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BEFORE THE ARIZONA CORPORATION COMMISSION

1  
2 WILLIAM A. MUNDELL  
3 Chairman  
4 JIM IRVIN  
5 Commissioner  
6 MARC SPITZER  
7 Commissioner

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AZ CORP COMMISSION  
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6 IN THE MATTER OF THE APPLICATION ) DOCKET NO. W-02465A-01-0776  
7 OF BELLA VISTA WATER CO., INC. AN )  
8 ARIZONA CORPORATION TO ) ARIZONA CORPORATION  
9 DETERMINE THE FAIR VALUE OF ITS ) COMMISSION STAFF'S CLOSING  
10 PROPERTIES FOR RATEMAKING ) BRIEF  
11 PURPOSES, TO FIX A JUST AND )  
12 REASONABLE RATE OF RETURN )  
13 THEREON AND TO APPROVE RATE )  
14 SCHEDULES AND TARIFFS DESIGNED )  
15 TO DEVELOP SUCH RETURN )

Arizona Corporation Commission  
DOCKETED

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14 Staff of the Utilities Division ("Staff") of the Arizona Corporation Commission  
15 ("Commission") hereby files its closing brief in the above-captioned matter. In this brief, Staff will  
16 address the major disputed issues between the applicant Bella Vista Water Company ("BVWC" or  
17 "Company") and Staff. On any issue not specifically addressed in this brief, Staff maintains its  
18 position as represented in its testimony.

19 This rate case is all about accuracy. The issues over rate base and cost of capital boil down  
20 to what party used the most accurate analysis. Staff's analysis of rate base is the most accurate  
21 analysis because Staff's analysis adheres to widely accepted rate making principles. Staff properly  
22 rejects inclusion of post-test year plant into rate base because the impacts on revenues and expenses  
23 are not known and measurable. To add post-test year plant to rate base would violate the widely held  
24 and accepted matching principle and the Company's position directly violates that basic precept. The  
25 Company fails to meet its burden to justify inclusion of post-test year plant in rate base, inclusion  
26 of approximately \$143,846 of cash working capital ("CWC"), and inclusion of professional fees not  
27 directly benefiting the rate payers.

28 Staff's cost of capital analysis is also the most accurate analysis. Staff based its rate of return

1 recommendation ("ROR") on its cost of capital analysis, which in turn was based on Staff's  
2 determination of capital structure, cost of debt, and cost of equity. Cost of capital is a financial  
3 analysis looking at investor's present and future expectations. It is a forward-looking financial  
4 analysis, independent of the analysis used to determine whether post-test year plant should be  
5 included in rate base. The Company's cost of capital analysis and ROR recommendation is based  
6 on misconception on top of misconception and is an inaccurate measure of investor expectation.  
7 While Staff's analysis adheres to these fundamental concepts, the Company's recommendation is  
8 based on direct violations of those concepts.

9 **I. THE COMMISSION SHOULD NOT ALLOW THE POST TEST-YEAR PLANT**  
10 **ADVOCATED BY THE COMPANY BECAUSE TO DO SO WOULD VIOLATE THE**  
11 **MATCHING PRINCIPLE AND WOULD VIOLATE WIDELY ACCEPTED RATE**  
12 **MAKING PRINCIPLES.**

13 The Company filed its rate application on September 28, 2001, and chose a test year ending  
14 December 31, 2000. Despite its choice of a test year ending December 31, 2000, BVWC seeks to  
15 include in its rate base plant additions that occurred outside the test year up through March 6, 2002.  
16 This request should be denied as unreasonable. It is unreasonable because allowing post-test year  
17 plant installed well after the Company's chosen test year would result in violating the matching  
18 principle and not be in keeping with widely accepted rate making principles. The impacts of the  
19 Company's proposed post-test year plant on revenues and expenses, despite the Company's  
20 intentions, are not known and measurable. The Commission should therefore reject the inclusion of  
21 post-test year plant additions, and should instead adopt Staff witness Alexander Igwe's  
22 recommendation of the disallowance of post-test year plant in rate base.

23 **A. The Commission should not allow pro forma adjustments to the historical test-year**  
24 **chosen by the Company unless the impacts are known and measurable.**

25 Arizona is a historical test-year state. Commission rules require the end of the test year, the  
26 one-year historical period used in determining rate base and operating income, to be the most recent  
27 practical date available prior to the filing. A.A.C. R14-2-103(A)(3)(p). While pro forma  
28 adjustments are allowed, when appropriate, the starting point for determining rate base, revenues and  
expenses is the historical test-year the Company chooses when applying for a rate adjustment. Pro

1 forma adjustments are defined as “adjustments to actual test year results and balances to obtain a  
2 more normal relationship between revenues, expenses and rate base.” A.A.C. R14-2-103(A)(3)(I).  
3 The definition of Original Cost Rate Base, or the rate base used as part of the determination of fair  
4 value, is defined as the “depreciated original cost, prudently invested, of the property (exclusive of  
5 contributions and/or advances in aid of construction) *at the end of the test year*, used or useful, plus  
6 a proper allowance for working capital and including all *applicable* pro forma adjustments.” A.A.C.  
7 R14-3-103(A)(3)(h). The issue here is whether the post-test year plant the Company proposes to  
8 include in rate base also includes known and measurable changes to revenues and expenses. The  
9 answer, in this case, is no, for the following reasons.

10 BVWC’s proposal that the Commission allow a pro forma adjustment to its rate base to  
11 account for plant additions occurring after December 31, 2000 is not only inconsistent with the test  
12 year BVWC chose, but it also offends widely accepted rate making principles. The known and  
13 measurable and matching concepts are recognized and accepted rate making principles. These  
14 widely accepted rate making principles allow pro forma adjustments to rate base only if those  
15 adjustments are known and measurable. Likewise, widely accepted rate making principles allow pro  
16 forma adjustments to rate base only if those adjustments do not violate the matching principle. The  
17 matching principle requires revenues, expenses, and rate base to be properly matched in time, so that  
18 the effect of a change in one is reflected in the other two. In this case, BVWC has failed to quantify  
19 the effects of post-test year plant on revenues and expenses and has failed to apply the matching  
20 principle.

21 **B. The impacts of the Company’s post-test year plant on revenues are not quantifiable and**  
22 **are therefore not known and measurable.**

23 A pro forma post-test year plant adjustment will violate the matching principle if the  
24 adjustment is not revenue neutral. The Company argues that the inclusion of post test-year plant in  
25 this case was not intended to increase revenues and should be allowed. (See Rebuttal Testimony of  
26 Judith A. Gignac at 9). However, intent is different from impact. The more removed the post-test  
27 year rate base additions are from the test year on which revenues and expenses are based, the more  
28 likely it becomes that the effect of the post-test year plant is not revenue neutral. Through Ms.

1 Gignac's own testimony, the majority of the post-test year plant was placed in service during the  
2 latter half of 2001. (See Rebuttal Testimony of Judith A. Gignac, Exhibit A; see also T.R. at 301  
3 [Testimony of Thomas Bourassa]). This is the heart of the problem for Staff.

4 As Staff witness Mr. Alexander Igwe testified on several occasions, the inclusion of post-test  
5 year plant poses a significant problem with the matching principle. Mr. Igwe testified that "it is  
6 incorrect to assume that because plant additions do not provide service to new customers, the impact  
7 is revenue neutral." (See Direct Testimony of Alexander Ibhade Igwe at 13). Furthermore, Mr. Igwe  
8 testified that "new plant may increase system efficiency and reliability resulting in lower expenses  
9 and increased revenues." *Id.* Mr. Igwe, during the hearing, further explained that pro forma  
10 adjustments are made when all the impacts are known and measurable and that this is the foundation  
11 of the matching principle. (T.R. at 424-25). In this case, the impacts of including post-test year plant  
12 on revenues and expenses are not known and measurable. (T.R. at 425-26). Mr. Igwe explained:

13 Even if we were to agree that the post test year [plant] was not installed to provide  
14 service to new customers, the impact on the existing customer is not known. I might  
15 have gone on system efficiency, which would have impacted system requirements.  
16 The company has agreed, especially Ms. Gignac has stated it might have had some  
17 impact on operating expenses. We don't know what those impacts are. That is the  
18 difficulty in this case.

19 (T.R. at 426).

20 Because allowing the post-test year plant in rate base would violate the matching principle  
21 and because the impacts on revenues and expenses are not known, the Commission should not allow  
22 post-test year plant additions beyond December 31, 2000 in rate base.

23 In addition, no extraordinary circumstances justify inclusion of new plant into rate base.  
24 Despite the curtailment issues that Ms. Gignac testified to, such issues are not considered  
25 extraordinary to justify inclusion of post-test year plant. (T.R. at 427). Even the Company's witness  
26 Mr. Ronald Kozoman, indicates no extraordinary events occurred during the test year. (See Exhibit  
27 S-13; T.R. at 426-27). Thus, the extraordinary circumstances justification does not exist in this case.

28 **C. The Arguments by the Company cannot justify inclusion of post-test year plant into rate base.**

BVWC puts forth several arguments as to why this Commission should reject Staff's

1 arguments. The Company accuses Staff of 'speculation' and presenting no evidence that post test  
2 year plant will add to revenues. (See Rebuttal Testimony of Judith A. Gignac at 13). However, it  
3 is the Company that is asking for the rate increase, not Staff. It falls on the Company to bear the  
4 burden of proof to justify the rate increase it is asking for, regardless of its magnitude. In any event,  
5 the Company never quantified the impacts on revenues or expenses, but merely relied on its intention  
6 to have this post-test year plant not increase revenues. Staff emphasized that the Company could not  
7 substantiate its claim because it is impossible to quantify the impacts this post-test year plant will  
8 have on revenues and expenses. (See Surrebuttal Testimony of Alexander Ibhade Igwe at 4). The  
9 Company has simply not met its burden to justify the inclusion of this post-test year plant.

10 Ms. Gignac attempts to justify the inclusion of post-test year plant by testifying as to the need  
11 for the plant. For instance, Ms. Gignac states that the post-test year plant was put into place to  
12 respond to a vulnerability to drought conditions. (See Rebuttal Testimony of Judith A. Gignac at 7).  
13 Specifically, she testifies that curtailment for the Rail Oaks portion of the system was less severe in  
14 2002 than in 2000 because of the post-test year plant additions. (T.R. at 51). But Ms. Gignac also  
15 had to admit that curtailment affects revenues and that putting in this post-test year plant can affect  
16 revenue (See T.R. at 43, 45). In addition, the post-test year plant, which leads to a more efficient and  
17 more reliable system could make the system more attractive to future growth and development (T.R.  
18 at 48). The presence of these factors, and the lack of quantifiable evidence that no impacts on  
19 revenues will occur, further justifies exclusion of post-test year plant in this case.

20 Mr. Thomas Bourassa also puts forth several arguments justifying the inclusion of post-test  
21 year plant. Mr. Bourassa argues that Staff perverts the matching principle by not allowing post-test  
22 year plant. (See Rebuttal Testimony of Thomas Bourassa at 16). However, Mr. Bourassa never  
23 quantified the impacts of including post-test year plant in rate base on revenues and expenses. (See  
24 Surrebuttal Testimony of Alexander Ibhade Igwe at 3). Mr. Bourassa could only assert that the post-  
25 test year plant was not intended for new growth and that there was little to no customer growth on  
26 the system. (T.R. at 250-51). Mr. Bourassa did not testify as to what impacts the new plant would  
27 have on water usage by present customers. Furthermore, Mr. Bourassa ignores the fact that a  
28 majority of the new plant was put in only during the latter half of 2001, making it impossible to

1 quantify what impacts it would have on present usage or new growth. Mr. Lyndon Hammon, Staff  
2 Engineer, testified that the system would be able to better accommodate growth with the new plant.  
3 (T.R. at 420).

4 The bottom line is while Mr. Bourassa relied on certain factors in making his assertion, he  
5 could never quantify the impacts of new plant on revenues. (T.R. at 251). The majority of the new  
6 plant was not in place until the latter half of 2001. There is no way to quantify the impacts on  
7 revenues. Similarly, the Company could not quantify all the impacts on operating expenses. (See  
8 Surrebuttal Testimony of Alexander Ibhade Igwe at 4). While the Company witnesses argue that  
9 operating costs will go up, they never attempt to quantify the impacts of new plant on expenses other  
10 than depreciation. Id. Because Mr. Bourassa could not quantify the impacts on the new plant on  
11 revenues and expenses, and because those impacts are not known and measurable, the inclusion of  
12 post-test year plant violates the matching principle.

13 Mr. Bourassa also tries to use the Commission Decisions of other rate cases as justification  
14 for inclusion of post-test year plant. (See Rebuttal Testimony of Thomas Bourassa at 21). However,  
15 those cases are factually distinguishable in their unique health and safety issues from this case. For  
16 instance the Far West Water & Sewer Rate Case involved a problem with total dissolved solids  
17 ("TDS") which warranted inclusion of post-test year plant. (See Commission Decision No. 62429  
18 at 3). In the Paradise Valley Water Company rate case, a problem existed with periods of low water  
19 pressure or no water. (See Commission Decision No. 60220 at 4). Neither problem was in existence  
20 in this case. (T.R. at 46). Many of these decisions were the result of settlements and do not have  
21 binding precedent on this case. (See Commission Decision Nos. 62649 [Far West Water & Sewer],  
22 64186 [Gold Canyon Sewer Company]). The prior BVWC rate decision was also the result of a  
23 settlement agreement. (See Exhibit S-7 [Commission Decision No. 61730]). Those cases are not  
24 applicable to the case here.

25 Mr. Bourassa attempts to use Arizona case law to justify his assertion that Staff's exclusion  
26 of post-test year plant violates Arizona law. (See Rebuttal Testimony of Thomas Bourassa at 11-14).  
27 The case law does not support his assertion. Contrary to Mr. Bourassa's interpretation, the  
28 Commission has the discretion to consider pro forma adjustments and it may include those

1 adjustments into rate base, but no requirement exists that it must put post-test year plant into rate  
2 base. The Arizona Courts have recognized the Commission's constitutional power to set rates and  
3 to prescribe just and reasonable classifications to be used in setting rates under the Arizona  
4 Constitution. See Consol. Water Util., Ltd. v. Arizona Corp. Comm'n, 178 Ariz. 478, 483-84, 875  
5 P.2d 137, 142-43 (App. 1994). While the Court can consider matters subsequent to the historical test  
6 year, the Commission is under no obligation to do so. See Litchfield Park Serv. Co. v. Arizona Corp.  
7 Comm'n, 178 Ariz. 431, 437-38, 874 P.2d 988, 994-95. In Litchfield Park, the Court upheld the  
8 Commission exclusion of a well from rate base because that well was not used and useful during the  
9 test year. Id. at 437, 874 P.2d at 994. The Court in Litchfield Park referred to the Commission  
10 decision, which reasoned that inclusion of the well would result in a violation of the matching  
11 principle. Id. The situation in Litchfield Park is very similar in this case. The new plant was not  
12 serving customers in the test year. The matching principle is violated if new plant is included. The  
13 Commission has ample justification to exclude BVWC post-test year plant and no case law requires  
14 otherwise.

15 Mr. Bourassa argues that the Commission must consider fair value at the time the rate is  
16 fixed. (See Rebuttal Testimony of Thomas Bourassa at 12; T.R. at 101). Mr. Bourassa equates the  
17 time the rate is fixed to the time of inquiry. Fair value is determined at the time of inquiry. See  
18 Simms v. Round Valley Light & Power Co., 80 Ariz. 145, 152, 294 P.2d 378, 382 (1956). But no  
19 case law exists that proscribes what the time of inquiry is. The problem here is that the Company has  
20 not proven its post-test year plant does not affect revenues or expenses, thereby not showing that it  
21 should be included. Staff has considered the addition, and for the litany of reasons outline above, had  
22 to disallow it.

23 The Arizona Supreme Court in Arizona Corp. Comm'n v. Arizona Water Co., which upheld  
24 the requirement of a fair value determination, sanctioned the use of a test period. 85 Ariz. 198, 200,  
25 335 P.2d 412, 413 (1959). So long as no abuse occurs, how the Commission determines fair value  
26 is within its discretion. Id. at 202, 335 P.2d at 414. Furthermore, while the Commission must  
27 determine fair value, the Commission is not limited to using a particular formula to determine the  
28 fair value. See Arizona Corp. Comm'n v. Arizona Pub. Serv. Co., 113 Ariz. 368, 370, 555 P.2d 326,

1 328 (1976); Arizona Water Co., 85 Ariz. at 202, 335 P.2d at 414. The use of the historical test year  
2 concept has been upheld. Arizona Pub. Serv. Co., 113 Ariz. at 370, 555 P.2d at 328. Therefore, the  
3 Commission has broad power to consider how to formulate fair value on rate base and is not under  
4 any obligation to include post-test year plant that the Company suggests. In fact, as explained above,  
5 Staff has given ample justification why such inclusion is not appropriate.

6 Finally, Mr. Bourassa cites Arizona Cmty. Action Ass'n v. Arizona Corp. Comm'n, 123  
7 Ariz. 228, 599 P.2d 184 (1979) to support his assertion that Staff's position is inconsistent with the  
8 Courts. All the Court did in that case was uphold the Commission decision based on the  
9 Commission's broad power to determine fair value. Id. at 230, 599 P.2d at 186. While, in that case,  
10 the Court may have upheld the Commission's decision to include construction work in progress  
11 ("CWIP"), the Court's have also upheld Commission's decisions *not* to include CWIP into rate base.  
12 See Consol. Water, 178 Ariz. at 482-83, 875 P.2d at 141-42; Litchfield Park, 178 Ariz. at 437, 874  
13 P.2d at 994. There is no mandate to include CWIP or any post-test year plant into rate base, contrary  
14 to Mr. Bourassa's interpretation. Since the Commission has never had any legal obligation to include  
15 post-test year plant into rate base, Mr. Bourassa's reliance is misplaced.

16 Adding post-test year plant to rate base, in this case, would violate the matching principle.  
17 The Commission is under no obligation to include post-test year plant into rate base. Given the fact  
18 that the Company cannot quantify the impacts on revenues and expenses, the impacts cannot be  
19 known and measurable. Despite the Company's intent that post-test year plant is not designed to  
20 affect revenues, the impacts on revenues are still unknown. It is the Company's burden to show  
21 those impacts. The Company has failed to meet this burden. For those reasons, this Commission  
22 should not include post-test year plant into rate base.

23 **II. THE COMMISSION SHOULD DISALLOW CASH WORKING CAPITAL INTO**  
24 **RATE BASE.**

25 The main question for the Commission on this issue is whether the Company has satisfied  
26 its burden to justify cash working capital ("CWC") solely based on its using the formula method, as  
27 opposed to using a lead-lag study. BVWC has argued for \$143,846 in working capital and advocated  
28 the use of the formula method in its case. (See Rebuttal Testimony of Thomas Bourassa at 32-35).

1 The Company argues that a lead-lag study advocated by Staff is not required and that it would cost  
2 too much. (See Rebuttal Testimony of Thomas Bourassa at 34; T.R. at 261). However, Mr. Bourassa  
3 could never state that the study would be impossible for the Company to perform.

4 Staff witness Alexander Igwe testified that a lead-lag study is the more accurate method of  
5 determining the required cash flow because "it measures the timing of actual transactions and cash  
6 flow." (See Direct Testimony of Alexander Ibhade Igwe at 20). As Mr. Igwe stated that a cash  
7 working capital requirement could be positive or negative. (See Surrebuttal Testimony of Alexander  
8 Ibhade Igwe at 9). Mr. Bourassa agreed with that assessment. (T.R. at 261). Because of that fact, a  
9 lead lag study would be cost effective. (See Surrebuttal Testimony of Alexander Ibhade Igwe at 9).

10 The Company counters by arguing that Staff has presented no evidence to show that the cash  
11 working capital would be zero or negative and that Staff has not done any lead-lag studies itself. (See  
12 Rebuttal Testimony of Thomas Bourassa at 35). The Company's argument misplaces the burden.

13 It is the Company's obligation to persuade this Commission of the need for a significant cash flow  
14 allowance of over \$140,000. Staff has presented this Commission with the justification it needs to  
15 reject the Company's argument. Because the Company has not presented evidence to show what the  
16 actual CWC is and because the Company's argument is entirely dependent on a method that always  
17 provides a positive outcome even when actual CWC is negative, the Company has failed to meet its  
18 burden. It is for that reason, that the Commission can and should reject the Company's argument.

19 **III. THE COMMISSION SHOULD DISALLOW \$37,490 OF THE \$42,077 THE**  
20 **COMPANY IS ASKING FOR IN PROFESSIONAL FEES.**

21 The Company is asking for \$42,077 in professional fees as a result of \$27,600 going toward  
22 an environmental review related to selling its operations and \$9,890 going toward a due diligence  
23 review of its system relating to potential acquisition of three water companies. The environmental  
24 review was not related to providing water service. (See Direct Testimony of Alexander Ibhade Igwe  
25 at 32). The due diligence review was not the result of its normal cost of doing business. (See Direct  
26 Testimony of Alexander Ibhade Igwe at 33). The benefits of these services are for the shareholders  
27 of BVWC, not for the ratepayers. (See Surrebuttal Testimony of Alexander Ibhade Igwe at 11-12).  
28 While the Company attempts to argue that the expenditures were valuable in identifying potential

1 problems, the fact remains that these services are not essential for normal and efficient operation and  
2 provide no direct benefit for the ratepayers. Had the Company not been seeking to sell operations  
3 or acquire other companies, the Company would have never had to engage in either study.  
4 Therefore, the Company did not pay to benefit ratepayers, but to benefit shareholders. Consequently,  
5 the Company should be denied \$37,490 in professional fees.

6 **IV. THE COMMISSION SHOULD ADOPT STAFF'S RECOMMENDED RATE OF**  
7 **RETURN USING STAFF'S RECOMMENDED CAPITAL STRUCTURE, COST OF**  
8 **DEBT, AND COST OF EQUITY.**

9 Staff is recommending an regulatory rate of return ("ROR") of 8.1 percent based on a cost  
10 of equity of 9.1 percent and a cost of debt of 5.94 percent, using the Company's current capital  
11 structure. The regulatory ROR is based on the widely held principles of maintaining financial  
12 integrity, attracting capital and equating earnings with firms of comparable risk. To determine ROR,  
13 an analysis of cost of capital must be performed. Cost of capital analysis is done by determining a  
14 Company's current capital structure, the contemporary cost of debt, and the expected return on equity  
15 ("ROE"). ROE is determined by analyzing cost of equity based on financial models to measure  
16 investor expectations. These criteria are all forward-looking (See Surrebuttal Testimony of Joel M.  
17 Reiker at 5).

18 BVWC is only entitled to a fair rate of return on the fair value of its property, no more and  
19 no less. See Litchfield Park, 178 Ariz. at 434, 874 P.2d at 991. The goal is to determine what is the  
20 appropriate rate of return. The Court's have upheld as reasonable the Commission's determination  
21 of ROR using a utility's capital structure, i.e. the amount of equity and debt, and the Commission  
22 has discretion to determine the appropriate capital structure. Id. at 435, 874 P.2d at 992. The  
23 Commission has recently supported Staff's cost of capital analysis and rejected the Company's  
24 mismatch argument in the recent Black Mountain Gas Company rate case. See Commission Decision  
25 No. 64727 at 14. The matching principle does not apply to cost of capital analysis because cost of  
26 capital is a financial analysis looking at investor's present and future expectations and is not an  
27 accounting analysis of looking at the inclusion of post-test year plant and whether the impact on  
28 revenues and expenses is known and measurable. Therefore, Staff's cost of capital analysis is  
reasonable and supported by the evidence as the most accurate and comprehensive determination of

1 cost of equity, cost of debt, cost of capital and ROR.

2 **A. Staff's cost of capital analysis is based on sound financial principles and should be**  
3 **adopted by this Commission.**

4 Staff's cost of capital analysis and determination of ROR is just and reasonable because it  
5 is based on sound financial principles. Mr. Reiker's analysis relies on mainstream corporate finance  
6 theory and principles. Staff's recommended capital structure is the accurate snapshot of BVWC's  
7 capital structure as it exists today and is expected to be on a going-forward basis. Staff's ROE  
8 analysis incorporates actual market returns and uses a variety of formulas accepted in the financial  
9 community into its ROE analysis. (See Surrebuttal Testimony of Joel M. Reiker at 1). These  
10 formulas are not just financial theories but are market-based models widely accepted in the financial  
11 community to estimate cost of equity. (See Direct Testimony of Joel M. Reiker at 8).

12 Cost of capital analysis is central to determining the fair rate of return. Cost of capital is a  
13 forward-looking financial analysis and as such should not be confused with the accounting concept  
14 of the matching principle. Cost of capital is dependent upon capital structure, cost of debt and return  
15 on equity ("ROE"). ROE is based on cost of equity analysis. Staff witness Joel Reiker used financial  
16 models that accurately reflect market conditions to determine cost of equity. Mr. Reiker's  
17 recommended capital structure most accurately reflects the Company's combination of debt and  
18 equity as it exists today. For these reasons, the Commission should adopt Staff's cost of capital  
19 recommendation.

20 **1. Mr. Reiker's Capital Structure is the most accurate snapshot of the Company on a**  
21 **forward-looking basis.**

22 As a result of Staff witness Joel Reiker's analysis of the Company, Staff recommends the  
23 following capital structure:

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Table 1

Capital Source	Percentage
Long-term Debt	31.9%
Common Equity	<u>68.1%</u>
	100.00%

(See Direct Testimony of Joel M. Reiker at 3).

Mr. Reiker's recommended capital structure is appropriate because it represents the most recent information available concerning Bella Vista's capital structure. Because cost of capital is a forward-looking analysis, and because financial decisions are based on the present and future, Mr. Reiker's recommended capital structure is appropriately forward-looking (See Surrebuttal Testimony of Joel M. Reiker at 4-5). The Commission must include the Water Infrastructure Finance Authority ("WIFA") loan into BVWC's capital structure in order to reflect the Company's actual capital structure on a forward-looking basis (See Direct Testimony of Joel M. Reiker at 3). Since the criteria to determining a fair rate of return is forward-looking, it defies logic to not use the contemporary capital structure when determining the rate of return for BVWC.

**2. Mr. Reiker's Cost of Debt is appropriate.**

Mr. Reiker recommends a 5.94 percent cost of debt. Mr. Reiker calculated his recommended cost of debt by adjusting test year interest expense to reflect the stated interest rate on each of the Company's eight loans, and dividing that amount (adjusted for interest income) by the principal amount of debt outstanding (See Direct Testimony of Joel M. Reiker at 4). Mr. Reiker's recommended cost of debt is the appropriate cost of debt because it is the best estimate of what the relevant embedded cost of debt will be going forward.

**3. Mr. Reiker's Cost of Equity is reasonable and should be adopted.**

Staff witness Joel Reiker used two finance models to estimate the Company's cost of equity. The first model is the Discounted Cash Flow ("DCF") model that estimates cost of equity based on the present value of future dividends and the current stock price (See Direct Testimony of Joel M. Reiker at 9). In his analysis, Mr. Reiker used both the constant-growth DCF analysis, as well as the

1 multi-stage or non-constant growth DCF analysis. The second model is the Capital Asset Pricing  
2 Model ("CAPM") that calculates cost of capital by adding the risk-free interest rate to the market risk  
3 premium adjusted for the level of risk of the investment relative to the market. (See Direct  
4 Testimony of Joel M. Reiker at 19). Staff's determination of ROE, using the above methodologies,  
5 results in the most complete, accurate, and comprehensive analysis in this case.

6 Mr. Reiker recommends a ROE of 9.1 percent based on the results of his DCF and CAPM  
7 analyses. Mr. Reiker conducted his analyses using eight publicly traded water companies ("Sample  
8 Companies") followed by *The Value Line Investment Survey* ("Value Line"). For his constant-  
9 growth DCF analysis Mr. Reiker examined six indicators of expected infinite annual dividend  
10 growth: 5-year historical earnings per share ("EPS") growth, projected EPS growth, 5-year historical  
11 dividend ("DPS") growth, projected DPS growth, 5-year intrinsic growth, and projected intrinsic  
12 growth. (See Direct Testimony of Joel M. Reiker at 9-17). Mr. Reiker's constant-growth DCF  
13 estimate using an average of these six growth indicators was 9.1 percent (See Direct Testimony of  
14 Joel M. Reiker at 17). Mr. Reiker also conducted a multi-stage, or non-constant growth DCF  
15 estimate, which incorporated Value Line's projected dividends for the next five years, and the  
16 historical rate of growth in gross domestic product ("GDP"). (See Direct Testimony of Joel M.  
17 Reiker at 17-18). Mr. Reiker's multi-stage DCF estimate was 9.25 percent (See Direct Testimony  
18 of Joel M. Reiker at 18). Finally, Mr. Reiker also calculated CAPM cost of equity estimates using  
19 his sample companies. (See Direct Testimony of Joel M. Reiker at 19-22). Mr. Reiker's CAPM cost  
20 of equity estimates ranged from 9.4 percent to 9.5 percent (See Direct Testimony of Joel M. Reiker  
21 at 22).

22 The following table presents Mr. Reiker's DCF and CAPM cost of equity estimates:  
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**Table 2**

<b>Method</b>	<b>Estimate</b>
Constant Growth DCF	9.1%
Multi-Stage DCF	9.3%
Historical MRP CAPM	9.4%
Current MRP CAPM	9.5%
<b>Average</b>	<b>9.3%</b>

(See Direct Testimony of Joel M. Reiker at 23).

As a result his analysis, Mr. Reiker's "reasonable" range of cost of equity estimates for the sample companies is 9.1 percent to 9.5 percent.

Mr. Reiker then performed a mathematical adjustment straight from accepted standard corporate finance theory to estimate the effect that BVWC's capital structure has on its cost of equity. Capital structure affects cost of equity because a greater percentage of debt in the capital structure results in a greater level of financial risk (See Direct Testimony of Joel M. Reiker at 7).

Therefore, a lower level of debt relative to the sample companies results in a lower cost of equity. BVWC's capital structure contains a significantly lower ratio of debt than the sample companies, which lowers BVWC's cost of equity. Therefore, BVWC's financial risk and cost of equity are lower than that of the sample companies. Mr. Reiker calculated the effect of BVWC's capital structure on its cost of equity and concluded that BVWC's adjusted cost of equity is somewhere in the range of 8.4 percent (See Direct Testimony of Joel M. Reiker at 25-27). Therefore, Mr. Reiker recommended a ROE at the lower end of his reasonable range of estimates: 9.1 percent.

#### 4. Mr. Reiker's Rate of Return

Based on Mr. Reiker's cost of capital analysis, Staff recommends an overall ROR of 8.1 percent based on his cost of capital analysis, which is presented in the following table:

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**Table 3**

	<b>Weight</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-term Debt	31.9%	5.94%	1.9%
Common Equity	68.1%	9.1%	<u>6.2%</u>
<b>Cost of Capital/ROR</b>			<b>8.1%</b>

(See Direct Testimony of Joel M. Reiker at 27).

**B. The Company's Requested ROR Should be Rejected**

The Company's recommended ROR is based upon faulty assumptions that lead to an inaccurate picture of the actual conditions that exist with BWVC. Despite its assertions to the contrary, no mismatch exists between capital structure in cost of capital and rate based because cost of capital analysis is designed to measure present and future expectations. While the Company argues for inclusion of unique risks into cost of equity, such would fly in the face of established precepts on cost of equity. Mr. Kozoman's reliance on accounting returns gives a misleading picture as to the actual market returns and investor expectations. Finally, no evidence exists that the Company's financial integrity would be compromised if Staff's recommendations were adopted.

**1. The Company's Position on Capital Structure is Incorrect**

The Company argues that Staff's inclusion of a \$2.1 million WIFA loan results in a mismatch because the associated plant has been excluded from rate base. (See Rebuttal Testimony of Ronald L. Kozoman at 11). The Company contends that either the WIFA loan should be removed from the capital structure, or the plant should be included in rate base. (T.R. at 326-27). However, capital structure is a forward-looking financial analysis, because investors make financial decisions based on present and future conditions. (See Surrebuttal Testimony of Joel M. Reiker at 4). If a company's test year capital structure is significantly different than its actual going-forward capital structure, then it should not be used to calculate the company's cost of capital on a going forward basis regardless of the rate base determination. *Id.* The cost of equity should be estimated on a going-forward basis, the cost of debt should be the reliable and relevant cost of debt on a going-forward basis, and the

1 capital structure must follow the two, i.e. on a going-forward basis regardless of rate base exclusions  
2 (See Surrebuttal Testimony of Joel M. Reiker at 4-5). Company witness Ron Kozoman  
3 acknowledged that the appropriate capital structure to use is the capital structure as it now stands or  
4 as it will stand in the not too distant future (T.R. at 326, 329). Despite Mr. Kozoman's contention  
5 that Staff's analysis results in a mismatch, no evidence was presented to support his assertion that  
6 cost of capital must be matched with rate base. The concept of matching rate base with revenues and  
7 expenses, an accounting principle, is different from cost of capital analysis, which is a forward-  
8 looking financial analysis. Because of this fundamental difference, no mismatch exists in Staff's  
9 analysis and the Company's assertion should be rebuffed.

10 **2. The Company's cost of equity should not be increased because of any unique risks**  
11 **facing it.**

12 The Company argues that it has an increased cost of equity due to several unsystematic risks  
13 that it faces. Unsystematic or "unique" risks are those risks particular to an individual company or  
14 investment project. The Company argues that because of these unique risks the Commission should  
15 add "basis points" to the Company's cost of equity on top of the DCF and CAPM results. The  
16 Commission should not adopt these arguments, because Staff's DCF and CAPM analyses do involve  
17 real-world analysis and because unsystematic risk is not part of market risk and is something that can  
18 be easily avoided. Finally, much of what the Company perceives as risks unique to it are really risks  
19 that all water companies face and have already been reflected in the DCF and CAPM analyses by  
20 Staff. To adopt the Company's position would be to accept a position replete with several  
21 misconceptions over the subject of finance.

22 Ms. Gignac argues that reliance on "financial theories" such as the DCF and CAPM models  
23 do not reflect the realities of doing business in Arizona as a private water company. (See Rebuttal  
24 Testimony of Judith A. Gignac at 17). But Ms. Gignac acknowledges that Staff's analysis involved  
25 the use of actual market figures. (T.R. at 53). In addition, Mr. Reiker testified extensively as to how  
26 he incorporated actual market analyses from Value Line when determining ROE, using stock prices  
27 and other market data. (See Direct Testimony of Joel M. Reiker at 9-22). The bottom line is that by  
28 incorporating market figures into the analysis, Staff has accurately reflected in its analysis the kinds

1 of risks that companies in the water service industry are currently facing in the real world, as defined  
2 by the capital markets.

3 The Company also tries to rebut Staff's analysis by arguing that the Company should be  
4 given a high cost of equity due to increased unsystematic risks the Company is facing. As Mr. Reiker  
5 testified to in this case, unsystematic risk is eliminated through portfolio diversification, and  
6 investors who choose to be less than fully diversified will not be compensated by the market for this  
7 type of risk (See Direct Testimony of Joel M. Reiker at 6). This idea also ties into the concept of  
8 Modern Portfolio Theory ("MPT"), which is the concept that investors are not rewarded for  
9 unsystematic risks because they diversify them away by holding portfolios. (See Direct Testimony  
10 of Joel M. Reiker at 40). MPT is a concept widely accepted that earned its developers the Nobel  
11 Prize in Economic Sciences in 1990. *Id.* Based on the established credibility of MPT, it is wholly  
12 reasonable for the Commission to reject the idea of incorporating unique risk, despite the Company's  
13 pleas to the contrary. The Company has presented no evidence to rebut the use of MPT and its  
14 argument should be rebuffed.

15 The Company argues, through the testimonies of Ms. Gignac and Mr. Kozoman, that the  
16 Company has a higher cost of equity due to its size and the special circumstances facing the  
17 Company. (See Rejoinder Testimony of Judith A. Gignac at 7-8; see also Rejoinder Testimony of  
18 Ronald L. Kozoman at 26-27). This is the same argument as the unique risk argument and the  
19 Company's ignorance of MPT is evident in its continued assertion that the ROE should reward  
20 BVWC's shareholders for these unsystematic risks. As Mr. Reiker testified to, unsystematic risk is  
21 not part of market risk because it is risk that can be avoided. (See Direct Testimony of Joel M.  
22 Reiker at 6). Financial risk and business risk are part of market risk because they are risks that are  
23 unavoidable. (See Direct Testimony of Joel M. Reiker at 7). Business risk has to do with risks  
24 inherent in a particular industry while financial risk relates to the dependence on debt financing. *Id.*  
25 Even if the shareholders of Bella Vista *were* less than diversified, they would not be rewarded for  
26 unsystematic risk (See Surrebuttal Testimony of Joel M. Reiker at 7).

27 The Company argues that its small size leads to additional risk. However, the Company's  
28 argument consciously ignores evidence provided by Staff and previously recognized by the

1 Commission, which indicates that due to the regulated financial structure of utilities and the  
2 exclusive right to provide service to a particular area, the “firm size phenomenon” does not exist in  
3 this industry (See Direct Testimony of Joel M. Reiker at 42-43). Firm size has no relevance to cost  
4 of equity analysis and should not be accepted.

5 Finally, the Company ignores the fact that many of the risks it cites as unique are common  
6 throughout the water industry. All water companies are dependent upon certain consumers and  
7 certain industries. While Fort Huachuca may be of particular concern to BVWC, other water  
8 companies are equally dependent on large industrial users and the local economy in their service  
9 area. All water companies, whether in the desert, or in other parts of the nation with significantly  
10 more rainfall, face the mounting concern of drought and have to deal with environmental issues and  
11 conservation. Therefore, it can be argued that the vast majority, if not all, the risks cited by Mr.  
12 Kozoman and Ms. Gignac as unique are actually business risks or risks inherent in the business.  
13 Therefore, Staff’s use of market figures in determining the DCF and CAPM models already take into  
14 account many of the risks facing BVWC. For all of the above reasons, the Commission should reject  
15 the incorporation of unique risk into the cost of equity tabulation.

16 **3. The Company’s Reliance on Accounting Returns to Infer Market Returns is Incorrect.**

17 In arriving at his ROE recommendation, Mr. Kozoman also used the DCF and CAPM  
18 analyses. The results of his DCF and CAPM analyses averaged 7.51 percent. Then, in order to  
19 “match what the nationally traded companies were earning”, he first added over 400 basis points to  
20 his DCF and CAPM estimates to arrive at his ROE recommendation of 12.00 percent, for an ROR  
21 of 10.75 percent. (See Direct Testimony of Ronald L. Kozoman at 3; T.R. at 333-34). The  
22 “nationally traded” water companies followed by Value Line have not earned equity returns of 12.00  
23 percent in years. Mr. Kozoman later adjusted his ROE recommendation down to 10.50 percent for  
24 an ROR of 9.50 percent (See Rejoinder Testimony of Ronald L. Kozoman at 5).

25 In truth, the “nationally traded” water companies followed by Value Line earned an average  
26 9.9 percent *accounting* return on equity in 2000, and were projected to record earnings of 10.0  
27 percent on book equity in 2001 (See Direct Testimony of Ronald L. Kozoman, Schedule D-4.3). But  
28 what is troubling about Mr. Kozoman’s maneuver is that he is referring to book, or *accounting*

1 returns, not *market* returns. The book, or accounting return, is simply what these companies'  
2 accounting firms reported as earnings as a percentage of book equity (See Direct Testimony of Joel  
3 M. Reiker at 38). The market return (using the DCF and CAPM models) is the far more accurate  
4 gauge of investor expectations because the shareholder is not directly interested in the ratio of book  
5 earnings to book equity. Rather, the investor is interested in anticipated dividends and capital gains  
6 relative to the price the investor has to pay (See Surrebuttal Testimony of Joel M. Reiker at 9). At  
7 the hearing Mr. Kozoman was presented with the May 3, 2002, edition of Value Line, which  
8 reported its projected average annual *market* return (price appreciation plus dividend income) for  
9 2005-2007 for American States Water, American Water Works, California Water Company, and  
10 Philadelphia Suburban, the four sample water companies used by Staff to determine cost of equity.

11 Those projections, as read into the record by Mr. Kozoman, were as follows:

12 **Table 4**

	<b>High</b>	<b>Low</b>	<b>Average</b>
American States Water	8.0%	-1.0%	3.5%
American Water Works	3.0%	Nil	1.5%
California Water Co.	11.0%	4.0%	7.5%
Philadelphia Suburban	12.0%	3.0%	7.5%
<b>Average</b>			<b>5.0%</b>

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20 (See T.R. at 340-44; see also Exhibit S-10).

21 As shown in the above table, Value Line is projecting a 5.0% average annual *market* return  
22 three to five years out. To rely on accounting returns would be especially troubling in light of the  
23 recent publicity in the financial community surrounding the accounting practices and reported  
24 earnings of publicly traded companies (See Surrebuttal Testimony of Joel M. Reiker at 9).  
25 Therefore, the Commission should rely on market-based models and not on accounting returns, to  
26 determine the appropriate cost of equity in this case.

27 **4. The Company's Testimony on Financial Integrity is Incorrect.**

28 In his direct testimony Mr. Reiker calculated a pre-tax interest coverage ratio of 6.4 based

1 on his recommended ROR (See Direct Testimony of Joel M. Reiker at Schedule JMR-9). In his  
2 surrebuttal testimony Mr. Reiker again tested the financial integrity of his ROR recommendation by  
3 calculating a times interest earned ratio ("TIER") and debt service coverage ("DSC") ratio based on  
4 Staff's overall recommended rates. This analysis resulted in a TIER and DSC of 6.31 and 3.46,  
5 respectively. (See Surrebuttal Testimony of Joel M. Reiker at 11). Despite Mr. Kozoman's assertion  
6 to the contrary, Staff did appropriately determine DSC and TIER. Staff's analysis is in accordance  
7 with past Commission practice. (T.R. at 347-48; Exhibit S-8 [Commission Decision No. 62450]).  
8 Mr. Kozoman did not even rely upon WIFA's policy manual when determining DSC (T.R. at 350).  
9 During cross-examination by Staff and the Administrative Law Judge ("ALJ") during the hearing,  
10 Mr. Kozoman claimed that staff did not use the proper amount of interest related to the \$2.1 million  
11 WIFA loan (T.R. at 349, 356). In truth, Mr. Reiker used Staff's synchronized interest amount, and  
12 the actual amount of principal repaid during the test year (See Surrebuttal Testimony of Joel M.  
13 Reiker at 11, Schedule JMR-S1). Mr. Kozoman failed to calculate DSC based on his determination  
14 of what he thought was the correct interest amount, without explanation. (T.R. at 356). With a  
15 calculated TIER and DSC of 6.31 and 3.46, respectively, Mr. Kozoman could have *quadrupled* the  
16 amount of interest expense included in Mr. Reiker's calculation and still have arrived at a TIER  
17 above 1.5. At the same time Mr. Kozoman could have *doubled* the amount of principal included in  
18 Mr. Reiker's calculation and still have arrived at a DSC ratio above 1.20. Even using all of Mr.  
19 Kozoman's theories, the DSC calculation came out to 2.12, well above the 1.2 requirement for a  
20 WIFA loan. (See Rebuttal Testimony of Ronald L. Kozoman at 34; T.R. at 349-50). With the  
21 Company's present rates, they would still be able to service the debt (See Exhibit RUCO-6 at 2; T.R.  
22 at 51-52, 344-45). Financial integrity has not been an issue with the Company and will not be with  
23 Staff's recommended rates.

24 **5. Mr. Kozoman's testimony is incorrect with regard to Staff's analysis.**

25 Mr. Kozoman makes several inaccurate comments regarding Staff's analysis. Mr. Kozoman  
26 accuses Staff of trying to drive the market-to-book ratio for utility stocks down to one (See Rebuttal  
27 Testimony of Ronald L. Kozoman at 10). Mr. Kozoman's assertion is without any shred of merit.  
28 Mr. Reiker's explained that when a regulator awards a utility a return on its assets equal to its cost

1 of capital, the market will price that utility's stock at book value. (See Direct Testimony of Joel M.  
2 Reiker at 15). But Mr. Reiker also takes into account the fact that there are several reasons for the  
3 market to expect a company to earn returns higher than its cost of capital, thus driving the market  
4 price of its stock above book value. Id. Mr. Reiker accounted for the fact that the average market-to-  
5 book ratio of the sample companies is above 1.0 by including the *vs* component. (See Direct  
6 Testimony of Joel M. Reiker at 13-16). In fact, to the extent that investors expect the market-to-  
7 book ratio of the sample companies to equal one as opposed to greater than one in the future, Mr.  
8 Reiker's dividend growth estimate is generous to BVWC (See Direct Testimony of Joel M. Reiker  
9 at 15). Mr. Kozoman's assertion on this point has no substance.

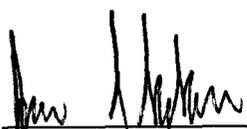
10 Mr. Kozoman's reliance on Simms is also misplaced. Simms states that the Commission  
11 must find fair value to determine just and reasonable rates. 80 Ariz. at 151, 294 P.2d at 382. The  
12 Simms case is referring to finding the fair value of a company's property, i.e. finding the rate base  
13 of the Company. However, no case law precludes the Commission from using cost of equity analysis  
14 to determine an appropriate return on that rate base. As discussed above, Staff's analysis  
15 incorporates market expectations and the appropriate measures of risk to determine what is the  
16 appropriate return on the rate base. Staff's analysis uses comprehensive financial models accepted  
17 in the financial community as appropriate for determining cost of equity to determine ROE and  
18 ROR. For all of the above reasons, the Commission can and should adopt Staff's ROR  
19 recommendation as reasonable and appropriate for BVWC.

## 20 V. CONCLUSION

21 The main concern for Staff in this case is not the legality of any of the rates proposed by any  
22 of the parties in this case. However, the fact that all the proposed rates might be legal does not mean  
23 that the Company's rates do not violate fundamental principles of accounting and finance. As shown  
24 throughout the hearings, the Company's advocacy of inclusion of post-test year plant into rate base  
25 violates the fundamental accounting principle of matching pro forma adjustments to rate base with  
26 revenues and expenses. As shown, the impacts of inclusion of post-test year plant in this case are  
27 not known and measurable, despite the Company's intentions. The Company's cost of capital  
28 analysis violates several precepts of corporate finance theory to produce an artificially inflated

1 recommendation. Staff's analysis adheres to the proper principles to rightly exclude post-test year  
2 plant and to accurately determine a fair ROR for the Company. Staff's analysis shows that the  
3 customers of BVWC need not pay a penny more for their service and should pay less for service  
4 without detriment to the Company's financial integrity. Staff's recommendations are reasonable,  
5 legal and accurately determined. For all of the above reasons, the Commission should adopt Staff's  
6 recommendations.

7           RESPECTFULLY SUBMITTED this 9<sup>th</sup> day of September, 2002.

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