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BEFORE THE ARIZONA CORPORATION COMMISSION

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KRISTIN K. MAYES

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS EASTERN GROUP AND FOR CERTAIN RELATED APPROVAL	DOCKET NO. W-01445A-02-0619

Arizona Corporation Commission
DOCKETED

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STAFF'S REPLY BRIEF

PUBLIC VERSION

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I. INTRODUCTION.

Staff hereby replies to the Closing Brief filed by Arizona Water Company ("Company" or "AWC"). Staff will first address the Company's position on the Pinal Creek Group ("PCG") issues. Staff will then respond to the Company's positions regarding rate base, income statement issues, cost of capital, rate design, and other issues. Often, the Company's assertions were already addressed in Staff's Closing Brief. In such instances, Staff relies on the arguments made in its Closing Brief.

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* * * END CONFIDENTIAL * * *

III. RATE BASE ISSUES.

A. Accumulated depreciation.

As discussed in Staff's Closing Brief, rate base is a measurement at a point in time. Because the Company included an additional year of plant beyond the test year, it is appropriate to reflect the additional year in the accumulated depreciation balance. *Id.* at 985-86. As the Commission stated in the Northern Group rate order: "It is necessary to reconcile the accumulated depreciation with the same cut-off date as was used for the post-test year plant. As Staff points out, if accumulated depreciation is not increased by a corresponding amount, the Company's shareholders will realize a windfall at the expense of the Company's ratepayers" Decision No. 64282 at 6. The Company claims that Staff's calculation is a "mismatch." (AWC Closing Brief at 6-8). But the Company cut off its cross examination before Staff's witness could explain his calculations (Tr. at 1008). It is the Company that created a mismatch by measuring rate base and accumulated depreciation at different points in time. *Id.* at 986-87.

Because the Company employs the "half-year" convention, Staff appropriately recognized a half year of depreciation on post-test year plant. The Company attempted to violate the "half-year" convention in the same way in the recent Northern Group rate case. The Commission rejected that attempt then, as it should do now. See Decision 64282 at 5-6.

B. Working Capital.

Mr. Ludders testified that the Company accrues property taxes on its books once it receives a valuation notice. (Tr. at 963-64, 1016-17). The Company asserts, without any citation to the record, that the accruals are based on the prior years taxes, not the valuation notices. (AWC Closing Brief at 12). The Company's blatant attempt to introduce "facts" outside the record should be rejected.

Moreover, even if the Company's "fact" was true, it simply proves Staff's point. If the Company accrues property tax prior to receiving the tax bill, the date of the tax bill cannot be the appropriate starting point for calculating the lag period for property taxes. By accruing taxes before receiving the bill, the Company is recognizing the liability before it receives the bill. As Mr. Ludders testified, the billing date is not the correct date because liability accrues prior to that date – just like a credit card debt exists once an item is charged, even before the bill comes in the mail. (Tr. at 1012). As Mr. Ludders explained, the amount of tax due, although not listed on the valuation notice, can be calculated using the valuation notice. *Id.* at 1015, 1102. The date of the valuation notice is therefore the proper starting point for calculating property tax lag days.

C. Deferred CAP M&I Charges.

As explained in Staff's Closing Brief, Staff's proposed amortization period for CAP M&I charges simply uses the existing amortization period authorized by the Commission in the Company's last rate case. The Company asserts that this is inconsistent with Decision No. 62293, which authorized an amortization period for CAP M&I charges for Arizona-American's Sun City and Sun City West districts. (AWC Closing Brief at 14-15). As the Company notes, the Commission has "broad discretion" in setting amortization periods. *Id.* Certainly, it must be within the Commission's broad discretion to continue an existing amortization rate. Further, Decision No. 62293 concerned the unique circumstances surrounding the Sun City non-potable water pipeline – circumstances not present here. Sun City was not using its CAP water allocation, and the Commission sought to reduce groundwater use by approving the CAP recharge and pipeline proposals. Decision No. 62293 at 12-16. In contrast, the Company admits that it is already using almost all of its CAP allocation. (AWC Closing Brief at 14). Because it was based on unique circumstances, Decision No. 62293 provides little guidance here and it certainly does not mandate the reversal of an amortization period already approved by the Commission. Further, even if Decision No. 62293 did provide guidance, the amortization period for the Sun City CAP charges was based on the period of deferral. Decision No. 62293 at 7-8. The Company proposes a three year amortization period, even though the CAP charges have been deferred since 1992. (Tr. at 1031). Thus, Decision No. 62293 provides no support for the Company's position.

IV. INCOME STATEMENT ISSUES.

A. Revenue Annualization.

The Company attempts to calculate increased revenue based on new 5/8 inch customers only and then allocate expenses to the 5/8 inch customers in its revenue annualization calculation. (AWC Closing Brief at 16-17). Because the allocation of expenses is not supported by a cost of service study, it is speculative, and Staff's calculation should be adopted instead. (Tr. at 1056-58).

B. Adjustment Mechanisms.

The Company seeks approval of a remarkable four adjustment mechanisms in this case. *Id.* at 498-99. In so doing, the Company seeks to insulate itself from the normal risks of doing business. *Id.* at 1064-65. Such risks are properly borne by the shareholders, not the ratepayers. Staff has not opposed the MAP adjustor or the Arsenic Cost Recovery Mechanism. Surely two adjustors are sufficient. As explained in Staff's Closing Brief, Mr. Ludders has articulated a principled test for evaluating adjustors. The Company offers no such standard to support its adjustors. The Company suggests that Staff has "failed to meet its burden of proof" in rejecting the adjustors. (AWC Closing Brief at 19). But the Company bears the burden of proof on each and every element of the rate case.

C. Rate Case Expense.

The Company claims that it should get more rate case expense than in its 1992 rate case because the Eastern Group is "substantially larger". (AWC Closing Brief at 21). But the 1992 case concerned all of the Company's divisions, not just the Eastern Group. If anything, the Company's costs for a case concerning only the Eastern Group should be smaller. The Company also claims that proceedings are "far more complex today". *Id.* But the 1992 case and this case both spanned 5 days of hearings, and both cases had two rounds of briefing. Decision No. 58120 at 1-2. This does not indicate a vast difference in complexity.

The Company then claims that its rate case expense should not be compared to its recent Northern Group rate case because the Eastern Group has twice the number of customers and greater expenses and revenue. (AWC Closing Brief at 21). This claim is based on the dubious premise that rate case expense should be proportional to customers (or rate base, or revenue). The Company has presented no evidence of such a link, and it defies the common-sense view that larger rate cases

should have lower per customer costs because of economies of scale and because fixed costs can be spread over a larger customer base. The Company has failed to justify the substantial increase in rate case expense when compared with prior, comparable cases.[1]

D. CIAC Amortization.

Staff's proposed CIAC Amortization methodology is consistent with the approach used in the 1992 rate case and the Northern Group rate case. (Tr. at 1038).

V. COST OF CAPITAL.

Staff's recommendations meet the applicable legal standard of resulting in a rate that is "reasonably sufficient to assure confidence in the financial soundness of the utility, and [that is] adequate, under efficient and economic management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia et al.*, 262 U.S. 679, 693 (1923). Staff's estimate uses actual available information or an objective application of widely accepted economic principles to arrive at its estimate. Staff does not dispute the relevance of risk in the cost of capital analysis, but does object to the methods the Company uses to quantify that risk.

A. Staff's cost of debt estimate is based on actual cost of debt to AWC and should be adopted.

As stated in its closing brief, Staff bases its recommendation of the short-term debt cost on the actual current cost to short-term debt to the Company based on its existing contract with Bank of America. (Reiker Direct, Ex. S-38 at 3). Staff's recommendation based on that contract is 4%. The Company argues that the perceived "volatile nature of the short-term debt market" requires use of a 24-month average cost from January 2001 through December 2002. (AWC Closing Brief at 23). The Company's averaging approach should be rejected, as the current cost of short-term debt incurred by the Company is a more accurate indicator of the Company's cost going forward. The actual current cost of short-term debt is the only cost relevant to the Company's current cost of capital. This is perfectly consistent with the Efficient Markets Hypothesis, a crux of modern

[1] The Company's also objects to Staff's proposed amortization period for rate case expense. The Company's argument is addressed in Staff's Closing Brief at 7.

corporate finance theory. (Reiker Direct, Ex. S-38 at 36). The Company's attempt to use a cost higher than the actual cost of short-term debt is a blatant attempt to earn returns higher than its cost of capital.

B. <u>Staff's DCF model properly uses dividend per share and earnings per share factors to arrive at a reasonable estimation of cost of equity</u>.

The Company's restatement of Staff's DCF model estimates to include only security analysts' forecasts of growth is inappropriate. As Staff points out, such exclusion ignores the fact that analysts' earnings forecasts are known to be overly optimistic. (Reiker Surrebuttal, Ex. S-39 at 20). Staff provided overwhelming evidence that earnings projections of professional analysts are notoriously biased and investors are aware of this bias. (Reiker Direct, Ex. S-38 14, 41-44). The Company does not refute this fact. Further, as Staff points out, past and near-term dividends per share (DPS) growth is reflected in the market price whether dividends per share are expected to grow faster in the future on not. *Id.*

Staff does not read Myron Gordon's communication to support inclusion of a second stage. (AWC Closing Brief at 28). The email, sent to Dr. Zepp in a different case, in fact indicates that Mr. Gordon is "in no position to comment on whether Dr. Zepp used the best possible method and whether or not the numbers he used are correct." (Zepp Rejoinder, Ex. A-6 at 4).

The Company's assertion that investors ignore DPS growth when purchasing common stocks is erroneous. The Company's own expert witness, Dr. Zepp, contradicts his own testimony given in another jurisdiction where he testified that "According to me, investors would look at both ... Investors would examine past and forecasted growth in earnings per share, dividends per share, and other trends that provide indications about what future growth would be." (Reiker Direct, Ex. S-38 at 45). The Company's DCF analysis is result driven and should be rejected.

The DCF model is predicated on dividend growth. *Id.* at 18-21. The DCF method of estimating the cost of equity is based upon the theory that the market price of a stock is equal to the present value of all expected future *dividends*. *Id.* at 14-15.

C. <u>The Company's ad hoc "Risk Premium" method should be rejected</u>.

Staff's cost of equity estimate is the result of the objective application of accepted methods of

estimating that cost. The Company's labeling of the application of the methods as "mechanical" is correct. (AWC Closing Brief at 30). The methods are applied in an objective, mechanical way with no preconceived notion of what the result should be. The Company, on the other hand, advocates the use of an ad hoc risk premium analysis. And then to further skew the result from the objective application of accepted methods, the Company argues for the piling on of risk premiums grounded on so-called unique risk factors. All of these "risk factors" are economically unfounded and some of which have been rejected by this Commission in past AWC rate cases.

The Company would have the Commission believe that its ad hoc risk premium analysis is preferred to the CAPM when it is not. The risk premium method is simply a "rule of thumb" and not a cost of equity model developed in the corporate finance literature. (Reiker Direct, Ex. S-38 at 47). The CAPM is the most popular method of estimating the cost of equity among firms. (Reiker Surrebuttal, Ex. S-39 at 18). Mr. Reiker provided a plethora of reasons for the Commission to reject the Company's risk premium analysis. (Reiker Direct, Ex. S-38 at 46-52). The critical flaw in the Company's risk premium analysis is the use of Baa rated corporate bonds to imply meaningful equity risk premiums. According to Professor Laurence Booth of the Rotman School of Management at the University of Toronto, "Since corporate bonds are default risky, the investor's expected rate of return is significantly lower than the yield to maturity. As a result, the yield to maturity on a corporate bond is not an estimate of the investor's required rate of return, and cannot be meaningfully compared to the [cost of equity]. Only the yield to maturity on a default free government bond is an estimate of a required rate of return, similar to the [cost of equity]. This is why all risk comparisons should be to government default free bonds, otherwise you mix apples and oranges." (Reiker Direct, Ex. S-38 at 48-49) Other reasons the Company's risk premium analysis cannot be relied on include the Company's use of "forecasted" interest rates and its reliance on authorized returns granted in other jurisdictions.

D. <u>Staff's CAPM should be adopted</u>.

The CAPM adopted by Staff and RUCO conforms to the original CAPM developed in the 1960s by William Sharpe, John Lintner, and Jan Mossin. In fact, Staff's CAPM actually produces cost of equity estimates that are *higher* than what the original version would produce. (Reiker

Surrebuttal, Ex. S-39 at 19). This is because Staff's CAPM 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 returns for low beta stocks such as utilities. (Reiker Surrebuttal, Ex. S-39 at 18-19).

The Company takes issue with Staff's CAPM by citing empirical tests conducted thirty years ago which found the required return on the zero-beta asset to be higher than the Treasury bill rate during the period 1926 to 1968 (Tr. at 185). However, the Company failed to realize that those empirical tests used short-term Treasuries and raw (unadjusted) betas. (Reiker Surrebuttal, Ex. S-39 at 1-3). The Company has not shown that a zero-beta CAPM, appropriately applied, would produce required returns higher than Staff's CAPM. *Id.* at 19. The Company's only response is to state that the empiricist "certainly knew about the method *Value Line* and others used to adjust betas because Marshall Blume had published his paper showing such [beta] adjustments improved beta forecasts years before Black published the update of BJS." (Zepp Rejoinder, Ex. A-7 at 33). Thus, somehow implying that a beta adjusted toward 1.0 should be used in a zero-beta CAPM application. This argument does not hold water because William Sharpe, the Nobel Laureate who developed the CAPM, stated sixteen years *after* the CAPM tests were conducted, that it makes more sense to adjust beta towards an industry average rather than 1.0. (Ex. S-15). Further, the Company's own witness, Dr. Zepp, admitted that he has taken the position that beta estimates adjusted toward the industry average provide better estimates of the true beta than beta estimates adjusted toward 1.0. (Tr. at 191).

E. <u>The Company's restatement of Staff's CAPM is inappropriate and contradictory</u>.

The Company states that its witness took a "conservative" approach and used "forecasted" Treasury rates to restate Staff's CAPM. (AWC Closing Brief at 29). There is nothing "conservative" about using forecasted interest rates. Analysts who forecast future interest rates do not have any more information about the future than what is already reflected in the current rate. (Reiker Direct, Ex. S-38 at 46). An examination of the Company's own ad hoc risk premium analysis shows just how bad professional analysts are at predicting future interest rates. For example, the Company relies on a range of forecasts for the Baa corporate bond rate in December 2001 for the period 2003 to 2004. (Zepp Direct, Ex. A-4 at Table 22). This range averages 8.10 percent. As of May 2, 2003, the

Baa corporate bond rate was 6.68 percent – a difference of 142 basis points. (Reiker Direct, Ex. S-38 at 47).

The Company's restatement of Staff's CAPM also contradicts its own testimony. This is because the Company updates Staff's risk-free rate with its own forecasted long-term Treasury rates, but fails to update Staff's market risk premium. The Company states that the average rate on intermediate-term Treasuries, used by Staff in its CAPM, has increased by 70 basis points since the time Staff prepared its CAPM. (AWC Closing Brief at 29-30). However, the Company's own expert witness, Dr. Zepp states in his direct testimony that "risk premiums change in the opposite direction to changes in interest rates." (Zepp Direct, Ex. A-4 at 10). In fact, Dr. Zepp even states that he has conducted empirical studies that corroborate this theory. *Id.* at 37. Apparently, the Company only recognizes this concept when it works in their favor, suggesting once again that its analyses are result driven.

F. <u>The Company's comparable earnings analysis should be discarded</u>.

The Company presents in its closing brief what has been accurately described by RUCO as a comparable earnings analysis. (AWC Closing Brief at 30-31; Rigsby Surrebuttal, Ex. R-2 at 32). The comparable earnings method is simply the practice of examining historical and projected book/accounting returns on equity as a gauge of the cost of equity. As accurately stated by RUCO witness William Rigsby, "there are serious problems with the comparable earnings method." (Rigsby Surrebuttal, Ex. R-2 at 29). Staff witness Joel Reiker described the problems associated with the comparable earnings method no less than *five* times while under cross examination by the Company's attorney: (Tr. at 824-25, 827, 835-36, 839, 841-42). For example, Mr. Reiker stated:

> A. I think I testified several minutes ago that you simply can't compare these estimates of the cost of equity to actual book or accounting returns on equity because of the market to book ratio issue. The market to book ratio of these companies is well above one, and as I stated in my surrebuttal testimony at page 2, I provided a quote from a Professor Lawrence Booth who is actually a colleague of Myron Gordon at the University of Toronto, and Myron Gordon developed the DCF model for use in utility rate cases. And he says theoretically, there's no question whatsoever that a market to book ratio of 1.5 indicates that the cost of equity is less than the allowed ROE, and they've never even come across a company witness who would disagree with that proposition. And what that means, that supports the second explanation I gave for

> the market to book ratio being above one, and that's that investors expect regulators to award returns on equity that are higher than the cost of equity.
>
> Q. Okay.
>
> A. And the point in this proceeding, at least the job I was given in this proceeding, is to estimate the cost of equity, and the accountants take that number and apply it to the book value of the company's rate base.

(Tr. at 835-36).

If investors expect the sample companies to earn book/accounting returns in excess of the return they require, then relying on the Company's comparable earnings analysis will result in a return to the Company that is higher than its cost of equity. This constitutes a windfall. *Id.* at 838.

The Company once again contradicts itself on page 31 of its brief by presenting authorized, realized, and forecasted book/accounting returns on equity for publicly traded water companies. These companies all have market-to-book ratios in excess of 1.0 (Reiker Direct, Ex. S-38 at Schedule JMR-5). Therefore, as stated by Staff witness Mr. Reiker several times during the hearing, these companies have been expected to earn book/accounting returns that are higher than what investors require in return for investing in them. (Tr. at 824-25, 827, 835-36, 839, 841-42). This is not consistent with the concept of a fair return contemplated by *Hope*, which the Company cites on page 24 of its brief. The Company demonstrates its unwillingness to accept this basic equation of elementary mathematics by criticizing RUCO witness William Rigsby's statement that a market to book ratio of 1.0 is one of the desired effects of regulation. (AWC Closing Brief at 24). Staff witness Mr. Reiker explained this simple concept:

> A. In regulation, you set the return on the book value of the rate base, okay? So if you're going to take a cost of capital and make that the rate of return on book value of the rate base, as an investor, when you buy the stock, why would you pay a price higher than the book value when the cost of capital was applied to the book value of rate base? The only reason you would pay a price higher theoretically than book value of the stock is if you expect that company to earn a book return higher [than the cost of capital] ...

(Tr. at 825).

The Company's comparable earnings method appears to be a last-ditch effort to secure an unwarranted and improperly high return for its investors.

G. **The Cost of Equity estimate adopted by the Commission should not include a risk premium based on the non-factors identified by AWC.**

As stated in Staff's closing brief, AWC's five alleged factors for inclusion of a 150 basis point risk premium should be rejected. (Staff Closing Brief at 18). The bond issue risk factor is now moot, as AWC successfully placed its bonds. (Reiker Direct, Ex. S-38 at 55). The advocated premium for Arizona's use of a historical test year should be rejected as inconsistent with both Supreme Court and Commission precedent. *Id.* at 38. Both the so-called risk factors for new EPA arsenic standards and for potential disallowances of plant should be rejected, as both factors are present for all water utilities and therefore do not make AWC more risky than the sample group. *Id.* at 57. Further, AWC's rate base will expand as it adds plant to treat for arsenic. *Id.* And finally, the risk premium sought as a result of AWC's comparably small size should be disallowed as inconsistent with Commission precedent and because it has not been shown that the firm's size increases its risk. *Id.* at 58. In fact, the "Wong Study" has demonstrated that small utility firms are not more risky than larger ones. *Id.* at 59-64. Finally, Modern Portfolio Theory teaches that the market does not account for these types of unique risk, as investors diversify investments to obviate their effect. *Id.* at 28. Only the systematic risk of a security is priced by the market. *Id.* at 56.

The Company responds by claiming that the above so-called risk factors fall into the category of "other systematic risks", such as "distress risk", by citing a study conducted by Fama and French. (AWC Closing Brief at 35). However, Staff has provided evidence that the Fama-French model cited by the company has not been accepted by the academic community, and very recent studies indicate that the model is not even correct. (Reiker Surrebuttal, Ex. S-39 at 5-6).

In response to the Wong article which supports the statement that "there is no need to adjust for the firm size in utility rate regulations" (Reiker Direct, Ex. S-39 at 60-61) the Company presents an article written by its witness Dr. Zepp. Staff has shown that an educated review of the Zepp article reveals several reasons to reject it. The statistical significance of Dr. Zepp's annual beta calculation, which he presents in his article, was manufactured through the use his creative "pooling" method. (Reiker Surrebuttal, Ex. S-39 at. 8). Pooling the return data increases the statistical significance of Dr. Zepp's annual beta because instead of having just five data points to calculate a beta based on five years worth of annual returns, Dr. Zepp uses fifteen data points to calculate a beta based on five

years worth of annual returns. *Id.* In other words, Dr. Zepp has "manufactured" ten additional data points, which result in higher statistical significance. *Id.* Dr. Zepp's annual beta would have been meaningless had he not used his creative pooling method. *Id.* at 8-9. Even if Dr. Zepp's creative pooling method was legitimate, his annual beta cannot be compared to *Value Line* betas because he has inserted a "dummy variable" into his regression, which further increases the statistical significance of his estimate. *Id.* at 9. Finally, Dr. Zepp's annual beta cannot be relied on because he did not conduct the appropriate statistical test – a two tailed test. Id. Had he conducted the appropriate statistical test, his annual beta estimate would not be statistically different than the *Value Line* betas, which Staff relies on. *Id.* In fact, the Ibbotson Associates *Stocks, Bonds, Bills, and Inflation Valuation Edition 2002 Yearbook*, which Dr. Zepp relies on and cites in his article (Zepp Rebuttal, Ex. A-5 at Ex. TMZ R4), states that "the appropriate critical value is that for the two-tailed test ..." (Ex. S-20). The Company's only response to the numerous problems Staff found with Dr. Zepp's annual beta calculation is to say they are "complicated" "technical arguments" that are "trivial." (AWC Closing Brief at 36-37).

The Company also claims that because Arizona Water's Series K bonds were placed at an interest rate that exceeded the interest rate on Baa utility bonds, the Company's equity is somehow riskier. *Id.* at. 37. The Company states that "Mr. Reiker admitted during cross-examination that bond ratings issued by independent credit-rating services provide an objective measure of the relative riskiness of a firm. *Id.* Regardless of the fact that Mr. Reiker did *not* make that statement,[2] the risk reflected by a lower bond rating (default risk) has nothing to do with the cost of equity. Staff witness Mr. Reiker testified:

> Q. Now, what is the relationship between a utility's bond rating and its cost of debt?
>
> A. Well, the lower bond rating would result in a higher cost of debt.
>
> Q. And why is that?
>
> A. Well, [a] lower bond rating would mean that the company has greater default risk.

[2] According to the transcript at page 772, Mr. Reiker agreed that "a bond rating is a way of measuring the *credit risk* of a particular firm", not the "relative riskiness."

(Tr. at 773-74).

As explained on pages 48 and 49 of Staff 's direct testimony and pages 2 and 3 of Staff's surrebuttal testimony, different companies have different levels of default risk, and because some of this default risk is diversifiable (unsystematic) it is irrelevant to the cost of equity. In fact, the higher rate on Arizona Water's Series K bonds relative to publicly-placed bonds may be due to lower costs incurred by Arizona Water. A private placement, such as the Company's Series K bonds, may have a higher cost than a public offering because in a private offering the firm enjoys lower issuing costs because it does not need to prepare the extensive registration statement required for a public offering. The institution that buys the issue typically benefits because the issuing firm passes some of these cost savings on the investor as a higher return. (Reiker Surrebuttal, Ex. S-39 at 3-4).

H. Staff's rate of return recommendation.

Based on the evidence in this proceeding the Commission should adopt Staff's recommended overall rate of return, which is 8.6 percent. Staff's recommended capital structure, cost of debt, and return on equity are shown in the following table:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	28.2%	8.5%	2.39%
Short-term Debt	5.6%	4.0%	0.22%
Common Equity	66.1%	9.0%	5.95%
Cost of capital/ROR			8.6%

VI. RATE DESIGN

A. Staff's three-tiered rate design promotes conservation and is based on sound economic theory and should be adopted.

The Company advocates its "simple rate design" and objects to Staff's rate design as a "dramatic... change." (AWC Closing Brief at 41-42) The Company claims that its rate design is based on a 1992 cost of service study. But the Company's Vice President, Mr. Kennedy, admitted that the Commission strongly criticized the 1992 cost of service study as inadequate and incomplete. (Tr. at 532-36). Moreover, Mr. Kennedy could not point to a single instance where the Commission had required a cost of service study before implementing three tiered rates. *Id.* at 344.

The Company attacks Mr. Thornton's incremental cost study and marginal cost theory. But Mr. Thornton was merely explaining the theoretical basis for inverted three-tiered rates. As Mr. Thornton explained, marginal cost theory is long established and simple to apply to water rates. (Thornton Surrebuttal, Ex. S-41 at 2). Mr. Thornton's incremental cost study applies these principles to give a rough estimate of the premium that should be attached to the third tier. The Company's claim that this analysis is "generic" and "largely hypothetical" (AWC Closing Brief at 46) is odd given that the Commission has repeatedly adopted inverted block three tiered rate designs without such analysis in the past. *See e.g. Beaver Valley Water Co*, Decision No. 66388, *Bellemont Water Co.*, Decision 65853, and *Michaels Ranch Water Co.*, Decision No. 65652. Staff has provided much more analysis compared to these prior cases when inverted three tiered rate designs were adopted. The Company's claim that Staff's rate design is unsupported is thus without any basis.

The Company makes the remarkable claim that its rate design is more consistent with conservation. (AWC Closing Brief at 45). Staff's first tier covers only 3,000 gallons, an amount that the Company (inconsistently) attacked at the hearing as being too small. (Tr. at 859-63). The Company's claim is based on the assumption that Staff's moderately priced first tier will encourage these few users who are using less than 3,000 gallons to use more water. . Staff's first tier is unlikely to result in increased consumption, and instead is designed to provide wide and affordable access to a minimum amount of an essential commodity. (Tr. at 934-35). If anything, people who are using more than 3,000 gallons have an incentive to try to reduce their usage to get the lower rate. Thus, Staff's first tier is consistent with conservation. Further, the Company adjustment is inconsistent with the testimony of its president, who testified that an inverted three tiered rate structure is an appropriate part of a conservation plan. *Id.* at 342.

B. <u>The Apache Junction and Superior system are not interconnected and should not have consolidated rates.</u>

In Decisions No. 64282 and 66400, the Commission rejected requests by the Company for consolidated rates, recognizing that consolidation results in unfair subsidies. Apparently hoping that the third time is the charm, the Company again seeks approval of a rate consolidation plan, this time for Apache Junction and Superior. As described in Staff's Closing Brief, these systems are not

interconnected and have different costs of service, making consolidation inappropriate.

The Company spends a page and a half discussing a California Public Utilities Commission decision authorizing rate consolidation for Southern California Water Company's Region III. *Southern California Water Co.*, Decision No. 00-06-075 (June 22, 2000). But the Company fails to point out that the California PUC rejected a subsequent request for rate consolidation in Southern California Water Company's Region I. *See Southern California Water Co.*, Decision No. 00-12-063 (December 21, 2000). The California PUC noted that its prior order was based "solely under the facts of that case" and that rate consolidation requires a careful, case by case analysis. *Id.* at Section III.C.[3] The California PUC noted that the burden of proof rests with the company to show that "the wrong price signals or incentives are not given by any new rate design" and that the advantages must clearly outweigh the disadvantages. *Id.*

VII. OTHER ISSUES.

Staff's position regarding water loss and the NP-260 tariff are described in Staff's Closing Brief. Staff does not dispute the application of the Arsenic Cost Recovery Mechanism in this case.

VIII. CONCLUSION.

Staff's proposals reflect sound ratemaking principles. Accordingly, Staff requests that its positions be adopted.

RESPECTFULLY SUBMITTED this 10th day of November 2003.

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[3] Page Numbers are not available from Westlaw for this document. The Westlaw reference number for this document is 2000 WL 33128278.

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