonstration of no existing variance for arsenic.

Our preliminary review indicates that the information provided in the exemption request for the Tubac Public Water System does not support the issuance of a federal exemption for arsenic. Our decision is based on the arsenic analytical result for Well No. 4, reported as 39 parts per billion (ppb), which is above the threshold level of 35 ppb, the level which EPA considers does not pose an unreasonable risk to public health. **Your request for an exemption for the Tubac Public Water System is hereby denied at this time.**

Under the Safe Drinking Water Act, Congress established a timeframe that allows water systems up to five years to comply with new or revised drinking water standards. Under the revised arsenic MCL of 10 ppb, water systems were allowed to operate at levels between 10 ppb and 50 ppb for up to five years after the date of federal promulgation or by January 23, 2006. As

a matter of congressional policy, exposure at 50 ppb for the five years from January 22, 2001 to January 23, 2006 is not believed to pose an unreasonable risk to health.

In granting exemptions, which would extend the period of time for systems to meet a drinking water standard during which the system would continue to provide water above the MCL, EPA looked at the duration of exposure that should not generally pose an unreasonable risk to health based on arsenic concentrations over time. Under this approach, EPA has made a determination that exemptions would not be available for systems with arsenic concentrations above 35 ppb. A more detailed explanation can be found in Appendix G-3: Exemptions & the Arsenic Rule at the following EPA website:
http://www.epa.gov/safewater/arsenic/pdfs/ars final_app_g.pdf. You are encouraged to work with ADEQ on a plan to reduce the levels of arsenic being delivered to your customers.

Should you have any questions or would like to provide additional information to demonstrate how the Tubac Public Water System would operate without posing an unreasonable risk to health, please contact Kevin Ryan, at (415) 972-3806 or alternatively, at ryan.kevin@epa.gov.

Sincerely,

Corine Li, P.E.
Manager
Drinking Water Office

cc: John Calkins ADEQ

STATE	DIVISION	TANK NAME	DISTRICT	ERECTION DATE	2009 EST. FUNDING	2010 EST. FUNDING	2011 EST. FUNDING	2012 EST. FUNDING	2013 EST. FUNDING	2014 EST. FUNDING	2015 EST. FUNDING	2016 EST. FUNDING	2017 EST. FUNDING	2018 EST. FUNDING
AZ	Central	A.F. WP 1 TANK 1	Agua Fria	2000	4,200	-	-	-	125,000					
AZ	Central	A.F. WP 1 TANK 2	Agua Fria	2000	4,200	-	-	-	125,000					
AZ	Central	A.F. WP 2 TANK 1	Agua Fria	2000	4,200	-	-	200,000	-					
AZ	Central	A.F. WP 2 TANK 2	Agua Fria	1996	4,200		-	200,000						
AZ	Central	A.F. WP 3 TANK 1	Agua Fria	1996	4,200	200,000	-	-						
AZ	Central	A.F. WP 3 TANK 2	Agua Fria	2000	4,200	200,000	-	-						
AZ	Central	A.F. WP 4 TANK 1	Agua Fria	2000	4,200	-	200,000	-						
AZ	Central	A.F. WP 4 TANK 2	Agua Fria	1998	4,200		200,000	-						
AZ	Central	A.F. WP 5	Agua Fria	2004	4,200	-	-	-	-			125,000		
AZ	Central	A.F. WP 6	Agua Fria	Out of Service	-	-	-	-	-					
AZ	Central	A.F. WP 100	Agua Fria		4,725	-	-	-	-			200,000		
AZ	Central	A.F. WP 8	Agua Fria	2004	4,725	-	-	-	-		200,000			
AZ	Central	A.F. WP 9	Agua Fria	2004	4,725	-	-	-	-		125,000			
AZ	Central	A.F. WP 10 TANK 1	Agua Fria	2005	4,725	-	-	-	-					125,000
AZ	Central	A.F. WP 10 TANK 2	Agua Fria	2007	4,725	-	-	-	-					125,000
AZ	Central	S.C. WP 1 TANK 1	Sun City			-	143,750		-					
AZ	Central	S.C. WP 1 TANK 2	Sun City		5,250	-	143,750		-					
AZ	Central	S.C. WP 2 TANK 1	Sun City	1969	5,250	-	143,750		-					
AZ	Central	S.C. WP 2 TANK 2	Sun City	1969		-	143,750		-					
AZ	Central	S.C. WP 2 TANK 3	Sun City	1969		-	143,750		-					
AZ	Central	S.C. WP 3 TANK 1	Sun City		4,725	-	-	143,750	-					
AZ	Central	S.C. WP 3 TANK 2	Sun City		4,725	-	-	143,750	-					
AZ	Central	S.C. WP 5 TANK 1	Sun City	1971	200,000	-	-	-	-					
AZ	Central	S.C. WP 5 TANK 2	Sun City	1970	200,000	-	-	-	-					
AZ	Central	S.C. WP 6 TANK 1	Sun City		5,750	-	-	-	200,000					
AZ	Central	S.C. WP 6 TANK 2	Sun City		5,750	-	-	-	200,000					
AZ	Central	S.C. WP 8 TANK 1	Sun City	1978	4,725	143,750	-	-	-					
AZ	Central	S.C. WP 8 TANK 2	Sun City	1978	4,725	143,750	-	-	-					
AZ	Central	S.C.W. WP 1 TANK 1	Sun City West			-	200,000	-	-					
AZ	Central	S.C.W. WP 1 TANK 2	Sun City West	1992		-	200,000	-	-					
AZ	Central	S.C.W. WP 2 TANK 1	Sun City West	1986	4,725	183,750	-	-	-					
AZ	Central	S.C.W. WP 2 TANK 2	Sun City West	1986	4,725	183,750	-	-	-					
AZ	Central	COOL WELL	Sun City West		0	-	-	-	-					

Arizona-Am ' n Water Company
Tank Maint ; Schedule (Eastern Division)
Test Year E ... g December 31,2007

Exhibit 3
Pa 2

State	Region	TANK NAME	TANK LOCATION	ERECTION DATE	2009 EST FUNDING	2010 EST FUNDING	2011 EST FUNDING	2012 EST FUNDING	2013 EST FUNDING	2014 EST FUNDING	2015 EST FUNDING	2016 EST FUNDING	2017 EST FUNDING	2018 EST FUNDING
AZ	Eastern	Plant Reservoir #1	Anthem	1999	125,000	0	0	0	0					
AZ	Eastern	Plant Reservoir #2	Anthem	2002	0	0	0	4,000	125,000					
AZ	Eastern	Upper Reservoir #1	Anthem	1998	0	0	0	0	75,000					
AZ	Eastern	Upper Reservoir #2	Anthem	2005	0	0	4,600	0	0			75,000		
AZ	Eastern	Vista Arroyo Norte	Anthem	2007	0	0	0	0	5,000					350,000
AZ	Eastern	16-1 (No. 1)	Bullhead City	1993	4,600	0	0	0	0			275,000		
AZ	Eastern	16-1 (No. 2)	Bullhead City	?	4,600	0	0	0	0			275,000		
AZ	Eastern	16-2 (No. 1)	Bullhead City	1975	0	0	0	0	0					
AZ	Eastern	16-2 (No. 2)	Bullhead City	1994	4,600	0	0	0	300,000					
AZ	Eastern	24-1	Bullhead City	1999	4,600	0	0	0	0		300,000			
AZ	Eastern	Arizona Gateway	Bullhead City	1995	4,600	0	250,000	0	0					
AZ	Eastern	Big Bend Acres	Bullhead City	1987										
AZ	Eastern	Bullhead #4	Bullhead City	?	4,600	0	0	0	0	150,000				
AZ	Eastern	Camp Mohave	Bullhead City	1996	4,600	0	0	0	0		275,000			
AZ	Eastern	Desert Foothills (No. 1)	Bullhead City	1997	4,600	0	0	0	0	300,000				
AZ	Eastern	Desert Foothills (No. 2)	Bullhead City	2006	0	0	0	4,600	0				300,000	
AZ	Eastern	Desert Glen	Bullhead City		4,600	0	0	250,000	0					
AZ	Eastern	Lake Mohave Highlands	Bullhead City	1972	4,600	200,000	0	0	0					
AZ	Eastern	Laredo Village	Bullhead City	1990	4,600	0		250,000	0					
AZ	Eastern	Pegasus Ranch	Bullhead City	1971	4,600	200,000	0	0	0					
AZ	Eastern	Rancho Colorado	Bullhead City	2006	0	0	0	4,600	0				250,000	
AZ	Eastern	River Bend (No. 2)	Bullhead City	?	0	0	0	0	0					
AZ	Eastern	Riverview Mall	Bullhead City	1983	4,600	0	0	0	0	50,000				
AZ	Eastern	Silver Creek	Bullhead City	1984	4,600	0	250,000	0	0					
AZ	Eastern	Havasu Booster #1	Lake Havasu City	?	4,600	200,000	0	0	0					
AZ	Eastern	Havasu Booster #2	Lake Havasu City	1990	4,600	200,000	0	0	0					
AZ	Eastern	Havasu Booster #3	Lake Havasu City	1991	4,600	0	200,000	0	0					
AZ	Eastern	Havasu Booster #4 (No. 1)	Lake Havasu City	1994	4,600	0	250,000	0	0					
AZ	Eastern	Havasu Booster #4 (No. 2)	Lake Havasu City	2003	4,600	0	0	0	0	275,000				
AZ	Eastern	60th Street Tank	Paradise Valley	1960	4,600	0	0	0	250,000					
AZ	Eastern	Clearwater Hills #1	Paradise Valley	1956	4,600	275,000	0	0	0					
AZ	Eastern	Clearwater Hills #2	Paradise Valley	1965	200,000	0	0	0	0					
AZ	Eastern	Clearwater Hills #3	Paradise Valley	1968	4,600	275,000	0	0	0					
AZ	Eastern	Club Estates Tank	Paradise Valley	1961	200,000	0	0	0	0					
AZ	Eastern	Country Club #1	Paradise Valley		4,600	0	287,500	0	0					
AZ	Eastern	Country Club #2	Paradise Valley	1960/61	4,600	0	287,500	0	0					
AZ	Eastern	PVARF #1	Paradise Valley	2006	0	0	0	5,250	0				125,000	
AZ	Eastern	PVARF #2	Paradise Valley	2006	0	0	0	5,250	0				125,000	
AZ	Eastern	Racquet Club Tank	Paradise Valley	1955	4,600	0	0	125,000	0					
AZ	Eastern	Stone Canyon Tank	Paradise Valley	1955	4,600	0	0	100,000	0					
AZ	Eastern	Pallo parado booster	Tubac		0	0	0	0						

Paved Areas

Arizona Water Works Material Costs

Material/Labor	1" Service	2" Service
Saddle 6"	$ 66.55	$ 76.14
Corporation Stop	$ 25.47	$ 111.12
Copper Tubing (60'/40')	$ 298.80	$ 518.80
Angle Meter Stop	$ 41.26	$ 111.12
Meter Box	$ 100.00	$ 213.45
AMR Water Meter (Neptune)	$ 157.85	$ 305.19
Sub-total	$ 689.93	$ 1,335.82

Wheeler Construction Labor Costs

Material/Labor	Short Run Service 20 LF (1" & 2" with Asphalt)				Long Run Service 60 LF (1" & 2" with Asphalt)			
	Quantity	Unit	Unit Price	Total	Quantity	Unit	Unit Price	Total
Foreman and Pickup	6	HR	80	$ 480.00	8	HR	$ 80.00	$ 640.00
Backhoe and Operator	6	HR	145	$ 870.00	8	HR	$ 145.00	$ 1,160.00
Laborers (2)	12	HR	40	$ 480.00	16	HR	$ 40.00	$ 640.00
1/2 Sack Slurry	2	CY	80	$ 160.00	5	CY	$ 80.00	$ 400.00
Asphalt Crew	4	HR	500	$ 2,000.00	4	HR	$ 500.00	$ 2,000.00
Asphalt Buy	2	TN	60	$ 120.00	2	TN	$ 60.00	$ 120.00
Hot Tap	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Road Plates	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Traffic Control	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Sub-total				$ 5,010.00				$ 5,860.00

Range

Size	Short	Long
1-inch Service	$ 5,699.93	$ 6,549.93
2-inch Service	$ 6,345.82	$ 7,195.82

Arizona American Water Labor Costs

Material/Labor	Short Run Service 20 LF (1" & 2" with Asphalt)				Long Run Service 60 LF (1" & 2" with Asphalt)			
	Quantity	Unit	Unit Price	Total	Quantity	Unit	Unit Price	Total
Utility Worker IV	6	HR	25	$ 150.00	8	HR	$ 25.00	$ 200.00
Dump Truck	6	HR	21	$ 126.00	8	HR	$ 21.00	$ 168.00
Backhoe	2	HR	99	$ 198.00	4	HR	$ 99.00	$ 396.00
Laborers (2)	12	HR	16	$ 192.00	16	HR	$ 16.00	$ 256.00
Service Truck	6	HR	15.80	$ 94.80	8	HR	$ 15.80	$ 126.40
1/2 Sack Slurry	2	CY	80	$ 160.00	5	CY	$ 80.00	$ 400.00
Asphalt Crew	4	HR	500	$ 2,000.00	4	HR	$ 500.00	$ 2,000.00
Asphalt Buy	2	TN	60	$ 120.00	2	TN	$ 60.00	$ 120.00
Hot Tap	1	EA	30	$ 30.00	1	EA	$ 30.00	$ 30.00
Road Plates	1	EA	68	$ 68.00	1	EA	$ 68.00	$ 68.00
Traffic Control	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Sub-total				$ 3,438.80				$ 4,064.40

Range

Size	Short	Long
1-inch Service	$ 4,128.73	$ 4,754.33
2-inch Service	$ 4,774.62	$ 5,400.22

Hot Tap = $25+20%
Road Plates = $$25+$16+20%

Non Paved Areas

Arizona Water Works Material Costs

Material/Labor	1" Service	2" Service
Saddle 6"	$ 66.55	$ 76.14
Corporation Stop	$ 25.47	$ 111.12
Copper Tubing (60'/40')	$ 298.80	$ 518.80
Angle Meter Stop	$ 41.26	$ 111.12
Meter Box	$ 100.00	$ 213.45
AMR Water Meter (Neptune)	$ 157.85	$ 305.19
Sub-total	$ 689.93	$ 1,335.82

Wheeler Construction Labor Costs

Material/Labor	Short Run Service 20 LF (1" & 2" without Asphalt)				Long Run Service 60 LF (1" & 2" without Asphalt)			
	Quantity	Unit	Unit Price	Total	Quantity	Unit	Unit Price	Total
Foreman and Pickup	6	HR	80	$ 480.00	8	HR	$ 80.00	$ 640.00
Backhoe and Operator	6	HR	145	$ 870.00	8	HR	$ 145.00	$ 1,160.00
Laborers (2)	12	HR	40	$ 480.00	16	HR	$ 40.00	$ 640.00
Hot Tap	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Road Plates	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Traffic Control	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Sub-total				$ 2,730.00				$ 3,340.00

Range

Size	Short	Long
1-inch Service	$ 3,419.93	$ 4,029.93
2-inch Service	$ 4,065.82	$ 4,675.82

Arizona American Water Labor Costs

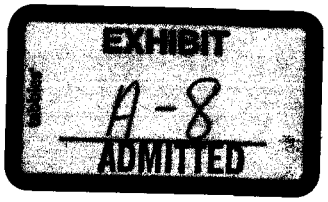
Material/Labor	Short Run Service 20 LF (1" & 2" without Asphalt)				Long Run Service 60 LF (1" & 2" without Asphalt)			
	Quantity	Unit	Unit Price	Total	Quantity	Unit	Unit Price	Total
Utility Worker IV	6	HR	25	$ 150.00	8	HR	$ 25.00	$ 200.00
Dump Truck	6	HR	21	$ 126.00	8	HR	$ 21.00	$ 168.00
Backhoe	2	HR	99	$ 198.00	4	HR	$ 99.00	$ 396.00
Laborers (2)	12	HR	16	$ 192.00	16	HR	$ 16.00	$ 256.00
Service Truck	6	HR	15.80	$ 94.80	8	HR	$ 15.80	$ 126.40
Hot Tap	1	EA	30	$ 30.00	1	EA	$ 30.00	$ 30.00
Road Plates	1	EA	68	$ 68.00	1	EA	$ 68.00	$ 68.00
Traffic Control	1	EA	300	$ 300.00	1	EA	$ 300.00	$ 300.00
Sub-total				$ 1,158.80				$ 1,544.40

Range

Size	Short	Long
1-inch Service	$ 1,848.73	$ 2,234.33
2-inch Service	$ 2,494.62	$ 2,880.22

Hot Tap = $25+20%
Road Plates = $$25+$16+20%

BEFORE THE ARIZONA CORPORATION COMMISSION



COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REBUTTAL TESTIMONY
OF
BRADLEY J. COLE
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
FEBRUARY 11, 2009

REBUTTAL TESTIMONY
OF
BRADLEY J. COLE
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
FEBRUARY 11, 2009

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EXECUTIVE SUMMARY

Mr. Cole testifies as follows:

Arizona-American will be hiring a Production Supervisor and four Plant Operators over the next six months to Staff the White Tanks Water Treatment Plant ("White Tanks Plant")

Once the White Tanks Plant enters service, Arizona-American's power savings for groundwater production are estimated at $791,765. Estimated chemical-treatment savings are $30,138.

Arizona-American accepts Staff's Recommendations for the Service Line and Meter Installation fees.

I INTRODUCTION

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

A. My name is Bradley J. Cole. My business address is 15626 N. Del Webb Boulevard, Sun City, Arizona, 85351, and my business phone is 623-815-3136.

Q. ARE YOU THE SAME BRADLEY J. COLE WHO PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. First, I will discuss Arizona-American's plans to begin staffing the White Tanks Water Treatment Plant ("White Tanks Plant"). Second, I will discuss the operational savings that Arizona-American expects to realize when the White Tanks Plant goes into service. Finally, I will respond to Staff's proposed service-line and meter-installation fees.

II WHITE TANKS PLANT STAFFING

Q. WHAT IS THE WHITE TANKS PLANT?

A. The White Tanks Plant is currently under construction to serve Arizona-American's Agua Fria Water District. When it enters service late this year it will allow Arizona-American to treat its allotment of Central Arizona Project water from the Colorado River. This will allow Arizona-American to substantially reduce ground water consumption in the Aqua Fria Water District.

Mr. Gross provides more details about the White Tanks Plant in his direct testimony and updates the status of construction in his rebuttal testimony

Q. WILL ARIZONA-AMERICAN WATER BE ADDING NEW EMPLOYEES TO STAFF THE WHITE TANKS PLANT?

A. Yes. Arizona-American will be hiring a Production Supervisor and four Plant Operators over the next six months.

Q. WHAT WILL THESE NEW EMPLOYEES DO AT THE WHITE TANKS PLANT?

A. The Production Supervisor will have direct overall operational responsibility for running the White Tanks Plant. To ensure that the White Tanks Plant operates effectively and efficiently, the Production Supervisor's duties will include:

- Hiring new operators;
- Setting staff schedules;
- Conducting performance reviews;
- Imposing discipline;
- Ensuring rule compliance;
- Maintaining water quality;
- Making reports;
- Supervising equipment maintenance;
- Making or directing operational adjustments; and
- Recommending and implementing capital replacements.

The Plant Operators will consist of a four-man crew - a lead operator and three subordinate operators. Each will be charged with operating the White Tanks Plant to ensure that is operates effectively and efficiently, and performing various equipment maintenance and replacement tasks. Each will also be charged with keeping detailed records of work activities.

Q. WILL ADDITIONAL SUPPORT BE AVAILABLE FROM OTHER ARIZONA-AMERICAN EMPLOYEES FOR THE WHITE TANKS PLANT?

A. Yes. Arizona-American operates in thirteen districts throughout the state. Its Central Division includes the Sun City Water, Sun City West Water, and Agua Fria Water districts. The Central Division employs an experienced maintenance crew including journeyman electricians. If support is needed, this maintenance crew can provide support or perform maintenance on plant equipment.

III WHITE TANKS PLANT OPERATIONAL SAVINGS

Q. WILL THERE BE OPERATIONAL SAVINGS IN THE AGUA FRIA WATER DISTRICT AS A RESULT OF OPERATING THE WHITE TANKS PLANT?

A. Yes. Because the White Tanks Plant will maximize Arizona-American's use of CAP water in the Agua Fria Water District, the district's well production will be reduced along with associated costs.

Q. WHAT OPERATING EXPENSES WOULD BE IMPACTED?

A. To the extent that well water is not being used, pumping and treatment costs will be reduced. The primary pumping cost is electricity. The primary variable costs associated with treatment are the chemicals used to treat the raw well water.

Q. DO YOU KNOW THE EXACT AMOUNTS OF THESE POWER AND CHEMICAL COST REDUCTIONS?

A. No, of course not. One of the major variables that must be estimated is well usage once the White Tanks Plant enters service. Arizona-American has hired a consultant to perform a well integration study, which should be completed later this year. The study will help Arizona-American determine where, when, and how our wells will be used in conjunction with the White Tanks Plant.

Q. CAN YOU GIVE THE COMMISSION AN IDEA OF WHAT THOSE REDUCTIONS IN POWER AND CHEMICAL COSTS MAY BE?

A. Yes. I performed a high-level analysis based on the annual system delivery in the Agua Fria Water District. I also looked at the annual power and chemical costs and reduced each accordingly by the estimated well production savings from the White Tanks Plant.

Q. HOW WAS YOUR ANALYSIS PERFORMED?

A. The Agua Fria Water District produced 5,879,468,000 gallons of water in 2008, all from groundwater wells. CAP water will be delivered to the White Tanks Plant through the Beardsley Canal, owned by Maricopa Water District ("MWD"). However, the canal is not available between December 1 and February 13, while MWD performs annual maintenance. This is the MWD 10-year average of canal dry-up period. During those 75 days, all the water in the Agua Fria Water District must be supplied from groundwater sources. Therefore, the White Tanks Plant will be able to treat Arizona-American's CAP water allocation for 290 days (365-75) each year.

Q. HOW DID YOU FACTOR MWD'S CANAL MAINTENANCE INTO YOUR CALCULATIONS?

A. During the 290-day operating period, the White Tanks Plant will treat approximately 10 million gallons per day, or 2.90 billion gallons of renewable Colorado River water. In 2008, water wells in the Agua Fria Water District produced 5.07 billion gallons during the same 290 day operating period. Therefore, I calculated that the White Tanks Plant will displace approximately 57.24 % [(2.90/5.07) x 100] of the district's groundwater usage.

Q. HOW DID YOU APPLY THAT CALCULATION TO ESTIMATE THE OFFSETS IN POWER AND CHEMICAL EXPENSES?

A. As a reasonable estimate I assume that power and chemical costs will be reduced by the same percentage that groundwater usage will be reduced. Power and chemical expenses are directly related to the amount of well water produced.

Q. WHAT IS YOUR ESTIMATE OF WELL ELECTRICITY SAVINGS?

A. In 2008, well electricity costs during the same 290-day period in the Agua Fria Water District were $1,383,344. If I reduce this by 57.24%, I estimate the resulting power savings would be $ 791,765.

Q. WHAT IS YOUR ESTIMATE OF CHEMICAL SAVINGS?

A. In 2008, chemical treatment costs during the same 290-day period in the Agua Fria Water District were $52,657. If I reduce this by 57.24%, I estimate the resulting chemical savings would be $30,138.

Q. WHAT IS YOUR ESTIMATE OF TOTAL ANNUAL OPERATIONAL SAVINGS RESULTING FROM OPERATION OF THE WHITE TANKS PLANT?

A. If I add the savings for electricity and chemicals together, I estimate that total annual savings will be $821,903.

IV <u>SERVICE LINE AND METER INSTALLATION FEES</u>

Q. HAVE YOU REVIEWED STAFF'S RECOMMENDATIONS FOR THE SERVICE LINE AND METER INSTALLATION FEES?

A. Yes.

Q. DO YOU SUPPORT THOSE RECOMMENDATIONS?

A. Yes. Arizona-American supports Staff's recommendations.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

EXHIBIT
A-9
ADMITTED

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REBUTTAL TESTIMONY
OF
JEFFREY W. STUCK
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
DATED FEBRUARY 11, 2009

REBUTTAL TESTIMONY
OF
JEFFREY W. STUCK
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
DATED FEBRUARY 11, 2009

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EXECUTIVE SUMMARY

Jeffrey W. Stuck testifies as follows:

Tubac Water District

Arizona-American is planning to construct a central plant to treat the district's water supply, which presently exceeds the federal arsenic standard of 10 parts per billion. The Central Plant treatment option is less expensive, more thorough, easier to manage, and consistent with recommendations provided by the Arizona Department of Environmental Quality ("ADEQ").

In the Tubac Water District, the initial cost for the Central Plant treatment option will be approximately $2.3 million versus only about $544,000 for the Point-Of-Use option. However, the annual O&M costs for the Central Plant option are only about $173,000 compared to $349,000 for the Point-Of-Use option. Consequently, the cross-over point in our Tubac Water District would occur in approximately the tenth year.

The Central Plant option treats all water delivered to the customer. This means that the water from every tap will meet the federal arsenic standard, including water used for showering and tooth brushing. The Point-Of-Use option would only treat water at one location, the kitchen tap.

For the Point-Of-Use Option, Arizona-American would have to regularly enter every customer residence or business to test the systems and to replace filters. This would not only be a burden on Arizona-American, but also on our customers.

Our Tubac Water District had an average of 535 customers during the test year. In its Arsenic Master Plan, a compliance guidance document for the arsenic regulation, ADEQ does not recommend use of Point-Of-Use devices in public water systems that serve more than 300 connections due to the breakpoint cost for O&M. This is consistent with our projections.

Mohave Water District

Arizona-American is currently negotiating an agreement with the Laughlin Ranch Developer which currently owns the LR1 well. We hope to finalize the agreement very quickly and to have the well in service by August 31, 2009, as recommended by Staff.

Mohave Wastewater

In 2007, the actual waste disposal expense associated with hauling away liquid sludge from the Wishing Well Plant was $186,330. As part of the upgrade, Arizona-American installed a screw press to dewater the sludge. I estimate that the annual cost of disposing of solid waste from the Wishing Well plant will drop to just $45,000. Therefore, I conservatively estimate plant operating-expense savings of approximately $140,000 per year.

Flows have continued to increase at the Wishing Well Treatment Plant. December 2008 saw the greatest monthly flows in the plant's history. Peak flows have also continued to increase. Our peak day was November 26, 2008, where flows reached 284,000 gallons. This was 84,000 gallons more than the Plant's former effective capacity of 200,000 gallons per day, or 42% above daily capacity.

I INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jeffrey W. Stuck. My business address is 19820 N. 7th Street, Suite 201, Phoenix, Arizona 85024.

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

A. I am employed by Arizona-American Water Company ("Arizona-American") as Director of Operations for Eastern Arizona, which includes the following districts: Mohave Water; Mohave Wastewater; Havasu City Water; Paradise Valley Water; Anthem Water; Anthem/Agua Fria Wastewater; and Tubac Water.

Q. PLEASE DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS DIRECTOR OF OPERATIONS.

A. In my districts, I am responsible for water treatment, wastewater treatment, customer service, water distribution, and wastewater-collection operations.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND.

A. I hold a Bachelor of Science Degree from Arizona State University.

Q. PLEASE OUTLINE YOUR BUSINESS EXPERIENCE.

A. I have worked in the water industry for 20 years. I began my career working at the Arizona Department of Water Resources where my duties included water rights investigations associated with the Little Colorado River Adjudication. In 1992 I began working for the Arizona Department of Environmental Quality in the Safe Drinking Water Program for the next 13 years. I held many positions in the ADEQ Safe Drinking Water Program, the last being the Safe Drinking Water Program Manager. In 2005 I joined American Water.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS CASE?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS CASE?

A. The purpose of my rebuttal testimony in this case is to respond to Mr. Magruder's testimony regarding point of use arsenic treatment and central plant treatment. In addition, I am providing the production data and estimated cost savings of the Wishing Well Wastewater Treatment Plant ("Wishing Well WWTP") in response to Staff and RUCO's recommendations in this proceeding.

II <u>TUBAC ARSENIC TREATMENT</u>

Q. MR. MAGRUDER QUESTIONED ARIZONA-AMERICAN'S CHOICE OF A CENTRAL PLANT TREATMENT FOR ARSENIC REMOVAL INSTEAD OF POINT-OF-USE; WHY DID ARIZONA-AMERICAN SELECT THE CENTRAL PLANT OPTION?

A. The Central Plant treatment option is less expensive, more thorough, easier to manage, and consistent with recommendations provided by the Arizona Department of Environmental Quality ("ADEQ").

Q. WHAT IS THE CENTRAL PLANT TREATMENT OPTION FOR ARSENIC REMOVAL?

A. In this option, arsenic-laden water is collected from one or more wells, treated in a central arsenic-remediation facility, treated for other contaminants, chlorinated, and then distributed to our customers.

Q. WHAT IS THE POINT-OF-USE TREATMENT OPTION?

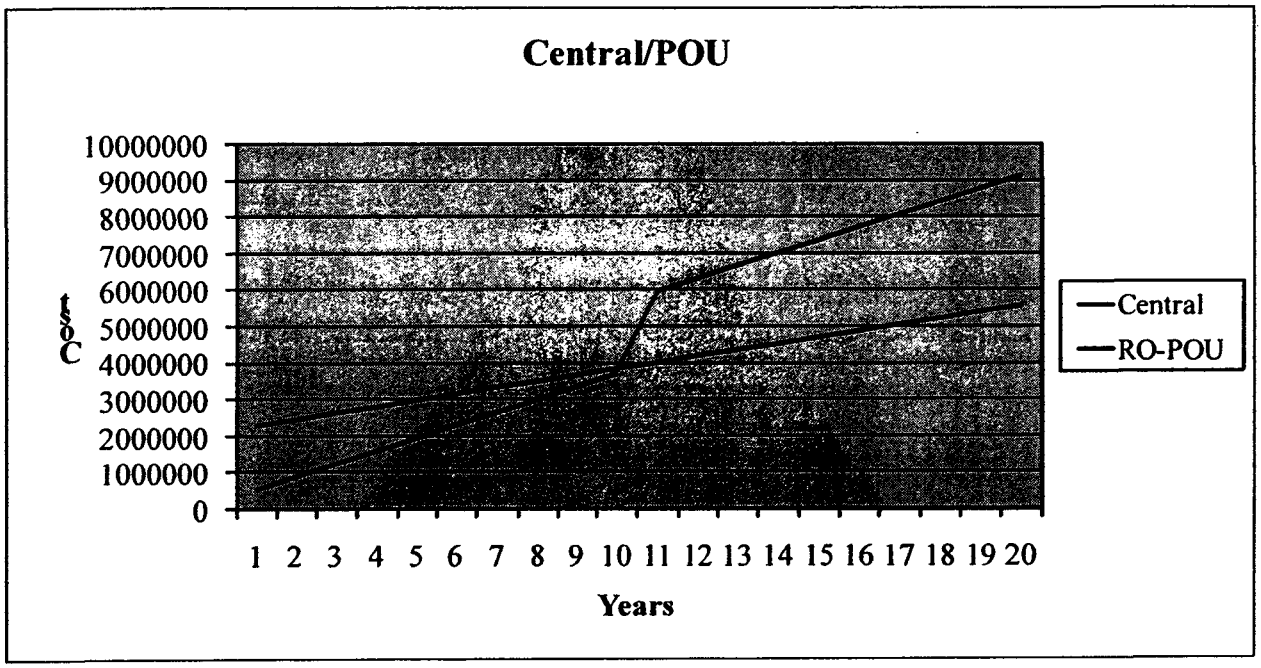
A. In this option, the collection, treatment, and delivery processes are the same, except that arsenic is removed by a filtering system at the point of use, typically the kitchen sink, with water delivered for drinking and cooking through a separate tap.

Q. HOW IS THE CENTRAL PLANT OPTION LESS EXPENSIVE THAN THE POINT-OF-USE OPTION?

A. The Point-Of-Use option is less expensive initially. The cost of acquiring and installing the arsenic-removal devices in each customer's home or business is less than the cost of constructing the Central Plant. However, the ongoing operation-and-maintenance costs for the Point-Of-Use option are significantly greater. Arizona-American would have to regularly enter the customer's residence or business to ensure that the Point-Of-Use devise was performing as required, and for periodic filter replacement. The whole process would be very labor intensive and customer intrusive. The Point-Of-Use device would also need to be changed in its entirety once every 10 years according to manufacturer recommendations. By contrast, with the Central-Plant option, monitoring is provided by instrumentation, and media replacement is required at just one location, every year or two, and the plant itself has a much longer operational life span, on the order of 40 years. In addition, there are liability concerns because of the necessity to monitor a unit that is outside of the Company's control without complete access to the customers' premises.

Q. CAN YOU PROVIDE ANY MORE INFORMATION COMPARING THE UP-FRONT AND LONG-TERM COSTS OF THE TWO OPTIONS?

A. Certainly. I have prepared the following chart that compares the two options:



In the Tubac Water District, the initial cost for the Central Plant treatment option will be approximately $2.3 million versus only about $544,000 for the Point-Of-Use option. However, the annual O&M costs for the Central Plant option are only about $173,000 compared to $349,000 for the Point-Of-Use option. Consequently, the chart shows that the cross-over point in our Tubac Water District would occur in approximately the tenth year. At that point, the cumulative costs of the Point-Of-Use option catch-up to and surpass the cumulative costs of the Central Plant option. The forecast also assumes an additional investment of almost $2 million would be required for the Point-Of-Use option in year 11 to replace the individual units in the customers' homes.

Q. HOW IS THE CENTRAL PLANT OPTION MORE THOROUGH?

A. The Central Plant option treats all water delivered to the customer. This means that the water from every tap will meet the federal arsenic standard, including water used for showering and tooth brushing. The Point-Of-Use option would only treat water at one location, the kitchen tap.

Q. HOW IS THE CENTRAL PLANT OPTION EASIER TO MANAGE?

A. I have already touched on this. To ensure compliance, Arizona-American will have to regularly enter every customer residence or business to test the systems and to replace filters. This would not only be a burden on Arizona-American, but also on our customers. Each customer uses quantities of water each month, so the effective replacement of filters would not necessarily occur at the same point in time for all customers.

Q. HOW IS THE CENTRAL PLANT OPTION MORE CONSISTENT WITH ADEQ RECOMMENDATIONS?

A. Our Tubac Water District had an average of 535 customers during the test year. In its Arsenic Master Plan, a compliance guidance document for the arsenic regulation, ADEQ does not recommend use of Point-Of-Use devices in public water systems that serve more than 300 connections due to the breakpoint cost for O&M. This is consistent with our projections.

III <u>MOHAVE WATER</u>

Q. STAFF RECOMMENDED THAT ARIZONA-AMERICAN BRING A NEW WELL IN SERVICE FOR ITS LAUGHLIN RANCH SERVICE AREA BY AUGUST 31, 2009. WILL ARIZONA-AMERICAN COMPLY WITH THAT RECOMMENDATION?

A. Yes. We are currently negotiating an agreement with the Laughlin Ranch Developer which currently owns the LR1 well. We hope to finalize the agreement very quickly and to have the well in service by August 31, 2009, as recommended by Staff.

IV <u>MOHAVE WASTEWATER</u>

Q. MR. GROSS TESTIFIES THAT THERE WILL BE OPERATIONAL SAVINGS ASSOCIATED WITH THE UPGRADE AND EXPANSION OF THE WISHING WELL WASTEWATER TREATMENT PLANT; IS HE CORRECT?

A. Yes. In 2007, the actual waste disposal expense associated with hauling away liquid sludge from the Wishing Well Treatment Plant was $186,330. As part of the upgrade, Arizona-American installed a screw press to dewater the sludge. Based on our experience at our Anthem Wastewater Treatment Plant, I estimate that the annual cost of disposing of solid waste from the Wishing Well Treatment Plant will drop to just $45,000. Therefore, I conservatively estimate plant operating-expense savings of approximately $140,000 per year.

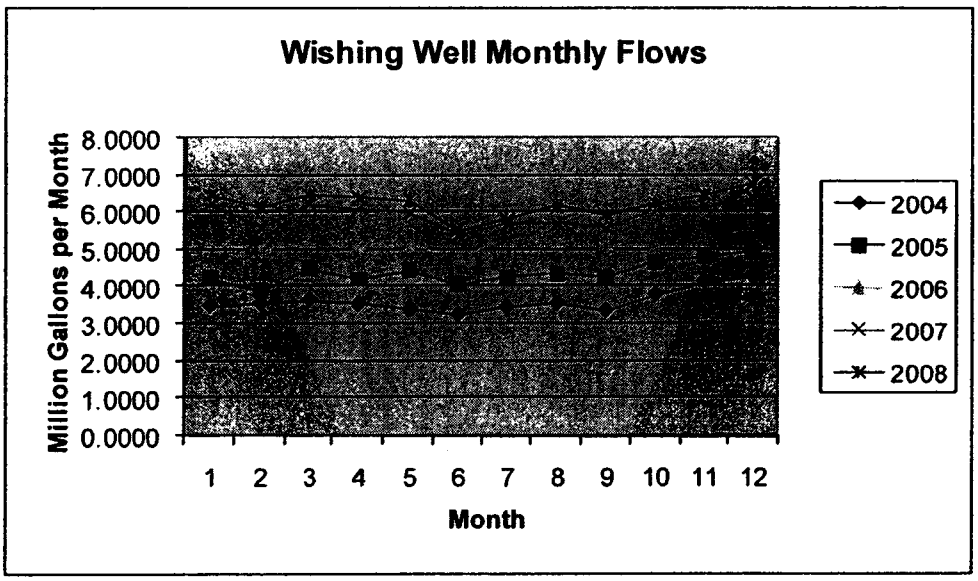
Q. WHAT HAS BEEN THE TREND WITH FLOWS AT THE WISHING WELL PLANT?

A. Flows have continued to increase. The following table shows monthly flows for the years 2004-2008.

Table – Monthly Flows at Wishing Well Treatment Plant (million-gallons/month)

	2004	2005	2006	2007	2008
JAN	3.5000	4.2327	5.2405	6.2361	6.4742
FEB	3.5680	3.8964	4.9412	5.5790	6.1517
MAR	3.6676	4.5064	5.2719	6.2015	6.4626
APR	3.5645	4.2216	5.1776	6.1266	6.3996
MAY	3.4137	4.4503	5.1008	5.9844	6.3247
JUN	3.2708	4.0808	4.8097	5.3793	5.5063
JUL	3.4577	4.2679	5.2768	5.6995	5.8099
AUG	3.5661	4.3570	5.2358	5.6937	6.1751
SEP	3.3918	4.2680	5.1879	5.5907	5.91564
OCT	3.8055	4.6815	5.0621	6.0749	6.259
NOV	4.1481	4.8141	5.2477	6.1426	6.466
DEC	4.2823	4.9637	5.5904	6.3761	6.7831
Total	43.6361	52.7404	62.1424	71.0844	74.7279

I have also provided the data in chart form.



The data show that monthly and annual flows continue to increase. December 2008 saw the greatest monthly flows in the plant's history.

Q. WHAT HAVE RECENT PEAK FLOWS BEEN AT THE WISHING WELL TREATMENT PLANT?

A. Peak flows have also continued to increase. Our peak day was November 26, 2008, where flows reached 284,000 gallons. This was 84,000 gallons more than the Plant's former effective capacity of 200,000 gallons per day, or 42% above daily capacity.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

EXHIBIT
A-10
ADMITTED

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS AGUA FRIA WATER DISTRICT, HAVASU WATER DISTRICT, MOHAVE WATER DISTRICT, PARADISE VALLEY WATER DISTRICT, SUN CITY WEST WATER DISTRICT, AND TUBAC WATER DISTRICT	DOCKET NO. W-01303A-08-0227
IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WASTEWATER DISTRICT	DOCKET NO. SW-01303A-08-0227

REBUTTAL TESTIMONY
OF
G. TROY DAY
ON BEHALF OF
ARIZONA-AMERICAN WATER COMPANY
FEBRUARY 11, 2009

REBUTTAL TESTIMONY
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EXECUTIVE SUMMARY

Mr. Day testifies as follows:

Tank-Maintenance Program

Staff recommended that the Commission reject Arizona-American's proposed tank maintenance program. Arizona-American acknowledges that it did not propose a clear program and did not support it with enough data. Therefore, Arizona-American offers a revised program that should be more acceptable to Staff.

Tank maintenance is one of the largest single maintenance expenses for a water utility. Although it is a relatively predictable expense for the Company, a particular district might see more or less than its proportionate share during a rate case test year. For a smaller district, the expense can have a significant impact on rates. By funding tank maintenance by an annual accrual, the rate impact of the maintenance can be spread over many years, lessening the rate impact on customers.

Under the revised program Arizona-American would perform inspections, interior coating, and exterior painting every 14 years for every tank. It is more cost effective to only have to take a tank out of service once every 14 years, rather than every seven years.

Arizona-American used information from Arizona Water and data from our Missouri-American Water affiliate, which has over 100 tanks and many years of tank maintenance records. Based on this study and our experience with the Arizona climate and water-quality characteristics, we believe that 14 years is an appropriate timeframe for maintenance of both interiors and exteriors. This time period is more customer friendly for costs while still allowing us to maintain our valuable assets in a timely manner.

Maintenance costs are based on the costs used by Arizona Water. Interior coating is at $4.22/sq.ft., and exterior coating is at $1.68/sq.ft.

Arizona-American projects that it will spend approximately $4.4 million over the next 14 years. In her rebuttal Schedule C-2, Ms. Hubbard calculates the proposed revised annual tank-maintenance accrual by district. The adjustment is detailed on ADJ SLH-5 Tank Maintenance for each district.

The tank maintenance funds would be accounted for in a reserve account that could only be used for tank maintenance. Second, Arizona-American can annually report on the status of the account, including the funds collected, the maintenance performed, and the year-ending fund balance.

Small Meter Replacement Standard

Arizona-American strives to replace small meters after 15 years of usage. Meters need to be replaced over time, because meter accuracy also decreases over time. These inaccuracies are in the customers' favor, but the result is inaccurate billing, inaccurate rate calculations, and inaccurate water-loss computations. This is consistent with a study performed in 1995 by the City of Phoenix.

I INTRODUCTION

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

A. My name is Troy Day. My business address is 19820 N. 7th Street, Suite 201, Phoenix, Arizona 85024 and my business phone is 623-445-2422.

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

A. I am the Vice President of Operations for Arizona-American Water Company ("Arizona-American" or the "Company").

Q. PLEASE DESCRIBE YOUR PRIMARY RESPONSIBILITIES FOR THE COMPANY.

A. I lead the Operations, Water Quality and Water Resource functions of Arizona American Water. I guide the capital improvement program to ensure Arizona Operations facilities comply with American Water standards, as well as all regulatory requirements. I direct the implementation of standards of practice, policies, and business plans to ensure operational efficiency and effectiveness. I ensure water and wastewater operations meet the required standards and are in compliance with all regulatory requirements.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND EDUCATION.

A. I have worked for American Water for over eight years. Previously, I served as the Production Director for American Water, Western Region. Before that I was American Water's Director of Water Quality for its Western Region. I came to American Water from the Arizona Department of Environmental Quality, where I managed numerous programs including water permits and water quality standards. Before that I worked as a Hydrologist for the Arizona Department of Water Resources. I am a graduate of Arizona State University, where I studied Geology.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will discuss Arizona-American's proposed revised tank-maintenance program and also the timing of Arizona-American's small meter replacement program.

II TANK-MAINTENANCE PROGRAM

Q. DID ARIZONA-AMERICAN PROPOSE A TANK-MAINTENANCE PROGRAM IN ITS DIRECT TESTIMONY?

A. Yes, Mr. Cole proposed such a program. Mr. Cole reports to me.

Q. HOW DID STAFF REACT TO MR. COLE'S PROPOSAL?

A. Staff witness McMurray recommended that the Commission reject Arizona-American's proposal. Mr. McMurray did not believe that Arizona-American had provided sufficient support for the recommended annual expense levels. Mr. McMurray stated: "Staff recommends normalizing tank maintenance expense by using an average of the general ledger balances for the past three years."

Q. HOW DO YOU RESPOND TO STAFF?

A. I understand Staff's concerns. Arizona-American did not propose a clear program and did not support it with enough data. I would like to offer a revised program that should be more acceptable to Staff.

Q. WHY DOES ARIZONA-AMERICAN STILL WANT A TANK-MAINTENANCE ACCRUAL?

A. Tank maintenance is one of the largest single maintenance expenses for a water utility. Although it is a relatively predictable expense for the Company, a particular district might see more or less than its proportionate share during a rate case test year. For a smaller district, the expense can have a significant impact on rates. By funding tank-

maintenance by an annual accrual, the rate impact of the maintenance can be spread over many years, lessening the rate impact on customers.

Q. WHAT ARE YOU PROPOSING FOR ARIZONA-AMERICAN'S REVISED TANK MAINTENANCE PROGRAM?

A. Under the revised program Arizona-American would perform inspections, interior coating, and exterior painting every 14 years for every tank. This differs from the Tank Maintenance Program approved for Arizona Water, which is to perform interior coating every 14 years and exterior painting every seven years. Arizona-American proposes 14 years for both interior and exterior coating, because it is more cost effective to only have to take a tank out of service once every 14 years, rather than every seven years. Further, our experience is that exterior coating every seven years is more often than needed.

Q. IS THERE ANY AMERICAN WATER WORKS ASSOCIATION ("AWWA") STANDARD FOR TANK MAINTENANCE AND REPAIR?

A. No. Due to differing climates and water quality characteristics there is no standard time frame for tank maintenance. Because there is no standard we have used information from Arizona Water and data from our Missouri-American Water affiliate, which has over 100 tanks and many years of tank maintenance records. As discussed above, Arizona Water has used a tank maintenance deferral account to paint tank exteriors every seven years and coat interiors every 14 years. Missouri American Water's average schedule for painting tank exteriors is eight years, and for coating interiors every 12 years. Our experience with the Arizona climate and water-quality characteristics leads us to believe that 14 years is an appropriate timeframe for maintenance of both interiors and exteriors. This time period is more customer friendly for costs while still allowing us to maintain our valuable assets in a timely manner.

Q. WHAT IS ARIZONA-AMERICAN'S PROJECTED TANK-MAINTENANCE EXPENSE?

A. Arizona-American projects that it will spend approximately $4.4 million over the next 14 years.

Q. HOW DID YOU CALCULATE THE PROJECTED TANK-MAINTENANCE OF $4.4 MILLION?

A. Please see Exhibit GTD-R1, attached to my testimony. Page one on Exhibit GTD-R1, describes each water tank in Arizona-American's system. Page two shows the proposed scheduled maintenance for each tank on page one and calculates the expected cost of the scheduled maintenance. Finally, page three summarizes page two. The first column on page three shows the $4,400,281 estimated tank-maintenance cost over the next 14 years.

Q. WHAT ARE THE MAINTENANCE COSTS IN EXHIBIT GTD-R1 BASED ON?

A. These are based on the costs used by Arizona Water. Interior coating is at $4.22 /sq.ft., and exterior painting is at $1.68/sq.ft.

Q. WHO CALCULATES THE PROPOSED REVISED ANNUAL ACCRUAL BY DISTRICT?

A. In her rebuttal Schedule C-2, Ms. Hubbard calculates the proposed revised annual tank-maintenance accrual by district. The adjustment is detailed on ADJ SLH-5 Tank Maintenance for each district.

Q. ARE YOU PROPOSING ANY OTHER FEATURES FOR THE REVISED TANK-MAINTENANCE PROGRAM?

A. Yes. First, the tank maintenance funds would be accounted for in a reserve account that could only be used for tank maintenance. Second, Arizona-American can annually report

on the status of the account, including the funds collected, the maintenance performed, and the year-ending fund balance.

III SMALL METER REPLACEMENT STANDARD

Q. WHAT IS ARIZONA-AMERICAN'S STANDARD FOR REPLACING SMALL WATER METERS?

A. Arizona-American strives to replace small meters after 15 years of usage. Meters need to be replaced over time, because meter accuracy also decreases over time. These inaccuracies are in the customers' favor, but the result is inaccurate billing, inaccurate rate calculations, and inaccurate water-loss computations.

The AWWA standard for small meter accuracy is 96% average accuracy, and the recommended testing period for small meters is 15 years. This is consistent with a study performed in 1995 by the City of Phoenix. The City found that once a meter had registered more than 748,000 gallons, accuracy began to dip below the AWWA standard of 96%. A meter needs to register just 137 gallons per day consumption (just over 4,000 gallons per month), to register 748,000 gallons in 15 years.

Average consumption even in our Sun City Water District exceeds 8,000 gallons per month. Based on the Phoenix study, we would expect that almost 100% of small meters aged 15 years and older would not meet the AWWA standard of 96% average accuracy. This is confirmed by our experience testing small meters that have been in service 15 years or more. This is why we strive to replace all small meters after 15 years of usage.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

Arizona American Water
2008 Rate Case - Tank Inspection Schedule
All Tanks

Eastern Division

Division	Facility Name	District	Year Constructed	Last Interior Paint	Last Exterior Paint	Type	Size (Gals.)	Evaluation and Report	Washout of Tank	Disinfection of Tank	Total Estimated Cost		Comments
Eastern	16-1 (No. 1)	Bullhead City	1993	1999	1999	Steel	1,000,000	3,200	750	115	4,065		Chips in paint from rocks, some mis-matching paint from painting over graffiti
Eastern	16-1 (No. 2)	Bullhead City	unknown	unknown	1999	Steel	420,000	3,000	850	155	4,005		Needs painting/oxidized
~~Eastern~~	~~16-3 (No. 1)~~	~~Bullhead City~~	~~1975~~	~~unknown~~	~~1988~~	~~Steel~~	~~250,000~~	~~0~~	~~0~~	~~0~~	~~0~~		Out of service/ Needs demolishid
Eastern	16-2 (No. 2)	Bullhead City	1994	1980	1980	Steel	1,000,000	3,200	900	185	4,285		Oxidized, outside
Eastern	24-1	Bullhead City	1999	1999	1999	Steel	1,000,000	3,200	900	185	4,285		outside looks good/oxidized
Eastern	Arizona Gateway	Bullhead City	1995	1995	1995	Steel	300,000	3,000	850	155	4,005		outside looks good/oxidized
~~Eastern~~	~~Big Bend Acres~~	~~Bullhead City~~	~~1987~~	~~1991~~	~~1987~~	~~Steel~~	~~120,000~~	~~0~~	~~0~~	~~0~~	~~0~~		Galvanized tank/no paint/falling apart (Being Replaced in 2007 w/400,000 steel tank)
Eastern	Bullhead #4	Bullhead City	unknown	1995	1995	Steel	120,000	2,800	750	115	3,665		Galvanized tank/coated outside only
Eastern	Camp Mohave	Bullhead City	1996	1996	1996	Steel	250,000	3,000	850	155	4,005		outside looks good/oxidized
Eastern	Desert Foothills (No. 1)	Bullhead City	1997	1997	1997	Steel	500,000	3,000	850	155	4,005		Needs lightning protection cables secured, paint does not match new tank on site
Eastern	Desert Foothills (No. 2)	Bullhead City	2006	2006	2006	Steel	500,000	3,000	850	155	4,005		New tank
Eastern	Desert Glen	Bullhead City		1995	1995	Steel	200,000	2,800	750	115	3,665		Paint oxidized, chips in paint from rocks.
Eastern	Lake Mohave Highlands	Bullhead City	1972	1972	1996	Steel	100,000	2,800	750	115	3,665		Steel tank/ blisters on overflow pipe/ Signs of failure showing
Eastern	Laredo Village	Bullhead City	1990	1990	1990	Steel	500,000	3,000	850	155	4,005		various gunshot wounds to tank,needs maintenance
Eastern	Pegasus Ranch	Bullhead City	1971	1992	1992	Steel	120,000	2,800	750	115	3,665		Galvanized tank/leaks in tank
Eastern	Rancho Colorado	Bullhead City	2006	2006	2006	Steel	250,000	3,000	850	155	4,005		New tank
~~Eastern~~	~~River Bend (No. 2)~~	~~Bullhead City~~	~~unknown~~	~~unknown~~	~~unknown~~	~~Steel~~	~~100,000~~	~~0~~	~~0~~	~~0~~	~~0~~		Out of service/ Needs demolishid
Eastern	Riverview Mall	Bullhead City	1983	1983	1983	Steel	40,000	2,800	750	115	3,665		Lots of stains in paint/oxidized
Eastern	Silver Creek	Bullhead City	1984	1984	1984	Steel	300,000	3,000	850	115	3,965	62,960	outside looks good/oxidized
Eastern	Havasu Booster #1	Lake Havasu City	unknown	unknown	unknown	Steel	100,000	2,800	750	115	3,665		numerous patches made, tank should be replacec
Eastern	Havasu Booster #2	Lake Havasu City	1990	1990	1990	Steel	100,000	2,800	750	115	3,665		outside looks good/oxidized
Eastern	Havasu Booster #3	Lake Havasu City	1991	1991	1991	Steel	125,000	2,800	750	115	3,665		outside looks good/oxidized
Eastern	Havasu Booster #4 (No. 1)	Lake Havasu City	1994	1994	1994	Steel	250,000	3,000	850	155	4,005		outside looks good/oxidized
Eastern	Havasu Booster #4 (No. 2)	Lake Havasu City	2003	2003	2003	Steel	750,000	3,200	900	185	4,285	19,265	outside looks good
Eastern	60th Street Tank	Paradise Valley	1960	1974	1974	Steel	200,000	2,800	750	115	3,665		
Eastern	Clearwater Hills #1	Paradise Valley	1956	2000	2000	Steel	102,000	2,800	750	115	3,665		Refurbished in 2000
Eastern	Clearwater Hills #2	Paradise Valley	1965	1978	1978	Steel	100,000	2,800	750	115	3,665		
Eastern	Clearwater Hills #3	Paradise Valley	1968	2000	2000	Steel	20,000	2,800	750	115	3,665		Refurbished in 2000
Eastern	Club Estates Tank	Paradise Valley	1961	1978	1978	Steel	30,000	2,800	750	115	3,665		
Eastern	Country Club #1	Paradise Valley	unknown	2000	2000	Steel	500,000	3,000	850	155	4,005		Refurbished in 2000
Eastern	Country Club #2	Paradise Valley	1961	2000	2000	Steel	360,000	3,000	850	155	4,005		Refurbished in 2000
Eastern	PVARF #1	Paradise Valley	2006	2006	2006	Steel	1,500,000	3,200	1,150	215	4,565		New Tank
Eastern	PVARF #2	Paradise Valley	2006	2006	2006	Steel	1,500,000	3,200	1,150	215	4,565		New Tank
Eastern	Racquet Club Tank	Paradise Valley	1955	2000	2000	Steel	102,000	2,800	750	115	3,665		Refurbished in 2000
Eastern	Stone Canyon Tank	Paradise Valley	1955	2000	2000	Steel	90,000	2,800	750	115	3,665	42,795	Painted outside
Eastern	Palo Parado Booster	Tubac	unknown	unknown	unknown	Steel	50,000	2,800	750	115	3,665	3,665	
								97,000	27,100	4,605	128,705		

Central Division

Division	Facility Name	District	Year Constructed	Last Interior Paint	Last Exterior Paint	Type	Size (Gals.)	Evaluation and Report	Washout of Tank	Disinfection of Tank	Total Estimated Cost		Comments
Central	A.F. WP 1 TANK 1	Agua Fria	2000	2000	2000	Concrete	1,325,000	3,200	1,150	215	4,565		Buried concrete
Central	A.F. WP 1 TANK 2	Agua Fria	2000	2000	2000	Concrete	1,325,000	3,200	1,150	215	4,565		Buried concrete
Central	A.F. WP 2 TANK 1	Agua Fria	1996	1996	1996	Steel	1,000,000	3,200	900	185	4,285		
Central	A.F. WP 2 TANK 2	Agua Fria	2000	2000	2000	Steel	1,000,000	3,200	900	185	4,285		
Central	A.F. WP 3 TANK 1	Agua Fria	1996	1996	1996	Steel	1,000,000	3,200	900	185	4,285		
Central	A.F. WP 3 TANK 2	Agua Fria	2000	2000	2000	Steel	1,000,000	3,200	900	185	4,285		
Central	A.F. WP 4 TANK 1	Agua Fria	1998	1998	1998	Steel	1,500,000	3,200	1,150	215	4,565		
Central	A.F. WP 4 TANK 2	Agua Fria	2000	2000	2000	Steel	2,000,000	3,200	1,150	215	4,565		
Central	A.F. WP 5	Agua Fria	2007	2007	2007	Concrete	1,250,000	3,200	1,150	215	4,565		Buried concrete
~~Central~~	~~A.F. WP 6~~	~~Agua Fria~~	~~unknown~~	~~unknown~~	~~unknown~~	~~Steel~~	~~40,000~~	~~0~~	~~0~~	~~0~~	~~0~~		Out of service
Central	A.F. WP 100	Agua Fria	2007	2007	2007	Steel	1,500,000	3,200	1,150	215	4,565		
Central	A.F. WP 8 - Tank 1	Agua Fria	2004	2004	2004	Steel	1,500,000	3,200	1,150	215	4,565		
Central	A.F. WP 8 - Tank 2	Agua Fria	2009	2009	20009	Steel	2,500,000	3,400	1,650	240	5,290		New - online by Jan 1, 2009
Central	A.F. WP 9	Agua Fria	2004	2004	2004	Steel	100,000	2,800	750	115	3,665		
Central	A.F. WP 10 TANK 1	Agua Fria	2005	2005	2005	Concrete	1,735,000	3,200	1,150	215	4,565		Buried concrete
Central	A.F. WP 10 TANK 2	Agua Fria	2007	2007	2007	Concrete	1,735,000	3,200	1,150	215	4,565		Buried concrete
Central	Cool Well	Agua Fria	unknown	unknown	unknown	Steel	10,000	2,800	750	115	3,665	70,845	
Central	S.C.W. WP 1 TANK 1	Sun City West	1992	1992	1992	Steel	1,250,000	3,200	1,150	215	4,565		Prev. inspections recommended next exterior paint - 2007, next inter paint - 2008
Central	S.C.W. WP 1 TANK 2	Sun City West	1992	1992	1992	Steel	1,250,000	3,200	1,150	215	4,565		Prev. inspections recommended next exterior paint - 2007, next inter paint - 2010
Central	S.C.W. WP 2 TANK 1	Sun City West	1986	1986	1986	Steel	758,000	3,200	900	185	4,285		
Central	S.C.W. WP 2 TANK 2	Sun City West	1986	1986	1986	Steel	758,000	3,200	900	185	4,285	17,700	
								63,400	21,200	3,945	88,545		

Arizona American Water

Interior - Cost to Maintain, Sq. Ft	4.22
Exterior - Cost to Maintain, Sq. Ft	1.68

Eastern Division Tank Maintenance Average Cost Per Square Foot of Surface Space

Facility Information							Square Footage			Last Maintained		Next Maintained		Estimated Cost	
Divison	Tank Name	Tank Location	Year Constructed	Tank Capacity	Diameter	Height	Interior Total/ft²	Exterior Total/ft²	Combined Total/ft²	Interior	Exterior	Interior	Exterior	Interior	Exterior
Eastern	16-1 (No. 1)	Bullhead City	1986	1,000,000	82.0	24.0	16,745	11,464	28,208	1986	1986	2012	2012	$70,663	$ 19,259
Eastern	16-1 (No. 2)	Bullhead City	1969	420,000	56.0	24.0	9,148	6,685	15,834	1969	1969	2012	2012	$38,606	$ 11,231
Eastern	16-2 (No. 1)	Bullhead City	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	unknown	1986	N/A	N/A	N/A	N/A
Eastern	16-2 (No. 2)	Bullhead City	1994	1,000,000	82.0	24.0	16,745	11,464	28,208	1980	1980	2011	2011	$70,663	$ 19,259
Eastern	24-1	Bullhead City	1999	1,000,000	82.0	24.0	16,745	11,464	28,208	1999	1999	2013	2013	$70,663	$ 19,259
Eastern	Arizona Gateway	Bullhead City	1995	300,000	72.0	24.0	13,572	9,500	23,072	1995	1995	2009	2009	$57,272	$ 15,960
Eastern	Big Bend Water	Bullhead City	1987	20,000	30.0	24.0	3,676	2,969	6,644	1987	1987	N/A	N/A	N/A	N/A
Eastern	Bullhead #4	Bullhead City	1961	120,000	30.0	24.0	3,676	2,969	6,644	1961	1991	2012	2012	$15,511	$ 4,988
Eastern	Camp Mohave	Bullhead City	1996	250,000	44.0	24.0	6,359	4,838	11,197	1996	1996	2010	2010	$26,833	$ 8,128
Eastern	Desert Foothills (No. 1)	Bullhead City	1997	500,000	60.0	24.0	10,179	7,351	17,530	1997	1997	2011	2011	$42,954	$ 12,350
Eastern	Desert Foothills (No. 2)	Bullhead City	2006	500,000	60.0	24.0	10,179	7,351	17,530	2006	2006	2020	2020	$42,954	$ 12,350
Eastern	Desert Glen	Bullhead City	1988	200,000	65.0	24.0	11,537	8,219	19,757	1988	1988	2011	2011	$48,688	$ 13,808
Eastern	Lake Mohave Highlands	Bullhead City	1972	100,000	27.0	24.0	3,181	2,608	5,789	1972	1996	2010	2010	$13,423	$ 4,382
Eastern	Laredo Village	Bullhead City	1990	500,000	60.0	24.0	10,179	7,351	17,530	1990	1990	2010	2010	$42,954	$ 12,350
Eastern	Pegasus Ranch	Bullhead City	1971	120,000	30.0	24.0	3,676	2,969	6,644	1992	1992	2010	2010	$15,511	$ 4,988
Eastern	Rancho Colorado	Bullhead City	2006	250,000	44.0	24.0	6,359	4,838	11,197	2006	2006	2020	2020	$26,833	$ 8,128
Eastern	Riverside (No. 2)	Bullhead City	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Unknown	Unknown	N/A	N/A	N/A	N/A
Eastern	Riverview Mall	Bullhead City	1983	40,000	22.0	12.0	1,590	1,210	2,799	1983	1983	2009	2009	$6,708	$ 2,032
Eastern	Silver Creek	Bullhead City	1984	300,000	50.0	32.0	8,954	6,990	15,944	1984	1984	2009	2009	$37,784	$ 11,743
Eastern	Havasu Booster #1	Lake Havasu City	unknown	100,000	27.0	24.0	3,181	2,608	5,789	unknown	unknown	2010	2010	$13,423	$ 4,382
Eastern	Havasu Booster #2	Lake Havasu City	1990	100,000	30.0	32.0	4,430	3,723	8,152	1990	1990	2009	2009	$18,693	$ 6,254
Eastern	Havasu Booster #3	Lake Havasu City	1991	125,000	30.0	24.0	3,676	2,969	6,644	1991	1991	2009	2009	$15,511	$ 4,988
Eastern	Havasu Booster #4 (No. 1)	Lake Havasu City	1994	250,000	70.0	24.0	12,975	9,126	22,101	1994	1994	2010	2010	$54,754	$ 15,332
Eastern	Havasu Booster #4 (No. 2)	Lake Havasu City	2003	750,000	52.0	32.0	9,475	7,351	16,826	2003	2003	2017	2017	$39,985	$ 12,350
Eastern	60th Street Tank	Paradise Valley	1960	200,000	38.1	24.0	5,147	4,009	9,156	1974	1974	2009	2009	$21,720	$ 6,735
Eastern	Clearwater Hills #1	Paradise Valley	1956	102,000	27.0	24.0	3,181	2,608	5,789	2000	2000	2014	2014	$13,423	$ 4,382
Eastern	Clearwater Hills #2	Paradise Valley	1965	100,000	27.0	24.0	3,181	2,608	5,789	1978	1978	2009	2009	$13,423	$ 4,382
Eastern	Clearwater Hills #3	Paradise Valley	1968	20,000	13.0	20.0	1,082	950	2,032	2000	2000	2014	2014	$4,567	$ 1,595
Eastern	Club Estates Tank	Paradise Valley	1961	30,000	16.0	20.0	1,407	1,206	2,614	1978	1978	2010	2010	$5,939	$ 2,027
Eastern	Country Club #1	Paradise Valley	1961	500,000	60.0	24.0	10,179	7,351	17,530	2000	2000	2014	2014	$42,954	$ 12,350
Eastern	Country Club #2	Paradise Valley	1961	360,000	50.0	24.0	7,697	5,733	13,430	2000	2000	2014	2014	$32,481	$ 9,632
Eastern	PVARF #1	Paradise Valley	2006	1,500,000	116.0	20.0	28,425	17,857	46,282	2006	2006	2020	2020	$119,954	$ 29,999
Eastern	PVARF #2	Paradise Valley	2006	1,500,000	116.0	20.0	28,425	17,857	46,282	2006	2006	2020	2020	$119,954	$ 29,999
Eastern	Racquet Club Tank	Paradise Valley	1955	102,000	27.0	24.0	3,181	2,608	5,789	2000	2000	2014	2014	$13,423	$ 4,382
Eastern	Stone Canyon Tank	Paradise Valley	1955	90,000	28.0	24.0	3,022	2,491	5,513	2000	2000	2014	2014	$12,754	$ 4,185
Eastern	Palo Parado Booster	Tubac	1984	50,000	12.0	30.0	1,357.17	1,244.07	2,601.24	1984	2000	2014	2014	$5,727	$ 2,090

Central Division Tank Maintenance Average Cost Per Square Foot of Surface Space

Facility Information							Square Footage			Last Maintained		Next Maintained		Estimated Cost	
Divison	Tank Name	Tank Location	Year Constructed	Tank Capacity	Diameter	Height	Interior Total/ft²	Exterior Total/ft²	Combined Total/ft²	Interior Paint	Exterior Paint	Interior Paint	Exterior Paint	Interior Paint	Exterior Paint
Central	A.F. WP 1 TANK 1	Agua Fria	2000	1,325,000	75.0	20.0	0	0	0	N/A	N/A	N/A	N/A	$ -	$ -
Central	A.F. WP 1 TANK 2	Agua Fria	2000	1,325,000	75.0	20.0	0	0	0	N/A	N/A	N/A	N/A	$ -	$ -
Central	A.F. WP 2 TANK 1	Agua Fria	1996	1,000,000	108.0	16.0	23,750	14,590	38,340	1996	1996	2010	2010	$ 100,227	$ 24,510
Central	A.F. WP 2 TANK 2	Agua Fria	2000	1,000,000	108.0	16.0	23,750	14,590	38,340	2000	2000	2014	2014	$ 100,227	$ 24,510
Central	A.F. WP 3 TANK 1	Agua Fria	1996	1,000,000	108.0	16.0	23,750	14,590	38,340	1996	1996	2010	2010	$ 100,227	$ 24,510
Central	A.F. WP 3 TANK 2	Agua Fria	2000	1,000,000	108.0	16.0	23,750	14,590	38,340	2000	2000	2014	2014	$ 100,227	$ 24,510
Central	A.F. WP 4 TANK 1	Agua Fria	1998	1,500,000	135.0	16.0	35,414	21,100	56,513	1998	1998	2012	2012	$ 149,445	$ 35,448
Central	A.F. WP 4 TANK 2	Agua Fria	2000	2,000,000	156.0	16.0	46,068	26,955	73,023	2000	2000	2014	2014	$ 194,408	$ 45,284
Central	A.F. WP 5	Agua Fria	2007	1,250,000	127x71	19.6	0	0	0	N/A	N/A	N/A	N/A	$ -	$ -
Central	A.F. WP 6	Agua Fria	unknown	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	unknown	unknown	N/A	N/A	N/A	N/A
Central	A.F. WP 100	Agua Fria	2007	1,500,000	125.0	16.0	31,612	19,340	50,953	2007	2007	2021	2021	$ 133,404	$ 32,492
Central	A.F. WP 8 - Tank 1	Agua Fria	2004	1,500,000	135.0	16.0	35,414	21,100	56,513	2004	2004	2018	2018	$ 149,445	$ 35,448
Central	A.F. WP 8 - Tank 2	Agua Fria	2009	2,500,000	168.0	16.0	52,779	30,612	83,390	2009	2009	2023	2023	$ 222,726	$ 51,428
Central	A.F. WP 9	Agua Fria	2004	100,000	135.0	16.0	35,414	21,100	56,513	2004	2004	2018	2018	$ 149,445	$ 35,448
Central	A.F. WP 10 TANK 1	Agua Fria	2005	1,735,000	124.0	20.0	0	0	0	N/A	N/A	N/A	N/A	$ -	$ -
Central	A.F. WP 10 TANK 2	Agua Fria	2007	1,735,000	124.0	20.0	0	0	0	N/A	N/A	N/A	N/A	$ -	$ -
Central	Cool Well	Agua Fria	1998	10,000	12.0	12.0	679	565	1,244	unknown	unknown	#VALUE!	#VALUE!	N/A	N/A
Central	S.C.W. WP 1 TANK 1	Sun City West	1992	1,250,000	117.0	16.0	27,384	16,632	44,016	1992	1992	2009	2009	$ 115,559	$ 27,942
Central	S.C.W. WP 1 TANK 2	Sun City West	1992	1,250,000	117.0	16.0	27,384	16,632	44,016	1992	1992	2009	2009	$ 115,559	$ 27,942
Central	S.C.W. WP 2 TANK 1	Sun City West	1986	758,000	96.0	15.0	19,000	11,762	30,762	1986	1986	2010	2010	$ 80,181	$ 19,760
Central	S.C.W. WP 2 TANK 2	Sun City West	1986	758,000	96.0	15.0	19,000	11,762	30,762	1986	1986	2010	2010	$ 80,181	$ 19,760

Arizona American Water
Eastern & Central Division - Tank Maintenance Plan
Total Spend

	TOTAL	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Eastern Division																
Interior	$ 1,362,666	$ 171,113	$ 178,163	$ 172,305	$ 136,312	$ 79,537	$ 145,228	$ -	$ -	$ 50,691	$ -	$ -	$ 429,317	$ -	$ -	$ -
Exterior	$ 384,850	$ 52,094	$ 53,124	$ 48,121	$ 38,646	$ 21,552	$ 44,593	$ -	$ -	$ 15,585	$ -	$ -	$ 111,135	$ -	$ -	$ -
	$ 1,747,516	$ 223,207	$ 231,287	$ 220,426	$ 174,958	$ 101,089	$ 189,821	$ -	$ -	$ 66,276	$ -	$ -	$ 540,452	$ -	$ -	$ -
Central Division																
Interior	$ 2,142,524	$ 231,118	$ 371,932	$ -	$ 163,257	$ -	$ 457,553	$ -	$ -	$ -	$ 390,258	$ -	$ -	$ 190,622	$ -	$ 337,784
Exterior	$ 510,241	$ 55,885	$ 91,177	$ -	$ 38,612	$ -	$ 108,900	$ -	$ -	$ -	$ 91,995	$ -	$ -	$ 46,224	$ -	$ 77,448
	$ 2,652,765	$ 287,003	$ 463,109	$ -	$ 201,869	$ -	$ 566,453	$ -	$ -	$ -	$ 482,253	$ -	$ -	$ 236,846	$ -	$ 415,232
Total Estimated Cost	$ 4,400,281	$ 510,210	$ 694,396	$ 220,426	$ 376,827	$ 101,089	$ 756,274	$ -	$ -	$ 66,276	$ 482,253	$ -	$ 540,452	$ 236,846	$ -	$ 415,232

EXHIBITS

W-01303A-08-0227
SW-01303A-08-0227

PART 1 OF 3

To review Part 2 please see:
BAR CODE #0000095518

To review Part 3 please see:
BAR CODE #0000095519