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BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission
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|---|---|
| IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WEST WATER AND WASTEWATER DISTRICTS. | DOCKET NO. WS-01303A-02-0867 |
| IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS SUN CITY WATER AND WASTEWATER DISTRICTS. | DOCKET NO. WS-01303A-02-0868 |
| IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT AND ITS HAVASU WATER DISTRICT. | DOCKET NO. W-01303A-02-0869 |
| IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS MOHAVE WATER DISTRICT AND ITS ANTHEM WATER DISTRICT, ITS AGUA FRIA WATER DISTRICT, AND ITS ANTHEM/AGUA FRIA WASTEWATER DISTRICT. | DOCKET NO. WS-01303A-02-0870 |

**NOTICE OF FILING OF TESTIMONY SUMMARIES**

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|---|---|
| IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS TUBAC WATER DISTRICT. | DOCKET NO. W-01303A-02-0908<br><br>**NOTICE OF FILING OF TESTIMONY SUMMARIES** |

Staff hereby provides notice of filing the summaries of testimony for Staff Witnesses, Alexander Ibhade Igwe, Joel M. Reiker, Dennis R. Rogers, Marlin Scott, Jr., John A. Chelus, Dorothy M. Hains, Lyndon R. Hammon, Brian K. Bozzo, and Darron W. Carlson.

RESPECTFULLY SUBMITTED this 3rd day of December 2003.

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**SUMMARY OF STAFF WITNESS**
**ALEXANDER IBHADE IGWE'S**
**DIRECT AND SURREBUTTAL TESTIMONIES**
**IN THE RATE CASES FILED BY**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867 ET AL.**

## OPERATING INCOME

Corporate Cost Allocation

### Direct Testimony

- In AAWC's application, the Company proposed substituting its projected overhead expenses for Citizens' recorded test year costs. The Company's projected overhead expenses were derived by extrapolating the average Service Company charges and projected additional expenses incurred by AAWC between April and July 2002. AAWC claims that the costs incurred between January and March 2002 were excluded from its estimates because they were not normal. AAWC asserts that its estimated overhead expenses should be approved because Citizens' recorded test year overhead expenses are not representative of the costs of operating the ten systems under its management.
- Staff recommends rejecting the Company's proposal to substitute its estimated overhead expenses for Citizens recorded test year costs for the following reasons:
    1. The Company's estimated overhead expenses are not known and measurable.
    2. It creates a mismatch between test year revenues, operating expenses and rate base.
    3. It contradicts the historical test year convention, the basis for determining test year revenues, operating expenses and rate base in all rate proceedings in Arizona.
    4. It increases overhead expenses by $4,579,823 without any known benefit to ratepayers.

### Rebuttal Testimony

- In its rebuttal testimony, AAWC abandoned its original proposal to substitute estimates for Citizens' recorded test year overhead expenses. Instead, the Company proposes to substitute its normalized 2002 overhead expenses for Citizens' recorded test year costs. The Company claims that its 2002 overhead expenses are known and measurable and represent costs that it would incur on a going forward basis.
- Staff recommends denying AAWC's proposal for the following reasons:
    1. AAWC's 2002 overhead expenses are not known and measurable relative to the test year revenues, other operating expenses and rate base.
    2. It creates a mismatch between test year revenues, expenses and rate base.
    3. The Company's proposal increases overhead expenses by $3,420,382 without any known benefit to ratepayers.

Salaries, Wages & Related Expenses

**Direct Testimony**

- The Company proposed substituting its projected salaries, wages and related expenses for Citizens' recorded test year costs. As with overhead expenses, the Company's projected salaries, wages and related expenses were derived by extrapolating the average of the costs incurred between April and July 2002. The Company claims that its projected costs are more representative of the costs of operating the ten systems under its management. The Company's proposal reduces Citizens' recorded test year costs by $575,598, from $4,312,389 to $3,736,791.
- Staff recommends denying the Company's proposal to substitute its projected salaries, wages and related expenses for Citizens' recorded test year costs for the following reasons:
    1. The Company's projected salaries, wages and related expenses are not known and measurable.
    2. It creates a mismatch between test year revenues, expenses and rate base.
    3. Although the Company's proposal reduces revenue requirement by $575,598, it is inconsistent with sound ratemaking principles.

**Rebuttal Testimony**

- Again, AAWC abandoned its originally filed position and adopted a new position that substitutes its normalized 2002 salaries, wages and related expenses for Citizens' recorded costs. The Company argues that its 2002 salaries, wages and related expenses are known and measurable and represent the costs of operating the ten systems on a going-forward basis. In addition, the Company alleges that Staff did not adjust salaries, wages and related expenses to reflect the increases it granted to employees in April 2002.
- Staff recommends denying the Company's proposal to substitute its 2002 salaries, wages and related expenses for Citizens' test year costs for the following reasons:
    1. AAWC's 2002 salaries, wages and related expenses are not known and measurable relative to the test year.
    2. It creates a mismatch between test year revenues, other expenses and rate base.
    3. The Company has not demonstrate any significant change to its salaries, wages and related expenses since it acquired Citizens' systems. Therefore, it is not necessary for Staff to make any adjustment to Citizens' recorded test year salaries, wages and related expenses.

Purchased Water Expenses

- Staff has accepted the Company's normalized purchased water expense for Anthem water district and its proposed water expense for Agua Fria water district.

Depreciation Expense

- Staff accepts the Company's depreciation rates. However, Staff's adjustments to plant result in different depreciation expense.
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Property Taxes

- The Company's proposed property tax expense was derived based on Arizona Department of Revenue's ("ADOR") Centrally Valued Properties method.
- Staff used an adaptation of ADOR method by calculating the average revenue based on twice the adjusted test year revenue and Staff recommended revenue. The Company adopts Staff's adaptation of ADOR's method for calculating property tax in its rebuttal testimony. Staff recommends a level of property tax different than that proposed by the Company because of the difference between Staff's recommended revenue and the Company's proposed revenue.

Income Taxes

- The Company and Staff used the same effective tax rate for computation of income taxes. The difference between Staff's recommended income taxes and the Company's proposed income taxes is due to difference in level of revenues.

**SUMMARY OF THE DIRECT AND SURREBUTTAL TESTIMONIES**
**OF**
**STAFF WITNESS**
**JOEL M. REIKER**
**IN THE RATE CASE FILED BY**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867 ET AL.**

**Staff's Recommended Rate of Return**

*Staff's Recommended Rate of Return*

Staff recommends the following rate of return:

| | Weight | Cost | Weighted Cost |
|---|---|---|---|
| Debt | 60.1% | 4.8% | 2.9% |
| Equity | 39.9% | 9.0% | 3.6% |
| Cost of Capital/ROR | | | 6.5% |

Staff's recommended rate of return ("ROR") is based on its updated return on equity ("ROE") recommendation, its updated cost of debt recommendation, and updated capital structure.

Staff's ROE recommendation is based on the results of its updated discounted cash flow ("DCF") and capital asset pricing model ("CAPM") cost of equity estimates, shown below:

| Model | Estimate |
|---|---|
| Discounted Cash Flow | 9.0% |
| Capital Asset Pricing Model | 8.1% |
| Average | 8.5% |

Staff has added 50 basis points to its updated cost of equity estimate of 8.5 percent to account for Arizona-American's capital structure, which reflects greater financial risk compared to the companies in its sample ("sample water companies"). Staff's 50 basis point financial risk adjustment is based on the Hamada equation, developed by Professor Robert Hamada of the University of Chicago, and is more appropriate than the Company's method.

*Staff's Recommended ROE and ROR are Reasonable*

Staff's DCF and CAPM estimates average 8.5 percent. According to Wharton School finance professor Jeremy Siegel, the average compound and arithmetic returns on U.S. equities have been 8.3 percent and 9.7 percent, respectively, using 199 years of data from 1802 through 2001. One should keep in mind that these returns are actual returns, not

expected returns. However, the risk of a regulated water utility, as measured by beta, is significantly below the theoretical beta (1.0) of average-risk securities. According to the CAPM, the cost of equity moves in the same direction as interest rates. Interest rates have declined significantly in the past twenty years, and are currently at levels comparable to the 1950's and '60's. Therefore, the cost of equity has also declined.

**Staff's Comments on the Testimony of Company Witness Thomas M. Zepp.**

*Dr. Zepp's DCF Estimates*

The Commission should reject Dr. Zepp's DCF estimates for the following reasons:

1. Staff disagrees with Dr. Zepp's exclusion of Connecticut Water and Middlesex Water from his sample of water utilities.
2. Staff disagrees with Dr. Zepp's exclusion of Cascade Natural Gas and Southwest Gas from his sample of Gas distribution utilities.
3. Dr. Zepp's conclusion that gas utilities and water utilities have approximately the same level of risk is incorrect.
4. The use of a historical average dividend yield in the constant growth DCF formula is inappropriate and should not be given weight by the Commission. This is because there is no point in "smoothing" stock prices for use in a model that assumes perfect markets. Security prices follow a random walk, therefore, the best forecast of tomorrow's yield is simply today's yield.
5. Dr. Zepp's calculation of projected near-term earnings growth contains two errors. First, he has relied upon the industry average forecast reported by *First Call* in his analysis instead of the individual forecast for each firm in his sample. Second, Dr. Zepp has omitted Philadelphia Suburban Corporation from his average of *Value Line* projected near-term earnings growth.
6. Dr. Zepp's sole reliance on analysts' forecasts of future growth is inappropriate and results in inflated cost of equity estimates.
7. Dr. Zepp's expected infinite annual dividend growth rate in his DCF analysis is unreasonable because, based on past gross domestic product ("GDP") growth, it assumes water utility industry earnings will grow faster than the overall economy, forever.
8. Dividends per share ("DPS") growth is a fundamental component of a constant-growth DCF method such as Dr. Zepp uses. However, Dr. Zepp did not consider DPS growth in his DCF analysis. Further, to the extent that dividend growth conveys management's assessment of prospects for future earnings, the sample water companies are not necessarily confident that earnings can grow indefinitely at the inflated rate Dr. Zepp assumes. Therefore, it is imperative to consider DPS growth in combination with other factors.
9. Dr. Zepp's Rebuttal Table 6, showing that in the years 1997 to 2002, average prices for water utility stocks have increased faster than earnings per share ("EPS"), DPS, and book values, coincides with a decline in interest rates and

capital costs in general. This is further evidence supporting a decline in the average cost of equity to the sample water companies.

*Dr. Zepp's "Risk Premium" Estimates*

The Commission should reject Dr. Zepp's "risk premium" estimates for the following reasons:

1. While the risk premium approach is based on a general rule of thumb, the Commission should primarily rely on cost of equity models developed in the corporate finance literature, such as the DCF and CAPM, rather than on rules of thumb.
2. The risk premium method is *very* subjective, and it is *not* preferred to the CAPM, as the Company claims.
3. In particular, Dr. Zepp's risk premium analysis cannot be relied on because corporate bond rates cannot be used to imply meaningful equity risk premiums. Because a corporate bond contains some default risk which is diversifiable, the investor's expected rate of return is lower than the bond's yield to maturity. Therefore, all risk comparisons should be to default-free government bonds.
4. Dr. Zepp's analysis in no way examines the cost of equity. Rather, it considers ROE *decisions* made by various commissions at various points in time in the early 1980s and the period after 1990. Dr. Zepp's Rebuttal Table 3 cannot be relied on because there is no data for the six-year period between October 1983 and January 1990. Further, Staff found positive autocorrelation in Dr. Zepp's regression analysis. When positive autocorrelation is present, the validity of the regression is called into question and the risk premium estimate itself is questionable.
5. Dr. Zepp's risk premium method is not valid to estimate Arizona-American's cost of equity because it relies on forecasted interest rates. Professional forecasts of financial variables are notoriously unreliable and appear to be getting worse, not better, over time. The direction of interest rates and bond yields cannot be predicted any better than by the flip of a coin. An examination of Dr. Zepp's own risk premium analysis shows how bad professional analysts are at predicting interest rates. For example, Dr. Zepp relies on a range of consensus forecasts of the Baa corporate bond rate compiled by *Blue Chip Financial Forecasts* in June 2002, for the period 2003 to 2004. This "forecasted" range averages 8.15 percent. As of May 2003, the actual Baa corporate bond rate was 6.68 percent – a difference of 147 basis points.
6. Dr. Zepp's first risk premium study, specifically, is not appropriate because he has failed to confirm various assumptions in his analysis. For example, he assumes that the water companies in his analysis have earned accounting/book returns that are less than their authorized ROEs.
7. Dr. Zepp's second risk premium study cannot be relied on because he relies on ROEs authorized by other commissions in other jurisdictions. Dr. Zepp has not shown that the companies in this second risk premium study are

comparable in risk to Arizona-American, or are water utilities at all. Finally, there are six years of data missing from Dr. Zepp's second risk premium analysis, indicating that his data is of poor quality, or it was subjectively edited.

8. Dr. Zepp's third risk premium study is not appropriate because he has failed to account for changing industry risk over time. His method is inconsistent with current capital market conditions to the extent that gas distribution utility risk has changed in the past 49 years. Further, Dr. Zepp has failed to show a relationship between water utility risk and gas distribution utility risk over the past 49 years.

*Dr. Zepp's Testimony on the CAPM*

Dr. Zepp's attempt to apply the findings of the "zero-beta" CAPM is inappropriate for the following reasons:

1. The empirical tests which found the required return on the zero beta asset to be higher than the yield on Treasury bills used *short-term* Treasuries and *raw* (unadjusted) betas. Dr. Zepp has not provided evidence that the results of CAPM studies which use *short-term* Treasury bills and *raw* betas can be appropriately applied to a CAPM application such as Staff's that uses *intermediate-term* Treasury notes, which generally have *higher* returns than T-bills, and *Value Line* betas that are adjusted towards 1.0, which *increase* the required return for low beta stocks such as utilities. In other words, Staff's CAPM already produces required returns higher than what the original CAPM would produce.
2. The 476 basis-point premium over intermediate-term Treasury yields used by Dr. Zepp in his restatement of Staff's CAPM was *not* a finding of Fama and MacBeth.

Dr. Zepp's claim that his "risk premium" model is simpler, less subjective, and preferred to the CAPM is incorrect. The CAPM is the most popular method of estimating the cost of equity among firms. A review of the various ways Dr. Zepp has implemented his risk premium method reveals just how subjective it is. Further, the fact that there are six years of data missing from his second risk premium analysis indicates that the data is of poor quality, or it was subjectively edited.

*Dr. Zepp's Testimony on Fair Value Rate Base*

Dr. Zepp's recommendation to determine the Company's earnings requirement by multiplying the ROR by the current value of the Company's property, i.e., its reproduction cost, to determine earnings, rather than multiplying the ROR by the OCRB and solving for a ROR that, when applied to the reproduction cost, produces the same dollar level of earnings, should be rejected for the following reasons:

1. If Dr. Zepp's recommendation was adopted the Company and its investors would receive a windfall gain at the expense of Arizona consumers.
2. If Dr. Zepp's recommendation was adopted, and Arizona-American's reproduction cost new rate base ("RCNRB") was smaller than its original cost rate base ("OCRB"), the Company would expect to earn *less* than the cost of capital on its investment. Dr. Zepp's recommendation is confiscatory and violates the widely accepted capital attraction standard when the RCNRB is smaller than the OCRB.
3. If Arizona-American's RCNRB was smaller than its OCRB and the market-based ROR was multiplied by the RCNRB to determine earnings, the Company would not expect to be able to maintain its credit.
4. Dr. Zepp's assertion that investors in Arizona should expect to earn a higher dollar return as a result of a utility having assets worth more than original cost is incorrect. This is evidenced by Pinnacle West Capital Corp., parent of Arizona Public Service Company ("APS"), whose market-to-book ratio is lower than that of other publicly-traded electric companies that do not operate in Arizona.

*Dr. Zepp's Restatement of Staff's DCF Estimates*

Dr. Zepp's attempt to show that past DPS growth and near-term forecasts of DPS growth would not be considered by investors by restating Staff's constant growth DCF estimates using only past and forecasted DPS growth should be ignored by the Commission for the following reasons:

1. Dr. Zepp implicitly assumes that authorized ROEs equal equity costs. This assumption is incorrect.
2. Dr. Zepp relies on forecasts of Baa corporate bond rates. The Commission should not rely on forecasts of interest rates, and corporate bonds cannot be used to imply meaningful equity risk premiums.
3. Dr. Zepp's sole reliance on past and forecasted DPS growth is irrelevant because Staff does not rely solely on DPS growth in its constant growth DCF analysis, nor does Staff suggest that rational investors rely solely on DPS growth when pricing stocks.

Dr. Zepp's restatement of Staff's multi-stage DCF analysis should be rejected for two reasons.

1. Dr. Zepp assumes that investors would use *Value Line*'s projected retention ("br") growth rate to project dividends in 2007 and 2008. This is inappropriate because *Value Line* already projects DPS growth in 2007 and 2008. Investors relying on a multi-stage DCF model would use information concerning DPS growth to the greatest extent possible in the first stage.
2. Dr. Zepp takes *Value Line*'s projected br growth rate for 2006 – 2008 and misapplies it to years 2009 – 2016. *Value Line* does not project growth for the years 2009 – 2016, and Dr. Zepp's perpetual growth rate does not begin until

the year 2017. Therefore, inserting a projected br growth rate for the years 2006 – 2008 into years 2009 – 2016, before starting the perpetual growth rate in 2017, is speculative.

**Staff's Comments on the Testimony of Company Witness David Stephenson.**

The Commission should give no weight to Mr. Stephenson's testimony regarding financial integrity for the following reasons:

1. Mr. Stephenson makes his interest coverage calculation from accounting data and implicitly assumes that the Commission is obligated to provide a dollar return on items other than assets devoted to public service. Staff's recommended rates are designed to provide an opportunity for the Company to earn a fair rate of return *on the value of assets devoted to the public benefit.*
2. The fallacy in Mr. Stephenson's argument is revealed in his return on equity calculation in which he calculates a book/accounting ROE of only 2.21 percent under the Company's own proposed rates. Clearly a return of 2.21 percent is unreasonable for a water utility, as the yield on risk-free intermediate-term Treasury securities is currently 3.6 percent. A well-managed company would certainly not seek rates designed to provide investors with a return lower than the risk free rate, as Mr. Stephenson suggests is the case.

**Staff's Comments on the Testimony of Intervenor Walter W. Meek.**

Staff agrees with Mr. Meek that unique factors and events can have an effect on stock prices. However, because these *uncertainties* can be diversified away, they are not relevant to investors' forecasts of future returns.

According to modern portfolio theory ("MPT"), diversification allows investors to reduce their level of risk exposure for any given level of expected return. The risk that is left is called systematic risk. MPT is a widely accepted concept that gained added fame in 1990 when the Nobel Prize in Economic Sciences was awarded to Harry Markowitz, Merton Miller, and William Sharpe for their work on the concept.

The fact that Mr. Meek's organization receives inquiries about the effect of unique factors, and the fact that there is demand for publications such as *Value Line* are both consistent with the existence of an efficient market, in which investors do not require added return for unique risk. This is because although a market may be reasonably efficient, at any given point in time a particular security may be in disequilibrium. Many investors and analysts spend a great deal of time searching for securities that are in disequilibrium. The market-based models used by Staff to calculate cost of equity estimates for the sample water companies are "equilibrium models." Therefore, Staff's estimate of the cost of equity to the sample water companies is an estimate of the appropriate expected return given their level of systematic risk.

The Commission should not rely on the comparable earnings method proposed by Mr. Meek for the following reasons:

1. The sample water companies have an average market-to-book ratio of 2.3 and the sample gas companies have a market-to-book ratio of 1.7. Therefore, from a theoretical standpoint the sample companies are expected to earn book/accounting returns in excess of their economically relevant costs of equity.
2. The comparable earnings method has been supplanted by market-based models developed in corporate finance. The DCF method is the most popular method of estimating the cost of equity in public utility rate cases and the CAPM is the most popular method of estimating the cost of equity among companies. In the now classic article "The Application of Finance Theory to Public Utility Rate Cases" professor Stewart Myers explained how the traditional comparable earnings method of examining book/accounting returns of other firms contained serious deficiencies, both in logic and application.
3. The interpretation of the comparable earnings standard suggested by finance theory is the rate of return, defined in terms of anticipated dividends and capital gains investors expect to earn by purchasing shares of comparable risk. This is also called the "cost of equity." Therefore, the DCF method and CAPM both satisfy the comparable earnings standard.

**SUMMARY OF STAFF WITNESS**
**DENNIS R. ROGERS'**
**DIRECT AND SURREBUTTAL TESTIMONIES**
**IN THE RATE CASES FILED BY**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867 ET AL**

## Staff's Recommended Rate Design

A. The Company's original filing proposed uniform increases to monthly minimums and commodity charges in all water and wastewater systems so that each customer in the same system would experience the same percentage increase. The Company proposed a two step increase to minimize the impact if the proposed increase was over 40 percent. Staff's does not oppose the phased in increases in the event that the Commission authorizes an increase exceeding 40 percent as long that there is no provision to recoup "lost" revenues. Staff is not recommending a revenue increase exceeding 40 percent for any system.

The Company's proposed and Staff's recommended changes by percent, are presented in the following table.

| | Original Filing | Staff's Direct |
|---|---|---|
| Sun City West Water | 39.55% | 11.63% |
| Sun City West Wastewater | 55.59% | 31.91% |
| Sun City Water | 88.50% | 31.72% |
| Sun City Wastewater | 12.50% | (15.87%) |
| Mohave Water | 13.29% | (9.40%) |
| Havasu Water | 44.86% | (7.25%) |
| Agua Fria Water | 7.60% | (14.92%) |
| Anthem Water | 16.90% | (28.56%) |
| Anthem/Agua Fria Wastewater | 51.50% | (8.35%) |
| Tubac | 86.20% | 35.11% |

B. Staff's direct testimony advocates an inverted three-tier rate design to promote efficient water use by sending an economic signal to future customers of Arizona-American

water systems. Staff recommends increasing or decreasing the monthly minimums for each system by the same percentage as Staff's recommended revenue requirement and removing all gallons from the monthly minimum. Staff also recommends removing seasonal rates where they exist because they are unnecessary with tiered rates. The usage breakover points between tiers for all systems are 4,000 and 100,000 gallons across all meter sizes and customer classes. The one exception is Tubac which has an upper recommended tier of 52,000 gallons per month. The recommended irrigation, fire protection, standby, and public interruptible tariffs are not tiered, and the percentage of increase or decrease corresponds with the overall change in revenue. Staff's supports the Company's methodology to uniformly increase or decrease the current tariffs for the three wastewater systems consistent with the revenue requirement.

C. Staff concurs with the Company's proposed service line and meter installation charges submitted with the original application.

D. Staff's recommends adoption of the Company's low income program for the Sun City and Sun City West water systems.

E. Staff's recommends that the Company explore modifying its Mohave water system's rate design in the next rate case in response to customer complaints concerning equitability of charges and to address the unwieldiness of 125 separate bill counts.

F. Staff's surrebuttal testimony identified conceptual errors in schedules G-8 and G-9 of the cost of service study provided in the Company's rebuttal testimony. The Company's Schedules G-8 and G-9 erroneously include demand costs in the monthly minimum charges resulting in an overstatement of costs to include in the monthly minimum charges. Including demand costs in the minimum charge does not fairly distribute cost to cost causers.

G. Staff's surrebuttal testimony asserts that its rate design is based on sound rate design principles and that the Company's claim that the new rate design represents a radical change is incorrect. Staff believes that the rate design promotes revenue stability by maintaining the current base to commodity revenue generation ratios in each system, sends the appropriate price signals to cost causers, and encourages limiting the use of a finite resource. Staff demonstrates that there is a difference between discretionary and non discretionary use and does not agree with the Company's position that the breakover point between the first and second tiers promote inefficient use. On the contrary, Staff's revenue requirements and rate designs send an economic signal to better manage water use. Further, Staff's rate design conforms is consistent with the way costs are incurred by placing a greater portion of the revenue requirement on those customers that put the greatest incremental cost burden on each system. Staff agrees with the Company that there are many factors other than the cost of service study that are taken in consideration when designing rates. The Company's cost of service study is based on average cost, a fundamental limitation. Neither the Company's proposed nor Staff's recommended rate design strictly adhere to any cost of service study.

H. Staff's recommends that the meters serving the Youngtown community lake should continue to be charged metered rates rather than the lower irrigation rates because the lake is a recreational facility.

**SUMMARY OF TESTIMONIES**
**OF MARLIN SCOTT, JR.**
**FOR**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867, et al.**

**DIRECT TESTIMONY**

**TUBAC WATER DISTRICT**

CONCLUSIONS:

1. Non-account Water – Tubac has an acceptable non-account water loss of 7.1%.

2. System Analysis – Tubac has adequate capacity to serve the customer base.

3. Arizona Department of Environmental Quality ("ADEQ") Compliance Status - ADEQ has determined that Tubac's system is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

4. Water Testing Cost – Staff recommends the adoption of Tubac's annual water testing cost of $1,420.

5. Arsenic - Tubac has arsenic concentrations exceeding the new Maximum Contaminant Level ("MCL") of 10 parts per billion ("ppb") and is currently evaluating its options to achieve the new MCL.

6. Arizona Department of Water Resources ("ADWR") Compliance Status - Tubac is located within the Santa Cruz Active Management Area ("AMA") and is in compliance with its AMA requirements.

7. Arizona Corporation Commission ("ACC") Compliance Status - Tubac has no outstanding ACC compliance issues.

RECOMMENDATIONS:

8. Depreciation Rates - Staff recommends that Tubac's depreciation rates be used for this proceeding.

9. Service Line and Meter Installation Charges - Staff recommends the acceptance of Tubac's proposed Service Line and Meter Installation Charges, except for the 2-inch meter size. For the 2-inch size, Staff recommends adopting a charge of "At cost".

10. Curtailment Plan Tariff - Staff recommends that Tubac file a curtailment plan tariff within 90 days after the effective date of an order issued in this proceeding.

**HAVASU WATER DISTRICT**

CONCLUSIONS:

1. Non-account Water – Havasu has a non-account water loss of 14.2% which is not within the acceptable limits. Staff recommends that effective upon the date an order is issued in this proceeding, Havasu should monitor its system and file semi-annual reports within 30 days after the end of each 6-month period for one year, with the Director of the Utilities Division, indicating the quantity of water pumped, gallons sold and water loss percentage for each month during that 6-month period. If the reduction of water loss to less than 10% cannot be achieved, Havasu shall submit to the Director of the Utilities Division a plan which outlines the procedures, steps, and time frames to achieve acceptable water losses. This plan shall be submitted within 18 months after the effective date of an order issued in this proceeding.

2. System Analysis – Havasu has adequate capacity to serve the customer base.

3. ADEQ Compliance Status - ADEQ has determined that Havasu's system is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

4. Water Testing Cost – Staff recommends the adoption of its estimated annual water testing cost of $3,356.

5. Arsenic - Havasu has arsenic concentrations exceeding the new MCL of 10 ppb and is currently evaluating its options to achieve the new MCL.

6. ADWR Compliance Status - Havasu is not located in any AMA.

7. ACC Compliance Status - Havasu has no outstanding ACC compliance issues.

RECOMMENDATIONS:

8. Depreciation Rates - Staff recommends that Havasu's depreciation rates be used for this proceeding.

9. Service Line and Meter Installation Charges - Staff recommends the acceptance of Havasu's proposed Service Line and Meter Installation Charges, except for the 2-inch meter size. For the 2-inch size, Staff recommends adopting a charge of "At cost".

10. Curtailment Plan Tariff - Staff recommends that Havasu file a curtailment plan tariff within 90 days after the effective date of an order issued in this proceeding.

**MOHAVE WATER DISTRICT**

CONCLUSIONS:

1. Non-account Water - Three of the five Mohave Water District's water system have non-account water loss of 10% or more and are not within the acceptable limits. Effective upon the date an order is issued in this proceeding, these high water loss water systems should monitor and file semi-annual reports within 30 days after the end of each 6-month

period for one year, with the Director of the Utilities Division, indicating the quantity of water pumped, gallons sold and water loss percentage for each month during that 6-month period. If the reduction of water loss to less than 10% cannot be achieved, Mohave Water District shall submit to the Director of the Utilities Division plans which outline the procedures, steps, and time frames to achieve acceptable water losses. These plans shall be submitted within 18 months after the effective date of an order issued in this proceeding.

2. System Analysis - Four of the five water systems have adequate capacity to serve the customer base. One system, Rio Vista, is a consecutive system and therefore has no pumping facilities.

3. ADEQ Compliance Status - ADEQ has determined that all five of Mohave Water District's systems are currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

4. Water Testing Cost – Staff recommends its estimated annual water testing cost of $19,410 be adopted.

5. Arsenic - All water systems have arsenic concentrations of 10 ppb or less and are currently meeting the new MCL.

6. ADWR Compliance Status - This Water District is not located in any AMA.

7. ACC Compliance Status - This Water District has no outstanding ACC compliance issues.

RECOMMENDATIONS:

8. Depreciation Rates - Staff recommends that Mohave Water District's depreciation rates be used for this proceeding.

9. Service Line and Meter Installation Charges - Staff recommends the acceptance of Mohave's proposed Service Line and Meter Installation Charges, except for the 2-inch meter size. For the 2-inch size, Staff recommends adopting a charge of "At cost".

10. Curtailment Plan Tariff - Staff recommends Mohave Water District file curtailment plan tariffs for all its systems within 90 days after the effective date of an order issued in this proceeding.

## SURREBUTTAL TESTIMONY

CONCLUSION:

1. The results of the Company's Cost of Service Studies (Schedules G-1 to G-7) for the water districts as presented in the Rebuttal Testimony of Mr. Ronald L. Kozoman could be considered and used as a guide for rate design in this proceeding.

RECOMMENDATION:

1. Staff accepts the following Reproduction Cost New ("RCN") values for the various Arizona-American districts:

| District | RCN Value (dollars) (Land & intangibles not trended) |
|---|---|
| Sun City Water | 81,526,331 |
| Sun City Wastewater | 41,107,539 |
| Sun City West Water | 40,335,226 |
| Sun City West Wastewater | 54,552,306 |
| Agua Fria | 58,598,675 |
| Anthem Water | 42,788,201 |
| Anthem Wastewater | 24,000,160 |
| Tubac Water | 3,099,558 |
| Mohave Water | 31,855,608 |
| Havasu Water | 2,742,969 |
| TOTAL: | 380,606,574 |

**SUMMARY OF TESTIMONY**
**OF JOHN A. CHELUS**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**SUN CITY WEST DISTRICT**
**DOCKET NO. WS-01303A-02-0867**

**Sun City West – Water**

CONCLUSIONS

1. The Sun City West water system has a non-account water loss of 6.0%. The Cool Well system has a non-account water loss of 10.0%. These levels are acceptable in this rate proceeding.

2. Based on data submitted by the Company from Maricopa County Environmental Services Department (MCESD), MCESD has determined that systems PWS #04-07-150, Sun City West, and PWS # 04-07-080, Cool Well, are currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

3. The most recent lab analysis for the Sun City West water system indicates that six of the ten wells have Arsenic levels above 10 ppb. The Cool Well system had an arsenic value of 5 ppb. The Company is currently evaluating its options to achieve the new arsenic level of 10 parts per billon.

4. The Sun City West Water District is located within the Phoenix Active Management Area ("AMA") and is in compliance with the AMA's reporting and conservation requirements.

5. The Sun City West Water District has no outstanding Arizona Corporation Commission compliance issues.

6. Staff considers the reported water testing expenses for the Sun City West Water District reasonable.

7. Engineering Staff generally agree with the Company's methodology and conclusions of the Cost of Service Studies for the water districts, presented in the Rebuttal Testimony of Mr. Ronald L. Kozoman.

RECOMMENDATIONS

1. It is recommended that the Sun City West Water District continue to use depreciation rates as delineated in Exhibit 6 of Schedule JAC-1.

2. Staff recommends the adoption of the Sun City West Water District's proposed Service Line and Meter Installation Charges as modified in Schedule JAC-1 Section K.

3. Staff recommends that the Sun City West Water District file curtailment tariffs within 90 days after the effective date of any decision and order pursuant to this application. The tariff

shall be submitted to the Director of the Utilities Division for his review and certification. Staff also recommends that the tariff shall generally conform to the sample tariff found posted on the Commission's web site (www.cc.state.az.us/utility) or available upon request from Commission Staff.

4. Staff recommends that Arizona American be required to install additional storage or production capacity to meet 24 hour storage requirements to the Cool Well system no later than December 31, 2004 as discussed in Schedule JAC-1, Section C.

5. Staff recommends adjustment of original Cost rate base by $19,743 as delineated in Schedule JAC-1, Section H.

**Sun City West – Wastewater**

CONCLUSIONS

1. The Sun City West Wastewater District has no outstanding Arizona Corporation Commission compliance issues.

RECOMMENDATIONS

1. It is recommended that the Sun City West Wastewater District continue to use depreciation rates as delineated in Exhibit 5 of Schedule JAC-2.

2. Staff has evaluated Sun City West Wastewater District's RCN and recommends that its cost values not be accepted for purposes of setting rates in this proceeding.

3. Staff recommends adjustment of original Cost rate base by $215,448 as delineated in Schedule JAC-2, Section I.

REPRODUCTION COST NEW RECOMMENDATION

1. Engineering Staff accepts the following Reproduction Cost New (RCN) values for the various Arizona-American divisions:

| District | RCN Value (dollars) (land & intangibles not trended) |
|---|---|
| Sun City Water | 81,526,331 |
| Sun City Wastewater | 41,107,539 |
| Sun City West Water | 40,335,226 |
| Sun City West Wastewater | 54,552,306 |
| Agua Fria Water | 58,598,675 |
| Anthem Water | 42,788,201 |
| Anthem Wastewater | 24,000,160 |

| | |
|---|---|
| Tubac Water | 3,099,558 |
| Mohave Water | 31,855,608 |
| Havasu Water | 2,742,969 |
| | --- |
| TOTAL | 380,606,574 |

**SUMMARY OF DIRECT TESTIMONY**
**OF DOROTHY HAINS**
**FOR**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**SUN CITY DISTRICT**
**DOCKET NO. WS-01303A-02-0868**

## SUN CITY - WATER

### Recommendations:

I. Staff recommends that the Arizona-American Water Company Sun City Water Division ("Sun City Water") depreciation rates delineated in Exhibit DMH-1 Figure 6 be used for this proceeding.

II. Staff recommends that Sun City Water's original cost plant in service value be adjusted by $1,386,148 to reflect the removal of certain plant items that were determined not to be used and useful during the test year.

III. Staff recommends that Sun City Water file a curtailment tariff within 90 days after a decision is issued in this proceeding.

IV. Staff recommends the adoption of Sun City Water proposed Service Line and Meter Installation Charges except for the 2 inch meter size as modified in Exhibit DMH-1, Section K.

### Conclusions:

I. Maricopa County Environmental Services Department ("MCESD") has determined that this system is currently delivering water that meets the water quality standards required by Arizona Administrative Code, Title 18, Chapter 4.

II. At the present time Sun City Water meets the new arsenic maximum contaminant level ("MCL") requirement.

III. Sun City Water is within the Phoenix Active Management Area and is in compliance with the Arizona Department of Water Resource ("ADWR") monitoring and reporting rules.

IV. Sun City Water has 9.65 percent water loss which is within acceptable limits

V. Sun City Water is proposing that $2,096,100 of post test year plant additions be included for rate setting purposes in this rate proceeding. Staff has confirmed that these plant items were in service before December 31, 2002, and finds these plant items to be used and useful from an engineering perspective.

VI. Staff considers the reported water testing expenses and the estimated water testing costs for the Sun City District reasonable.

VII. The results of the Company's Cost of Service Studies (Schedules G-1 to G-7) for the water districts as presented in the Rebuttal Testimony of Mr. Ronald L. Kozoman could be considered and used as a guide for rate design in this proceeding.

## SUN CITY - WASTEWATER

**Recommendations:**

I. Staff recommends that the Sun City Wastewater depreciation rates delineated in Exhibit DMH-2, Figure 6 be used for this proceeding.

II. Staff recommends that Sun City Wastewater's original cost plant in service value be adjusted by $15,547 to reflect the removal of certain plant items that were determined to be not used and useful during the test year.

**Conclusions:**

I. Staff concludes that the Tolleson Wastewater Treatment Plant ("WWTP") filter media replacement project is necessary and reasonable and that the method used to allocate a share of the cost to Sun City Wastewater is reasonable.

II. The Company does not own or operate a wastewater treatment plant. The Company collects the wastewater in its CC&N's area, and then transports the wastewater to the Town of Tolleson WWTP for treatment and disposal. ADEQ has determined that the Tolleson WWTP is currently in substantial compliance with Clean Water Act.

III. The Sun City Wastewater District has no outstanding Arizona Corporation Commission compliance issues.

## REPRODUCTION NEW RECOMMENDATION

1. Engineering Staff accepts the following Reproduction Cost New (RCN) values for the various
Arizona-American divisions:

| District | RCN Value (dollars) (land & intangibles not trended) |
|---|---|
| Sun City Water | 81,526,331 |
| Sun City Wastewater | 41,107,539 |
| Sun City West Water | 40,335,226 |

| | |
|---|---|
| Sun City West Wastewater | 54,552,306 |
| Agua Fria Water | 58,598,675 |
| Anthem Water | 42,788,201 |
| Anthem Wastewater | 24,000,160 |
| Tubac Water | 3,099,558 |
| Mohave Water | 31,855,608 |
| Havasu Water | 2,742,969 |
| | --- |
| TOTAL | 380,606,574 |

ARIZONA-AMERICAN WATER COMPANY
DOCKET NOS. WS-01303A-02-0867, *et alia*

SUMMARY OF DIRECT TESTIMONY
AS AMENDED BY SURREBUTTAL TESTIMONY
OF
LYNDON R. HAMMON

**Conclusions**

(1) The water and wastewater systems for the Agua Fria and Anthem divisions have adequate production, storage and treatment capacity.

(2) The Arizona Department of Environmental Quality ("DEQ") reported that the Anthem wastewater treatment plant, and the Anthem, Agua Fria, and Waddell Haciendas water systems are in **total** compliance with its rules and regulations. DEQ determined that the three drinking water systems are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.

(3) Anthem, Waddell Haciendas, and Agua Fria are located within the Phoenix Active Management Area and are in compliance with the reporting and conservation requirements of the Department of Water Resources.

(4) Arizona-American has no outstanding Arizona Corporation Commission compliance issues.

**Recommendations**

(1) Engineering Staff accepts the following Reproduction Cost New (RCN) values for the various Arizona-American divisions:

| District | RCN Value (dollars) (land & intangibles not trended) |
|---|---|
| Sun City Water | 81,526,331 |
| Sun City Wastewater | 41,107,539 |
| Sun City West Water | 40,335,226 |
| Sun City West Wastewater | 54,552,306 |
| Agua Fria Water | 58,598,675 |
| Anthem Water | 42,788,201 |
| Anthem Wastewater | 24,000,160 |
| Tubac Water | 3,099,558 |
| Mohave Water | 31,855,608 |
| Havasu Water | 2,742,969 |
| TOTAL | 380,606,574 |

*(recommendations continued on next page)*

(2) Staff recommends the acceptance of the present Arizona-American depreciation rates.

(3) Staff recommends that the "test year adjusted results" for water testing expenses shown on schedules C-1, page 1 of Arizona-American's applications for Anthem and Agua Fria water districts, be accepted without adjustment.

(4) Staff recommends that the Company file a curtailment tariff for the Agua Fria and the Anthem water district, within 90 days after the effective date of any decision and order pursuant to this application. The tariff shall be submitted to the Director of Utilities Division for his review and certification. Staff also recommends that the tariff shall generally conform to the sample tariff found posted on the Commission's web site.

(5) Staff recommends the acceptance of the Company's proposed meter and service installation charges, except for the 2 inch meter size. For the 2 inch size, Staff recommends adopting a charge of "At Cost".

(6) Engineering Staff generally agree with the Company's assumptions, methodology, and conclusions of the Cost of Service Studies for the water districts, presented in the Rebuttal Testimony of Mr. Ronald L. Kozoman.

**SUMMARY OF STAFF WITNESS**
**BRIAN K. BOZZO'S**
**DIRECT AND SURREBUTTAL TESTIMONIES**
**IN THE RATE CASES FILED BY**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867 ET AL.**

I. TEST YEAR END PLANT

A. In aggregate, Staff's **direct** testimony recommended the removal of **$2,270,531** in Test Year plant from the Company's application, as shown in Table 1 (Direct at page 4.) This consisted of four separate removals of plant.

B. Staff's recommendation removed $1,737,746 of plant which was Not Used and Useful and $272,649 of plant which was Unidentified. Staff also recommended the removal of $171,746 for Mis-Classified plant and $88,746 for plant removed per the prior decision. These items are shown in Table 1 below.

**TABLE 1**

**STAFF'S ADJUSTMENTS TO PLANT RECORDED AT TEST YEAR END**

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT |
|---|---|---|
| 1. | NOT USED AND USEFUL | $ 1,737,746 |
| 2. | UNIDENTIFIED PLANT | $ 272,649 |
| 3. | ACCOUNTING ERROR - MIS-CLASSIFIED PLANT | $ 171,390 |
| 4. | PLANT REMOVED PER PRIOR DECISION | $ 88,746 |
| 5. | TOTAL | $ 2,270,531 |

Breakdowns of the above plant amounts are shown in Tables 2-5 on the attached pages.

C. In its rebuttal testimony, the Company agreed with Staff's various plant removals but disagreed with the Accumulated Depreciation treatment that Staff applied to the Not Used and Useful and Unidentified plant disallowances.
(The Company accepted the Accumulated Depreciation Staff removed for the Mis-Classified Plant and Plant Removed per the Prior Decision.)

## II. ACCUMULATED DEPRECIATION

A. Staff removed the Accumulated Depreciation through December 31, 2001 for the Not Used and Useful and Unidentified plant removals. The Company disagreed with Staff's treatment, claiming that the Not Used and Useful and Unidentified Plant should be retired. Retirement treatment would call for the removal of the full original cost of the plant item from Accumulated Depreciation rather than the actual amount accumulated through December 31, 2001.

B. Not Used and Useful Plant – The Company stated that "plant not used and useful is plant that should be retired". (Rebuttal at page 5, line 16) In surrebuttal, Staff pointed out the following:

1. The company has the responsibility to account for plant items so they can be properly classified.
2. The dispensation of the plant was unclear.
3. The Company's application classified this plant as in service rather than retired.
4. The Company could have retired the plant prior to the rate case. Alternatively, the Company could have proposed pro forma adjustments retiring the plant.
5. The plant could potentially come back into service as plant held for future use.
6. The Company gave no support or rational for its statement that amounts in not used and useful plant are plant amounts that should be retired and therefore has not supported its argument. Based on all of the above, Staff did not treat the plant as retirements.

C. Unidentified Plant – The Company stated that unidentified plant should be treated differently if previously rate based than if not previously rate based (Rebuttal at page 5, beg. on line 19). Specifically, the Company stated that, if previously rate based, the Unidentified plant should be considered a retirement and treated as such. If not previously rate based, the plant should be considered an abandonment and actual A/D should be removed. In surrebuttal, Staff pointed out the following regarding the Company rebuttal:

1. The company has the responsibility to account for plant items so they can be properly classified.
2. The nature of the plant was unclear.
3. The Company did not identify which Unidentified plant amounts were previously rate based and provided no support that this plant is retired.
4. The Company application classified this plant as in service rather than retired.
5. The Company could have retired the plant prior to the rate case. Alternatively, the Company could have proposed pro forma adjustments retiring the plant. Based on all of the above, Staff did not treat the plant as retirements.

# DIRECT TESTIMONY

## TABLE 1
## STAFF'S ADJUSTMENTS TO PLANT RECORDED AT TEST YEAR END

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT | ACC. DEP. |
|---|---|---|---|
| 1. | NOT USED AND USEFUL | $ 1,737,746 | $ 583,880 |
| 2. | UNIDENTIFIED PLANT | $ 272,649 | $ 109,792 |
| 3. | ACCOUNTING ERROR - MIS-CLASSIFIED PLANT | $ 171,390 | $ 41,665 |
| 4. | PLANT REMOVED PER PRIOR DECISION | $ 88,746 | $ 33,764 |
| 5. | TOTAL | $ 2,270,531 | $ 769,101 |

## TABLE 2
## NOT USED AND USEFUL PLANT

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT | ACC. DEP. |
|---|---|---|---|
| 1. | SUN CITY WEST WATER | $ - | $ - |
| 2. | SUN CITY WEST WASTEWATER | $ 212,082 | $ 208,448 |
| 3. | SUN CITY WATER | $ 1,370,218 | $ 336,050 |
| 4. | SUN CITY WASTEWATER | $ - | $ - |
| 5. | MOHAVE | $ - | $ - |
| 6. | HAVASU | $ 77,319 | $ 18,120 |
| 7. | AGUA FRIA | $ 76,503 | $ 19,638 |
| 8. | ANTHEM | $ - | $ - |
| 9. | AA WASTEWATER | $ - | $ - |
| 10. | TUBAC | $ 1,624 | $ 1,624 |
| 11. | TOTAL | $ 1,737,746 | $ 583,880 |

## TABLE 3
## UNIDENTIFIED PLANT

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT | ACC. DEP. |
|---|---|---|---|
| 1. | SUN CITY WEST WATER | $ 19,743 | $ 1,750 |
| 2. | SUN CITY WEST WASTEWATER | $ 3,367 | $ - |
| 3. | SUN CITY WATER | $ - | $ - |
| 4. | SUN CITY WASTEWATER | $ 15,547 | $ 14,679 |
| 5. | MOHAVE | $ 233,992 | $ 93,363 |
| 6. | HAVASU | $ - | $ - |
| 7. | AGUA FRIA | $ - | $ - |
| 8. | ANTHEM | $ - | $ - |
| 9. | AA WASTEWATER | $ - | $ - |
| 10. | TUBAC | $ - | $ - |
| 11. | TOTAL | $ 272,649 | $ 109,792 |

TABLE 4
ACCOUNTING ERROR - MIS-CLASSIFIED PLANT

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT | ACC. DEP |
|---|---|---|---|
| 1. | SUN CITY WEST WATER | $ - | $ - |
| 2. | SUN CITY WEST WASTEWATER | $ - | $ - |
| 3. | SUN CITY WATER | $ 171,390 | $ 41,665 |
| 4. | SUN CITY WASTEWATER | $ - | $ - |
| 5. | MOHAVE | $ - | $ - |
| 6. | HAVASU | $ - | $ - |
| 7. | AGUA FRIA | $ - | $ - |
| 8. | ANTHEM | $ - | $ - |
| 9. | AA WASTEWATER | $ - | $ - |
| 10. | TUBAC | $ - | $ - |
| 11. | TOTAL | $ 171,390 | $ 41,665 |

TABLE 5
PLANT REMOVED PER DECISION NO. 60172

| LINE NO. | TYPE OF ADJUSTMENT | AMOUNT | ACC. DEP |
|---|---|---|---|
| 1. | SUN CITY WEST WATER | $ - | $ - |
| 2. | SUN CITY WEST WASTEWATER | $ - | $ - |
| 3. | SUN CITY WATER | $ 88,746 | $ - |
| 4. | SUN CITY WASTEWATER | $ - | $ - |
| 5. | MOHAVE | $ - | $ - |
| 6. | HAVASU | $ - | $ - |
| 7. | AGUA FRIA | $ - | $ - |
| 8. | ANTHEM | $ - | $ - |
| 9. | AA WASTEWATER | $ - | $ - |
| 10. | TUBAC | $ - | $ - |
| 11. | TOTAL | $ 88,746 | $ 33,764 |

**SUMMARY OF STAFF WITNESS**
**DARRON W. CARLSON'S**
**DIRECT AND SURREBUTTAL TESTIMONIES**
**IN THE RATE CASES FILED BY**
**ARIZONA-AMERICAN WATER COMPANY, INC.**
**DOCKET NO. WS-01303A-02-0867 ET AL.**

I. Revenue Requirement

A. The Company's original filing proposed, in the aggregate for the ten systems, an increase of $11,660,912 (or 32.99 percent) over test year revenues of $35,351,457.

B. Staff's direct testimony recommended, in the aggregate for the ten systems, an increase of $476,722 (or 1.35 percent) over test year revenues of $35,351,457.

C. The Company's rebuttal position for revenue requirement, in the aggregate for the ten systems, is an increase of $8,477,752 (or 24.01 percent) over revised test year revenues of $35,306,183.

D. Staff's surrebuttal testimony recommends, in the aggregate for the ten systems, an increase of $346,647 (or 0.98 percent) over test year revenues of $35,351,457.

1. The Company, in its rebuttal, revised its test year revenues by reducing it $45,274 because its bill counts only produced $35,306,183.
2. Staff recognizes that this difference is less than 2/10 of 1 percent and in such cases Staff recommends the use of the general ledger test year revenues as adjusted which are $35,351,457.

II. Fair Value Rate Base ("FVRB")

A. The Company's original filing proposed, in the aggregate for the ten systems, a FVRB of $148,996,589 which reflects a 100 percent weighting to the reproduction cost rate base ("RCRB") and ignores the original cost rate base ("OCRB") entirely.

B. Staff's direct testimony recommended, in the aggregate for the ten systems, a FVRB of $91,719,544 which reflects a 100 percent weighting to the OCRB and rejects RCRB as Staff did not find the RCRB study valid.

C. The Company's rebuttal position, in the aggregate for the ten systems, is a FVRB of $136,262,880 that continues to reflect a 100 percent weighting to RCRB and ignores OCRB entirely.

D. Staff's surrebuttal testimony recommends, in the aggregate for the ten systems, a FVRB of $113,569,782 which reflects a 50 percent weighting to Staff's revised OCRB of $91,647,303 and a 50 percent weighting to Staff's RCRB of $135,490,259. (Staff found the RCRB study to be valid subsequent to the revisions in the Company's rebuttal testimony).

III. Acquisition Adjustment

A. The Company's original filing proposed, in the aggregate for the ten systems, recognition of $71,240,169 of acquisition adjustment in its OCRB and also amortized $149,600 to increase depreciation expense in the test year and subsequent years.

1. The Company claims that it did not claim rate base recognition of the acquisition adjustment in its original filing even though it is included in the original cost plant.

B. Staff's direct testimony recommended, in the aggregate for the ten systems, that the entire acquisition adjustment be removed from OCRB until the Company fulfills Commission requirements necessary for recognition. Additionally, Staff removed the entire amortization from expense as both unauthorized and inappropriate.

1. Staff removed the acquisition adjustment from OCRB, since the Company failed to do so.

C. The Company's rebuttal position, in the aggregate for the ten systems, is that it is not seeking recovery of the acquisition adjustment even though it is included in its original cost plant. The Company also claims that including the acquisition adjustment amortization in expense was inadvertent and should be removed.

D. Staff's surrebuttal testimony continues to recommend removal of the acquisition adjustment from OCRB.

IV. Accounting Treatment of the Acquisition Adjustment

A. The Company's original filing proposed that the Commission authorize a 40-year mortgage method of amortization of the acquisition adjustment.

B. Staff's direct testimony recommended removal of the acquisition adjustment and, therefore, Staff did not address the accounting treatment issue.

C. The Company's rebuttal position is that it needs an accounting order in this rate case in order to enable it to use the mortgage method.

D. Staff's surrebuttal testimony recommends that the Commission authorize an amortization methodology only in the event of, and in conjunction with, a provision authorizing recovery of the acquisition adjustment.

V. Basis for Operating Income Determination

A. The Company's original filing proposed calculating operating income by multiplying its FVRB (based solely on RCRB) by its cost of capital (rate of return).

B. Staff's direct testimony recommended that operating income be calculated by multiplying OCRB by the cost of capital (rate of return). The fair value rate of return multiplied by FVRB should result in the same required

operating income as multiplying the cost of capital by OCRB. That is, OCRB times original cost rate of return equals FVRB times fair value rate of return.

C. The Company's rebuttal position remains the same as originally filed.

D. Staff's surrebuttal testimony recommends a FVRB consisting of 50 percent each of RCRB and OCRB. Staff continues to recommend that the operating income be calculated by multiplying OCRB by the cost of capital and that the fair value rate of return multiplied by FVRB should result in the same required operating income as multiplying the cost of capital by OCRB.

VI. Deferred Income Taxes and Income Tax Credits.

A. Both the Company and Staff concur that the Citizens' balances in these accounts should be removed from AAWC's going-forward books.

VII. Sun City Wastewater – Third Amendment to the Tolleson Agreement

A. The Company's original filing proposed that the Commission approve a cost adjustor mechanism to recover capital and reserve costs.

B. Staff's direct testimony recommended that the Commission deny approval of both the adjustor mechanism and authority to recover costs. Staff believes it is premature for this authorization until such time as Staff can inspect these capital investments and analyze the actual costs.

C. The Company's rebuttal position is that deferral of the costs was authorized by the Commission in Decision No. 66386 (October 6, 2003) and the recovery is a separate issue and should be determined in this case.

D. Staff's surrebuttal testimony recommends that, since the Commission just authorized deferral of the costs, it is still premature to authorize recovery of costs representing expenditures not yet made, not inspected by Staff, and not audited by Staff. This places the Company in the same position as if it constructed and owned the new plant and replacement plant. That is, prudently incurred plant additions would be recognized in the next rate case.