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BEFORE THE ARIZONA CORPORATION CC  
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COMMISSIONERS

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2007 AUG 24 P 1:17

AZ CORP COMMISSION  
DOCKET CONTROL

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 SUN CITY  
WASTEWATER AND SUN CITY WEST  
WASTEWATER DISTRICT.

DOCKET NO. WS-01303A-06-0491

**NOTICE OF FILING TESTIMONY  
SUMMARIES**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Testimony Summaries of Pedro M. Chaves (Utilities Division); Dennis Rogers (Utilities Division); Gerald Becker (Utilities Division); Dorothy Hains (Utilities Division); and Joel F. Jeanson (Huron Consulting Group) in the above-referenced matter.

RESPECTFULLY SUBMITTED this 24<sup>th</sup> day of August, 2007.

Maureen A. Scott, Senior Staff Counsel  
Keith A. Layton, Staff Counsel  
Legal Division  
Arizona Corporation Commission  
1200 West Washington Street  
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Original and thirteen (13) copies  
of the foregoing filed this  
24<sup>th</sup> day of August, 2007 with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Arizona Corporation Commission  
**DOCKETED**  
AUG 24 2007

DOCKETED BY *nr*

1 Copies of the foregoing mailed this  
24<sup>th</sup> day of August, 2007 to:

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3 Arizona-American Water Company  
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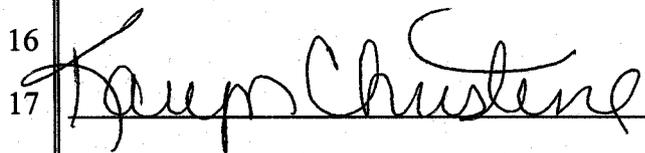
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**EXECUTIVE SUMMARY OF PEDRO M. CHAVES  
ARIZONA-AMERICAN WATER COMPANY  
SUN CITY WASTEWATER DISTRICT**

The pre-filed testimony of Staff witness Pedro M. Chaves addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Arizona-American Water Company – Sun City Wastewater and Sun City West Wastewater Districts (jointly “Sun City” or “Applicant”) for this proceeding consisting of 62.4 percent long-term debt and 37.6 percent equity for this rate proceeding.

Cost of Debt – Staff recommends that the Commission adopt a 5.4 percent average cost of debt.

Cost of Equity – Staff recommends that the Commission adopt a 10.6 percent return on equity (“ROE”). Staff bases its ROE recommendation on its discounted cash flow (“DCF”) and capital asset pricing models (“CAPM”) and an upward adjustment of 80 basis points for financial risk.

Overall Rate of Return – Staff recommends that the Commission adopt an overall rate of return (“ROR”) of 7.3 percent.

Response to the Rebuttal Testimony of Applicant’s witnesses

Mr. Thomas M. Broderick:

Staff updated Sun City’s capital structure, and corresponding cost of equity and debt components, to include the current dollar amount outstanding on an obligation with the City of Tolleson (“Tolleson Obligation”).

Mr. Broderick’s proposed capital structure in this rate proceeding excludes short-term debt and the current dollar amount outstanding of the Tolleson Obligation bond, and hence, would compensate shareholders for a non-existing equity investment.

Dr. Bente Villadsen:

Dr. Villadsen’s use of market-value capital structures to determine rates of return is inconsistent with the practice known to investors that regulators authorize returns on the book value of property devoted to public service.

The after-tax weighted average cost of capital (“ATWACC”) methodology has not been extensively used or reviewed in the regulatory environment. Furthermore, the ATWACC methodology has been recently rejected by the Arizona Corporation Commission.

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**EXECUTIVE SUMMARY**  
**ARIZONA-AMERICAN WATER COMPANY**  
**SUN CITY WASTEWATER DISTRICT**  
**DOCKET NO. WS-01303A-06-0491**

The Testimony of Staff witness Dennis R. Rogers addresses the following issues:

Revenue Requirement – Staff recommends a revenue requirement of \$6,010,554, a \$1,527,700 (34.08 percent) increase over test year revenues of \$4,482,855. Staff's revenue requirement is \$237,859 less than the Company's proposed rejoinder revenue requirement of \$6,248,413.

Rate Base – Staff recommends a rate base of \$18,806,981, a \$59,246 increase from the Company's proposed rejoinder rate base of \$18,747,735.

Test Year Operating Income – Staff's adjusted test year operating income is \$443,027, a \$4,984 decrease over the Company's rejoinder testimony.

Imputed Regulatory Advances in Aid of Construction ("IR AIAC") – Staff continues to recommend using December 9, 2005, as the end of the Test Year for computation of "IR AIAC" amortization as opposed to December 31, 2005, as proposed by Mr. Broderick.

Imputed Regulatory Contributions in Aid of Construction ("IR CIAC") - Staff continues to recommend using December 9, 2005, as the end of the Test Year for computation of "IR CIAC" amortization as opposed to December 31, 2005, as proposed by Mr. Broderick.

Property Taxes – Staff adjusted the Assessment Ratio to 23.5 percent which was accepted in the Company's rejoinder.

Tolleson Obligation – Staff included the unamortized portion of the Tolleson Obligation Agreement in rate base as a Regulatory Asset using the length of the term of the agreement to determine the amount to be included in rate base and the amortization amount per year for depreciation expense purposes. Staff also removed the amount that had been expensed for the principle for the amortization period and adjusted Depreciation Expense to reflect the amortization of the Tolleson Obligation over the period of the agreement.

Rate Design - Staff continues to advocate a rate design with volumetric component in order to reflect cost causation in better proportion to customer bills. A rate design with both a customer charge and a volume component addresses both the fixed and variable components of the cost of providing service.

Staff has provided for a flat rate design that produces the Revenue Requirement in order to provide the Commission with the necessary information so that they may consider transition to a volumetric rate design in steps if they prefer.

**EXECUTIVE SUMMARY OF GERALD W. BECKER  
ARIZONA-AMERICAN WATER COMPANY  
SUN CITY WEST WASTEWATER  
DOCKET NO. WS-01303A-06-0491**

The Testimony of Staff witness Gerald W. Becker addresses the following issues:

Revenue Requirement – Staff recommends a revenue requirement of \$6,131,457, a \$1,593,051 (35.10 percent) increase over test year revenues of \$4,538,405. These amounts do not consider a test year operating income adjust of \$8,120.00 with which Staff now agrees.

Rate Base – Staff recommends a rate base of \$17,103,003, a \$4,171,017 decrease from the Company's proposed rate base.

Test Year Operating Income – Staff's adjusted test year operating income is \$298,960, a \$38,189 decrease from that proposed by the Company.

Response to the Rebuttal Testimony of Mr. Thomas M. Broderick:

1. Imputed Regulatory Advances in Aid of Construction ("IR AIAC") and Imputed Regulatory Contributions in Aid of Construction ("IR CIAC") - Staff maintains that the amortization of Imputed Regulatory AIAC and CIAC should cease at December 9, 2005. The revenues reflected in this case are for the period December 10, 2004 through December 9, 2005. A cut off date of December 9, 2005 matches the billing determinants and related revenues of this case with the appropriate balance sheet date.
2. Property Taxes - Staff proposes that Property Taxes be calculated using an assessment ratio of 23.5 percent versus the 24.0 percent proposed by the Company. The rate of 23.5 percent provides a better approximation of the average property tax expenses over the period rates are expecting to be in place. The Company has accepted this in its rejoinder testimony.
3. Rate Design - Staff continues to advocate a rate design with volumetric component in order to reflect cost causation. A rate design with both a customer charge and a volume component addresses both the fixed and variable components of cost causation.
4. Classification of Customers - Staff recommends that the Company establish and implement better guidelines to define customers as being residential versus commercial.
5. Customer Billing - Staff recommends that the Company monitor bills more closely to gain greater assurance that customers are on the correct rate.

**EXECUTIVE SUMMARY OF DOROTHY HAINS  
ARIZONA-AMERICAN WATER COMPANY  
SUN CITY WASTEWATER AND SUN CITY WEST  
WASTEWATER DISTRICTS  
DOCKET NO. WS-01303A-06-0491**

**PART I**

**For Arizona American Water Company Sun City Wastewater District**

**Staff's Recommendations:**

1. Staff recommends that the depreciation rates presented in Figure 6 by NARUC account be used for purposes of this proceeding and on a going forward basis. (See §G of engineering report for discussion and details.).
2. Staff recommends that the cost of the emergency generator plant (\$49,002) be reclassified to NARUC Account No. 355. (See §H of engineering report for discussion and details).
3. Staff recommends that the flow meter expense (\$33,459) be reclassified to NARUC Account No. 364 (flow measuring devices). (See §H of engineering report for discussion and details).

**Staff's Conclusions:**

1. 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 District is reasonable. (See §H of engineering report for discussion and details).
2. As of July 10, 2007, a check of the compliance database indicates that there are currently no delinquencies for the Arizona American Water Company Sun City Sewer District.

**PART II**

**For Arizona American Water Company Sun City West Wastewater District**

**Staff's Recommendations:**

1. It is recommended that the Sun City West District use depreciation rates as delineated in Figure 6. (See § G and Figure 6 of the engineering report for discussion and details.)
2. Staff recommends Account No 307000 be removed from the Sun City West District in this filing. Staff further recommends that the amount of dollars in this account

(\$166,650) be reallocated to the Account No. 355 (for generator). (See § G and Figure 6 of the engineering report for discussion and details.)

3. Staff recommends that the flow meter expense of \$27,968 be reclassified to NARUC Account No. 364 (flow measuring devices). (See § H the engineering report for discussion and details.)
4. Staff recommends that the Sun City West District reported amount of \$73,343 of chemical testing expense for this proceeding be accepted. (See § H of the engineering report for discussion and details.)

#### **Staff's Conclusions:**

1. The Arizona American Sun City West Wastewater District ("Sun City West District") is in full compliance with the Arizona Department of Environmental Quality ("ADEQ") for operation and maintenance, operator certification and discharge permit limit. (See §C of the report for discussion and details.)
2. Staff concludes that the Sun City West District's plant upgrades including (1) adding a pump to the primary effluent pump station; (2) constructing a new secondary clarifier; (3) converting two existing solids contact basins to two bioreactors; (4) converting an existing aerobic digester to a bioreactor; (5) constructing two tertiary filters; (6) adding an additional pump to the filter influent pump station; (7) constructing a sodium hypochlorite disinfection unit; (8) constructing a sodium bisulfite dechlorination unit; (9) adding an additional standby generator; (10) upgrading the odor control system; (11) constructing solids dewatering building with two 2-meter belt filter press units, polymer feed equipment and sludge conveying equipment; (12) constructing a thickened sludge pump station; (13) constructing a filtered effluent booster pump station and associated piping, electrical work, and control panels are completed and in service as of the end of the test year. (See § B of the engineering report for discussion and details.)
3. Staff concludes that the Sun City West District's treatment plant has adequate capacity to treat the Sun City West area and the Corte Bella area. (See § E of the engineering report for discussion and details.)
4. As of July 10, 2007, a check of the compliance database indicates that there are currently no delinquencies for the Arizona American Water Company Sun City West Wastewater District.

**EXECUTIVE SUMMARY OF JOEL F. JEANSON  
ARIZONA-AMERICAN WATER COMPANY  
SUN CITY WEST WASTEWATER  
DOCKET NO. WS-01303A-06-0491**

The Testimony of Staff consultant Joel F. Jeanson of Huron Consulting Group addresses the following issues:

The Company has generally taken or proposed to take appropriate actions in response to the Staff recommendations.

Remaining Issues include:

Recommendation # 9: Still believe that a low-use billing exceptions test is appropriate. Should be premises-specific. This is one additional control to provide assurance that customers will not be overbilled as a result of the curbing of meter readings. This control would help detect a problem before the overbilling occurs. Agree with Arizona-American Water Company that other agreed to improvements in system of internal controls also help mitigate this risk.

Recommendation # 12: Procedures that Company has indicated are in place are reasonable and should be memorialized in formal written policies and procedures.

Recommendation # 15: Accept Company's calculations of additional refunds due residential customers totaling \$114,140 is again generous.

Attached is a copy of Mr. Jeanson's Summary of Findings and Conclusions and Recommendations from his Report.

**EXECUTIVE SUMMARY  
ARIZONA AMERICAN WATER COMPANY  
METER READING AND BILLING INVESTIGATION REPORT**

**A. OBJECTIVES**

The objectives of this investigation are to:

1. Determine if there is a systemic and / or pervasive problem with Arizona-American Water Company (AAWC) in terms of meter reading and the rendering of accurate customer bills.
2. To the extent that the problem is determined not to be pervasive for the entire system:
  - a. Determine that the meter reading problem is isolated to a specific instance or instances;
  - b. Identify the timeframe(s) in which the meter reading errors occurred; and
  - c. Determine that the remedy applied is symmetric with harm incurred.
3. Determine that the methods of refunding amounts overbilled are reasonable

**B. FINDINGS AND CONCLUSIONS**

There are twenty-one primary findings and conclusions in this report. Related recommendations, which are listed in **C. RECOMMENDATIONS** of this Executive Summary, are referenced as appropriate following each finding and conclusion.

1. The recurring meter reading problems identified in 2005 suggest that the Company has not properly emphasized the importance of actual meter readings in generating accurate customer bills when training and managing its meter reading staff, especially given the Company's inverted rate structure. (See Recommendation No. 1)
2. The Company did not take timely action in response to identified meter reading problems in 2005. (See Recommendation No. 6)
3. While the majority of the amounts overbilled occurred as a result of curbed meter readings in July and August 2005, meter readings were curbed in prior months as well in the Sun City, Sun City West, and Agua Fria districts. (See Recommendation No. 15)
4. AAWC management ultimately took action in 2005 to help prevent these problems from re-occurring. (See Recommendation No. 7)
5. Meter reader training programs are reasonably effective; however, meter reading procedures have only recently been documented in a formal meter reader training manual.

## **B. Findings and Conclusions (Continued)**

6. The relationship between AAWC and its affiliates has no adverse effect on AAWC meter reading practices; however, billing exception parameters are established consistently for all American Water operating companies and do not meet the needs of AAWC. (See Recommendation No. 5)
7. AAWC meter reading practices are generally reasonable and consistent with industry standards. (See Recommendation No. 4)
8. AAWC internal controls to ensure meter reading accuracy need to be strengthened. (See Recommendation Nos. 1 and 8)
9. Meter reading practices are consistent with Commission rules and tariffs with three exceptions. Estimated bills have been rendered for reasons other than those allowed by Arizona Administrative Code (A.A.C.) R14-2-409.5. Specific action is not taken to obtain an actual meter reading after two consecutive estimates which is a violation of A.A.C. R14-2-409.3. Additionally, curbed meter readings violate R14-2-408.A, which requires the actual reading of a meter on a monthly basis. However, given that customers on Master Route 3 whose meter readings were curbed received appropriate, if not generous, refunds, the existing remedy appears to be symmetric with the harm incurred and, therefore, no penalties are recommended. (See Recommendation No. 8)
10. The curbed meter reading and overbilling problems identified in 2005 are not indicative of a systemic or pervasive problem with AAWC usage estimation and billing processes; however, the billing exceptions criteria used by the Company was too broad to effectively detect either the underbilling (July and August bills) or overbilling (September) problems in Arizona. (See Recommendation No. 9)
11. The Company does not routinely adjust a customer's account if the field order generated as a result of working the billing exceptions report confirms that the high bill was based on a correct actual read and the prior meter reading was reported as an actual meter reading.
12. The Company's inability to identify the problem, and the cause of the problem, on a timely basis resulted in dissatisfaction among those Arizona customers who called the call center with questions regarding their high bill following the two months of low bills based on the curbed meter readings. (See Recommendation Nos. 10 and 11)
13. AAWC has taken action in response to the identified usage estimation and billing-related problems to help prevent these problems from re-occurring; however, these actions have not at this time resulted in the development of red flags or early warning systems to identify potential problems on a more timely basis. (See Recommendation No.11)

## **B. Findings and Conclusions (Continued)**

14. Billing practices are generally consistent with Commission rules and tariffs; however, accounts with consecutive estimates are not reported as billing exceptions until a customer has received five consecutively estimated bills. This practice increases the likelihood that AAWC is not complying with the A.A.C. R14-2-409.3 requirement that after the second consecutive month of estimating the customer's bill for reasons other than severe weather, the Company must attempt to secure an actual meter reading. (See Recommendation No. 5)
15. Usage estimation and billing practices are generally reasonable and consistent with industry standards. (See Recommendation No. 12)
16. Usage estimation calculation practices result in reasonably accurate estimated bills. (See Recommendation No. 14)
17. While customer service and billing training programs appear to be appropriate and comprehensive, customer complaints related to interactions with American Water customer service representatives indicate that the training programs may not be effective. (See Recommendation No. 13)
18. American Water's use of a consolidated call center and billing department for all American Water operating companies is a reasonable business practice; but this practice contributed to delays in identifying the meter reading and billing problems and responding to the Arizona customers impacted by the 2005 meter reading and billing problem. (See Recommendation No. 10)
19. The process used to provide refunds to customers whose meter readings were curbed ultimately resulted in appropriate, if not generous, refunds to customers on Master Route 3.
20. Actions taken by the Company to ensure that refunds were provided to customers who received bills based on curbed meter reading on routes other than Master Route 3 were not sufficient. (See Recommendation No. 15)
21. Adjustments made to bills based on estimated usage when actual meter readings are obtained are properly calculated, including the assignment of consumption to the appropriate rate tiers.

## C. RECOMMENDATIONS

This report makes the following recommendations:

### Meter Reading

1. Require AAWC to define and implement a "low use" limit in the meter reading system based on the previous month's consumption of the individual customer within six months of a decision in this matter. (Refers to Finding No. 8)
2. Require AAWC to develop a report which lists the number of over-rides entered by individual meter readers by cycle on a daily basis and implement a procedure whereby this report is reviewed on a daily basis by supervisory personnel. This process should be completed within six months of a decision in this matter. (Refers to Finding No. 8)
3. Require AAWC to establish a "no tolerance" policy for the curbing of meter reads and then ensure that meter readers are aware of that policy. In addition, require AAWC to emphasize the importance of actual meter readings in generating accurate customer bills when training its meter reading staff. (Refers to Finding No. 1)
4. Require AAWC to complete a cost-benefit study related to the implementation of an automated meter reading system to assure accurate actual meter readings. Require the Company to provide the results of this study to the Commission within twelve months of a decision in this matter. (Refers to Finding No. 7)
5. Require AAWC to change its billing exceptions parameters for Arizona customers so that accounts are reported following two consecutive estimates rather than five consecutive estimates. (Refers to Finding Nos. 6 and 14)
6. For the next two years, require AAWC to report to the Commission Staff the results of its monthly quality control meter reading inspections. Require the Company to report the likely number of customers affected, and steps taken to remedy the problem in the event the Company determines that meter readings have been curbed. (Refers to Finding No. 2)
7. Require AAWC to continue to disable the key on the hand held meter reading device showing the customer's previous meter reading. (Refers to Finding No. 4)

### Billing and Estimation

8. Require AAWC to change its process for coding the reason for estimated bills to eliminate "no code" as an option. In this way, both the Company and Commission can be assured that bills are being estimated only for reasons specifically allowed in Commission rules. Require this change to be completed within three months of a decision in this matter. Given the uncertainty as to whether estimated bills are being rendered only for the specifically allowed reasons, require the Company to provide Commission Staff with quarterly reports of the number of estimated bills rendered by reason code for the next two years. (Refers to Finding No. 9)

### **C. Recommendations (Continued)**

9. Require AAWC to adjust the parameters on the high / low billing exceptions test to customer-specific parameters based on current period amounts billed for water services compared to the billing for the same period prior year (or prior month) at the same premises. Require this change to be completed within six months of a decision in this matter, with documentation of the change then provided to the Utilities Division, Consumer Services Chief. (Refers to Finding No. 10)
10. Require AAWC to evaluate its processes and related systems of internal controls to ensure that promises made to call customers back once the requested task is completed are kept. Require this change to be completed within six months of a decision in this matter, with documentation of the change then provided to the Director of the Utilities Division. (Refers to Finding No. 12 and 18)
11. Require AAWC to define and develop a report of the number and type of customer complaint calls by day for each service area (Sun City, Sun City West, Agua Fria, etc.) in the AAWC franchise territory. This change should be completed within twelve months of a decision in this matter. (Refers to Finding Nos. 12 and 13)
12. Require AAWC to simplify the "cancel / re-bill" procedure. This will ensure that more accurate usage information is retained and made available upon which to calculate estimated bills. This change should be completed within twelve months of a decision in this matter. (Refers to Finding No.15)
13. Require American Water to train its call center representatives to recognize when billing complaints may be the result of curbed meter readings. (Refers to Finding No. 17)

### **Refunding Methodology and Process**

14. Require AAWC to automate the billing adjustment process. The current process is a manual process and is more prone to calculation error than a process programmatically embedded in the customer billing system. Automating this process may be necessary if the parameters of the billing exceptions process are tightened and more bills reported as billing exceptions. This change should be completed within six months of a decision in this matter. (Refers to Finding No. 16)
15. Require AAWC to programmatically identify and issue refunds to those customers not located in Master Route 3 using the same program applied to Master Route 3 customers. (Refers to Finding Nos. 3 and 20)
16. Refunds are not generally made for exception-reported accounts if both the prior and current reads are reported as actual reads and the current read is confirmed as accurate. This practice is appropriate except in those instances in which the prior month "actual" meter reading has been curbed or mis-read.