
Transcript

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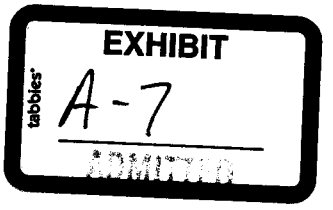


**BEFORE THE ARIZONA CORPORATION COMMISSION**

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GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner

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| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO: W-01651B-12-0339 |

# DIRECT TESTIMONY OF

# THOMAS J. BOURASSA

## (RATE BASE, INCOME STATEMENT AND RATE DESIGN)

**March 25, 2013**

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## I. INTRODUCTION AND QUALIFICATIONS

**Q. PLEASE STATE YOUR NAME AND ADDRESS.**

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

A. I am testifying in this proceeding on behalf of the applicant, Vail Water Company, Inc. ("VWC" or the "Company").

**Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE INSTANT CASE?**

A. Yes, my direct testimony was submitted in support of the initial application in this docket. There were two volumes, one addressing rate base, income statement and rate design, and the other addressing cost of capital.

**Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

A. I will provide rebuttal testimony in response to the direct filings by Staff. More specifically, this first volume of my rebuttal testimony relates to rate base, income statement and rate design for VWC. In a second, separate volume of my rebuttal testimony, I will present an update to the Company's requested cost of capital as well as provide responses to Staff on the cost of capital and rate of return applied to the fair value rate base, and the determination of operating income.

## I. SUMMARY OF VWC'S REBUTTAL POSITION

**Q. WHAT IS THE REVENUE THE COMPANY IS PROPOSING IN THIS REBUTTAL TESTIMONY?**

A. The Company proposes a total revenue requirement of $2,256,141, which constitutes a decrease in revenues of $78,606, or -3.37% over adjusted test year revenues.

**Q. HOW DO THESE COMPARE WITH THE COMPANY'S DIRECT FILING?**

A. In the direct filing, the Company requested a total revenue requirement of $2,378,860, which required an increase in revenues of $44,114, or 1.89%.

**Q. WHAT ACCOUNTS FOF THE DIFFERENCE?**

A. In its rebuttal filing, VWC has adopted a number of rate base and revenue/expense adjustments recommended by Staff, as well as proposed a number of adjustments of its own based on known and measurable changes to the test year.

The net result of these adjustments is: (1) the Company's proposed operating expenses have decreased by $83,011, from $2,022,639 in the direct filing to $1,939,628; and (2) a net increase of $2,378 in rate base from the direct filing of $3,312,773 to $3,315,151.

In addition, the Company has reduced its recommended cost of equity from 10.4% in its direct filing to 10.1% in its rebuttal filing. The Company is recommending a 10.1% rate of return on FVRB based on the Company weighted average cost of capital which reflects the Company's capital structure of 0 percent debt and 100 percent equity. I discuss the Company proposed return on equity, cost of debt, and capital structure in my cost of capital testimony.

**Q. WHAT ARE THE PROPOSED REVENUE REQUIREMENTS AND RATE INCREASES FOR THE COMPANY AND STAFF AT THIS STAGE OF THE PROCEEDING?**

A. The proposed revenue requirements and proposed rate increases are as follows:

| | Revenue Requirement | Revenue Incr. | % Increase |
|---|---|---|---|
| Company-Direct | $2,378,860 | $ 44,114 | 1.89% |
| Staff | $3,199,993 | $ 345,155 | 12.09% |
| Company-Rebuttal | $2,256,141 | $ (78,606) | -3.37% |

## II. RATE BASE

### A. Rate Base (B Schedules).

**Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE BASE RECOMMENDATIONS?**

A. Yes, the rate bases proposed by the Company and Staff are as follows:

| | OCRB | FVRB |
|---|---|---|
| Company-Direct | $ 3,312,773 | $ 3,312,773 |
| Staff | $ 2,218,704 | $ 2,218,704 |
| Company Rebuttal | $ 3,315,151 | $ 3,315,151 |

**Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED ORIGINAL COST RATE BASE?**

A. Yes. The Company's rebuttal rate base adjustments to OCRB are detailed on rebuttal schedules B-2, pages 3 through 6. Rebuttal Schedule B-2, page 1 and 2, summarize the Company's proposed adjustments and the rebuttal OCRB.

#### 1. Plant-in-service (PIS).

**Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO PLANT-IN-SERVICE , AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF?**

A. Rebuttal B-2 Adjustment 1, as summarized on Rebuttal Schedule B-2, page 2, consists of three adjustments labeled as "A", "B", and "C" on Rebuttal Schedule B-2, page 3.

Adjustment A reflects a reclassification of retired PIS recorded in 2008. The reclassification of retired plant has a net PIS adjustment of zero as shown on

Rebuttal Schedule B-2, page 3.1. This adjustment reflects the adoption of Staff's recommendation.[1]

Adjustment B reflects retirements the Company should have retired but did not. The retirements total $92,956 as shown on Rebuttal Schedule B-2, page 3.2. Staff also proposes retirements but proposes retirements totaling $281,388.[2] The Company disagrees with the Staff proposed retirements because it includes retirements that were already recorded. The details of the Company's retirement proposal are shown on B-2, page 3.2.1.

Adjustment F reflects the reconciliation of the PIS to the reconstruction of PIS shown on Rebuttal Schedule B-2, pages 3.4 through 3.16. As shown, there are no differences between the reconstructed balance and the adjusted balances shown on Rebuttal Schedule B-2, page 3.3; which means I have accounted for all of the Company's proposed PIS adjustments in the plant reconstruction.

2. **Accumulated Depreciation (A/D).**

**Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED ADJUSTMENTS TO ACCUMULATED DEPRECIATION, AND IDENTIFY ANY ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF?**

A. Rebuttal B-2 Adjustment 2, as summarized on Rebuttal Schedule B-2, page 2, consists of three adjustments labeled as "A", "B", and "C" on Rebuttal Schedule B-2, page 4.

Adjustment A reflects the removal of A/D related to the reclassification of retired plant in rebuttal adjustment 1-A discussed above. The Company proposes a

[1] *See* Direct Testimony of Jeffrey M Michlik ("Michlik Direct") at 7.
[2] *Id.*

decrease in A/D of $4,514. Staff proposes a downward adjustment to A/D of $10,136 related to the reclassification of retired plant.[3]

**Q. WHY IS THERE A DIFFERENCE BETWEEN THE COMPANY'S AND STAFF'S ADJUSTMENT TO A/D?**

A. It is not clear to me how Staff computed its A/D adjustment. Neither the Staff schedules nor Staff's work papers show the computation of the $10,136. The Company's adjustment reflects the change in A/D using the depreciation rates in effect for the 2008 and the intervening years through the end of the test year. The computation of the change in A/D is shown on Rebuttal Schedule B-2, page 4.1.

**Q. THANK YOU. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE COMPANY PROPOSED PIS ADJUSTMENTS?**

A. Adjustment B reflects the removal of $92,956 of A/D for the retirement of PIS discussed in adjustment 1-B discussed previously. As noted in relation to adjustment 1-B, the Company also disagrees with the amount of Staff's adjustment to A/D.[4]

Adjustment C reflects the adjustment required to reconcile the direct adjusted A/D balance to the reconstructed A/D balance. The Company proposes an additional downward adjustment to A/D totaling $23,075.

**Q. WHY IS THERE A DIFFERENCE BETWEEN THE ADJUSTED A/D BALANCE AND THE RECONSTRUCTED A/D BALANCE?**

A. The difference of $23,075 takes into account the proposed plant retirements from PIS adjustment 1-B, the year taken out of service (or retired), and the impact on depreciation expense in the intervening years since the last test year through the

[3] *Id.*

[4] *Id.* Please note: Staff's testimony appears to have a typo. The testimony shows an A/D adjustment of $288,388 but Staff Schedule JMM-5 shows an A/D adjustment of $281,388.

end of the test year in the instant case.[5] The Company's proposed A/D adjustment corrects an overstatement in the A/D balance due to the failure to record retirements in the past.

**Q. HAS STAFF PROPOSED A SIMILAR ADJUSTMENT?**

A. No.

**Q. WHY NOT?**

A. I do not know.

**Q. IS THE COMPANY'S APPROACH TO THE RECONSTUCTION OF A/D FOR RETIREMENTS WHICH WERE NOT RECORDED IN PRIOR YEARS CONSISTENT WITH OTHER RATE CASES?**

A. Yes. The most notable examples are the recent *Bella Vista Water Company* rate case[6] and the recent *Pima Utility Company* rate case.[7] While these two cases are similar with respect to retirements that were not recorded, in my experience almost every rate case reflects adjustments to the recorded book PIS and A/D based on a reconstruction PIS and A/D. The causes vary from using incorrect depreciations rates, failure to record prior rate case adjustments, failure to record retirements, plant reclassifications, etc.

3. **Contributions-in-aid of Construction (CIAC).**

**Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO CONTRIBUTIONS-IN-AID OF CONSTRUCTION?**

A. In Rebuttal B-2 Adjustment 3, as shown on Schedule B-2, page 2, the Company reduces accumulated amortization of CIAC by $2,076. This adjustment recognizes

[5] Staff Exhibit, MSJ, Table E-2 reflects the year of retirement, the amount for each year, and the plant account affected.

[6] *Bella Vista Water Company*, Docket No. W-02465A-09-0411, *et al.*

[7] *Pima Utility Company*, Docket No. W-02199A-11-0329, *et al.*

the changes to the annually computed composite amortization rates in the intervening years since the last test year resulting from the Company's proposed plant retirements.

**Q. DID STAFF PROPOSE A DECREASE TO ACCUMULATED AMORTIZATION BALANCE?**

A. No.

4. **Deferred CAP Charges.**

**Q. PLEASE DISCUSS THE COMPANY'S ADJUSTMENT TO DEFERRED CAP CHARGES?**

A. In Rebuttal B-2 Adjustment 4, as shown on Schedule B-2, page 2, the Company reduces Deferred CAP Charges by $23,173. This adjustment is similar to Staff's proposed adjustment to Deferred CAP charges.[8] I should note, the Staff recommended balance and adjustment contained an error. After informal discussions with Staff it was agreed the adjustment should be $23,173.

5. **Remaining Issues in Dispute.**

a. **Deferred CAP Liability.**

**Q. PLEASE DISCUSS THE STAFF RECOMMENDATION FOR DEFERRED CAP LIABILITYTO BE USED AS AN OFFSET TO THE DEFERRED CAP SURCHARGE ASSET IN RATE BASE?**

A. Staff proposes a deferred CAP liability totaling $1,075,643.[9] However, after a review of the Staff recommended balance an error was discovered. The corrected

[8]Michlik Direct. at 11.

[9]*Id.* at 11. Please note: Staff's testimony appears to have a typo. The testimony shows a Deferred CAP Liability adjustment $1,076,180 but Staff Schedule JMM-8 shows a Deferred CAP Liability of $1,075,643.

balance is $1,081,072. Staff has agreed with this revised balance through informal discussions. That said, Staff justifies its recommendation to create a deferred CAP liability by claiming that an offsetting liability to the deferred CAP charges asset would recognize that ratepayers have funded the CAP charges.[10]

**Q. WHAT IS A DEFERRED LIABILITY?**

A. Based on the Staff reasoning that the Deferred CAP Charge account was funded by ratepayers, I assume it is like CIAC or advances-in-aid of construction ("AIAC"), which are deferred credits, where the funds to construct plant did not come from investors but rather third-parties such as developers. In ratemaking, we recognize CIAC and AIAC as deductions in rate base offsetting the corresponding PIS investment to reflect this fact.

**Q. WHY DOES THE COMPANY DISAGREE WITH THE STAFF RECOMMENDATION?**

A. Staff's recommendation to create a deferred liability account equal to the Deferred CAP Charges (asset) account and then use it as a deduction in rate bases to offset the Deferred CAP Charges balance does not square the facts and circumstances surrounding the authorized treatment of the CAP Hook-up Fee and the CAP Surcharge in the prior rate case.

**Q. PLEASE EXPLAIN.**

A. In Decision 62450 (April 14, 2000), the Commission ordered that both the CAP Hook-up Fees and the CAP Surcharges collected by the Company were to be treated as revenues and not treated as deferred credits, like CIAC or AIAC, or as deferred liabilities.[11] Decision 62450 clearly rejected Staff's recommendation to

[10] *Id.*

[11] *See* Decision 62450 at 10.

treat the CAP Hook-up Fee as a deferred credit.[12] More importantly, these two revenue sources were part of the Company's authorized revenue requirement in the last rate case.[13] In fact, including these two sources of revenues in the revenue requirement kept the base rates to ratepayers lower than they otherwise would have been. In other words, ratepayers were "subsidized" by these revenues. Staff admits they were treated as revenues in the last rate case but now seeks to re-characterize the revenues as deferred credits.[14]

**Q. WHAT IS WRONG WITH THAT?**

A. Staff appears to want a second bite at the apple. In the last rate case, Staff's position was to treat the CAP Hook-Up Fee as a deferred credit.[15] However, Staff's position in the prior rate case was rejected.[16] Re-characterizing previously authorized revenues into something like CIAC or AIAC or a deferred liability is a type of retroactive ratemaking which should not be countenanced by the Commission.

**Q. WHAT IS RETROACTIVE RATEMAKING?**

A. Retroactive rate-making is defined as "the setting of rates which permit a utility to recover past losses or which require it to refund past excess profits collected under a rate that did not perfectly match expenses plus rate-of-return with the rates actually established."[17] In other words, regulators are prohibited from making a retrospective inquiry to determine whether a prior rate was reasonable and

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[12] *Id.*
[13] *Id.* at 12.
[14] Michlik Direct at 10.
[15] Decision 62450 at 10.
[16] *Id.*
[17] *State ex rel. Util. Consumers' Council of Mo., Inc. v. Pub. Serv. Comm'n*, 585 S.W.2d 41, 59 (Mo. banc 1979).

imposing a retrospective "fix" such as a surcharge when rates were too low or a refund when rates were too high. Retroactive ratemaking is prohibited.[18]

**Q. WHY WOULD THE INCLUSION OF A DEFERRED CAP LIABILITY AS AN OFFSET THE COMPANY'S DEFERRED CAP CHARGES ASSET CONSTITUTE RETROACTIVE RATEMAKING?**

A. As I already stated, Staff is re-characterizing past revenues and turning them into something like AIAC or CIAC. The result is to reduce past revenues and earnings which the Company was authorized to recover through the rates it was authorized to charge. Staff does not explain the entries necessary to establish its recommended deferred CAP liability account. But, when a $1,081,072 deferred liability account is established, the balancing entry must be a reduction to revenues. Ultimately, the revenue reduction reduces shareholder equity. The impact of the Staff approach is no different than imposing a refund similar to the retroactive "fix" discussed above.

**Q. DID RATEPAYERS FUND THE DEFERRED CAP CHARGES?**

A. Only in the sense that ratepayers paid rates which funded the Company's revenue requirement; no more and no less. Revenues from these two sources did not take on the characteristic of AIAC and/or CIAC simply because ratepayers paid these charges. They were in fact part of the Company's earnings which flowed to shareholder equity net of expenses. These revenues, net of expenses, are no less shareholder "funds" than any other earnings flowing out of the revenue requirement.

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[18] *Mountain States Telephone and Telegraph Co. v. Ariz. Corp. Comm'n, 124 Ariz. 433, 436, 604 P.2d 1144, 1147 (App. 1979), citing Arizona Grocery Co. v. Atchison, T. &S.F. Railroad Co.,* 284 U.S. 370 (1932).

**Q. WHAT ARE THE PROPORTIONS OF REVENUES GENERATED FROM CAP HOOK-UP FEES AND CAP SURCHARGES AND WHO PAID THE THEM?**

A. Through the end of the test year, developers paid CAP hook-up fees comprising about 75 percent of the revenues from these two sources and ratepayers paid the remaining 25 percent through the CAP Surcharge.[19] Clearly, the majority of revenues were collected from developers, not ratepayers as suggested by Staff.[20]

**Q. WERE THE REVENUES FROM THE CAP HOOK-UP FEE AND THE CAP SURCHARGE RESTRICTED IN THEIR USE?**

A. Yes. The revenues from these two sources were to be used solely for CAP-related expenses and capital items.[21] However, the restrictions placed on these revenues did not change the fundamental nature of these funds; they were revenues.

**Q. WERE INCOME TAXES PAID ON THE CAP REVENUES?**

A. Yes. The shareholder ultimately paid the taxes.

**Q. WERE ANY AMOUNTS DEDUCTED FROM THE CAP ACCOUNT TO REIMBURSE SHAREHOLDERS FOR THE TAXES?**

A. No. The shareholder will be left holding the bag so to speak and incur severe financial harm if these revenues are re-characterized as Staff proposes.

**Q. DOES THE COMPANY'S DEFERRED CAP SURCHARGE ASSET RESPRESENT EXCESS FUNDS FROM THE COLLECTION OF CAP HOOK-UP FEES AND CAP SURCHARGES?**

A. No. The Deferred CAP Surcharge balance represents the un-amortized portion of the cost of acquiring an additional CAP allocation of 1,071 a.f. in 2007 for

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[19]Michlik Direct at 30.

[20]*Id.* at 11.

[21]Decision 62450 at 11.

approximately $750,000 and unused long-term storage credits ("LTSC"). Both of these Deferred CAP Surcharge components comprise the Company's investment and not the ratepayer's investment. This asset ultimately benefits ratepayers. And, both components arose out the authorized use of the revenues as stated in Decision 62450.[22]

**Q. HAS STAFF TAKEN ISSUE WITH THE USE OF THE CAP HOOK-UP FEES AND/OR THE CAP SURCHARGES IT HAS COLLECTED?**

A. Not that I am aware. The revenues were used solely for CAP-related expenses and capital items as was ordered in Decision 62450.[23]

**Q. HOW IS THE DEFERRED CAP SURCHARGE INVESTMENT A BENEFIT TO RATEPAYERS?**

A. There are several reasons. First, the Company's investment in its CAP allocation provides an assurance of a long-term water supply. Second, the Company may use its long-term storage credits to offset future CAGRD excess pumping water charges when there are outages on the canal shielding the ratepayer from the excess pumping water charges. Finally, revenues from the sale of LTSCs help to subsidize rates to customers. The adjusted test year revenues recommended by both parties include over $40,000 of revenues from the sale of LTSCs, which will keep rates charged to ratepayers lower than they otherwise would be.

**Q. IF THE COMMISSION WERE TO DENY RECOGNITION OF THE DEFERRED CAP SURCHARGE ASSET IN RATE BASE, SHOULD THE TEST YEAR REVENUES BE REDUCED BY THE REVENUES FROM THE SALE OF LTSCS?**

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[22] *Id.*
[23] *Id.*

A. Yes. And, ratepayers should make up the difference through the rates they pay. As the Company would further explain in briefing, to allow ratepayers to benefit from the Company's investment through a subsidization of their rates without recognition of the investment in rate base would constitute a taking of the Company's property and would not be just and reasonable.

**Q. THE ADJUSTED TEST YEAR REVENUES ALSO INCLUDES $110,000 OF CAP HOOK-UP FEE REVENUES. CORRECT?**

A. Yes. The adjusted test year revenues recommended by both parties include $110,000 of revenues from CAP Hook-Up Fees. I find it astonishing that Staff, who now wants to retroactively change the nature of the CAP Hook-Up Fee from revenues to something like AIAC or CIAC, has not recommended the exclusion of these revenues. After all, if the fees are ultimately going to be treated as CIAC and/or AIAC like, then the receipt of those fees would not be revenues. Staff can't have it both ways. If the Commission were to adopt the Staff recommendation to include a deferred CAP liability in rate base, which it should not for the reasons stated above, then the $110,000 should be removed from test year revenues and ratepayers make up the difference through the rates they pay.

**Q. DOES THE COMPANY HAVE UNEXPENDED CAP HOOK-UP FEE AND CAP SURCHARGE RECEIPTS?**

A. Yes. At the end of the test year the company had approximately $1.9 million of unexpended amounts.[24] Currently, the balance is approximately $1.6 million; which is the amount available for design and construction of the CAP pipeline currently estimated to cost about $2 million.

[24] Michlik Direct at 30.

**Q. IS IT THE COMPANY'S INTENTION TO USE THE REMAINING FUNDS FOR THE CONSTRUCTION OF INFRASTRUCTURE TO RECEIVE CAP WATER DIRECTLY?**

A. Yes. These remaining funds will help pay the cost of the planned CAP pipeline. And, once the CAP pipeline is constructed and placed into service there will be no "excess" CAP funds. Further, consistent with the fact that the remaining unexpended funds will be used for the CAP pipeline are from revenues, the infrastructure costs should be recognized as the shareholder's investment and not as CIAC or AIAC funded investment.

**Q. WOULD THE COST OF THE CAP PIPELINE BE CONSIDERED AN AUTHORIZED EXPENDITURE OF THE CAP REVENUES AS CONTEMPATED BY DECISION 62450?**

A. Yes.

**b. <u>Excess Capacity.</u>**

**Q. PLEASE COMMENT ON THE COMPANY'S DISAGREEMENT WITH THE STAFF RECOMMENDED EXCESS CAPACITY ADJUSTMENTS.**

A. The Company disagree with the Staff recommended excess capacity adjustments. This issue is discussed in the Rebuttal Testimony of Kara D. Festa. P.E..

**II. <u>INCOME STATEMENT (C SCHEDULES)</u>**

**Q. PLEASE EXPLAIN THE ADJUSTMENTS YOU ARE PROPOSING TO THE INCOME STATEMENT AS SHOWN ON SCHEDULES C-1 AND C-2.**

A. The following is a summary of adjustments shown on Schedule C-1:

Adjustment 1 annualizes depreciation expense. Annualized depreciation expense is lower reflecting the Company's proposed retirements.

**Q. WHY IS THERE A DIFFERENCE BETWEEN THE COMPANY RECOMMENDED DEPRECIATION EXPENSE AND THE STAFF DEPRECIATION EXPENSE?**

A. There are two reasons. First, Staff includes depreciation of $(14,940) for account 348 – Other Tangible Plant. But, this account is fully depreciated. This is an error that should be corrected. Second, Staff's plant balances are lower for some accounts because of Staff's recommended excess capacity adjustment and retirement adjustment; which the Company has not adopted.

**Q. THANK YOU. PLEASE CONTINUE.**

A. Adjustment 2 changes the property taxes to reflect the Company's rebuttal proposed revenues. Staff and the Company are in agreement on the method of computing property taxes. This method utilizes the ADOR formula and inputs two years of adjusted revenues plus one year of proposed revenues. I computed the property taxes based on the Company's proposed revenues, and then used the property tax rate and assessment ratio that was used in the direct filing.

Adjustment number 7 reduces management fees by over $91,000 to reflect the Company's revised cost of providing management services.

**Q. PLEASE EXPLAIN?**

A. The Company's cost estimate used in the preparation of the initial filing contained an error. The Company's revised cost estimate corrects the error. Staff was notified of the error and provided a revised computation on December 20, 2012, in revised response to Staff data request JMM 2-5.

**Q. HAS STAFF REFLECTED THE REVISED COST ESTIMATE ITS SCHEDULES? IF NOT, WHY NOT?**

A. No. Staff does not provide an explanation. Instead, despite the further reduction to the management fees, Staff only offers criticism of the Company's cost allocation and the value of the management services provided by TEM Corp.

**Q. WHAT IS THE COST PER CUSTOMER FOR THE MANAGEMENT FEES?**

A. The revised management fee is $126,683 annually which translates to $2.73 per customer per month.

**Q. IS THIS A REASONABLE COST?**

A. In my view, it is very reasonable. I make my judgment based upon several factors. First, if the Company were to hire employees directly as full time employee to perform the same services as provided by the TEM plus the office costs such as office rent, insurance, and utilities, it would cost well over 3 times the amount included in the adjusted test year operating expenses.[25] Second, if the Company were to hire the TEM employees directly as full time employees plus the office costs such as office rent, insurance, and utilities, it would also cost about 3 times the amount included in the adjusted test year operating expenses.[26] Third, third-party services similar to the services provided by TEM would cost at least 2.25 times amount included in the adjusted test year operating expenses.[27]

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[25] Based upon the American Water Works Association 2009 Compensation Survey, the average compensation for a financial executive, controller, and 2 entry level accountants would be $123,110, $97,940, and $85,598. With benefits and payroll taxes, the total compensation would total nearly $400,000 annually. Adding a reasonable amount for office costs such as office rent, insurance, utilities, etc. of $30,000, the total cost would be at least $430,000 annually. The adjusted test year expenses include approximately $136,000 of management fees or less than a third the cost of this alternative.

[26] Based upon the current compensation of each TEM employee who provides services to the Company With benefits and payroll taxes, the total compensation would total over $350,000 annually. Adding a reasonable amount for office costs such as office rent, insurance, utilities, etc. of $30,000, the total cost would be at least $380,000 annually. The adjusted test year expenses include approximately $136,000 of management fees or a little more than a third the cost of this alternative.

[27] The Company recently obtained a proposal from LaVoie & Company, P.C for services similar to the services TEM provides totaling over $170,000 annually. Of course, there would still be a need for a full time executive/manager at the Company to oversee the third-party work and manage the Company. This

**Q. MR. BOURASSA, WOULD A SMALL COMPANY LIKE VWC HIRE FULL TIME EMPLOYEES TO PERFORM THE SERVICES TEM PROVIDES?**

A. Let me premise my answer by saying that there is no question small companies need the kinds of services TEM provides. This Commission knows full well the operational and financial problems of small utilities and the disruptions in service a poorly managed small utility can cause. The question comes down to affordability. Small utilities typically cannot afford to hire full time qualified employees to perform the necessary management and accounting functions; which is exactly why many have significant operational, management, and/or financial problems. VWC has the benefit of leveraging the economies of scale TEM provides.

**Q. DOES THE COMPANY'S PAYMENT OF MANAGEMENT FEES HELP TO LOWER THE COSTS OF THE OTHER ENTITIES TO WHICH TEM PROVIDES SERVICES?**

A. Yes it does, in the same sense that VWC's costs are lower because it shares costs. Rather than hiring full time employees, VWC benefits by "sharing" employee time with other companies. Having a contractual relationship with TEM is not the undesirable circumstance Staff appears to make it out to be.[28]

**Q. DID THE COMPANY PROVIDE SUPPORT FOR THE MANAGEMENT FEES?**

A. Yes. The Company provided: (1) wages and salary information;(2) a listing of all services provided by each TEM employee on a daily, weekly, monthly, and annual

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employee would not be a low level, low skilled person and would have to have the management and financial skills of a least a controller/accounting manager. According the American Water Works Association 2009 Compensation Survey the annual compensation required would be $97,940 plus benefits totaling $127,322. Adding a reasonable amount for office costs such as rent, insurance, utilities, etc., of $10,000, the total cost would be at least $307,000 annually. The adjusted test year expenses include approximately $136,000 of management fees or a little more less than half the cost of this alternative.

[28] Michlik Direct at 15-20.

basis; (3) a copy of TEM's general ledger detail for all indirect costs such as office rent, utilities, and insurance; (4) supporting documentation for all indirect costs as requested by Staff; and, (5) and a cost allocation worksheet.[29]

**Q. DID THE COMPANY PROVIDE GENERAL LEDGER DETAIL OF TEM CORP.?**

A. Yes. Contrary to Staff's assertion, the Company did provide relevant general ledger detail in support of the costs it seeks in this case.[30] The Company provided both the relevant excerpts from the ledger and the supporting documentation for the TEM allocated costs the Company seeks to include in the management fee. The Company did not provide the entire general ledger and supporting information relating to other entities because the Company is not seeking to recover any of those costs; this information is irrelevant to the issue at hand.

**Q. WERE THE TEM COSTS ALLOCATED ON A "VAGUE GUESSTIMATED PERCENTAGE" AS MR. MICHLIK ASSERTS ON PAGE 21 OF HIS TESTIMONY?**

A. No. The wages and salaries were based upon each TEM employee's estimate of the time necessary to perform all the work they perform on a daily, weekly, monthly, and annual basis on behalf of VWC. These employees have been with TEM for many years and have the experience of many years working on Company related matters. They know best the amount of their total time they devote to Company related matters.

The remaining other costs such as insurance, office rent, utilities, computer services, etc. where either allocated on a weighted percentage of employee time or at a rate of 100% when the cost was directly related to VWC. These allocation

[29] *See, e.g.,* Company's Response to Staff Data Request 2.5 (revised).
[30] *Id.* at 24.

rates are not unreasonable nor do they violate the NARUC cost allocation guidelines. In the end, whether you agree or disagree with the allocation methodology, the results (the cost per customer per month) are much lower than the alternatives; even from third-party vendors.

**Q. PLEASE RESPOND TO STAFF'S RECOMMENDATION THE COMPANY OBTAIN AT LEAST 5 BIDS FROM THIRD-PARTY VENDORS FOR MANAGEMENT SERVICES EVERY THREE YEARS?**

A. I have at least two responses. First, I do not think 5 vendors exist in Arizona which would be able provide the same services to VWC as TEM provides. Even if there are, not all of them may be willing to provide a bid. As noted in Mr. Volpe's testimony, recently, the Company has sought bids from several vendors. Thus far, only one vendor has responded with a bid. A second vendor responded they were not interested in submitting a bid at this time because they cannot handle the additional work. Mr. Volpe discusses his efforts to obtain bids in his testimony. Other vendors may not want to submit bids when there is a highly likelihood the Company will continue under its current arrangement; one that is the least costly to VWC. Second, and perhaps more importantly, since the Company cannot unilaterally increase or decrease its utility rates in response to new bids obtained every three years, obtaining bids seems to be an exercise in futility in addition to being administratively burdensome. Having established a fair and reasonable management fee in the instant case and then revisiting the fee in the next rate case seems to me to be the most prudent and reasonable course of action.

**Q. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE COMPANY'S REBTUTTAL PROPOSED REVENUE/EXPENSE ADJUSTMENTS.**

A. Adjustment number 4 moves increases water testing expense by $9,761 based upon Staff's recommendation.[31]

Adjustment number 5 reduces miscellaneous expense by $1,311 based upon Staff's recommendation.[32]

Adjustment numbers 6 through 9 are intentionally left blank.

Adjustment 10 reflects income taxes based upon the Company adjusted test year revenue and expense.

**Q. HAS THE COMPANY UPDATED ITS INCOME TAX COMPUTATION TO CONFORM TO THE RECENT COMMISSION DECISION ON INCOME TAXES FOR PASS-THROUGH UTILITIES?**

A. Yes. Decision 73739 (Feb. 22, 2013) requires the specification of the individual filing status of all individual owners. Accordingly, the Company updated the tax filing status of some individual owners from Single to Married Filing Jointly or Married Filing Separately. In the direct filing, all individual owners were assumed to file as Single.

**Q. DID THE EFFECTIVE INCOME TAX RATE CHANGE?**

A. Yes. The overall federal and state effective income tax rate at proposed revenue is now about 22.1 percent whereas in the direct filing it was about 25.4 percent. The reduction was not all due to the change in filing status of some individual owners. The effective income tax rate also decreased because the Company is requesting a lower revenue requirement.

**Q. DID YOU COMPUTE THE EFFECTIVE TAX RATE ASSUMING VWC WAS A SUBCHAPTER C CORPORATION?**

---

[31] Michlik Direct at 12.

[32] *Id.* at 12.

A. Yes. The overall federal and state effective income tax rate assuming VWC was a stand-alone C-Corp. is 38.6 percent. Following Decision 73739, I employed the lower tax rates when computing the income taxes for VWC.

1. **Remaining Revenue/Expense Issues**

**Q. PLEASE COMMENT ON THE STAFF RECOMMENDATION TO INCREASE PURCHASED WATER EXPENSE BY $47,911?**

A. The Company disagrees with Staff recommendation to increase purchased water expense for two reasons. First, Staff's recommendation is based upon a normalized purchased water expense which reflects the mean average of CAP water rates 5 years into the future.[33] The CAP rates for 2015 to 2018 are only advisory and are not firm. As a result, they are not truly known and measurable.[34] There is a high degree of uncertainty with respect to the rate CAP may ultimately charge in the future; particularly 5 years hence. There is also uncertainty with respect to how much the purchased water cost the Company will defer through LTSCs. The only thing we know with any degree of certainty is that the CAP rates will increase. However, this does not make Staff's normalized amount known and measurable. Second, the Company's recommendation to include a true-up to actual CAP purchased water costs in its CAP surcharge adjuster mechanism removes all uncertainty and insures the Company does not recover any more or any less than the actual expense incurred – which is fair to both the Company and to ratepayers.

[33] *Id.* at 12.
[34] *Id.* at 11-12.

## III. RATE DESIGN (H SCHEDULES).

**Q. WHAT ARE THE COMPANY'S PROPOSED RATES FOR WATER SERVICE?**

A. The Company's proposed rates are:

MONTHLY SERVICE CHARGES

| | |
|---|---|
| 5/8" x 3/4" Meter | $ 14.92 |
| 3/4" Meter | $ 22.38 |
| 1" Meter | $ 37.30 |
| 1 1/2" Meter | $ 74.30 |
| 2" Meter | $ 119.36 |
| 3" Meter | $ 238.72 |
| 4" Meter | $ 372.99 |
| 6" Meter | $ 745.99 |

Gallons in minimum 0

COMMODITY RATES

| | | |
|---|---|---|
| 5/8"X3/4" -Residential | 1 to 3,000 | $ 3.00 |
| | 3,001 to 10,000 | $ 3.75 |
| | Over 10,000 | $ 4.50 |
| 5/8"X3/4" - Commercial | 1 to 10,000 | $3.75 |
| | Over 10,000 | $ 4.50 |
| 3/4" - Residential | 1 to 3,000 | $ 3.00 |
| | 3,001 to 10,000 | $ 3.75 |
| | Over 10,000 | $ 4.50 |
| 3/4" Meter – Commercial | 1 to 10,000 | $ 3.75 |
| | Over 10,000 | $ 4.50 |

| | | |
|---|---|---|
| 1" Meter | 1 to 25,000 | $ 3.75 |
| | Over 25,000 | $ 4.50 |
| 1 ½" Meter | 1 to 50,000 | $ 3.75 |
| | Over 50,000 | $ 4.50 |
| 2" Meter | 1 to 80,000 | $ 3.75 |
| | Over 80,000 | $ 4.50 |
| 3" Meter | 1 to 160,000 | $ 3.75 |
| | Over 160,000 | $ 4.50 |
| 4" Meter | 1 to 250,000 | $ 3.75 |
| | Over 250,000 | $ 4.50 |
| 6" Meter | 1 to 500,000 | $ 3.75 |
| | Over 500,000 | $ 4.50 |
| CAP Recovery Fee (per 1,000 gallons) | *removed | |
| CAP Surcharge (per 1,000 gallons) | *to be determined | |
| CAP Hook-up Fee | See Schedule H-3, page 4. | |

**Q. WHAT WILL BE THE 5/8X3/4 INCH RESIDENTIAL CUSTOMER AVERAGE MONTHLY BILL UNDER THE PROPOSED RATES?**

A. As shown on Schedule H-2, page 1, the average monthly bill under proposed rates for a 5/8x3/4 inch residential customer using an average 6,720 gallons is $37.87 – a $2.19 decrease from the present monthly bill or a 5.47 percent decrease.

**Q. HAVE YOU MADE ANY CHANGES TO THE RATE DESIGN FROM THE DIRECT FILING?**

A. Yes. I have lowered the first tier commodity rate and increased the price differential between the commodity rates in a move to set the commodity rates more like Staff recommended commodity rates. With these changes, the Company's proposed rates continues to provide somewhat more revenue stability

than the current rate design in that it provides for about 37.5 percent of the revenue requirement from monthly minimums whereas under present rates about 34 percent of revenues are derived from the monthly minimums. As I stated in my direct, generally the portion of revenue derived from the monthly minimums should be in the range of 40 to 50 percent and ideally closer to 50 percent. So, the Company rate design is less stable than I would like. However, the proposed rate design achieves an appropriate balance for this case given the constraints in moving from the current single tier rate design to an inverted tier design with more revenue stability.

**Q. PLEASE COMMENT ON THE PROPOSED RATE DESIGN OF STAFF.**

A. Like the Company, Staff is proposing an inverted three tier design for the 5/8x3/4 inch metered residential customers and an inverted two tier design for the small commercial and irrigation customers as well as all 1 inch and larger metered customers.[35] Staff's break-over points are similar to the Company's and increase with meter size. The major differences between the Staff and the Company rate designs is the Staff design provides for a lower first tier commodity rate than the Company and the price differential between the commodity rates is narrower at $0.75 compared to $1.05 under the Staff rate design.

**Q. WHY ARE YOU RECOMMENDING NARROWER PRICE DIFFERENTIALS BETWEEN THE COMMODITY RATES?**

A. This will provide greater stability with respect to the commodity revenues. Commodity rate revenues under an inverted tier rate design are inherently volatile. The revenue volatility is due to the fact that an increasing block rate anticipates recovering greater proportions of revenues at higher levels of consumption. When

[35] *See* Staff Schedule JMM-17, page 1 of 2.

more revenues are expected to be recovered at the higher priced commodity rates (due wider price differentials between the commodity rates) and conservation takes place, a greater amount of revenues are lost.

**1. Other Tariff Changes.**

**Q. IS THERE ANY DISAGREEMENT BETWEEN THE COMPANY AND STAFF ON THE COMPANY'S PROPOSED METER AND SERVICE LINE INSTALLATION CHARGES?**

A. No. The Company and Staff are in agreement.

**Q. IS THERE ANY DISAGREEMENT BETWEEN THE COMPANY AND STAFF ON THE COMPANY'S PROPOSED MISCELLANEOUS CHARGES?**

A. No. The Company and Staff are in agreement.

**Q. IS THERE ANY DISAGREEMENT BETWEEN THE COMPANY AND STAFF ON THE COMPANY'S PROPOSED NON-CAP HOOK-UP FEE?**

A. No. The Company and Staff are in agreement.

**2. Remaining Issues in Dispute.**

**a. CAP Surcharge Adjuster Mechanism.**

**Q. HAVE YOU PREPARED AN UPDATE TO THE CAP SURCHARGE ESTIMATE BASED ON RECENT DEVELOPMENTS WITH RESPECT TO THE CAP PIPELINE COSTS AND THE WHEELING FEES FROM THE CITY OF TUCSON?**

A. Yes. I have attached an updated CAP surcharge calculation and have included it as Exhibit TJB-RB-RB1. The updated computation reflects the most current CAP pipeline cost estimate as well as the most current cost estimate from the City of Tucson for wheeling CAP water to the Company's service territory. Mr. Volpe

discusses the recent developments regarding the status of the project and negotiations with the City of Tucson in his testimony. That said, as shown, the indicated year 1 CAP surcharge (per 1,000 gallons) is estimated to be $2.61.

**Q. PLEASE COMMENT ON STAFF'S RECOMMENDATION TO EXCLUDE THE ANNUAL DEPRECIATION AND RETURN ON INVESTMENT COMPONENTS FROM THE SURCHARGE CALCULATION?**

A. Staff asserts that the funds in the CAP are not the Company's funds so it should not receive a return of or a return on the CAP project investment.[36] In other words, the remaining balance of the restricted revenues in the CAP account is a deferred credit like CIAC or AIAC. Staff goes as far to state that treating the funds as CIAC is an efficient and reasonable manner to effectuate a refund to ratepayers for excess funds collected over CAP expenditures.[37]

The Company disagrees with Staff for two important reasons. First, unless and until the Commission determines that there are excess CAP funds, there is no basis for a refund. The CAP pipeline is a valid capital expenditure under Decision 62450. And, despite missing a deadline for the submission of plans,[38] that issue has been fully resolved and the Company will still be able to meet the original December 31, 2015 deadline to have CAP water delivered to its service territory.[39] At this point, there is less money in the CAP account than the projected cost of the CAP pipeline. The Company anticipates there will be no excess CAP funds once the CAP pipeline is completed and placed into service. Second, if there are no excess CAP funds because all of the CAP revenues were spent on CAP-related expenses and/or capital items as authorized in Decision 62450, then the revenues

[36]Michlik Direct at 31 and 33.
[37]*Id.* at 31.
[38]*Id.* at 28.
[39]Decision 62450 at 15.

collected by the Company are shareholder funds and the Company should receive recognition of its investment. To re-characterize these revenues as CIAC is retroactive ratemaking. See my discussion on pages 9 through 10, above. In addition, since the shareholder has paid taxes on the CAP revenues, the shareholder will incur sever financial harm. See my discussion on page 11.

**Q. PLEASE COMMENT ON STAFF'S RECOMMENDATION TO EXCLUDE THE CAP M&I AND CAPITAL CHARGES FROM THE SURCHARGE CALCULATION.**

A. Staff recommends excluding the CAP M&I and capital charges from the CAP surcharge computation because Staff has normalized the test year purchased water expense using provisional CAP rates through 2018. I have explained the Company's reason for disagreeing with the normalization of the purchased water costs at page 20. The bottom line is the Company's proposal to include the CAP delivery and capital charges as a true-up in the computation removes all uncertainty with respect future CAP rates and the Company will not over or under collect the expense.

b. **CAP Hook-UP Fee.**

**Q. ON PAGE 31, MR. MICHLIK RECOMMENDS THE CAP HOOK-UP FEE BE TREATED AS CIAC IN THE FUTURE. PLEASE COMMENT.**

A. Staff's recommended test year revenue is inconsistent with its position on the CAP Hook-Up Fee. Let me explain. The Company recommends the CAP Hook-up Fee continue to be treated as revenue. Accordingly, the Company included $110,000 of CAP Hook-Up Fee revenue in its adjusted test year revenues. Staff accepted the Company's adjusted test year revenues and did not remove the $110,000. But, if the CAP Hook-Up Fee is to be treated as CIAC, then the $110,000 of revenues will

not exist. If the Commission decides to treat the CAP Hook-Up Fee as CIAC in the future, these revenues must be removed from the test year revenues and ratepayers will have to pay rates sufficient to make up the difference.

**Q. WHY IS THE COMPANY RECOMMENDING TO CONTINUE TO TREAT THE CAP HOOK-UP FEE AS REVENUE?**

A. The revenues help to keep rates lower to ratepayers than they otherwise would be, just as they did in the prior rate case.

**Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

A. Yes.

# EXHIBIT TJB-RB-RB1

Vail Water Company
CAP Surcharge Mechanism
Computation of CAP Surcharge (Year 1) - Updated Based upon Latest Information

EXHIBIT TJB-RB-RB1
Page 1

| Line No. | | | | |
|---|---|---|---|---|
| 1 | Component 1 - Annual Depreciation | | | |
| 2 | [1] | CAP Project Costs | $ | 1,956,321 |
| 3 | [2] | Composite Depreciation Rate | | 2.00% |
| 4 | [3] | Depreciation [1]x[2] | $ | 39,126 |
| 5 | | | | |
| 6 | Component 2 - Annual CAP M&I Charges | | | |
| 7 | [4] | CAP Allocation (a.f.) | | 1,857 |
| 8 | [5] | M&I Charges (per a.f.) using 2013 firm rate | $ | 129.00 |
| 9 | [6] | Total M&I Charges [4]x[5] | $ | 239,553 |
| 10 | | | | |
| 11 | Component 3 - Annual Tucson Water Wheeling Fees | | | |
| 12 | [7] | CAP Water Delivered to Vail Service Territory (a.f.) | | 1,100 |
| 13 | [8] | Wheeling fee (per a.f.) | $ | 601.77 * |
| 14 | [9] | Total Wheeling Fees | $ | 661,947 |
| 15 | | | | |
| 16 | Component 4 - Annual Recharge Credits | | | |
| 17 | [10] | CAP Water Recharged (a.f.) [4]-[7] | | 757 |
| 18 | [11] | M&I Charges (per a.f.) = [5] | $ | 129.00 |
| 19 | [12] | Total Recharge Credits for Future Use -[10]x[11] | $ | (97,653) |
| 20 | | | | |
| 21 | Component 5 - Return on Investment plus Income Taxes | | | |
| 22 | [13] | CAP Project Costs = [1] | $ | 1,956,321 |
| 23 | [14] | Less: Accumulated Depreciation (sum of prior years depreciation expense) | $ | - |
| 24 | [15] | Net Investment [13] - [14] | $ | 1,956,321 |
| 25 | [16] | Authorized Rate of Return | | 10.10% |
| 26 | [17] | Required Return [15]x[16] | $ | 197,588 |
| 27 | [18] | Income Tax Factor | | 1.3045 |
| 28 | [19] | Total Return plus Income Taxes [17]x[18] | $ | 257,759 |
| 29 | | | | |
| 30 | Component 6 - Other CAP-Related Costs/Credits | | | |
| 31 | [20] | Test Year Purchased Water | $ | (199,817) |
| 32 | [21] | Prior Year Under (Over) recovery | $ | - |
| 33 | [22] | Other - Specify (provide supporting schedule) | $ | - |
| 34 | [23] | Total Other CAP-Related Costs/Credits [20]+[21]+[22] | $ | (199,817) |
| 35 | | | | |
| 36 | Computation of Commodity Charge | | | |
| 37 | [24] | Total Base Cost to be Recovery [3]+[6]+[9]+[12]+[19]+[23] | $ | 900,916 |
| 38 | [25] | Gallons sold in prior year (in 1,000's) | | 344,560 |
| 39 | [26] | Cost per 1,000 gallons [24]/[25] | **$** | **2.61** |
| 40 | | | | |
| 41 | *The wheeling fee will contain annual inflators for power and O&M currently estimated to be 8% for power | | | |
| 42 | and 3% for O&M. | | | |

# REBUTTAL SCHEDULES

**Vail Water Company**
Test Year Ended December 31, 2011
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Rebuttal Schedule A-1
Page 1
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Fair Value Rate Base | | $ 3,315,151 |
| 2 | | | |
| 3 | Adjusted Operating Income | | 395,119 |
| 4 | | | |
| 5 | Current Rate of Return | | 11.92% |
| 6 | | | |
| 7 | Required Operating Income | | $ 334,830 |
| 8 | | | |
| 9 | Required Rate of Return on Fair Value Rate Base | | 10.10% |
| 10 | | | |
| 11 | Operating Income Deficiency | | $ (60,288) |
| 12 | | | |
| 13 | Gross Revenue Conversion Factor | | 1.3038 |
| 14 | | | |
| 15 | Increase in Gross Revenue | | |
| 16 | Requirement | | $ (78,606) |
| 17 | | | |
| 18 | Adjusted Test Year Revenues | | $ 2,334,747 |
| 19 | Increase in Gross Revenue Revenue Requirement | | $ (78,606) |
| 20 | Proposed Revenue Requirement | | $ 2,256,141 |
| 21 | % Increase | | -3.37% |
| 22 | | | |

| 23 | **Customer** | | **Present** | **Proposed** | **Dollar** | **Percent** |
|---|---|---|---|---|---|---|
| 24 | **Classification** | | **Rates** | **Rates** | **Increase** | **Increase** |
| 25 | (Residential Commercial, Irrigation) | | | | | |
| 26 | 5/8x3/4 Inch | Residential | $ 1,728,603 | $ 1,677,344 | $ (51,259) | -2.97% |
| 27 | 3/4 Inch | Residential | 55,737 | 53,999 | (1,738) | -3.12% |
| 28 | 1 Inch | Residential | 2,132 | 1,975 | (157) | -7.38% |
| 29 | | | | | | |
| 30 | 5/8x3/4 Inch | Commercial | 3,471 | 3,773 | 302 | 8.71% |
| 31 | 3/4 Inch | Commercial | 1,804 | 1,841 | 37 | 2.07% |
| 32 | 1 Inch | Commercial | 4,172 | 4,035 | (137) | -3.28% |
| 33 | 1/12 Inch | Commercial | 17,977 | 15,346 | (2,631) | -14.64% |
| 34 | 2 Inch | Commercial | 67,893 | 57,822 | (10,071) | -14.83% |
| 35 | | | | | | |
| 36 | 5/8x3/4 Inch | Irrigation | 2,073 | 2,160 | 87 | |
| 37 | 3/4 Inch | Irrigation | 5,089 | 5,280 | 191 | 3.75% |
| 38 | 1 Inch | Irrigation | 17,540 | 16,901 | (638) | -3.64% |
| 39 | 1/12 Inch | Irrigation | 17,246 | 16,217 | (1,029) | -5.96% |
| 40 | 2 Inch | Irrigation | 113,577 | 115,693 | 2,116 | 1.86% |
| 41 | | | | | | |
| 42 | 5/8x3/4 Inch | Standpipe | 12,909 | 9,095 | (3,813) | -29.54% |
| 43 | 1 Inch | Standpipe | 2,256 | 1,991 | (265) | -11.74% |
| 44 | 3 Inch | Construction | 37,004 | 27,561 | (9,442) | -25.52% |
| 45 | | | | | | |
| 46 | Revenue Annualization | | 29,925 | 29,694 | (232) | -0.77% |
| 47 | | | | | | |
| 48 | **Subtotal** | | $ 2,119,407 | $ 2,040,728 | $ (78,679) | -3.71% |
| 49 | | | | | | |
| 50 | Other Water Revenues | | 214,637 | 214,637 | - | 0.00% |
| 51 | Reconciling Amount | | 703 | 776 | 73 | 10.38% |
| 52 | Rounding | | | | - | 0.00% |
| 53 | **Total of Water Revenues** | | $ 2,334,746 | $ 2,256,141 | $ (78,606) | -3.37% |
| 54 | | | | | | |

| | | |
|---|---|---|
| 55 | | |
| 56 | SUPPORTING SCHEDULES: | |
| 57 | B-1 | |
| 58 | C-1 | |
| 59 | C-3 | |
| 60 | H-1 | |

**Vail Water Company**
Test Year Ended December 31, 2011
Summary of Rate Base

Exhibit
Rebuttal Schedule B-1
Page 1
Witness: Bourassa

| Line No. | | Original Cost Rate base | Fair Value Rate Base |
|---|---|---|---|
| 1 | | | |
| 2 | Gross Utility Plant in Service | $ 20,065,753 | $ 20,065,753 |
| 3 | Less: Accumulated Depreciation | 3,601,631 | 3,601,631 |
| 4 | | | |
| 5 | Net Utility Plant in Service | $ 16,464,122 | $ 16,464,122 |
| 6 | | | |
| 7 | Less: | | |
| 8 | Advances in Aid of Construction | 11,374,431 | 11,374,431 |
| 9 | | | |
| 10 | Contributions in Aid of Construction | 2,930,228 | 2,930,228 |
| 11 | | | |
| 12 | Accumulated Amortization of CIAC | (603,756) | (603,756) |
| 13 | | | |
| 14 | Customer Meter Deposits | 529,140 | 529,140 |
| 15 | Deferred Income Taxes & Credits | - | - |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | Plus: | | |
| 20 | | | |
| 21 | Deferred CAP Charges | 1,081,072 | 1,081,072 |
| 22 | Prepayments | - | - |
| 23 | Allowance for Working Capital | - | - |
| 24 | | | |
| 25 | | | |
| 26 | Total Rate Base | $ 3,315,151 | $ 3,315,151 |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |
| 41 | SUPPORTING SCHEDULES: | | |
| 42 | B-2 | | |
| 43 | B-3 | | |
| 44 | B-5 | | |
| 45 | | | |
| 46 | | | |
| 47 | | | |
| 48 | | | |
| 49 | | | |
| 50 | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 1
Witness: Bourassa

| Line No. | | Actual at End of Test Year | Proforma Adjustment | Adjusted at end of Test Year |
|---|---|---|---|---|
| 1 | Gross Utility | | | |
| 2 | Plant in Service | $ 20,158,709 | (92,956) | $ 20,065,753 |
| 3 | | | | |
| 4 | **Less:** | | | |
| 5 | Accumulated | | | |
| 6 | Depreciation | 3,722,176 | (120,545) | 3,601,631 |
| 7 | | | | |
| 8 | | | | |
| 9 | Net Utility Plant | | | |
| 10 | in Service | $ 16,436,533 | | $ 16,464,122 |
| 11 | | | | |
| 12 | **Less:** | | | |
| 13 | Advances in Aid of | | | |
| 14 | Construction | 11,374,431 | - | 11,374,431 |
| 15 | | | | |
| 16 | Contributions in Aid of | | | |
| 17 | Construction - Gross | 2,930,228 | - | 2,930,228 |
| 18 | | | | |
| 19 | Accumulated Amortization of CIAC | (605,832) | 2,076 | (603,756) |
| 20 | | | | |
| 21 | Customer Meter Deposits | 529,140 | | 529,140 |
| 22 | Accumulated Deferred Income Tax | - | - | - |
| 23 | | | | - |
| 24 | | | | - |
| 25 | | | | |
| 26 | **Plus:** | | | |
| 27 | | | | |
| 28 | Deferred CAP Charges | 1,104,206 | (23,134) | 1,081,072 |
| 29 | Prepayments | - | - | - |
| 30 | Materials and Supplies | - | | - |
| 31 | Working capital | - | - | - |
| 32 | | | | - |
| 33 | | | | |
| 34 | Total | $ 3,312,773 | | $ 3,315,151 |
| 35 | | | | |
| 36 | | | | |
| 37 | | | | |
| 38 | | | | |
| 39 | | | | |
| 40 | | | | |
| 41 | | | | |
| 42 | | | | |
| 43 | | | | |
| 44 | | | | |
| 45 | SUPPORTING SCHEDULES: | | | RECAP SCHEDULES: |
| 46 | B-2, pages 2 | | | B-1 |
| 47 | | | | |
| 48 | | | | |
| 49 | | | | |
| 50 | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments

Exhibit
Rebuttal Schedule B-2
Page 2
Witness: Bourassa

| Line No. | | Adjusted at End of Test Year | Proforma Adjustments 1 Plant-in-Service | 2 Accumulated Depreciation | 3 CIAC | 4 Deferred CAP Charges | 5 Intentionally Left Blank | Rebuttal Adjusted at end of Test Year |
|---|---|---|---|---|---|---|---|---|
| 1 | Gross Utility | | | | | | | |
| 2 | Plant in Service | $ 20,158,709 | (92,956) | | | | | $ 20,065,753 |
| 3 | | | | | | | | |
| 4 | **Less:** | | | | | | | |
| 5 | Accumulated | | | | | | | |
| 6 | Depreciation | 3,722,176 | | (120,545) | | | | 3,601,631 |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | Net Utility Plant | | | | | | | |
| 10 | in Service | $ 16,436,533 | $ (92,956) | $ 120,545 | $ - | $ - | $ - | $ 16,464,122 |
| 11 | | | | | | | | |
| 12 | **Less:** | | | | | | | |
| 13 | Advances in Aid of | | | | | | | |
| 14 | Construction | 11,374,431 | | | | | | 11,374,431 |
| 15 | | | | | | | | |
| 16 | Contributions in Aid of | | | | | | | |
| 17 | Construction (CIAC) | 2,930,228 | | | - | | | 2,930,228 |
| 18 | | | | | | | | |
| 19 | Accumulated Amort of CIAC | (605,832) | | | 2,076 | | | (603,756) |
| 20 | | | | | | | | |
| 21 | Customer Meter Deposits | 529,140 | | | | | | 529,140 |
| 22 | Accumulated Deferred Income Taxes | - | | | - | | | - |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | **Plus:** | | | | | | | |
| 26 | | | | | | | | |
| 27 | Deferred CAP Charges | 1,104,206 | | | | (23,134) | | 1,081,072 |
| 28 | Prepayments | - | | | | | | - |
| 29 | Materials and Supplies | - | | | | | | - |
| 30 | Allowance for Cash Working Capital | - | | | | | | - |
| 31 | | | | | | | | |
| 32 | Total | $ 3,312,773 | $ (92,956) | $ 120,545 | $ (2,076) | $ (23,134) | $ - | $ 3,315,151 |
| 33 | | | | | | | | |
| 34 | | | | | | | | |
| 35 | | | | | | | | |
| 36 | SUPPORTING SCHEDULES: | | | | | RECAP SCHEDULES: | | |
| 37 | B-2, pages 3-5 | | | | | B-1 | | |
| 38 | | | | | | | | |
| 39 | | | | | | | | |
| 40 | | | | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1

Exhibit
Rebuttal Schedule B-2
Page 3
Witness: Bourassa

Plant-in-Service

| Line No. | Acct. No. | Description | Direct Adjusted Orginal Cost | A Reclassify Retired Plant | B Plant Retirements | Adjustments C Adjustments to Reconcile to Reconstructed Balance | D Intentionally Left Blank | E Intentionally Left Blank | Rebuttal Adjusted Original Cost |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 301 | Organization Cost | - | - | - | - | | | - |
| 7 | 302 | Franchise Cost | - | - | - | - | | | - |
| 8 | 303 | Land and Land Rights | 17,750 | - | - | - | | | 17,750 |
| 9 | 304 | Structures and Improvements | 399,328 | - | (1,978) | - | | | 397,350 |
| 10 | 305 | Collecting and Impounding Res. | - | - | - | - | | | - |
| 11 | 306 | Lake River and Other Intakes | - | - | - | - | | | - |
| 12 | 307 | Wells and Springs | 1,126,979 | - | - | - | | | 1,126,979 |
| 13 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | | | - |
| 14 | 309 | Supply Mains | 2,995 | - | - | - | | | 2,995 |
| 15 | 310 | Power Generation Equipment | - | - | - | - | | | - |
| 16 | 311 | Electric Pumping Equipment | 1,553,110 | 1,838 | (29,479) | - | | | 1,525,469 |
| 17 | 320 | Water Treatment Equipment | - | - | - | - | | | - |
| 18 | 320.1 | Water Treatment Plant | - | - | - | - | | | - |
| 19 | 320.2 | Chemical Solution Feeders | - | - | - | - | | | - |
| 20 | 330 | Dist. Reservoirs & Standpipe | 1,621,069 | 25,642 | (61,499) | - | | | 1,585,212 |
| 21 | 330.1 | Storage tanks | - | - | - | - | | | - |
| 22 | 330.2 | Pressure Tanks | - | - | - | - | | | - |
| 23 | 331 | Trans. and Dist. Mains | 14,023,034 | - | - | - | | | 14,023,034 |
| 24 | 333 | Services | 12,451 | - | - | - | | | 12,451 |
| 25 | 334 | Meters | 923,082 | - | - | - | | | 923,082 |
| 26 | 335 | Hydrants | 492,908 | - | - | - | | | 492,908 |
| 27 | 336 | Backflow Prevention Devices | 7,901 | - | - | - | | | 7,901 |
| 28 | 339 | Other Plant and Misc. Equip. | 6,553 | - | - | - | | | 6,553 |
| 29 | 340 | Office Furniture and Fixtures | 29,683 | (27,480) | - | - | | | 2,203 |
| 30 | 340.1 | Computers and Software | 15,621 | - | - | - | | | 15,621 |
| 31 | 341 | Transportation Equipment | 54,806 | - | - | - | | | 54,806 |
| 32 | 342 | Stores Equipment | - | - | - | - | | | - |
| 33 | 343 | Tools and Work Equipment | 15,645 | - | - | - | | | 15,645 |
| 34 | 344 | Laboratory Equipment | - | - | - | - | | | - |
| 35 | 345 | Power Operated Equipment | - | - | - | - | | | - |
| 36 | 346 | Communications Equipment | - | - | - | - | | | - |
| 37 | 347 | Miscellaneous Equipment | 5,190 | - | - | - | | | 5,190 |
| 38 | 348 | Other Tangible Plant | - | - | - | - | | | - |
| 39 | | 1998 ACC Plant Adjustment | (149,395) | - | - | - | | | (149,395) |
| 40 | | Rounding | | | | | | | - |
| 41 | | TOTALS | $ 20,158,709 | $ - | $ (92,956) | $ - | $ - | $ - | $ 20,065,753 |
| 42 | | | | | | | | | |
| 43 | Plant-in-Service per Books | | | | | | | | $ 20,158,709 |
| 44 | | | | | | | | | |
| 45 | Increase (decrease) in Plant-in-Service | | | | | | | | $ (92,956) |
| 46 | | | | | | | | | |
| 47 | Adjustment to Plant-in-Service | | | | | | | | $ (92,956) |
| 48 | | | | | | | | | |
| 49 | SUPPORTING SCHEDULES | | | | | | | | |
| 50 | B-2, pages 3.1 to 3.3 | | | | | | | | |
| 51 | | | | | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 -A

Exhibit
Rebuttal Schedule B-2
Page 3.1
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Reclassify Retired Plant | | |
| 2 | | | |
| 3 | | | |
| 4 | Acct. | | PIS |
| 5 | No. | Description | Adjustment |
| 6 | 301 | Organization Cost | |
| 7 | 302 | Franchise Cost | |
| 8 | 303 | Land and Land Rights | |
| 9 | 304 | Structures and Improvements | |
| 10 | 305 | Collecting and Impounding Res. | |
| 11 | 306 | Lake River and Other Intakes | |
| 12 | 307 | Wells and Springs | |
| 13 | 308 | Infiltration Galleries and Tunnels | |
| 14 | 309 | Supply Mains | |
| 15 | 310 | Power Generation Equipment | |
| 16 | 311 | Electric Pumping Equipment | 1,838 |
| 17 | 320 | Water Treatment Equipment | |
| 18 | 320.1 | Water Treatment Plant | |
| 19 | 320.2 | Chemical Solution Feeders | |
| 20 | 330 | Dist. Reservoirs & Standpipe | 25,642 |
| 21 | 330.1 | Storage tanks | |
| 22 | 330.2 | Pressure Tanks | |
| 23 | 331 | Trans. and Dist. Mains | |
| 24 | 333 | Services | |
| 25 | 334 | Meters | |
| 26 | 335 | Hydrants | |
| 27 | 336 | Backflow Prevention Devices | |
| 28 | 339 | Other Plant and Misc. Equip. | |
| 29 | 340 | Office Furniture and Fixtures | (27,480) |
| 30 | 340.1 | Computers and Software | |
| 31 | 341 | Transportation Equipment | |
| 32 | 342 | Stores Equipment | |
| 33 | 343 | Tools and Work Equipment | |
| 34 | 344 | Laboratory Equipment | |
| 35 | 345 | Power Operated Equipment | |
| 36 | 346 | Communications Equipment | |
| 37 | 347 | Miscellaneous Equipment | |
| 38 | 348 | Other Tangible Plant | |
| 39 | | 1998 ACC Plant Adjustment | |
| 40 | | TOTALS | $ - |
| 41 | | | |
| 42 | | | |
| 43 | SUPPORTING SCHEDULE | | |
| 44 | Staff Schedule JMM-6 | | |
| 45 | B-2, pages 3.4 to 3.16 | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 -B

Exhibit
Rebuttal Schedule B-2
Page 3.2
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Retirements Not Recorded | | |
| 2 | | | |
| 3 | | | |
| 4 | Acct. | | PIS |
| 5 | No. | Description | Adjustment |
| 6 | 301 | Organization Cost | |
| 7 | 302 | Franchise Cost | |
| 8 | 303 | Land and Land Rights | |
| 9 | 304 | Structures and Improvements | (1,978) |
| 10 | 305 | Collecting and Impounding Res. | |
| 11 | 306 | Lake River and Other Intakes | |
| 12 | 307 | Wells and Springs | |
| 13 | 308 | Infiltration Galleries and Tunnels | |
| 14 | 309 | Supply Mains | |
| 15 | 310 | Power Generation Equipment | |
| 16 | 311 | Electric Pumping Equipment | (29,479) |
| 17 | 320 | Water Treatment Equipment | |
| 18 | 320.1 | Water Treatment Plant | |
| 19 | 320.2 | Chemical Solution Feeders | |
| 20 | 330 | Dist. Reservoirs & Standpipe | (61,499) |
| 21 | 330.1 | Storage tanks | |
| 22 | 330.2 | Pressure Tanks | |
| 23 | 331 | Trans. and Dist. Mains | |
| 24 | 333 | Services | |
| 25 | 334 | Meters | |
| 26 | 335 | Hydrants | |
| 27 | 336 | Backflow Prevention Devices | |
| 28 | 339 | Other Plant and Misc. Equip. | |
| 29 | 340 | Office Furniture and Fixtures | |
| 30 | 340.1 | Computers and Software | |
| 31 | 341 | Transportation Equipment | |
| 32 | 342 | Stores Equipment | |
| 33 | 343 | Tools and Work Equipment | |
| 34 | 344 | Laboratory Equipment | |
| 35 | 345 | Power Operated Equipment | |
| 36 | 346 | Communications Equipment | |
| 37 | 347 | Miscellaneous Equipment | |
| 38 | 348 | Other Tangible Plant | |
| 39 | | 1998 ACC Plant Adjustment | |
| 40 | | TOTALS | $ (92,956) |
| 41 | | | |
| 42 | | | |
| 43 | SUPPORTING SCHEDULE | | |
| 44 | B-2, page 3.2.1 | | |
| 45 | B-2, pages 3.4 to 3.16 | | |

VAIL WATER COMPANY
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 -B
Retirements Not Recorded

Exhibit
Schedule B-2
Page 3.2.1

| | | | original | current | retirement | install | retirement | 2012 HW | HW | HW | Per MSJ 4-1 Original | Unrecorded Original | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a. | | Plant Description | cost | cost | cost | year | year | INDEX (Jul 2012) | Index (Year of Install) | Factor | Cost Est. | Cost Est. | NARUC |
| | | Well 6 | | | | | | | | | | | |
| | 1 | 75 HP well pump | unknown | $ 38,105 | unknown | 1981 | 2003 | 785 | 245 | 0.31210 | $ 11,893 | $ 11,893 | 311 |
| | 2 | 10,000 gallon storage tank | unknown | $ 20,000 | unknown | 1981 | 2003 | 450 | 245 | 0.54444 | $ 10,889 | $ 10,889 | 330 |
| | 3 | 3,000 gallon pressure tank | unknown | $ 18,500 | unknown | 1981 | 2003 | 450 | 245 | 0.54444 | $ 10,072 | $ 10,072 | 330 |
| | 4 | Two 30 HP transfer/booster pumps | unknown | $ 9,302 | unknown | 1981 | 2003 | 785 | 245 | 0.31210 | $ 2,903 | $ 2,903 | 311 |
| | | Vail Valley Ranch I-J Zone | | | | | | | | | | | |
| b. | 1 | 15,000 gallon storage tank | unknown | $ 30,000 | $ 15,000 | 1989 | 2002 | 450 | 245 | 0.54444 | $ 16,333 | | |
| | 2 | 2,000 gallon pressure tank | unknown | $ 12,500 | unknown | 1989 | 2004 | 450 | 245 | 0.54444 | $ 6,806 | $ 6,806 | 330 |
| | 3 | Two 5 HP booster pumps | unknown | $ 5,898 | unknown | 1989 | 2004 | 785 | 330 | 0.42038 | $ 2,479 | $ 2,479 | 311 |
| | | Well 3 | | | | | | | | | | | |
| c. | 1 | 75 HP well pump | unknown | $ 33,705 | unknown | 1980 | 2006 | 785 | 222 | 0.28280 | $ 9,532 | $ 9,532 | 311 |
| | 2 | 1,000 gallon surge tank | unknown | $ 6,500 | unknown | 1980 | 2006 | 450 | 206 | 0.45778 | $ 2,976 | $ 2,976 | 330 |
| | | Old Well Site 2 | | | | | | | | | | | |
| d. | 1 | 100,000 gallon storage tank | unknown | $ 200,000 | unknown | 1961 | 2005 | 450 | 59 | 0.13111 | $ 26,222 | $ 26,222 | 330 |
| | 2 | 5,000 gallon pressure tank | unknown | $ 25,000 | unknown | 1961 | 2005 | 450 | 59 | 0.13111 | $ 3,278 | $ 3,278 | 330 |
| | 3 | 250 gallon surge tank | unknown | $ 3,250 | unknown | 1961 | 2005 | 450 | 59 | 0.13111 | $ 426 | $ 426 | 330 |
| | 4 | Two 25 HP, one 20 HP & one 15 HP booster/transfer pumps | unknown | $ 16,927 | unknown | 1961 | 2005 | 785 | 71 | 0.09045 | $ 1,531 | $ 1,531 | 311 |
| | 5 | Land | | | | | | | | | | | |
| | 6 | Fencing | unknown | $ 5,000 | unknown | 1961 | 2005 | 450 | 59 | 0.13111 | $ 656 | $ 656 | 304 |
| | | Golos | | | | | | | | | | | |
| e. | 1 | 50,000 gallon storage tank | unknown | $ 100,000 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 45,778 | | |
| | 2 | 3,000 gallon pressure tank | unknown | $ 18,500 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 8,469 | | |
| | 3 | 5 HP booster pump | unknown | $ 2,949 | (1) | 1980 | 2004 | 785 | 222 | 0.28280 | $ 834 | | |
| | 4 | Land | | | | | | | | | | | |
| | 5 | Fencing | unknown | $ 3,500 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 1,602 | | |
| | | | | | | | | | | | $ - | $ - | |
| | | Patterson | | | | | | | | | | | |
| f. | 1 | Three 40 gallon bladder tanks | unknown | $ 2,196 | unknown | 1978 | 2000 | 450 | 170 | 0.37778 | $ 830 | $ 830 | 330 |
| | 2 | Two 2 HP booster pumps | unknown | $ 4,666 | unknown | 1978 | 2000 | 785 | 192 | 0.24459 | $ 1,141 | $ 1,141 | 311 |
| | 3 | Land | | | | | | | | | | | |
| | 4 | Fencing | unknown | $ 3,500 | unknown | 1978 | 2000 | 450 | 170 | 0.37778 | $ 1,322 | $ 1,322 | 304 |
| | | Old Andrada | | | | | | | | | | | |
| g. | 1 | Land (reverted back to owner) | | | | 1980 | 2004 | | | | | | |
| | 2 | 100,000 gallon storage tank | unknown | $ 200,000 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 91,556 | | |
| | 3 | 5,000 gallon pressure tank | unknown | $ 25,000 | $ 2,000 | 1980 | 2002 | 450 | 206 | 0.45778 | $ 11,445 | | |
| | 4 | 3,000 gallon pressure tank | unknown | $ 18,500 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 8,469 | | |
| | 5 | Two 20 HP booster pumps | unknown | $ 8,290 | (1) | 1980 | 2004 | 785 | 222 | 0.28280 | $ 2,344 | | |
| | 6 | Fencing | unknown | $ 3,500 | (1) | 1980 | 2004 | 450 | 206 | 0.45778 | $ 1,602 | | |

(1) Golos & Andrada together - retirement cost was $71,200

Total $ 281,388 $ 92,956

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.4
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | Per Decision 62450 Plant at 12/31/1998 | Per Decision 62450 Accum. Deprec. At 12/31/2008 | 1999 Plant Additions (Per Books) | 1999 Plant Adjustments | 1999 Adjusted Plant Additions | 1999 Plant Retirements (Per Books) | 1999 Salvage A/D Only | 1999 Depreciation (Calculated) | 1999 Plant Balance | 1999 Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | - | - | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | - | - | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | 3,500 | - | | | - | | | - | 3,500 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 62,198 | 17,499 | 2,753 | | 2,753 | | | 1,780 | 64,951 | 19,279 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | - | - | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | - | - | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 155,446 | 43,733 | 17,905 | | 17,905 | | | 5,261 | 173,351 | 48,993 |
| 8 | 308 | Infiltration Galleries | 0.00% | - | - | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | - | - | | | - | | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | - | - | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 295,681 | 83,186 | 12,860 | | 12,860 | | | 10,876 | 308,541 | 94,062 |
| 12 | 320 | Water Treatment Equipment | 2.58% | - | - | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | - | - | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | - | - | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 118,072 | 33,218 | 1,825 | | 1,825 | | | 2,380 | 119,897 | 35,598 |
| 16 | 330.1 | Storage Tanks | 0.00% | - | - | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | - | - | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,413,166 | 397,575 | 271,852 | | 271,852 | | | 30,982 | 1,685,018 | 428,557 |
| 19 | 333 | Services | 3.30% | 15,376 | 4,326 | | (2,950) | (2,950) | | | 459 | 12,426 | 4,785 |
| 20 | 334 | Meters | 3.60% | 105,774 | 29,758 | 44,429 | | 44,429 | | | 4,608 | 150,203 | 34,366 |
| 21 | 335 | Hydrants | 3.60% | - | - | | | - | | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | - | - | | | - | | | - | - | - |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | 2,701 | 760 | 2,973 | | 2,973 | | | 151 | 5,674 | 911 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 4,039 | 1,136 | 1,290 | | 1,290 | | | 319 | 5,329 | 1,455 |
| 25 | 340.1 | Computers & Software | 6.80% | - | - | | 2,950 | 2,950 | | | 100 | 2,950 | 100 |
| 26 | 341 | Transportation Equipment | 13.30% | 32,900 | 9,256 | 20,247 | | 20,247 | 13,907 | | 4,797 | 39,240 | 146 |
| 27 | 342 | Stores Equipment | 0.00% | - | - | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 827 | 233 | | | - | 827 | | 32 | - | (562) |
| 29 | 344 | Laboratory Equipment | 0.00% | - | - | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | - | - | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | - | - | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | - | - | | | - | | | - | - | - |
| 33 | 348 | Other Tangible Plant | 0.00% | - | - | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | (149,395) | (100,842) | | | - | | | (3,944) | (149,395) | (104,786) |
| 35 | | | | | 0 | | | | | | | | |
| 36 | | TOTALS | | 2,060,285 | 500,987 | 376,134 | - | 376,134 | 14,734 | - | 57,799 | 2,421,685 | 562,903 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.5
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2000 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 3,500 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | | - | | 1,322 | 1,322 | | 1,800 | 63,629 | 19,757 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 12,731 | | 12,731 | | | - | | 5,751 | 186,082 | 54,744 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 11,820 | | 11,820 | | 1,141 | 1,141 | | 11,300 | 319,220 | 104,221 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 4,487 | | 4,487 | | 830 | 830 | | 2,435 | 123,554 | 37,202 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 45,393 | | 45,393 | | | - | | 34,154 | 1,730,411 | 462,712 |
| 19 | 333 | Services | 3.30% | 25 | | 25 | | | - | | 410 | 12,451 | 5,195 |
| 20 | 334 | Meters | 3.60% | 38,863 | | 38,863 | | | - | | 6,107 | 189,066 | 40,473 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | - | | - | - | - |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | 879 | | 879 | | | - | | 220 | 6,553 | 1,131 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 2,326 | | 2,326 | | | - | | 441 | 7,655 | 1,896 |
| 25 | 340.1 | Computers & Software | 6.80% | 6,229 | | 6,229 | | | - | | 412 | 9,179 | 513 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | - | | 5,219 | 39,240 | 5,365 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 794 | | 794 | | | - | | 31 | 794 | (532) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | 5,190 | | 5,190 | | | - | | 93 | 5,190 | 93 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (108,730) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 128,737 | - | 128,737 | - | 3,293 | 3,293 | - | 64,430 | 2,547,129 | 624,040 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.6
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2001 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | 3,500 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | | - | | | 1,782 | 63,629 | 21,538 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 201,146 | | 201,146 | | | 9,173 | 387,228 | 63,917 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | | | - | | | 11,492 | 319,220 | 115,713 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 323,144 | | 323,144 | | | 5,703 | 446,698 | 42,905 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,073,094 | | 1,073,094 | | | 45,339 | 2,803,505 | 508,051 |
| 19 | 333 | Services | 3.30% | | | - | | | 411 | 12,451 | 5,606 |
| 20 | 334 | Meters | 3.60% | 64,869 | | 64,869 | | | 7,974 | 253,935 | 48,447 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | - | - | - |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | 236 | 6,553 | 1,367 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 1,207 | | 1,207 | | | 562 | 8,862 | 2,458 |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | 624 | 9,179 | 1,137 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | 5,219 | 39,240 | 10,584 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | | | - | | | 61 | 794 | (471) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | 187 | 5,190 | 280 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | (3,944) | (149,395) | (112,674) |
| 35 | | | | | | | | | | | |
| 36 | | TOTALS | | 1,663,460 | - | 1,663,460 | - | - | 84,818 | 4,210,589 | 708,857 |

**Vail Water Company**
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.7
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2002 Plant Additions (Per Books) | Plant Adjustments1 | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | 7,500 | | 7,500 | | | - | | - | 11,000 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | | - | 2,000 | | 2,000 | | 1,754 | 61,629 | 21,292 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 8,598 | | 8,598 | | | - | | 12,529 | 395,826 | 76,446 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 309,156 | | 309,156 | | | - | | 17,057 | 628,376 | 132,769 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | | | - | 15,000 | | 15,000 | | 8,784 | 431,698 | 36,689 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,784,712 | | 1,784,712 | | | - | | 73,917 | 4,588,217 | 581,968 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 6,017 |
| 20 | 334 | Meters | 3.60% | 82,558 | | 82,558 | | | - | | 10,628 | 336,493 | 59,074 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | - | | - | - | - |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 1,603 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 5,719 | | 5,719 | | | - | | 797 | 14,581 | 3,255 |
| 25 | 340.1 | Computers & Software | 6.80% | 3,316 | | 3,316 | | | - | | 737 | 12,495 | 1,874 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | - | | 5,219 | 39,240 | 15,803 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 1,750 | | 1,750 | | | - | | 129 | 2,544 | (342) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 467 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (116,618) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 2,203,309 | - | 2,203,309 | 17,000 | - | 17,000 | - | 128,439 | 6,396,898 | 820,297 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.8
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2003 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 11,000 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 39,852 | | 39,852 | | | - | | 2,284 | 101,481 | 23,576 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 168,351 | | 168,351 | | | - | | 15,360 | 564,177 | 91,806 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 276,980 | | 276,980 | | 14,796 | 14,796 | | 27,341 | 890,560 | 145,314 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 349,054 | | 349,054 | | 20,961 | 20,961 | | 11,915 | 759,791 | 27,643 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 647,298 | | 647,298 | | | - | | 98,237 | 5,235,515 | 680,205 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 6,428 |
| 20 | 334 | Meters | 3.60% | 43,395 | | 43,395 | | | - | | 12,895 | 379,888 | 71,969 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | - | | - | - | - |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 1,838 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 9,943 | | 9,943 | | | - | | 1,330 | 24,524 | 4,584 |
| 25 | 340.1 | Computers & Software | 6.80% | 1,625 | | 1,625 | | | - | | 905 | 14,120 | 2,779 |
| 26 | 341 | Transportation Equipment | 13.30% | 21,808 | | 21,808 | | | - | | 6,669 | 61,048 | 22,472 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 490 | | 490 | | | - | | 215 | 3,034 | (128) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 654 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (120,562) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 1,558,796 | - | 1,558,796 | - | 35,757 | 35,757 | - | 174,040 | 7,919,937 | 958,579 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.9
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2004 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 11,000 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 13,214 | | 13,214 | | | - | | 3,026 | 114,695 | 26,602 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 14,693 | | 14,693 | | | - | | 18,289 | 578,870 | 110,095 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 14,116 | | 14,116 | | 2,479 | 2,479 | | 32,270 | 902,197 | 175,105 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | | | - | | 6,806 | 6,806 | | 15,128 | 752,985 | 35,964 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 3,233,912 | | 3,233,912 | 71,200 | | 71,200 | | 136,337 | 8,398,227 | 745,343 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 6,839 |
| 20 | 334 | Meters | 3.60% | 205,315 | (11,621) | 193,694 | 3,685 | | 3,685 | | 17,096 | 569,897 | 85,380 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | 5,067 | 5,067 | | | - | | 91 | 5,067 | 91 |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 2,074 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 933 | | 933 | | | - | | 1,699 | 25,457 | 6,284 |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | - | | 960 | 14,120 | 3,739 |
| 26 | 341 | Transportation Equipment | 13.30% | 30,048 | | 30,048 | 39,240 | | 39,240 | | 7,508 | 51,856 | (9,259) |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 5,201 | | 5,201 | 915 | | 915 | | 399 | 7,320 | (644) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 841 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (124,506) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 3,517,432 | (6,554) | 3,510,878 | 115,040 | 9,285 | 124,325 | - | 229,693 | 11,306,490 | 1,063,947 |

**Vail Water Company**
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.10
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2005 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 11,000 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 16,415 | | 16,415 | | 656 | 656 | | 3,432 | 130,454 | 29,378 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 486,713 | | 486,713 | | | - | | 26,311 | 1,065,583 | 136,406 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 385,087 | | 385,087 | | 1,531 | 1,531 | | 39,383 | 1,285,753 | 212,957 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 201,590 | | 201,590 | | 29,926 | 29,926 | | 16,776 | 924,649 | 22,815 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,751,217 | | 1,751,217 | | | - | | 185,477 | 10,149,444 | 930,819 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 7,249 |
| 20 | 334 | Meters | 3.60% | 311,350 | | 311,350 | 72,274 | | 72,274 | | 24,820 | 808,973 | 37,926 |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | - | | 182 | 5,067 | 274 |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 2,310 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 3,327 | | 3,327 | | | - | | 1,844 | 28,784 | 8,128 |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | - | | 960 | 14,120 | 4,699 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | - | | 6,897 | 51,856 | (2,363) |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 651 | | 651 | | | - | | 589 | 7,971 | (55) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 1,028 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (128,450) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 3,156,350 | - | 3,156,350 | 72,274 | 32,113 | 104,387 | - | 303,561 | 14,358,453 | 1,263,121 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.11
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2006 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 11,000 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 44,562 | | 44,562 | | | - | | 4,277 | 175,016 | 33,655 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | 61,396 | | 61,396 | | | - | | 35,081 | 1,126,979 | 171,487 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | | | - | | 9,532 | 9,532 | | 46,116 | 1,276,221 | 249,540 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | | | - | | 2,976 | 2,976 | | 18,463 | 921,673 | 38,302 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,425,350 | | 1,425,350 | | | - | | 217,242 | 11,574,794 | 1,148,062 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 7,660 |
| 20 | 334 | Meters | 3.60% | 112,794 | | 112,794 | 94,234 | | 94,234 | | 29,457 | 827,533 | (26,851) |
| 21 | 335 | Hydrants | 3.60% | | | - | | | - | | - | - | - |
| 22 | 336 | Backflow Prevention Devices | 3.60% | 2,947 | | 2,947 | | | - | | 235 | 8,014 | 509 |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 2,546 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 212 | | 212 | | | - | | 1,965 | 28,996 | 10,093 |
| 25 | 340.1 | Computers & Software | 6.80% | 1,500 | | 1,500 | | | - | | 1,011 | 15,620 | 5,710 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | - | | 6,897 | 51,856 | 4,534 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 212 | | 212 | | | - | | 622 | 8,183 | 567 |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 1,214 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (132,394) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 1,648,973 | - | 1,648,973 | 94,234 | 12,508 | 106,742 | - | 358,255 | 15,900,684 | 1,514,635 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.12
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2007 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | 6,750 | | 6,750 | | | - | 17,750 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 218,451 | | 218,451 | | | 7,959 | 393,467 | 41,613 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | | | - | | | 36,063 | 1,126,979 | 207,551 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 244,070 | | 244,070 | | | 50,337 | 1,520,291 | 299,878 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 609,673 | | 609,673 | | | 24,530 | 1,531,346 | 62,832 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 1,877,226 | | 1,877,226 | | | 250,268 | 13,452,020 | 1,398,330 |
| 19 | 333 | Services | 3.30% | | | - | | | 411 | 12,451 | 8,071 |
| 20 | 334 | Meters | 3.60% | 41,452 | | 41,452 | 59,683 | | 29,463 | 809,302 | (57,071) |
| 21 | 335 | Hydrants | 3.60% | 354,032 | | 354,032 | | | 6,373 | 354,032 | 6,373 |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | 2,238 | | 248 | 5,776 | (1,481) |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | 236 | 6,553 | 2,782 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | - | | - | | | 1,972 | 28,996 | 12,064 |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | 1,062 | 15,620 | 6,772 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | 6,897 | 51,856 | 11,431 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 5,756 | | 5,756 | 2,915 | | 739 | 11,024 | (1,609) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | 187 | 5,190 | 1,401 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | (3,944) | (149,395) | (136,338) |
| 35 | | | | | | | | | | | |
| 36 | | TOTALS | | 3,357,410 | - | 3,357,410 | 64,836 | - | 412,801 | 19,193,258 | 1,862,600 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.13
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2008 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Retirement Adjustments | Adjusted Plant Retirements | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | | - | 17,750 | - |
| 4 | 304 | Structures & Improvements | 2.80% | 3,882 | | 3,882 | | | - | | 11,071 | 397,349 | 52,685 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | | | - | | | - | | 36,063 | 1,126,979 | 243,614 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | | | - | 1,838 | (1,838) | - | | 54,730 | 1,520,291 | 354,608 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 51,600 | | 51,600 | 25,642 | (25,642) | - | | 31,143 | 1,582,946 | 93,975 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 367,475 | | 367,475 | | | - | | 272,715 | 13,819,495 | 1,671,045 |
| 19 | 333 | Services | 3.30% | | | - | | | - | | 411 | 12,451 | 8,482 |
| 20 | 334 | Meters | 3.60% | 98,538 | | 98,538 | 34,117 | | 34,117 | | 30,294 | 873,723 | (60,894) |
| 21 | 335 | Hydrants | 3.60% | 120,356 | | 120,356 | | | - | | 14,912 | 474,388 | 21,284 |
| 22 | 336 | Backflow Prevention Devices | 3.60% | 2,125 | | 2,125 | | | - | | 246 | 7,901 | (1,235) |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | - | | 236 | 6,553 | 3,018 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 1,430 | | 1,430 | 5,697 | 27,480 | 33,177 | | 892 | (2,751) | (20,220) |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | - | | 1,062 | 15,620 | 7,834 |
| 26 | 341 | Transportation Equipment | 13.30% | 11,000 | | 11,000 | 8,050 | | 8,050 | | 7,093 | 54,806 | 10,474 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 1,610 | | 1,610 | | | - | | 911 | 12,634 | (698) |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | - | | 187 | 5,190 | 1,588 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | - | | (3,944) | (149,395) | (140,282) |
| 35 | | | | | | | | | | | | | |
| 36 | | TOTALS | | 658,016 | - | 658,016 | 75,344 | - | 75,344 | - | 458,023 | 19,775,930 | 2,245,280 |

Vail Water Company
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.14
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2009 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | 17,750 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | | - | | | 11,126 | 397,349 | 63,811 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | | | - | | | 36,063 | 1,126,979 | 279,677 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 546 | | 546 | | | 54,740 | 1,520,837 | 409,348 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | 2,266 | | 2,266 | | | 31,682 | 1,585,212 | 125,657 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 2,995 | | 2,995 | | | 276,420 | 13,822,490 | 1,947,465 |
| 19 | 333 | Services | 3.30% | | | - | | | 411 | 12,451 | 8,893 |
| 20 | 334 | Meters | 3.60% | 33,038 | | 33,038 | 22,935 | | 31,636 | 883,826 | (52,193) |
| 21 | 335 | Hydrants | 3.60% | 3,570 | | 3,570 | | | 17,142 | 477,958 | 38,426 |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | 284 | 7,901 | (950) |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | 236 | 6,553 | 3,254 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | 4,951 | | 4,951 | | | (19) | 2,200 | (20,239) |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | 1,062 | 15,620 | 8,897 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | 7,289 | 54,806 | 17,764 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 409 | | 409 | | | 989 | 13,043 | 291 |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | 187 | 5,190 | 1,775 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | (3,944) | (149,395) | (144,226) |
| 35 | | | | | | | | | | | |
| 36 | | TOTALS | | 47,775 | - | 47,775 | 22,935 | - | 465,304 | 19,800,770 | 2,687,649 |

**Vail Water Company**
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.15
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2010 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | 17,750 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | | - | | | 11,126 | 397,349 | 74,936 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | | | - | | | 36,063 | 1,126,979 | 315,741 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | | - | | | - | - | - |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 1,877 | | 1,877 | | | 54,784 | 1,522,714 | 464,132 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | | | - | | | 31,704 | 1,585,212 | 157,361 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | | | - | | | 276,450 | 13,822,490 | 2,223,915 |
| 19 | 333 | Services | 3.30% | | | - | | | 411 | 12,451 | 9,304 |
| 20 | 334 | Meters | 3.60% | 31,537 | | 31,537 | 11,215 | | 32,184 | 904,148 | (31,224) |
| 21 | 335 | Hydrants | 3.60% | | | - | | | 17,206 | 477,958 | 55,633 |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | 284 | 7,901 | (666) |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | 236 | 6,553 | 3,490 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | | | - | | | 150 | 2,200 | (20,090) |
| 25 | 340.1 | Computers & Software | 6.80% | | | - | | | 1,062 | 15,620 | 9,959 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | 7,289 | 54,806 | 25,053 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | | | - | | | 1,004 | 13,043 | 1,295 |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | 187 | 5,190 | 1,962 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | (3,944) | (149,395) | (148,170) |
| 35 | | | | | | | | | | | |
| 36 | | TOTALS | | 33,414 | - | 33,414 | 11,215 | - | 466,196 | 19,822,969 | 3,142,630 |

**Vail Water Company**
Plant Additions and Retirements

Exhibit
Rebuttal Schedule
Page 3.16
Witness: Bourassa

| Line No. | NARUC Account No. | Description | Allowed Deprec. Rate | 2011 Plant Additions (Per Books) | Plant Adjustments | Adjusted Plant Additions | Plant Retirements (Per Books) | Salvage A/D Only | Depreciation (Calculated) | Plant Balance | Accum. Deprec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | 0.00% | | | - | | | - | - | - |
| 2 | 302 | Franchise Cost | 0.00% | | | - | | | - | - | - |
| 3 | 303 | Land and Land Rights | 0.00% | | | - | | | - | 17,750 | - |
| 4 | 304 | Structures & Improvements | 2.80% | | 1 | 1 | | | 11,126 | 397,350 | 86,062 |
| 5 | 305 | Collecting & Impounding Reservoirs | 0.00% | | | - | | | - | - | - |
| 6 | 306 | Lake, River, Canal Intakes | 0.00% | | | - | | | - | - | - |
| 7 | 307 | Wells & Springs | 3.20% | | | - | | | 36,063 | 1,126,979 | 351,804 |
| 8 | 308 | Infiltration Galleries | 0.00% | | | - | | | - | - | - |
| 9 | 309 | Raw Water Supply Mains | 2.00% | | 2,995 | 2,995 | | | 30 | 2,995 | 30 |
| 10 | 310 | Power Generation Equipment | 0.00% | | | - | | | - | - | - |
| 11 | 311 | Pumping Equipment | 3.60% | 2,756 | (1) | 2,755 | | | 54,867 | 1,525,469 | 519,000 |
| 12 | 320 | Water Treatment Equipment | 2.58% | | | - | | | - | - | - |
| 13 | 320.1 | Water Treatment Plants | 0.00% | | | - | | | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | 0.00% | | | - | | | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipes | 2.00% | | | - | | | 31,704 | 1,585,212 | 189,065 |
| 16 | 330.1 | Storage Tanks | 0.00% | | | - | | | - | - | - |
| 17 | 330.2 | Pressure Tanks | 0.00% | | | - | | | - | - | - |
| 18 | 331 | Transmission & Distribution Mains | 2.00% | 203,539 | (2,995) | 200,544 | | | 278,455 | 14,023,034 | 2,502,370 |
| 19 | 333 | Services | 3.30% | | | - | | | 411 | 12,451 | 9,715 |
| 20 | 334 | Meters | 3.60% | 32,042 | 1 | 32,043 | 13,109 | | 32,890 | 923,082 | (11,443) |
| 21 | 335 | Hydrants | 3.60% | 14,950 | | 14,950 | | | 17,476 | 492,908 | 73,108 |
| 22 | 336 | Backflow Prevention Devices | 3.60% | | | - | | | 284 | 7,901 | (381) |
| 23 | 339 | Other Plant & Misc Equipment | 3.60% | | | - | | | 236 | 6,553 | 3,726 |
| 24 | 340 | Office Furniture & Equipment | 6.80% | | 3 | 3 | | | 150 | 2,203 | (19,940) |
| 25 | 340.1 | Computers & Software | 6.80% | | 1 | 1 | | | 1,062 | 15,621 | 11,021 |
| 26 | 341 | Transportation Equipment | 13.30% | | | - | | | 7,289 | 54,806 | 32,342 |
| 27 | 342 | Stores Equipment | 0.00% | | | - | | | - | - | - |
| 28 | 343 | Tools, Shop & Garage Equipment | 7.70% | 2,602 | | 2,602 | | | 1,104 | 15,645 | 2,399 |
| 29 | 344 | Laboratory Equipment | 0.00% | | | - | | | - | - | - |
| 30 | 345 | Power Operated Equipment | 0.00% | | | - | | | - | - | - |
| 31 | 346 | Communication Equipment | 0.00% | | | - | | | - | - | - |
| 32 | 347 | Miscellaneous Equipment | 3.60% | | | - | | | 187 | 5,190 | 2,148 |
| 33 | 348 | Other Tangible Plant | 0.00% | | | - | | | - | - | - |
| 34 | | 1983 ACC Adjustment to Plant | 2.64% | | | - | | | (1,225) | (149,395) | (149,395) |
| 35 | | | | | | | | | | | |
| 36 | | TOTALS | | 255,889 | 5 | 255,894 | 13,109 | - | 472,110 | 20,065,753 | 3,601,631 |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1-C

Exhibit
Rebuttal Schedule B-2
Page 3.3
Witness: Bourassa

Adjustments to Reconcile to Reconstructed PIS Balance

| Line No. | Acct. No. | Description | Direct Adjusted Orginal Cost | Rebuttal Adjustments | Rebuttal Adjusted Orginal Cost | Rebuttal Plant Per Reconstruction | Adjustment |
|---|---|---|---|---|---|---|---|
| 6 | 301 | Organization Cost | - | - | - | - | - |
| 7 | 302 | Franchise Cost | - | - | - | - | - |
| 8 | 303 | Land and Land Rights | 17,750 | - | 17,750 | 17,750 | - |
| 9 | 304 | Structures and Improvements | 399,328 | (1,978) | 397,350 | 397,350 | - |
| 10 | 305 | Collecting and Impounding Res. | - | - | - | - | - |
| 11 | 306 | Lake River and Other Intakes | - | - | - | - | - |
| 12 | 307 | Wells and Springs | 1,126,979 | - | 1,126,979 | 1,126,979 | - |
| 13 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - |
| 14 | 309 | Supply Mains | 2,995 | - | 2,995 | 2,995 | - |
| 15 | 310 | Power Generation Equipment | - | - | - | - | - |
| 16 | 311 | Electric Pumping Equipment | 1,553,110 | (27,641) | 1,525,469 | 1,525,469 | - |
| 17 | 320 | Water Treatment Equipment | - | - | - | - | - |
| 18 | 320.1 | Water Treatment Plant | - | - | - | - | - |
| 19 | 320.2 | Chemical Solution Feeders | - | - | - | - | - |
| 20 | 330 | Dist. Reservoirs & Standpipe | 1,621,069 | (35,857) | 1,585,212 | 1,585,212 | - |
| 21 | 330.1 | Storage tanks | - | - | - | - | - |
| 22 | 330.2 | Pressure Tanks | - | - | - | - | - |
| 23 | 331 | Trans. and Dist. Mains | 14,023,034 | - | 14,023,034 | 14,023,034 | - |
| 24 | 333 | Services | 12,451 | - | 12,451 | 12,451 | - |
| 25 | 334 | Meters | 923,082 | - | 923,082 | 923,082 | - |
| 26 | 335 | Hydrants | 492,908 | - | 492,908 | 492,908 | - |
| 27 | 336 | Backflow Prevention Devices | 7,901 | - | 7,901 | 7,901 | - |
| 28 | 339 | Other Plant and Misc. Equip. | 6,553 | - | 6,553 | 6,553 | - |
| 29 | 340 | Office Furniture and Fixtures | 29,683 | (27,480) | 2,203 | 2,203 | - |
| 30 | 340.1 | Computers and Software | 15,621 | - | 15,621 | 15,621 | - |
| 31 | 341 | Transportation Equipment | 54,806 | - | 54,806 | 54,806 | - |
| 32 | 342 | Stores Equipment | - | - | - | - | - |
| 33 | 343 | Tools and Work Equipment | 15,645 | - | 15,645 | 15,645 | - |
| 34 | 344 | Laboratory Equipment | - | - | - | - | - |
| 35 | 345 | Power Operated Equipment | - | - | - | - | - |
| 36 | 346 | Communications Equipment | - | - | - | - | - |
| 37 | 347 | Miscellaneous Equipment | 5,190 | - | 5,190 | 5,190 | - |
| 38 | 348 | Other Tangible Plant | - | - | - | - | - |
| 39 | | 1998 ACC Plant Adjustment | (149,395) | - | (149,395) | (149,395) | - |
| 40 | | TOTALS | $ 20,158,709 | $ (92,956) | $ 20,065,753 | $ 20,065,753 | $ - |

SUPPORTING SCHEDULE
B-2, pages 3.1 and 3.2
B-2, pages 3.4 to 3.16

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Accumulated Depreciation

| Line No. | Acct. No. | Description | Direct Adjusted Accum. Depr. | Adjustments A Reclassify Retireed Plant | B Plant Retirements | C Adjustments to Reconcile to Reconstructed Balance | D Intentionally Left Blank | E Intentionally Left Blank | Rebuttal Adjusted Accum. Depr. |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 301 | Organization Cost | - | - | - | - | | | - |
| 7 | 302 | Franchise Cost | - | - | - | - | | | - |
| 8 | 303 | Land and Land Rights | - | - | - | - | | | - |
| 9 | 304 | Structures and Improvements | 88,696 | - | (1,978) | (656) | | | 86,062 |
| 10 | 305 | Collecting and Impounding Res. | - | - | - | - | | | - |
| 11 | 306 | Lake River and Other Intakes | - | - | - | - | | | - |
| 12 | 307 | Wells and Springs | 352,116 | - | - | (312) | | | 351,804 |
| 13 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | | | - |
| 14 | 309 | Supply Mains | 31 | - | - | (1) | | | 30 |
| 15 | 310 | Power Generation Equipment | - | - | - | - | | | - |
| 16 | 311 | Electric Pumping Equipment | 554,754 | 232 | (29,479) | (6,507) | | | 519,000 |
| 17 | 320 | Water Treatment Equipment | - | - | - | - | | | - |
| 18 | 320.1 | Water Treatment Plant | - | - | - | - | | | - |
| 19 | 320.2 | Chemical Solution Feeders | - | - | - | - | | | - |
| 20 | 330 | Dist. Reservoirs & Standpipe | 232,569 | 1,795 | (61,499) | 16,200 | | | 189,065 |
| 21 | 330.1 | Storage tanks | - | - | - | - | | | - |
| 22 | 330.2 | Pressure Tanks | - | - | - | - | | | - |
| 23 | 331 | Trans. and Dist. Mains | 2,506,255 | - | - | (3,885) | | | 2,502,370 |
| 24 | 333 | Services | 9,718 | - | - | (3) | | | 9,715 |
| 25 | 334 | Meters | (11,187) | - | - | (256) | | | (11,443) |
| 26 | 335 | Hydrants | 73,245 | - | - | (137) | | | 73,108 |
| 27 | 336 | Backflow Prevention Devices | (379) | - | - | (2) | | | (381) |
| 28 | 339 | Other Plant and Misc. Equip. | 3,728 | - | - | (2) | | | 3,726 |
| 29 | 340 | Office Furniture and Fixtures | 14,089 | (6,540) | - | (27,488) | | | (19,940) |
| 30 | 340.1 | Computers and Software | 11,025 | - | - | (4) | | | 11,021 |
| 31 | 341 | Transportation Equipment | 32,357 | - | - | (15) | | | 32,342 |
| 32 | 342 | Stores Equipment | - | - | - | - | | | - |
| 33 | 343 | Tools and Work Equipment | 2,404 | - | - | (4) | | | 2,399 |
| 34 | 344 | Laboratory Equipment | - | - | - | - | | | - |
| 35 | 345 | Power Operated Equipment | - | - | - | - | | | - |
| 36 | 346 | Communications Equipment | - | - | - | - | | | - |
| 37 | 347 | Miscellaneous Equipment | 2,150 | - | - | (1) | | | 2,148 |
| 38 | 348 | Other Tangible Plant | - | - | - | - | | | - |
| 39 | | 1998 ACC Plant Adjustment | (149,395) | - | - | - | | | (149,395) |
| 40 | | TOTALS | $ 3,722,176 | $ (4,514) | $ (92,956) | $ (23,075) | $ - | $ - | $ 3,601,631 |
| 41 | | | | | | | | | |
| 42 | | Accumulated Depreciation per Books | | | | | | | $ 3,722,176 |
| 43 | | | | | | | | | |
| 44 | | Increase (decrease) in Accumulated Depreciation | | | | | | | $ (120,545) |
| 45 | | | | | | | | | |
| 46 | | Adjustment to Accumulated Depreciation | | | | | | | $ (120,545) |
| 47 | | | | | | | | | |
| 48 | | SUPPORTING SCHEDULES | | | | | | | |
| 49 | | B-2, pages 4.1 to 4.3 | | | | | | | |
| 50 | | | | | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 -A

Exhibit
Rebuttal Schedule B-2
Page 4.1
Witness: Bourassa

A/D rRelated to Reclassified Retired Plant

| Line No. | Acct. No. | Description | PIS Adjustment | Years (1/2 Conv.) | Depr Rate | A/D Adjustment |
|---|---|---|---|---|---|---|
| 6 | 301 | Organization Cost | - | | | |
| 7 | 302 | Franchise Cost | - | | | |
| 8 | 303 | Land and Land Rights | - | | | |
| 9 | 304 | Structures and Improvements | - | | | |
| 10 | 305 | Collecting and Impounding Res. | - | | | |
| 11 | 306 | Lake River and Other Intakes | - | | | |
| 12 | 307 | Wells and Springs | - | | | |
| 13 | 308 | Infiltration Galleries and Tunnels | - | | | |
| 14 | 309 | Supply Mains | - | | | |
| 15 | 310 | Power Generation Equipment | - | | | |
| 16 | 311 | Electric Pumping Equipment | 1,838 | 3.50 | 3.6% | 232 |
| 17 | 320 | Water Treatment Equipment | - | | | |
| 18 | 320.1 | Water Treatment Plant | - | | | |
| 19 | 320.2 | Chemical Solution Feeders | - | | | |
| 20 | 330 | Dist. Reservoirs & Standpipe | 25,642 | 3.50 | 2.0% | 1,795 |
| 21 | 330.1 | Storage tanks | - | | | |
| 22 | 330.2 | Pressure Tanks | - | | | |
| 23 | 331 | Trans. and Dist. Mains | - | | | |
| 24 | 333 | Services | - | | | |
| 25 | 334 | Meters | - | | | |
| 26 | 335 | Hydrants | - | | | |
| 27 | 336 | Backflow Prevention Devices | - | | | |
| 28 | 339 | Other Plant and Misc. Equip. | - | | | |
| 29 | 340 | Office Furniture and Fixtures | (27,480) | 3.50 | 6.8% | (6,540) |
| 30 | 340.1 | Computers and Software | - | | | |
| 31 | 341 | Transportation Equipment | - | | | |
| 32 | 342 | Stores Equipment | - | | | |
| 33 | 343 | Tools and Work Equipment | - | | | |
| 34 | 344 | Laboratory Equipment | - | | | |
| 35 | 345 | Power Operated Equipment | - | | | |
| 36 | 346 | Communications Equipment | - | | | |
| 37 | 347 | Miscellaneous Equipment | - | | | |
| 38 | 348 | Other Tangible Plant | - | | | |
| 39 | | 1998 ACC Plant Adjustment | - | | | - |
| 40 | | TOTALS | $ - | | | $ (4,514) |

SUPPORTING SCHEDULE
B-2, page 3.1
B-2, pages 3.4 to 3.16

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2-B

Exhibit
Rebuttal Schedule B-2
Page 4.2
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Retirements Not Recorded | | |
| 2 | | | |
| 3 | | | |
| 4 | Acct. | | A/D |
| 5 | No. | Description | Adjustment |
| 6 | 301 | Organization Cost | |
| 7 | 302 | Franchise Cost | |
| 8 | 303 | Land and Land Rights | |
| 9 | 304 | Structures and Improvements | (1,978) |
| 10 | 305 | Collecting and Impounding Res. | |
| 11 | 306 | Lake River and Other Intakes | |
| 12 | 307 | Wells and Springs | |
| 13 | 308 | Infiltration Galleries and Tunnels | |
| 14 | 309 | Supply Mains | |
| 15 | 310 | Power Generation Equipment | |
| 16 | 311 | Electric Pumping Equipment | (29,479) |
| 17 | 320 | Water Treatment Equipment | |
| 18 | 320.1 | Water Treatment Plant | |
| 19 | 320.2 | Chemical Solution Feeders | |
| 20 | 330 | Dist. Reservoirs & Standpipe | (61,499) |
| 21 | 330.1 | Storage tanks | |
| 22 | 330.2 | Pressure Tanks | |
| 23 | 331 | Trans. and Dist. Mains | |
| 24 | 333 | Services | |
| 25 | 334 | Meters | |
| 26 | 335 | Hydrants | |
| 27 | 336 | Backflow Prevention Devices | |
| 28 | 339 | Other Plant and Misc. Equip. | |
| 29 | 340 | Office Furniture and Fixtures | |
| 30 | 340.1 | Computers and Software | |
| 31 | 341 | Transportation Equipment | |
| 32 | 342 | Stores Equipment | |
| 33 | 343 | Tools and Work Equipment | |
| 34 | 344 | Laboratory Equipment | |
| 35 | 345 | Power Operated Equipment | |
| 36 | 346 | Communications Equipment | |
| 37 | 347 | Miscellaneous Equipment | |
| 38 | 348 | Other Tangible Plant | |
| 39 | | 1998 ACC Plant Adjustment | |
| 40 | | TOTALS | $ (92,956) |
| 41 | | | |
| 42 | | | |
| 43 | SUPPORTING SCHEDULE | | |
| 44 | B-2, page 3.2 | | |
| 45 | B-2, pages 3.4 to 3.16 | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2-C

Exhibit
Schedule B-2
Page 4.3
Witness: Bourassa

*Adjustments to Reconcile to Reconstructed A/D Balance*

| Line No. | Acct. No. | Description | Direct Adjusted Orginal Cost | Rebuttal Adjustments | Rebuttal Adjusted Orginal Cost | Rebuttal Plant Per Reconstruction | Difference |
|---|---|---|---|---|---|---|---|
| 6 | 301 | Organization Cost | - | - | - | - | - |
| 7 | 302 | Franchise Cost | - | - | - | - | - |
| 8 | 303 | Land and Land Rights | - | - | - | - | - |
| 9 | 304 | Structures and Improvements | 88,696 | (1,978) | 86,718 | 86,062 | (656) |
| 10 | 305 | Collecting and Impounding Res. | - | - | - | - | - |
| 11 | 306 | Lake River and Other Intakes | - | - | - | - | - |
| 12 | 307 | Wells and Springs | 352,116 | - | 352,116 | 351,804 | (312) |
| 13 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - |
| 14 | 309 | Supply Mains | 31 | - | 31 | 30 | (1) |
| 15 | 310 | Power Generation Equipment | - | - | - | - | - |
| 16 | 311 | Electric Pumping Equipment | 554,754 | (29,247) | 525,507 | 519,000 | (6,507) |
| 17 | 320 | Water Treatment Equipment | - | - | - | - | - |
| 18 | 320.1 | Water Treatment Plant | - | - | - | - | - |
| 19 | 320.2 | Chemical Solution Feeders | - | - | - | - | - |
| 20 | 330 | Dist. Reservoirs & Standpipe | 232,569 | (59,704) | 172,865 | 189,065 | 16,200 |
| 21 | 330.1 | Storage tanks | - | - | - | - | - |
| 22 | 330.2 | Pressure Tanks | - | - | - | - | - |
| 23 | 331 | Trans. and Dist. Mains | 2,506,255 | - | 2,506,255 | 2,502,370 | (3,885) |
| 24 | 333 | Services | 9,718 | - | 9,718 | 9,715 | (3) |
| 25 | 334 | Meters | (11,187) | - | (11,187) | (11,443) | (256) |
| 26 | 335 | Hydrants | 73,245 | - | 73,245 | 73,108 | (137) |
| 27 | 336 | Backflow Prevention Devices | (379) | - | (379) | (381) | (2) |
| 28 | 339 | Other Plant and Misc. Equip. | 3,728 | - | 3,728 | 3,726 | (2) |
| 29 | 340 | Office Furniture and Fixtures | 14,089 | (6,540) | 7,548 | (19,940) | (27,488) |
| 30 | 340.1 | Computers and Software | 11,025 | - | 11,025 | 11,021 | (4) |
| 31 | 341 | Transportation Equipment | 32,357 | - | 32,357 | 32,342 | (15) |
| 32 | 342 | Stores Equipment | - | - | - | - | - |
| 33 | 343 | Tools and Work Equipment | 2,404 | - | 2,404 | 2,399 | (4) |
| 34 | 344 | Laboratory Equipment | - | - | - | - | - |
| 35 | 345 | Power Operated Equipment | - | - | - | - | - |
| 36 | 346 | Communications Equipment | - | - | - | - | - |
| 37 | 347 | Miscellaneous Equipment | 2,150 | - | 2,150 | 2,148 | (1) |
| 38 | 348 | Other Tangible Plant | - | - | - | - | - |
| 39 | | 1998 ACC Plant Adjustment | (149,395) | - | (149,395) | (149,395) | - |
| 40 | | TOTALS | $ 3,722,176 | $ (97,470) | $ 3,624,706 | $ 3,601,631 | $ (23,075) |

SUPPORTING SCHEDULE
B-2, pages 4.1 and 4.2
B-2, pages 3.4 to 3.16

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment 3

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Contributions-in-Aid of Construction (CIAC) and Accumulated Amortization

| Line No. | | | Gross CIAC | Accumulated Amortization |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | Computed balance at 12/31/2011 | $ 3,299,762 | | $ 603,756 |
| 6 | Less: Unexpended HUF's | (369,535) | | |
| 7 | Adjusted CIAC Balance | | $ 2,930,228 | |
| 8 | | | | |
| 9 | Adjusted balance at 12/31/2011 | | $ 2,930,228 | $ 605,832 |
| 10 | | | | |
| 11 | Increase (decrease) | | $ - | $ (2,076) |
| 12 | | | | |
| 13 | | | | |
| 14 | Adjustment to CIAC/AA CIAC | | $ - | $ 2,076 |
| 15 | Label | | 3a | 3b |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | SUPPORTING SCHEDULES | | | |
| 22 | E-1 | | | |
| 23 | B-2, page 5.1 | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| 35 | | | | |
| 36 | | | | |
| 37 | | | | |
| 38 | | | | |
| 39 | | | | |
| 40 | | | | |
| 41 | | | | |
| 42 | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Contributions-in-aid of Construction (CIAC)

Exhibit
Rebuttal Schedule B-2
Page 5.1
Witness: Bourassa

| Line No. | | Decision 62450 Balance 12/31/1998 | 1999 Additions | 1999 Balance 12/31/1999 | 2000 Additions | 2000 Balance 12/31/2000 | 2001 Additions | 2001 Balance 12/31/2001 | 2002 Additions | 2002 Balance 12/31/2002 | 2003 Additions | 2003 Balance 12/31/2003 | 2004 Additions | 2004 Balance 12/31/2004 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | CIAC | 359,686 | 116,204 | 475,890 | 23,473 | 499,363 | 185,874 | 685,237 | 242,829 | 928,066 | 62,830 | 990,896 | 293,831 | 1,284,727 |
| 6 | Less: Unexpended HUF's | | | (32,646) | | (48,690) | | (59,190) | | (109,590) | | (160,518) | | (377,893) |
| 7 | Amortizable Balance | 359,686 | | 443,244 | | 450,673 | | 626,047 | | 818,477 | | 830,378 | | 906,835 |
| 8 | | | | | | | | | | | | | | |
| 9 | Amortization Decision | 176,681 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| 11 | Amortization Rate | | | 2.39% | | 2.53% | | 2.02% | | 2.01% | | 2.20% | | 2.03% |
| 12 | Amortization (1/2 yr convention) | | | 10,594 | | 11,415 | | 12,622 | | 16,462 | | 18,273 | | 18,440 |
| 13 | Accumulated Amortization | | | 187,275 | | 198,691 | | 211,312 | | 227,774 | | 246,047 | | 264,488 |
| 14 | | | | | | | | | | | | | | |
| 15 | Net CIAC | 183,005 | 116,204 | 288,615 | 23,473 | 300,672 | 185,874 | 473,924 | 242,829 | 700,292 | 62,830 | 744,849 | 293,831 | 1,020,240 |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |

| Line No. | | 2005 Additions | 2005 Balance 12/31/2005 | 2006 Additions | 2006 Balance 12/31/2006 | 2007 Additions | 2007 Balance 12/31/2007 | 2008 Additions | 2008 Balance 12/31/2008 | 2009 Additions | 2009 Balance 12/31/2009 | 2010 Additions | 2010 Balance 12/31/2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | CIAC | 488,618 | 1,773,345 | 90,156 | 1,863,501 | 100,722 | 1,964,223 | 537,706 | 2,501,929 | 212,688 | 2,714,617 | 179,144 | 2,893,761 |
| 25 | Less: Unexpended HUF's | | (476,568) | | (246,286) | | (216,884) | | (241,597) | | (282,001) | | (322,405) |
| 26 | Amortizable Balance | | 1,296,777 | | 1,617,215 | | 1,747,338 | | 2,260,333 | | 2,432,617 | | 2,571,357 |
| 27 | | | | | | | | | | | | | |
| 28 | Amortization Rate | | 2.12% | | 2.25% | | 2.15% | | 2.32% | | 2.33% | | 2.34% |
| 29 | Amortization (1/2 yr convention) | | 27,437 | | 36,462 | | 37,616 | | 52,398 | | 56,787 | | 60,074 |
| 30 | Accumulated Amortization | | 291,925 | | 328,387 | | 366,003 | | 418,401 | | 475,188 | | 535,262 |
| 31 | | | | | | | | | | | | | |
| 32 | Net CIAC | 488,618 | 1,481,421 | 90,156 | 1,535,114 | 100,722 | 1,598,220 | 537,706 | 2,083,528 | 212,688 | 2,239,429 | 179,144 | 2,358,499 |
| 33 | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | |

| Line No. | | 2011 Additions | 2011 Balance 12/31/2011 |
|---|---|---|---|
| 41 | CIAC | 406,001 | 3,299,762 |
| 42 | Less: Unexpended HUF's | | (369,535) |
| 43 | Amortizable Balance | | 2,930,228 |
| 44 | | | |
| 45 | Amortization Rate | | 2.34% |
| 46 | Amortization (1/2 yr convention) | | 68,493 |
| 47 | Accumulated Amortization | | 603,756 |
| 48 | | | |
| 49 | Net CIAC | 406,001 | 2,696,007 |
| 50 | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Original Cost Rate Base Proforma Adjustments
Adjustment 4

Exhibit
Rebuttal Schedule B-2
Page 5
Witness: Bourassa

Deferred CAP Charges

| Line No. | | |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | Deferred CAP Charges per Rebuttal | $ 1,081,072 |
| 6 | Deferred CAP Charges per Direct | 1,104,206 |
| 7 | Increase (decrease) in Deferred CAP Charges | $ (23,134) |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | Adjustment to Deferred CAP Charges | $ (23,134) |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | SUPPORTING SCHEDULES | |
| 22 | Staff Schedule JMM-8 | |
| 23 | Testimony | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| 32 | | |
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| 37 | | |
| 38 | | |
| 39 | | |
| 40 | | |
| 41 | | |
| 42 | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Computation of Working Capital

Exhibit
Rebuttal Schedule B-5
Page 1
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Cash Working Capital (1/8 of Allowance | | |
| 2 | Operation and Maintenance Expense) | $ | 102,794 |
| 3 | Pumping Power (1/24 of Pumping Power) | | 5,685 |
| 4 | Purchased Water (1/24 of Purchased Water) | | 8,326 |
| 5 | Prepaid Expenses | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | Total Working Capital Allowance | $ | 116,805 |
| 10 | | | |
| 11 | | | |
| 12 | Working Capital Requested | $ | - |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | Adjusted Test Year |
| 18 | Total Operating Expense | $ | 1,939,628 |
| 19 | Less: | | |
| 20 | Income Tax | $ | 112,385 |
| 21 | Property Tax | | 103,681 |
| 22 | Depreciation | | 564,948 |
| 23 | Purchased Water | | 199,817 |
| 24 | Pumping Power | | 136,444 |
| 25 | Allowable Expenses | $ | 822,354 |
| 26 | 1/8 of allowable expenses | $ | 102,794 |
| 27 | | | |
| 28 | | | |
| 29 | SUPPORTING SCHEDULES: | RECAP SCHEDULES: | |
| 30 | C-1 | B-1 | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 1
Witness: Bourassa

| Line No. | | Test Year Adjusted Results | Adjustment | Rebuttal Test Year Adjusted Results | Proposed Rate Increase | Rebuttal Adjusted with Rate Increase |
|---|---|---|---|---|---|---|
| 1 | **Revenues** | | | | | |
| 2 | Metered Water Revenues | $ 2,120,110 | $ - | $ 2,120,110 | $ (78,606) | $ 2,041,504 |
| 3 | Unmetered Water Revenues | - | - | - | | - |
| 4 | Other Water Revenues | 214,637 | - | 214,637 | | 214,637 |
| 5 | | $ 2,334,747 | $ - | $ 2,334,747 | $ (78,606) | $ 2,256,141 |
| 6 | **Operating Expenses** | | | | | |
| 7 | Salaries and Wages | $ 276,984 | - | $ 276,984 | - | $ 276,984 |
| | Employee Benefits | 12,757 | - | 12,757 | - | 12,757 |
| 8 | Purchased Water | 199,817 | - | 199,817 | - | 199,817 |
| 9 | Purchased Power | 218,584 | (82,140) | 136,444 | - | 136,444 |
| 10 | Chemicals | 1,732 | - | 1,732 | - | 1,732 |
| 11 | Materials and Supplies | 14,372 | - | 14,372 | - | 14,372 |
| 12 | Repairs and Maintenance | 28,876 | - | 28,876 | - | 28,876 |
| 13 | Office Supplies and Expense | 73,301 | - | 73,301 | - | 73,301 |
| 14 | Contractual Services - Engineering | 6,270 | - | 6,270 | - | 6,270 |
| 15 | Contractual Services - Accounting | 10,473 | - | 10,473 | - | 10,473 |
| 16 | Contractual Services - Legal | 12,933 | - | 12,933 | - | 12,933 |
| 17 | Contractual Services - Mgmt Fees | 211,138 | - | 211,138 | - | 211,138 |
| 18 | Contractual Services - Other | 15,976 | - | 15,976 | - | 15,976 |
| 19 | Contractual Services - Water Testing | 3,906 | - | 3,906 | - | 3,906 |
| 20 | Rents - Building/Real Property | 7,920 | - | 7,920 | - | 7,920 |
| 21 | Rents - Equipment | 8,314 | - | 8,314 | - | 8,314 |
| 22 | Transportation Expenses | 33,154 | - | 33,154 | - | 33,154 |
| 23 | Insurance - Vehicle | 5,111 | - | 5,111 | - | 5,111 |
| 24 | Insurance - General Liability | 32,130 | - | 32,130 | - | 32,130 |
| 25 | Insurance - Worker's Comp | 3,111 | - | 3,111 | - | 3,111 |
| 26 | Reg. Comm. Exp. | 11,946 | - | 11,946 | - | 11,946 |
| 27 | Reg. Comm. Exp. - Rate Case | 30,000 | - | 30,000 | - | 30,000 |
| 28 | Bad Debt Expense | 6,856 | - | 6,856 | - | 6,856 |
| 29 | Miscellaneous Expense | 11,424 | (1,311) | 10,113 | - | 10,113 |
| 30 | Depreciation Expense | 570,649 | (5,701) | 564,948 | - | 564,948 |
| 31 | Taxes Other Than Income | - | - | - | - | - |
| 32 | Property Taxes | 103,681 | (0) | 103,681 | (1,169) | 102,511 |
| 33 | Income Tax | 106,244 | 6,141 | 112,385 | (17,148) | 95,237 |
| 34 | Interest on Meter Deposits | 4,981 | - | 4,981 | | 4,981 |
| 35 | **Total Operating Expenses** | $ 2,022,639 | $ (83,011) | $ 1,939,628 | $ (18,317) | $ 1,921,311 |
| 36 | **Operating Income** | $ 312,107 | $ 83,011 | $ 395,119 | $ (60,289) | $ 334,830 |
| 37 | **Other Income (Expense)** | | | | | |
| 38 | Interest Income | 33,771 | - | 33,771 | | 33,771 |
| 39 | Other income | 6,090 | - | 6,090 | | 6,090 |
| 40 | Interest Expense | - | - | - | | - |
| 41 | Other Expense | - | - | - | | - |
| 42 | Gain (loss) on Disposal of Equip | (10,496) | - | (10,496) | | (10,496) |
| 43 | **Total Other Income (Expense)** | $ 29,364 | $ - | $ 29,364 | $ - | $ 29,364 |
| 44 | **Net Profit (Loss)** | $ 341,472 | $ 83,011 | $ 424,483 | $ (60,289) | $ 364,194 |
| 45 | | | | | | |
| 46 | SUPPORTING SCHEDULES: | | | | RECAP SCHEDULES: | |
| 47 | C-1, page 2 | | | | A-1 | |
| 48 | | | | | | |
| 49 | | | | | | |

Vail **Water Company**
Test Year Ended December 31, 2011
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 2.1
Witness: Bourassa

| Line No. | | LABEL>>>>> Test Year Adjusted Results | 1 Depreciation | 2 Property Taxes | 3 Mgmnt Fees | 4 Water Testing Expense | 5 Misc. Expense | 6 Intentionally Left Blank |
|---|---|---|---|---|---|---|---|---|
| 1 | **Revenues** | | | | | | | |
| 2 | Metered Water Revenues | $ 2,120,110 | | | | | | |
| 3 | Unmetered Water Revenues | - | | | | | | |
| 4 | Other Water Revenues | 214,637 | | | | | | |
| 5 | | $ 2,334,747 | $ - | $ - | $ - | $ - | $ - | $ - |
| 6 | **Operating Expenses** | | | | | | | |
| 7 | Salaries and Wages | $ 276,984 | | | | | | |
| 8 | Employee Benefits | 12,757 | | | | | | |
| 9 | Purchased Water | 199,817 | | | | | | |
| 10 | Purchased Power | 218,584 | | | (91,901) | 9,761 | | |
| 11 | Chemicals | 1,732 | | | | | | |
| 12 | Materials and Supplies | 14,372 | | | | | | |
| 13 | Repairs and Maintenance | 28,876 | | | | | | |
| 14 | Office Supplies and Expense | 73,301 | | | | | | |
| 15 | Contractual Services - Engineering | 6,270 | | | | | | |
| 16 | Contractual Services - Accounting | 10,473 | | | | | | |
| 17 | Contractual Services - Legal | 12,933 | | | | | | |
| 18 | Contractual Services - Mgmt Fees | 211,138 | | | | | | |
| 19 | Contractual Services - Other | 15,976 | | | | | | |
| 20 | Contr. Services - Water Testing | 3,906 | | | | | | |
| 21 | Rents - Building/Real Property | 7,920 | | | | | | |
| 22 | Rents - Equipment | 8,314 | | | | | | |
| 23 | Transportation Expenses | 33,154 | | | | | | |
| 24 | Insurance - Vehicle | 5,111 | | | | | | |
| 25 | Insurance - General Liability | 32,130 | | | | | | |
| 26 | Insurance - Worker's Comp | 3,111 | | | | | | |
| 27 | Reg. Comm. Exp. | 11,946 | | | | | | |
| 28 | Reg. Comm. Exp. - Rate Case | 30,000 | | | | | | |
| 29 | Bad Debt Expense | 6,856 | | | | | | |
| 30 | Miscellaneous Expense | 11,424 | | | | | (1,311) | |
| 31 | Depreciation Expense | 570,649 | (5,701) | | | | | |
| 32 | Taxes Other Than Income | - | | | | | | |
| 33 | Property Taxes | 103,681 | | (0) | | | | |
| 34 | Income Tax | 106,244 | | | | | | |
| 35 | Interest on Customer Sec. Dep. | 4,981 | | | | | | |
| 36 | **Total Operating Expenses** | $ 2,022,639 | $ (5,701) | $ (0) | $ (91,901) | $ 9,761 | $ (1,311) | $ - |
| 37 | **Operating Income** | $ 312,107 | $ 5,701 | $ 0 | $ 91,901 | $ (9,761) | $ 1,311 | $ - |
| 38 | **Other Income (Expense)** | | | | | | | |
| 39 | Interest Income | 33,771 | | | | | | |
| 40 | Other income | 6,090 | | | | | | |
| 41 | Interest Expense | - | | | | | | |
| 42 | Other Expense | - | | | | | | |
| 43 | Gain (loss) on Disposal of Equip | (10,496) | | | | | | |
| 44 | **Total Other Income (Expense)** | $ 29,364 | $ - | $ - | $ - | $ - | $ - | $ - |
| 45 | **Net Profit (Loss)** | $ 341,472 | $ 5,701 | $ 0 | $ 91,901 | $ (9,761) | $ 1,311 | $ - |
| 46 | | | | | | | | |
| 47 | SUPPORTING SCHEDULES: | | | | | | | |
| 48 | C-2 | | | | | | | |
| 49 | E-2 | | | | | | | |

Vail **Water Company**
Test Year Ended December 31, 2011
Income Statement

Exhibit
Rebuttal Schedule C-1
Page 2.2
Witness: Bourassa

| Line No. | | 7 Intentionally Left Blank | 8 Intentionally Left Blank | 9 Intentionally Left Blank | 10 Income tax | Rebuttal Test Year Adjusted Results | Proposed Rate Increase | Rebuttal Adjusted with Rate Increase |
|---|---|---|---|---|---|---|---|---|
| 1 | **Revenues** | | | | | | | |
| 2 | Metered Water Revenues | | | | | $ 2,120,110 | $ (78,606) | $ 2,041,504 |
| 3 | Unmetered Water Revenues | | | | | - | | - |
| 4 | Other Water Revenues | | | | | 214,637 | | 214,637 |
| 5 | | $ - | $ - | $ - | $ - | $ 2,334,747 | $ (78,606) | $ 2,256,141 |
| 6 | **Operating Expenses** | | | | | | | |
| 7 | Salaries and Wages | | | - | | $ 276,984 | | $ 276,984 |
| 8 | Employee Benefits | | | | | 12,757 | | 12,757 |
| 9 | Purchased Water | | | | | 199,817 | | 199,817 |
| 10 | Purchased Power | | | | | 136,444 | | 136,444 |
| 11 | Chemicals | | | | | 1,732 | | 1,732 |
| 12 | Materials and Supplies | | | | | 14,372 | | 14,372 |
| 13 | Repairs and Maintenance | | | | | 28,876 | | 28,876 |
| 14 | Office Supplies and Expense | | | | | 73,301 | | 73,301 |
| 15 | Contractual Services - Engineering | | | | | 6,270 | | 6,270 |
| 16 | Contractual Services - Accounting | | | | | 10,473 | | 10,473 |
| 17 | Contractual Services - Legal | | | | | 12,933 | | 12,933 |
| 18 | Contractual Services - Mgmt Fees | - | | | | 211,138 | | 211,138 |
| 19 | Contractual Services - Other | | | | | 15,976 | | 15,976 |
| 20 | Contr. Services - Water Testing | | | | | 3,906 | | 3,906 |
| 21 | Rents - Building/Real Property | | | | | 7,920 | | 7,920 |
| 22 | Rents - Equipment | | | | | 8,314 | | 8,314 |
| 23 | Transportation Expenses | | | | | 33,154 | | 33,154 |
| 24 | Insurance - Vehicle | | | | | 5,111 | | 5,111 |
| 25 | Insurance - General Liability | | | | | 32,130 | | 32,130 |
| 26 | Insurance - Worker's Comp | | | | | 3,111 | | 3,111 |
| 27 | Reg. Comm. Exp. | | | | | 11,946 | | 11,946 |
| 28 | Reg. Comm. Exp. - Rate Case | | | | | 30,000 | | 30,000 |
| 29 | Bad Debt Expense | | | | | 6,856 | | 6,856 |
| 30 | Miscellaneous Expense | | | | | 10,113 | | 10,113 |
| 31 | Depreciation Expense | | | | | 564,948 | | 564,948 |
| 32 | *Taxes Other Than Income* | | | | | - | | - |
| 33 | Property Taxes | | | | | 103,681 | (1,169) | 102,511 |
| 34 | Income Tax | | | | 6,141 | 112,385 | (17,148) | 95,237 |
| 35 | Interest on Customer Sec. Dep. | | | | | 4,981 | | 4,981 |
| 36 | **Total Operating Expenses** | $ - | $ - | $ - | $ 6,141 | $ 1,939,628 | $ (18,317) | $ 1,921,311 |
| 37 | **Operating Income** | $ - | $ - | $ - | $ (6,141) | $ 395,119 | $ (60,289) | $ 334,830 |
| 38 | **Other Income (Expense)** | | | | | | | |
| 39 | Interest Income | | | | | 33,771 | | 33,771 |
| 40 | Other income | | | | | 6,090 | | 6,090 |
| 41 | Interest Expense | | | | | - | | - |
| 42 | Other Expense | | | | | - | | - |
| 43 | Gain (loss) on Disposal of Equip | | | | | (10,496) | | (10,496) |
| 44 | **Total Other Income (Expense)** | $ - | $ - | $ - | $ - | $ 29,364 | $ - | $ 29,364 |
| 45 | **Net Profit (Loss)** | $ - | $ - | $ - | $ (6,141) | $ 424,483 | $ (60,289) | $ 364,194 |
| 46 | | | | | | | | |
| 47 | SUPPORTING SCHEDULES: | | | | | | | |
| 48 | C-2 | | | | | | | |
| 49 | E-2 | | | | | | | |

RECAP SCHEDULES:
C-1, page 1

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustments to Revenues and Expenses

Exhibit
Rebuttal Schedule C-2
Page 1
Witness: Bourassa

| Line No. | | Adjustments to Revenues and Expenses | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Subtotal |
| | | Depreciation Expense | Property Taxes | Mgmnt Fees | Water Testing Expense | Misc. Expense | Intentionally Left Blank | |
| 4 | Revenues | | | | | | - | - |
| 6 | Expenses | (5,701) | (0) | (91,901) | 9,761 | (1,311) | | (89,152) |
| 8 | Operating | | | | | | | |
| 9 | Income | 5,701 | 0 | 91,901 | (9,761) | 1,311 | - | 89,152 |
| 11 | Interest | | | | | | | |
| 12 | Expense | | | | | | | - |
| 13 | Other | | | | | | | |
| 14 | Income / | | | | | | | - |
| 15 | Expense | | | | | | | |
| 17 | Net Income | 5,701 | 0 | 91,901 | (9,761) | 1,311 | - | 89,152 |

| | | Adjustments to Revenues and Expenses | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 7 | 8 | 9 | 10 | 11 | 12 | Subtotal |
| | | Intentionally Left Blank | Intentionally Left Blank | Intentionally Left Blank | Income tax | | | |
| 25 | Revenues | | | | | | | - |
| 27 | Expenses | - | - | - | 6,141 | | | (83,011) |
| 29 | Operating | | | | | | | |
| 30 | Income | - | - | - | (6,141) | - | - | 83,011 |
| 32 | Interest | | | | | | | |
| 33 | Expense | | - | | | | | - |
| 34 | Other | | | | | | | |
| 35 | Income / | | - | | | | | - |
| 36 | Expense | | | | | | | |
| 38 | Net Income | - | - | - | (6,141) | - | - | 83,011 |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Depreciation Expense

| Line No. | Acct. No. | Description | Adjusted Original Cost | Non-Depreciable or Fully Depreciated Plant | Adjusted Original Cost | Proposed Rates | Rebuttal Depreciation Expense |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | 301 | Organization Cost | - | | - | 0.00% | - |
| 6 | 302 | Franchise Cost | - | | - | 0.00% | - |
| 7 | 303 | Land and Land Rights | 17,750 | | 17,750 | 0.00% | - |
| 8 | 304 | Structures and Improvements | 397,350 | | 397,350 | 3.33% | 13,232 |
| 9 | 305 | Collecting and Impounding Res. | - | | - | 2.50% | - |
| 10 | 306 | Lake River and Other Intakes | - | | - | 2.50% | - |
| 11 | 307 | Wells and Springs | 1,126,979 | | 1,126,979 | 3.33% | 37,528 |
| 12 | 308 | Infiltration Galleries and Tunnels | - | | - | 6.67% | - |
| 13 | 309 | Supply Mains | 2,995 | | 2,995 | 2.00% | 60 |
| 14 | 310 | Power Generation Equipment | - | | - | 5.00% | - |
| 15 | 311 | Electric Pumping Equipment | 1,525,469 | | 1,525,469 | 12.50% | 190,684 |
| 16 | 320 | Water Treatment Equipment | - | | - | 3.33% | - |
| 17 | 320.1 | Water Treatment Plant | - | | - | 3.33% | - |
| 18 | 320.2 | Chemical Solution Feeders | - | | - | 20.00% | - |
| 19 | 330 | Dist. Reservoirs & Standpipe | 1,585,212 | | 1,585,212 | 2.22% | 35,192 |
| 20 | 330.1 | Storage tanks | - | | - | 2.22% | - |
| 21 | 330.2 | Pressure Tanks | - | | - | 5.00% | - |
| 22 | 331 | Trans. and Dist. Mains | 14,023,034 | | 14,023,034 | 2.00% | 280,461 |
| 23 | 333 | Services | 12,451 | | 12,451 | 3.33% | 415 |
| 24 | 334 | Meters | 923,082 | | 923,082 | 8.33% | 76,893 |
| 25 | 335 | Hydrants | 492,908 | | 492,908 | 2.00% | 9,858 |
| 26 | 336 | Backflow Prevention Devices | 7,901 | | 7,901 | 6.67% | 527 |
| 27 | 339 | Other Plant and Misc. Equip. | 6,553 | | 6,553 | 6.67% | 437 |
| 28 | 340 | Office Furniture and Fixtures | 2,203 | | 2,203 | 6.67% | 147 |
| 29 | 340.1 | Computers and Software | 15,621 | | 15,621 | 20.00% | 3,124 |
| 30 | 341 | Transportation Equipment | 54,806 | | 54,806 | 20.00% | 10,961 |
| 31 | 342 | Stores Equipment | - | | - | 4.00% | - |
| 32 | 343 | Tools and Work Equipment | 15,645 | | 15,645 | 5.00% | 782 |
| 33 | 344 | Laboratory Equipment | - | | - | 10.00% | - |
| 34 | 345 | Power Operated Equipment | - | | - | 5.00% | - |
| 35 | 346 | Communications Equipment | - | | - | 10.00% | - |
| 36 | 347 | Miscellaneous Equipment | 5,190 | | 5,190 | 10.00% | 519 |
| 37 | 348 | Other Tangible Plant | (149,395) | 149,395 | - | 2.64% | - |
| 38 | | TOTALS | $ 20,065,753 | $ 149,395 | $ 20,215,148 | | $ 660,819 |
| 39 | | | | | | | |
| 40 | | | | | Gross CIAC | Amort. Rate | |
| 41 | | Less: Amortization of Contributions | | | $ 2,930,228 | 3.2718% | $ (95,871) |
| 42 | | Total Depreciation Expense | | | | | $ 564,948 |
| 43 | | | | | | | |
| 44 | | Adjusted Test Year Depreciation Expense | | | | | 570,649 |
| 45 | | | | | | | |
| 46 | | Increase (decrease) in Depreciation Expense | | | | | (5,701) |
| 47 | | | | | | | |
| 48 | | Adjustment to Revenues and/or Expenses | | | | | $ (5,701) |
| 49 | | | | | | | |
| 50 | | SUPPORTING SCHEDULE | | | | | |
| 51 | | B-2, page 3 | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Property Taxes

| Line No. | DESCRIPTION | Test Year as adjusted | Company Recommended |
|---|---|---|---|
| 1 | Company Adjusted Test Year Revenues | $ 2,334,747 | $ 2,334,747 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 * Line 2) | 4,669,494 | 4,669,494 |
| 4 | Company Recommended Revenue | 2,334,747 | 2,256,141 |
| 5 | Subtotal (Line 4 + Line 5) | 7,004,241 | 6,925,635 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 2,334,747 | 2,308,545 |
| 8 | Department of Revenue Mutilplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 4,669,494 | 4,617,090 |
| 10 | Plus: 10% of CWIP - 2010[1] | - | - |
| 11 | Less: Net Book Value of Licensed Vehicles | 22,464 | 22,464 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 4,647,029 | 4,594,626 |
| 13 | Assessment Ratio | 20.0% | 20.0% |
| 14 | Assessment Value (Line 12 * Line 13) | 929,406 | 918,925 |
| 15 | Composite Property Tax Rate - Obtained from ADOR | 11.1556% | 11.1556% |
| 16 | Test Year Adjusted Property Tax Expense (Line 14 * Line 15) | $ 103,681 | $ 102,511 |
| 17 | Tax on Parcels | - | - |
| 18 | Total Property Taxes (Line 16 + Line 17) | $ 103,681 | |
| 19 | Test Year Property Taxes | $ 103,681 | |
| 20 | Adjustment to Test Year Property Taxes (Line 18 - Line 19) | **$ (0)** | |
| 21 | | | |
| 22 | Property Tax on Company Recommended Revenue (Line 16 + Line 17) | | $ 102,511 |
| 23 | Company Test Year Adjusted Property Tax Expense (Line 18) | | $ 103,681 |
| 24 | Increase in Property Tax Due to Increase in Revenue Requirement | | **$ (1,169)** |
| 25 | | | |
| 26 | Increase in Property Tax Due to Increase in Revenue Requirement (Line 24) | | $ (1,169) |
| 27 | Increase in Revenue Requirement | | $ (78,606) |
| 28 | Increase in Property Tax Per Dollar Increase in Revenue (Line 26 / Line 27) | | 1.48741% |
| 29 | | | |
| 30 | | | |
| 31 | [1] Intentionally excluded test year CWP. | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 3

Exhibit
Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Contractual Servioces - Management Fees

| Line No. | | | |
|---|---|---|---|
| 1 | | | |
| 2 | Number of test year billings | | 45,819 |
| 3 | Additional billings from revenue annualization | | 585 |
| 4 | | | |
| 5 | Total adjusted test year number of billings | | 46,404 |
| 6 | | | |
| 7 | | | |
| 8 | Revised Cost per bill | $ | 2.73 |
| 9 | | | |
| 10 | Total Cost | $ | 126,683 |
| 11 | | | |
| 12 | Direct adjusted management fees | $ | 218,584 |
| 13 | | | |
| 14 | Increase (decrease) in Contractual Services - Management Fees | $ | (91,901) |
| 15 | | | |
| 16 | | | |
| 17 | Adjustment to Revenue and/or Expense | $ | (91,901) |
| 18 | | | |
| 19 | REFERENCE | | |
| 20 | Work papers | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Water Testing Expnese

| Line No. | | | |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | Increase (decrease) in water testing expense | $ | 9,761 |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | Total increase(decrease) in water testing expense | $ | 9,761 |
| 9 | | | |
| 10 | | | |
| 11 | Adjustment to Revenue and/or Expense | $ | 9,761 |
| 12 | | | |
| 13 | SUPPORTING SCHEDULES | | |
| 14 | Staff Adjustment #2 | | |
| 15 | Testimony | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Rebuttal Schedule C-2
Page 6
Witness: Bourassa

Miscellaneous Expense

| Line No. | | |
|---|---|---|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | Increase (decrease) in miscellaneouse expense | $ (1,311) |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | Total increase(decrease) in miscellaneous expense | $ (1,311) |
| 9 | | |
| 10 | | |
| 11 | Adjustment to Revenue and/or Expense | $ (1,311) |
| 12 | | |
| 13 | SUPPORTING SCHEDULES | |
| 14 | Staff Adjustment #3 | |
| 15 | Testimony | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
Rebuttal Schedule C-2
Page 7
Witness: Bourassa

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| Line No. |
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**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Rebuttal Schedule C-2
Page 8
Witness: Bourassa

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| Line No. | |
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**Vail Water Company**
Test Year Ended December 31, 2001
Adjustment to Revenues and Expenses
Adjustment Number 8

Exhibit
Rebuttal Schedule C-2
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Witness: Bourassa

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| Line No. |
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| 19 |
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**Vail Water Company**
Test Year Ended December 31, 2001
Adjustment to Revenues and Expenses
Adjustment Number 9

Exhibit
Rebuttal Schedule C-2
Page 10
Witness: Bourassa

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| Line No. | |
|---|---|
| 1 | |
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**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 9

Exhibit
Schedule C-2
Page 10
Witness: Bourassa

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| Line No. |
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| 11 |
| 12 |
| 13 |
| 14 |
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| 16 |
| 17 |
| 18 |
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| 20 |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Schedule C-2
Page 8
Witness: Bourassa

Interest Synchronization

| Line No. | | | |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | Fair Value Rate Base | $ 3,315,151 | |
| 5 | Weighted Cost of Debt | 0.00% | |
| 6 | Interest Expense | | $ - |
| 7 | | | |
| 8 | Test Year Interest Expense | | $ - |
| 9 | | | |
| 10 | Increase (decrease) in Interest Expense | | - |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | Adjustment to Revenue and/or Expense | | $ - |
| 15 | | | |
| 16 | | | |
| 17 | Weighted Cost of Debt Computation | | |

| | | Amount | Percent | Cost | Weighted Cost |
|---|---|---|---|---|---|
| 18 | | | | | |
| 19 | | | | | |
| 20 | Debt | $ - | 0.00% | 0.00% | 0.00% |
| 21 | Equity | $ 7,270,669 | 100.00% | 10.10% | 10.10% |
| 22 | Total | $ 7,270,669 | 100.00% | | 10.10% |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Adjustment to Revenues and/or Expenses
Adjustment Number 10

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Rebuttal Schedule C-2
Page 11
Witness: Bourassa

| Line No. | | | Test Year Adjusted Results | Adjusted with Rate Increase |
|---|---|---|---|---|
| 1 | Income Tax Computation | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | Revenue | | $ 2,334,747 | $ 2,256,141 |
| | Operating Expenses Excluding Income Taxes | | 1,827,243 | 1,826,074 |
| | Synchronized Interest | | - | - |
| 7 | Income Before Taxes | | $ 507,504 | $ 430,067 |
| 8 | | | | |
| 9 | Arizona Income Before Taxes | | $ 507,504 | $ 430,067 |
| 10 | | | | |
| 11 | Less: Effective Arizona Income Tax | | $ 15,426 | $ 13,072 |
| 12 | Rate = | 3.0395% [1] | | |
| 13 | Arizona Taxable Income | | $ 492,078 | $ 416,995 |
| 14 | | | | |
| 15 | Arizona Income Taxes | | $ 15,426 | $ 13,072 |
| 16 | | | | |
| 17 | Federal Income Before Taxes | | $ 507,504 | $ 430,067 |
| 18 | | | | |
| 19 | Less Arizona Income Taxes | | $ 15,426 | $ 13,072 |
| 20 | | | | |
| 21 | Federal Taxable Income | | $ 492,078 | $ 416,995 |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | FEDERAL INCOME TAXES: | | | |
| 26 | Effective Federal Tax Rate = | 19.7041% [1] | $ 96,960 | $ 82,165 |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |
| 31 | | | | |
| 32 | Federal Income Taxes | | $ 96,960 | $ 82,165 |
| 33 | | | | |
| 34 | | | | |
| 35 | Total Income Tax | | $ 112,385 | $ 95,237 |
| 36 | | | | |
| 37 | Overall Tax Rate | | 22.14% | 22.14% |
| 38 | | | | |
| 39 | Income Tax | | $ 112,385 | $ 95,237 |
| 40 | Test Year Income tax Expense | | 106,244 | 112,385 |
| 41 | Adjustment to Income Tax Expense | | $ 6,141 | $ (17,148) |
| 42 | | | | |
| 43 | | | | |
| 44 | [1] See work papers/testimony | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Computation of Gross Revenue Conversion Factor

Exhibit
Rebuttal Schedule C-3
Page 1
Witness: Bourassa

| Line No. | Description | Percentage of Incremental Gross Revenues |
|---|---|---|
| 1 | Combined Federal and State Effective Income Tax Rate | 22.145% |
| 2 | | |
| 3 | Property Taxes | 1.158% |
| 4 | | |
| 5 | | |
| 6 | Total Tax Percentage | 23.303% |
| 7 | | |
| 8 | Operating Income % = 100% - Tax Percentage | 76.697% |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | 1 = Gross Revenue Conversion Factor | |
| 14 | Operating Income % | 1.3038 |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | SUPPORTING SCHEDULES: | RECAP SCHEDULES: |
| 26 | C-3, page 2 | A-1 |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| 32 | | |
| 33 | | |
| 34 | | |
| 35 | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 39 | | |
| 40 | | |

**Vail Water Company**
**Test Year Ended December 31, 2011**

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Rebuttal Schedule C-3
Page 2
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## GROSS REVENUE CONVERSION FACTOR

| Line No. | Description | (A) | (B) | (C) | (D) | [E] | [F] |
|---|---|---|---|---|---|---|---|
| | *Calculation of Gross Revenue Conversion Factor:* | | | | | | |
| 1 | Revenue | 100.0000% | | | | | |
| 2 | Uncollectible Factor (Line 11) | 0.0000% | | | | | |
| 3 | Revenues (L1 - L2) | 100.0000% | | | | | |
| 4 | Combined Federal and State Income Tax and Property Tax Rate (Line 23) | 23.3027% | | | | | |
| 5 | Subtotal (L3 - L4) | 76.6973% | | | | | |
| 6 | **Revenue Conversion Factor (L1 / L5)** | 1.303827 | | | | | |
| | *Calculation of Uncollectible Factor:* | | | | | | |
| 7 | Unity | 100.0000% | | | | | |
| 8 | Combined Federal and State Tax Rate (Line 17) | 22.1447% | | | | | |
| 9 | One Minus Combined Income Tax Rate (L7 - L8 ) | 77.8553% | | | | | |
| 10 | Uncollectible Rate | 0.0000% | | | | | |
| 11 | Uncollectible Factor (L9 * L10 ) | | 0.0000% | | | | |
| | *Calculation of Effective Tax Rate:* | | | | | | |
| 12 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | | | |
| 13 | Arizona State Income Tax Rate | 3.0395% | | | | | |
| 14 | Federal Taxable Income (L12 - L13) | 96.9605% | | | | | |
| 15 | Applicable Federal Income Tax Rate (Line 53) | 19.7041% | | | | | |
| 16 | Effective Federal Income Tax Rate (L14 x L15) | 19.1052% | | | | | |
| 17 | Combined Federal and State Income Tax Rate (L13 +L16) | | 22.1447% | | | | |
| | *Calculation of Effective Property Tax Factor* | | | | | | |
| 18 | Unity | 100.0000% | | | | | |
| 19 | Combined Federal and State Income Tax Rate (L17) | 22.1447% | | | | | |
| 20 | One Minus Combined Income Tax Rate (L18-L19) | 77.8553% | | | | | |
| 21 | Property Tax Factor | 1.4874% | | | | | |
| 22 | Effective Property Tax Factor (L20*L21) | | 1.1580% | | | | |
| 23 | Combined Federal and State Income Tax and Property Tax Rate (L17+L22) | | | 23.3027% | | | |
| 24 | Required Operating Income | $ 334,830 | | | | | |
| 25 | AdjustedTest Year Operating Income (Loss) | $ 395,119 | | | | | |
| 26 | Required Increase in Operating Income (L24 - L25) | | $ (60,288) | | | | |
| 27 | Income Taxes on Recommended Revenue (Col. (E), L52) | $ 95,237 | | | | | |
| 28 | Income Taxes on Test Year Revenue (Col. (B), L52) | $ 112,385 | | | | | |
| 29 | Required Increase in Revenue to Provide for Income Taxes (L27 - L28) | | $ (17,148) | | | | |
| 30 | Recommended Revenue Requirement | $ 2,256,141 | | | | | |
| 31 | Uncollectible Rate (Line 10) | 0.0000% | | | | | |
| 32 | Uncollectible Expense on Recommended Revenue (L30 * L31) | $ - | | | | | |
| 33 | Adjusted Test Year Uncollectible Expense | $ - | | | | | |
| 34 | Required Increase in Revenue to Provide for Uncollectible Exp. | | $ - | | | | |
| 35 | Property Tax with Recommended Revenue | $ 102,511 | | | | | |
| 36 | Property Tax on Test Year Revenue | $ 103,681 | | | | | |
| 37 | Increase in Property Tax Due to Increase in Revenue (L35-L36) | | $ (1,169) | | | | |
| 38 | Total Required Increase in Revenue (L26 + L29 + L37) | | $ (78,606) | | | | |

| | | (A) | (B) | (C) | (D) | [E] | [F] |
|---|---|---|---|---|---|---|---|
| | | Test Year | | | Company Recommended | | |
| | | Total | Vail Water Company | | Total | Vail Water Company | |
| | *Calculation of Income Tax:* | | | | | | |
| 39 | Revenue | $ 2,334,747 | $ 2,334,747 | | $ 2,256,141 | $ 2,256,141 | |
| 40 | Operating Expenses Excluding Income Taxes | $ 1,827,243 | $ 1,827,243 | | $ 1,826,074 | $ 1,826,074 | |
| 41 | Synchronized Interest (L58) | $ - | $ - | $ - | $ - | $ - | |
| 42 | Arizona Taxable Income (L39 - L40 - L41) | $ 507,504 | $ 507,504 | $ - | $ 430,068 | $ 430,068 | $ - |
| 43 | Arizona State Effective Income Tax Rate (see work papers) | 3.0395% | 3.0395% | 3.0395% | 3.0395% | 3.0395% | 3.0395% |
| 44 | Arizona Income Tax (L42 x L43) | $ 15,426 | $ 15,426 | $ - | $ 13,072 | $ 13,072 | $ - |
| 45 | Federal Taxable Income (L42- L44) | $ 492,078 | $ 492,078 | $ - | $ 416,996 | $ 416,996 | $ - |
| 46 | Effective Tax Rate (see work papers) | 19.7041% | 19.7041% | | 19.7041% | 19.7041% | |
| 47 | Federal Income Tax | $ 96,960 | $ 96,960 | | $ 82,165 | $ 82,165 | |
| 48 | | $ - | | | $ - | | |
| 49 | | $ - | | | $ - | | |
| 50 | | $ - | | | $ - | | |
| 51 | Total Federal Income Tax | $ 96,960 | $ 96,960 | $ - | $ 82,165 | $ 82,165 | $ - |
| 52 | Combined Federal and State Income Tax (L44 + L47) | $ 112,385 | $ 112,385 | $ - | $ 95,237 | $ 95,237 | $ - |
| 53 | | | | | | | |
| 54 | WATER Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45] | | | | | 19.7041% | |
| 55 | | | | | | | |

| | | | N/A |
|---|---|---|---|
| | *Calculation of Interest Synchronization:* | | |
| 56 | Rate Base | $ 3,315,151 | $ - |
| 57 | Weighted Average Cost of Debt | 0.0000% | 0.0000% |
| 58 | Synchronized Interest (L56 X L57) | $ - | $ - |

**Vail Water Company**
Revenue Summary
Test Year Ended December 31, 2011

Exhibit
Rebuttal Schedule H-1
Page 1
Witness: Bourassa

| Line No. | Meter Size | Classification | Total Revenues at Present Rates | Total Revenues at Proposed Rates | Dollar Change | Percent Change | Percent of Present Water Revenues | Percent of Proposed Water Revenues |
|---|---|---|---|---|---|---|---|---|
| 1 | 5/8x3/4 Inch | Residential | $ 1,728,603 | $ 1,677,344 | $ (51,259) | -2.97% | 74.04% | 74.35% |
| 2 | 3/4 Inch | Residential | 55,737 | 53,999 | (1,738) | -3.12% | 2.39% | 2.39% |
| 3 | 1 Inch | Residential | 2,132 | 1,975 | (157) | -7.38% | 0.09% | 0.09% |
| 4 | | | | | | | | |
| 5 | 5/8x3/4 Inch | Commercial | 3,471 | 3,773 | 302 | 8.71% | 0.15% | 0.17% |
| 6 | 3/4 Inch | Commercial | 1,804 | 1,841 | 37 | 2.07% | 0.08% | 0.08% |
| 7 | 1 Inch | Commercial | 4,172 | 4,035 | (137) | -3.28% | 0.18% | 0.18% |
| 8 | 1/12 Inch | Commercial | 17,977 | 15,346 | (2,631) | -14.64% | 0.77% | 0.68% |
| 9 | 2 Inch | Commercial | 67,893 | 57,822 | (10,071) | -14.83% | 2.91% | 2.56% |
| 10 | | | | | | | | |
| 11 | 5/8x3/4 Inch | Irrigation | 2,073 | 2,160 | 87 | 4.18% | 0.09% | 0.10% |
| 12 | 3/4 Inch | Irrigation | 5,089 | 5,280 | 191 | 3.75% | 0.22% | 0.23% |
| 13 | 1 Inch | Irrigation | 17,540 | 16,901 | (638) | -3.64% | 0.75% | 0.75% |
| 14 | 1/12 Inch | Irrigation | 17,246 | 16,217 | (1,029) | -5.96% | 0.74% | 0.72% |
| 15 | 2 Inch | Irrigation | 113,577 | 115,693 | 2,116 | 1.86% | 4.86% | 5.13% |
| 16 | | | | | | | | |
| 17 | 5/8x3/4 Inch | Standpipe | 12,909 | 9,095 | (3,813) | -29.54% | 0.55% | 0.40% |
| 18 | 1 Inch | Standpipe | 2,256 | 1,991 | (265) | -11.74% | 0.10% | 0.09% |
| 19 | 3 Inch | Construction | 37,004 | 27,561 | (9,442) | -25.52% | 1.58% | 1.22% |
| 20 | | | | | | | | |
| 21 | **Subtotals of Revenues** | | $ 2,089,481 | $ 2,011,034 | $ (78,447) | -3.75% | 89.50% | 89.14% |
| 22 | **Revenue Annualizations:** | | | | | | | |
| 23 | 5/8x3/4 Inch | Residential | $ 21,450 | $ 20,276 | $ (1,174) | -5.47% | 0.92% | 0.90% |
| 24 | 3/4 Inch | Residential | 1,715 | 1,622 | (93) | -5.45% | 0.07% | 0.07% |
| 25 | 1 Inch | Residential | - | - | - | 0.00% | 0.00% | 0.00% |
| 26 | | | | | | | | |
| 27 | 5/8x3/4 Inch | Commercial | (132) | (142) | (10) | 7.60% | -0.01% | -0.01% |
| 28 | 3/4 Inch | Commercial | (144) | (146) | (2) | 1.23% | -0.01% | -0.01% |
| 29 | 1 Inch | Commercial | - | - | - | 0.00% | 0.00% | 0.00% |
| 30 | 1/12 Inch | Commercial | 104 | 89 | (16) | -14.92% | 0.00% | 0.00% |
| 31 | 2 Inch | Commercial | 3,337 | 2,842 | (495) | -14.84% | 0.14% | 0.13% |
| 32 | | | | | | | | |
| 33 | 5/8x3/4 Inch | Irrigation | (78) | (79) | (0) | 0.29% | 0.00% | 0.00% |
| 34 | 3/4 Inch | Irrigation | 32 | 33 | 1 | 2.11% | 0.00% | 0.00% |
| 35 | 1 Inch | Irrigation | 1,001 | 932 | (69) | -6.92% | 0.04% | 0.04% |
| 36 | 1/12 Inch | Irrigation | (1,986) | (1,803) | 182 | -9.19% | -0.09% | -0.08% |
| 37 | 2 Inch | Irrigation | 11,538 | 11,378 | (160) | -1.39% | 0.49% | 0.50% |
| 38 | | | | | | | | |
| 39 | 5/8x3/4 Inch | Standpipe | 213 | 150 | (62) | -29.35% | 0.01% | 0.01% |
| 40 | 1 Inch | Standpipe | - | - | - | 0.00% | 0.00% | 0.00% |
| 41 | 3 Inch | Construction | (7,125) | (5,458) | 1,667 | -23.40% | -0.31% | -0.24% |
| 42 | | | | | | | | |
| 43 | **Subtotal Revenue Annualization** | | 29,925 | 29,694 | (232) | -0.77% | 1.28% | 1.27% |
| 44 | | | | | | | | |
| 45 | **Total Revenues w/ Annualization** | | $ 2,119,407 | $ 2,040,728 | $ (78,679) | -3.71% | 90.78% | 90.45% |
| 46 | **Adjusted Misc Revenues** | | 214,637 | 214,637 | - | 0.00% | 9.19% | 9.51% |
| 47 | **Reconciling Amount** | | 703 | 776 | 73 | 10.38% | 0.03% | 0.03% |
| 48 | **Total Revenues** | | $ 2,334,746 | $ 2,256,141 | $ (78,606) | -3.37% | 100.00% | 100.00% |
| 49 | | | | | | | | |
| 50 | | | | | | | | |

Vail Water Company
Analysis of Revenue by Detailed Class
Test Year Ended December 31, 2011

Exhibit
Rebuttal Schedule H-2
Page 1
Witness: Bourassa

| Line No. | Customer Classification and/or Meter Size | | (a) Average Number of Customers at 12/31/2011 | Average Consumption | Average Bill Present Rates | Average Bill Proposed Rates | Proposed Increase Dollar Amount | Proposed Increase Percent Amount | Percent of Customers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5/8x3/4 Inch | Residential | 3,596 | 6,720 | $ 40.06 | $ 37.87 | $ (2.19) | -5.47% | 96.33% |
| 2 | 3/4 Inch | Residential | - | 8,344 | 54.38 | 51.42 | (2.96) | -5.44% | 0.00% |
| 3 | 1 Inch | Residential | 3 | 4,681 | 59.22 | 54.85 | (4.37) | -7.38% | 0.08% |
| 4 | | | | | | | | | |
| 5 | 5/8x3/4 Inch | Commercial | 6 | 8,274 | 46.28 | 49.90 | 3.63 | 7.84% | 0.17% |
| 6 | 3/4 Inch | Commercial | 2 | 10,858 | 64.43 | 63.74 | (0.69) | -1.07% | 0.06% |
| 7 | 1 Inch | Commercial | 3 | 18,848 | 115.89 | 107.98 | (7.91) | -6.83% | 0.08% |
| 8 | 1/12 Inch | Commercial | 14 | 4,611 | 107.65 | 91.89 | (15.75) | -14.64% | 0.37% |
| 9 | 2 Inch | Commercial | 26 | 18,005 | 219.72 | 186.88 | (32.84) | -14.95% | 0.69% |
| 10 | | | | | | | | | |
| 11 | 5/8x3/4 Inch | Irrigation | 3 | 10,343 | 54.55 | 53.96 | (0.59) | -1.08% | 0.08% |
| 12 | 3/4 Inch | Irrigation | 11 | 4,462 | 38.85 | 39.11 | 0.26 | 0.68% | 0.29% |
| 13 | 1 Inch | Irrigation | 15 | 13,968 | $ 96.37 | 89.68 | (6.69) | -6.94% | 0.41% |
| 14 | 1/12 Inch | Irrigation | 7 | 31,594 | 215.57 | 193.07 | (22.50) | -10.44% | 0.18% |
| 15 | 2 Inch | Irrigation | 12 | 164,452 | 805.51 | 799.39 | (6.12) | -0.76% | 0.31% |
| 16 | | | | | | | | | |
| 17 | 5/8x3/4 Inch | Standpipe | 31 | 5,522 | 35.27 | 24.85 | (10.42) | -29.54% | 0.82% |
| 18 | 1 Inch | Standpipe | 1 | 36,876 | 188.00 | 165.94 | (22.06) | -11.74% | 0.03% |
| 19 | 3 Inch | Construction | 4 | 139,198 | 840.99 | 626.39 | (214.60) | -25.52% | 0.10% |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | Totals | | 3,733 | | | | | | 100.00% |
| 25 | | | | | | | | | |
| 26 | Actual Year End Number | | | | | | | | |
| 27 | of Customers: | | 3,867 | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |

Vail Water Company
Analysis of Revenue by Detailed Class
Test Year Ended December 31, 2011

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Rebuttal Schedule H-2
Page 2
Witness: Bourassa

| Line No. | Customer Classification and/or Meter Size | | (a) Average Number of Customers at 12/31/2011 | Median Consumption | Median Bill Present Rates | Median Bill Proposed Rates | Proposed Increase Dollar Amount | Proposed Increase Percent Amount | Percent of Customers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5/8x3/4 Inch | Residential | 3,596 | 5,500 | $ 35.18 | $ 33.29 | $ (1.89) | -5.36% | 96.41% |
| 2 | 3/4 Inch | Residential | - | 7,500 | $ 51.00 | $ 48.25 | $ (2.75) | -5.38% | 0.00% |
| 3 | 1 Inch | Residential | - | 3,500 | $ 54.50 | $ 50.42 | $ (4.08) | -7.48% | 0.00% |
| 4 | | | | | | | | | |
| 5 | 5/8x3/4 Inch | Commercial | 6 | 4,500 | $ 31.18 | $ 32.92 | $ 1.74 | 5.58% | 0.17% |
| 6 | 3/4 Inch | Commercial | 2 | 9,500 | $ 59.00 | $ 58.00 | $ (1.00) | -1.69% | 0.06% |
| 7 | 1 Inch | Commercial | 3 | 11,000 | $ 84.50 | $ 78.55 | $ (5.95) | -7.04% | 0.08% |
| 8 | 1/12 Inch | Commercial | 14 | 2,500 | $ 99.20 | $ 83.97 | $ (15.23) | -15.35% | 0.37% |
| 9 | 2 Inch | Commercial | 26 | 8,500 | $ 181.70 | $ 151.23 | $ (30.47) | -16.77% | 0.69% |
| 10 | | | | | | | | | |
| 11 | 5/8x3/4 Inch | Irrigation | 3 | 13,000 | $ 65.18 | $ 65.92 | $ 0.74 | 1.13% | 0.08% |
| 12 | 3/4 Inch | Irrigation | 11 | 1,500 | $ 27.00 | $ 28.00 | $ 1.00 | 3.72% | 0.29% |
| 13 | 1 Inch | Irrigation | 15 | 9,000 | $ 76.50 | $ 71.05 | $ (5.45) | -7.12% | 0.41% |
| 14 | 1/12 Inch | Irrigation | 7 | 13,000 | $ 141.20 | $ 123.35 | $ (17.85) | -12.64% | 0.18% |
| 15 | 2 Inch | Irrigation | 12 | 133,252 | $ 680.71 | $ 658.99 | $ (21.72) | -3.19% | 0.32% |
| 16 | | | | | | | | | |
| 17 | 5/8x3/4 Inch | Standpipe | 31 | 4,500 | $ 31.18 | $ 20.25 | $ (10.93) | -35.05% | 0.82% |
| 18 | 1 Inch | Standpipe | 1 | 37,500 | $ 190.50 | $ 168.75 | $ (21.75) | -11.42% | 0.03% |
| 19 | 3 Inch | Construction | 4 | 45,000 | $ 464.20 | $ 202.50 | $ (261.70) | -56.38% | 0.10% |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | Totals | | 3,730 | | | | | | 100.00% |
| 18 | | | | | | | | | |
| 19 | Actual Year End Number | | | | | | | | |
| 20 | of Customers: | | 3,867 | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |

Vail Water Company
Test Year Ended December 31, 2011
Present and Proposed Rates

Exhibit
Rebuttal Schedule H-3
Witness: Bourassa
Page 1

| Line No. | Monthly Usage Charge for: | Present Rates | Proposed Rates | Change | Percent Change |
|---|---|---|---|---|---|
| 1 | Meter Size (All Classes): | | | | |
| 2 | 5/8x3/4 Inch | $ 13.18 | $ 14.92 | $ 1.74 | 13.20% |
| 2 | 3/4 Inch | 21.00 | 22.38 | 1.38 | 6.57% |
| 3 | 1 Inch | 40.50 | 37.30 | (3.20) | -7.90% |
| 4 | 1 1/2 Inch | 89.20 | 74.60 | (14.60) | -16.37% |
| 5 | 2 Inch | 147.70 | 119.36 | (28.34) | -19.19% |
| 6 | 3 Inch | 284.20 | 238.72 | (45.48) | -16.00% |
| 7 | 4 Inch | 479.20 | 372.99 | (106.21) | -22.16% |
| 8 | 6 Inch | 966.70 | 745.99 | (220.71) | -22.83% |
| 9 | WIFA Surcharge | 6.92 | - | (6.92) | -100.00% |
| 10 | Standpipe | by meter size | - | | |
| 11 | | | | | |
| 12 | Fire Sprinkler | (a) | (a) | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | Gallons In Minimum (All Classes) | - | - | | |
| 16 | | | | | |
| 17 | | | (Per 1,000 gallons) | | |
| 18 | | | Present | Proposed | |
| 19 | Commodity Rates | Block | Rate | Rate | |
| 20 | | | | | |
| 21 | 5/8x3/4 inch (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] | |
| 22 | | | | | |
| 23 | 5/8x3/4 Inch - Residential only | 1 gallons to 3,000 gallons | [redacted] | $ 3.00 | |
| 24 | | 3,001 gallons to 10,000 gallons | | $ 3.75 | |
| 25 | | over 10,000 gallons | | $ 4.50 | |
| 26 | | | | | |
| 27 | 5/8x3/4 Inch - Commercial, Industrial, Irrigation | 1 gallons to 10,000 gallons | [redacted] | $ 3.75 | |
| 28 | | over 10,000 gallons | | $ 4.50 | |
| 29 | | | | | |
| 30 | 3/4 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] | |
| 31 | | | | | |
| 32 | 3/4 Inch Meter - Residential only | 1 gallons to 3,000 gallons | [redacted] | $ 3.00 | |
| 33 | | 3,001 gallons to 10,000 gallons | | $ 3.75 | |
| 34 | | over 10,000 gallons | | $ 4.50 | |
| 35 | | | | | |
| 36 | 3/4 Inch Meter - Commercial, Industrial, Irrigation | 1 gallons to 10,000 gallons | [redacted] | $ 3.00 | |
| 37 | | over 10,000 gallons | | $ 3.75 | |
| 38 | | | | | |
| 39 | (a) Higher of $5.00 per month or 1.0 percent of the monthly minimum. | | | | |
| 40 | NT = No Tariff | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Present and Proposed Rates

Exhibit
Rebuttal Schedule H-3
Witness: Bourassa
Page 2

| Line No. | Commodity Rates | Block | (Per 1,000 gallons) Present Rate | Proposed Rate |
|---|---|---|---|---|
| 4 | 1 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 6 | 1 Inch Meter (all classes except standpipe and construction) | 1 gallons to 25,000 gallons | [redacted] | $ 3.75 |
| 7 | | over 25,000 gallons | | $ 4.50 |
| 9 | 1.5 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 11 | 1.5 Inch Meter (all classes except standpipe and construction) | 1 gallons to 50,000 gallons | [redacted] | $ 3.75 |
| 12 | | over 50,000 gallons | | $ 4.50 |
| 14 | 2 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 16 | 2 Inch Meter (all classes except standpipe and construction) | 1 gallons to 80,000 gallons | [redacted] | $ 3.75 |
| 17 | | over 80,000 gallons | | $ 4.50 |
| 19 | 3 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 21 | 3 Inch Meter (all classes except standpipe and construction) | 1 gallons to 160,000 gallons | [redacted] | $ 3.75 |
| 22 | | over 160,000 gallons | | $ 4.50 |
| 24 | 4 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 26 | 4 Inch Meter (all classes except standpipe and construction) | 1 gallons to 250,000 gallons | [redacted] | $ 3.75 |
| 27 | | over 250,000 gallons | | $ 4.50 |
| 29 | 6 Inch Meter (all classes, including standpipe and construction) | Over Minimum Gallons | $ 4.00 | [redacted] |
| 31 | 6 Inch Meter (all classes except standpipe and construction) | 1 gallons to 500,000 gallons | [redacted] | $ 3.75 |
| 32 | | over 500,000 gallons | | $ 4.50 |
| 35 | Construction/Standpipe | All gallons | $ 4.00 | $ 4.50 |
| 37 | CAP Recovery Surcharge (per 1,000 gallons) | All gallons | $ 0.32 | removed |
| 39 | CAP Water Surcharge (per 1,000 gallons) | All gallons | NT | see testimony |
| 41 | NT = No Tariff | | | |

Vail Water Company
Present and Proposed Rates
Test Year Ended December 31, 2011

Exhibit
Rebuttal Schedule H-3
Page 3
Witness: Bourassa

Meter and Service Line Charges[1]

| Line No. | | Present Service Line Charge | Present Meter Installation Charge | Total Present Charge | Proposed Service Line Charge | Proposed Meter Installation Charge | Total Proposed Charge |
|---|---|---|---|---|---|---|---|
| 7 | 5/8 x 3/4 Inch | [redacted] | | $ 400.00 | $ 445.00 | $ 305.00 | $ 750.00 |
| 8 | 3/4 Inch | | | $ 440.00 | 445.00 | 405.00 | 850.00 |
| 9 | 1 Inch | | | $ 500.00 | 495.00 | 465.00 | 960.00 |
| 10 | 1 1/2 Inch | | | $ 675.00 | 550.00 | 675.00 | 1,225.00 |
| 11 | 2 Inch Turbo | | | NT | 830.00 | 1,195.00 | 2,025.00 |
| 12 | 2 Inch, Compound | | | $ 1,660.00 | 830.00 | 2,040.00 | 2,870.00 |
| 13 | 3 Inch Turbo | | | NT | 1,045.00 | 1,820.00 | 2,865.00 |
| 14 | 3 Inch, compound | | | $ 2,150.00 | 1,165.00 | 2,604.00 | 3,769.00 |
| 15 | 4 Inch Turbo | | | NT | 1,490.00 | 2,820.00 | 4,310.00 |
| 16 | 4 Inch, compound | | | $ 3,135.00 | 1,670.00 | 3,795.00 | 5,465.00 |
| 17 | 6 Inch Turbo | | | NT | 2,210.00 | 5,175.00 | 7,385.00 |
| 18 | 6 Inch, compound | | | $ 6,190.00 | 2,330.00 | 7,070.00 | 9,400.00 |

[1] Proposed charges based on ACC Staff Engineering Memo dated Feburary 21, 2008 plus $150 additional charge for meter telemetry unit for remote meter reading.
NT = No Tariff

Other Charges:

| | Present Rates | Proposed Rates |
|---|---|---|
| Establishment | $ 25.00 | $ 25.00 |
| Establishment - After Hours | $ 50.00 | Remove from tariff |
| Reestablishment (within 12 months) | (a) | (a) |
| Reestablishment (within 12 months After Hours) | (b) | Remove from tariff |
| Reconnection (Deliquent) | $ 30.00 | $ 30.00 |
| Reconnection (Deliquent), If after hours | $ 35.00 | Remove from tariff |
| Meter Test (if correct) | $ 30.00 | $ 30.00 |
| Meter Re-read (if correct) | $ 15.00 | $ 15.00 |
| Deposit | (c) | (c) |
| Deposit Interest | (c) | (c) |
| NSF Check | $ 25.00 | $ 25.00 |
| Deferred Payment, per month | 1.5% | 1.5% |
| Late Payment Fee (per month) | 1.5% | 1.5% |
| Moving Customer Meter (Customer Request) | Cost | Cost |
| Illegal Hook-up | (d) | (d) |
| Transfer Fee | $ 25.00 | $ 25.00 |
| After hours service charge (at customer request) | NT | $ 50.00 |
| | | |
| Main Extension | per Rule R-14-2-406B | per Rule R-14-2-406B |
| | | |

(a) Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).
(b) Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D) plus $25.00
(c) Per Rule R14-2-403.B
(d) Estimated billings from ther time illegal connection was made to date.
NT = No Tariff

Vail Water Company
Present and Proposed Rates
Test Year Ended December 31, 2011

Exhibit
Rebuttal Schedule H-3
Page 4
Witness: Bourassa

Central Arizona Project Hook-up Fee[1]

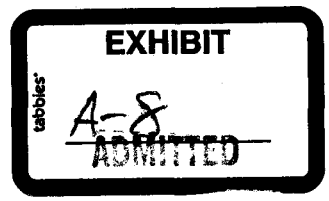
| Line No. | | Present Charge | Proposed Charge |
|---|---|---|---|
| 1 | 5/8 x 3/4 Inch | $ 1,000.00 | $ 1,000.00 |
| 2 | 3/4 Inch | 1,500.00 | 1,500.00 |
| 3 | 1 Inch | 2,500.00 | 2,500.00 |
| 4 | 1 1/2 Inch | 5,000.00 | 5,000.00 |
| 5 | 2 Inch | 8,000.00 | 8,000.00 |
| 6 | 3 Inch | 17,500.00 | 17,500.00 |
| 7 | 4 Inch | 30,000.00 | 30,000.00 |
| 8 | 6 Inch | 62,500.00 | 62,500.00 |
| 9 | 8 Inch | 120,000.00 | 120,000.00 |
| 10 | 10 Inch | 190,000.00 | 190,000.00 |
| 11 | 12 Inch or larger | 250,000.00 | 250,000.00 |

Offsite Facilities Hook-Up Fee[2]

| Line No. | | Present Charge | Proposed Charge |
|---|---|---|---|
| 12 | 5/8 x 3/4 Inch | $ 420.00 | $ 420.00 |
| 13 | 3/4 Inch | 504.00 | 504.00 |
| 14 | 1 Inch | 840.00 | 840.00 |
| 15 | 1 1/2 Inch | 1,680.00 | 1,680.00 |
| 16 | 2 Inch | 2,690.00 | 2,690.00 |
| 17 | 3 Inch | 5,040.00 | 5,040.00 |
| 18 | 4 Inch | 8,400.00 | 8,400.00 |
| 19 | 6 Inch or larger | 16,800.00 | 16,800.00 |

[1] Treated as revenue.

[2] Treated as contribution-in-aid of construction ("CIAC").




**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner
BOB BURNS
Commissioner

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO: W-01651B-12-0339 |

# REBUTTAL TESTIMONY OF

# THOMAS J. BOURASSA

# (COST OF CAPITAL)

**March 25, 2013**

TABLE OF CONTENTS

## I. INTRODUCTION AND QUALIFICATIONS

**Q. PLEASE STATE YOUR NAME AND ADDRESS.**

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

A. I am testifying on behalf of the applicant, Vail Water Company. ("VWC" or the "Company").

**Q. ARE YOU THE SAME THOMAS J. BOURASSA THAT FILED DIRECT TESTIMONY IN THIS DOCKET?**

A. Yes, my direct testimony was presented in two volumes. My background information and qualifications are set forth in the rate base and revenue requirement volume of my direct testimony.

**Q. DID YOU ALSO PREPARE REBUTTAL TESTIMONY ON THOSE ISSUES IN THIS DOCKET?**

A. Yes, my rebuttal testimony on rate base, income statement, revenue requirement and rate design is being filed in a separate volume at the same time as this testimony. In this volume, I present my cost of capital rebuttal testimony. Also attached are two exhibits, which are discussed below.

## II. SUMMARY OF REBUTTAL TESTIMONY AND THE PROPOSED COST OF CAPITAL FOR THE COMPANY

### A. Summary of Company's Rebuttal Recommendation

**Q. WHAT IS THE SCOPE OF THIS VOLUME OF YOUR REBUTTAL TESTIMONY?**

A. I will provide updates of my cost of capital analysis and recommended rate of return using more recent financial data. I also will provide rebuttal as appropriate to the direct testimony of Staff witness John Cassidy.

**Q. HOW HAS THE INDICATED RETURN ON EQUITY CHANGED SINCE THE DIRECT FILING WAS MADE LAST AUGUST?**

A. The cost of equity has decreased somewhat since I prepared my cost of equity analysis in July 2012. The table below summarizes the results of my updated analysis using those models:

| Method | Low | High | Midpoint |
|---|---|---|---|
| Range DCF Constant Growth Estimates | 8.7% | 9.7% | 9.2% |
| Range of CAPM Estimates | 8.7% | 12.7% | 10.7% |
| Average of DCF and CAPM midpoint estimates | 8.7% | 11.2% | 9.9% |
| Financial Risk Adjustment | -0.8% | -0.8% | -0.8% |
| Specific Company Risk Premium | 1.0% | 1.0% | 1.0% |
| **Indicated Cost of Equity** | **8.6%** | **11.4%** | **10.1%** |

The schedules containing my updated cost of capital analysis are attached to this rebuttal testimony.

My 10.1 percent ROE recommendation balances my judgment about the degree of financial and business risk associated with an investment in VWC as well as consideration of the current economic environment.

**Q. HAVE YOU UPDATED YOUR COST OF EQUITY ESTIMATE FOR SWC USING DUFF& PHELPS RISK PREMIUM STUDY DATA?**

A. Yes, as shown in **Rebuttal Exhibit TJB-COC-RB1**. The 2012 Duff & Phelps Risk Premium Study data is now available, and I have updated my cost of equity estimate using this data. As I did in my direct testimony, I have included cost of

equity estimates for the water sample companies. These estimates have been adjusted for leverage (financial risk) differences between the companies in the size portfolios contained in the study and the water sample companies and VWC. Further, like the Build-up Method cost of equity estimate using the *Morningstar* data, the cost of equity estimates includes a water industry risk premium adjustment.[1] I have also used the most recent recommendations for the market risk premium from *Duff & Phelps* for use with the study data. Based on various measures of size the results are as follows[2]:

| Stock Symbol | Company | Cost of Equity |
|---|---|---|
| AWR | American States Water Co. | 9.88% |
| WTR | Aqua America | 8.21% |
| CWT | California Water Services Group | 10.69% |
| CTWS | Connecticut Water Services | 12.28% |
| MSEX | Middlesex Water Company | 11.60% |
| SJW | SJW Corp. | 11.79% |
| | Average | **10.74%** |
| | Midpoint | 10.25% |
| | VWC | **13.58%** |

**Q. HOW DO THE DUFF AND PHELPS COST OF EQUITY ESTIMATES COMPARE TO YOUR DCF AND CAPM RESULTS?**

A. The results of my DCF and CAPM analyses for the publicly traded water companies are lower than the results of the build-up method using the *Duff &*

[1] Note that the risk premium for the water utility industry is negative indicating that water utilities are less risky than the market as a whole.

[2] *See* Exhibit TJB-COC-RB1, Table 6.

*Phelps* study data. The mid-point of my DCF and CAPM results is 10.1 percent which is somewhat below the midpoint of the ranges of estimates produced by the build-up method using the *Duff & Phelps* study data which range from 8.21 percent to 12.28 percent with a midpoint of 10.25 percent. Second, and more importantly, my recommended ROE of 10.1 for VWC is well below the mid-point of the range of estimates for VWC using both build-up methods (one using the *Morningstar* data[3] and the other using the *Duff & Phelps* study data) which range from 10.1 percent to 13.58 percent with a mid-point of 11.8 percent. Accordingly, I find my recommendation of a 10.1 percent ROE appropriately conservative.

**Q. DO THE COST OF EQUITY ESTIMATES BASED ON DUFF & PHELPS TAKE INTO CONSIDERATION THE DIFFERENCES IN LEVERAGE BETWEEN THE PUBLICLY TRADED SAMPLE WATER UTILITIES AND SWC?**

A. Yes.

**Q. HAVE YOU ACCOUNTED FOR THE FACT THAT THE WATER UTILITY INDUSTRY IS LESS RISKY THAN THE MARKET?**

A. Yes. Based on the industry data, each of above estimates based on the *Duff & Phelps* risk premium study is adjusted downward for the water utility industry risk based upon the water industry risk premium found in *Morningstar*.[4] As shown in Table 5 of Rebuttal Exhibit TJB-COC-RB1, the appropriate downward industry risk premium adjustment is approximately 360 basis points.[5]

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[3] *See* Direct Testimony of Thomas J. Bourassa - Cost of Capital ("Bourassa COC Direct") at 44-45.

[4] Morningstar, *Ibbotson SBBI 2013 Valuation Yearbook*. Table 3-5.

[5] A downward market risk premium indicates the water utility industry is less risky than the market on average. This is consistent with water utility beta's being less than 1.0.

**Q. WHAT WAS THE ASSUMED HISTORICAL MARKET RISK PREMIUM USED IN THE DUFF AND PHELPS STUDY AND YOUR ESTIMATED COST OF EQUITY?**

A. The *Duff & Phelps* study reflects an historical market risk premium of 4.5 percent from 1963 to 2012. I used a current market risk premium estimate of 5.0 percent for my calculations. The 5.0 percent is based on the current recommendations of the authors of the *Duff & Phelps* study for use with the study data.[6] In contrast, the long-horizon equity risk premia as determined by *Morningstar* is 6.7 percent.[7]

**Q. THANK YOU. PLEASE SUMMARIZE YOUR RECOMMENDED REBUTTAL COST OF CAPITAL COMPONENTS.**

A. The Company's recommended capital structure consists of 0 percent debt and 100 percent common equity as shown on Rebuttal Schedule D-1. Based on my updated cost of capital analysis, I am recommending a cost of equity of 10.1 percent. Based on my 10.1 percent recommended cost of equity, and a 0 percent debt and a 100 percent equity capital structure, the Company's weighted average cost of capital ("WACC") is 10.1 percent, as shown on Rebuttal Schedule D-1.

**A. <u>Summary of the Staff</u>**

**Q. PLEASE SUMMARIZE THE RESPECTIVE RECOMMENDATIONS OF STAFF FOR THE RATE OF RETURN ON FAIR VALUE RATE BASE.**

A. Staff is recommending a capital structure consisting of 0 percent debt and 100 percent equity.[8] Staff determined a cost of equity of 9.1 percent based on the average cost of equity produced by its DCF and CAPM models and an upward

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[6] *Duff & Phelps* at 2.

[7] Morningstar.*Ibbotson SBBI 2013 Valuation Yearbook*. Table A-1.

[8] *See* Direct Testimony of John Cassidy ("Cassidy Direct") at 34.

economic assessment adjustment.[9] Staff uses a sample of six publicly traded water utilities, the same as those I used in my analysis. Staff did not consider firm size or firm-specific risks in its analysis. Based on its capital structure recommendation, Staff determined the WACC for VWC to be 9.1 percent.[10]

**Q. PLEASE COMPARE THE PARTIES' RESPECTIVE COST OF EQUITY ESTIMATES AND RECOMMENDATIONS.**

A. The respective parties' cost of equity recommendations are summarized below:

| Party | DCF | CAPM | Average | Recommended |
|---|---|---|---|---|
| VWC | 8.7% | 11.2% | 9.9% | 10.1% |
| Staff | 8.8% | 8.2% | 8.5% | 9.1% |

**B. Comments on the Cost of Equity Results and Recommendations of Staff**

**Q. HOW DO THE PARTIES' RECOMMENDATIONS COMPARE TO OTHER FORECASTS OF COMMON EQUITY RETURNS AND CURRENTLY AUTHORIZED RETURNS?**

A. *Value Line*, a reputable publication used by the Company and Staff cost of capital witnesses, publishes forecasts of returns on common equity for larger publicly traded water companies. These water utilities are included in my sample group and Staff's sample groups. *Value Line* (January 18, 2013) projects the following returns on equity for those water utilities:

| | |
|---|---|
| American States Water (AWR) | 12.0% |
| Aqua America (WTR) | 12.5% |

[9] *Id.*
[10] *Id.*

| | |
|---|---|
| California Water (CWT) | 10.5% |
| Connecticut Water (CTWS) | 10.5% |
| Middlesex Water (MSEX) | 9.0% |
| SJW Corp. (SJW) | 7.0% |
| Average | 10.3% |

Furthermore, the currently authorized ROE's for the sample water utility companies as reported by AUS Utility Reports (January 2013) average 10.03 percent. They are as follows:

| | |
|---|---|
| American States Water (WTR) | 9.99% |
| Aqua America (WTR) | 10.33% |
| California Water (CWT) | 9.99% |
| Connecticut Water (CTWS) | 9.75% |
| Middlesex Water (MSEX) | 10.15% |
| SJW Corp. (SJW) | 9.99% |
| Average | 10.03% |

**Q. DO INVESTORS CARE ABOUT THE RETURN ON EQUITY THAT A COMPANY IS EARNING AND IS PROJECTED TO EARN?**

A. Of course, if they are looking to make sound investments. Returns on equity, earnings per share, and stock price/earnings ratios are widely followed and reported by investment services, business magazines, and other financial media outlets. A company's earnings play a major role in any investment decision. The higher the return on equity, the greater the company's earnings and funds are available to pay dividends and to reinvest in capital projects.

In the instant case, we are attempting to establish a fair and reasonable return on equity for VWC which will in turn be used to establish a rate of return on the fair value of VWC property devoted to public service. That rate base is an accounting or book rate base. The rate base has not been adjusted to reflect the current market value of the utility plant and assets devoted to public service. In other words, Staff is applying a *market* return derived from a finance model to the Company's *book* equity, which in turn is financing a *book* rate base. Thus, Staff is ignoring the fact that a firm's earnings, whether they are reported as the return on equity or as earnings per share, are also based on accounting data, as opposed to market data. For example, earning per share ("EPS") is calculated by dividing net income into the number of shares outstanding. The current market price of those shares is irrelevant to that calculation.

**Q. WHAT ELSE IS THE RELEVANCE OF ALL THESE PROJECTED BOOK RETURNS, MR. BOURASSA?**

A. In this case, comparison to these proxies readily illustrates that Staff's return is 93 basis points lower than the average of the currently authorized returns and 120 basis points below the average of the 3-5 year expected returns of the publicly traded utilities Staff uses to estimate the cost of equity for VWC. Regardless of the particular finance model being used, the results of the model should be reasonable and generally consistent with the returns on equity actually being earned or projected to earn.

**Q. THANK YOU. HOW DO THE PARTIES' RECOMMENDATIONS COMPARE TO THE DUFF & PHELPS RISK PREMIUM STUDY DATA?**

A. The build-up method cost of equity average estimate using the *Duff & Phelps* study data is 10.74 percent. This is 164 basis points higher than Staff's recommendation of 9.1 percent and 64 basis points higher than my recommendation of 10.1 percent.

**Q. WHAT ABOUT SIZE-BASED METRICS LIKE NET PLANT AND TOTAL REVENUES, DO THOSE FACTOR IN UNDER THE BUILD-UP METHOD?**

A. Not directly; however, these metrics confirm the results. Below is a table using the two common metrics of size as reported by AUS Utility Reports (March 2013) compared with the results of my cost of equity analysis based on the *Duff & Phelps* study.

| Water Utility | Net Plant ($ millions) | Size Rank by Plant | Revenue ($ millions) | Size Rank by Rev. | *Duff & Phelps* COE | Lowest to Highest COE |
|---|---|---|---|---|---|---|
| American States Water (WTR) | $ 912.0 | 3 | $ 449.7 | 3 | 9.88% | 2 |
| Aqua America (WTR) | $3,863.4 | 1 | $ 755.7 | 1 | 8.21% | 1 |
| California Water (CWT) | $1,443.1 | 2 | $ 541.5 | 2 | 10.69% | 3 |
| Connecticut Water (CTWS) | $ 422.6 | 6 | $ 79.8 | 6 | 12.28% | 6 |
| Middlesex Water (MSEX) | $ 433.3 | 5 | $ 106.6 | 5 | 11.60% | 4 |
| SJW Corp. (SJW) | $ 870.5 | 4 | $ 261.4 | 4 | 11.79% | 5 |
| Average | $1,324.2 | | $ 365.8 | | 10.74% | |
| VWC (at December 31, 2012) | $ 16.5 | | $ 2.3 | | 13.78% | |

What this illustrates is that, despite the fact that neither net plant nor revenues were considered as measures of size using the build-up method, the cost of equity results show that as the size of the utility increases so does the cost of equity. This is as expected and is consistent with the empirical financial data found in *Morningstar*.

The average net plant for the publicly traded water utilities is over 80 times that of VWC and the average total revenues are over 156 times. There is a

significant size difference and one would expect the cost of equity estimate for VWC to be much higher, and it is. Therefore, it is again confirmed that these large publicly traded utilities are less risky than VWC. In the real world, VWC has a cost of equity that is higher than the large publicly traded utilities.

**Q. PLEASE SUMMARIZE THE RECOMMENDED RETURNS OF THE PARTIES, EXPECTED BOOK RETURNS, AUTHORIZED RETURNS, AND RETURNS BASED ON THE DUFF & PHELPS STUDY.**

A. The following table summarizes the equity returns recommended by each of the parties with the forgoing expected book returns, authorized returns, and returns based upon size (*Duff & Phelps*) for the publicly traded utilities:

| | Cost of Equity |
|---|---|
| Staff recommendation | 9.10% |
| VWC recommendation | 10.10% |
| Mid-point of DCF and CAPM (Water Utilities) | 9.90% |
| Expected Book Returns (Water Utilities) | 10.30% |
| Authorized Returns (Water Utilities) | 10.03% |
| Duff & Phelps (Water Utilities) | 10.74% |

The foregoing data provide clear evidence that the Staff recommendations for VWC is simply too low. At the end of the day, when all the expert and lawyer wrangling over inputs and assumptions is done, the results should still pass the simple, common-sense "smell test", and the Staff recommendation doesn't pass that test.

**Q. PLEASE COMMENT THE STAFF PROPOSED ECONOMIC ASSESSMENT ADJUSTMENT.**

A. Mr. Cassidy's DCF and CAPM results produce a 8.5 percent average ROE. Mr. Cassidy then adds an economic assessment adjustment of 60 basis points to achieve his recommended 9.1 ROE. The economic assessment adjustment appears to be Mr. Cassidy's acknowledgment that the results of his models are unreasonably low.

But even if Mr. Cassidy adds his economic assessment adjustment, his recommendation of 9.1 percent does not pass the "smell test" when compared to the projected and authorized returns for the sample publicly traded utility companies.

**Q. THANK YOU. TURNING NOW TO MR. CASSIDY'S CRITICISMS OF YOU FOR CONSIDERING THE DIFFERENCES IN RISK DUE TO THE SIZE OF VWC COMPARED TO THE PUBLICLY TRADED SAMPLE UTILITIES. PLEASE COMMENT.**

A. Mr. Cassidy does not dispute that smaller companies are more risky than larger companies. Staff simply opines the Commission has not allowed a risk premium for size in the past.[11] Frankly, it is so astonishing that the process in Arizona has, heretofore, ignored what the rest of the financial world knows – that size matters – I simply cannot avoid discussing it without me having to question my own integrity as a cost of capital expert.

**Q. OKAY, WHY DOES SIZE MATTER IN AN ANALYSIS OF A UTILITY'S COST OF CAPITAL?**

**A.** There are many reasons why smaller utilities are more risky than larger utilities. I have discussed these reasons extensively in my direct testimony and will not repeat that testimony here.[12] The simple fact is that a rational investor is not going to view an equity investment in VWC as having the same risk as the purchase of publicly traded stock in a substantially larger utility such as Aqua America, American States Water or California Water Service. That does not mean we can't use the sample companies as proxies, it means we can't ignore the plethora of

[11] Cassidy Direct at 43.

[12] Bourassa COC Direct at 17–23, 40–41.

evidence that firm size does matter. If the differences in risk between small utilities like VWC and the large, publicly traded water utilities used to estimate the cost of equity are ignored, VWC's equity cost will be understated and unreasonable.

**Q. IS FIRM SIZE A UNIQUE RISK?**

A. No. The firm size is a systematic risk factor.[13] We know that based on empirical financial data that the firm size phenomenon in the market is real. Moreover, we know that the capital asset pricing model is incomplete and does not fully account for the higher returns on small company stocks. In other words, the higher risks associated with smaller firms is not fully accounted for by beta.

With respect to the relationship between firm size and return, *Morningstar* states:[14]

> One of the most remarkable discoveries of modern finance is that of a relationship between firm size and return. The relationship cuts across the entire size spectrum but is most evident among smaller companies which have higher returns than larger ones. Many studies have looked at the effect of firm size and return…

With respect to the CAPM, *Morningstar* states:[15]

> The firm size phenomenon is remarkable in several ways. First, the greater risk of small stocks does not, in the context of the capital asset pricing model (CAPM), fully account for their higher returns over the long term. In the CAPM only systematic, or beta risk, is rewarded; small company stocks have had returns in excess of those implied by their betas.

**Q. AT PAGE 43, MR. CASSIDY SUGGESTS WATER AND OTHER SMALL FIRMS DO NOT REQUIRE A RISK PREMIUM BECAUSE SUCH RISKS**

[13] Shannon P. Pratt and Roger J. Grabowski. *Cost of Capital: Applications and Examples, Fourth Edition.* John Wiley and Sons, 2010.p. 56.

[14] Morningstar, *Ibbotson SBBI 2012 Valuation Yearbook,* at 85.

[15] *Id.* at 88.

**ARE UNSYSTEMATIC AND THUS CAN BE DIVERSIFIED AWAY. IS HE CORRECT?**

A. No. Mr. Cassidy misunderstands this issue. The *Duff & Phelps* study confirms that even a well-diversified portfolio of small firms is still more risky than a well-diversified portfolio of larger firms. Based on studies in *Morningstar,* which I discuss on page 33-34 of my direct testimony, the CAPM does not fully explain the differences in risk between large and small firms. Appropriate CAPM models should include size as an explanatory value, i.e.,

$$\text{Cost of Equity} = \text{risk-free rate} + \beta_1 * \text{MRP} + \beta_2 * \text{size risk premium}$$

Size is a second "systematic" risk factor. Based on these alternative versions of the CAPM diversification cannot eliminate the risk of a company from being smaller than the average. Mr. Cassidy's testimony does not justify ignoring the additional risk of SWC that stems from it being smaller than the publicly traded water utilities in his proxy group.

**Q. ON PAGE 36 OF HIS TESTIMONY, MR. CASSIDY CRITICIZES YOU FOR RELYING EXCLUSIVELY ON ANALYSTS FORECASTS OF GROWTH. IS THIS TRUE?**

A. No. I rely on both historical growth rates and forecasts of growth. I just give more weight to the analyst forecasts of growth. Mr. Cassidy's criticism contradicts his subsequent testimony that I give greater weight to analysts' estimates of growth which recognizes I rely on both historical and forecasted growth.

**Q. ON PAGE 38 AND 39 OF HIS TESTIMONY, MR. CASSIDY CRITICIZES YOU FOR GIVING GREATER WEIGHT TO ANALYSTS FORECASTS OF GROWTH. PLEASE COMMENT.**

A. I do give more weight to the analyst forecasts of growth. That fact is not a secret.[16] It is important to note that while Mr. Cassidy disagrees with the additional weight I give the analyst forecasts, he does not say these forecasts have no merit. The dispute between Mr. Cassidy and me comes down to something between 50 percent and my "greater" emphasis. In my direct testimony, I explained why a weight greater than 50 percent should be given to analysts' estimates.[17]

**Q. ARE ANALYSTS' FORECAST ESTIMATES OF GROWTH FOR UTILITIES UPWARDLY BIASED?**

A. No. Analyst's estimates of EPS growth for utilities are not upwardly biased. Dr. Thomas Zepp presented studies in the recent *Arizona Water Company* rate case that analysts' forecasts of growth for utilities are not upwardly biased once differences in expected inflation are taken into account, and he concluded Mr. Cassidy's claims of consistent upward bias in analyst forecasts of growth for utilities were not supported.[18] Staff did not dispute Dr. Zepp's studies and testimony on this subject.

Whether you agree with Dr. Zepp's studies and conclusions or not, analysts' estimates of growth have been shown to be superior to historically based estimates of growth for use in the DCF for utility stocks. The study by Gordon, Gordon and Gould[19], discussed in my direct testimony at page 30, found analysts' estimates of EPS growth for the next five years provide a more useful estimate of growth

[16] Bourassa COC Direct at 30-31.

[17] *Id.* at 30.

[18] *See* Rebuttal Testimony of Thomas M. Zepp at 35-37 in Docket No. W-01445A-11-310.

[19] David A. Gordon, Myron J. Gordon and Lawrence I Gould, "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989) 50-55

required in the DCF model than three different historical measures of growth (historical EPS, historical DPS, and historical retention growth). They explain that this result makes sense because analysts would take into account such past growth as indicators of future growth as well as any new information.

The Gordon, Gordon, and Gould study as well as the Zepp studies cast doubt on whether Mr. Cassidy suggestion that the studies of analysts' forecasts in general provides evidence that analysts provide poor forecasts of EPS growth for utility stocks.

**Q. ARE THERE REASONS WHY ANALYSTS' ESTIMATES ARE NOT UPWARDLY BIASED?**

A. Yes. Sources of forecast earnings growth information such as *Value Line* are in the business of selling information to investors. *Value Line*, *Yahoo Finance*, and *Reuters*, to name a few, do not sell stock and there is no incentive to provide inaccurate, upwardly biased forecasts. If this were the case, investors would not continue to buy subscriptions.

**Q. WHY IS EARNINGS GROWTH A MEANINGFUL GUIDE TO INVESTORS' LONG-TERM GROWTH EXPECTATIONS?**

A. It is growth in earnings, after all, that will support future dividends and share prices. There is an abundance of evidence attesting to the importance of earnings in assessing investor expectations. The sheer volume of earnings forecasts available from the investment community relative to the scarcity of dividend forecasts attests to their importance. *Value Line*, *Yahoo*, and *Reuters* all provide comprehensive information on investor's earnings forecasts. *Value Line's* principle investment rating assigned to individual stocks, Timeliness Rank, is based primarily on earnings. These investment information providers focus on earnings

growth rather that dividend growth which indicates the investment community places greater importance to earnings as a measure on future long-term growth.

**Q. DOES THE ACCURACY OF ANALYSTS' FORECAST MATTER IF INVESTORS RELY ON ANALYSTS' FORECASTS?**

A. No. Regardless of whether you agree or disagree with the accuracy of analysts' forecasts, the level of accuracy is an after-the-fact evaluation with little relevance to the issues at hand here. Dr. Morin states:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of g. ***The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations.*** As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for only one year, let alone for longer time periods. ***This objection is unfounded, however, because it is present investor expectations that are being priced; it is the consensus forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.*** (emphasis added)[20]

What really matters is that analysts' forecasts strongly influence investors and hence the market prices they are willing to pay for stocks. Analysts' growth rates influence the prices investors will pay for stocks and thus impact the dividend yields. The dividend yields change until the sum of the dividend yield plus the growth rate equals investors' perceived cost of equity. Had the growth forecasts been lower – as Mr. Cassidy suggests they should be – the stock prices would be

[20]Roger A. Morin. *New Regulatory Finance* (2006) 298.

lower and dividend yields would be higher, but there would not necessarily be any difference in the ultimate estimate of the cost of equity.

**Q. HAS MR. CASSIDY OFFERED ANY EVIDENCE THAT INVESTORS DO NOT RELY ON ANALYST ESTIMATES?**

A. No. Nor does he offer any evidence of the extent investors rely on historical growth or on analyst estimates of future growth. Mr. Cassidy offers no quantitative or conceptual argument to rebut the conclusions of Gordon, Gordon, and Gould, and offers no evidence that any of the measures of past growth he has used – historical EPS, historical DPS, historical sustainable growth – provide a better forecast of future growth for utilities than analysts' estimates of EPS growth.

The bottom line – Mr. Cassidy is using Staff's inputs into the DCF model mechanically without considering the reasons for using those inputs. And Staff's inputs have long been skewed to give less weight to the best estimate of future growth in an effort to keep down the cost of equity.

**Q. ON PAGE 42 OF HIS TESTIMONY, MR. CASSIDY ALSO CRITICIZES YOU FOR USING FORECASTED INTEREST RATES FOR THE RISK-FREE RATE IN YOUR CAPM. PLEASE RESPOND.**

A. I use both a current interest rate as well as forecasted interest rates on 30 year U.S. Treasury Bonds as a proxy to my risk-free rate. The CAPM is a prospective model, and like analysts' forecasts of growth, I believe investors rely on this forward-looking information. If investors did not rely on this information *Value Line*, *Blue Chip* and others would not provide this information. Mr. Cassidy provides no evidence that investors do not rely on this information. This is just

another disagreement between Mr. Cassidy and me regarding the inputs to the models.

**Q. DO YOU AGREE WITH MR. CASSIDY THAT AN INCREASE IN THE PRICE OF A SHARE OF STOCK NECESSARILY REFLECTS A DECREASE IN THE COST OF EQUITY?**

A. No. From the standpoint of an investor, a true market rate of return would take into account *both* anticipated dividends *and* capital gains resulting from future changes in the price of stock. I expect Mr. Cassidy to agree with me that the cost of equity is the compensation investors expect for bearing the risk of ownership of a stock. That compensation includes capital gains. So, despite the dividend yield going down when the price of a share rises, it does not necessarily translate to a drop in the cost of equity.

**Q. MR. CASSIDY BASES ONE OF HIS CAPM ESTIMATES ON RATES FOR INTERMEDIATE-TERM TREASURY SECURITIES AND ONE ON RATES FOR LONG-TERM TREASURY SECURITIES. SHOULD RATES FOR INTERMEDIATE-TERM TREASURIES BE USED IN A CAPM ANALYSIS?**

A. No. It is inappropriate to use either a short-term or an intermediate-term Treasury security to determine the value of the risk-free rate. *Morningstar* explains the appropriate choice for the risk-free rate is no less than the expected return for long-term Treasury security.

> The horizon of the chosen Treasury security should match the horizon on whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury yield should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If an investor plan to hold stock in a company for only five years, the yield on a five-year Treasury note would not

> be appropriate since the company will continue to exist beyond those five years...
>
> Companies are entities that generally have no defined life span; when determining a company's value, it is important to use a long-term discount rate because the life of the company is assumed to be infinite.[21]

As Dr. Morin concurs with *Morningstar* and states:

> At the conceptual level, because common stock is a long-term investment and because cash flows to investors in the form of dividends last indefinitely, the yield on very long-term government bonds, namely the 30-year Treasury bonds, is the best measure of the risk free rate for use in the CAPM and risk premium methods. The expected stock return is based upon long-term cash flows, regardless of an individual's holding period. Utility asset investments generally have long-term useful lives and should be correspondingly matched with longer-term maturity financing instruments. ***Moreover, short-term Treasury bill yields reflect the impact of factors different from those influencing the yields on longer term securities such as common stock.(emphasis added)***[22]

**Q. ARE THERE OTHER REASONS FOR NOT USING SHORT-TERM OR INTERMEDIATE-TERM TREASURY SECURITIES?**

A. Yes. According to Dr. Morin, "short-term rates are volatile, fluctuate widely, and are subject to more random disturbances than long-term rates leading to volatile and unreliable equity returns."[23] He goes on to state that "on grounds of stability and consistency, the yields on long-term Treasury bonds match more closely with expected common stock returns."[24] For example, the Federal Reserve has announced that it will continue to hold interest rates down to support economic

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[21] *Morningstar, supra* at 44, 55.

[22] Morin, *supra* at 151-152.

[23] *Id.* at 152.

[24] *Id.*

recovery, resulting in extremely low short- and intermediate-term Treasury rates – precisely the type of manipulation that Dr. Morin warns of in his text on regulatory finance, quoted above.[25]

**Q. ON PAGE 39 AND 40 OF MR. CASSIDY'S TESTIMONY, HE STATES THE DIVIDEND YIELD IN YOUR DIRECT TESTIMONY WAS OVERSTATED BECAUSE OF INCORRECT SPOT SHARE PRICES. PLEASE COMMENT.**

A. It is true that my spot prices were for not the spot prices for the date indicated in my schedules. This was due to linking error to the underlying *Value Line Analyzer* data which I employed. Correcting this error would have reduced my expected dividend yield by about 20 basis points and lowered my DCF results by the same. However, my recommendation of 10.4 percent would not have changed.

**Q. WHY NOT?**

A. Because correcting the spot prices, which are generally higher, would have increased the market-to-book ratios which in turn would have reduced my market based Hamada financial risk adjustment by about 20 basis points.

**Q. ON PAGE 42 AND 43 OF MR. CASSIDY'S TESTIMONY, HE STATES YOUR CURRENT MARKET RISK PREMIUM AND YOUR 3-5 YEAR PRICE APPRECIATION ESTIMATE ARE OVER-STATED. PLEASE COMMENT.**

A. Mr. Cassidy is correct that both my market dividend yield and my market 3-5 year price appreciation as shown on Schedule D-411 are higher than his spot dividend yield and spot 3-5 year price appreciation but this does not mean my they are over-

[25] *See, e.g., Blue Chip Financial Forecasts*, February, 2013.

stated, nor is my resulting current market risk premium ("MRP") over-stated. Had Mr. Cassidy computed his current MRP in the same frame as I did, he would have computed a similar result. The current MRP used in my rebuttal analysis is 12.37 percent which is an average of the prior 3 months which ranged from 11.52 percent to 12.90 percent. As I stated in my direct testimony, I do not use spot dividend yields or spot 3-5 year price appreciation to estimate my current MRP because spot rates cause significant volatility in the computed current MRP.[26] As you will find in Rebuttal Schedule D-4.11, the current market risk premium estimates fluctuate significantly over-time. I prefer to use averages of several months; typically 3-12 months depending on the prevailing trend in the current market risk premium which help to eliminate the volatility. I believe my approach provides a more stable measurement of the current market risk premium. For example, if the current market risk premium were measured using the spot rate approach for April 2011, the current market risk premium would have been 7.82 percent. The current MRP is would have been significantly higher the current MRP was measured just a few month earlier or just a few month later. For example, the February 2011 current MRP was 11.26 percent and the July 2011 current MRP was 13.82 percent. The current MRP averaged over 15 percent in the 12 months following February 2011.

**Q. DO YOU HAVE ANY FURTHER COMMENTS?**

A. Just that as I testified above, when all the numbers and models and financial theory are set aside, Staff's recommendation is far too low to pass the smell test and should be rejected.

[26] Bourassa COC Direct at 36.

**Q. WELL MR. BOURASSA, YOU ADMIT THAT THE COMMISSION HAS NOT ADOPTED YOUR RECOMMENDATIONS BEFORE, DON'T YOU? WHY SHOULD THIS TIME BE DIFFERENT?**

A. I can only note that each Commission reviews every rate case on its own merits, or "case-by-case" as Staff likes to say. And I have made more changes to my approach on cost of capital than I can possibly recall in response to many of my arguments being rejected. I have recognized a lot of realities of ratemaking and tried to find a reasonable balance with financial theory and financial reality. I will continue to ask the Commission to appropriately balance ratemaking and finance and the interests of shareholders and ratepayers.

**Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY ON COST OF CAPITAL?**

A. Yes, although my silence on any of the issues, matters or findings addressed in the testimony of Staff does not constitute my acceptance of their positions on such issues, matters or findings.

# EXHIBIT TJB-COC-RB1

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013 *Duff and Phelps* Risk Premium Study Data**

**TABLE 1**

| | Company | Symbol | Measures of size (Millions) MV Equity[1] | Book Equity[1] | MVIC[1] | 5 Yr Avg. Net Income | Total Assets[2] | 5 Yr Avg. EBITDA[3] |
|---|---|---|---|---|---|---|---|---|
| 1. | American States | AWR | $ 1,039 | $ 408 | $ 1,380 | $ 32 | $ 1,192 | $ 120 |
| 2. | Aqua America | WTR | $ 4,129 | $ 1,251 | $ 5,525 | $ 113 | $ 4,072 | $ 407 |
| 3. | California Water | CWT | $ 862 | $ 450 | $ 1,344 | $ 37 | $ 1,692 | $ 128 |
| 4. | Connecticut Water | CTWS | $ 260 | $ 119 | $ 395 | $ 10 | $ 425 | $ 23 |
| 5. | Middlesex | MSEX | $ 310 | $ 177 | $ 442 | $ 12 | $ 489 | $ 38 |
| 6. | SJW Corp. | SJW | $ 517 | $ 264 | $ 861 | $ 20 | $ 935 | $ 87 |
| | Vail Water Company | | NA | $ 11.0 | NA | $ 0.6 | $ 13.0 | $ 1.1 |

[1] From Zacks Investment Research data
[2] From Zacks Investment Research. From E-1 for subject utility.
[3] Net Income. From Zacks Investment Research and Company ACC reports

Net Income Data

| Company | Symbol | 2011 | 2010 | 2009 | 2008 | 2007 | Average |
|---|---|---|---|---|---|---|---|
| American States | AWR | $ 45.9 | $ 33.2 | $ 29.5 | $ 22.0 | $ 28.0 | $ 31.7 |
| Aqua America | WTR | $ 143.1 | $ 124.0 | $ 104.4 | $ 97.9 | $ 95.0 | $ 112.9 |
| California Water | CWT | $ 37.7 | $ 37.7 | $ 40.6 | $ 39.8 | $ 31.2 | $ 37.4 |
| Connecticut Water | CTWS | $ 11.3 | $ 9.8 | $ 10.2 | $ 9.4 | $ 8.8 | $ 9.9 |
| Middlesex | MSEX | $ 13.4 | $ 14.3 | $ 10.0 | $ 12.2 | $ 11.8 | $ 12.4 |
| SJW Corp. | SJW | $ 20.9 | $ 24.4 | $ 15.2 | $ 21.5 | $ 19.3 | $ 20.2 |
| Vail Water Company | | $ 0.6 | $ 0.7 | $ 0.7 | $ 0.5 | $ 0.6 | $ 0.6 |

Net Income data for publicly traded water utilities from Zacks Investment Research and/or Yahoo Finance

[4] Earnings before Interest, Taxes, Depreciation and Amortization (EBITDA). From Zacks Investment Research and Company ACC reports.

EBITDA Data

| Company | Symbol | 2011 | 2010 | 2009 | 2008 | 2007 | Average |
|---|---|---|---|---|---|---|---|
| American States | AWR | $ 133.3 | $ 134.4 | $ 122.6 | $ 105.9 | $ 102.8 | $ 119.8 |
| Aqua America | WTR | $ 397.8 | $ 473.2 | $ 415.2 | $ 384.7 | $ 364.5 | $ 407.1 |
| California Water | CWT | $ 143.3 | $ 155.7 | $ 125.5 | $ 122.1 | $ 95.6 | $ 128.4 |
| Connecticut Water | CTWS | $ 24.2 | $ 22.5 | $ 20.3 | $ 21.1 | $ 27.9 | $ 23.2 |
| Middlesex | MSEX | $ 34.6 | $ 43.3 | $ 34.6 | $ 38.6 | $ 36.6 | $ 37.6 |
| SJW Corp. | SJW | $ 87.1 | $ 75.4 | $ 93.5 | $ 99.7 | $ 77.7 | $ 86.7 |
| Vail Water Company | | $ 1.1 | $ 1.2 | $ 1.1 | $ 1.0 | $ 1.1 | $ 1.1 |

EBITDA data for publicly traded water utilities from Zacks Investment Research and/or Yahoo Finance
EBITDA data for subject utility from E-1 and/or ACC reports

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013** *Duff and Phelps* **Risk Premium Study Data**

**$MRP_{m+s}$ Estimates Using Duff & Phelps Study (Unlevered)** **TABLE 2**
*Assumes 100% Equity and 0% debt*
Data Smoothing with Regression Analysis
***Smoothed Premium ($RP_{m+s}$) = Constant + X Coefficients * Log(Relevent Metric)***

**$RPun_{relevered} = RP_{levered} - W_d/W_e*(\beta_u-\beta_d)*RP_{market}$**
**Where $\beta_u$ = unlevered portfolio beta**
**$\beta_d$ = debt beta, assumed to be 0.1**
**$W_d$ = percentage of debt in capital structure**
**$W_e$ = percentage of equity in capital structure**
**$RP_{levered}$ = levered realized risk premium**

| | MV Equity (Table C-1) | Book Equity (Table C-2) | MVIC (Table C-4) | 5 Yr Avg. Net Income (Table C-3) | Total Assets (Table C-5) | 5 Yr Avg. EBITDA (Table C-6) |
|---|---|---|---|---|---|---|
| Constant | 18.448% | 15.453% | 18.701% | 13.312% | 17.363% | 14.836% |
| X Coefficient(s) | -3.193% | -2.533% | -3.173% | -2.600% | -2.793% | -2.717% |

| | | | $MRP_{m+s}$ (unlevered) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Company | Symbol | MV Equity | Book Equity | MVIC | 5 Yr Avg. Net Income | Total Assets | 5 Yr Avg. EBITDA | Average |
| 1. | American States | AWR | 8.82% | 8.84% | 8.74% | 9.41% | 8.77% | 9.19% | 8.96% |
| 2. | Aqua America | WTR | 6.90% | 7.61% | 6.83% | 7.98% | 7.28% | 7.75% | 7.39% |
| 3. | California Water | CWT | 9.07% | 8.73% | 8.77% | 9.22% | 8.35% | 9.11% | 8.88% |
| 4. | Connecticut Water | CTWS | 10.74% | 10.20% | 10.46% | 10.72% | 10.02% | 11.13% | 10.54% |
| 5. | Middlesex | MSEX | 10.49% | 9.76% | 10.31% | 10.47% | 9.85% | 10.56% | 10.24% |
| 6. | SJW Corp. | SJW | 9.78% | 9.32% | 9.39% | 9.92% | 9.07% | 9.57% | 9.51% |
| | Average (unlevered) | | 9.30% | 9.08% | 9.08% | 9.62% | 8.89% | 9.55% | 9.25% |
| | Vail Water Company | | NA | 12.82% | NA | 13.86% | 14.25% | 14.74% | 13.92% |
| | | | | | | | Indicated size premium | | 4.66% |

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013 *Duff and Phelps* Risk Premium Study Data**

**Unlevered Portfilio Beta** **TABLE 3**
**(from 2012 Duff & Phelps RP Study - Table C)**

| | Company | Symbol | Unlevered Portfolio Beta ($\beta_u$) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | (Table C-1) | (Table C-2) | (Table C-4) | (Table C-3) | (Table C-5) | (Table C-6) | Average |
| 1. | American States | AWR | 0.94 | 0.96 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| 2. | Aqua America | WTR | 0.87 | 0.89 | 0.86 | 0.88 | 0.83 | 0.82 | 0.86 |
| 3. | California Water | CWT | 0.98 | 0.96 | 0.95 | 0.95 | 0.94 | 0.96 | 0.96 |
| 4. | Connecticut Water | CTWS | 0.96 | 0.98 | 0.97 | 0.97 | 0.99 | 1.03 | 0.98 |
| 5. | Middlesex | MSEX | 0.96 | 1.00 | 0.98 | 0.97 | 0.99 | 0.99 | 0.98 |
| 6. | SJW Corp. | SJW | 0.98 | 0.98 | 0.98 | 0.99 | 0.97 | 0.95 | 0.98 |
| | Average | | 0.95 | 0.96 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| | Vail Water Company | | NA | 0.98 | NA | 1.01 | 1.05 | 1.03 | 1.02 |

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013 *Duff and Phelps* Risk Premium Study Data**

**MRP Estimates Using Duff & Phelps Study (Relevered)**
**Relevered Realized Risk Premium**

**TABLE 4**

$RP_{relevered} = RP_{unlevered} + W_d/W_e*(\beta_u-\beta_d)*RP_{market}$

**Where $\beta_u$ = unlevered portfolio beta**

**$\beta_d$ = debt beta, assumed to be 0.1**

**$W_d$ = percentage of debt in capital structure**

**$W_e$ = percentage of equity in capital structure**

**$RP_{unlevered}$ = unlevered realized risk premium from Table 2**

**$RP_{market}$ = general equity risk premium for the market since 1963 (4.5%)**

| | | | $MRP_{m+s}$ (Relevered) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Company | Symbol | $W_d/W_e$ | MV Equity | Book Equity | MVIC | 5 Yr Avg. Net Income | Total Assets | 5 Yr Avg. EBITDA | Average |
| 1. | American States | AWR | 32.7% | 10.05% | 10.11% | 9.99% | 10.66% | 10.05% | 10.44% | 10.22% |
| 2. | Aqua America | WTR | 33.8% | 8.07% | 8.81% | 7.98% | 9.16% | 8.39% | 8.84% | 8.54% |
| 3. | California Water | CWT | 55.8% | 11.29% | 10.89% | 10.91% | 11.36% | 10.46% | 11.27% | 11.03% |
| 4. | Connecticut Water | CTWS | 52.0% | 12.75% | 12.26% | 12.50% | 12.76% | 12.11% | 13.31% | 12.61% |
| 5. | Middlesex | MSEX | 42.6% | 12.14% | 11.49% | 11.99% | 12.14% | 11.56% | 12.27% | 11.93% |
| 6. | SJW Corp. | SJW | 66.5% | 12.42% | 11.95% | 12.02% | 12.58% | 11.67% | 12.11% | 12.13% |
| | Average MRP (Relevered) | | 47.26% | 11.12% | 10.92% | 10.90% | 11.44% | 10.71% | 11.37% | 11.08% |
| | Vail Water Company | | 0.00% | NA | 12.82% | NA | 13.86% | 14.25% | 14.74% | 13.92% |

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013 *Duff and Phelps* Risk Premium Study Data**

**Equity Risk Premium Adjustment and Other meterics used in Build-up Method**

**TABLE 5**

| | |
|---|---|
| [1] Estimate of Current Market Risk Premium ( $RP_{market}$) | **5.00%** <<<< Current Duff and Phelps recommendation |
| [2] Risk Premium Assumed in Duff & Phelps Study (1963-2012) [1] | 4.50% |
| [3] Equity Risk Premium Adjustment ([1] - [2]) | 0.50% |
| [4] Average MRP (relevered) for publicly traded water companies (from Table 4) | 11.08% |
| [5] MRP (relevered) for publicly traded water companies ($RP_{m+s}$) ([3] + [4]) | 11.58% |
| | |
| [6] Equity Risk Premium Adjustment ([3]) | 0.50% |
| [7] Average MRP (relevered) for subject utility company (from Table 4) | 13.92% |
| [8] MRP (relevered) for subject utility company ($RP_{m+s}$) ([6] + [7]) | 14.42% |
| | |
| [9] Industry Risk Premium (From *Ibbotson* for SIC 494 Water Supply Industry Table 3-5) | -4.83% |
| [10] Adjustment Factor to Industry Risk Premium ([2] / 6.7% [1]] | 0.7463 |
| [11] Adjusted Industry Risk Premium ($R_i$) ([9] x [10]) | -3.60% |
| | |
| [12] Risk Free Rate ($R_f$)[2] | 2.77% |

[1] From Duff and Phelps Risk Premium Report 2013.
[2] Yield on 20 Yr U.S. Treasury March 6, 2013 (Federal Reserve)

**Vail Water Company**
**COST OF EQUITY (COE) USING RISK PREMIUM BUILD-UP METHOD**
**Based on 2013 *Duff and Phelps* Risk Premium Study Data**

**TABLE 6**

**Cost of Equity (COE) Estimate using Build-up Method**

$E(R_i) = R_f + RP_{m+s} + RP_i + RP_u$

**Where:**

**$E(R_i)$ = Expected (indicated) rate of return**
**$R_f$ = Risk-free rate of return. See Table 5.**
**$RP_{m+s}$ = Market risk premium including size premium. See Table 4.**
**$RP_i$ = Industry risk premium (adjusted) See Table 5.**
**$RP_u$ = Company-specific risk premium**

| | Sample Publicly Traded Water Utilities | Vail Water Company |
|---|---|---|
| $R_f$ = | 2.77% | 2.77% |
| $RP_{m+s}$ = | See Table 4 | See Table 4 |
| $RP_i$ = | -3.60% | -3.60% |
| $RP_u$ = | 0.00% | 0.00% |

| | Company | Symbol | Indicated COE $E(R_i)$ MV Equity | Book Equity | MVIC | 5 Yr Avg. Net Income | Total Assets | 5 Yr Avg. EBITDA | Average |
|---|---|---|---|---|---|---|---|---|---|
| 1. | American States | AWR | 9.72% | 9.77% | 9.66% | 10.33% | 9.72% | 10.11% | 9.88% |
| 2. | Aqua America | WTR | 7.74% | 8.47% | 7.65% | 8.83% | 8.06% | 8.51% | 8.21% |
| 3. | California Water | CWT | 10.95% | 10.56% | 10.58% | 11.03% | 10.12% | 10.93% | 10.69% |
| 4. | Connecticut Water | CTWS | 12.42% | 11.92% | 12.16% | 12.43% | 11.77% | 12.97% | 12.28% |
| 5. | Middlesex | MSEX | 11.81% | 11.15% | 11.66% | 11.81% | 11.22% | 11.93% | 11.60% |
| 6. | SJW Corp. | SJW | 12.08% | 11.62% | 11.69% | 12.24% | 11.33% | 11.78% | 11.79% |
| | Average COE estimate | | 10.79% | 10.58% | 10.57% | 11.11% | 10.37% | 11.04% | 10.74% |
| | Vail Water Company | | NA | 12.48% | NA | 13.53% | 13.92% | 14.41% | 13.58% |

# REBUTTAL D SCHEDULES

**Vail Water Company**
Test Year Ended December 31, 2011
Summary of Cost of Capital

Exhibit
Rebuttal Schedule D-1
Page 1
Witness: Bourassa

| Line No. | Item of Capital | Actual End of Test Year Dollar Amount | Percent of Total | Cost Rate | Weighted Cost | Adjusted End of Test Year Dollar Amount | | Percent of Total | Cost Rate | Weighted Cost | End of Projected Year Dollar Amount | Percent of Total | Cost Rate | Weighted Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Long-Term Debt | - | 0.00% | 0.000% | 0.00% | - | | 0.00% | 0.000% | 0.00% | - | 0.00% | 0.000% | 0.00% |
| 2 | | | | | | | | | | | | | | |
| 3 | Stockholder's Equity | 4,373,528 | 100.00% | 10.10% | 10.10% | 7,270,669 | [1,2,3,4] | 100.00% | 10.10% | 10.10% | 7,695,152 | 100.00% | 10.10% | 10.10% |
| 4 | | | | | | | | | | | | | | |
| 5 | Totals | 4,373,528 | 100.00% | | 10.10% | 7,270,669 | | 100.00% | | 10.10% | 7,695,152 | 100.00% | | 10.10% |
| 6 | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | |
| 8 | [1] Adjustment for Equity for Rebuttal A/D Adj. B-2, p. 4 | | $ 120,545 | | | | | | | | | | | |
| 9 | [2] Adjustment for Equity for Rebuttal CIAC amortization Adj. B-2, p. 5 | | $ 2,076 | | | | | | | | | | | |
| 10 | [3] Adjustment for Equity for Direct A/D Adj. B-2, p. 4 | | $ 2,710,101 | | | | | | | | | | | |
| 11 | [4] Adjustment for Equity for Direct CIAC amortization Adj. B-2, p. 5 | | $ 64,419 | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | SUPPORTING SCHEDULES: | | | | | | | | | | | | | |
| 23 | D-1 | | | | | | | | | | | | | |
| 24 | D-3 | | | | | | | | | | | | | |
| 25 | D-4 | | | | | | | | | | | | | |

RECAP SCHEDULES:
A-3

**Vail Water Company**
Test Year Ended December 31, 2011
Cost of Long Term Debt

Exhibit
Rebuttal Schedule D-2
Page 1
Witness: Bourassa

| Line No. | Description of Debt | Actual End of Test Year Amount Outstanding | Actual End of Test Year Annual Interest | Actual End of Test Year Interest Rate | Actual End of Test Year Weighted Cost | Adjusted End of Test Year Amount Outstanding | Adjusted End of Test Year Annual Interest | Adjusted End of Test Year Interest Rate | Adjusted End of Test Year Weighted Cost | End of Projected Year Amount Outstanding | End of Projected Year Annual Interest | End of Projected Year Interest Rate | End of Projected Year Weighted Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | |
| 2 | | - | - | 0.000% | 0.000% | - | - | 0.000% | 0.000% | - | - | 0.000% | 0.000% |
| 3 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | |
| 13 | Totals | $ - | - | | 0.000% | $ - | - | | 0.000% | $ - | - | | 0.000% |
| 14 | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | |
| 16 | Supporting Schdules: | | | | | | | | | | | | |
| 17 | E-1 | | | | | | | | | | | | |
| 18 | E-2 | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | |

**Vail Water Company**
Test Year Ended December 31, 2011
Cost of Preferred Stock

Exhibit
Rebuttal Schedule D-3
Page 1
Witness: Bourassa

| Line No. | | End of Test Year | | | End of Projected Year | | |
|---|---|---|---|---|---|---|---|
| | Description of Issue | Shares Outstanding | Amount | Dividend Requirement | Shares Outstanding | Amount | Dividend Requirement |
| 7 | NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING | | | | | | |

SUPPORTING SCHEDULES:
E-1

RECAP SCHEDULES:
D-1

**Vail Water Company**
Test Year Ended December 31, 2011
Cost of Common Equity

Exhibit
Rebuttal Schedule D-4
Page 1
Witness: Bourassa

| Line No. | | |
|---|---|---|
| 1 | | |
| 2 | The Company is proposing a cost of common equity of | 10.10% . |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | SUPPORTING SCHEDULES: | RECAP SCHEDULES: |
| 18 | D-4.1 to D-4.16 | D-1 |
| 19 | | |
| 20 | | |

**Vail Water Company**
**Summary of Results**

**Exhibit**
**Rebuttal Schedule D-4.1**

| Line No. | Method | Low | High | Midpoint |
|---|---|---|---|---|
| 6 | Range DCF Constant Growth Estimates[1] | 8.7% | 9.7% | 9.2% |
| 8 | Range of CAPM Estimates[2] | 8.7% | 12.7% | 10.7% |
| 12 | Average of midpoint estimates | 8.7% | 11.2% | 9.9% |
| 15 | Financial Risk Adjustment[3] | -0.8% | -0.8% | -0.8% |
| 17 | Small Company Risk Premium[4] | 1.0% | 1.0% | 1.0% |
| 19 | Indicated Cost of Equity | 8.9% | 11.4% | 10.1% |
| 23 | Recommended Cost of Equity | | | 10.1% |

[1] See Schedule D-4-8
[2] See Schedule D-4.12
[3] See Schedule D-4.13, Testimony
[4] See Schedule D-4.16, Testimony

**Vail Water Company**
**Selected Characteristics of Sample Group of Water Utilities**

**Exhibit**
**Rebuttal Schedule D-4.2**

| Line No. | Company[1] | % Water Revenues | Operating Revenues (millions) | Net Plant (millions) | S&P Bond Rating | Moody's Bond Rating | Allowed ROE |
|---|---|---|---|---|---|---|---|
| 1 | 1. American States | 68% | $ 449.7 | $ 912.0 | A+ | A2 | 9.99 |
| 2 | 2. Aqua America | 96% | $ 755.7 | $ 3,863.4 | AA- | NR | 10.33 |
| 3 | 3. California Water | 100% | $ 541.5 | $ 1,443.1 | AA- | NR | 9.99 |
| 4 | 4. Connecticut Water | 100% | $ 79.8 | $ 422.6 | A | NR | 9.75 |
| 5 | 5. Middlesex | 89% | $ 106.6 | $ 433.3 | A | NR | 10.15 |
| 6 | 6. SJW Corp. | 96% | $ 261.4 | $ 870.5 | A | NR | 9.99 |
| 7 | | | | | | | |
| 8 | Average | 92% | $ 365.8 | $ 1,324.2 | | | 10.03 |
| 9 | | | | | | | |
| 10 | Vail Water Company | 68% | $ 2.3 | $ 16.5 | NR | NR | |
| 11 | (Adjusted as of December 31, 2012) | | | | | | |

[1]AUS Utility Reports (March 2013).

**Vail Water Company**
**Capital Structures**

**Exhibit**
**Rebuttal Schedule D-4.3**

| No. | | Book Value[1] | | Market Value[1] | |
|---|---|---|---|---|---|
| | | Long-Term Debt | Common Equity | Long-Term Debt | Common Equity |
| | Company | | | | |
| 1. | American States | 45.5% | 54.5% | 24.7% | 75.3% |
| 2. | Aqua America | 52.7% | 47.3% | 25.3% | 74.7% |
| 3. | California Water | 51.7% | 48.3% | 35.8% | 64.2% |
| 4. | Connecticut Water | 53.2% | 46.8% | 34.2% | 65.8% |
| 5. | Middlesex | 42.8% | 57.2% | 29.9% | 70.1% |
| 6. | SJW Corp. | 56.6% | 43.4% | 39.9% | 60.1% |
| | Average | 50.4% | 49.6% | 31.6% | 68.4% |
| | Vail Water Company (Proforma) | 0.0% | 100.0% | N/A | N/A |

[1] Value Line Analyzer Data (March 6, 2013)
[2] Adjusted Per Schedule D-1

**Vail Water Company**
**Comparisons of Past and Future Estimates of Growth**

**Exhibit**
**Rebuttal Schedule D-4.4**

| Line No. | | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|---|---|
| | | | Five-year historical average annual changes | | | | | Average of Future and Historical Growth |
| | Company | Price[1] | Book Value[2] | EPS[2] | DPS[2] | Average Col 1-4 | Average Future Growth[3] | Col 5-6 |
| 1 | 1. American States | 9.12% | 5.50% | 10.50% | 3.00% | 7.03% | 5.83% | 6.43% |
| 2 | 2. Aqua America | 5.40% | 6.00% | 6.00% | 8.00% | 6.35% | 6.06% | 6.20% |
| 3 | 3. California Water | NMF | 5.00% | 5.00% | 1.00% | 3.67% | 6.00% | 4.83% |
| 4 | 4. Connecticut Water | 7.90% | 3.00% | 4.00% | 1.50% | 4.10% | 6.80% | 5.45% |
| 5 | 5. Middlesex | 4.56% | 5.00% | 2.00% | 1.50% | 3.26% | 4.85% | 4.06% |
| 6 | 6. SJW Corp. | NMF | 4.50% | NMF | 5.00% | 4.75% | 11.00% | 7.88% |
| 7 | | | | | | | | |
| 8 | GROUP AVERAGE | 6.74% | 4.83% | 5.50% | 3.33% | 4.86% | 6.76% | 5.81% |
| 9 | GROUP MEDIAN | 6.65% | 5.00% | 5.00% | 2.25% | 4.43% | 6.03% | 5.83% |

[1] Average of changes in annual stock prices ending on December 31 through 2012. Data from Yahoo Finance website.

[2] Value Line Analyzer Data, March 6, 2013

[3] See Schedule D-4.6.

**Vail Water Company**
**Comparisons of Past and Future Estimates of Growth**

**Exhibit**
**Rebuttal Schedule D-4.5**

| Line No. | | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|---|---|
| | | Ten-year historical average annual changes | | | | | | Average of Future and Historical Growth |
| | Company | Price[1] | Book Value[2] | EPS[2] | DPS[2] | Average Col 1-4 | Average Future Growth[3] | Col 5-6 |
| 1. | American States | 10.41% | 5.00% | 5.00% | 2.00% | 5.60% | 5.83% | 5.72% |
| 2. | Aqua America | 7.70% | 8.50% | 7.00% | 7.50% | 7.68% | 6.06% | 6.87% |
| 3. | California Water | 6.27% | 5.00% | 4.00% | 1.00% | 4.07% | 6.00% | 5.03% |
| 4. | Connecticut Water | 4.80% | 4.00% | 0.50% | 1.50% | 2.70% | 6.80% | 4.75% |
| 5. | Middlesex | 5.14% | 4.50% | 2.50% | 1.50% | 3.41% | 4.85% | 4.13% |
| 6. | SJW Corp. | 6.99% | 5.50% | 2.00% | 5.00% | 4.87% | 11.00% | 7.94% |
| | GROUP AVERAGE | 6.88% | 5.42% | 3.50% | 3.08% | 4.72% | 6.76% | 5.74% |
| | GROUP MEDIAN | 6.63% | 5.00% | 3.25% | 1.75% | 4.47% | 6.03% | 5.38% |

[1] Average of changes in annual stock prices ending December 31, 2011. Data from Yahoo Finance website.
[2] Value Line Analyzer Data, March 6, 2013.
[3] See Schedule D-4.6.

**Vail Water Company**
**Analysts Forecasts of Earnings Per Share Growth**

**Exhibit**
**Rebuttal Schedule D-4.6**

| Line No. | | [1] | [2] | [3] | [4] |
|---|---|---|---|---|---|
| | | ESTIMATES OF EARNINGS GROWTH | | | Average |
| | Company | Reuters[1] | Yahoo[1] | Value Line[1] | Growth (G) (Cols 1-3)[2] |
| 1 | 1. American States | 6.00% | 6.00% | 5.50% | 5.83% |
| 2 | 2. Aqua America | 6.27% | 4.90% | 7.00% | 6.06% |
| 3 | 3. California Water | 6.00% | 6.00% | 6.00% | 6.00% |
| 4 | 4. Connecticut Water | | 6.10% | 7.50% | 6.80% |
| 5 | 5. Middlesex | neg | 2.70% | 7.00% | 4.85% |
| 6 | 6. SJW Corp. | | 14.00% | 8.00% | 11.00% |
| 7 | | | | | |
| 8 | | | | | |
| 9 | GROUP AVERAGE | 6.09% | 6.62% | 6.83% | 6.76% |
| 10 | GROUP MEDIAN | | | | 6.03% |

[1] Data as of March 6, 2013

[2] Where no data available or single estimate, average of other utilities assumed to estimate for utility.

**Vail Water Company**
**Current Dividend Yields for Water Utility Sample Group**

**Exhibit**
**Rebuttal Schedule D-4.7**

| Line No. | Company | Curent Stock Price ($P_0$)[1] | Current Dividend ($D_0$)[1] | Current Dividend Yield ($D_0/P_0$)[1] | Average Annual Dividend Yield ($D_0/P_0$)[1,2] |
|---|---|---|---|---|---|
| 1 | 1. American States | $ 55.29 | $ 1.10 | 1.99% | 3.20% |
| 2 | 2. Aqua America | $ 29.73 | $ 0.63 | 2.12% | 2.85% |
| 3 | 3. California Water | $ 20.63 | $ 0.62 | 3.01% | 3.36% |
| 4 | 4. Connecticut Water | $ 29.54 | $ 0.94 | 3.18% | 3.62% |
| 5 | 5. Middlesex | $ 19.75 | $ 0.73 | 3.70% | 4.02% |
| 6 | 6. SJW Corp. | $ 27.79 | $ 0.69 | 2.48% | 2.94% |
| 7 | | | | | |
| 8 | Average | | | 2.75% | 3.33% |
| 9 | Median | | | 2.74% | 3.28% |

[1] Value Line Analyzer Data. Stock prices as of March 6, 2013.

[2] Average Annual Dividend is dividends declared per share for a year divided by the average annual price of the stock in the same year, expressed as a percentage. For comparison purposes only.

**Vail Water Company**
**Discounted Cash Flow Analysis**
**DCF Constant Growth**

**Exhibit**
**Rebuttal Schedule D-4.8**

| Line No. | | [1] | [2] | [3] | | [4] |
|---|---|---|---|---|---|---|
| | | Average Spot Dividend Yield ($D_0/P_0$)[1] | Expected Dividend Yield ($D_1/P_0$)[2] | Growth (g) | | Indicated Cost of Equity k=Div Yld + g (Cols 2+3) |
| 8 | DCF - Past and Future Growth | 2.75% | 2.91% | 5.81% | [3] | 8.7% |
| 10 | DCF - Future Growth | 2.75% | 2.93% | 6.76% | [4] | 9.7% |
| 13 | Average | 2.75% | 2.92% | 6.28% | | 9.2% |

[1] Spot Dividend Yield = $D_0/P_0$. See Schedule D-4.7.

[2] Expected Dividend Yield = $D_1/P_0 = D_0/P_0 * (1+g)$.

[3] Growth rate (g). Average of Past and Future Growth. See Schedule D-4.4, column 7

[4] Growth rate (g). Average of Analyst Estimates Future Growth. See Schedule D-4.6.

**Vail Water Company**
**Market Betas**

**Exhibit**
**Rebuttal Schedule D-4.9**

| Line No. | Company | Beta (β)[1] |
|---|---|---|
| 1 | 1. American States | 0.70 |
| 2 | 2. Aqua America | 0.60 |
| 3 | 3. California Water | 0.65 |
| 4 | 4. Connecticut Water | 0.75 |
| 5 | 5. Middlesex | 0.70 |
| 6 | 6. SJW Corp. | 0.85 |
| 7 | | |
| 8 | Average | **0.71** |

[1] Value Line Investment Analyzer data (March 6, 2013)

Note: Beta is a relative measure of the historical sensitivity of a stock's price to overall fluctuations in the New York Stock Exchange Composite Index. A Beta of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The "Beta coefficient" is derived from a regression analysis of the relationship between weekly percent-age changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are adjusted for their long-term tendency to converge toward 1.00.

**Vail Water Company**
**Forecasts of Long-Term Interest Rates**
**2012-14**

**Exhibit**
**Rebuttal Schedule D-4.10**

| Line No. | Description | Spot Feb. 2013 | 2014 | 2015 | Average |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | Blue Chip Consensus Forecasts[1] | 3.2% | 3.6% | 4.3% | 3.7% |
| 7 | | | | | |
| 8 | Value Line[2] | 3.2% | 4.6% | 4.5% | 4.1% |
| 9 | | | | | |
| 10 | Average | | | | 3.9% |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | [1] December 2012 Blue Chip Financial Forecasts consensus forecast of 30 Year U.S.Treasury | | | | |
| 16 | [2] Value Line Quarterly forecast, dated February 22, 2013, Long-term Treasury | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |

**Vail Water Company**
**Computation of Current Market Risk Premium**

**Exhibit**
**Rebuttal Schedule D-4.11**

| Line No. | Month | Dividend Yield ($D_0/P_0$)[1] | | Expected Dividend Yield ($D_1/P_0$)[2] | | Growth (g)[3] | | Expected Market Return (k) | | Monthly Average 30 Year Treasury Rate[4] | | Market Risk Premium (MRP) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | **Month** | | | | | | | | | | | |
| 4 | Jan 2011 | 2.34% | + | 2.60% | + | 11.10% | = | 13.70% | - | 4.52% | = | 9.18% |
| 5 | Feb | 2.41% | + | 2.73% | + | 13.16% | = | 15.89% | - | 4.65% | = | 11.24% |
| 6 | Mar | 2.35% | + | 2.64% | + | 12.33% | = | 14.97% | - | 4.51% | = | 10.46% |
| 7 | April | 1.83% | + | 2.02% | + | 10.30% | = | 12.32% | - | 4.50% | = | 7.82% |
| 8 | May | 1.95% | + | 2.18% | + | 11.76% | = | 13.94% | - | 4.29% | = | 9.65% |
| 9 | June | 1.97% | + | 2.21% | + | 12.11% | = | 14.32% | - | 4.23% | = | 10.09% |
| 10 | July | 2.23% | + | 2.58% | + | 15.51% | = | 18.09% | - | 4.27% | = | 13.82% |
| 11 | Aug | 2.73% | + | 3.24% | + | 18.51% | = | 21.75% | - | 3.65% | = | 18.10% |
| 12 | Sept | 2.88% | + | 3.47% | + | 20.40% | = | 23.87% | - | 3.18% | = | 20.69% |
| 13 | Oct | 2.60% | + | 3.03% | + | 16.35% | = | 19.38% | - | 3.13% | = | 16.25% |
| 14 | Nov | 2.75% | + | 3.24% | + | 17.89% | = | 21.13% | - | 3.02% | = | 18.11% |
| 15 | Dec 2011 | 2.70% | + | 3.17% | + | 17.41% | = | 20.58% | - | 2.98% | = | 17.60% |
| 16 | Jan 2012 | 2.61% | + | 2.98% | + | 14.18% | = | 17.16% | - | 3.03% | = | 14.13% |
| 17 | Feb | 2.60% | + | 2.99% | + | 15.01% | = | 18.00% | - | 3.11% | = | 14.89% |
| 18 | Mar | 2.36% | + | 2.65% | + | 12.33% | = | 14.98% | - | 3.28% | = | 11.70% |
| 19 | April | 2.62% | + | 3.02% | + | 15.22% | = | 18.24% | - | 3.18% | = | 15.06% |
| 20 | May | 2.86% | + | 3.38% | + | 18.12% | = | 21.50% | - | 2.93% | = | 18.57% |
| 21 | June | 2.73% | + | 3.18% | + | 16.59% | = | 19.77% | | 2.70% | = | 17.07% |
| 22 | July | 2.79% | + | 3.29% | + | 18.10% | = | 21.39% | | 2.59% | = | 18.80% |
| 23 | Aug | 2.73% | + | 3.17% | + | 16.23% | = | 19.40% | | 2.77% | = | 16.63% |
| 24 | Sept | 2.67% | + | 3.07% | + | 14.95% | = | 18.02% | | 2.88% | = | 15.14% |
| 25 | Oct | 2.71% | + | 3.14% | + | 15.81% | = | 18.95% | | 2.90% | = | 16.05% |
| 26 | Nov | 2.74% | + | 3.15% | + | 14.88% | = | 18.03% | | 2.80% | = | 15.23% |
| 27 | Dec 2012 | 2.62% | + | 2.95% | + | 12.63% | = | 15.58% | | 2.88% | = | 12.70% |
| 28 | Jan 2013 | 2.56% | + | 2.86% | + | 11.74% | = | 14.60% | | 3.08% | = | 11.52% |
| 29 | Feb | 2.60% | + | 2.94% | + | 13.13% | = | 16.07% | | 3.17% | = | 12.90% |
| 30 | | | | | | | | | | | | |
| 31 | Recommended | 2.59% | + | 2.92% | + | 12.50% | = | 15.42% | - | 3.04% | = | 12.37% |
| 32 | | | | | | | | | | | | |
| 33 | Short-term Trends | | | | | | | | | | | |
| 34 | Recent Twelve Months Avg | 2.67% | + | 3.07% | + | 14.98% | = | 18.04% | - | 2.93% | = | 15.11% |
| 35 | Recent Nine Months Avg | 2.68% | + | 3.08% | + | 14.90% | = | 17.98% | - | 2.86% | = | 15.12% |
| 36 | Recent Six Months Avg | 2.65% | + | 3.02% | + | 13.86% | = | 16.87% | - | 2.95% | = | 13.92% |
| 37 | Recent Three Months Avg | 2.59% | + | 2.92% | + | 12.50% | = | 15.42% | - | 3.04% | = | 12.37% |
| 38 | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | |

40 [1] Average Current Dividend Yield ($D_0/P_0$) of dividend paying stocks. Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

41 [2] Expected Dividend Yield ($D_1/P_0$) equals average current dividend yield (D0/P0) times one plus growth rate(g).

42 [3] Average 3-5 year price appreciation (annualized). Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

43 [4] Monthly average 30 year U.S. Treasury. Federal Reserve.

44

**Vail Water Company**
**Capital Asset Pricing Model (CAPM)**

**Exhibit**
**Rebuttal Schedule D-4.12**

| Line No. | | Rf[1] | + | beta[3] | x | Rp | | = | k |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | Historical Market Risk Premium CAPM | 3.9% | + | 0.71 | x | 6.7% | [4] | = | 8.7% |
| 4 | | | | | | | | | |
| 5 | Current Market Risk Premium CAPM | 3.9% | + | 0.71 | x | 12.4% | [5] | = | 12.7% |
| 6 | | | | | | | | | |
| 7 | Average | | | | | | | | 10.7% |

[1] Forecasts of long-term treasury yields. See Schedule D-4.10.
[2] Value Line Investment Analyzer data. See Schedule D-4.9.
[3] Historical Market Risk Premium from (Rp) MorningStar SBBI 2013 Valuation Yearbook Table A-1 Long-Horizon ERP 1926-2012.
[4] Computed using DCF constant growth method to determine current market return onValue Line 1700 stocks and CAPM with beta of 1.0 to compute Current Market Risk Premium (Rp). See Schedule D-4.11.

**Vail Water Company**
**Financial Risk Computation**

**Exhibit**
**Rebuttal Schedule D-4.13**

| Line No. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **CAPM** | | | | | | | | | | |
| 2 | | **Rf** | | + | **$\beta$** | | x | **(Rp)** | | | **k** |
| 3 | Historical Market Risk Premium | 3.9% | [1] | + | 0.71 | [2] | x | 6.7% | [3] | = | 8.7% |
| 4 | Current Market Risk Premium | 3.9% | [1] | + | 0.71 | [2] | x | 12.4% | [4] | = | 12.7% |
| 5 | | | | | | | | | | | |
| 6 | Average | | | | | | | | | | 10.7% |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | **CAPM Relevered Beta** | | | | | | | | | | |
| 10 | | **Rf** | | + | **$\beta$** | | x | **(Rp)** | | | **k** |
| 11 | Historical Market Risk Premium | 3.9% | [1] | + | 0.62 | [5] | x | 6.7% | [3] | = | 8.1% |
| 12 | Current Market Risk Premium | 3.9% | [1] | + | 0.62 | [5] | x | 12.4% | [4] | = | 11.6% |
| 13 | | | | | | | | | | | |
| 14 | Average | | | | | | | | | | 9.9% |
| 15 | | | | | | | | | | | |
| 16 | Financial Risk Adjustment | | | | | | | | | | **-0.8%** |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |

19 [1] Forecast of long-term treasury yields. See Schedule D-4.10
20 [2] Value Line Investment Analyzer data. See Schedule D-4.9
21 [3] Historical Market Risk Premium from (Rp) MorningStar SBBI 2013 Valuation Yearbook Table A-1 Long-Horizon ERP 1926-2012
22 [4] Computed using DCF constant growth method to determine current market return on Value Line 1700 stocks
23 and CAPM with beta of 1.0 to compute Current Market Risk Premium (Rp). See Schedule D-4.11
24 [5] Relevered bata found on Schedule D-4.15
25

Vail Water Company
Financial Risk Computation
Unlevered Beta

Exhibit
Rebuttal Schedule D-4.14

| Line No. | | Company | VL Beta $\beta_L$ [1] | Raw Beta Raw $\beta_L$ [2] | Tax Rate t [3] | MV Debt D [4] | MV Equity E [4] | Unlevered Raw Beta $\beta_U$ [5] |
|---|---|---|---|---|---|---|---|---|
| 5 | 1. | American States | 0.70 | 0.55 | 41.7% | 24.7% | 75.3% | 0.46 |
| 6 | 2. | Aqua America | 0.60 | 0.40 | 32.9% | 25.3% | 74.7% | 0.33 |
| 7 | 3. | California Water | 0.65 | 0.48 | 40.5% | 35.8% | 64.2% | 0.36 |
| 8 | 4. | Connecticut Water | 0.75 | 0.63 | 41.3% | 34.2% | 65.8% | 0.48 |
| 9 | 5. | Middlesex | 0.70 | 0.55 | 32.7% | 29.9% | 70.1% | 0.43 |
| 10 | 6. | SJW Corp. | 0.85 | 0.78 | 41.1% | 39.9% | 60.1% | 0.56 |
| 13 | | Sample Water Utilities | 0.71 | 0.57 | 38.4% | 31.6% | 68.4% | 0.44 |

[1] Value Line Investment Analyzer data. See Schedule D-4.13
Value Line uses the historical data of the stock, but assumes that a security's beta moves toward the market average over time. The formula is as follows:
Adjusted beta = .33 + (.67) * Raw beta

[2] Raw Beta = (VL beta - .33)/(.67)

[3] Effective tax rates per Value Line Analyzer Data (March 6, 2013).

[4] See Schedule D-4.3

[5] Raw $B_u$ = Raw $B_L$ / (1+ (1-t)*D/E)

Vail Water Company
Financial Risk Computation
Relevered Beta

Exhibit
Rebuttal Schedule D-4.15

| Line No. | | Unlevered Raw Beta $\beta_U$[1] | MV Book Debt BD[2] | MV Equity Capital EC[2] | Tax Rate t[3] | Relevered Raw Beta $\beta_{RL}=\beta_U (1+(1-t)BD/EC))$ $\beta_{RL}$ | VL Adjusted Relevered Beta .33 + .67(Raw Beta) $\beta_{RL}$ |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | Vail Water Company | 0.44 | 0.0% | 100.0% | 22.14% | 0.44 | 0.62 |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |

[1] Unlevered Beta from Schedule D-4.14.

[2] Adjusted Capital Structure of Company

| | | BV (in Thousands) | | | MV (in Thousands) | MV % |
|---|---|---|---|---|---|---|
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | Long-term Debt | $ - | 1.00 | | $ - | 0.00% |
| 18 | Preferred Stock | $ - | 1.00 | | - | 0.0% |
| 19 | Common Stock | $ 7,271 | 2.28 | (a) | 16,559 | 100.0% |
| 20 | Total Capital | $ 7,271 | | | $ 16,559 | 100.0% |

21

22 (a) Current market-to-book ratio of sample water utilities. See work papers.

23

[3] Current Tax rate based on test year at proposed rates.

25

26

**Vail Water Company**
**Size Premium[1]**

**Exhibit**
**Rebuttal Schedule D-4.16**

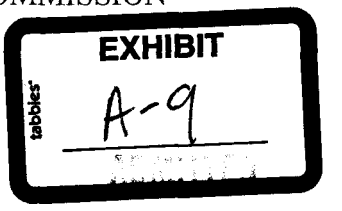
| Line No. | | Beta(β) | Size Premium | Risk Premium for Small Water Utilities[7] |
|---|---|---|---|---|
| 6 | Mid-Cap Companies[2] | 1.12 | 1.14% | |
| 8 | Low-Cap Companies[3] | 1.23 | 1.88% | |
| 10 | Micro-Cap Companies[4] | 1.36 | 3.89% | |
| 12 | Decile 10[5] | 1.41 | 6.10% | 3.67% |

| | | Risk Premium for Small Water Utilities |
|---|---|---|
| 20 | Estimated Risk Premium for small water utilities[6] | 0.99% |

[1] Data from Table 7-8 of Morningstar, *Ibbotson SBBI 2012 Valuation Yearbook.*
[2] Mid-Cap companies includes companies with market capitalization between $1,621 million and $6,896 million.
[3] Low-Cap companies includes companies with market capitalization between $423 million and $1,620 million.
[4] Micro-Cap companies includes companies with market capitalization less than $422 million.
[5] Decile 10 includes companies with market capitalization between $1.0 million and $206 million.
[6] From Table 2, Thomas M. Zepp, "Utility Stocks and the Size Effect Revisited," *The Quarterly Review of Economics and Finance*, 43 (2003), 578-582.
[7] Computed as the weighted differences between the Decile 10 risk premium and the inidicated risk premiums for the sample water utlities as shown below. Excludes risk due to differences in beta.

| | | Market Cap. (Millions) | Class | Size Premium | Difference to Decile 10 | Weight | Weighted Size Premium |
|---|---|---|---|---|---|---|---|
| 1. | American States | $ 1,039 | Low-Cap | 1.88% | 4.22% | 0.166667 | 0.70% |
| 2. | Aqua America | $ 4,129 | Mid-Cap | 1.14% | 4.96% | 0.166667 | 0.83% |
| 3. | California Water | $ 862 | Low-Cap | 1.88% | 4.22% | 0.166667 | 0.70% |
| 4. | Connecticut Water | $ 260 | Micro-Cap | 3.89% | 2.21% | 0.166667 | 0.37% |
| 5. | Middlesex | $ 310 | Micro-Cap | 3.89% | 2.21% | 0.166667 | 0.37% |
| 6. | SJW Corp. | $ 517 | Low-Cap | 1.88% | 4.22% | 0.166667 | 0.70% |
| | Weighted Size Premium for Small Companies | | | | | | 3.67% |

BEFORE THE ARIZONA CORPORATION COMMISSION




COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
SUSAN BITTER SMITH
BOB BURNS

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON | **DOCKET NO. W-01651B-12-0339** |

# REBUTTAL TESTIMONY OF KARA D. FESTA P.E. ON BEHALF OF VAIL WATER COMPANY MARCH 25, 2013

REBUTTAL TESTIMONY OF
KARA D. FESTA P.E.
ON BEHALF OF
VAIL WATER COMPANY
MARCH 25, 2013

TABLE OF CONTENTS

## INTRODUCTION AND QUALIFICATIONS

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Kara D. Festa, P.E., and my business address is 4001 E. Paradise Falls Drive, Tucson, Arizona, 85712.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by WestLand Resources, Inc. (WestLand), as a civil engineer, and I am a principal of the company.

**Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.**

A. I have a Bachelors degree in Civil Engineering and Masters degree in Environmental Engineering from the University of Arizona. I have been working in the engineering field, primarily in water and wastewater planning and design, for 17 years, 14 of those years at WestLand. I am Registered Professional Engineer in Arizona and New Mexico.

**Q. PLEASE DESCRIBE YOUR INVOLVEMENT WITH PREVIOUS WORK FOR VAIL WATER COMPANY.**

A. I have been working on water system engineering projects with Vail Water Company (Company) since 1998, as a project engineer, project manager, and then in my capacity as a principal with WestLand. My work with Company has included water system hydraulic modeling and master planning, design for pipelines, booster stations, reservoirs, and wells, and general operational and engineering assistance. In addition, I have assisted the water company during well outages, to help with troubleshooting, selection of new well equipment, review of well videos and providing engineering recommendations.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. My testimony presents my professional opinion as to the capacity of well infrastructure and overall capacity and reliability of the Company well supplies, and whether Well No.

6 is excess capacity or would be considered necessary to meet the water demand of the Company system.

## I. RESPONSE TO COMMISSION STAFF REGARDING EXCESS CAPACITY

**Q. WHAT INFORMATION AND/OR RECORDS DID YOU REVIEW FOR THIS TESTIMONY?**

A. I reviewed well capacity and demand information from 2011 and 2012, as well as the testimony and Staff Report prepared by Marlin Scott Jr.

**Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE MATTERS ADDRESSED IN YOUR TESTIMONY.**

**A.** I have concluded from my review that Well No. 6 is not excess capacity, but is a needed facility in the Vail Water Company system. The main reasons relate to the actual available flow from each well, the configuration of the water system and availability and function of the wells to serve various areas of the water system, and the demands placed on the well source system.

**Q. CAN YOU FIRST EXPLAIN THE ACTUAL FLOW AVAILABLE FROM EACH WELL?**

A. Yes. The Staff Report based the calculations about the water system on the recorded capacity of the wells when those facilities were placed in service, as noted in historical documentation (Page 1, Table 1). In reality, most well pumping capacity is not consistent over time, and typically the available capacity from a well will drop over time as the well pump and casing age. This occurs for a variety of reasons, the most common being the growth of deposits on the interior of the casing that reduce the available flow into the well, and wear to the moving parts of the pump due to sand or other materials running through the pump. When we review the ability of a well system to serve the demands of the current water system, we need to consider what the pumps are actually capable of

providing at the current time, not what the well might have been capable of producing when the equipment was newly installed. Often, the well casing and pump can be rehabilitated or the pumping equipment replaced to reclaim lost pumping capacity, but this requires a significant investment in time and funds, and the need for well and pump rehabilitation must be weighed against the costs and completed when economically viable.

The current equipped and available capacities of each well are provided in the table below:

| *Well No.* | *GPM* |
|---|---|
| 3 | 550 |
| 5 | 810 |
| 6 | 650 |
| 8 | 830/1,200* |
| | 3,210* |

* Well No. 8 is currently out of service. Well No. 8 was producing 830 gpm prior to the planned outage. The new pump capacity is expected to be 1,200 gpm following well rehabilitation and pump replacement.

**Q. AS AN ENGINEER REVIEWING THE CAPACITY IN THE WATER SYSTEM, HOW DO YOU TYPICALLY DETERMINE WHAT WELL CAPACITY SHOULD BE PROVIDED?**

A. A water company must have sufficient well capacity to meet the peak day usage, also called Peak Day Demand, because the water supply source has to be able to keep up with the demands of the water system during the highest demand days of the year. This typically occurs during early summer. There can be a series of days of very high demand

where the water company is pumping at or near Peak Day Demand values for a sustained period. In that situation, the wells would need to be running for sustained periods just to meet system demands. And in reality, due to the variability of demand over the day and available reservoir capacity to accept the well supply, the wells may not be able to run all the time, even on Peak Day.

Because of how a water system operates, we always need to have, at a minimum, at least enough well capacity to meet Peak Day Demand. Because we also never know when a well outage will occur due to pumping or electrical equipment or casing issues, the accepted engineering recommendation is to be able to supply Peak Day Demand with the largest well out of service.

I would also like to point out that Peak Day Demand should not be confused with other types of peaking calculations. For example, the "highest peak use" per customer provided in the Staff Report (Page 5, System Analysis) is the Average Day of the Peak Month of water sales, rather than the Peak Day usage of well pumping demands. Peak Day Demand is generally assumed to be as much as 1.5 times higher than the Average Day of the Peak Month usage. The peak usage provided in that section of the Staff Report is also based on customer use, rather than well pumping, which doesn't account for any lost and unaccounted for uses. The actual available well capacity should be based on the Peak Daily Demand of the water system, not only customer sales, and especially not customer sales on average during the highest month, which would considerably underestimate the actual peak demand on the water system's well sources.

**Q. WHY DO THE WELL SIZING CRITERIA CONSIDER THE SITUATION WITH THE LARGEST WELL OUT OF SERVICE?**

A. Well outages can occur at any time, especially during high demand periods when the wells are being placed under significant stress, such as summer peak usage periods.

Because the total well capacity within a water system is not always available, we have to plan for this reality in the design and operation of water systems, so that service to customers is reliable.

**Q. WHEN PUMP OR WELL ISSUES CAUSE A WELL OUTAGE TO OCCUR, HOW LONG COULD A WELL BE OUT OF SERVICE?**

A. It can vary from a few days to a few weeks for a mechanical or electrical failure, and from a few weeks to a month or more for pump and casing inspection, rehabilitation, and repairs. For example, the water company recently took Well No. 8 out of service to assess the pump due to a noted issue with the equipment. The company brushed and bailed the well due to deposits inside the casing which had caused reduced pumping capacity, replaced the pump and sections of column, tube and shaft that were not suitable for continued use, and lowered the pump setting 50 feet. The well has currently been out of service for approximately six weeks, and is expected to be back in service within approximately the next two weeks. Well No. 8 was taken out of service voluntarily, and the water company elected to do this work before the high-use summer period, to reduce the potential for a well outage during that period. It is best when well outages can be scheduled at the water company's convenience, but this is not always possible due to unexpected issues that occur, especially when wells and pumps are heavily used, as happens in the summer months.

**Q. WHAT ELSE IS IMPORTANT TO UNDERSTAND ABOUT THIS WATER SYSTEM IN REVIEWING WELL CAPACITY?**

A. On critical point in reviewing the well capacity is the actual configuration of the water system, and where the wells are located. The Vail Water Company system is divided into two main areas, the North Service Area and the South Service Area, divided by the Southern Pacific Railroad. There is a pipeline between these two service areas, but

because of the location and configuration of the booster stations within the water system, water can be moved from North Service Area to the South Service Area, but the water system isn't configured to move water from the South Service Area to the North Service Area.

Well No. 3 is located in the South Service Area, which means that Well No. 3 capacity can only serve into the South Service Area, and isn't available to the North Service Area. Well Nos. 5, 6, and 8 are in the North Service Area, and this well capacity can also be transferred to the South Service Area using the I-3380 Zone Booster Station.

Another point of note is that the capacity of Well No. 5 serves a somewhat unusual function in this water system. In most water systems, well capacity is not directly used to provide fire flow to a water system. Pressure and fire flow generally come from a combination of reservoirs located at a high water elevation above the water system or booster stations that pressurize the water system. However, because of the configuration of the Vail Water Company system, and long pipelines leading from the water system's I Zone reservoirs to the subdivisions and school in the vicinity of Well No. 5, there were noted and significant low pressure problems in that area prior to the installation of Well No. 5. Part of the function of Well No. 5 is to operate during high demand periods to help increase the pressure in that area of the water system. The controls for Well No. 5 are designed to respond both to the remote reservoir level for reservoir filling, and to the local pressure in the area of the well. The purpose for equipping and connecting Well No. 5 to the water system was not solely for source water to the system, but also to serve this supplemental pressure requirement.

**Q. HOW IS THE WATER SYSTEM DEMAND BROKEN UP BETWEEN THE NORTH SERVICE AREA AND THE SOUTH SERVICE AREA?**

A. Based on data from the water company regarding the customer breakdown between the North and South Service areas, the demand of the South Service area is calculated to be approximately 32 percent of the water system demand, and the demand of the North Service Area is approximately 68 percent of the water system demand. The annual pumping reported of 382,210,000 gallons calculates to an average daily demand (ADD) of 1,047,151 gallons per day, or 727 gallons per minute (gpm). The standard engineering assumption of a peaking factor of two times the Average Day Demand provides a Peak Day Demand of 1,454 gpm. This would be proportioned between the South and North Service Areas at a Peak Day Demand of approximately 460 and 994 gpm, respectively.

**Q. HOW DOES THE DEMAND COMPARE TO THE CURRENT WELL SUPPLY?**

A. Looking first at the South Service area, the Peak Day Demand of 460 gpm is just less than the Well No. 3 capacity of 550 gpm, and Well No. 3 would be considered sufficient capacity for Peak Day Demand. In addition, if Well No. 3 is out of service, water can also be transferred into the South Service Area from the I-3380 Zone Booster Station, which provides the required redundancy for the South Service Area.

In the North Service area, the Peak Day Demand is 994, and the sum of the well capacities will be 2,660 gpm when Well No. 8 is brought back into service, if the well rehabilitation achieves the original pumping capacity. Because the water company needs to be able to serve the Peak Day Demand when the largest well is out of service, the available well capacity without Well No. 8 capacity is 1,460 gpm. This is sufficient to meet the Peak Day Demand.

**Q. IN THE NORTH SERVICE AREA, WHAT WOULD BE THE CONDITION IF WELL NO. 6 WAS NOT PART OF THE WATER SYSTEM?**

A. In that case, the North Service Area would be served by only Well No. 5 and Well No. 8. The Company would still need to be able to serve the water system with the largest well

out of service. Without Well No. 8, the available well capacity of Well No. 5 would be 810 gpm, which is less than the Peak Daily Demand needed for the North Service Area. The purpose of Well No. 6 in the water system, therefore, is to provide adequate redundancy to meet peaking demands. There is not excess well capacity in the North Service Area or in the Company's water system.

**Q. IS THERE ANY OTHER CONSIDERATION REGARDING THE OPERATION OF THE NORTH SERVICE AREA THAT IS IMPORTANT TO THE DISCUSSION OF WELL CAPACITY?**

A. Yes. Much of the North Service Area constitutes a master planned community that is under construction. The construction usage from 3-inch hydrant meters for grading operations and dust control can be considerable, and is typically 200 to 300 gpm per hydrant meter when contractor are drawing water for water truck and Klein tank filling. The water company currently has five 3-inch construction meters in use in the system, which is typical of the ongoing construction operations. The highest usage of the construction meters is during the hottest, driest times of the year, when significant grading and dust control water is required.

When this additional pumping demand is considered in the context of peaking usage and how much higher the Peak Day Demand can be than the Average Day of the Peak Month value, the need for the capacity of all three wells in the North Service Area is even clearer.

**Q. DOES VAIL WATER COMPANY ACTUALLY USE ALL FOUR OF THE WATER SYSTEM WELLS?**

A. Yes. **Exhibit A** shows the proportion of use from each of the water company's wells in 2011 and 2012.

**Q. COULD YOU SUMMARIZE YOUR PROFESSIONAL OPINION ABOUT THE WELL CAPACITY OF THE COMPANY SYSTEM?**

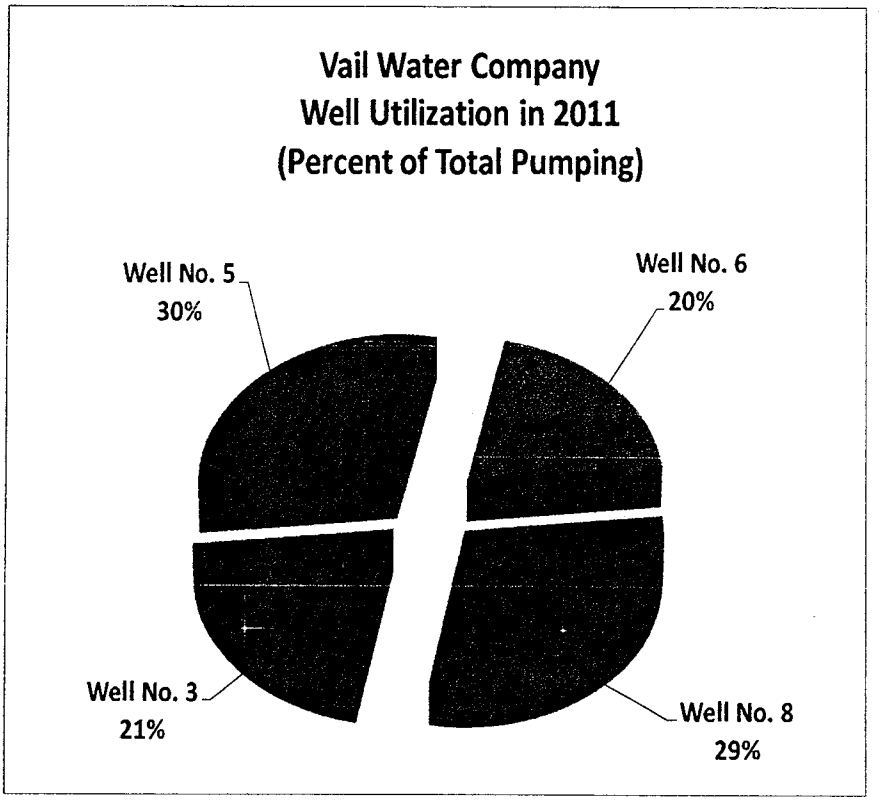
A. I believe that the Company needs all four of the existing wells to provide adequate and reliable service to the water system. Well No. 6 should not be considered excess capacity, is used and useful, and is an important facility for the reliable operation of Company to meet customer demands.

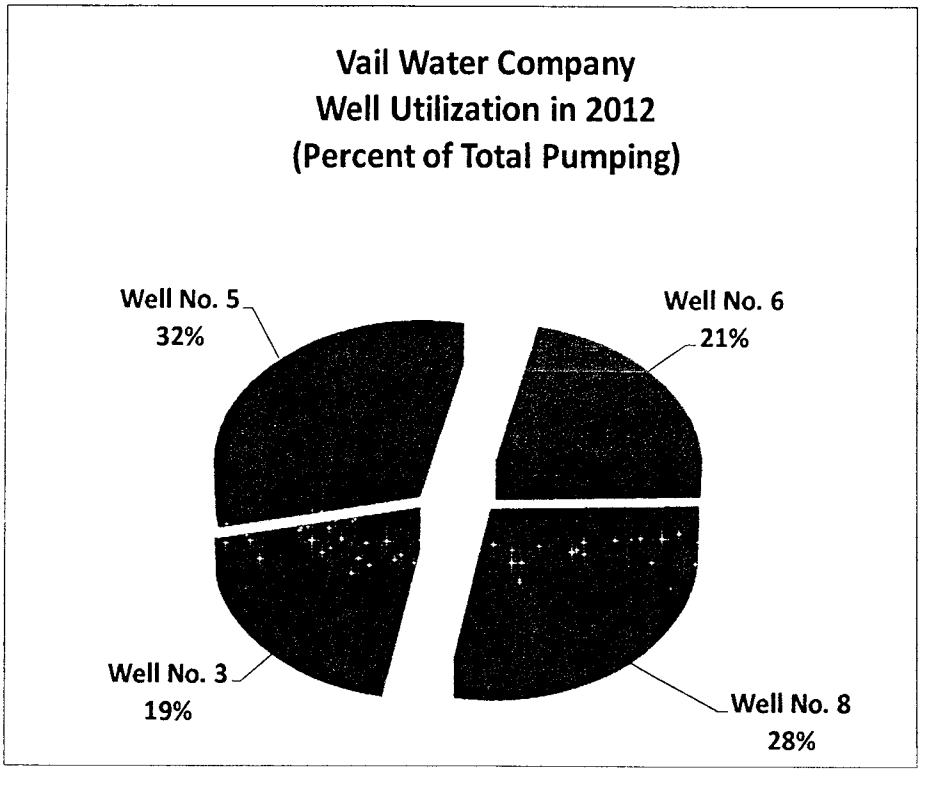
## II. CONCLUSION

**Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

A. Yes.

**EXHIBIT A**

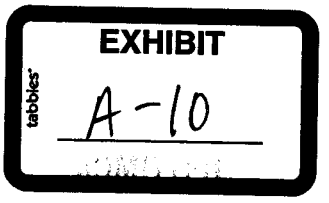

Vail Water Company
Well Utilization in 2011
(Percent of Total Pumping)
Well No. 5
30%
Well No. 6
20%
Well No. 3
21%
Well No. 8
29%


Vail Water Company
Well Utilization in 2012
(Percent of Total Pumping)
Well No. 5
32%
Well No. 6
21%
Well No. 3
19%
Well No. 8
28%

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
SUSAN BITTER SMITH
BOB BURNS




| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON | **DOCKET NO. W-01651B-12-0339** |

# TESTIMONY OF CHRISTOPHER VOLPE IN SUPPORT OF SETTLEMENT AGREEMENT ON BEHALF OF VAIL WATER COMPANY

**May 3, 2013**

TESTIMONY OF
CHRISTOPHER VOLPE
IN SUPPORT OF SETTLEMENT
ON BEHALF OF
VAIL WATER COMPANY
MAY 3, 2013

TABLE OF CONTENTS

## I. INTRODUCTION AND QUALIFICATIONS

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE NUMBER.**

A. My name is Christopher ("Kip") Volpe. My business address is 1010 N. Finance Center Drive, Suite 200, Tucson, AZ 85710, and my business phone number is 520-571-1958, ext. 105.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by TEM Corp., a management company that performs management services for Vail Water Company ("Vail" or the "Company") under a service contract.

**Q. PLEASE DESCRIBE YOUR PRIMARY RESPONSIBILITIES FOR VAIL.**

A. I am a Vice President of Vail and oversee the administration and operations of the Company.

## II. PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. I will provide testimony in support of the proposed Settlement Agreement. I will discuss briefly the settlement process, the settlement terms, and the benefits of the settlement.

## III. SETTLEMENT PROCESS

**Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE PROCEEDINGS LEADING UP THE SETTLEMENT.**

A. On July 27, 2012, Vail filed with the Commission an Application for a rate increase. In its Application, Vail requested an increase in revenues of $44,144 or 1.89 percent. The Company's Application also requested a rate of return of 10.4 percent. Following multiple rounds of discovery and following the filing of the Company's Rebuttal Testimony, the parties began discussing the potential for a settlement.

**Q. PLEASE DESCRIBE THE SETTLEMENT PROCESS.**

A. A formal settlement conference was noticed and held at the Commission's offices on April 18, 2013. At this conference, the parties negotiated the points of disagreement in their respective testimonies. Staff accepted some of the Company's positions and rejected others. By the conclusion of this settlement conference, the parties had substantially agreed on the terms of a settlement.

## IV. SETTLEMENT TERMS

**Q. PLEASE DESCRIBE THE MAJOR TERMS OF THE SETTLEMENT.**

A. The Settlement Agreement provides for a revenue increase of $21,480 and a rate of return of 9.1 percent. The Agreement also establishes a fair value of rate base for the Company of $3,315,108. As part of the settlement, Vail agreed to Staff's proposed rate design and also consented to Staff's preferred treatment of certain surcharges and hook-up-fees related to the Company's CAP project. The parties also agreed that Vail will provide timesheets for management services from TEM Corp. to support claimed management fee expenses in future rate cases.

**Q. DID THE SETTLEMENT INCLUDE AN AGREEMENT ON THE IMPLEMENTATION OF A CAP SURCHARGE?**

A. Yes. After multiple discussions with Staff, the parties have agreed upon a CAP surcharge, including its components, and a Plan of Administration. The surcharge will allow the Company to address certain expenses related to direct delivery of CAP water to the Company's service territory, a policy supported by the state of Arizona and by the Commission. As part of that surcharge, customers will share in any profits received by the Company from the sale of long term storage credits.

## V. PUBLIC INTEREST

**Q. WHY IS THE APPROVAL OF THIS SETTLEMENT IN THE PUBLIC INTEREST?**

A. The terms of the settlement provide a reasonable resolution of the issues presented during this rate case. Although the settlement incorporates a rate of return that is lower than the rate sought by Vail, Vail believes it will be able to continue operating effectively and providing safe and reliable water service to its customers under the terms of the Settlement Agreement. Perhaps most importantly, the settlement supports the Company's direct use of a renewable resource in its service territory. The Settlement Agreement is the product of candid discussions between Vail and Staff and illustrates a willingness of the parties to find common ground and to reach a compromise that both parties believe is in the public interest.

## VI. CONCLUSION

**Q. DOES THIS CONCLUDE YOUR TESTIMONY IN SUPPORT OF THE SETTLEMENT AGREEMENT?**

A. Yes.

ORIGINAL

BEFORE THE ARIZONA CORPORATION

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EXHIBIT
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**COMMISSIONERS**
BOB STUMP- Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO. W-01651B-12-0339<br><br>**STAFF'S NOTICE OF SETTLEMENT AGREEMENT** |

Staff of the Arizona Corporation Commission ("Staff"), on behalf of the Signatories to the Proposed Settlement Agreement ("Agreement"), hereby files the Agreement in compliance with the filing deadline of April 24, 2013 set by the Administrative Law Judge in her Procedural Order of April 24, 2013.

RESPECTFULLY SUBMITTED this 26th day of April 2013.

Brian E. Smith
Bridget A. Humphrey
Attorneys, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 26th day of April 2013 with:

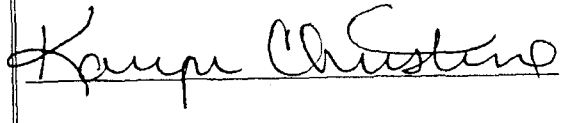
Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
DOCKETED
APR 26 2013
DOCKETED BY

Copy of the foregoing mailed this
26th day of April 2013 to:

Christopher Volpe, Vice President
Vail Water Company
1010 North Finance Center Drive
Suite 200
Tucson, Arizona 85710

Michael McNulty
Michael Hallam
Lewis and Roca LLP
40 North Central Avenue
Phoenix, Arizona 85004



# VAIL WATER COMPANY

# PROPOSED SETTLEMENT AGREEMENT

**DOCKET NO. W-01651B-12-0339**

April 26, 2013

## TABLE OF CONTENTS

**PROPOSED SETTLEMENT AGREEMENT OF**
**DOCKET NO. W-01651B-12-0339**
**VAIL WATER COMPANY'S REQUEST FOR RATE ADJUSTMENT**

The purpose of this Settlement Agreement ("Agreement") is to settle disputed issues related to Docket No. W-01651B-12-0339, Vail Water Company's ("Vail" or the "Company") application for a determination of the fair value of its utility plant and property and the setting of rates thereon (the "Rate Case"). This Agreement is entered into between Arizona Corporation Commission Utilities Division ("Staff") and Vail (each a "Party", and collectively, the "Parties").

## I. RECITALS

1.1 Vail filed the rate application in Docket No. W-01651B-12-0339 on July 27, 2012. Staff found the Application sufficient on August 27, 2012.

1.2 No other entity filed to intervene.

1.3 A Procedural Order was issued on September 11, 2012, scheduling an evidentiary hearing on May 7, 2013.

1.4 This Agreement is a result of the Parties' good faith efforts to settle all of the issues presented in the Rate Case.

1.5 The terms of this Agreement will serve the public interest by providing a just and reasonable resolution of the issues presented in the Rate Case, establishing just and reasonable rates for Vail's customers, and promoting the health, welfare, and safety of Vail's customers. Commission approval of this Agreement will further serve the public interest by allowing the Parties to avoid the expense and delay associated with continued litigation.

1.6 The Parties agree to ask the Commission to: (1) find that the terms and conditions of this Agreement are just and reasonable and in the public interest, along with any and all other necessary findings, and (2) approve the Agreement and order that the Agreement and the rates contained therein become effective at the earliest practicable date.

## TERMS AND CONDITIONS

## II. RATE INCREASE

For ratemaking purposes and for the purposes of this Agreement, the Parties agree that:

2.1 Vail's adjusted test year revenue was $2,183,759.

2.2 Vail will receive an annual increase in revenue of $21,480, for an annual revenue requirement of $2,205,239.

2.3 The Company's fair value rate base used to establish the rates agreed to herein is $3,315,108.

2.4 The fair value rate base includes deferred Central Arizona Project ("CAP") recharge credits of $1,081,028. In addition, the Company agrees that all recharge credits sold by the Company must be priced, at a minimum, to recover the direct costs of the CAP water, including recognition the Department of Water Resources' ("ADWR") 5% cut to the aquifer.

2.5 The schedules attached as **Exhibit A** ("Settlement Schedules") reflect the Parties' agreed upon rate base, operating expenses and operating income, cost of capital and rate design.

## III. COST OF CAPITAL

For ratemaking purposes and for the purposes of this Agreement, the Parties agree that:

3.1 The Company has a capital structure comprised of 100% common equity.

3.2 A return on common equity of 9.1% shall be adopted.

## IV. CAP SURCHARGE ADJUSTMENT PROVISIONS

4.1 Vail shall implement a CAP Surcharge, the components of which will include (i) CAP Municipal and Industrial (M&I) capital charges, (ii) CAP delivery charges, and (iii) City of Tucson wheeling charges.

4.2 The CAP Surcharge will begin at zero and be adjusted annually as described in the Proposed Plan of Administration.

4.3 As described in the Proposed Plan of Administration, Vail's CAP capital and delivery cost recovery through the CAP Surcharge will be reduced for any water loss in excess of 10 percent (10%).

4.4 The parties shall file the Proposed Plan of Administration prior to the May 7, 2013 hearing.

## V. RATE DESIGN

5.1 The Company accepts Staff's rate design to generate the settlement revenue requirement as further set forth in the Settlement Schedules.

## VI. COMPLIANCE AND OTHER MATTERS

6.1 The Company will obtain timesheets for management services from TEM Corp. to support management fees requested for recovery in rates in future rate cases and provide copies of such time records to Staff in future rate cases.

6.2 The Company's CAP Hook Up Fee Tariff will be eliminated.

## VII. COMMISSION EVALUATION OF PROPOSED SETTLEMENT

7.1 This Agreement shall serve as a procedural device by which the Parties will submit their proposed settlement of Vail's pending rate case, Docket No. W-01651B-12-0339, to the Commission.

7.2 All currently-filed testimony and exhibits shall be offered into the Commission's record as evidence.

7.3 The Parties recognize that the Commission will independently consider and evaluate the terms of this Agreement.

7.4 If the Commission issues an order adopting all material terms of this Agreement, such action shall constitute Commission approval of the Agreement. Thereafter, the Parties shall abide by the terms as approved by the Commission.

7.5 The Parties agree to support and defend this Agreement, including filing testimony in support of the Agreement and presenting evidence in support of the Agreement at the hearing scheduled to begin on May 7, 2013, and will not oppose any provision of the Agreement in pre-filed or live testimony. The Parties shall take reasonable steps to expedite consideration of the settlement, entry of a decision adopting the settlement, and implementation of the rates anticipated in this Agreement and shall not seek any delay in the schedules set for consideration of the Agreement or for the Administrative Law Judge's or Commission's consideration of the settlement embodied in this Agreement. If the Commission adopts an order approving all material terms of this Agreement, the Parties will support and defend the Commission's order before any court or regulatory agency in which it may be at issue.

7.6 Within fifteen (15) days of an order of the Commission issued in this Docket, Vail shall file compliance tariffs for Staff review and approval. Such compliance tariffs, however, will become effective upon the effective date of the rate increase stated in the Commission's order.

7.7 If the Commission fails to issue an order adopting all material terms of this Agreement or adds new or different material terms to this Agreement or decides any issue or adopts any position in conflict with any material term of this Agreement, any or all of the Parties may withdraw from this Agreement, and such Party or Parties may pursue without prejudice their respective remedies at law. For purposes of this Agreement, whether a term is material shall be left to the discretion of the Party choosing to withdraw from the Agreement.

7.8 Vail recognizes that Staff does not have the power to bind the Commission. For purposes of proposing a settlement agreement, Staff acts in the same manner as any party to a Commission proceeding.

## VIII. MISCELLANEOUS PROVISIONS

8.1 The provisions set forth in this Agreement are made for the purposes of a compromised settlement only and shall not be construed as admissions against interest or waivers of litigation positions of the Parties in this Rate Case or to other or future rate cases.

8.2 This Agreement represents the Parties' mutual desire to compromise and settle disputed issues in a manner consistent with the public interest. None of the positions taken in this Agreement by any of the Parties may be

referred to, cited, or relied upon as precedent in any proceeding before the Commission, any other regulatory agency, or any court for any purpose except in furtherance of this Agreement.

8.3 This case presents a unique set of circumstances and compromises to achieve consensus for settlement. Consequently, participants may be accepting positions that, in other circumstances, they would be unwilling to accept. They are doing so because the Agreement, as a whole, with its various provisions for settling the unique issues presented by this case, is consistent with their long-term interests and the broad public interest. The acceptance by any Party of any specific element of this Agreement shall not be considered as precedent for acceptance of that element in any other context.

8.4 No Party is bound by any position asserted in negotiations, except as expressly stated otherwise in this Agreement. No Party shall offer evidence of conduct or statements made in the course of negotiating this Agreement before this Commission, or any other regulatory agency, or any court.

8.5 To the extent any provision of this Agreement is inconsistent with any existing Commission order, rule, or regulation, this Agreement shall control.

8.6 Each of the terms of this Agreement is in consideration of all other terms of this Agreement. Accordingly, the terms are not severable.

8.7 The Parties warrant and represent that each person whose signature appears below is fully authorized and empowered to execute this Agreement.

8.8 The Parties acknowledge that they are represented by competent legal counsel and that they understand all of the terms of this Agreement and have had an opportunity to participate in the drafting of this Agreement and to fully review it with their counsel before signing, and that they execute this Agreement with full knowledge of the terms of the Agreement.

8.9 This Agreement may be executed in any number of counterparts and by each Party on separate counterparts, each of which when so executed and delivered shall be deemed an original and all of which taken together shall constitute one and the same instrument. This Agreement may also be executed electronically or by facsimile.

Executed this 26th day of April, 2013.

VAIL WATER COMPANY

By: _____

Name: SHELDON J. MANDELL

Its: PRESIDENT

ARIZONA CORPORATION COMMISSION
UTILITIES DIVISION

By: _____

Name: STEVE OLEA

Its: Director, Utilities Division

# EXHIBIT A

# SETTLEMENT SCHEDULES

# VAIL WATER COMPANY

# PROPOSED SETTLEMENT AGREEMENT

**DOCKET NO. W-01651B-12-0339**

April 26, 2013

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**DOCKET NO. W-01651B-12-0339**
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## I. RECITALS

1.1 Vail filed the rate application in Docket No. W-01651B-12-0339 on July 27, 2012. Staff found the Application sufficient on August 27, 2012.

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For ratemaking purposes and for the purpo[illegible] f this Agreement, the Parties agree that:

2.1 Vail's adjusted test year revenue was $2,1[illegible]59.

2.2 Vail will receive an annual increase in revenue of $21,480, for an annual revenue requirement of $2,205,239.

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2.4 The fair value rate base includes deferred Central Arizona Project ("CAP") recharge credits of $1,081,028. In addition, the Company agrees that all recharge credits sold by the Company must be priced, at a minimum, to recover the direct costs of the CAP water, including recognition the Department of Water Resources' ("ADWR") 5% cut to the aquifer.

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7.6 Within fifteen (15) days of an order of the Commission issued in this Docket, Vail shall file compliance tariffs for Staff review and approval. Such compliance tariffs, however, will become effective upon the effective date of the rate increase stated in the Commission's order.

7.7 If the Commission fails to issue an order adopting all material terms of this Agreement or adds new or different material terms to this Agreement or decides any issue or adopts any position in conflict with any material term of this Agreement, any or all of the Parties may withdraw from this Agreement, and such Party or Parties may pursue without prejudice their respective remedies at law. For purposes of this Agreement, whether a term is material shall be left to the discretion of the Party choosing to withdraw from the Agreement.

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## VIII. MISCELLANEOUS PROVISIONS

8.1 The provisions set forth in this Agreement are made for the purposes of a compromised settlement only and shall not be construed as admissions against interest or waivers of litigation positions of the Parties in this Rate Case or to other or future rate cases.

8.2 This Agreement represents the Parties' mutual desire to compromise and settle disputed issues in a manner consistent with the public interest. None of the positions taken in this Agreement by any of the Parties may be

referred to, cited, or relied upon as precedent in any proceeding before the Commission, any other regulatory agency, or any court for any purpose except in furtherance of this Agreement.

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8.7 The Parties warrant and represent that each person whose signature appears below is fully authorized and empowered to execute this Agreement.

8.8 The Parties acknowledge that they are represented by competent legal counsel and that they understand all of the terms of this Agreement and have had an opportunity to participate in the drafting of this Agreement and to fully review it with their counsel before signing, and that they execute this Agreement with full knowledge of the terms of the Agreement.

8.9 This Agreement may be executed in any number of counterparts and by each Party on separate counterparts, each of which when so executed and delivered shall be deemed an original and all of which taken together shall constitute one and the same instrument. This Agreement may also be executed electronically or by facsimile.

Executed this 26th day of April, 2013.

VAIL WATER COMPANY

By:_____

Name:_____

Its:_____

ARIZONA CORPORATION COMMISSION
UTILITIES DIVISION

By:_____

Name:_____

Its:_____

# EXHIBIT A

# SETTLEMENT SCHEDULES

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Settlement Schedule JMM-1

**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | (A) COMPANY FAIR VALUE | (B) STAFF FAIR VALUE |
|---|---|---|---|
| 1 | Adjusted Rate Base | $ 3,312,773 | $ 3,315,108 |
| 2 | Adjusted Operating Income (Loss) | $ 312,107 | $ 285,069 |
| 3 | Current Rate of Return (L2 / L1) | 9.42% | 8.60% |
| 4 | Required Rate of Return | 10.40% | 9.10% |
| 5 | Required Operating Income (L4 * L1) | $ 344,528 | $ 301,675 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 32,421 | $ 16,606 |
| 7 | Commission Tax Allowance Policy - Gross Revenue Conversion Factor | 1.3606 | 1.2935 |
| 8 | Required Revenue Increase (L7 * L6) | $ 44,113 | $ 21,480 |
| 9 | Adjusted Test Year Revenue | $ 2,334,747 | $ 2,183,759 |
| 10 | Proposed Annual Revenue | $ 2,378,860 | $ 2,205,239 |
| 11 | Required Increase in Revenue (%) | 1.89% | 0.98% |

References:
Column (A): Company Schedule A-1
Column (B): Staff Schedules JMM-2 and JMM-8

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Settlement Schedule JMM-2

## COMMISSION TAX ALLOWANCE POLICY - GROSS REVENUE CONVERSION FACTOR

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Commission Tax Allowance Policy - Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Commission Tax Allowance Policy - Revenue | 100.0000% | | | |
| 2 | Commission Tax Allowance Policy - Uncollectible Factor | 0.0000% | | | |
| 3 | Commission Tax Allowance Policy - Revenues (L1 - L2) | 100.0000% | | | |
| 4 | Commisstion Tax Allowance Policy - Combined Federal and State Income Tax and Property Tax Rate (Line 18) | 22.6905% | | | |
| 5 | *Subtotal (L3 - L4)* | 77.3095% | | | |
| 6 | **Commission Tax Allowance Policy - Revenue Conversion Factor (L1 / L5)** | 1.293502 | | | |
| | *Commission Tax Allowance Policy - Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Commission Tax Allowance Policy (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Commission Tax Allowance Policy - Arizona State Income Tax Rate (from worksheet) | 2.9627% | | | |
| 9 | Commission Tax Allowance Policy - Income (L7 - L8) | 97.0373% | | | |
| 10 | Commission Tax Allowance Policy - Applicable Federal Income Tax Rate (Line 48) | 19.1272% | | | |
| 11 | Commission Tax Allowance Policy - Effective Federal Income Tax Rate (L9 x L10) | 18.5605% | | | |
| 12 | Commission Tax Allowance Policy - Combined Federal and State Income Tax Rate (L8 +L11) | | 21.5232% | | |
| | *Commission Tax Allowance Policy - Calculation of Effective Property Tax Factor* | | | | |
| 13 | Unity | 100.0000% | | | |
| 14 | Commission Tax Allowance Policy - Combined Federal and State Income Tax Rate (L12) | 21.5232% | | | |
| 15 | Commission Tax Allowance Policy - One Minus Combined Income Tax Rate (L13-L14) | 78.4768% | | | |
| 16 | Commission Tax Allowance Policy - Property Tax Factor (JMM-W14, L27) | 1.4874% | | | |
| 17 | Commission Tax Allowance Policy - Effective Property Tax Factor (L15*L16) | | 1.1673% | | |
| 18 | Commission Tax Allowance Policy - Combined Federal and State Income Tax and Property Tax Rate (L12+L17) | | | 22.6905% | |
| 19 | Commission Tax Allowance Policy - Required Operating Income (Schedule JMM-1, Line 5) | $ 301,675 | | | |
| 20 | Commission Tax Allowance Policy - AdjustedTest Year Operating Income (Loss) (JMM-8, L35) | 285,069 | | | |
| 21 | Commission Tax Allowance Policy - Required Increase in Operating Income (L19 - L20) | | $ 16,606 | | |
| 22 | Commission Tax Allowance Policy - *Income Taxes on Recommended Revenue* (Col. [C], L47) | $ 82,738 | | | |
| 23 | Commission Tax Allowance Policy - Income Taxes on Test Year Revenue (Col. [A], L47) | 78,184 | | | |
| 24 | Commission Tax Allowance Policy - Required Increase in Revenue to Provide for Income Taxes (L22 - L23) | | 4,554 | | |
| 25 | Commission Tax Allowance Policy - Recommended Revenue Requirement (Schedule JMM-W1, Line 10) | $ 2,205,239 | | | |
| 26 | Commission Tax Allowance Policy - Uncollectible Rate | 0.0000% | | | |
| 27 | Commission Tax Allowance Policy - Uncollectible Expense on Recommended Revenue (L25*L26) | $ - | | | |
| 28 | Commission Tax Allowance Policy - Adjusted Test Year Uncollectible Expense | $ - | | | |
| 29 | Commission Tax Allowance Policy - Required Increase in Revenue to Provide for Uncollectible Exp. (L27-L28) | | - | | |
| 30 | Commission Tax Allowance Policy - Property Tax with Recommended Revenue (Schedule JMM-W14, L21) | $ 97,263 | | | |
| 31 | Commission Tax Allowance Policy - Property Tax on Test Year Revenue (Schedule JMM-W14, Line 17) | 96,944 | | | |
| 32 | Commission Tax Allowance Policy - Increase in Property Tax Due to Increase in Revenue (L30-31) | | 319 | | |
| 33 | Commission Tax Allowance Policy - Total Required Increase in Revenue (L21 + L24 + L29 + L32) | | $ 21,480 | | |

| | *Commission Tax Allowance Policy Calculation of Income Tax:* | Test Year | | Staff Recommended |
|---|---|---|---|---|
| 34 | Commission Tax Allowance Policy - Revenue (Schedule JMM-1, Col. [B], Line 9 & Sch. JMM-1, Col. [B] Line 10) | $ 2,183,759 | $ 21,480 | $ 2,205,239 |
| 35 | Commission Tax Allowance Policy - Operating Expenses Excluding Income Taxes | $ 1,820,507 | | $ 1,820,826 |
| 36 | Commission Tax Allowance Policy - Synchronized Interest (L51) | $ - | | $ - |
| 37 | Commission Tax Allowance Policy - Arizona Taxable Income (L34 - L35 - L36) | $ 363,253 | | $ 384,413 |
| 38 | Commission Tax Allowance Policy - Arizona State Income Tax Rate | 2.9627% | | 2.9627% |
| 39 | Commission Tax Allowance Policy - Arizona Income Tax (L37 x L38) | $ 10,762 | | $ 11,389 |
| 40 | Commission Tax Allowance Policy - Federal Taxable Income (L37- L39) | $ 352,491 | | $ 373,024 |
| 41 | Commission Tax Allowance Policy - Federal Effective Tax | 19.1272% | | 19.1272% |
| 42 | Commission Tax Allowance Policy - Federal Tax | $ 67,422 | | $ 71,349 |
| 43 | | $ - | | $ - |
| 44 | | $ - | | $ - |
| 45 | | $ - | | $ - |
| 46 | | $ 67,422 | | $ 71,349 |
| 47 | Commission Tax Allowance Policy - Combined Federal and State Income Tax (L39 + L46) | $ 78,184 | | $ 82,738 |

| | | |
|---|---|---|
| 48 | *Commission Tax Allowance Policy* - Applicable Federal Income Tax Rate [Col. [C], L46 - Col. [A], L46] / [Col. [C], L40 - Col. [A], L40] | 19.1272% |

| | *Commission Tax Allowance Policy - Calculation of Interest Synchronization:* | |
|---|---|---|
| 49 | Commission Tax Allowance Policy - Rate Base (Schedule JMM-3, Col. (C), Line 17 | $ 3,315,108 |
| 50 | Commission Tax Allowance Policy - Weighted Average Cost of Debt | 0.0% |
| 51 | Commission Tax Allowance Policy - Synchronized Interest (L45 X L46) | $ - |

**Vail Water Company**
**Docket No. W-01651B-12-0339**
**Test Year Ended: December 31, 2011**

**Settlement Schedule JMM-3**

**RATE BASE - ORIGINAL COST**

| LINE NO. | | (A) COMPANY AS FILED | (B) STAFF ADJUSTMENTS | (C) STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Plant in Service | $ 20,158,710 | $ (92,955) | $ 20,065,755 |
| 2 | Less: Accumulated Depreciation | 3,722,176 | (120,545) | 3,601,631 |
| 3 | Net Plant in Service | $ 16,436,534 | $ 27,590 | $ 16,464,124 |
| | *LESS:* | | | |
| 4 | Contributions in Aid of Construction (CIAC) | $ 2,930,228 | $ - | $ 2,930,228 |
| 5 | Less: Accumulated Amortization | 605,832 | (2,076) | $ 603,756 |
| 6 | Net CIAC | 2,324,396 | 2,076 | $ 2,326,472 |
| 7 | Advances in Aid of Construction (AIAC) | 11,374,431 | - | 11,374,431 |
| 8 | Customer Deposits | 529,140 | - | 529,140 |
| 9 | Deferred CAP Liability | - | - | - |
| | *ADD:* | | | |
| 10 | Deferred CAP Charges | 1,104,206 | (23,178) | 1,081,028 |
| 11 | Defered Tax Assets | - | - | - |
| 12 | **Original Cost Rate Base** | $ 3,312,773 | $ 2,335 | $ 3,315,108 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
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Settlement Schedule JMM-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

| LINE NO. | ACCT. NO. | | [A] COMPANY AS FILED | [B] ADJ #1 Retired Plant Ref: Sch JMM-5 | [C] ADJ #2 Plant Retired to Wrong Account Ref: Sch JMM-6 | [D] ADJ #3 Excess Capacity Ref: Sch JMM-7 | [E] ADJ #4 CAP LTSC Ref: Sch JMM-8 | [F] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|
| | *PLANT IN SERVICE:* | | | | | | | |
| 1 | | DESCRIPTION | | | | | | |
| 2 | 301 | Organization Cost | $ - | $ - | $ - | $ - | $ - | $ - |
| 3 | 302 | Franchise Cost | - | - | - | - | - | - |
| 4 | 303 | Land and Land Rights | 17,750 | - | - | - | - | 17,750 |
| 5 | 304 | Structures and Improvements | 399,328 | (1,978) | - | - | - | 397,350 |
| 6 | 305 | Collecting and Impounding Res. | - | - | - | - | - | - |
| 7 | 306 | Lake River and Other Intakes | - | - | - | - | - | - |
| 8 | 307 | Wells and Springs | 1,126,979 | - | - | - | - | 1,126,979 |
| 9 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - | - |
| 10 | 309 | Supply Mains | 2,995 | - | - | - | - | 2,995 |
| 11 | 310 | Power Generation Equipment | - | - | - | - | - | - |
| 12 | 311 | Electric Pumping Equipment | 1,553,110 | (29,479) | 1,838 | - | - | 1,525,469 |
| 13 | 320.1 | Water Treatment Plants | - | - | - | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | - | - | - | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | (61,499) | 25,642 | - | - | 1,585,212 |
| 16 | 330.1 | Storage Tanks | - | - | - | - | - | - |
| 17 | 330.2 | Pressure Tanks | - | - | | - | - | - |
| 18 | 331 | Transmission and Distribution Mains | 14,023,034 | - | - | - | - | 14,023,034 |
| 19 | 333 | Services | 12,451 | - | - | - | - | 12,451 |
| 20 | 334 | Meters | 923,082 | - | - | - | - | 923,082 |
| 21 | 335 | Hydrants | 492,908 | - | - | - | - | 492,908 |
| 22 | 336 | Backflow Prevention Devices | 7,901 | - | - | - | - | 7,901 |
| 23 | 339 | Other Plant and Miscellaneous Equipment | 6,553 | - | - | - | - | 6,553 |
| 24 | 340 | Office Furniture and Fixtures | 29,683 | - | (27,480) | - | - | 2,203 |
| 25 | 340.1 | Computers and Software | 15,621 | - | - | - | - | 15,621 |
| 26 | 341 | Transportation Equipment | 54,807 | - | - | - | - | 54,807 |
| 25 | 343 | Tools and Work Equipment | 15,645 | - | - | - | - | 15,645 |
| 26 | 344 | Laboratory Equipment | - | - | - | - | - | - |
| 27 | 345 | Power Operated Equipment | - | - | - | - | - | - |
| 28 | 346 | Communications Equipment | 5,190 | - | - | - | - | 5,190 |
| 29 | 347 | Miscellaneous Equipment | - | - | - | - | - | - |
| 30 | 348 | Other Tangible Plant | (149,395) | - | - | - | - | (149,395) |
| 31 | Total Plant in Service | | $ 20,158,710 | $ (92,956) | $ - | $ - | $ - | $ 20,065,755 |
| 32 | Less: Accumulated Depreciation | | 3,722,176 | (92,956) | (27,589) | - | - | 3,601,631 |
| 33 | Net Plant in Service | | $ 16,436,534 | $ - | $ 27,589 | $ - | $ - | $ 16,464,124 |
| 34 | | | | | | | | |
| 35 | *LESS:* | | | | | | | |
| 36 | Contributions in Aid of Construction (CIAC) | | $ 2,930,228 | $ - | $ - | $ - | $ - | $ 2,930,228 |
| 37 | Less: Accumulated Amortization | | 605,832 | - | (2,076) | - | - | 603,756 |
| 38 | Net CIAC (L39 - L40) | | 2,324,396 | - | 2,076 | - | - | 2,326,472 |
| 39 | Advances in Aid of Construction (AIAC) | | 11,374,431 | - | - | - | - | 11,374,431 |
| 40 | Customer Deposits | | 529,140 | - | - | - | - | 529,140 |
| 41 | Deferred Income Taxes | | - | - | - | - | - | - |
| 42 | Deferred CAP Liability | | - | | - | - | - | - |
| 43 | | | | | | | | |
| 44 | *ADD:* | | | | | | | |
| 45 | Deferred CAP Charges | | 1,104,206 | - | - | - | (23,178) | 1,081,028 |
| 46 | Defered Tax Assets | | - | - | - | - | - | - |
| 47 | | | | | | | | |
| 48 | **Original Cost Rate Base** | | $ 3,312,773 | $ - | $ 25,513 | $ - | $ (23,178) | $ 3,315,108 |

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Settlement Schedule JMM-5

RATE BASE ADJUSTMENT NO. 1 - RETIRED PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | 304 | Structures and Improvements | $ 399,328 | $ (1,978) | $ 397,350 |
| 2 | 311 | Electric Pumping Equipment | 1,553,110 | (29,479) | 1,523,631 |
| 3 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | (61,499) | 1,559,570 |
| 4 | | | $ 3,573,507 | $ (92,956) | $ 3,480,551 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | $ 3,722,176 | $ (92,956) | $ 3,629,220 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-6

RATE BASE ADJUSTMENT NO. 2 - PLANT RETIRED TO THE WRONG ACCOUNT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|---|
| 1 | 311 | Electric Pumping Equipment | $ 1,553,110 | $ 1,838 | $ 1,554,948 |
| 2 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | 25,642 | 1,646,711 |
| 3 | 340 | Office Furniture and Fixtures | 29,683 | (27,480) | 2,203 |
| 4 | | | $ 3,203,862 | $ - | $ 3,203,862 |
| 5 | | | | | |
| | | Accumulated Depreciation | $ 3,722,176 | $ (27,589) | $ 3,694,587 |
| | | Adjustment to CIAC Amortization | $ 2,930,228 | $ (2,076) | $ 2,928,152 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-7

## RATE BASE ADJUSTMENT NO. 3 - EXCESS CAPACITY

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|---|
| 1 | 307 | Wells and Springs | $ 1,126,979 | $ - | $ 1,126,979 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | $ 3,722,176 | $ - | $ 3,722,176 |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-8

RATE BASE ADJUSTMENT NO. 4 - CAP Long-Term Storage Credits

| LINE NO. | ACCT NO. | DESCRIPTION | [A] Plant in Service Per Company | [B] Adjustment to Long-Term Storage Credits | [C] Plant In Service Per Staff (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | | Deferred CAP Charges | $ 1,104,206 | $ (23,178) | $ 1,081,028 |
| 2 | | | | | |
| 3 | | Deferred CAP Liability | $ - | $ - | $ - |
| 4 | | | | | |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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**Settlement Schedule JMM-9**

**OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED**

| LINE NO. | DESCRIPTION | [A] COMPANY ADJUSTED TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED |
|---|---|---|---|---|---|---|
| 1 | *REVENUES:* | | | | | |
| 2 | Metered Water Sales | $ 2,120,110 | $ - | $ 2,120,110 | $ 21,480 | $ 2,141,590 |
| 3 | Water Sales-Unmetered | - | - | - | - | - |
| 4 | Other Water Revenue | 214,637 | (150,988) | 63,649 | - | 63,649 |
| 5 | Intentionally Left Blank | - | - | - | - | - |
| 6 | **Total Operating Revenues** | $ 2,334,747 | $ - | $ 2,183,759 | $ 21,480 | $ 2,205,239 |
| 7 | | | | | | |
| 8 | *OPERATING EXPENSES:* | | | | | |
| 9 | Salaries and Wages | $ 276,984 | $ - | $ 276,984 | $ - | $ 276,984 |
| 10 | Employee Benefits | 12,757 | - | $ 12,757 | - | 12,757 |
| 11 | Purchased Water | 199,817 | - | 199,817 | - | 199,817 |
| 12 | Purchased Power | 218,584 | - | 218,584 | - | 218,584 |
| 13 | Chemicals | 1,732 | - | 1,732 | - | 1,732 |
| 14 | Materials and Supplies | 14,372 | - | 14,372 | - | 14,372 |
| 15 | Repairs and Maintenance | 28,876 | - | 28,876 | - | 28,876 |
| 16 | Office Supplies and Expense | 73,301 | - | 73,301 | - | 73,301 |
| 17 | Contractual Services - Engineering | 6,270 | - | 6,270 | - | 6,270 |
| 18 | Contractual Services - Accounting | 10,473 | - | 10,473 | - | 10,473 |
| 19 | Contractual Services - Legal | 12,933 | - | 12,933 | - | 12,933 |
| 20 | Contractual Services - Management Fees | 211,138 | (91,901) | 119,237 | - | 119,237 |
| 21 | Contractual Services - Other | 15,976 | - | 15,976 | - | 15,976 |
| 22 | Contractual Services - Water Testing | 3,906 | 9,761 | 13,667 | - | 13,667 |
| 23 | Rents - Building/Real Property | 7,920 | - | 7,920 | - | 7,920 |
| 24 | Rents - Equipment | 8,314 | - | 8,314 | - | 8,314 |
| 25 | Transportation Expenses | 33,154 | - | 33,154 | - | 33,154 |
| 26 | Insurance - Vehicle | 5,111 | - | 5,111 | - | 5,111 |
| 27 | Insurance - General Liability | 32,130 | - | 32,130 | - | 32,130 |
| 28 | Insurance - Worker's Comp | 3,111 | - | 3,111 | - | 3,111 |
| 29 | Regulatory Commission Expenese | 11,946 | - | 11,946 | - | 11,946 |
| 30 | Regulatory Commission Expense - Rate Case | 30,000 | - | 30,000 | - | 30,000 |
| 31 | Bad Debt Expense | 6,856 | - | 6,856 | - | 6,856 |
| 32 | Miscellaneous Expense | 11,424 | (1,311) | 10,113 | - | 10,113 |
| 33 | Depreciation Expense | 570,649 | (5,701) | 564,948 | - | 564,948 |
| 34 | Taxes Other than Income | - | - | - | - | - |
| 35 | Property Taxes | 103,681 | (6,737) | 96,944 | 319 | 97,263 |
| 36 | Income Taxes | 106,244 | (28,060) | 78,184 | 4,554 | 82,738 |
| 37 | *Interest on Customer Deposits* | 4,981 | - | 4,981 | - | 4,981 |
| 38 | **Total Operating Expenses** | $ 2,022,640 | $ (123,949) | $ 1,898,691 | $ 4,874 | $ 1,903,564 |
| 39 | **Operating Income (Loss)** | $ 312,107 | $ 123,949 | $ 285,069 | $ 16,606 | $ 301,675 |

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-10
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-1, and JMM-14
Column (E): Column (C) + Column (D)

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Settlement Schedule JMM-10

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] Purchased Water Expense ADJ #1 | [C] Water Testing ADJ #2 | [D] Miscellanoues Expense ADJ #3 | [E] Depreciaition Expense ADJ #4 | [F] Property Tax Expense ADJ #5 | [G] Income Tax Expense ADJ #6 | [H] Company Rebuttal Adjustments that Staff Accepts ADJ #7 | [I] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ref: Sch JMM-11 | Ref: Sch JMM-12 | Ref: Sch JMM-13 | Ref: Sch JMM-14 | Ref: Sch JMM-15 | Ref: Sch JMM-16 | Ref: Sch JMM-17 | |
| 1 | *REVENUES:* | | | | | | | | | |
| 2 | Metered Water Sales | $ 2,120,110 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 2,120,110 |
| 3 | Water Sales-Unmetered | - | - | - | - | - | - | - | - | - |
| 4 | Other Water Revenue | 214,637 | - | - | - | - | - | - | (150,988) | 63,649 |
| 5 | Intentionally Left Blank | - | - | - | - | - | - | - | - | - |
| 6 | **Total Operating Revenues** | $ 2,334,747 | $ - | $ - | $ - | $ - | $ - | $ - | $ (150,988) | $ 2,183,759 |
| 7 | | | | | | | | | | |
| 8 | *OPERATING EXPENSES:* | | | | | | | | | |
| 9 | Salaries and Wages | $ 276,984 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 276,9 |
| 10 | Employee Benefits | 12,757 | | | | | | | | 12 |
| 11 | Purchased Water | 199,817 | - | - | - | - | - | - | - | 199,8 |
| 12 | Purchased Power | 218,584 | - | - | - | - | - | - | - | 218,584 |
| 13 | Chemicals | 1,732 | - | - | - | - | - | - | - | 1,732 |
| 14 | Materials and Supplies | 14,372 | - | - | - | - | - | - | - | 14,372 |
| 15 | Repairs and Maintenance | 28,876 | - | - | - | - | - | - | - | 28,876 |
| 16 | Office Supplies and Expense | 73,301 | - | - | - | - | - | - | - | 73,301 |
| 17 | Contractual Services - Engineering | 6,270 | - | - | - | - | - | - | - | 6,270 |
| 18 | Contractual Services - Accounting | 10,473 | - | - | - | - | - | - | - | 10,473 |
| 19 | Contractual Services - Legal | 12,933 | - | - | - | - | - | - | - | 12,933 |
| 20 | Contractual Services - Management Fees | 211,138 | | - | | | | | (91,901) | 119,237 |
| 21 | Contractual Services - Other | 15,976 | | | | | | | | 15,976 |
| 22 | Contractual Services - Water Testing | 3,906 | - | 9,761 | - | - | - | - | - | 13,667 |
| 23 | Rents - Building/Real Property | 7,920 | - | - | - | - | - | - | - | 7,920 |
| 24 | Rents - Equipment | 8,314 | | | | | | | | 8,314 |
| 25 | Transportation Expenses | 33,154 | - | - | - | - | - | - | - | 33,154 |
| 26 | Insurance - Vehicle | 5,111 | - | - | - | - | - | - | - | 5,111 |
| 27 | Insurance - General Liability | 32,130 | - | - | - | - | - | - | - | 32,130 |
| 28 | Insurance - Worker's Comp | 3,111 | | | | | | | | 3,111 |
| 29 | Regulatory Commission Expenese | 11,946 | - | - | - | - | - | - | - | 11,946 |
| 30 | Regulatory Commission Expense - Rate Case | 30,000 | - | - | - | - | - | - | - | 30,000 |
| 31 | Bad Debt Expense | 6,856 | - | - | - | - | - | - | - | 6,856 |
| 32 | Miscellaneous Expense | 11,424 | - | - | (1,311) | - | - | - | - | 10,113 |
| 33 | Depreciation Expense | 570,649 | - | - | - | (5,701) | - | - | - | 564,948 |
| 34 | Amortization of CIAC | - | - | - | - | - | - | - | - | - |
| 35 | Taxes Other than Income | - | - | - | - | - | - | - | - | - |
| 36 | Property Taxes | 103,681 | - | - | - | - | (6,737) | - | - | 96,944 |
| 37 | Income Taxes | 106,244 | - | - | - | - | - | (28,060) | - | 78,184 |
| 38 | Interest on Customer Deposits | 4,981 | - | - | - | - | - | - | - | 4 |
| 39 | **Total Operating Expenses** | $ 2,022,640 | $ - | $ 9,761 | $ (1,311) | $ (5,701) | $ (6,737) | $ (28,060) | $ (91,901) | $ 1,899 |
| 40 | **Operating Income (Loss)** | $ 312,107 | $ - | $ (9,761) | $ 1,311 | $ 5,701 | $ 6,737 | $ 28,060 | $ (59,087) | $ 285, |

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Settlement Schedule JMM-11

## OPERATING ADJUSTMENT NO. 1 - PURCHASED WATER EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Purchased Water | $ 199,817 | $ - | $ 199,817 |

| Staff's Calculation to increase CAP M&I Charges | |
|---|---|
| Future CAP Charge 1,857 (a.f.) x $146 (average of five years 129 + 138 + 149 + 155 + 159) | $ 271,122 |
| Current CAP Charge 1,857 (a.f.) x $122 | $ 226,554 |
| Increase | $ 44,568 |

| Staff's Calculation to increase CAP Capital Charges | |
|---|---|
| Future CAP Charge 1,857 (a.f.) x $16.80 (average of five years 15 + 16 + 17 + 18 + 18) | $ 31,198 |
| Current CAP Charge 1,857 (a.f.) x $15 | $ 27,855 |
| | $ 3,343 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-12

OPERATING ADJUSTMENT NO. 2 - WATER TESTING EXPENSE AND MANAGEMENT FEES EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Water Testing Fee | $ 3,906 | $ 9,761 | $ 13,667 |

*References:*
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-13

OPERATING ADJUSTMENT NO. 3 - MISCELLANEOUS EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Miscellaneous Expense | $ 11,424 | $ (1,311) | $ 10,113 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Settlement Schedule JMM-14

**OPERATING INCOME ADJUSTMENT NO. 4 - DEPRECIATION EXPENSE ON TEST YEAR PLANT**

| LINE NO. | ACCT NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated Plant | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | $ - | $ - | $ - | 0.00% | $ - |
| 2 | 302 | Franchise Cost | $ - | $ - | $ - | 0.00% | $ - |
| 3 | 303 | Land and Land Rights | $ 17,750 | $ 17,750 | $ - | 0.00% | $ - |
| 4 | 304 | Structures and Improvements | $ 397,350 | $ - | $ 397,350 | 3.33% | $ 13,232 |
| 5 | 305 | Collecting and Impounding Res. | $ - | $ - | $ - | 2.50% | $ - |
| 6 | 306 | Lake River and Other Intakes | $ - | $ - | $ - | 2.50% | $ - |
| 7 | 307 | Wells and Springs | $ 1,126,979 | $ - | $ 1,126,979 | 3.33% | $ 37,528 |
| 8 | 308 | Infiltration Galleries and Tunnels | $ - | $ - | $ - | 6.67% | $ - |
| 9 | 309 | Supply Mains | $ 2,995 | $ - | $ 2,995 | 2.00% | $ 60 |
| 10 | 310 | Power Generation Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 11 | 311 | Electric Pumping Equipment | $ 1,525,469 | $ - | $ 1,525,469 | 12.50% | $ 190,684 |
| 12 | 320 | Water Treatment Equipment | $ - | $ - | $ - | 3.33% | $ - |
| 13 | 320 | Water Treatment Plant | $ - | $ - | $ - | 20.00% | $ - |
| 14 | 330 | Distribution Reservoirs & Standpipe | $ 1,585,212 | $ - | $ 1,585,212 | 2.22% | $ 35,192 |
| 15 | 330.1 | Storage Tanks | $ - | $ - | $ - | 2.22% | $ - |
| 16 | 330.2 | Pressure Tanks | $ - | $ - | $ - | 5.00% | $ - |
| 17 | 331 | Transmission and Distribution Mains | $ 14,023,034 | $ - | $ 14,023,034 | 2.00% | $ 280,461 |
| 18 | 333 | Services | $ 12,451 | $ - | $ 12,451 | 3.33% | $ 415 |
| 19 | 334 | Meters | $ 923,082 | $ - | $ 923,082 | 8.33% | $ 76,893 |
| 20 | 335 | Hydrants | $ 492,908 | $ - | $ 492,908 | 2.00% | $ 9,858 |
| 21 | 336 | Backflow Prevention Devices | $ 7,901 | $ - | $ 7,901 | 6.67% | $ 527 |
| 22 | 339 | Other Plant and Miscellaneous Equipment | $ 6,553 | $ - | $ 6,553 | 6.67% | $ 437 |
| 23 | 340 | Office Furniture and Fixtures | $ 2,203 | $ - | $ 2,203 | 6.67% | $ 147 |
| 24 | 341 | Computers and Software | $ 15,621 | $ - | $ 15,621 | 20.00% | $ 3,124 |
| 25 | 342 | Transportation Equipment | $ 54,807 | $ - | $ 54,807 | 20.00% | $ 10,961 |
| 26 | 343 | Tools and Work Equipment | $ 15,645 | $ - | $ 15,645 | 5.00% | $ 782 |
| 27 | 344 | Laboratory Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 28 | 345 | Power Operated Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 29 | 346 | Communications Equipment | $ 5,190 | $ - | $ 5,190 | 10.00% | $ 519 |
| 30 | 347 | Miscellaneous Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 31 | 348 | Other Tangible Plant | $ (149,395) | $ (149,395) | $ - | 10.00% | $ - |
| 32 | | Total Plant | $ 20,065,755 | $ (131,645) | $ 20,197,400 | | $ 660,819 |
| 33 | | | | | | | |
| 34 | | Composite Depreciation Rate: | 3.27% | | | | |
| 35 | | CIAC: | $ 2,930,228 | | | | |
| 36 | | Amortization of CIAC (Line 35 x Line 34): | $ 95,871 | | | | |
| 37 | | | | | | | |
| 38 | | Depreciation Expense Before Amortization of CIAC: | $ 660,819 | | | | |
| 39 | | Less Amortization of CIAC: | $ 95,871 | | | | |
| 40 | | **Test Year Depreciation Expense - Staff:** | **$ 564,948** | | | | |
| 41 | | Depreciation Expense - Company: | $ 570,649 | | | | |
| 42 | | **Staff's Total Adjustment:** | **$ (5,701)** | | | | |
| 43 | | | | | | | |

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Settlement Schedule JMM-15

## OPERATING INCOME ADJUSTMENT NO. 5 - PROPERTY TAX EXPENSE

| LINE NO. | Property Tax Calculation | [A] STAFF AS ADJUSTED | [B] STAFF RECOMMENDED |
|---|---|---|---|
| 1 | Staff Adjusted Test Year Revenues | $ 2,183,759 | $ 2,183,759 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 * Line 2) | 4,367,519 | $ 4,367,519 |
| 4 | Staff Recommended Revenue, Per Schedule JMM-1 | 2,183,759 | $ 2,205,239 |
| 5 | Subtotal (Line 4 + Line 5) | 6,551,278 | 6,572,758 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 2,183,759 | $ 2,190,919 |
| 8 | Department of Revenue Mutilplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 4,367,519 | $ 4,381,839 |
| 10 | Plus: 10% of CWIP - | - | - |
| 11 | Less: Net Book Value of Licensed Vehicles | 22,449 | $ 22,449 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 4,345,070 | $ 4,359,390 |
| 13 | Assessment Ratio | 20.0% | 20.0% |
| 14 | Assessment Value (Line 12 * Line 13) | 869,014 | $ 871,878 |
| 15 | Composite Property Tax Rate (Per Company Schedule) | 11.1556% | 11.1556% |
| 16 | | | $ - |
| 17 | Staff Test Year Adjusted Property Tax (Line 14 * Line 15) | $ 96,944 | |
| 18 | Company Proposed Property Tax | 103,681 | |
| 19 | | | |
| 20 | Staff Test Year Adjustment (Line 17-Line 18) | $ (6,737) | |
| 21 | Property Tax - Staff Recommended Revenue (Line 14 * Line 15) | | $ 97,263 |
| 22 | Staff Test Year Adjusted Property Tax Expense (Line 17) | | $ 96,944 |
| 23 | Increase in Property Tax Expense Due to Increase in Revenue Requirement | | $ 319 |
| 24 | | | |
| 25 | Increase to Property Tax Expense | | $ 319 |
| 26 | Increase in Revenue Requirement | | 21,480 |
| 27 | Increase to Property Tax per Dollar Increase in Revenue (Line 25/Line 26) | | 1.487411% |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Settlement Schedule JMM-16

OPERATING INCOME ADJUSTMENT NO. 6 - COMMISSION TAX ALLOWANCE POLICY - TEST YEAR INCOME TAXE EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Income Tax Expense | $ 106,244 | $ (28,060) | $ 78,184 |

References:
Column (A), Company Schedule C-1
Column (B): Column [C] - Column [A]
Column (C): Schedule JMM-2

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Settlement Schedule JMM-17

OPERATING ADJUSTMENT NO. 7 - COMPANY REBUTTAL ADJUSTMENTS THAT STAFF ACCEPTS

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | CAP Hook-up Fees | $ 2,120,110 | $ (150,988) | $ 1,969,122 |
| 2 | Contractual Services - Management Fees | $ 211,138 | $ (91,901) | $ 119,237 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

| Monthly Usage Charge | Present | Company Proposed Rates | Staff Recommended Rates |
|---|---|---|---|
| Meter Size (All Classes): | | | |
| 5/8 x 3/4 Inch | $ 13.18 | $ 14.70 | $ 14.70 |
| 3/4 Inch | 21.00 | 23.42 | 22.50 |
| 1 Inch | 40.50 | 45.16 | 37.50 |
| 1 1/2 Inch | 89.20 | 99.46 | 75.00 |
| 2 Inch | 147.70 | 164.69 | 120.00 |
| 3 Inch | 284.20 | 316.88 | 240.00 |
| 4 Inch | 479.20 | 534.31 | 375.00 |
| 6 Inch | 966.92 | 1,078.12 | 750.00 |
| 8 Inch | N/A | N/A | 1,200.00 |
| 10 Inch | N/A | N/A | 1,725.00 |
| 12 Inch | N/A | N/A | 3,225.00 |
| Commodity Charge - Per 1,000 Gallons | | | |
| 5/8" x 3/4" Meter (Residential) | | | |
| All Gallons | $ 4.0000 | N/A | N/A |
| First 4,000 gallons | N/A | $ 3.7500 | N/A |
| 4,001 to 10,000 gallons | N/A | 4.0000 | N/A |
| Over 10,000 gallons | N/A | 4.2500 | N/A |
| First 3,000 gallons | N/A | N/A | $ 2.9400 |
| 3,001 to 10,000 gallons | N/A | N/A | 4.1500 |
| Over 10,000 gallons | N/A | N/A | 5.2800 |
| 5/8" x 3/4" Meter (Commercial, Industrial, Irrigation) | | | |
| All Gallons | $ 4.0000 | N/A | N/A |
| First 10,000 gallons | N/A | 3.7500 | N/A |
| Over 10,000 gallons | N/A | 4.0000 | N/A |
| First 10,000 gallons | N/A | N/A | 4.1500 |
| Over 10,000 gallons | N/A | N/A | 5.2800 |
| 3/4" Meter (Residential) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 4,000 gallons | N/A | $ 3.7500 | N/A |
| 4,001 to 10,000 gallons | N/A | 4.0000 | N/A |
| Over 10,000 gallons | N/A | 4.2500 | N/A |
| First 3,000 gallons | N/A | N/A | 2.9400 |
| 3,001 to 10,000 gallons | N/A | N/A | 4.1500 |
| Over 10,000 gallons | N/A | N/A | 5.2800 |
| 3/4" Meter (Commercial, Industrial, Irrigation) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 10,000 gallons | N/A | 3.7500 | N/A |
| Over 10,000 gallons | N/A | 4.0000 | N/A |
| First 10,000 gallons | N/A | N/A | 4.1500 |
| Over 10,000 gallons | N/A | N/A | 5.2800 |
| 1" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 25,000 gallons | N/A | 4.0000 | N/A |
| Over 25,000 gallons | N/A | 4.2500 | N/A |
| First 22,000 gallons | N/A | N/A | 4.1500 |
| Over 22,000 gallons | N/A | N/A | 5.2800 |
| 1 1/2" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 50,000 gallons | N/A | 4.0000 | N/A |
| Over 50,000 gallons | N/A | 4.2500 | N/A |
| First 50,000 gallons | N/A | N/A | 4.1500 |
| Over 50,000 gallons | N/A | N/A | 5.2800 |
| 2" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 80,000 gallons | N/A | 4.0000 | N/A |
| Over 80,000 gallons | N/A | 4.2500 | N/A |
| First 80,000 gallons | N/A | N/A | 4.1500 |
| Over 80,000 gallons | N/A | N/A | 5.2800 |
| 3" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 160,000 gallons | N/A | 4.0000 | N/A |
| Over 160,000 gallons | N/A | 4.2500 | N/A |
| First 160,000 gallons | N/A | N/A | 4.1500 |
| Over 160,000 gallons | N/A | N/A | 5.2800 |
| 4" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 250,000 gallons | N/A | 4.0000 | N/A |
| Over 250,000 gallons | N/A | 4.2500 | N/A |
| First 250,000 gallons | N/A | N/A | 4.1500 |
| Over 250,000 gallons | N/A | N/A | 5.2800 |
| 6" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 500,000 gallons | N/A | 4.0000 | N/A |
| Over 500,000 gallons | N/A | 4.2500 | N/A |
| First 500,000 gallons | N/A | N/A | 4.1500 |
| Over 500,000 gallons | N/A | N/A | 5.2800 |

| | | | |
|---|---|---|---|
| 8" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 720,000 gallons | N/A | N/A | 4.1500 |
| Over 720,000 gallons | N/A | N/A | 5.2800 |
| 10" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 1,035,000 gallons | N/A | N/A | 4.1500 |
| Over 1,035,000 gallons | N/A | N/A | 5.2800 |
| 12" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 1,935,000 gallons | N/A | N/A | 4.1500 |
| Over 1,935,000 gallons | N/A | N/A | 5.2800 |
| Construction/Standpipe | | | |
| All Gallons | 4.0000 | 4.2500 | 5.2800 |
| CAP Recovery Surcharge (per 1,000 gallons) | 0.3200 | N/A | N/A |
| CAP Water Surcharge (per 1,000 gallons) | N/A | See Testimony | See Testimony |

Other Service Charges

| | | | |
|---|---|---|---|
| Establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Establishment (After Hours) | $ 50.00 | Remove from Tariff | Remove from Tariff |
| Reestablishment (within 12 months) | (a) | (a) | (a) |
| Reestablishment (within 12 months after hours) | (b) | Remove from Tariff | Remove from Tariff |
| Reconnection (Delinquent) | $ 30.00 | $ 30.00 | $ 30.00 |
| Reconnection (Delinquent) - After Hours | $ 30.00 | $ 30.00 | $ 30.00 |
| Meter Test (If Correct) | $ 20.00 | $ 20.00 | $ 20.00 |
| Deposit | (c) | (c) | (c) |
| Deposit Interest | (c) | (c) | (c) |
| NSF Check | $ 25.00 | $ 25.00 | $ 25.00 |
| Deferred Payment (per month) | 1.5% per month | 1.5% per month | 1.5% per month |
| Late Payment Fee (per month) | 1.5% per month | 1.5% per month | 1.5% per month |
| Moving Customer Meter (Customer Request) | At Cost | At Cost | At Cost |
| Illegal Hook-up | (d) | (d) | (d) |
| Transfer Fee | $ 25.00 | $ 25.00 | $ 25.00 |
| After Hour Service Charge (at customers request) | N/A | $ 50.00 | $ 50.00 |

(a) Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).
(b) Number of months off the system times the monthly minimum per A.A.C.
(c) Per Rule R14-2-403(B).
(d) Estimated billings from the time illegal connection was made to date.

In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per commission rule 14-2-409D(5).

Service and Meter Installation Charges

| Service Size | Total Present Charge | Proposed Service Line Charge | Proposed Meter Installation Charge | Total Proposed Charge | Recommended Service Line Charge | Recommended Meter Installation Charge | Total Recommended Charge |
|---|---|---|---|---|---|---|---|
| 5/8 x 3/4 Inch | $ 400.00 | $ 445.00 | $ 305.00 | $ 750.00 | $ 445.00 | $ 305.00 | $ 750.00 |
| 3/4 Inch | $ 440.00 | $ 445.00 | $ 405.00 | $ 850.00 | $ 445.00 | $ 405.00 | $ 850.00 |
| 1 Inch | $ 500.00 | $ 495.00 | $ 465.00 | $ 960.00 | $ 495.00 | $ 465.00 | $ 960.00 |
| 1 1/2 Inch | $ 675.00 | $ 550.00 | $ 675.00 | $ 1,225.00 | $ 550.00 | $ 675.00 | $ 1,225.00 |
| 2 Inch Turbo | N/A | $ 830.00 | $ 1,195.00 | $ 2,025.00 | $ 830.00 | $ 1,195.00 | $ 2,025.00 |
| 2 Inch Compound | $ 1,660.00 | $ 830.00 | $ 2,040.00 | $ 2,870.00 | $ 830.00 | $ 2,040.00 | $ 2,870.00 |
| 3 Inch Turbo | N/A | $ 1,045.00 | $ 1,820.00 | $ 2,865.00 | $ 1,045.00 | $ 1,820.00 | $ 2,865.00 |
| 3 Inch Compound | $ 2,150.00 | $ 1,165.00 | $ 2,604.00 | $ 3,769.00 | $ 1,165.00 | $ 2,604.00 | $ 3,769.00 |
| 4 Inch Turbo | N/A | $ 1,490.00 | $ 2,820.00 | $ 4,310.00 | $ 1,490.00 | $ 2,820.00 | $ 4,310.00 |
| 4 Inch Compound | $ 3,135.00 | $ 1,670.00 | $ 3,795.00 | $ 5,465.00 | $ 1,670.00 | $ 3,795.00 | $ 5,465.00 |
| 6 Inch Turbo | N/A | $ 2,210.00 | $ 5,175.00 | $ 7,385.00 | $ 2,210.00 | $ 5,175.00 | $ 7,385.00 |
| 6 Inch Compound | $ 6,190.00 | $ 2,330.00 | $ 7,070.00 | $ 9,400.00 | $ 2,330.00 | $ 7,070.00 | $ 9,400.00 |

**Vail Water Company**
**Docket No. W-01651B-12-0339**
**Test Year Ended: December 31, 2011**

**Settlement Schedule JMM-19**

**Typical Bill Analysis**
General Service 5/8 x 3/4-Inch Meter

| Company Proposed | Gallons | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|---|---|---|---|---|---|
| Average Usage | 6,720 | $ 40.06 | $ 40.58 | $ 0.52 | 1.30% |
| Median Usage | 5,500 | 35.18 | 35.70 | $ 0.52 | 1.48% |
| Staff Recommended | | | | | |
| Average Usage | 6,720 | $ 40.06 | $ 38.96 | $ (1.10) | -2.75% |
| Median Usage | 5,500 | 35.18 | 33.90 | $ (1.29) | -3.65% |

Present & Proposed Rates (Without Taxes)
General Service 5/8 x 3/4-Inch Meter

| Gallons Consumption | Present Rates | Company Proposed Rates | % Increase | Staff Recommended Rates | % Increase |
|---|---|---|---|---|---|
| - | $ 13.18 | $ 14.70 | 11.53% | $ 14.70 | 11.53% |
| 1,000 | 17.18 | 18.45 | 7.39% | 17.64 | 2.68% |
| 2,000 | 21.18 | 22.20 | 4.82% | 20.58 | -2.83% |
| 3,000 | 25.18 | 25.95 | 3.06% | 23.52 | -6.59% |
| 4,000 | 29.18 | 29.70 | 1.78% | 27.67 | -5.17% |
| 5,000 | 33.18 | 33.70 | 1.57% | 31.82 | -4.10% |
| 6,000 | 37.18 | 37.70 | 1.40% | 35.97 | -3.25% |
| 7,000 | 41.18 | 41.70 | 1.26% | 40.12 | -2.57% |
| 8,000 | 45.18 | 45.70 | 1.15% | 44.27 | -2.01% |
| 9,000 | 49.18 | 49.70 | 1.06% | 48.42 | -1.55% |
| 10,000 | 53.18 | 53.70 | 0.98% | 52.57 | -1.15% |
| 11,000 | 57.18 | 57.95 | 1.35% | 57.85 | 1.17% |
| 12,000 | 61.18 | 62.20 | 1.67% | 63.13 | 3.19% |
| 13,000 | 65.18 | 66.45 | 1.95% | 68.41 | 4.96% |
| 14,000 | 69.18 | 70.70 | 2.20% | 73.69 | 6.52% |
| 15,000 | 73.18 | 74.95 | 2.42% | 78.97 | 7.91% |
| 16,000 | 77.18 | 79.20 | 2.62% | 84.25 | 9.16% |
| 17,000 | 81.18 | 83.45 | 2.80% | 89.53 | 10.29% |
| 18,000 | 85.18 | 87.70 | 2.96% | 94.81 | 11.31% |
| 19,000 | 89.18 | 91.95 | 3.11% | 100.09 | 12.23% |
| 20,000 | 93.18 | 96.20 | 3.24% | 105.37 | 13.08% |
| 25,000 | 113.18 | 117.45 | 3.77% | 131.77 | 16.43% |
| 30,000 | 133.18 | 138.70 | 4.14% | 158.17 | 18.76% |
| 35,000 | 153.18 | 159.95 | 4.42% | 184.57 | 20.49% |
| 40,000 | 173.18 | 181.20 | 4.63% | 210.97 | 21.82% |
| 45,000 | 193.18 | 202.45 | 4.80% | 237.37 | 22.88% |
| 50,000 | 213.18 | 223.70 | 4.93% | 263.77 | 23.73% |
| 75,000 | 313.18 | 329.95 | 5.35% | 395.77 | 26.37% |
| 100,000 | 413.18 | 436.20 | 5.57% | 527.77 | 27.73% |

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**COMMISSIONERS**
BOB STUMP- Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO. W-01651B-12-0339<br><br>**STAFF'S NOTICE OF FILING PROPOSED PLAN OF ADMINISTRATION AND EXAMPLE COMPUTATION OF CAP SURCHARGE** |

Staff of the Arizona Corporation Commission ("Staff") hereby files the Proposed Plan of Administration and Example Computation of CAP Surcharge in accordance with the Settlement Agreement which was previously filed on April 26, 2013 in the above docket.

RESPECTFULLY SUBMITTED this 3rd day of May 2013.

Brian E. Smith
Bridget A. Humphrey
Attorneys, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Arizona Corporation Commission
DOCKETED
MAY 3 2013
DOCKETED BY

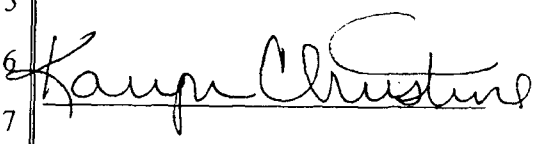
Original and thirteen (13) copies of the foregoing filed this 3rd day of May 2013 with:

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

Copy of the foregoing mailed this 3rd day of May 2013 to:

Christopher Volpe
Vice President
Vail Water Company
1010 North Finance Center Drive
Suite 200
Tucson, Arizona 85710

Michael McNulty
Michael Hallam
LEWIS AND ROCA, LLP
40 North Central Avenue
Phoenix, Arizona 85004
Attorneys for VWC



# CAP Surcharge and Long-Term Storage Credit Balance Plan of Administration

This Plan of Administration ("POA") relates to the administration of Vail Water Company's ("Vail" or the "Company") CAP Surcharge and Long-Term Storage Balance. The purpose of the POA is to describe how Vail will administer its CAP Surcharge and Long-Term Storage Balance if approved by the Arizona Corporation Commission in Docket No. W-01651B-12-0339.

## I. Overview

Vail is a public service corporation providing water utility service in Pima County, Arizona pursuant to a Certificate of Convenience and Necessity granted by the Arizona Corporation Commission. As described in Decision Nos. 62450 and 73218, Vail is currently pursuing a CAP project that will allow for the direct delivery of CAP water in Vail's service territory.

## II. General Description - Surcharge

The purpose of the CAP surcharge mechanism is to recover the costs of CAP water and delivery of CAP water to the Company's service territory not included in base rates once the CAP project is complete and water is being delivered. Under the Company's proposed CAP surcharge mechanism, the Company would be required to make a separate filing for Commission consideration before the first surcharge becomes effective. The Company shall file its first surcharge request prior to taking delivery of CAP water through the CAP project. The amount of the initial surcharge will be determined and submitted for approval by the Commission. The CAP surcharge will be based on gallons sold similar to a commodity rate. The CAP surcharge will appear on customers' bills as a separate line item labeled "CAP Water Surcharge." Thereafter, the Company shall make annual filings prior to the anniversary of the effective date of the initial CAP surcharge.

## III. Components of CAP Surcharge

The CAP surcharge will include the following components as further described in Exhibit 1:

- Component 1 - Variance from Combined CAP M&I Capital and CAP Delivery Charges included in Base Rates – This component is based upon variances between the combined CAP M&I capital and CAP delivery charges in effect for the applicable year and the combined amount of those rates ($105.87 per acre-foot) included in base rates.

- Component 2 - Tucson Water Wheeling Fees – This component is based upon the fees set forth in the final Wheeling Agreement between Vail and Tucson Water and the volume of water delivered to Vail's service territory as defined by the Wheeling Agreement.

- Component 3 - Periodic Unrecovered Recharge Credits – This component applies the rate variance calculated in Component 1 to any excess of the total CAP allocation (in acre-feet) over the total water wheeled to customers. It is an asset that represents the CAP costs included in long term storage credits reserved for future use.

- Component 4 - Prior Year Under/(Over) Recovery – This component represents the under/(over) recovery of the prior year's costs through the surcharge.

- Component 5 - Long Term Storage Credit Recovery – This component reflects the value of Long Term Storage Credits to be recovered from ratepayers and used to offset CAGRD fees. The amount for recovery from ratepayers is calculated using average inventory cost. Vail will provide documentation to support these amounts.

- Component 6 - Gain on Sale of Long Term Storage Credits – This component reflects the customers' share (50 percent) of any profit resulting from the sale of Long Term Storage Credits to third parties.

- Component 7 - Excess Water Loss Disallowance – This component is a disallowance of charges based on unaccounted for water loss in Vail's system in excess of 10 percent. If Vail's unaccounted for water loss for the 12 months prior to the date of filing for a new surcharge exceeds 10 percent, the total amounts of the other components will be reduced by the percentage the unaccounted for water loss is in excess of 10 percent.

## IV. Calculation of the CAP Surcharge

Once the total of the component costs have been determined, the CAP surcharge (per 1,000 gallons) will be calculated by dividing the total costs by the prior year's gallons sold (in 1,000s). An illustrative exhibit is attached as Exhibit 1 showing the components of the calculation.

The Company will track the surcharge collections during the year and identify any under/(over) recovery. Any under/(over) recovery of the prior year's surcharge will be considered in the subsequent year's computation of the surcharge.

## V. CAP Long-Term Storage Balance

The Company will maintain a CAP long-term storage balance. The balance will be calculated beginning with the $1,081,028 amount adopted as a component of rate base and reflect additions for CAP M&I capital and CAP delivery charges incurred in the period beginning January 1, 2012, and ending the day before rates become effective in this case and

Periodic Unrecovered Recharge Credits (Component 3) and deductions for Variance from Combined CAP M&I Capital and CAP Deliver Charges included in Base Rates (Component 1), Long-Term Storage Credit Recovery (Component 5) and Total Cost of Long-Term Storage Credits Sold (Exhibit 1, Line 22).

## VI. Reporting

The Company shall file its first surcharge request prior to taking delivery of CAP water through the CAP project.

On or before February 1st of each year thereafter Vail will submit to the Commission as a compliance item an annual report showing its collections under the CAP Surcharge that includes a calculation of any under/(over) recovery and a calculation of the CAP Long-Term Storage Balance with detail showing each component's contribution to the change in balance from the prior year.

## VII. CAP Surcharge Implementation

Vail will submit annually a schedule showing the computation of each year's surcharge along with supporting documentation of the underlying costs. Except for the first year, which may be a partial year, each surcharge shall remain in effect for a period of 12 months. The first surcharge calculation shall require Commission approval prior to going into effect. Thereafter, each surcharge shall be approved administratively by Commission Staff and shall become effective on April 1st, unless Commission Staff files an objection to such surcharge calculation prior to April 1st. Notwithstanding the foregoing, if any annual surcharge proposed by Vail represents an increase greater than $1.00 per 1,000 gallons over the CAP surcharge then in effect, such surcharge shall require Commission approval prior to going into effect.

Vail Water Company
CAP Surcharge Mechanism
Example Computation of CAP Surcharge (Year 1)



| | | | |
|---|---|---|---|
| Component 1 - Variance from Combined CAP M&I Capital and CAP Delivery Charges included in Base Rates | | | |
| [1] | CAP Allocation (a.f.) | | 1,857 |
| [2] | CAP M&I Capital and Delivery Charges (per a.f.) using base year (test year CAP rate) | $ | 105.87 |
| [3] | CAP M&I Capital and Delivery Charges (per a.f.) using next year's firm rate | $ | 144.00 |
| [4] | CAP Rate Increase (decrease) [3]-[2] | $ | 38.13 |
| [5] | Total CAP M&I Capital and Delivery Charges Increase(decrease) [1]x[4] | $ | 70,807 |
| Component 2 - Tucson Water Wheeling Fees | | | |
| [6] | CAP Water Delivered to Vail Service Territory (a.f.) | | 1,100 |
| [7] | Wheeling fee (per a.f.) | $ | 650.00 |
| [8] | Total Wheeling Fees | $ | 715,000 |
| Component 3 - Periodic Unrecovered Recharge Credits | | | |
| [9] | CAP Water Recharged (a.f.) [1]-[6] | | 757 |
| [10] | CAP Rate Increase (per a.f.) = [4] | $ | 38.13 |
| [11] | Total Recharge Credits for Future Use [9]x[10] | $ | (28,864) |
| Component 4 - Prior Year Under/(Over) Recovery (Not applicable in Year 1) | | | |
| [12] | Total amount to be recovered via surcharge =[38] from prior year calc | $ | - |
| [13] | Gallons sold in previous 12 months (in 1,000s) (provide support) | | - |
| [14] | Prior year surcharge rate (per 1,000 gallons) = [40] from prior year | $ | - |
| [15] | Amounts recovered via surcharge [13]x[14] | $ | - |
| [16] | Prior Year Under (Over) recovery [12]-[15] | $ | - |
| Component 5 - Long-Term Storage Credit Recovery | | | |
| [17] | Long-term Storage Credits Used (a.f.) (provide support) | | 100 |
| [18] | Average Cost (provide support) | $ | 125 |
| [19] | Total Cost [17]x[18] | $ | 12,500 |
| Component 6 - Gain on Sale of Long-Term Storage Credits | | | |
| [20] | Long-term Storage Credits Sold (a.f.) (provide support) | | 100 |
| [21] | Average Cost per a.f. (provide support) | $ | 125 |
| [22] | Total Cost of Long-term Storage Credits Sold [20]x[21] | $ | 15,625 |
| [23] | Total Sales of Long-term Storage Credits | $ | 15,625 |
| [24] | Gain on Sale of Storage Credits [23]-[22] | $ | - |
| [25] | Shared with Ratepayers (%) | | 50.00% |
| [26] | Credit for Rate Payer's Share of Gain [24]x[25]x(-1) | $ | - |
| Component 7 - Excess Water Loss Disallowance | | | |
| [27] | Gallons Sold in Prior Year (in 1,000's) (provide support) | | 344,500 |
| [28] | Accounted for Water Not Sold (in 1,000's) (provide support) | | 10,000 |
| [29] | Total Gallons Sold and Accounted For (in 1,000's) [27] + [28] | | 354,500 |
| [30] | Total Gallons Allowed (in 1,000s) [29]/0.90 | | 393,889 |
| [31] | Gallons Pumped in Prior Year (in 1,000's) (provide support) | | 420,000 |
| [32] | Water Loss (in 1,000's) [31] - [30] | | 26,111 |
| [33] | Percent Water Loss [32]/[31]x100 | | 6.22% |
| [34] | Allowed Water Loss Percentage | | 10.00% |
| [35] | Percent Reduction in Total Costs Recovered [34]-[33] (if positive then 0%) | | 0.00% |
| [36] | Total Base Costs [5]+[8]+[11]+[16]+[19]+[26] | $ | 769,443 |
| [37] | Water Loss Credit [35]x[36] | $ | - |
| Computation of Commodity Surcharge | | | |
| [38] | Total Net Costs to be Recovered [36]+[37] | $ | 769,443 |
| [39] | Gallons sold in prior year (in 1,000's) | | 340,000 |
| [40] | Cost per 1,000 gallons [38]/[39] | $ | **2.26** |

Vail Water Company
CAP Surcharge Mechanism
Example Computation of CAP Surcharge (Year 2)

| | | | |
|---|---|---|---|
| Component 1 - Variance from Combined CAP M&I Capital and CAP Delivery Charges Included in Base Rates | | | |
| [1] | CAP Allocation (a.f.) | | 1,857 |
| [2] | CAP M&I Capital and Delivery Charges (per a.f.) using base year (test year CAP rate) | $ | 105.87 |
| [3] | CAP M&I Capital and Delivery Charges (per a.f.) using next year's firm rate | $ | 154.00 |
| [4] | CAP Rate Increase (decrease) [3]-[2] | $ | 48.13 |
| [5] | Total CAP M&I Capital and Delivery Charges Increase(decrease) [1]x[4] | $ | 89,377 |
| Component 2 - Tucson Water Wheeling Fees | | | |
| [6] | CAP Water Delivered to Vail Service Territory (a.f.) | | 1,300 |
| [7] | Wheeling fee (per a.f.) | $ | 650.00 |
| [8] | Total Wheeling Fees | $ | 845,000 |
| Component 3 - Periodic Unrecovered Recharge Credits | | | |
| [9] | CAP Water Recharged (a.f.) [1]-[6] | | 557 |
| [10] | CAP Rate Increase (per a.f.) = [4] | $ | 48.13 |
| [11] | Total Recharge Credits for Future Use [9]x[10] | $ | (26,808) |
| Component 4 - Prior Year Under/(Over) Recovery | | | |
| [12] | Total amount to be recovered via surcharge =[38] from prior year calc | $ | 769,443 |
| [13] | Gallons sold in previous 12 months (in 1,000s) (provide support) | | 352,000 |
| [14] | Prior year surcharge rate (per 1,000 gallons) = [40] from prior year | $ | 2.26 |
| [15] | Amounts recovered via surcharge [13]x[14] | $ | 796,600 |
| [16] | Prior Year Under (Over) recovery [12]-[15] | $ | (27,157) |
| Component 5 - Long-Term Storage Credit Recovery | | | |
| [17] | Long-term Storage Credits Used (a.f.) (provide support) | | 100 |
| [18] | Average Cost (provide support) | $ | 125 |
| [19] | Total Cost [17]x[18] | $ | 12,500 |
| Component 6 - Gain on Sale of Long-Term Storage Credits | | | |
| [20] | Long-term Storage Credits Sold (a.f.) (provide support) | | 150 |
| [21] | Average Cost per a.f. (provide support) | $ | 125 |
| [22] | Total Cost of Long-term Storage Credits Sold [20]x[21] | $ | 15,625 |
| [23] | Total Sales of Long-term Storage Credits | $ | 15,625 |
| [24] | Gain on Sale of Storage Credits [23]-[22] | $ | - |
| [25] | Shared with Ratepayers (%) | | 50.00% |
| [26] | Credit for Rate Payer's Share of Gain [24]x[25]x(-1) | $ | - |
| Component 7 - Excess Water Loss Disallowance | | | |
| [27] | Gallons sold in previous 12 months (in 1,000s) (provide support) | | 352,000 |
| [28] | Accounted for Water Not Sold (in 1,000's) (provide support) | | 10,000 |
| [29] | Total Gallons Sold and Accounted For (in 1,000's) [27] + [28] | | 362,000 |
| [30] | Total Gallons Allowed (in 1,000s) [29]/0.90 | | 402,222 |
| [31] | Gallons Pumped in Prior Year (in 1,000's) (provide support) | | 420,000 |
| [32] | Water Loss (in 1,000's) [31] - [30] | | 17,778 |
| [33] | Percent Water Loss [32]/[31]x100 | | 4.23% |
| [34] | Allowed Water Loss Percentage | | 10.00% |
| [35] | Percent Reduction in Total Costs Recovered [34]-[33] (if positive then 0%) | | 0.00% |
| [36] | Total Base Costs [5]+[8]+[11]+[16]+[19]+[26] | $ | 892,912 |
| [37] | Water Loss Credit [35]x[36] | $ | - |
| Computation of Commodity Surcharge | | | |
| [38] | Total Net Costs to be Recovered [36]+[37] | $ | 892,912 |
| [39] | Gallons sold in previous 12 months (in 1,000s) =[13] | | 352,000 |
| [40] | Cost per 1,000 gallons [38]/[39] | $ | **2.54** |

**BEFORE THE ARIZONA CORPORATION COMMISSION**

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AZ CORP COMMISSION
DOCKET CONTROL

**COMMISSIONERS**
BOB STUMP- Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO. W-01651B-12-0339<br><br>**STAFF'S NOTICE OF FILING DIRECT TESTIMONY** |

Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony of Jeffrey M. Michlik, John A. Cassidy and Marlin Scott Jr., in the above docket.

RESPECTFULLY SUBMITTED this 25th day of February 2013.

Brian E. Smith, Attorney
Bridget A. Humphrey, Attorney
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 25th day of February 2013 with:

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

EXHIBIT
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S-1

Copy of the foregoing mailed this
25th day of February 2013 to:

Christopher Volpe, Vice President
Vail Water Company
1010 North Finance Center Drive
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Tucson, Arizona 85710

Michael McNulty
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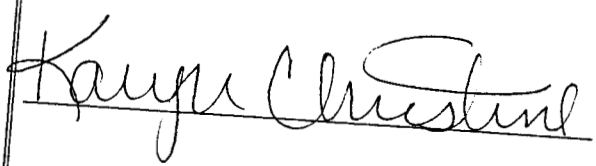
Phoenix, Arizona 85004



**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON | ) | DOCKET NO.W-01651B-12-0339 |

# DIRECT

# TESTIMONY

# OF

JEFFREY M. MICHLIK

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

FEBRUARY 25, 2013

## TABLE OF CONTENTS



## SCHEDULES

*VAIL WATER COMPANY*



**ATTACHMENTS**

**EXECUTIVE SUMMARY**
**VAIL WATER COMPANY**
**DOCKET NO. W-01651B-12-0339**

Vail Water Company ("Company") is a certificated Arizona public service corporation that provided water services during 2011 in Pima County, Arizona. The average number of customers served per the Company during the test year was approximately 3,900.

On July 27, 2012, the Company filed with the Arizona Corporation Commission ("Commission") an application for a permanent rate increase with a test year ending December 31, 2011. The application was found sufficient on August 27, 2012.

**Rate Application:**

The Company-proposed rates, as filed, produce total operating revenue of $2,378,860, an increase of $44,113, or 1.89 percent, over test year revenue of $2,334,747 to provide a $344,528 operating income and a 10.40 percent rate of return on its proposed $3,312,774 fair value rate base ("FVRB") which is its original cost rate base ("OCRB").

The Utilities Division ("Staff") recommends rates that produce total operating revenue of $2,191,924, a decrease of $142,823,or 6.12 percent, from the Staff-adjusted test year revenue of $2,334,747, to provide a $201,902 operating income and a 9.10 percent return on the $2,218,704 Staff-adjusted FVRB and OCRB.

The Company-proposed rates would increase the monthly bill for a typical 5/8 x 3/4-inch meter residential customer, with a median usage of 5,500 gallons, by $.52 (1.48 percent), from $35.18 to $35.70. Under the Staff-recommended rate design for permanent rates, the monthly bill for a typical residential customer would decrease by $3.73 (10.60 percent), from $35.18 to $31.45.

**Staff Recommendations:**

Staff recommends:

- Approval of Staff's rates and charges as shown in schedule JMM-17. In addition to collection of its regular rates and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code ("A.A.C.") Rule 14-2-409(D) (5).

- Directing the Company to docket with the Commission a schedule of its approved rates and charges within 30 days after the date the Decision in this matter is issued.

- Directing the Company to file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at

least five Best Management Practices ("BMPs"), in the form of tariffs that substantially conform to the templates created by Staff, for Commission review and consideration. The templates created by Staff are available on the Commission's website at http://www.azcc.gov/Divisions/Utilities/forms.asp (see Engineering Report).

- Authorizing the depreciation rates by individual National Association of Regulatory Utility Commissioners account, as presented in Table 1-1 of Engineering Report.

- Directing the Company to obtain competitive bids for its management services no less frequently than every three years, file the management services bid documentation with the Utilities Compliance Division and file a letter in Docket Control stating that the bid documentation was filed with the Utilities Division.

- Directing the Company to directly track salary costs from its affiliate, TEM Corp., to the maximum extent practical by use of timesheets in units no larger than hourly.

- Direct the Company to cooperate with Staff and provide information Staff may need in the Company's affiliate general ledger and other accounting records.

- Authorizing the Company to use any funds that remain in the Central Arizona Project ("CAP") account to fund the CAP Water line from Tucson Water to Vail Water and to treat those funds as contributions in aid of construction.

- Authorize a surcharge to be calculated at a later date, through the Company's own initiative in the Docket for this case, to request recovery of new CAP costs as they become known and measurable.

- Direct that the Company's CAP surcharges be reviewed in its next rate case for appropriate modification or discontinuation.

## I. INTRODUCTION

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

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

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

A. In my capacity as a Public Utilities Analyst V, I analyze and examine accounting, financial, statistical and other information and prepare reports based on my analyses that present Staff's recommendations to the Commission on utility revenue requirements, rate design and other matters. I also provide expert testimony on these same issues.

**Q. Please describe your educational background and professional experience.**

A. In 2000, I graduated from Idaho State University, receiving a Bachelor of Business Administration Degree in Accounting and Finance, and I am a Certified Public Accountant with the Arizona State Board of Accountancy. I have attended the National Association of Regulatory Utility Commissioners' ("NARUC") Utility Rate School, which presents general regulatory and business issues.

I joined the Commission as a Public Utilities Analyst in May of 2006. Prior to employment with the Commission, I worked four years for the Arizona Office of the Auditor General as a Staff Auditor, and one year in public accounting as a Senior Auditor.

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

A. I am presenting Staff's analysis and recommendations regarding Vail Water Company's ("Vail" or "Company") application for a permanent rate increase. I am presenting

testimony and schedules addressing rate base, operating revenues and expenses, revenue requirement, and rate design. Mr. Marlin Scott Jr. is presenting Staff's engineering analysis and related recommendations. Mr. John Cassidy is presenting cost of capital testimony.

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

A. I performed a regulatory audit of the Company's application and records. The regulatory audit consisted of examining and testing financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission-adopted NARUC Uniform System of Accounts ("USoA").

**Q. How is your testimony organized?**

A. My testimony is presented in ten sections. Section I is this introduction. Section II provides a background of the Company. Section III is a summary of consumer service issues. Section IV presents compliance status. Section V is a summary of the Company's filing and Staff's rate base and operating income adjustments. Section VI presents Staff's rate base recommendations. Section VII presents Staff's operating income recommendations. Section VIII presents Staff's revenue requirement. Section IX presents Staff's rate design. Section X presents the Company's Affiliated and Related Entities, and Section XI presents Staff's Central Arizona Project recommendations.

## II. BACKGROUND

**Q. Please review the background of this application.**

A. Vail Water Company is a certificated Arizona public service corporation that provided water services during 2011 in Pima County, Arizona. The average number of customers served per the Company during the test year was 3,900.

On July 27, 2012, the Company filed an application for a permanent rate increase, with a test year ending December 31, 2011.

## III. CONSUMER SERVICES

**Q. Please provide a brief history of customer complaints received by the Commission regarding the Company. Additionally, please discuss customer responses to the Company's proposed rate increase.**

A. A review of the Commission's Consumer Services database for the Company from January 1, 2010, to January 30, 2013, revealed the following:

2012 – Zero complaints, zero opinions, and zero inquires.

2011 – Three complaints (one billing, one disc/term-non pay, and one other), zero opinions and zero inquiries.

2010 – One complaint (deposit refund), zero opinions and zero inquiries.

All complaints have been resolved and closed.

## IV. COMPLIANCE

**Q. Please provide a summary of the compliance status of the Company.**

A. A check of the Commission's Compliance database indicates that there are currently no delinquencies for the Company.

## V. SUMMARY OF FILING, RECOMMENDATIONS, AND ADJUSTMENTS

**Q. Please summarize the Company's proposals in this filing.**

A. The Company-proposed rates, as filed, produce total operating revenue of $2,378,860, an increase of $44,113, or 1.89, over test year revenue of $2,334,747 to provide a $344,528 operating income and a 10.40 percent rate of return on its proposed $3,312,773 fair value rate base ("FVRB") which is its original cost rate base ("OCRB").

**Q. Please summarize Staff's recommendations.**

A. Staff recommends rates that produce total operating revenue of $2,191,924, a decrease of $142,823, or 6.12 percent, from the Staff-adjusted test year revenue of $2,334,747, to provide a $201,902 operating income and a 9.10 percent return on the $2,218,704 Staff-adjusted FVRB and OCRB.

**Q. What test year did the Company use in this filing?**

A. The Company's rate filing is based on the twelve months ended December 31, 2011 ("test year").

**Q. Please summarize the rate base adjustments addressed in your testimony.**

A. My testimony addresses the following issues:

Retired Plant – This adjustment decreases plant-in-service by $281,388 and accumulated depreciation by $281,388 to remove plant-in-service that should be retired.

Plant Retired to Wrong Account – This adjustment reclassifies plant balances to correct errors in recording retirements. This adjustment neither increases or decreases plant-in-service, but does decrease the associated accumulated depreciation by $10,136.

Excess Capacity – This adjustment reduces plant-in-service by $268,743 and accumulated depreciation by $268,743 to remove excess capacity.

Central Arizona Project ("CAP") Long-Term Storage Credits – This adjustment creates a Deferred Regulatory Liability in the amount of $1,075,643 to recognize ratepayer monies held by the Company.

**Q. Please summarize the operating revenue and expense adjustments addressed in your testimony.**

A. My testimony addresses the following issues:

Central Arizona Project ("CAP") Municipal and Industrial ("M&I") Expenses – This adjustment increases CAP M&I expenses by $47,911 to take into account scheduled increases in CAP M&I expenses.

Water Testing Expense – This adjustment increases water testing expense by $9,761 to reflect Staff's recommended annual amount of $13,667.

Miscellaneous Expense – This adjustment decreases miscellaneous expenses by $1,311 to remove costs that are not necessary to the provision of water services.

Depreciation Expense – This adjustment decreases depreciation expense by $40,418 to reflect application of Staff's recommended adjustments to plant-in-service discussed above and Staff's recommended depreciation rates.

Property Tax Expense – This adjustment does not increase or decrease test year property taxes, but reflects application of the modified version of the Arizona Department of Revenue's ("ADOR") property tax methodology.

Income Tax Allowance Expense – This adjustment decreases test year income tax expense by $13,733 to reflect the Tax Allowance for income tax expense.

## VI. RATE BASE ADJUSTMENTS

*Fair Value Rate Base*

**Q. Did the Company prepare a schedule showing the elements of Reconstruction Cost New Rate Base?**

A. No, the Company did not. The Company's filing treats the OCRB the same as the FVRB.

*Rate Base Summary*

**Q. Please summarize Staff's adjustments to the Company's rate base shown in Schedules JMM-3 and JMM-4.**

A. Staff's adjustments to the Company's rate base resulted in a net decrease of $1,094,069 from $3,312,773 to $2,218,704. Staff's recommendations result from the rate base adjustments described below.

*Rate Base Adjustment No. 1 – Retired Plant*

**Q. Did Staff identify plant that should be retired?**

A. Yes. Staff identified $281,388 in plant that the Company should have retired, but had not retired. Please see the testimony of Staff Engineer Marlin Scott, Jr.

**Q. What is Staff's recommendation?**

A. Staff recommends decreasing plant in service by $281,388 to remove all plant from rate base that should have been retired, and also remove the associated accumulated depreciation amount of $288,388, as shown in Staff Schedule JMM-5.

*Rate Base Adjustment No. 2 – Plant Retired to Wrong Account*

**Q. Did Staff identify plant that was retired to the wrong account?**

A. Yes. Based on the Company's response to Staff data request 4-3, Staff identified $27,480 in plant that was retired to the wrong account.

**Q. What is Staff's recommendation?**

A. Staff recommends reclassifying and increasing plant in the amount of $1,838 in account 311 Electric Pumping Equipment, and in the amount of $25,642 in account 330 Distribution Reservoirs and Standpipe, and reducing plant in the amount of $27,480 in account 340, Office Furniture and Fixtures, along with decreasing the associated accumulated depreciation by $10,136, as shown in Staff Schedule JMM-6.

*Rate Base Adjustment No. 3 – Excess Capacity*

**Q. Did Staff identify plant-in-service with excess capacity?**

A. Yes. Staff identified $268,743 in excess capacity that should be removed from rate base. Please see the testimony of Staff Engineering Marlin Scott, Jr.

**Q. What is Staff's recommendation?**

A. Staff recommends decreasing plant in the amount of $268,743 in account 307 Wells and Springs, as shown in Staff Schedule JMM-7.

*Rate Base Adjustment No. 4 – Central Arizona Project ("CAP") Long-Term Storage Credits ("LTSC")*

**Q. Is the Company proposing to include Deferred CAP Charges of $1,104,206 in rate base?**

A. Yes.

**Q. Please provide a brief overview of the Company's CAP LTSC and their uses?**

A. Based on the Company's response to Staff data request 3-1, the Company has an annual subcontract amount of 1,857 Acre Feet ("AF") of CAP rights. Currently Vail recharges its entire annual allocation with Kai Farms which generates recharge credits. The Company, as part of the Tucson Active Management Area, uses these credits to offset its annual groundwater pumping, as required to achieve "Safe Yield." The Company has also sold a limited amount of excess credits to del Lago Golf club during months when there is a need. Storage credits purchased by del Lago Golf have ranged from 125 AF to 243 AF annually and are sold on an average costs basis. Funds from these sales are deposited in the segregated CAP account.

**Q. Why has the Company been accumulating theses CAP LTSC?**

A. According to the Company, prior to 2009 all CAP and associated recharge costs were expensed in the year disbursed. As the remainder credits grew to an amount greater than

the amount of water recovered for a calendar year, the Company began to capitalize its CAP charges and amortize its usage on an average cost basis.[1]

Further, the Company plans to continue to use the LTSC until it can take direct delivery of the CAP water, and it plans to keep an amount of credits in reserve for potential outages on the canal.

**Q. Does Staff agree with the Company's plan for using the CAP LTSC?**

A. Staff agrees so long as the Company continues to deposit the proceeds of any sale of excess credits into the segregated funds designated for CAP purposes.

**Q. Has the Company provided Staff with a CAP LTSC work sheet?**

A. Yes. The Company stated that this worksheet mirrors the worksheet required by the Arizona Department of Water Resources ("ADWR"), but it provides greater detail.

**Q. Does Staff agree with the Company's calculation?**

A. Yes, for the most part. The Company provided Staff with a revised worksheet in response to Staff data request 5-1. Staff did notice that the five-percent cut to the aquifer was not included in the 2011 year calculation, and Staff has included a recalculated storage credit figure. Please see Attachment A.

**Q. Has Staff made an adjustment to correct for the Company's omission of the five-percent cut in the Deferred CAP asset?**

A. Yes. Please see schedule JMM-8. This results in a $28,563 reduction to the Deferred CAP asset charge.

[1] Company response to Staff data request JMM 5-1.

**Q. How is the CAP LTSC balance calculated on a yearly basis?**

A. As shown in the worksheet included in Attachment A, the Company starts with a beginning balance which includes the AF, cost and per unit cost. The Company then adds the CAP M&I charges for water entering the recharge facility for the year.[2] Next, other costs for acquisitions or purchases of LTSC for the year are added.[3] Then, the Company subtracts the cost for the annual amount pumped from the ground and for any LTSC sold to its affiliate, del Lago Golf, to compute an ending balance.

Since the volume of water being recharged into the facility is more than the quantity of water the Company pumped from the ground, a net positive CAP LTSC is accumulated for the year.

**Q. Is the Company proposing to include the Deferred CAP Charges balance in rate base?**

A. Yes. The Company has included a Deferred CAP Charges balance of $1,104,206 in its rate base.

**Q. Did the Company's investors fund the Deferred CAP Charges?**

A. No. The Company has collected funds via a CAP Hook-up fee and a CAP Service Charge (i.e., surcharge). While Decision No. 62450 refers to treating the CAP Hook-up fees as revenues, it also provides for a "true-up" between the amounts collected and expenditures by refunding any excess to customers.[4]

[2] The recharge facility is located at the Kai Farms a certified Groundwater Savings Facility.
[3] For example, in 2009, the Company purchased 4,000 AF from the City of Tucson for $489,000.
[4] Decision No. 62450, page 11.

**Q. Is the Company proposing to include a liability component in its rate base to reflect that ratepayers have provided funds for the CAP Charge?**

A. No. However, if Deferred CAP Charges are recognized in rate base, an offsetting liability to recognize that ratepayers have funded the CAP charges and that the amounts are to be trued-up is appropriate. That is, a deferred CAP liability account, or contra account, is appropriate to offset the Deferred CAP charge asset.

**Q. What is Staff's recommendation?**

A. Staff recommends a reduction of $28,563 to the Deferred CAP charge from $1,104,743 to $1,076,180. Staff also recommends recognition of a deferred CAP liability account in the amount of $1,076,180, as shown in Schedule JMM-8.

## VII. OPERATING INCOME ADJUSTMENTS

*Operating Income Summary*

**Q. What are the results of Staff's analysis of test year revenues, expenses, and operating income?**

A. As shown in Schedules JMM-9 and JMM-10, Staff's analysis resulted in test year revenues of $2,334,747, expenses of $2,024,301 and operating income of $310,446.

*Operating Income Adjustment No. 1 – Purchased Water Expense*

**Q. Why did Staff make an adjustment to Purchased Water Expense?**

A. Staff adjusted Purchased Water expense to recognize that CAP Municipal and Industrial ("M&I") and CAP Capital charges are scheduled to increase. Since the scheduled cost increases or similar increases are almost certain, Staff considers them to be known and measurable.

**Q. What method did Staff use to calculate its adjustment?**

A. Staff normalized the CAP M&I and CAP Capital charges by calculating the mean average over a five year period using information in CAP's Final 2013 to 2018 Rate Schedule.

**Q. What is Staff's recommendation?**

A. Staff recommends increasing purchased water expenses by $47,911, as shown in Staff Schedule JMM-11.

*Operating Income Adjustment No. 2 – Water Testing Expense*

**Q. What did the Company propose for water testing expense?**

A. The Company proposed its recorded test year expense of $3,906.

**Q. What adjustment did Staff make?**

A. Staff adjusted the water testing expense upward by $9,761, from $3,906 to $13,667, to reflect Staff's recommended amount. Please see the attached Engineering Report.

**Q. What is Staff's recommendation?**

A. Staff recommends increasing water testing expense by $9,761, as shown in Schedule JMM-12.

*Operating Income Adjustment No. 3 – Miscellaneous Expense*

**Q. Does the Company's application request to recover expenses not necessary to the provision of water services?**

A. Yes. The Company's application includes $1,311 in Miscellaneous Expenses related to lunches and dinners.

**Q. What is Staff's recommendation?**

A. Staff recommends decreasing Miscellaneous Expense by $1,311, from $11,424 to $10,113, as shown in Schedule JMM-13.

*Operating Income Adjustment No. 4 – Depreciation Expense*

**Q. How did Staff calculate depreciation expense?**

A. Staff recomputed depreciation expense on a going-forward basis by applying Staff's recommended depreciation rates by account to Staff's recommended plant-in-service balances and reducing that result by the amortization of contributions-in-aid-of-construction ("CIAC"), as shown in Schedule JMM-14.

**Q. What is Staff's recommendation?**

A. Staff recommends reducing depreciation expense by $40,418, from $570,649 to $530,231, as shown in Schedule JMM-14.

*Operating Income Adjustment No. 5 – Property Tax Expense*

**Q. What method has the Commission typically adopted to determine property tax expense for ratemaking purposes for Class C and above water utilities?**

A. The Commission's practice in recent years has been to use a modified ADOR methodology for water and wastewater utilities.

**Q. Did Staff calculate property taxes using the modified ADOR method?**

A. Yes. As shown in Schedule JMM-15, Staff calculated property tax expense using the modified ADOR method for both test year and Staff-recommended revenues. Since the modified ADOR method is revenue dependent, the property tax is different for test year and recommended revenues.

**Q. What does Staff recommend for test year property tax expense?**

A. Staff recommends the same test year property tax expense as the Company, as shown in Schedule JMM-15.

*Operating Income Adjustment No. 6 – Commission Tax Allowance Policy - Income Tax Expense*

**Q. What adjustment did Staff make to Income Tax Expense?**

A. The Commission on February 12, 2013, created a new Commission Tax Allowance Policy that makes income tax of utilities that are not C corporations an allowable expense.

**Q. Has Staff included an adjustment to account for this change in policy?**

A. Yes, Staff calculated test year income taxes consistent with the adopted policy of $91,962, as shown in schedule JMM-2.

**Q. What is Staff recommending?**

A. Staff recommends reducing Income Tax expense by $14,282, from $106,244 to $91,962, as shown in Schedule JMM-16.

## VIII. REVENUE REQUIREMENT

**Q. What operating income and revenue requirement does Staff recommend for the Company in this case?**

A. Yes. Staff recommends total operating revenue of $2,191,924, a decrease of $142,823, or 6.12 percent, from the Staff-adjusted test year revenue of $2,334,747, to provide a $201,902 operating income and a 9.10 percent return on the $2,218,704 Staff-adjusted FVRB and OCRB. For more information on the calculation of the rate of return see the Direct Testimony of John Cassidy.

## IX. RATE DESIGN

**Q. Did Staff prepare a summary of the Company's present rates, proposed rates, and Staff's recommended rates?**

A. Yes. See Schedules JMM-17.

**Q. Did Staff prepare a typical bill analysis for a 5/8" x 3/4" residential customer water customer?**

A. Yes. See Schedules JMM-18.

**Q. What does Staff recommend for other service charges?**

A. Staff presents its recommended other service charges in Schedule JMM-17, and they reflect Staff's experience of what are reasonable and customary charges.

**Q. What is Staff's recommendation?**

A. Staff recommends approval of its rates and charges, as shown in Schedules JMM-17.

## X. AFFILIATED AND RELATED ENTITIES

*Affiliate and Related Entities Structure*

**Q. Who are the officers of Vail Water Company?**

A. The Officers of Vail Water Company are as follows, as contained in Attachment B:

President – Sheldon J. Mandell

Treasurer – Howard J. Mandell

Secretary – Paul Mandell

Vice President – Christopher T. Volupe

**Q. Please identify the members, managers, officers, or partners of the other affiliated or related entities.**

A. The members, managers, or partners for each entity are as follows, as contained in Attachment B:

TEM Corp.

Other Officer – Lean A. Estes

Secretary/Treasurer/Vice President – Christopher T. Volupe

Vice-President – William A. Estes III

President – Shirley A. Estes

Estes Development Co., L.L.C.

Member – William A. Estes III

Member – Christopher T. Volupe

Vail Valley Associates, L.L.C.

Manager – Christopher H. Sheafe

Manager – William A. Estes

Member – The Sheafe

Manager – Robert C. Neill

Member – BSE Trust

Member – Robert and Mary Neill Family Trust Member

Mandell Vail Corp

President – Sheldon J. Mandell

Secretary – Howard J. Mandell

Vice-President – Arthur N. Mandell

Vice-President – Allen E. Mandell

Del Lago Golf LLC

Manager – Del Largo Golf LLC

Member – The Estes Living Trust

Member – The Estes Co.

**Q. How does the Commission define an affiliate?**

A. According to Rule 14-2-801(1) of the Arizona Administrative Code ("A.A.C."):

> *"Affiliate," with respect to the public utility, shall mean any other entity directly or indirectly controlling or controlled by, or under direct or indirect common control with, the public utility. For purposes of this definition, the term "control" (including the correlative meanings of the terms "controlled by" and "under common control with"), as used with respect to any entity, shall mean the power to direct the management policies of such entity, whether through ownership of voting securities, or by contract, or otherwise.*

**Q. Is it true that A.A.C. R14-2-801 et seq only apply to Class A utilities?**

A. Yes. However, even though the rules do not technically apply to Vail, the principles set forth in those rules, as well as the standards under Generally Accepted Accounting Principles ("GAAP"), are relevant in this case because of the organizational relationships between the Company, its parent, and the management company.

**Q. How is a related party defined under GAAP?**

A. A related party includes a party that "can significantly influence the management or operating policies of the transacting parties or if it has an ownership interest in one of the

transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests."

**Q. What treatment does GAAP give to transactions between such parties?**

A. GAAP states:

> *Transactions involving related parties cannot be presumed to be carried out on an arm's-length basis, as the requisite conditions of competitive, free-market dealings may not exist. Representations about transactions with related parties, if made, shall not imply that the related party transactions were consummated on terms equivalent to those that prevail in arm's-length transactions unless such representations can be substantiated.*[5]

**Q. Do the relationship and activities of Vail and TEM suggest that they are affiliates?**

A. Yes.

**Q. Should a higher standard of evidence be placed on affiliate or related-party transactions that are not subject to a competitive bidding process?**

A. Yes. For affiliate or related-party transactions, a mere showing that costs were incurred is not sufficient evidence to demonstrate that the costs are appropriately valued. Such transactions cannot be presumed to be carried out on an arm's length basis and, therefore, give rise to the potential for additional charges. Using a competitive bidding process provides evidence that the best quality service at the lowest price is obtained. Also, a competitive bidding process provides incentive to the outside service to run as efficiently as possible in order to keep costs low.

[5] Accounting Standards Codification 850-10-50-5.

**Q. What happens when the competitive bidding process is ignored?**

A. An unregulated affiliate may be able to pass expenses onto the regulated entity and have ratepayers pay for costs that are not necessary for the provision of water service.

**Q. Is there any evidence that such may have happened in this case?**

A. Yes. As TEM Corp. points out in an October 10, 1996 proposal to Del Largo Water Company,[6] the following are among the reasons used to justify TEM Corp. managing Del Lago Water Company (See Attachment C):

- **Vail Valley Joint Venture lower its operating Costs.** Currently all of Doug's, Kip's, Gloria's, and Lisa's time are billed to VVJV. With the acceptance of this proposal, any time spent on DLWCO would not be included in the TEM cost reimbursements paid by VVJV. For instance, Kip's time may drop form 15% to 5%, Doug's from 85% to 80%, Gloria's from 20% to 10% and so on. Additionally, if further staffing is needed for TEM to complete its duties, VVJV would not be burdened with a budget increase.

- **Mandell position is enhanced in VVJV.** The Mandell group owns 60% of VVJV and 50% of DLWCO; ***hence, every dollar saved at the VVJV level is more valuable to them than a dollar spent on DLWCO (emphasis added).***

- **TEM fees is passed on to customers.** When the rate base is based on the physical plant, the rate charged to customers includes overhead. For instance, if your physical plant is worth $1,000,000 and your overhead is $75,000 per year, you are allowed to earn an 8% profit on the physical plant plus recoup your overhead. In

[6] Currently, Vail Water Company.

this case fees should be $155,000. ***DLWCO has exposure from the Corporation Commission if costs, passed on to its customers, are not expended. Ramifications may include lowering the rate. Our goal is to get as large an increase as possible at the next rate hearing, again this results in a win for the Owners. If a larger fee to TEM is justifiable, perhaps additional benefit could be passed on to VVJV through further cost reductions*** *(emphasis added).*

**Q. Does Staff have concerns with this management contract?**

A. Yes. As noted above, costs can be shifted from VVJV to Vail Water Company, which can lower VVJV's operating costs and increase Vail Water Company's operating costs at the expense of rate payers. Especially since the Company, in response to Staff data request 2.8, stated that the partners of Vail Valley Joint Venture are shareholders of Vail Water Company, but do not exercise control over Vail Water Company.

**Q. Has the Company ever again bid out its management services?**

A. No.

**Q. What is Staff's recommendation?**

A. Staff recommends that the Company seek competitive bids for its management services no less frequently than every three years, and file the management services bid documentation with the Utilities Compliance Division along with filing a confirmation letter in Docket Control. The bid documentation should at a minimum contain the following:

a. The names of at least five vendors from which the Company has solicited bids.

b. A comparison of the prices or rates.

c. The rationale for selecting the winning bidder if the lowest cost is not used.

*Employee and Salaries*

**Q. How is the Company's organizational structure set-up?**

A. Vail Water Company has both its own employees and also an affiliate management company, TEM, that it has contracted to manage its Company.

**Q. How many employees does Vail Water Company employ, and what are their positions?**

A. In response to Staff data request 2.1, the Company noted that it has six employees: an Operator, a Billing Manager, a Customer Service Representative, and three field technicians.

**Q. How many employees of TEM does TEM allocate salaries to Vail?**

A. In response to Staff data request 2.5, the Company noted that it allocates a percentage of the following employee salaries to Vail Water Company: Vice President, Assistant Controller, Accounting/Legal Assistant, and Administrative Assistant.

**Q. Did the Company provide a worksheet that displays how TEM Corp. allocated its Management Fees to Vail Water Company?**

A. Yes (See Attachment D). The Schedule contains a category for Salaries, Benefits, and other Expenses. Each expense item is then allocated by a *vague guesstimated percentage* to arrive at a dollar amount to be allocated to Vail Water Company.

**Q. Does Staff find this methodology adequate?**

A. No. The Company is out of compliance with National Association of Regulatory Utility Commissioners ("NARUC").

**Q. What does NARUC state about allocations of cost?**

A. To the maximum extent practicable, in consideration of administrative costs, costs should be collected and classified on a direct basis for each asset, service or product provided.

**Q. What are direct costs?**

A. Costs which can be specifically identified with a particular service or product.

**Q. Can you give an example?**

A. Yes. Most legal invoices that Staff reviews specify the number of hours that an attorney works on different areas of a rate case. For, example, .25 hours reviewing Staff data requests, 1 hour working on company filing, etc., along with the cost charged per each hour of work.

**Q. Could TEM Corp. have used this methodology to directly track TEM Corp. hours?**

A. Yes.

**Q. Does the NARUC USoA also state that "Charges to utility plant or to a salaries expense account shall be based upon the actual time engaged in either plant construction or providing operational services. In the event actual time spent in the various activities is not available or practicable, salaries should be allocated upon the basis of a study of the time engaged during the representative period. Charges should not be made to the accounts based upon estimates or in an arbitrary fashion?"**

A. Yes.

**Q. What is Staff's recommendation?**

A. Staff recommends that the Company comply with the NARUC USoA, and directly track salary costs from its affiliate, TEM Corp., to the maximum extent practical by use of timesheets in units no larger than hourly.

*Affiliates General Ledger*

**Q. Did Staff ask for TEM Corp.'s general ledger?**

A. Yes. However, the Company refused to provide Staff with TEM Corp.'s general ledger.

**Q. Why is an affiliate's general ledger important?**

A. Without the affiliate's general ledger, Staff is unable to properly/adequately complete its audit of TEM Corp.'s allocation. Staff cannot verify that the salaries presented on the Company's work sheet are accurate. In addition, the Company states that it has also removed the affiliated profit; however, the Company's assertion cannot be verified without access to its general ledger and other accounting records.

**Q. What does NARUC USoA state about general records and transactions with associated Companies?**

A. Each utility shall keep its books of account, and all other books, records, and memoranda which support the entries in such books of accounts so as to be able to furnish readily full information as to any item included in any account. Each entry shall be supported by such detailed information as will permit a ready identification, analysis, and verification of all facts relevant thereto.

Further, each utility shall keep its accounts and records so as to be able to furnish accurately and expeditiously statements of all transactions with associated companies.

**Q. What is Staff's recommendation?**

A. Staff recommends that the Commission direct the Company to cooperate with Staff and provide information Staff may need in the Company's affiliate general ledger and other accounting records to verify costs requested for recovery that are direct charged or allocated from or through the affiliate.

## XI. CENTRAL ARIZONA PROJECT

*Introduction*

**Q. Please give some background on the Central Arizona Project.**

A. Authorized as part of the Colorado River Basin Project Act (Pub. L. 90-537), in 1968, the CAP is a multi-purpose water project which delivers water for irrigation, municipal and industrial uses in central and southern Arizona. CAP Municipal and Industrial subcontractors, of which Vail Water Company is one, have entered into CAP subcontracts with the Central Arizona Water Conservation District ("CAWCD") and the United States Secretary of the Interior through which they obtain water allocations in acre feet from the

Colorado River. The M&I fees recoup construction costs spent by CAP that are payable to the United States. The Company's payment of M&I fees to CAP assures that the Company's CAP allocation remains available to them. Vail's current CAP allocation is 1,875 acre feet. The annual M&I is payable in equal semi-annual installments.

When the Company actually takes delivery of CAP water allotted to them it pays an annual CAP Operation, Maintenance, and Replacement ("OM&R") expense in monthly payments.

**Q. How has the Commission dealt with CAP expenses in other cases?**

A. The Commission in Decision No. 68302 (November 14, 2005)[7], distinguished between CAP water that was being delivered as used and useful and CAP water that was not being delivered. In that case, two golf courses took delivery of 279 acre feet of CAP water. The 279 acre feet of CAP water was deemed used and useful and, therefore, the previously deferred M&I charges were included in rate base and amortized to expense over 20 years. Similarly, in Decision No. 71845 (August 24, 2010)[8], the Commission determined that 1,003 acre feet of CAP was used and useful and, therefore, the previously deferred M&I charges were included in rate base and amortized to expense over 20 years.

The Company was authorized to defer CAP M&I costs that were not deemed used and useful because that portion of its CAP allocation was not being utilized at the time. Each year the M&I balance is reduced by amounts amortized and by sales of non-potable CAP water pursuant to its NP-274 tariff. Customers reimburse the Company for the related ongoing (not to be confused with *deferred*) M&I capital charges and, accordingly, these costs do not affect the deferred CAP balance. However, when the Company sells non-

[7] Docket No. W-01445A-04-0650.
[8] Docket No. W-01445A-08-0440.

potable CAP water pursuant to the NP-274 tariff, it expenses the related ongoing M&I capital charges to account 6022 (making them a pass-thru expense similar to sales taxes) instead of deferring them. The balance is then further reduced by CAP Hook-up fees collected, and increased by an allowance for funds used during construction ("AFUDC") on the balance. The Company has projected its deferred CAP balance for every year until 2025. The Company compares the projected amount to be recovered to the actual amount authorized to be recovered in the rate case and uses this data to calculate its proposed Hook-up fee in the next rate case to provide to full recovery by 2025.

**Q. How will CAP water benefit the Company?**

A. The Company will now have another source of potable water, besides water that is pumped from the ground. The Company along with its real-estate affiliates can demonstrate more easily an assured water supply, in order to expand housing in its service area.

**Q. Does the Company have a CAP Hook-up fee?**

A. Yes. In Decision No. 62450 the Commission approved a CAP Hook-up fee subject to the following conditions:

a. The tariff would apply to all new subdivisions and line extension agreements that are approved for the north system from the end of the 1998 TY forward. Once the interconnection is completed between the north and south systems, the tariff would apply to all new subdivisions and line extension agreements in the combined north and south systems;

b. Vail must be recharging CAP water within 6 months of this Decision;

c. All CAP Hook-up Fees and CAP Service charges are to be placed in a separate interest bearing account;

d. Revenue collected from the CAP Hook-up Fee and CAP Service Charge can only be used for payment of the CAP holding fee and Municipal and Industrial costs;

e. The CAP Service Charge shall be identified as a separate line item charge on the customer bill;

f. Final plans for the direct use of CAP water within Vail's service territory are to be submitted to the Commission no later than December 31, 2010;

g. Vail must directly use the CAP allocation within its service territory by December 31, 2015;

h. No time extensions will be allowed for any reason;

i. Vail shall submit annual reports to the Utilities Division Director detailing the progress of plans to use CAP water directly in its service territory and plans for actual construction of any necessary facilities. The reports shall be submitted each July 1, beginning in 2001;

j. If Vail does not comply with either of the timeframes in f or g, all CAP charges will cease at that time and any monies remaining in the CAP account shall be refunded in a manner to be determined by the Commission at that time;

k. The Commission shall allow Staff to automatically impose fines and or other sanctions against Vail if the timeframes in item g are not met;

l. If Vail does not comply with the timeframes in item g and it sells its CAP allocation, any net profit shall be distributed to the customers in a manner to be determined by the Commission; and

m. Vail should submit annual reports regarding the amount of CAP Hookup Fee and CAP Service Fees collected. The reports should be submitted by each January 31 and cover the previous calendar year. The first report should be submitted by January 31, 2001, and should contain the following information:

i. The name of each entity paying a CAP Hook-up Fee;
ii. The amount of CAP Hook-up Fee each entity paid;
iii. The amount of CAP Service Charge collected;
iv. The balance in the CAP trust account;
v. The amount of interest earned in the CAP trust account;
vi. The amount of money spent from the CAP trust account; and a
vii. A description of what was paid for with monies from the CAP trust account.

**Q. Did the Company comply with the conditions set forth in Decision No. 62450?**

A. No. Specifically, the Company did not comply with item f. Staff's Compliance Section notified the Company that it was out of compliance.

**Q. What was the result of the non-compliance?**

A. A hearing ensued and the Company, in a settlement agreement, was awarded an extension of time in Decision No. 73218 for item f until June 30, 2013.

**Q. As part of the settlement agreement that was approved by the Commission in Decision No. 73218, the Company was ordered to propose in its rate case a surcharge mechanism to address CAP related costs. Has the Company done so?**

A. Yes. The Company proposes that the CAP surcharge recover the following: depreciation on the CAP project investment, CAP M&I delivery charges, wheeling fees from Tucson Water, a return on net investment, income taxes, and other CAP-related costs and credits.

*Hook-up Fees*

**Q. Has the Company asked to continue its CAP Hook-up fees?**

A. Yes. As a result of the Company's non-compliance with Decision No. 62450, the Hook-up fee was temporarily suspended but, as part of the settlement agreement reached in Decision No. 73218, the Company was allowed to reinstate its CAP Hook-up fees.

**Q. Are Hook-up fees normally used to pay for 100 percent of Plant Projects?**

A. No. They are intended to help offset project costs, not entirely pay for them. The theory behind a hook-up fee is that customers coming onto the system should help pay for improvements and not receive benefits paid for by previous or continuing ratepayers. Staff typically recommends that utilities seeking new certificates of convenience and necessity ("CC&N") to fund projects with no more than a combined CIAC and AIAC of 30 percent, and requires Companies to invest 70 percent of their own funds.

**Q. What happens when utilities are allowed to fund plant investments with large percentages of AIAC and CIAC?**

A. Obviously, the Company's plant is built by developers and ratepayers, which results in decreased rate base, from which the Company can earn a return. The Commission encourages Companies to invest and earn a return on their investments.

**Q. What is the typical method to account for Hook-up fees?**

A. Hook-up fees are normally recorded as CIAC.

**Q. Currently, how does Vail account for the hook-up fees?**

A. Vail records the hook-up fees as revenue. Further, Decision 62450 stated that all funds received as a result of both the CAP Service Charge and the CAP Hook-up Fee will be deposited in an interest bearing segregated account and used solely for CAP-related expenses. Also, as previously discussed, while Decision No. 62450 refers to treating the CAP Hook-up fees as revenues, it also provides for a "true-up" between the amounts collected and expenditures by refunding any excess to customers.

**Q. What was the status of the Company's CAP Account in Decision No. 73218?**

A. In Decision No. 73218, the Company stated, (See Finding of Fact 30), that it had collected approximately $4.5 million in its CAP account from 2000 until December 2011, and had expended approximately $2.7 million on M&I expenses to retain its CAP allocation, leaving approximately $1.9 million in the CAP account.[9] Further, in Finding of Fact 31, the CAP account through December 31, 2011, was funded by approximately 75 percent by developers and 25 percent by ratepayers.[10]

[9] See Decision No. 73218 (June 5, 2012), page 10 line 23.
[10] See Decision No. 73218 (June 5, 2012), page 11, line 2.

**Q. What is the Company's current CAP account status?**

A. Based on a January 14, 2013 filing, the Company indicated it has a balance in the CAP account of $1,626,866.

**Q. To date, for what have the CAP Hook-up fees and ratepayers' CAP surcharge monies collected in the CAP account been expended?**

A. To date, monies in the CAP account have been used to pay for CAP M&I charges.

**Q. Has the Company estimated the CAP project costs to connect a CAP Water line from Tucson Water to the Company service area?**

A. Yes. Based on the Company's seven-year capital project plan, the Company estimates it will expend $378,000 for the CAP Delivery line in 2013, and $1,525,330 in 2014, for a total of $1,903,330 (See Attachment E).

**Q. Does Staff have a recommendation on how the monies in the CAP fund should be expended on a going forward basis?**

A. Yes. Since the M&I fees are already reflected in Staff's recommended revenue requirement, Staff recommends that any remaining money in the CAP account be used to fund the CAP Water line from Tucson Water to Vail Water, and that the funds used from the CAP account to fund the CAP Water line be treated as CIAC.

**Q. Why does Staff recommend monies that are expended from the CAP account to fund the CAP water line be treated as CIAC?**

A. Decision No. 62450 provides for the excess of funds collected over expenditure to be refunded to ratepayers. Treating the funds as CIAC is an efficient and reasonable manner to effectuate the refund.

**Q. Does Staff recommend that the Company continue its CAP Hook-up fee?**

A. Yes, to a certain point. Staff recommends that the CAP Hook-up Fee be discontinued once ratepayers have paid for the CAP waterline infrastructure.

*CAP Service Charge*

**Q. Does the Company also currently have a CAP Service Charge?**

A. No. In Decision No. 62450 the Commission also authorized the Company to implement a CAP Service Charge of $0.32 per 1,000 gallons. However, the Company suspended its CAP Services Charges in November 2011 and, as part of the settlement agreement in Decision No. 73218, the Company has not re-instated the $0.32 per 1,000 gallons surcharge.

**Q. Is it Staff's understanding that the Company proposes to eliminate the CAP Service Charge and instead implement a CAP surcharge mechanism?**

A. Yes.

*Company's CAP surcharge adjuster mechanism*

**Q. Have you reviewed the Company's CAP surcharge mechanism?**

A. Yes. The Company proposes the following six components be included in its CAP surcharge mechanism:

1. Annual depreciation on CAP Project Plant Costs.
2. Annual CAP M&I Charges.
3. Annual Tucson Water Wheeling Fees.
4. Annual Recharge Credits.
5. Return on investment plus income taxes.
6. Other CAP-related costs credits.

**Q. Does Staff recommend inclusion of an Annual Depreciation on CAP Project Plant Costs (component 1) and a return of investment plus income taxes (component 5) as proposed by the Company in the CAP surcharge mechanism?**

A. No. As discussed above, the Company has already accumulated sufficient Hook-up fees and CAP surcharges from ratepayers and developers to pay for most of the project plant costs. Staff has already recommended that any remaining monies left in the CAP account be used for CAP Plant. The Company, as a partner in the CAP project, should fund any remaining amounts. Under Staff's recommendation, it is not equitable to require ratepayers to pay the Company a rate of return on CAP Project Plant funded by ratepayers.

**Q. Does Staff recommend that the Annual CAP M&I charges (component 2) be included in the CAP surcharge mechanism?**

A. No. As the Company's consultant has stated, $200,000 in CAP M&I charges will be included in base rates.

**Q. How will the Company be made whole if the CAP M&I charges are not included in the CAP surcharge mechanism, since CAP fees are schedule in increase in future year?**

A. As explained above, Staff has normalized the CAP M&I and capital charges as expense to reflect the provisional CAP rates until 2018.

**Q. What costs does Staff recommend be included in the CAP surcharge mechanism?**

A. Any CAP costs that the Company is not currently recovering. Stated another way, any costs that will not make the Company whole outside of the rate case should be included in the CAP surcharge mechanism. These costs might include:

a. Future CAP Operation, Maintenance, and Replacement ("OM&R") expense which the Company will incur once it takes delivery of its CAP allocation.

b. Any wheeling fees between Tucson Water and the Company.

Staff recommends that the Company through its own initiative file in this Docket a surcharge request once these CAP costs become known and measurable.

Staff also recommends that any continuation of CAP surcharges be reviewed in the Company's next rate case.

**Q. Does this conclude your Direct Testimony?**

A. Yes.

**Vail Water Company**
**Docket No. W-01651B-12-0339**
**Test Year Ended: December 31, 2011**

Direct Testimony of Jeffrey M. Michlik

**TABLE OF CONTENTS TO SCHEDULES**

**Vail Water Company**
**Docket No. W-01651B-12-0339**
**Test Year Ended: December 31, 2011**

**Schedule JMM-1**

**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | (A) COMPANY FAIR VALUE | (B) STAFF FAIR VALUE |
|---|---|---|---|
| 1 | Adjusted Rate Base | $ 3,312,773 | $ 2,218,704 |
| 2 | Adjusted Operating Income (Loss) | $ 312,107 | $ 310,447 |
| 3 | Current Rate of Return (L2 / L1) | 9.42% | 13.99% |
| 4 | Required Rate of Return | 10.40% | 9.10% |
| 5 | Required Operating Income (L4 * L1) | $ 344,528 | $ 201,902 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 32,421 | $ (108,545) |
| 7 | Commission Tax Allowance Policy - Gross Revenue Conversion Factor | 1.3606 | 1.3158 |
| 8 | Required Revenue Increase (L7 * L6) | $ 44,113 | $ (142,823) |
| 9 | Adjusted Test Year Revenue | $ 2,334,747 | $ 2,334,747 |
| 10 | Proposed Annual Revenue | $ 2,378,860 | $ 2,191,924 |
| 11 | Required Increase in Revenue (%) | 1.89% | -6.12% |

References:
Column (A): Company Schedule A-1
Column (B): Staff Schedules JMM-2 and JMM-8

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Schedule JMM-2

## COMMISSION TAX ALLOWANCE POLICY - GROSS REVENUE CONVERSION FACTOR

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Commission Tax Allowance Policy - Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Commission Tax Allowance Policy - Revenue | 100.0000% | | | |
| 2 | Commission Tax Allowance Policy - Uncollectible Factor | 0.0000% | | | |
| 3 | Commission Tax Allowance Policy - Revenues (L1 - L2) | 100.0000% | | | |
| 4 | Commisstion Tax Allowance Policy - Combined Federal and State Income Tax and Property Tax Rate (Line 18) | 24.0003% | | | |
| 5 | Subtotal (L3 - L4) | 75.9997% | | | |
| 6 | **Commission Tax Allowance Policy - Revenue Conversion Factor (L1 / L5)** | 1.315794 | | | |
| | *Commission Tax Allowance Policy - Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Commission Tax Allowance Policy (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Commission Tax Allowance Policy - Arizona State Income Tax Rate (from worksheet) | 2.8836% | | | |
| 9 | Commission Tax Allowance Policy - Income (L7 - L8) | 97.1164% | | | |
| 10 | Commission Tax Allowance Policy - Applicable Federal Income Tax Rate (Line 48) | 20.5622% | | | |
| 11 | Commission Tax Allowance Policy - Effective Federal Income Tax Rate (L9 x L10) | 19.9693% | | | |
| 12 | Commission Tax Allowance Policy - Combined Federal and State Income Tax Rate (L8 +L11) | | 22.8529% | | |
| | *Commission Tax Allowance Policy - Calculation of Effective Property Tax Factor* | | | | |
| 13 | Unity | 100.0000% | | | |
| 14 | Commission Tax Allowance Policy - Combined Federal and State Income Tax Rate (L12) | 22.8529% | | | |
| 15 | Commission Tax Allowance Policy - One Minus Combined Income Tax Rate (L13-L14) | 77.1471% | | | |
| 16 | Commission Tax Allowance Policy - Property Tax Factor (JMM-15, L27) | 1.4874% | | | |
| 17 | Commission Tax Allowance Policy - Effective Property Tax Factor (L15*L16) | | 1.1475% | | |
| 18 | Commission Tax Allowance Policy - Combined Federal and State Income Tax and Property Tax Rate (L12+L17) | | | 24.0004% | |
| 19 | Commission Tax Allowance Policy - Required Operating Income (Schedule JMM-1, Line 5) | $ 201,902 | | | |
| 20 | Commission Tax Allowance Policy - AdjustedTest Year Operating Income (Loss) (JMM-8, L35) | 310,447 | | | |
| 21 | Commission Tax Allowance Policy - Required Increase in Operating Income (L19 - L20) | | $ (108,545) | | |
| 22 | Commission Tax Allowance Policy - Income Taxes on Recommended Revenue (Col. [C], L47) | $ 59,808 | | | |
| 23 | Commission Tax Allowance Policy - Income Taxes on Test Year Revenue (Col. [A], L47) | 91,962 | | | |
| 24 | Commission Tax Allowance Policy - Required Increase in Revenue to Provide for Income Taxes (L22 - L23) | | (32,154) | | |
| 25 | Commission Tax Allowance Policy - Recommended Revenue Requirement (Schedule JMM-1, Line 10) | $ 2,191,925 | | | |
| 26 | Commission Tax Allowance Policy - Uncollectible Rate | 0.0000% | | | |
| 27 | Commission Tax Allowance Policy - Uncollectible Expense on Recommended Revenue (L25*L26) | $ - | | | |
| 28 | Commission Tax Allowance Policy - Adjusted Test Year Uncollectible Expense | $ - | | | |
| 29 | Commission Tax Allowance Policy - Required Increase in Revenue to Provide for Uncollectible Exp. (L27-L28) | | - | | |
| 30 | Commission Tax Allowance Policy - Property Tax with Recommended Revenue (Schedule JMM-15, L21) | $ 101,557 | | | |
| 31 | Commission Tax Allowance Policy - Property Tax on Test Year Revenue (Schedule JMM-15, Line 17) | 103,681 | | | |
| 32 | Commission Tax Allowance Policy - Increase in Property Tax Due to Increase in Revenue (L30-31) | | (2,124) | | |
| 33 | Commission Tax Allowance Policy - Total Required Increase in Revenue (L21 + L24 + L29 + L32) | | $ (142,823) | | |

| | *Commission Tax Allowance Policy Calculation of Income Tax:* | Test Year | | Staff Recommended |
|---|---|---|---|---|
| 34 | Commission Tax Allowance Policy - Revenue (Schedule JMM-1, Col. [B], Line 9 & Sch. JMM-1, Col. [B] Line 10) | $ 2,334,747 | $ (142,822) | $ 2,191,925 |
| 35 | Commission Tax Allowance Policy - Operating Expenses Excluding Income Taxes | $ 1,932,339 | | $ 1,930,215 |
| 36 | Commission Tax Allowance Policy - Synchronized Interest (L51) | $ - | | $ - |
| 37 | Commission Tax Allowance Policy - Arizona Taxable Income (L34 - L35 - L36) | $ 402,408 | | $ 261,711 |
| 38 | Commission Tax Allowance Policy - Arizona State Income Tax Rate | 2.8836% | | 2.8836% |
| 39 | Commission Tax Allowance Policy - Arizona Income Tax (L37 x L38) | $ 11,604 | | $ 7,547 |
| 40 | Commission Tax Allowance Policy - Federal Taxable Income (L37- L39) | $ 390,804 | | $ 254,164 |
| 41 | Commission Tax Allowance Policy - Federal Effective Tax | 20.5622% | | 20.5622% |
| 42 | Commission Tax Allowance Policy - Federal Tax | $ 80,358 | | $ 52,262 |
| 43 | | $ - | | $ - |
| 44 | | $ - | | $ - |
| 45 | | $ - | | $ - |
| 46 | | $ 80,358 | | $ 52,262 |
| 47 | Commission Tax Allowance Policy - Combined Federal and State Income Tax (L39 + L46) | $ 91,962 | | $ 59,808 |
| 48 | Commission Tax Allowance Policy - Applicable Federal Income Tax Rate [Col. [C], L46 - Col. [A], L46] / [Col. [C], L40 - Col. [A], L40] | | | 20.5622% |
| | *Commission Tax Allowance Policy - Calculation of Interest Synchronization:* | | | |
| 49 | Commission Tax Allowance Policy - Rate Base (Schedule JMM-3, Col. (C), Line 17 | $ 2,218,704 | | |
| 50 | Commission Tax Allowance Policy - Weighted Average Cost of Debt | 0.0% | | |
| 51 | Commission Tax Allowance Policy - Synchronized Interest (L45 X L46) | $ - | | |

**Vail Water Company**
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**Schedule JMM-3**

**RATE BASE - ORIGINAL COST**

| LINE NO. | | (A) COMPANY AS FILED | (B) STAFF ADJUSTMENTS | (C) STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Plant in Service | $ 20,158,710 | $ (550,130) | $ 19,608,580 |
| 2 | Less: Accumulated Depreciation | 3,722,176 | (560,267) | 3,161,909 |
| 3 | Net Plant in Service | $ 16,436,534 | $ 10,137 | $ 16,446,671 |
| | *LESS:* | | | |
| 4 | Contributions in Aid of Construction (CIAC) | $ 2,930,228 | $ - | $ 2,930,228 |
| 5 | Less: Accumulated Amortization | 605,832 | - | $ 605,832 |
| 6 | Net CIAC | 2,324,396 | - | $ 2,324,396 |
| 7 | Advances in Aid of Construction (AIAC) | 11,374,431 | - | 11,374,431 |
| 8 | Customer Deposits | 529,140 | - | 529,140 |
| 9 | Deferred CAP Liability | - | 1,075,643 | 1,075,643 |
| | *ADD:* | | | |
| 10 | Deferred CAP Charges | 1,104,206 | (28,563) | 1,075,643 |
| 11 | Defered Tax Assets | - | - | - |
| 12 | **Original Cost Rate Base** | $ 3,312,773 | $ (1,094,069) | $ 2,218,704 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
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Schedule JMM-4

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

| LINE NO. | ACCT. NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] ADJ #1 Retired Plant Ref: Sch JMM-5 | [C] ADJ #2 Plant Retired to Wrong Account Ref: Sch JMM-6 | [D] ADJ #3 Excess Capacity Ref: Sch JMM-7 | [E] ADJ #4 CAP LTSC Ref: Sch JMM-8 | [F] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|
| 1 | | *PLANT IN SERVICE:* | | | | | | |
| 2 | 301 | Organization Cost | $ - | $ - | $ - | $ - | $ - | $ - |
| 3 | 302 | Franchise Cost | - | - | - | - | - | - |
| 4 | 303 | Land and Land Rights | 17,750 | - | - | - | - | 17,750 |
| 5 | 304 | Structures and Improvements | 399,328 | (5,182) | - | - | - | 394,146 |
| 6 | 305 | Collecting and Impounding Res. | - | - | - | - | - | - |
| 7 | 306 | Lake River and Other Intakes | - | - | - | - | - | - |
| 8 | 307 | Wells and Springs | 1,126,979 | - | - | (268,743) | - | 858,236 |
| 9 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - | - |
| 10 | 309 | Supply Mains | 2,995 | - | - | - | - | 2,995 |
| 11 | 310 | Power Generation Equipment | - | - | - | - | - | - |
| 12 | 311 | Electric Pumping Equipment | 1,553,110 | (33,913) | 1,838 | - | - | 1,521,035 |
| 13 | 320.1 | Water Treatment Plants | - | - | - | - | - | - |
| 14 | 320.2 | Solution Chemical Feeders | - | - | - | - | - | - |
| 15 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | (242,293) | 25,642 | - | - | 1,404,418 |
| 16 | 330.1 | Storage Tanks | - | - | - | - | - | - |
| 17 | 330.2 | Pressure Tanks | - | - | - | - | - | - |
| 18 | 331 | Transmission and Distribution Mains | 14,023,034 | - | - | - | - | 14,023,034 |
| 19 | 333 | Services | 12,451 | - | - | - | - | 12,451 |
| 20 | 334 | Meters | 923,082 | - | - | - | - | 923,082 |
| 21 | 335 | Hydrants | 492,908 | - | - | - | - | 492,908 |
| 22 | 336 | Backflow Prevention Devices | 7,901 | - | - | - | - | 7,901 |
| 23 | 339 | Other Plant and Miscellaneous Equipment | 6,553 | - | - | - | - | 6,553 |
| 24 | 340 | *Office Furniture and Fixtures* | 29,683 | - | (27,480) | - | - | 2,203 |
| 25 | 340.1 | Computers and Software | 15,621 | - | - | - | - | 15,621 |
| 26 | 341 | Stores Equipment | 54,807 | - | - | - | - | 54,807 |
| 25 | 343 | Tools and Work Equipment | 15,645 | - | - | - | - | 15,645 |
| 26 | 344 | Laboratory Equipment | - | - | - | - | - | - |
| 27 | 345 | Power Operated Equipment | - | - | - | - | - | - |
| 28 | 346 | Communications Equipment | 5,190 | - | - | - | - | 5,190 |
| 29 | 347 | Miscellaneous Equipment | - | - | - | - | - | - |
| 30 | 348 | Other Tangible Plant | (149,395) | - | - | - | - | (14 5) |
| 31 | | Total Plant in Service | $ 20,158,710 | $ (281,388) | $ - | $ (268,743) | $ - | $ 19,608,580 |
| 32 | | Less: Accumulated Depreciation | 3,722,176 | (281,388) | (10,136) | (268,743) | - | 3,161,909 |
| 33 | | Net Plant in Service | $ 16,436,534 | $ - | $ 10,136 | $ - | $ - | $ 16,446,671 |
| 34 | | | | | | | | |
| 35 | | *LESS:* | | | | | | |
| 36 | | Contributions in Aid of Construction (CIAC) | $ 2,930,228 | $ - | $ - | $ - | $ - | $ 2,930,228 |
| 37 | | Less: Accumulated Amortization | 605,832 | - | - | - | - | 605,832 |
| 38 | | Net CIAC (L39 - L40) | 2,324,396 | - | - | - | - | 2,324,396 |
| 39 | | Advances in Aid of Construction (AIAC) | 11,374,431 | - | - | - | - | 11,374,431 |
| 40 | | Customer Deposits | 529,140 | - | - | - | - | 529,140 |
| 41 | | Deferred Income Taxes | - | - | - | - | - | - |
| 42 | | Deferred CAP Liability | - | | - | - | 1,075,643 | 1,075,643 |
| 43 | | | | | | | | |
| 44 | | *ADD:* | | | | | | |
| 45 | | Deferred CAP Charges | 1,104,206 | - | - | - | (28,563) | 1,075,643 |
| 46 | | Defered Tax Assets | - | - | - | - | - | - |
| 47 | | | | | | | | |
| 48 | | **Original Cost Rate Base** | $ 3,312,773 | $ - | $ 10,136 | $ - | $ (1,104,206) | $ 2,218,704 |

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Schedule JMM-5

## RATE BASE ADJUSTMENT NO. 1 - RETIRED PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | 304 | Structures and Improvements | $ 399,328 | $ (5,182) | $ 394,146 |
| 2 | 311 | Electric Pumping Equipment | 1,553,110 | (33,913) | 1,519,197 |
| 3 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | (242,293) | 1,378,776 |
| 4 | | | $ 3,573,507 | $ (281,388) | $ 3,292,119 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | $ 3,722,176 | $ (281,388) | $ 3,440,788 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
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Schedule JMM-6

## RATE BASE ADJUSTMENT NO. 2 - PLANT RETIRED TO THE WRONG ACCOUNT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|---|
| 1 | 311 | Electric Pumping Equipment | $ 1,553,110 | $ 1,838 | $ 1,554,948 |
| 2 | 330 | Distribution Reservoirs & Standpipe | 1,621,069 | 25,642 | 1,646,711 |
| 3 | 340 | Office Furniture and Fixtures | 29,683 | (27,480) | 2,203 |
| 4 | | | $ 3,203,862 | $ - | $ 3,203,862 |
| 5 | | | | | |
| | | Accumulated Depreciation | $ 3,722,176 | $ (10,136) | $ 3,712,040 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Schedule JMM-7

## RATE BASE ADJUSTMENT NO. 3 - EXCESS CAPACITY

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|---|
| 1 | 307 | Wells and Springs | $ 1,126,979 | $ (268,743) | $ 858,236 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | $ 3,722,176 | $ (268,743) | $ 3,453,433 |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
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Schedule JMM-8

RATE BASE ADJUSTMENT NO. 4 - CAP Long-Term Storage Credits

| LINE NO. | ACCT NO. | DESCRIPTION | [A] Plant in Service Per Company | [B] Adjustment to Long-Term Storage Credits | [C] Plant in Service Per Staff (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | | Deferred CAP Charges | $ 1,104,206 | $ (28,563) | $ 1,075,643 |
| 2 | | | | | |
| 3 | | Deferred CAP Liability | $ - | $ 1,075,643 | $ 1,075,643 |
| 4 | | | | | |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

**Vail Water Company**
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**Schedule JMM-9**

**OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED**

| LINE NO. | DESCRIPTION | [A] COMPANY ADJUSTED TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED |
|---|---|---|---|---|---|---|
| 1 | *REVENUES:* | | | | | |
| 2 | Metered Water Sales | $ 2,120,110 | $ - | $ 2,120,110 | $ (142,823) | $ 1,977,287 |
| 3 | Water Sales-Unmetered | - | - | - | - | - |
| 4 | Other Water Revenue | 214,637 | - | 214,637 | - | 214,637 |
| 5 | Intentionally Left Blank | - | - | - | - | - |
| 6 | **Total Operating Revenues** | $ 2,334,747 | $ - | $ 2,334,747 | $ (142,823) | $ 2,191,924 |
| 7 | | | | | | |
| 8 | *OPERATING EXPENSES:* | | | | | |
| 9 | Salaries and Wages | $ 276,984 | $ - | $ 276,984 | $ - | $ 276,984 |
| 10 | Employee Benefits | 12,757 | - | $ 12,757 | - | 12,757 |
| 11 | Purchased Water | 199,817 | 47,911 | 247,728 | - | 247,728 |
| 12 | Purchased Power | 218,584 | - | 218,584 | - | 218,584 |
| 13 | Chemicals | 1,732 | - | 1,732 | - | 1,732 |
| 14 | Materials and Supplies | 14,372 | - | 14,372 | - | 14,372 |
| 15 | Repairs and Maintenance | 28,876 | - | 28,876 | - | 28,876 |
| 16 | Office Supplies and Expense | 73,301 | - | 73,301 | - | 73,301 |
| 17 | Contractual Services - Engineering | 6,270 | - | 6,270 | - | 6,270 |
| 18 | Contractual Services - Accounting | 10,473 | - | 10,473 | - | 10,473 |
| 19 | Contractual Services - Legal | 12,933 | - | 12,933 | - | 12,933 |
| 20 | Contractual Services - Management Fees | 211,138 | - | 211,138 | - | 211,138 |
| 21 | Contractual Services - Other | 15,976 | - | 15,976 | - | 15,976 |
| 22 | Contractual Services - Water Testing | 3,906 | 9,761 | 13,667 | - | 13,667 |
| 23 | Rents - Building/Real Property | 7,920 | - | 7,920 | - | 7,920 |
| 24 | Rents - Equipment | 8,314 | - | 8,314 | - | 8,314 |
| 25 | Transportation Expenses | 33,154 | - | 33,154 | - | 33,154 |
| 26 | Insurance - Vehicle | 5,111 | - | 5,111 | - | 5,111 |
| 27 | Insurance - General Liability | 32,130 | - | 32,130 | - | 32,130 |
| 28 | Insurance - Worker's Comp | 3,111 | - | 3,111 | - | 3,111 |
| 29 | Regulatory Commission Expenese | 11,946 | - | 11,946 | - | 11,946 |
| 30 | Regulatory Commission Expense - Rate Case | 30,000 | - | 30,000 | - | 30,000 |
| 31 | Bad Debt Expense | 6,856 | - | 6,856 | - | 6,856 |
| 32 | Miscellaneous Expense | 11,424 | (1,311) | 10,113 | - | 10,113 |
| 33 | Depreciation Expense | 570,649 | (40,418) | 530,231 | - | 530,231 |
| 34 | Taxes Other than Income | - | - | - | - | - |
| 35 | Property Taxes | 103,681 | 0 | 103,681 | (2,124) | 101,557 |
| 36 | Income Taxes | 106,244 | (14,283) | 91,962 | (32,154) | 59,808 |
| 37 | Interest on Customer Deposits | 4,981 | - | 4,981 | - | 4,981 |
| 38 | **Total Operating Expenses** | $ 2,022,640 | $ 1,660 | $ 2,024,301 | $ (34,278) | $ 1,990,023 |
| 39 | **Operating Income (Loss)** | $ 312,107 | $ (1,660) | $ 310,446 | $ (108,545) | $ 201,901 |

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-10
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-1, and JMM-14
Column (E): Column (C) + Column (D)

**Vail Water Company**
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**Schedule JMM-1**

**SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR**

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] Purchased Water Expense ADJ #1 Ref: Sch JMM-11 | [C] Water Testing Expense ADJ #2 Ref: Sch JMM-12 | [D] Miscellanoues Expense ADJ #3 Ref: Sch JMM-13 | [E] Depreciaition Expense ADJ #4 Ref: Sch JMM-14 | [F] Property Tax Expense ADJ #5 Ref: Sch JMM-15 | [G] Income Tax Expense ADJ #6 Ref: Sch JMM-16 | [H] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|
| 1 | *REVENUES:* | | | | | | | | |
| 2 | Metered Water Sales | $ 2,120,110 | $ - | $ - | $ - | $ - | $ - | $ - | $ 2,120,11( |
| 3 | Water Sales-Unmetered | - | - | - | - | - | - | - | - |
| 4 | Other Water Revenue | 214,637 | - | - | - | - | - | - | 214,63 |
| 5 | Intentionally Left Blank | - | - | - | - | - | - | - | - |
| 6 | **Total Operating Revenues** | $ 2,334,747 | $ - | $ - | $ - | $ - | $ - | $ - | $ 2,334,74 |
| 7 | | | | | | | | | |
| 8 | *OPERATING EXPENSES:* | | | | | | | | |
| 9 | Salaries and Wages | $ 276,984 | $ - | $ - | $ - | $ - | $ - | $ - | $ 3,98 |
| 10 | Employee Benefits | 12,757 | | | | | | | 12,75 |
| 11 | Purchased Water | 199,817 | 47,911 | - | - | - | - | - | 247,72 |
| 12 | Purchased Power | 218,584 | - | - | - | - | - | - | 218,58 |
| 13 | Chemicals | 1,732 | - | - | - | - | - | - | 1,73 |
| 14 | Materials and Supplies | 14,372 | - | - | - | - | - | - | 14,37 |
| 15 | Repairs and Maintenance | 28,876 | - | - | - | - | - | - | 28,87 |
| 16 | Office Supplies and Expense | 73,301 | - | - | - | - | - | - | 73,30 |
| 17 | Contractual Services - Engineering | 6,270 | - | - | - | - | - | - | 6,27 |
| 18 | Contractual Services - Accounting | 10,473 | - | - | - | - | - | - | 10,47 |
| 19 | Contractual Services - Legal | 12,933 | - | - | - | - | - | - | 12,93 |
| 20 | Contractual Services - Management Fees | 211,138 | | | | | | | 211,13 |
| 21 | Contractual Services - Other | 15,976 | | | | | | | 15,97 |
| 22 | Contractual Services - Water Testing | 3,906 | - | 9,761 | - | - | - | - | 13,66 |
| 23 | Rents - Building/Real Property | 7,920 | - | - | - | - | - | - | 7,92 |
| 24 | Rents - Equipment | 8,314 | | | | | | | 8,31 |
| 25 | Transportation Expenses | 33,154 | - | - | - | - | - | - | 33,15 |
| 26 | Insurance - Vehicle | 5,111 | - | - | - | - | - | - | 5,11 |
| 27 | Insurance - General Liability | 32,130 | - | - | - | - | - | - | 32,13 |
| 28 | Insurance - Worker's Comp | 3,111 | | | | | | | 3,11 |
| 29 | Regulatory Commission Expenese | 11,946 | - | - | - | - | - | - | 11,94 |
| 30 | Regulatory Commission Expense - Rate Case | 30,000 | - | - | - | - | - | - | 30,00 |
| 31 | Bad Debt Expense | 6,856 | - | - | - | - | - | - | 6,85 |
| 32 | Miscellaneous Expense | 11,424 | - | - | (1,311) | - | - | - | 10,11 |
| 33 | Depreciation Expense | 570,649 | - | - | - | (40,418) | - | - | 0,23 |
| 34 | Amortization of CIAC | - | - | - | - | - | - | - | - |
| 35 | Taxes Other than Income | - | - | - | - | - | - | - | - |
| 36 | Property Taxes | 103,681 | - | - | - | - | 0 | - | 103,68 |
| 37 | Income Taxes | 106,244 | - | - | - | - | - | (14,282) | 91,96 |
| 38 | Interest on Customer Deposits | 4,981 | - | - | - | - | - | - | 4,98 |
| 39 | **Total Operating Expenses** | $ 2,022,640 | $ 47,911 | $ 9,761 | $ (1,311) | $ (40,418) | $ 0 | $ (14,282) | $ 2,024,30 |
| 40 | **Operating Income (Loss)** | $ 312,107 | $ (47,911) | $ (9,761) | $ 1,311 | $ 40,418 | $ (0) | $ 14,282 | $ 310,44 |

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Schedule JMM-11

OPERATING ADJUSTMENT NO. 1 - PURCHASED WATER EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Purchased Water | $ 199,817 | $ 47,911 | $ 247,728 |
| | Staff's Calculation to increase CAP M&I Charges | | | |
| | Future CAP Charge 1,857 (a.f.) x $146 (average of five years 129 + 138 + 149 + 155 + 159) | $ 271,122 | | |
| | Current CAP Charge 1,857 (a.f.) x $122 | $ 226,554 | | |
| | Increase | | $ 44,568 | |
| | Staff's Calculation to increase CAP Capital Charges | | | |
| | Future CAP Charge 1,857 (a.f.) x $16.80 (average of five years 15 + 16 + 17 + 18 + 18) | $ 31,198 | | |
| | Current CAP Charge 1,857 (a.f.) x $15 | $ 27,855 | | |
| | Increase | | $ 3,343 | |
| | Total | | $ 47,911 | |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Schedule JMM-12

OPERATING ADJUSTMENT NO. 2 - WATER TESTING EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Water Testing Fee | $ 3,906 | $ 9,761 | $ 13,667 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
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Schedule JMM-13

OPERATING ADJUSTMENT NO. 4 - MISCELLANEOUS EXPENSE

| Line No. | Description | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Miscellaneous Expense | $ 11,424 | $ (1,311) | $ 10,113 |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

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Schedule JMM-14

## OPERATING INCOME ADJUSTMENT NO. 4 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated Plant | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|---|---|---|---|---|---|---|---|
| 1 | 301 | Organization Cost | $ - | $ - | $ - | 0.00% | $ - |
| 2 | 302 | Franchise Cost | $ - | $ - | $ - | 0.00% | $ - |
| 3 | 303 | Land and Land Rights | $ 17,750 | $ 17,750 | $ - | 0.00% | $ - |
| 4 | 304 | Structures and Improvements | $ 394,146 | $ - | $ 394,146 | 3.33% | $ 13,125 |
| 5 | 305 | Collecting and Impounding Res. | $ - | $ - | $ - | 2.50% | $ - |
| 6 | 306 | Lake River and Other Intakes | $ - | $ - | $ - | 2.50% | $ - |
| 7 | 307 | Wells and Springs | $ 858,236 | $ - | $ 858,236 | 3.33% | $ 28,579 |
| 8 | 308 | Infiltration Galleries and Tunnels | $ - | $ - | $ - | 6.67% | $ - |
| 9 | 309 | Supply Mains | $ 2,995 | $ - | $ 2,995 | 2.00% | $ 60 |
| 10 | 310 | Power Generation Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 11 | 311 | Electric Pumping Equipment | $ 1,521,035 | $ - | $ 1,521,035 | 12.50% | $ 190,129 |
| 12 | 320 | Water Treatment Equipment | $ - | $ - | $ - | 3.33% | $ - |
| 13 | 320 | Water Treatment Plant | $ - | $ - | $ - | 20.00% | $ - |
| 14 | 330 | Distribution Reservoirs & Standpipe | $ 1,404,418 | $ - | $ 1,404,418 | 2.22% | $ 31,178 |
| 15 | 330.1 | Storage Tanks | $ - | $ - | $ - | 2.22% | $ - |
| 16 | 330.2 | Pressure Tanks | $ - | $ - | $ - | 5.00% | $ - |
| 17 | 331 | Transmission and Distribution Mains | $ 14,023,034 | $ - | $ 14,023,034 | 2.00% | $ 280,461 |
| 18 | 333 | Services | $ 12,451 | $ - | $ 12,451 | 3.33% | $ 415 |
| 19 | 334 | Meters | $ 923,082 | $ - | $ 923,082 | 8.33% | $ 76,893 |
| 20 | 335 | Hydrants | $ 492,908 | $ - | $ 492,908 | 2.00% | $ 9,858 |
| 21 | 336 | Backflow Prevention Devices | $ 7,901 | $ - | $ 7,901 | 6.67% | $ 527 |
| 22 | 339 | Other Plant and Miscellaneous Equipment | $ 6,553 | $ - | $ 6,553 | 6.67% | $ 437 |
| 23 | 340 | Office Furniture and Fixtures | $ 2,203 | $ - | $ 2,203 | 6.67% | $ 147 |
| 24 | 341 | Transportation Equipment | $ 15,621 | $ - | $ 15,621 | 20.00% | $ 3,124 |
| 25 | 342 | Stores Equipment | $ 54,807 | $ - | $ 54,807 | 4.00% | $ 2,192 |
| 26 | 343 | Tools and Work Equipment | $ 15,645 | $ - | $ 15,645 | 5.00% | $ 782 |
| 27 | 344 | Laboratory Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 28 | 345 | Power Operated Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 29 | 346 | Communications Equipment | $ 5,190 | $ - | $ 5,190 | 10.00% | $ 519 |
| 30 | 347 | Miscellaneous Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 31 | 348 | Other Tangible Plant | $ (149,395) | $ - | $ (149,395) | 10.00% | $ (14,940) |
| 32 | | Total Plant | $ 19,608,580 | $ 17,750 | $ 19,590,830 | | $ 623,487 |
| 33 | | | | | | | |
| 34 | | Composite Depreciation Rate: | | 3.18% | See Note 2 | | |
| 35 | | CIAC: | $ 2,930,228 | See Note 2 | | | |
| 36 | | Amortization of CIAC (Line 35 x Line 34): | $ 93,256 | | | | |
| 37 | | | | | | | |
| 38 | | Depreciation Expense Before Amortization of CIAC: | $ 623,487 | | | | |
| 39 | | Less Amortization of CIAC: | $ 93,256 | | | | |
| 40 | | **Test Year Depreciation Expense - Staff:** | **$ 530,231** | | | | |
| 41 | | Depreciation Expense - Company: | $ 570,649 | | | | |
| 42 | | **Staff's Total Adjustment:** | **$ (40,418)** | | | | |
| 43 | | | | | | | |

References:
Column [A]: Schedule JMM-W4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Schedule JMM-15

## OPERATING INCOME ADJUSTMENT NO. 5 - PROPERTY TAX EXPENSE

| LINE NO. | Property Tax Calculation | [A] STAFF AS ADJUSTED | [B] STAFF RECOMMENDED |
|---|---|---|---|
| 1 | Staff Adjusted Test Year Revenues | $ 2,334,747 | $ 2,334,747 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 • Line 2) | 4,669,494 | $ 4,669,494 |
| 4 | Staff Recommended Revenue, Per Schedule JMM-1 | 2,334,747 | $ 2,191,925 |
| 5 | Subtotal (Line 4 + Line 5) | 7,004,241 | 6,861,419 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 2,334,747 | $ 2,287,140 |
| 8 | Department of Revenue Mutilplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 4,669,494 | $ 4,574,280 |
| 10 | Plus: 10% of CWIP - | - | - |
| 11 | Less: Net Book Value of Licensed Vehicles | 22,449 | $ 22,449 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 4,647,045 | $ 4,551,830 |
| 13 | Assessment Ratio | 20.0% | 20.0% |
| 14 | Assessment Value (Line 12 * Line 13) | 929,409 | $ 910,366 |
| 15 | Composite Property Tax Rate (Per Company Schedule) | 11.1556% | 11.1556% |
| 16 | | | $ - |
| 17 | Staff Test Year Adjusted Property Tax (Line 14 * Line 15) | $ 103,681 | |
| 18 | Company Proposed Property Tax | 103,681 | |
| 19 | | | |
| 20 | Staff Test Year Adjustment (Line 17-Line 18) | $ 0 | |
| 21 | Property Tax - Staff Recommended Revenue (Line 14 * Line 15) | | $ 101,557 |
| 22 | Staff Test Year Adjusted Property Tax Expense (Line 17) | | $ 103,681 |
| 23 | Increase in Property Tax Expense Due to Increase in Revenue Requirement | | $ (2,124) |
| 24 | | | |
| 25 | Increase to Property Tax Expense | | $ (2,124) |
| 26 | Increase in Revenue Requirement | | (142,822) |
| 27 | Increase to Property Tax per Dollar Increase in Revenue (Line 25/Line 26) | | 1.487411% |

References:
Column [A]: Company Application
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Vail Water Company
Docket No. W-01651B-12-0339
Test Year Ended: December 31, 2011

Schedule JMM-16

OPERATING INCOME ADJUSTMENT NO. 7 - COMMISSION TAX ALLOWANCE POLICY - TEST YEAR INCOME TAXE EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] STAFF ADJUSTMENTS | [C] STAFF RECOMMENDED |
|---|---|---|---|---|
| 1 | Income Tax Expense | $ 106,244 | $ (14,282) | $ 91,962 |

References:
Column (A), Company Schedule C-1
Column (B): Column [C] - Column [A]
Column (C): Schedule JMM-2

| Monthly Usage Charge | Present | Company Proposed Rates | Staff Recommended Rates |
|---|---|---|---|
| Meter Size (All Classes): | | | |
| 5/8 x 3/4 Inch | $ 13.18 | $ 14.70 | $ 14.25 |
| 3/4 Inch | 21.00 | 23.42 | 21.90 |
| 1 Inch | 40.50 | 45.16 | 36.50 |
| 1 1/2 Inch | 89.20 | 99.46 | 73.00 |
| 2 Inch | 147.70 | 164.69 | 116.80 |
| 3 Inch | 284.20 | 316.88 | 233.60 |
| 4 Inch | 479.20 | 534.31 | 365.00 |
| 6 Inch | 966.92 | 1,078.12 | 730.00 |
| 8 Inch | N/A | N/A | 1,168.00 |
| 10 Inch | N/A | N/A | 1,679.00 |
| 12 Inch | N/A | N/A | 3,139.00 |
| Commodity Charge - Per 1,000 Gallons | | | |
| 5/8" x 3/4" Meter (Residential) | | | |
| All Gallons | $ 4.0000 | N/A | N/A |
| First 4,000 gallons | N/A | $ 3.7500 | N/A |
| 4,001 to 10,000 gallons | N/A | 4.0000 | N/A |
| Over 10,000 gallons | N/A | 4.2500 | N/A |
| First 3,000 gallons | N/A | N/A | $ 2.6500 |
| 3,001 to 10,000 gallons | N/A | N/A | 3.7000 |
| Over 10,000 gallons | N/A | N/A | 4.8000 |
| 5/8" x 3/4" Meter (Commercial, Industrial, Irrigation) | | | |
| All Gallons | $ 4.0000 | N/A | N/A |
| First 10,000 gallons | N/A | 3.7500 | N/A |
| Over 10,000 gallons | N/A | 4.0000 | N/A |
| First 10,000 gallons | N/A | N/A | 3.7000 |
| Over 10,000 gallons | N/A | N/A | 4.8000 |
| 3/4" Meter (Residential) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 4,000 gallons | N/A | $ 3.7500 | N/A |
| 4,001 to 10,000 gallons | N/A | 4.0000 | N/A |
| Over 10,000 gallons | N/A | 4.2500 | N/A |
| First 3,000 gallons | N/A | N/A | 2.6500 |
| 3,001 to 10,000 gallons | N/A | N/A | 3.7000 |
| Over 10,000 gallons | N/A | N/A | 4.8000 |
| 3/4" Meter (Commercial, Industrial, Irrigation) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 10,000 gallons | N/A | 3.7500 | N/A |
| Over 10,000 gallons | N/A | 4.0000 | N/A |
| First 10,000 gallons | N/A | N/A | 3.7000 |
| Over 10,000 gallons | N/A | N/A | 4.8000 |
| 1" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 25,000 gallons | N/A | 4.0000 | N/A |
| Over 25,000 gallons | N/A | 4.2500 | N/A |
| First 22,000 gallons | N/A | N/A | 3.7000 |
| Over 22,000 gallons | N/A | N/A | 4.8000 |
| 1 1/2" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 50,000 gallons | N/A | 4.0000 | N/A |
| Over 50,000 gallons | N/A | 4.2500 | N/A |
| First 50,000 gallons | N/A | N/A | 3.7000 |
| Over 50,000 gallons | N/A | N/A | 4.8000 |
| 2" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 80,000 gallons | N/A | 4.0000 | N/A |
| Over 80,000 gallons | N/A | 4.2500 | N/A |
| First 80,000 gallons | N/A | N/A | 3.7000 |
| Over 80,000 gallons | N/A | N/A | 4.8000 |
| 3" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 160,000 gallons | N/A | 4.0000 | N/A |
| Over 160,000 gallons | N/A | 4.2500 | N/A |
| First 160,000 gallons | N/A | N/A | 3.7000 |
| Over 160,000 gallons | N/A | N/A | 4.8000 |
| 4" Meter (All Classes Including Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 250,000 gallons | N/A | 4.0000 | N/A |
| Over 250,000 gallons | N/A | 4.2500 | N/A |
| First 250,000 gallons | N/A | N/A | 3.7000 |
| Over 250,000 gallons | N/A | N/A | 4.8000 |
| 6" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 500,000 gallons | N/A | 4.0000 | N/A |
| Over 500,000 gallons | N/A | 4.2500 | N/A |
| First 500,000 gallons | N/A | N/A | 3.7000 |
| Over 500,000 gallons | N/A | N/A | 4.8000 |

| | | | |
|---|---|---|---|
| 8" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 720,000 gallons | N/A | N/A | 3.7000 |
| Over 720,000 gallons | N/A | N/A | 4.8000 |
| 10" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 1,035,000 gallons | N/A | N/A | 3.7000 |
| Over 1,035,000 gallons | N/A | N/A | 4.8000 |
| 12" Meter (All Classes Except Standpipe and Construction) | | | |
| All Gallons | 4.0000 | N/A | N/A |
| First 1,935,000 gallons | N/A | N/A | 3.7000 |
| Over 1,935,000 gallons | N/A | N/A | 4.8000 |
| Construction/Standpipe | | | |
| All Gallons | 4.0000 | 4.2500 | 4.8000 |
| CAP Recovery Surcharge (per 1,000 gallons) | 0.3200 | N/A | N/A |
| CAP Water Surcharge (per 1,000 gallons) | N/A | See Testimony | See Testimony |

Other Service Charges

| | | | |
|---|---|---|---|
| Establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Establishment (After Hours) | $ 50.00 | Remove from Tariff | Remove from Tariff |
| Reestablishment (within 12 months) | (a) | (a) | (a) |
| Reestablishment (within 12 months after hours) | (b) | Remove from Tariff | Remove from Tariff |
| Reconnection (Delinquent) | $ 30.00 | $ 30.00 | $ 30.00 |
| Reconnection (Delinquent) - After Hours | $ 30.00 | $ 30.00 | $ 30.00 |
| Meter Test (If Correct) | $ 20.00 | $ 20.00 | $ 20.00 |
| Deposit | (c) | (c) | (c) |
| Deposit Interest | (c) | (c) | (c) |
| NSF Check | $ 25.00 | $ 25.00 | $ 25.00 |
| Deferred Payment (per month) | 1.5% per month | 1.5% per month | 1.5% per month |
| Late Payment Fee (per month) | 1.5% per month | 1.5% per month | 1.5% per month |
| Moving Customer Meter (Customer Request) | At Cost | At Cost | At Cost |
| Illegal Hook-up | (d) | (d) | (d) |
| Transfer Fee | $ 25.00 | $ 25.00 | $ 25.00 |
| After Hour Service Charge (at customers request) | N/A | $ 50.00 | $ 50.00 |

(a) Number of months off the system times the monthly minimum per A.A.C. R14-2-403(D).
(b) Number of months off the system times the monthly minimum per A.A.C.
(c) Per Rule R14-2-403(B).
(d) Estimated billings from the time illegal connection was made to date.

In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and franchise tax. Per commission rule 14-2-409D(5).

Service and Meter Installation Charges

| Service Size | Total Present Charge | Proposed Service Line Charge | Proposed Meter Insallation Charge | Total Proposed Charge | Recommended Service Line Charge | Recommended Meter Insallation Charge | Total Recommended Charge |
|---|---|---|---|---|---|---|---|
| 5/8 x 3/4 Inch | $ 400.00 | $ 445.00 | $ 305.00 | $ 750.00 | $ 445.00 | $ 305.00 | $ 750.00 |
| 3/4 Inch | $ 440.00 | $ 445.00 | $ 405.00 | $ 850.00 | $ 445.00 | $ 405.00 | $ 850.00 |
| 1 Inch | $ 500.00 | $ 495.00 | $ 465.00 | $ 960.00 | $ 495.00 | $ 465.00 | $ 960.00 |
| 1 1/2 Inch | $ 675.00 | $ 550.00 | $ 675.00 | $ 1,225.00 | $ 550.00 | $ 675.00 | $ 1,225.00 |
| 2 Inch Turbo | N/A | $ 830.00 | $ 1,195.00 | $ 2,025.00 | $ 830.00 | $ 1,195.00 | $ 2,025.00 |
| 2 Inch Compound | $ 1,660.00 | $ 830.00 | $ 2,040.00 | $ 2,870.00 | $ 830.00 | $ 2,040.00 | $ 2,870.00 |
| 3 Inch Turbo | N/A | $ 1,045.00 | $ 1,820.00 | $ 2,865.00 | $ 1,045.00 | $ 1,820.00 | $ 2,865.00 |
| 3 Inch Compound | $ 2,150.00 | $ 1,165.00 | $ 2,604.00 | $ 3,769.00 | $ 1,165.00 | $ 2,604.00 | $ 3,769.00 |
| 4 Inch Turbo | N/A | $ 1,490.00 | $ 2,820.00 | $ 4,310.00 | $ 1,490.00 | $ 2,820.00 | $ 4,310.00 |
| 4 Inch Compound | $ 3,135.00 | $ 1,670.00 | $ 3,795.00 | $ 5,465.00 | $ 1,670.00 | $ 3,795.00 | $ 5,465.00 |
| 6 Inch Turbo | N/A | $ 2,210.00 | $ 5,175.00 | $ 7,385.00 | $ 2,210.00 | $ 5,175.00 | $ 7,385.00 |
| 6 Inch Compound | $ 6,190.00 | $ 2,330.00 | $ 7,070.00 | $ 9,400.00 | $ 2,330.00 | $ 7,070.00 | $ 9,400.00 |

**Vail Water Company**
**Docket No. W-01651B-12-0339**
**Test Year Ended: December 31, 2011**

**Schedule JMM-18**

**Typical Bill Analysis**
General Service 5/8 x 3/4-Inch Meter

| Company Proposed | Gallons | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|---|---|---|---|---|---|
| Average Usage | 6,720 | $ 40.06 | $ 40.58 | $ 0.52 | 1.30% |
| Median Usage | 5,500 | 35.18 | 35.70 | $ 0.52 | 1.48% |
| Staff Recommended | | | | | |
| Average Usage | 6,720 | $ 40.06 | $ 35.96 | $ (4.10) | -10.22% |
| Median Usage | 5,500 | 35.18 | 31.45 | $ (3.73) | -10.60% |

Present & Proposed Rates (Without Taxes)
General Service 5/8 x 3/4-Inch Meter

| Gallons Consumption | Present Rates | Company Proposed Rates | % Increase | Staff Recommended Rates | % Increase |
|---|---|---|---|---|---|
| - | $ 13.18 | $ 14.70 | 11.53% | $ 14.25 | 8.12% |
| 1,000 | 17.18 | 18.45 | 7.39% | 16.90 | -1.63% |
| 2,000 | 21.18 | 22.20 | 4.82% | 19.55 | -7.70% |
| 3,000 | 25.18 | 25.95 | 3.06% | 22.20 | -11.83% |
| 4,000 | 29.18 | 29.70 | 1.78% | 25.90 | -11.24% |
| 5,000 | 33.18 | 33.70 | 1.57% | 29.60 | -10.79% |
| 6,000 | 37.18 | 37.70 | 1.40% | 33.30 | -10.44% |
| 7,000 | 41.18 | 41.70 | 1.26% | 37.00 | -10.15% |
| 8,000 | 45.18 | 45.70 | 1.15% | 40.70 | -9.92% |
| 9,000 | 49.18 | 49.70 | 1.06% | 44.40 | -9.72% |
| 10,000 | 53.18 | 53.70 | 0.98% | 48.10 | -9.55% |
| 11,000 | 57.18 | 57.95 | 1.35% | 52.90 | -7.49% |
| 12,000 | 61.18 | 62.20 | 1.67% | 57.70 | -5.69% |
| 13,000 | 65.18 | 66.45 | 1.95% | 62.50 | -4.11% |
| 14,000 | 69.18 | 70.70 | 2.20% | 67.30 | -2.72% |
| 15,000 | 73.18 | 74.95 | 2.42% | 72.10 | -1.48% |
| 16,000 | 77.18 | 79.20 | 2.62% | 76.90 | -0.36% |
| 17,000 | 81.18 | 83.45 | 2.80% | 81.70 | 0.64% |
| 18,000 | 85.18 | 87.70 | 2.96% | 86.50 | 1.55% |
| 19,000 | 89.18 | 91.95 | 3.11% | 91.30 | 2.38% |
| 20,000 | 93.18 | 96.20 | 3.24% | 96.10 | 3.13% |
| 25,000 | 113.18 | 117.45 | 3.77% | 120.10 | 6.11% |
| 30,000 | 133.18 | 138.70 | 4.14% | 144.10 | 8.20% |
| 35,000 | 153.18 | 159.95 | 4.42% | 168.10 | 9.74% |
| 40,000 | 173.18 | 181.20 | 4.63% | 192.10 | 10.93% |
| 45,000 | 193.18 | 202.45 | 4.80% | 216.10 | 11.86% |
| 50,000 | 213.18 | 223.70 | 4.93% | 240.10 | 12.63% |
| 75,000 | 313.18 | 329.95 | 5.35% | 360.10 | 14.98% |
| 100,000 | 413.18 | 436.20 | 5.57% | 480.10 | 16.20% |

# Attachment A

| Line No. | [A] Year | [B] AF | [C] Cost | [D] Per Unit Cost | Comments |
|---|---|---|---|---|---|
| 1 | 2009 | | | | |
| 2 | BEG BALANCE | 1,516.10 | $ - | $ - | Expensed in prior years |
| 3 | PLUS: | | | | |
| 4 | WATER ENTERING FACILITY | 1,857.00 | $ 330,649.60 | $ 178.06 | 2009 GL 174-005 |
| 5 | OTHER ACQUISITIONS | | | | |
| 6 | PURCHASED LTSC | 4,000.00 | $ 489,200.00 | $ 122.30 | 2009 GL 174-004 |
| 7 | | | | | |
| 8 | Sub - Total | 7,373.10 | $ 819,849.60 | $ 111.19 | |
| 9 | | | | | |
| 10 | LESS: | | | | |
| 11 | ANNUAL RECOVERY | 1,124.00 | $ 124,982.84 | $ 111.19 | Ground Water Pumped from Ground |
| 12 | LTSC RECOVERED | - | $ - | | |
| 13 | LTSC SOLD/LEASED (DLG) | 227.00 | $ 25,241.20 | $ 111.19 | LTSC sold to Delargo Golf Course |
| 14 | 5% CUT TO AQUIFER | 36.65 | | | Line 4, Column B - Line 11, Column B X .05 |
| 15 | | | | | |
| 16 | ENDING BALANCE | 5,985.45 | $ 669,625.57 | $ 111.88 | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | 2010 | | | | |
| 20 | BEG BALANCE | 5,985.45 | $ 669,625.57 | $ 111.88 | |
| 21 | PLUS: | | | | |
| 22 | WATER ENTERING FACILITY | 1,772.00 | $ 399,266.10 | $ 225.32 | 2010 GL 174-005 |
| 23 | OTHER ACQUISITIONS | - | $ - | | |
| 24 | PURCHASED LTSC | - | $ - | | |
| 25 | | | | | |
| 26 | Sub - Total | 7,757.45 | $ 1,068,891.67 | $ 137.79 | |
| 27 | | | | | |
| 28 | LESS: | | | | |
| 29 | ANNUAL RECOVERY | 1,112.00 | $ 153,221.42 | $ 137.79 | Ground Water Pumped from Ground |
| 30 | LTSC RECOVERED | - | $ - | | |
| 31 | LTSC SOLD/LEASED (DLG) | 155.00 | $ 21,357.30 | $ 137.79 | LTSC sold to Delargo Golf Course |
| 32 | 5% CUT TO AQUIFER | 33.00 | | | Line 22, Column B - Line 29, Column B X .05 |
| 33 | | | | | |
| 34 | ENDING BALANCE | 6,457.45 | $ 894,312.94 | $ 138.49 | |
| 35 | | | | | |
| 36 | | | | | |
| 37 | 2011 | | | | |
| 38 | BEG BALANCE | 6,457.45 | $ 894,312.94 | $ 138.49 | |
| 39 | PLUS: | | | | |
| 40 | WATER ENTERING FACILITY | 1,857.00 | 397,654.10 | 214.14 | 2011 GL 174-005 |
| 41 | OTHER ACQUISITIONS | - | $ - | | |
| 42 | PURCHASED LTSC | - | $ - | | |
| 43 | | | | | |
| 44 | Sub - Total | 8,314.45 | $ 1,291,967.04 | $ 155.39 | |
| 45 | | | | | |
| 46 | LESS: | | | | |
| 47 | ANNUAL RECOVERY | 1,164.00 | $ 180,871.81 | $ 155.39 | Ground Water Pumped from Ground |
| 48 | LTSC RECOVERED | | | | |
| 49 | LTSC SOLD/LEASED (DLG) | 193.50 | $ 30,067.61 | $ 155.39 | LTSC sold to Delargo Golf Course |
| 50 | 5% CUT TO AQUIFER | 34.65 | | | Line 40, Column B - Line 49, Column B X .05 |
| 51 | | | | | |
| 52 | ENDING BALANCE | 6,922.30 | $ 1,075,643.42 | $ 155.39 | Deferred Asset on Balance Sheet |
| 53 | | | | | |
| 54 | | | | | |
| 55 | AMORTIZATION | | | | |
| 56 | | | | | |
| 57 | 2009 | | | | |
| 58 | ANNUAL RECOVERY | 1,124.00 | $ 124,982.84 | | Amounts Taken From Above |
| 59 | LTSC SOLD/LEASED (DLG) | 227.00 | $ 25,241.20 | | |
| 60 | Total | 1,351.00 | $ 150,224.03 | | |
| 61 | | | | | |
| 62 | 2010 | | | | |
| 63 | ANNUAL RECOVERY | 1,112.00 | $ 153,221.42 | | |
| 64 | LTSC SOLD/LEASED (DLG) | 155.00 | $ 21,357.30 | | |
| 65 | Total | 1,267.00 | $ 174,578.73 | | |
| 66 | | | | | |
| 67 | 2011 | | | | |
| 68 | ANNUAL RECOVERY | 1,164.00 | $ 180,871.81 | | |
| 69 | LTSC SOLD/LEASED (DLG) | 193.50 | $ 30,067.61 | | |
| 70 | Total | 1,357.50 | $ 210,939.42 | | |
| 71 | | | | | |
| 72 | | | | | |
| 73 | | | | | |
| 74 | | | | | |

# Attachment B

Arizona Corporation Commission
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## Corporate Inquiry

**File Number: -0053195-8** Check Corporate Status

**Corp. Name: VAIL WATER COMPANY**

## Domestic Address

1010 N FINANCE CENTER DR #200
TUCSON, AZ 85710

## Statutory Agent Information

**Agent Name:** DAVID A MCEVOY

**Agent Mailing/Physical Address:**
4560 E CAMP LOWELL DR
TUCSON, AZ 85712

**Agent Status:** APPOINTED 04/18/2002
**Agent Last Updated:** 07/07/2004

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** PROFIT | **Business Type:** UTILITIES |
| **Incorporation Date:** 06/05/1959 | **Corporate Life Period:** PERPETUAL |
| **Domicile:** ARIZONA | **County:** PIMA |
| **Approval Date:** 06/10/1959 | **Original Publish Date:** 07/24/1959 |

## Officer Information

| | |
|---|---|
| SHELDON J MANDELL<br>PRESIDENT | HOWARD J MANDELL<br>SECRETARY |

| | |
|---|---|
| 2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/30/1996<br>**Last Updated:** 06/02/2009 | 2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 01/31/2001<br>**Last Updated:** 08/15/2001 |
| HOWARD J MANDELL<br>TREASURER<br>2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 01/31/2001<br>**Last Updated:** 06/02/2009 | PAUL MANDELL<br>VICE-PRESIDENT<br>2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 01/06/2010<br>**Last Updated:** 07/02/2010 |
| CHRISTOPHER T VOLPE<br>VICE-PRESIDENT<br>1010 N FINANCE DENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 09/28/2001<br>**Last Updated:** 06/13/2008 | |

## Director Information

| | |
|---|---|
| CHRISTOPHER H SHEAFE<br>DIRECTOR<br>4572 E FT LOWELL<br>TUCSON,AZ 85712<br>**Date of Taking Office:** 01/06/2010<br>**Last Updated:** 07/02/2010 | HOWARD J MANDELL<br>DIRECTOR<br>2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/30/1996<br>**Last Updated:** 06/13/2008 |
| SHELDON J MANDELL<br>DIRECTOR<br>2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/30/1996<br>**Last Updated:** 06/13/2008 | ROBERT C NEILL<br>DIRECTOR<br>1010 N FINANCE DENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 04/30/1996<br>**Last Updated:** 06/13/2008 |

## Annual Reports

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| File Year | File Month | Date Received | Reason Returned | Date Returned | Extension |
|---|---|---|---|---|---|
| 2012 | 06 | 05/14/2012 | | | |
| 2011 | 06 | 05/17/2011 | | | |
| 2010 | 06 | 05/27/2010 | | | |
| 2009 | 06 | 05/01/2009 | | | |
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|---|---|---|---|---|---|
| 2008 | 06 | 05/05/2008 | | | |
| 2007 | 06 | 06/28/2007 | | | |
| 2006 | 06 | 05/18/2006 | | | |
| 2005 | 06 | 04/07/2005 | | | |
| 2004 | 06 | 05/17/2004 | | | |
| 2003 | 06 | 04/21/2003 | | | |
| 2002 | 06 | 04/18/2002 | | | |
| 2001 | 06 | 04/12/2001 | | | |
| 2000 | 06 | 04/24/2000 | | | |
| 1999 | 06 | 03/31/1999 | | | |
| 1998 | 06 | 08/26/1998 | | | |
| 1996 | 12 | 05/08/1997 | | | |
| 1995 | 12 | 04/16/1996 | | | 10/15/1997 |
| 1994 | 12 | 04/14/1995 | | | |
| 1993 | 12 | 03/28/1994 | | | |
| 1992 | 12 | 04/01/1993 | | | |
| 1991 | 12 | 04/13/1992 | | | |
| 1990 | 12 | 04/08/1991 | | | |
| 1989 | 12 | 04/17/1990 | | | |
| 1988 | 12 | 04/17/1989 | | | |
| 1987 | 12 | 04/15/1988 | | | |

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| Document Number | Description | Date Received |
|---|---|---|
| -00320624 | 95 ANNUAL REPORT | 04/16/1996 |
| -00102040 | 96 ANNUAL REPORT | 05/08/1997 |
| -00220786 | 98 ANNUAL REPORT | 08/26/1998 |
| -00306221 | 99 ANNUAL REPORT | 03/11/1999 |
| 00141944 | 00 ANNUAL REPORT | 04/24/2000 |
| 00287485 | 01 ANNUAL REPORT | 04/12/2001 |
| 00471095 | 02 ANNUAL REPORT | 04/18/2002 |
| 00689435 | 03 ANNUAL REPORT | 04/22/2003 |
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|---|---|---|
| 00841386 | CHANGE(S) | 05/04/2004 |
| 00934463 | 04 ANNUAL REPORT | 05/17/2004 |
| 01162942 | 05 ANNUAL REPORT | 04/07/2005 |
| 01582917 | 06 ANNUAL REPORT | 05/18/2006 |
| 02050724 | 07 ANNUAL REPORT | 06/28/2007 |
| 02417701 | 08 ANNUAL REPORT | 05/05/2008 |
| 02415176 | 08 ANNUAL REPORT | 05/16/2008 |
| 02725210 | 09 ANNUAL REPORT | 05/01/2009 |
| 03168672 | 10 ANNUAL REPORT | 05/27/2010 |
| 03487712 | 11 ANNUAL REPORT | 05/17/2011 |
| 03896706 | 12 ANNUAL REPORT | 05/14/2012 |

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| Amendment Date | Amendment Type | Publish Date | Publish Exception |
|---|---|---|---|
| 06/13/1997 | NAME CHANGE | 04/10/1998 | |
| 08/19/1985 | AMENDMENT | 09/30/1985 | |

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## Name Changes / Mergers

| Description | Corporation Name | Date |
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| CHANGED FROM | DEL LAGO WATER COMPANY | 06/13/1997 |

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| Location | Date Received | Description |
|---|---|---|
| 10047027017 | 09/16/1983 | 83 ANNUAL REPORT |
| 10082010043 | 03/01/1984 | AMENDMENT |
| 20015067027 | 03/28/1984 | PUBLICATION OF AMENDMENT |
| 20018016011 | 06/13/1984 | PUBLICATION OF AMENDMENT |
| 10116006026 | 09/17/1984 | 84 ANNUAL REPORT |
| 20031019036 | 08/08/1985 | AGENT ADDRESS CHANGE/CORP. ADDRESS CHANGE |
| | | |

| | | |
|---|---|---|
| 10181012015 | 08/19/1985 | AMENDMENT |
| 10184007016 | 09/17/1985 | 85 ANNUAL REPORT |
| 20033025001 | 09/30/1985 | PUBLICATION OF AMENDMENT |
| 20042023026 | 06/05/1986 | AGENT APPOINTMENT/CORP. ADDRESS CHANGE |
| 10248017035 | 08/18/1986 | 86 ANNUAL REPORT |
| 10329003049 | 09/15/1987 | 87 ANNUAL REPORT |
| 10066059015 | 10/19/1987 | AMEND. FINANCIAL STATEMENT |
| 10380007006 | 04/15/1988 | 12/87 ANNUAL REPORT |
| 20071008047 | 05/25/1988 | CORPORATION ADDRESS CHANGE |
| 10463009018 | 04/17/1989 | 88 ANNUAL REPORT |
| 10529008006 | 04/17/1990 | 89 ANNUAL REPORT |
| 20106009046 | 10/22/1990 | CORPORATION ADDRESS CHANGE |
| 10601021040 | 04/08/1991 | 90 ANNUAL REPORT |
| 10671008041 | 04/13/1992 | 91 ANNUAL REPORT |
| 10752005024 | 04/01/1993 | 92 ANNUAL REPORT |
| 10840007044 | 03/28/1994 | 93 ANNUAL REPORT |
| 10958007047 | 04/14/1995 | 94 ANNUAL REPORT |
| 11016011003 | 04/16/1996 | 95 ANNUAL REPORT |
| 20193022039 | 06/26/1996 | CORP ADDRESS CHG |
| 11100030021 | 01/01/1997 | AGENT APPOINTMENT |
| 20209034012 | 04/15/1997 | EXTENSION/FISCAL CHANGE |
| 11145030002 | 05/08/1997 | 96 ANNUAL REPORT |
| 11136007027 | 06/13/1997 | AMENDMENT |
| 20223050009 | 07/23/1997 | PUB OF AMENDMENT |
| 20224026038 | 04/10/1998 | PUB OF AMENDMENT |
| 31501001590 | 08/26/1998 | 98 ANNUAL REPORT |
| 31533001966 | 03/11/1999 | 99 ANNUAL REPORT |
| 31577000478 | 04/24/2000 | 00 ANNUAL REPORT |
| 31614000308 | 04/12/2001 | 01 ANNUAL REPORT |
| 31662000117 | 04/18/2002 | 02 ANNUAL REPORT |
| 31720001692 | 04/22/2003 | 03 ANNUAL REPORT |
| 11648025037 | 04/07/2004 | 04 ANNUAL REPORT/MAIL RETURNED |
| 31798002740 | 05/04/2004 | CORP ADDRESS CHG |
| 31808001223 | 05/17/2004 | 04 ANNUAL REPORT |
| 31867001415 | 04/07/2005 | 05 ANNUAL REPORT |
| 31965002347 | 05/18/2006 | 06 ANNUAL REPORT |
| 32070003226 | 06/28/2007 | 07 ANNUAL REPORT |
| 32135003883 | | |

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|---|---|---|
| | 05/05/2008 | 08 ANNUAL REPORT |
| 32137002288 | 05/16/2008 | 08 ANNUAL REPORT |

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## Corporate Inquiry

**File Number: -0522072-9** Check Corporate Status

**Corp. Name: TEM CORP.**

## Domestic Address

1010 N FINANCE CENTER DR #200
TUCSON, AZ 85710

## Statutory Agent Information

**Agent Name:** DAVID A MCEVOY

**Agent Mailing/Physical Address:**
4560 E CAMPLOWELL
TUCSON, AZ 85716

**Agent Status:** APPOINTED 08/25/1992
**Agent Last Updated:** 05/26/2004

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** PROFIT | **Business Type:** REAL ESTATE |
| **Incorporation Date:** 10/24/1989 | **Corporate Life Period:** PERPETUAL |
| **Domicile:** ARIZONA | **County:** PIMA |
| **Approval Date:** 10/25/1989 | **Original Publish Date:** 12/08/1989 |

## Officer Information

| | |
|---|---|
| LEAN A ESTES<br>OTHER OFFICER | SHIRLEY A ESTES<br>PRESIDENT |

| | |
|---|---|
| 1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 07/17/1992<br>**Last Updated:** 06/11/2008 | 1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 01/01/2009<br>**Last Updated:** 06/16/2010 |
| CHRISTOPHER T VOLPE<br>SECRETARY<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 07/07/1992<br>**Last Updated:** 05/02/2011 | CHRISTOPHER T VOLPE<br>TREASURER<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 07/07/1992<br>**Last Updated:** 05/02/2011 |
| WILLIAM A ESTES III<br>VICE-PRESIDENT<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 01/01/2010<br>**Last Updated:** 06/16/2010 | CHRITOPHER T VOLPE<br>VICE-PRESIDENT<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 07/07/1992<br>**Last Updated:** 04/24/2009 |

## Director Information

| | |
|---|---|
| WILLIAM A ESTES III<br>DIRECTOR<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 01/01/2010<br>**Last Updated:** 05/02/2011 | SHIRLEY A ESTES<br>DIRECTOR<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 12/31/1989<br>**Last Updated:** 06/11/2008 |

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|---|---|---|---|---|---|
| 2012 | 05 | 05/18/2012 | | | |
| 2011 | 05 | 03/24/2011 | | | |
| 2010 | 05 | 03/24/2011 | | | |
| 2009 | 05 | 03/27/2009 | | | |
| 2008 | 05 | 04/30/2008 | | | |
| 2007 | 05 | 08/10/2007 | | | |
| 2006 | 05 | 05/18/2006 | | | |
| 2005 | 05 | 03/23/2005 | | | |
| 2004 | 05 | 03/31/2004 | | | |

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| 2003 | 05 | 03/11/2003 | | | |
| 2002 | 05 | 03/12/2002 | | | |
| 2001 | 05 | 03/26/2001 | | | |
| 2000 | 05 | 03/16/2000 | | | |
| 1999 | 05 | 06/11/1999 | | | |
| 1998 | 05 | 07/01/1998 | | | |
| 1996 | 12 | 10/27/1997 | | | |
| 1995 | 12 | 10/15/1996 | | | 10/15/1997 |
| 1994 | 12 | 06/15/1995 | | | 10/15/1996 |
| 1993 | 12 | 06/15/1994 | | | 06/15/1995 |
| 1992 | 12 | 04/14/1993 | | | 06/15/1994 |
| 1991 | 12 | 06/15/1992 | | | |
| 1990 | 12 | 06/17/1991 | | | 06/15/1992 |
| 1989 | 12 | 06/15/1990 | | | 06/15/1991 |

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| -00043939 | 95 ANNUAL REPORT | 10/15/1996 |
| -00134246 | 96 ANNUAL REPORT | 10/27/1997 |
| -00196180 | 98 ANNUAL REPORT | 07/01/1998 |
| -00311885 | 99 ANNUAL REPORT | 06/11/1999 |
| 00116933 | 00 ANNUAL REPORT | 03/16/2000 |
| 00276432 | 01 ANNUAL REPORT | 03/26/2001 |
| 00457683 | 02 ANNUAL REPORT | 03/12/2002 |
| 00662102 | 03 ANNUAL REPORT | 03/11/2003 |
| 00891319 | 04 ANNUAL REPORT | 03/31/2004 |
| 00841264 | OFFICER/DIRECTOR CHANGE | 04/07/2004 |
| 01151837 | 05 ANNUAL REPORT | 03/23/2005 |
| 01582915 | 06 ANNUAL REPORT | 05/18/2006 |
| 02109653 | 07 ANNUAL REPORT | 08/10/2007 |
| 02402234 | 08 ANNUAL REPORT | 04/30/2008 |

| | | |
|---|---|---|
| 02725093 | 09 ANNUAL REPORT | 03/27/2009 |
| 03151429 | 10 ANNUAL REPORT | 05/13/2010 |
| 03432267 | 11 ANNUAL REPORT | 03/24/2011 |
| 03904146 | 12 ANNUAL REPORT | 05/18/2012 |

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| Location | Date Received | Description |
|---|---|---|
| 10492013032 | 10/24/1989 | ARTICLES |
| 20094016034 | 12/08/1989 | PUBLICATION OF ARTICLES |
| 20099071018 | 04/13/1990 | 89 EXTENSION |
| 10550030041 | 06/15/1990 | 89 ANNUAL REPORT |
| 20112031030 | 04/12/1991 | 90 EXTENSION |
| 10627027004 | 06/17/1991 | 90 ANNUAL REPORT |
| 20126045042 | 04/15/1992 | 91 EXTENSION |
| 10699024038 | 06/15/1992 | 91 ANNUAL REPORT |
| 10705012015 | 08/25/1992 | AGENT APPOINTMENT |
| 10714011022 | 09/11/1992 | GLOBAL CHANGE |
| 10762010002 | 04/14/1993 | 92 ANNUAL REPORT |
| 20155014010 | 04/18/1994 | 93 EXTENSION |
| 10853012027 | 06/15/1994 | 93 ANNUAL REPORT |
| 20170074014 | 04/17/1995 | 94 EXTENSION |
| 10946007031 | 06/15/1995 | 94 ANNUAL REPORT |
| 20188024029 | 04/15/1996 | 95 EXTENSION |
| 31753002004 | 10/15/1996 | 95 ANNUAL REPORT |
| 11068028044 | 10/29/1996 | 95 ANNUAL REPORT |
| 20209034044 | 04/15/1997 | EXTENSION/FISCAL CHANGE |
| 11172008042 | 10/07/1997 | 96 ANNUAL REPORT |
| 31763000803 | 07/01/1998 | 98 ANNUAL REPORT |
| 31537000461 | 06/11/1999 | 99 ANNUAL REPORT |
| 31571000788 | 03/16/2000 | 00 ANNUAL REPORT |
| 31612000280 | 03/26/2001 | 01 ANNUAL REPORT |
| 31656000696 | 03/12/2002 | 02 ANNUAL REPORT |
| 31713000730 | 03/11/2003 | 03 ANNUAL REPORT |
| 31800000984 | 03/31/2004 | 04 ANNUAL REPORT |

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|---|---|---|
| 31794002802 | 04/07/2004 | OFFICER/DIRECTOR CHANGE |
| 31862001330 | 03/23/2005 | 05 ANNUAL REPORT |
| 31965002342 | 05/18/2006 | 06 ANNUAL REPORT |
| 32076001239 | 08/10/2007 | 07 ANNUAL REPORT |
| 32133002059 | 04/30/2008 | 08 ANNUAL REPORT |

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## Corporate Inquiry

**File Number: L-1078814-5** Check Corporate Status

**Corp. Name: ESTES DEVELOPMENT CO., L.L.C.**

## Domestic Address

1010 N FINANCE CENTER DR #200
TUCSON, AZ 85710

## Statutory Agent Information

**Agent Name:** DAVID A MCEVOY

**Agent Mailing/Physical Address:**
4560 E CAMP LOWELL DR
TUCSON, AZ 85712

**Agent Status:** APPOINTED 05/23/2003
**Agent Last Updated:** 06/08/2004

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** DOMESTIC L.L.C. | **Business Type:** |
| **Incorporation Date:** 05/23/2003 | **Corporate Life Period:** PERPETUAL |
| **Domicile:** ARIZONA | **County:** PIMA |
| **Approval Date:** 05/23/2003 | **Original Publish Date:** 06/24/2003 |

## Manager/Member Information

| | |
|---|---|
| WILLIAM A ESTES III<br>MEMBER<br>1010 N FINANCE CTR DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 05/23/2003<br>**Last Updated:** 05/19/2004 | CHRISTOPHER T VOLPE<br>MEMBER<br>1010 N FINANCE CTR DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 05/23/2003<br>**Last Updated:** 05/19/2004 |

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| 00841402 | CHANGE(S) | 05/05/2004 |
| 00956170 | AGENT ADDRESS CHANGE | 06/03/2004 |

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| 05/05/2004 | AMENDMENT | | WAIVE |

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| 11596007031 | 05/23/2003 | ARTICLES OF ORGANIZATION |
| 20321023012 | 06/24/2003 | PUBLICATION OF ARTICLES OF ORGANIZATION |
| 11661005016 | 05/05/2004 | AMENDMENT |
| 31798002843 | 05/05/2004 | CORP ADDRESS CHG |
| 31802002983 | 06/03/2004 | AGENT ADDRESS CHANGE |
| 11716009044 | 05/26/2005 | AMENDMENT |

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## Corporate Inquiry

**File Number: L-0775770-0 LATEST DATE TO DISSOLVE 12/31/2030**

Check Corporate Status

**Corp. Name: VAIL VALLEY ASSOCIATES L.L.C.**

## Domestic Address

5780 N SWAN RD #100
TUCSON, AZ 85718

## Statutory Agent Information

**Agent Name:** DAVID A MCEVOY

**Agent Mailing/Physical Address:**
4560 E CAMP LOWELL DR
TUCSON, AZ 85712

**Agent Status:** APPOINTED 04/29/1996
**Agent Last Updated:** 06/16/2004

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** DOMESTIC L.L.C. | **Business Type:** UNKNOWN |
| **Incorporation Date:** 04/29/1996 | **Corporate Life Period:** |
| **Domicile:** ARIZONA | **County:** PIMA |
| **Approval Date:** 04/30/1996 | **Original Publish Date:** 06/03/1996 |
| **Status:** LATEST DATE TO DISSOLVE | **Dissolution/Withdrawal Date:** 12/31/2030 |

## Manager/Member Information

| | |
|---|---|
| CHRISTOPHER H SHEAFE<br>MANAGER<br>4572 E CAMP LOWELL<br>TUCSON,AZ 85712 | ROBERT C NEILL<br>MANAGER<br>11078 E SKINNER DR<br>SCOTTSDALE,AZ 85262 |

| | |
|---|---|
| **Date of Taking Office:** 03/06/2007<br>**Last Updated:** 03/08/2007 | **Date of Taking Office:** 03/06/2007<br>**Last Updated:** 03/08/2007 |
| WILLIAM A ESTES JR<br>MANAGER<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 04/29/1996<br>**Last Updated:** 03/08/2007 | THE BSE TRUST<br>MEMBER<br>WILLIAM A JR&SHIRLEY A ESTES T<br>% THE ESTES CO.<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 12/11/2007<br>**Last Updated:** 12/13/2007 |
| THE SHEAFE LIVING TRUST<br>MEMBER<br>CHRISTOPHER H&SHARON K SHEAFE<br>TRUSTEES<br>4572 E CAMP LOWELL<br>TUCSON,AZ 85712<br>**Date of Taking Office:** 12/11/2007<br>**Last Updated:** 12/13/2007 | ROBERT & MARY NEILL FALY TRUST<br>MEMBER<br>ROBERT C AND MARY V NEILL<br>TRUSTEES<br>11078 E SKINNER DR<br>SCOTTSDALE,AZ 85262<br>**Date of Taking Office:** 12/11/2007<br>**Last Updated:** 12/13/2007 |

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| 00956346 | AGENT ADDRESS CHANGE | 06/03/2004 |
| 02189818 | AMENDMENT | 12/11/2007 |

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| 03/06/2007 | AMENDMENT | | WAIVE |

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| 11033030034 | 04/29/1996 | ARTICLES OF ORGANIZATION |
| 20185052014 | 06/03/1996 | PUBLICATION OF ARTICLES OF ORGANIZATION |
| | | |

| | | |
|---|---|---|
| 31804002701 | 06/03/2004 | AGENT ADDRESS CHANGE |
| 11776009021 | 03/06/2007 | AMENDMENT |
| 32103003426 | 12/11/2007 | AMENDMENT |

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## Corporate Inquiry

**File Number: F-0774495-7** | Check Corporate Status

**Corp. Name: MANDELL VAIL CORP.**

## Domestic Address

2441 N LEAVITT ST
CHICAGO, IL 60647

## Foreign Address

1010 N FINANCE CENTER DR #200
TUCSON, AZ 85710

## Statutory Agent Information

**Agent Name:** CORPORATION SERVICE COMPANY

**Agent Mailing/Physical Address:**
2338 W ROYAL PALM RD STE J
PHOENIX, AZ 85021

**Agent Status:** APPOINTED 07/31/2009
**Agent Last Updated:** 08/05/2009

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** BUSINESS | **Business Type:** REAL ESTATE |
| **Incorporation Date:** 04/10/1996 | **Corporate Life Period:** PERPETUAL |
| **Domicile:** ILLINOIS | **County:** PIMA |

| **Approval Date:** 04/10/1996 | **Original Publish Date:** 04/29/1996 |
|---|---|

## Officer Information

| | |
|---|---|
| SHELDON J MANDELL<br>PRESIDENT<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/1996<br>**Last Updated:** 01/28/2013 | HOWARD J MANDELL<br>SECRETARY<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/1996<br>**Last Updated:** 01/28/2013 |
| ARTHUR N MANDELL<br>VICE-PRESIDENT<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 08/01/2001<br>**Last Updated:** 01/28/2013 | |

## Director Information

| | |
|---|---|
| ARTHUR N MANDELL<br>DIRECTOR<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/2001<br>**Last Updated:** 01/28/2013 | ALLEN E MANDELL<br>DIRECTOR<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/1996<br>**Last Updated:** 01/28/2013 |
| HOWARD J MANDELL<br>DIRECTOR<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/1996<br>**Last Updated:** 01/28/2013 | SHELDON J MANDELL<br>DIRECTOR<br>2441 N LEAVITT ST<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 04/02/1996<br>**Last Updated:** 01/28/2013 |

## Annual Reports

| **Next Annual Report Due:** 01/10/2014 | E-FILE An Annual Report Online << Click Here |
|---|---|

FORMS For Annual Reports To Be Printed And Mailed << Click Here

| File Year | File Month | Date Received | Reason Returned | Date Returned | Extension |
|---|---|---|---|---|---|
| 2013 | 01 | 12/17/2012 | | | |
| 2012 | 01 | 12/27/2011 | | | |
| 2011 | 01 | 05/02/2011 | | | |
| 2010 | 01 | 12/21/2009 | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 2009 | 01 | 11/18/2008 | | | |
| 2008 | 01 | 12/28/2007 | | | |
| 2007 | 01 | 12/26/2006 | | | |
| 2006 | 01 | 01/04/2006 | | | |
| 2005 | 01 | 12/28/2004 | | | |
| 2004 | 01 | 01/02/2004 | | | |
| 2003 | 01 | 03/24/2003 | | | |
| 2002 | 01 | 12/26/2001 | | | |
| 2001 | 01 | 11/27/2000 | | | |
| 2000 | 01 | 12/27/1999 | | | |
| 1999 | 01 | 11/16/1998 | | | |
| 1998 | 01 | 08/05/1998 | | | |
| 1996 | 12 | 05/27/1997 | | | |

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## Scanned Documents

**(Click on gray button to view document - will open in a new window)**

| Document Number | Description | Date Received |
|---|---|---|
| -00089795 | 96 ANNUAL REPORT | 05/27/1997 |
| -00211356 | 98 ANNUAL REPORT | 08/05/1998 |
| -00279042 | 99 ANNUAL REPORT | 11/16/1998 |
| 00094235 | 00 ANNUAL REPORT | 12/27/1999 |
| 00232338 | 01 ANNUAL REPORT | 11/27/2000 |
| 00377865 | 02 ANNUAL REPORT | 12/26/2001 |
| 00673977 | 03 ANNUAL REPORT | 03/24/2003 |
| 00838597 | 04 ANNUAL REPORT | 01/02/2004 |
| 01088924 | 05 ANNUAL REPORT | 12/28/2004 |
| 01440675 | 06 ANNUAL REPORT | 01/04/2006 |
| 01636745 | AGENT ADDRESS CHANGE | 05/26/2006 |
| 01841538 | 07 ANNUAL REPORT | 12/26/2006 |
| 02264491 | 08 ANNUAL REPORT | 12/28/2007 |
| 02623427 | 09 ANNUAL REPORT | 11/18/2008 |
| 02856025 | AGENT APPOINTMENT | 07/31/2009 |

| | | |
|---|---|---|
| 02999060 | 10 ANNUAL REPORT | 12/21/2009 |
| 03479345 | 11 ANNUAL REPORT | 05/02/2011 |
| 03713874 | 12 ANNUAL REPORT | 12/27/2011 |
| 04119480 | 13 ANNUAL REPORT | 12/17/2012 |

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## Notices of Pending Revocation

**(Click on gray button - if present - to view notice - will open in a new window)**

| Date | Reason |
|---|---|
| 04/15/2011 | DELINQUENT ANNUAL REPORT |

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## Microfilm

| Location | Date Received | Description |
|---|---|---|
| 11015018002 | 04/10/1996 | APPLICATION FOR AUTHORITY |
| 20186037030 | 04/29/1996 | PUB OF APPL FOR AUTHORITY |
| 11133012046 | 03/25/1997 | 96 ANNUAL REPORT |
| 11260017025 | 12/05/1997 | 98 ANNUAL REPORT |
| 31523002168 | 11/16/1998 | 99 ANNUAL REPORT |
| 31560002545 | 12/27/1999 | 00 ANNUAL REPORT |
| 31599002694 | 11/27/2000 | 01 ANNUAL REPORT |
| 31646000024 | 12/26/2001 | 02 ANNUAL REPORT |
| 31715002131 | 03/24/2003 | 03 ANNUAL REPORT |
| 31782001169 | 01/02/2004 | 04 ANNUAL REPORT |
| 31844000783 | 12/28/2004 | 05 ANNUAL REPORT |
| 31946000948 | 01/04/2006 | 06 ANNUAL REPORT |
| 31975003341 | 05/26/2006 | AGENT ADDRESS CHANGE |
| 32024002554 | 12/26/2006 | 07 ANNUAL REPORT |
| 32099002163 | 12/28/2007 | 08 ANNUAL REPORT |
| 32175001339 | 11/18/2008 | 09 ANNUAL REPORT |

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- **General Web Site Usage Instructions**

- **STARPAS Main Menu**
- **A.C.C. Corporations Division Main Page**
- **Arizona Corporation Commission Home Page**

Arizona Corporation Commission
State of Arizona Public Access System

02/05/2013 11:17 AM

**Jump To...**

Scanned Documents Amendments Microfilm

## Corporate Inquiry

**File Number: L-0856439-3** Check Corporate Status

**Corp. Name: DEL LAGO GOLF LLC**

## Domestic Address

13801 E COLOSSAL CAVE RD
VAIL, AZ 85641

## Statutory Agent Information

**Agent Name:** TEM CORP

**Agent Mailing/Physical Address:**
1010 N FINANCE CENTER DR #200
TUCSON, AZ 85710

**Agent Status:** APPOINTED 12/04/2001
**Agent Last Updated:** 03/15/2005

## Additional Corporate Information

| | |
|---|---|
| **Corporation Type:** DOMESTIC L.L.C. | **Business Type:** |
| **Incorporation Date:** 11/04/1998 | **Corporate Life Period:** PERPETUAL |
| **Domicile:** ARIZONA | **County:** PIMA |
| **Approval Date:** 11/04/1998 | **Original Publish Date:** 11/23/1998 |

## Manager/Member Information

| | |
|---|---|
| MDC ARIZONA CORP<br>MANAGER<br>2441 N LEAVITT<br>CHICAGO,IL 60647<br>**Date of Taking Office:** 11/04/1998<br>**Last Updated:** 11/05/1998 | THE ESTES CO<br>MEMBER<br>1010 N FINANCE CENTER DR #200<br>TUCSON,AZ 85710<br>**Date of Taking Office:** 06/17/2008<br>**Last Updated:** 06/19/2008 |

THE ESTES LIVING TRUST
MEMBER
WILLIAM ESTES (TRUSTEE)
% TEM CORP
5151 E BROADWAY #200
TUCSON,AZ 85711
**Date of Taking Office:** 02/16/2000
**Last Updated:** 05/26/2005

## Scanned Documents

**(Click on gray button to view document - will open in a new window)**

| Document Number | Description | Date Received |
|---|---|---|
| 01050790 | MULTIPLE CHANGES | 01/28/2005 |
| 02454196 | AMENDMENT | 06/17/2008 |

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## Amendments

| Amendment Date | Amendment Type | Publish Date | Publish Exception |
|---|---|---|---|
| 06/17/2008 | AMENDMENT | | WAIVE |
| 01/14/2005 | AMENDMENT | | WAIVE |
| 07/28/2004 | AMENDMENT | | WAIVE |
| 01/08/2003 | AMENDMENT | | WAIVE |
| 02/16/2000 | AMENDMENT | | WAIVE |

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| Location | Date Received | Description |
|---|---|---|
| 11284019014 | 11/04/1998 | ARTICLES OF ORGANIZATION |
| 20234041019 | 11/23/1998 | PUBLICATION OF ARTICLES OF ORGANIZATION |
| 11402022005 | 02/16/2000 | AMENDMENT |
| 20297045023 | 12/04/2001 | AGENT APPOINTMENT/CORP ADDR CHG |
| 11578002029 | 01/08/2003 | AMENDMENT |
| 11693002014 | 07/28/2004 | AMENDMENT |
| 11716009030 | 01/14/2005 | AMENDMENT |
| | | |

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| 31849003013 | 01/28/2005 | MULTIPLE CHANGES |
| 32135001554 | 06/17/2008 | AMENDMENT |

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# Attachment C

TEM CORP.

Asset Managers for RCP Investments

November 12, 1996

Paul Mandell
National Wrecking Co.
2441 N. Leavitt
Chicago, Illinois 60647

Dear Paul:

It is our mutual understanding that TEM Corp. will be engaged by Del Lago Water Company, commencing October 1, 1996, to manage its operations pursuant to the terms of its proposal dated October 10, 1996 except for the length of the agreement shall be 6 months.

If you concur with the above, please sign below as an acknowledgment of such.

Sincerely,

Christopher T. Volpe
Treasurer

DEL LAGO WATER COMPANY

By: _____ 11/25/96
Signature Secretary Date

5780 N. Swan Rd., S-100, Tucson, AZ 85718 // P.O. Box 17360, Tucson, AZ 85731 // (602) 529-2883 • Fax (602) 299-0810

**Vail Water Company**
1010 North Finance Center Dr., Suite 200
Tucson, Arizona 85710
520-571-1958
Facsimile - 520-571-1961

December 31, 2011

Mr. Sheldon J. Mandell
National Wrecking
2441 North Leavitt Street
Chicago, Illinois 60647

Re: Vail Water Company

Dear Red:

This letter shall constitute Vail Water Company's approval to extend the Management Agreement between TEM Corp. and Vail Water Company through December 31, 2012, for an amount equal to $8.50 per paying customer per month. Except as modified hereby, all other terms and conditions of the proposal dated October 10, 1996, shall remain the same.

Sincerely,

Christopher T. Volpe
Vice President

CTV:lty

ACKNOWLEDGED AND APPROVED effective the 31st day of December, 2011.

VAIL WATER COMPANY, an
Arizona corporation

By: _____
Sheldon J. Mandell, President

# PROPOSAL TO

# DEL LAGO WATER COMPANY

# OCTOBER 10, 1996

TEM Corp.
P.O. Box 17360
Tucson, Arizona 85731
(502) 577-7007

October 10, 1996

Del Lago Water Company
P.O. Box 17360
Tucson, Arizona 85731

Re: Proposal to provide management services for Del Lago Water Company

Gentlemen:

TEM Corp. is pleased to submit this proposal to provide management services for Del Lago Water Company.

Staff personnel will be controller and staff, project manager, legal assistant and the support services of the computer, payroll and insurance departments. This proposal is based upon the continued employment by Del Lago Water Company of Charlotte Kimball and Bill McGuire.

**SCOPE OF WORK:**

Accounts Receivable/Accounts Payable/Vendor Transactions

1. Verify and cut checks for payment of vendor invoices
2. Update Accounts Payable ledger
3. Disburse payments
4. Maintain paid invoices file
5. Update Job Costing files

Bookkeeping/Payroll

1. Reconcile bank statements
2. Summarize A/R, A/P to General Ledger
3. Generate monthly Income Reports and Balance Sheets
4. Process and maintain all corporate tax reports (ADOR and ACC)
5. General Ledger maintenance
6. Continuing property records
8. Depreciation of plant assets (record-keeping)

9. Job Cost file maintenance
10. ACC reports as necessary
11. Capital Expenditure detail
12. Payroll records and filings
13. Employee compensation and benefits records
14. Staffing recommendations
15. Assist independant CPA firm in preparation and processing of federal and state income tax returns

General Administration

1. Analyze insurance needs and recommend optimal insurance coverage
2. Provide management direction to field services activities.
3. Develop and implement policies as necessary and approved by owners.
4. Attend Utility Coordination Committee meetings as necessary.
5. Review plans and specifications for compliance with utility requirements.
6. Preparation and submission of reports as required by the Arizona Department of Water Resources, Arizona Corporation Commission, Arizona Department of Environmental Quality, Central Arizona Project, State Health Department.
7. Make recommendations relative to rate increase timing and processing; assist in application to ACC for rate increase.
8. Meet with developers regarding line extensions and related matters.
9. Manage, coordinate and engage as necessary, outside consultant activities relative to engineering, accounting and tax return preparation and legal services.
10. Represent Del Lago Water Company at court proceedings relative to past due accounts as necessary.
11. Maintain corporate files.
12. Document preparation, filing and storage as required.
13. Meet with homeowner's associations and other customer groups as requested.
14. Other tasks of a routine nature necessary to the operation of the Del Lago Water Company.
15. Supervision of on-site personnel of Del Lago Water Company.
16. Make capital improvement recommendations for office and field personnel.
17. Provide use of mainframe and personal computers for billing, accounts/payable and accounting services.

**OTHER SERVICES:**

1. Negotiate Line Extension Agreements.
2. Coordinate rate increase applications and processing with attorney.
3. Maintain Line Extension Agreements and payout schedule.
4. Research and recommendation on expansion of CC&N area

5. Management and implementation of tariff.

**FEES:**

TEM Corp. shall receive a management fee of Five Dollars ($5.00) per customer per month which fee shall be paid at the end of each month.

**TERMS AND CONDITIONS:**

1. The length of this agreement shall be for _1_ years. The agreement may be renewed in one year increments at the mutual agreement of the parties.

2. Del Lago Water Company will agree to operate the system in full compliance with the current EPA and ADEQ regulations and will cooperate with TEM Corp. in maintaining such compliance.

3. The continued employment of Charlotte Kimball and Bill McGuire by Del Lago Water Company.

Reasons TEM Corp. managing the Del Lago Water Company is the better alterative to hiring an outside management company:

- **Vail Valley Joint Venture lowers its operating costs.** Currently all of Doug's, Kip's, Gloria's, and Lisa's time are billed to VVJV. With the acceptance of this proposal, any time spent on DLWCO would not be included in the TEM cost reimbursements paid by VVJV. For instance, Kip's time may drop from 15% to 5%, Doug's from 85% to 80%, Gloria's from 20% to 10% and so on. Additionally, if further staffing is needed for TEM to complete its duties, VVJV would not be burdened with a budget increase.

- **Mandell position is enhanced in VVJV.** The Mandell group owns 60% of VVJV and 50% of DLWCO; hence, every dollar saved at the VVJV level is more valuable to them than a dollar spent on DLWCO.

- **On-site management has additional benefits.** All of the management companies solicited to operate DLWCO indicated they would replace Bill and Charlotte and conduct business from their corporate offices off-site. This action would eliminate many inherent benefits of having the DLWCO office on-site, such as: better customer service; quicker reaction time to problems; avoidance of potential problems because of daily monitoring; having a night watchman with Charlotte living on property; personnel who care and, in TEM's case, have a vested interest in the overall success of the project; knowledge of the history of the project and idea of what to do when problems arise; giving a constant presence in the community for Owners, an important role that could come into play in negotiations with the various political bodies. Bill and Charlotte are known in Vail and serve as a resource to the pulse of the community. Conversely, vacating the premises is not the kind of message the Owners want to send. TEM is working with Charlotte & Bill to make the operations more professional. The offices have been cleaned and new carpet installed (at no cost to the venture), the door will have its window replaced (there currently is no glass), and the junk around the yard is being disposed.

- **TEM brings more to the table than outside management company.** Development experience, understanding of project goals, computer, technical, and administrative support, response time are among the advantages. Buck Lewis, the most logical alternative to TEM, has shown poor response time and needed continual prodding to complete work assignments. There is no reason to think that the DLWCO job would be any different.

- **TEM fee is passed on to customers.** While the rate base is based on the physical plant, the rate charged to customers includes overhead. For instance, if your physical plant is worth $1,000,000 and your overhead is $75,000 per year, you are allowed to earn an 8% profit on the physical plant plus recoup your overhead. In this case fees should be $155,000. DLWCO has exposure from the Corporation Commission if costs, passed on to its customers, are not expended. Ramifications may include lowering the rate. Our goal is to get as large an increase as possible at the next rate hearing, again this results in a win for the Owners. If a larger fee to TEM is justifiable, perhaps additional benefit could

be passed on to VVJV through further cost reductions.

- **Bill Estes is emotionally involved.** TEM has gone beyond its contemplated duties to make DLWCO a more professional and efficient operation because of Bill's attachment to it. TEM has incurred costs, that were not reimbursable under the approved budget without hesitation or soliciting a budgetary increase before proceeding, in the spirit of problem solving and for the good of the company. These costs include computer technical support and the under taking of reviewing billing software packages when no other operator was interested in bidding on the job. DLWCO avoided a crisis situation (not to mention cost savings) only with help of TEM's computer manager. TEM also has used and continues to use non-reimbursable personnel for payroll, administrative, file maintenance, and financial statement preparation on behalf of DLWCO. This use of TEM resources cannot continue without remuneration.

- **TEM offers the best price for the best product.** It is doubtful DLWCO could find an operator to perform the functions that TEM can for a lower fee. Besides the benefits aforementioned, TEM offers the best price. If an another operator was chosen, TEM would still have to be involved in decision making, administration, and other day-to-day duties. This cost would inevitably end up being the burden of VVJV; thus, effectively double costing the project.

# Attachment D

The Estes Co
Management Costs - Vail Water

| Salaries | Annual $$ | VWC Allocation Annually | % VWC | |
|---|---|---|---|---|
| V.P. Treasurer - TEM | $ 130,009 | $ 45,503 | 35.00% | Based upon amount of time spent on VWC matters |
| Asst. Controller - TEM | $ 50,000 | $ 17,500 | 35.00% | Based upon amount of time spent on VWC matters |
| Accounting/Legal Assistant - TEM | $ 50,000 | $ 12,500 | 25.00% | Based upon amount of time spent on VWC matters |
| Admin Assistant - TEM | $ 42,698 | $ 10,675 | 25.00% | Based upon amount of time spent on VWC matters |
| Total Salaries | $ 272,707 | $ 86,178 | 32.00% | |
| ER payroll taxes-7.65% | $ 20,862 | $ 7,302 | 35.00% | Based upon amount of time spent on VWC matters |
| Benefits (medical, life) | | | | |
| V.P. Treasurer - TEM | $ 11,305 | $ 3,957 | 35.00% | Based upon amount of time spent on VWC matters |
| Asst. Controller - TEM | $ 3,319 | $ 1,162 | 35.00% | Based upon amount of time spent on VWC matters |
| Accounting/Legal Assistant - TEM | $ 10,664 | $ 2,666 | 25.00% | Based upon amount of time spent on VWC matters |
| Admin Assistant - TEM | $ 3,235 | $ 809 | 25.00% | Based upon amount of time spent on VWC matters |
| Total Benefits | $ 28,523 | $ 8,593 | | |
| Sunburst Pension | $ 705 | $ 226 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| BASIC - Flex Spending | $ 189 | $ 60 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Worker's Comp insurance | $ 2,672 | $ 855 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Bldg Rent ($2,499.48/mo) | $ 29,994 | $ 9,598 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Simply Bits (phone/internet) | $ 5,776 | $ 1,848 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Kip cell phone | $ 1,753 | $ 561 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Copier,fax,scanner ($525/mo) | $ 6,300 | $ 2,016 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Copier-overages ($292/qtr avg) | $ 1,168 | $ 374 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Copier-personal prop taxes | $ 216 | $ 69 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Liability Insurance | $ 3,539 | $ 1,133 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Postage-Stamps.com (VWC specific) | $ 416 | $ 416 | 100.00% | Direct |
| Postage-Stamps.com (monthly fee) | $ 192 | $ 61 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Software purchased | $ 4,040 | $ 1,293 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Computer hardware | $ 4,334 | $ 1,387 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Computer maintenance | $ 6,389 | $ 2,044 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Storage-offsite (VWC specific) | $ 618 | $ 618 | 100.00% | Direct |
| Mileage (to VWC & Banks) VWC specific | $ 1,032 | $ 1,032 | 100.00% | Direct |
| Travel/Meals for meetings (VWC specific) | $ 478 | $ 478 | 100.00% | Direct |
| Office supplies | $ 1,472 | $ 471 | 32.00% | Indirect - Based upon % of Total Wages Allocated |
| Total Office costs | $ 393,373 | $ 24,541 | | |
| Total Cost Allocated to VWC Annually | | $ 126,613 | | |

| | | | | |
|---|---|---|---|---|
| 12/31/11 #customers | 3,867 | $ | 10,551 | monthly costs |
| | per bill count at year end | $ | 2.73 | cost per customer |

# Attachment E

# CAP Water Line from Tucson Water to Vail Water

## 2013

| Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Wheeling Agreement | | Planning | Engineering | | Right-A-Way Acquisition | | Permits | | Prepare Bid Contracts | | Out to Bid |
| Meetings with Tucson Water<br>Mayor and Council Approval | | 368,000.00 | | | $368,000.00 includes contingency | | | | $5,000.00 from VWC<br>5000 | | $5,000.00<br>5000<br>Bid Documents<br>Meeting with Contractors |
| | | | | | | | | | | | $378,000.00 |

## 2014

| Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Out to Bid | Award Bid | Construction | | | | | Start-up | Completion | | | |
| | $ 911,330 | $911,330.00 16" Dip Water Line | | | | | SCADA | | | | |
| | $ 30,000 | $30,000.00 Mixing Tank Connection | | | | | $ 35,000 | | | | |
| | $ 325,000 | $325,000.00 Booster at G Zone | | | | | | | | | |
| | $ 24,000 | $24,000.00 16" Valves | | | | | | | | | |
| | $ 200,000 | $200,00.00 Upgrades to Tucson Water System G Zone | | | | | | | | | |
| | | $1,525,330 | | | | | | | | | |
| Total Budget | | $1,903,330 | | | | | | | | | |
| $ 1,525,330 | | | | | | | | | | | |

**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | ) | DOCKET NO. W-01651B-12-0339 |

DIRECT

TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

FEBRUARY 25, 2013

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## SCHEDULES



## EXHIBITS

**EXECUTIVE SUMMARY**
**VAIL WATER COMPANY**
**DOCKET NO. W-01651B-12-0339**

The Direct Testimony of Staff witness John A. Cassidy addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Vail Water Company ("Company") for this proceeding consisting of 0.0 percent debt and 100.00 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 9.1 percent return on equity ("ROE") for the Company. Staff's estimated ROE for the Company is based on the 8.5 percent average of its discounted cash flow method ("DCF") and capital asset pricing model ("CAPM") cost of equity methodology estimates for the sample companies of 8.8 percent for the DCF and 8.2 percent for the CAPM. Staff's recommended ROE includes an upward economic assessment adjustment of 60 basis points.

Cost of Debt – Staff recommends that the Commission adopt a 0.0 percent cost of debt for the Company, as Vail Water has no debt in its capital structure.

Overall Rate of Return – Staff recommends that the Commission adopt a 9.1 percent overall rate of return.

Mr. Bourassa's Testimony – The Commission should reject the Company's proposed 10.4 percent ROE for the following reasons:

> Mr. Bourassa's Future Growth DCF estimates rely exclusively on analysts' forecasts of earnings per share growth. For purposes of calculating the current dividend yield ($D_0/P_0$) component, Mr. Bourassa states that he uses a spot price date of July 10, 2012. However, a check of market trading prices for July 10, 2012 reveals that he has understated the current market ($P_0$) price for all but one of his sample companies. An understatement to the current market ($P_0$) price serves to overstate the current dividend yield ($D_0/P_0$), which in turn artificially inflates both the expected dividend yield ($D_1/P_0$) and estimated cost of equity (k) derived from Mr. Bourassa's Future Growth DCF and Future and Historical Growth DCF models. Mr. Bourassa has overstated the market risk premium ($R_m - R_f$) in his Current Market Risk Premium CAPM, and his CAPM estimates are inflated due to use of a forecasted risk-free rate.

## I. INTRODUCTION

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

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

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

A. I am responsible for the examination of financial and statistical information included in utility rate applications and other financial matters, including studies to estimate the cost of capital component in rate filings used to determine the overall revenue requirement, and for preparing written reports, testimonies and schedules to present Staff's recommendations to the Commission on these matters.

**Q. Please describe your educational background and professional experience.**

A. I hold a Bachelor of Arts degree in History from Arizona State University, a Master of Library Science degree from the University of Arizona, and an MBA degree with an emphasis in Finance from Arizona State University. While pursuing my MBA degree, I was inducted into Beta Gamma Sigma, the National Business Honor Society. I have passed the CPA exam, but opted not to pursue certification. I have worked professionally as a librarian, financial consultant, tax auditor, and, as a former Commission employee, served as Staff's cost of capital witness in rate case evidentiary proceedings.

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

A. My testimony provides Staff's recommended capital structure, return on equity ("ROE") and overall rate of return ("ROR") for establishing the revenue requirements for Vail Water Company's ("Vail" or "Company") pending rate application.

*Summary of Testimony and Recommendations*

**Q. Briefly summarize how Staff's cost of capital testimony is organized.**

A. Staff's Cost of Capital Testimony is presented in eleven sections. Section I is this Introduction. Section II discusses the concept of weighted average cost of capital ("WACC"). Section III presents the concept of capital structure and presents Staff's recommended capital structure for Vail in this proceeding. Section IV presents Staff's cost of debt for Vail. Section V discusses the concepts of ROE and risk. Section VI presents the methods employed by Staff to estimate Vail's ROE. Section VII presents the findings of Staff's ROE analysis. Section VIII presents Staff's final cost of equity estimates for Vail. Section IX presents Staff's ROR recommendation. Section X presents Staff's comments on the Direct Testimony of the Company's witness, Mr. Thomas J. Bourassa. Finally, Section XI presents the conclusions.

**Q. Have you prepared any exhibits to accompany your testimony?**

A. Yes. I prepared nine schedules (JAC-1 to JAC-9) and two Exhibits (JAC-A and JAC-B) that support Staff's cost of capital analysis.

**Q. What is Staff's recommended rate of return for Vail?**

A. Staff recommends a 9.1 percent overall ROR, as shown in Schedule JAC-1. Staff's ROR recommendation is based on cost of equity estimates for the sample companies of 8.8 percent for the discounted cash flow method ("DCF") and 8.2 percent from the capital asset pricing method ("CAPM"). Staff recommends adoption of a 60 basis point upward Economic Assessment Adjustment, resulting in a 9.1 percent return on equity.

*Vail Water's Proposed Overall Rate of Return*

**Q. Briefly summarize Vail's proposed capital structure, cost of debt, ROE and overall ROR for this proceeding.**

A. Table 1 summarizes the Company's proposed capital structure, cost of debt, ROE and overall ROR in this proceeding:

**Table 1**

| | Weight | Cost | Weighted Cost |
|---|---|---|---|
| Long-term Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 10.4% | 10.4% |
| **Cost of Capital/ROR** | | | **10.4%** |

Vail is proposing an overall rate of return of 10.4 percent.

## II. THE WEIGHTED AVERAGE COST OF CAPITAL

**Q. Briefly explain the cost of capital concept.**

A. The cost of capital is the opportunity cost of choosing one investment over others with equivalent risk. In other words, the cost of capital is the return that stakeholders expect for investing their financial resources in a determined business venture over another business venture.

**Q. What is the overall cost of capital?**

A. The cost of capital to a company issuing a variety of securities (i.e., stock and indebtedness) is an average of the cost rates on all issued securities adjusted to reflect the relative amounts for each security in the company's entire capital structure. Thus, the overall cost of capital is the WACC.

**Q. How is the WACC calculated?**

A. The WACC is calculated by adding the weighted expected returns of a firm's securities. The WACC formula is:

Equation 1.

$$WACC = \sum_{i=1}^{n} W_i * r_i$$

In this equation, $W_i$ is the weight given to the $i^{th}$ security (the proportion of the $i^{th}$ security relative to the portfolio) and $r_i$ is the expected return on the $i^{th}$ security.

**Q. Can you provide an example demonstrating application of Equation 1?**

A. Yes. For this example, assume that an entity has a capital structure composed of 60 percent debt and 40 percent equity. Also, assume that the embedded cost of debt is 6.0 percent and the expected return on equity, i.e., the cost of equity, is 10.5 percent. Calculation of the WACC is as follows:

WACC = (60% * 6.0%) + (40% * 10.5%)

WACC = 3.60% + 4.20%

WACC = 7.80%

The weighted average cost of capital in this example is 7.80 percent. The entity in this example would need to earn an overall rate of return of 7.80 percent to cover its cost of capital.

## III. CAPITAL STRUCTURE

*Background*

**Q. Please explain the capital structure concept.**

A. The capital structure of a firm is the relative proportions of each type of security:--short-term debt, long-term debt (including capital leases), preferred stock and common stock--that are used to finance the firm's assets.

**Q. How is the capital structure expressed?**

A. The capital structure of a company is expressed as the percentage of each component of the capital structure (capital leases, short-term debt, long-term debt, preferred stock and common stock) relative to the entire capital structure.

As an example, the capital structure for an entity that is financed by $20,000 of short-term debt, $85,000 of long-term debt (including capital leases), $15,000 of preferred stock and $80,000 of common stock is shown in Table 2.

**Table 2**

| Component | | | % |
|---|---|---|---|
| Short-Term Debt | $20,000 | ($20,000/$200,000) | 10.0% |
| Long-Term Debt | $85,000 | ($85,000/$200,000) | 42.5% |
| Preferred Stock | $15,000 | ($15,000/$200,000) | 7.5% |
| Common Stock | $80,000 | ($80,000/$200,000) | 40.0% |
| Total | $200,000 | | 100% |

The capital structure in this example is composed of 10.0 percent short-term debt, 42.5 percent long-term debt, 7.5 percent preferred stock and 40.0 percent common stock.

*Vail Water's Capital Structure*

**Q. What capital structure does Vail propose?**

A. The Company proposes a capital structure composed of 0.0 percent debt and 100.0 percent common equity.

**Q. How does Vail's capital structure compare to capital structures of publicly-traded water utilities?**

A. Schedule JAC-4 shows the capital structures of six publicly-traded water companies ("sample water companies" or "sample water utilities") as of December 2011. The average capital structure for the sample water utilities is comprised of approximately 51.6 percent debt and 48.4 percent equity.

*Staff's Capital Structure*

**Q. What is Staff's recommended capital structure for Vail?**

A. Staff recommends a capital structure composed of 0.0 percent debt and 100.0 percent equity. Staff's recommended capital structure reflects the Company's actual capital structure as of the December 31, 2011, test year end.

## IV. COST OF DEBT

**Q. What is the basis for the Company's proposed 0.0 percent cost of debt?**

A. As noted above, the Company has no debt in its capital structure; therefore, it has a cost of debt of 0.0 percent.

## V. RETURN ON EQUITY

*Background*

**Q. Please define the term "cost of equity capital."**

A. The cost of equity is the rate of return that investors expect to earn on their investment in a business entity given its risk. In other words, the cost of equity to the entity is the investors' expected rate of return on other investments of similar risk. As investors have a wide selection of stocks to choose from, they will choose stocks with similar risks but higher returns. Therefore, the market determines the entity's cost of equity.

**Q. Is there a correlation between interest rates and the cost of equity?**

A. Yes, there is a positive correlation between interest rates and the cost of equity, as the two tend to move in the same direction. This relationship is reflected in the CAPM formula. The CAPM is a market-based model employed by Staff for estimating the cost of equity. The CAPM is further discussed in Section VI of this testimony.

**Q. What has been the general trend of interest rates in recent years?**

A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from January 18, 2002, to January 27, 2012.

**Chart 1: Average Yield on 5-, 7-, & 10-Year Treasuries**

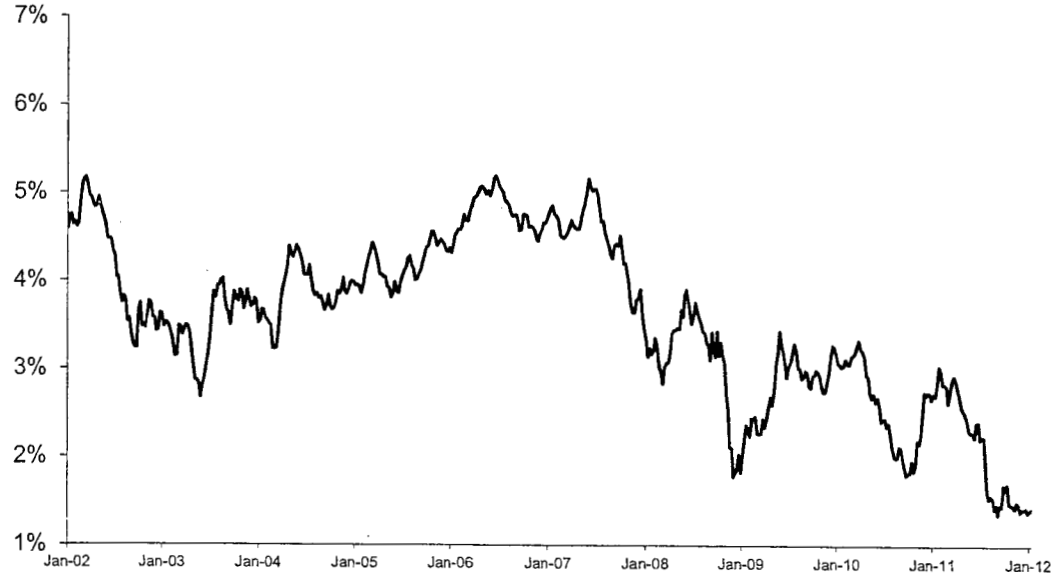


Chart 1 shows that intermediate-term interest rates trended downward from 2002 to mid-2003, trended upward through mid-2007, trended downward through late-2008, trended upward through early-2010, trended downward through late 2010, trended upward to early-2011, and are currently trending down from the existing, relatively low rates.

**Q. What has been the general trend in interest rates longer term?**

A. U.S. Treasury rates from December 1961 - December 2011 are shown in Chart 2. The chart shows that interest rates trended upward through the early-1980s and have trended downward over the last 30 years.


Source: Federal Reserve

**Q. Do these trends suggest anything in terms of cost of equity?**

A. Yes. As previously noted, interest rates and cost of equity tend to move in the same direction; therefore, the cost of equity has generally declined in the past 30 years.

**Q. Do actual returns represent the cost of equity?**

A. No. The cost of equity represents investors' *expected* returns and not realized returns.

**Q. Is there any information available that leads to an understanding of the relationship between the equity returns required for a regulated water utility and those required in the market as a whole?**

A. Yes. A comparison of betas, a component of the CAPM discussed in Section VI, for the water utility industry and the market provide insight into this relationship. In theory, the

market has a beta value of 1.0, with stocks bearing greater risk (less risk) than the market having beta values higher than (lower than) 1.0, respectively. Furthermore, in accordance with the CAPM, the cost of equity capital moves in the same direction as beta. Therefore, because the average beta value (0.71)[1] for a water utility is less than 1.0, the required return on equity for a regulated water utility is below that of the market as a whole.

*Risk*

**Q. Please define risk in relation to cost of capital.**

A. Risk, as it relates to an investment, is the variability or uncertainty of the returns on a particular security. Investors are risk averse and require a greater potential return to invest in relatively greater risk opportunities, i.e., investors require compensation for taking on additional risk. Risk is generally separated into two components. Those components are market risk (systematic risk) and non-market risk (diversifiable risk or firm-specific risk).

**Q. What is market risk?**

A. Market risk or systematic risk is the risk of an investment that cannot be reduced through diversification. Market risk stems from factors that affect all securities, such as recessions, war, inflation and high interest rates. Since these factors affect the entire market they cannot be eliminated through diversification. Market risk does not impact each security to the same degree. The degree to which a given security's return is affected by market fluctuations can be measured using Beta. Beta reflects the business risk and the financial risk of a security.

[1] See Schedule JAC-7.

**Q. Please define business risk.**

A. Business risk is the fluctuation of earnings inherent in a firm's operations and environment, such as competition and adverse economic conditions that may impair its ability to provide returns on investment. Companies in the same or similar line of business tend to experience the same fluctuations in business cycles.

**Q. Please define financial risk.**

A. Financial risk is the fluctuation of earnings, inherent in the use of debt financing, that may impair a firm's ability to provide adequate return; the higher the percentage of debt in a company's capital structure, the greater its exposure to financial risk.

**Q. Do business risk and financial risk affect the cost of equity?**

A. Yes.

**Q. Is a firm subject to any other risk?**

A. Yes. Firms are also subject to unsystematic or firm-specific risk. Examples of unsystematic risk include losses caused by labor problems, nationalization of assets, loss of a big client or weather conditions. Investors can eliminate firm-specific risk by holding a diverse portfolio; thus, it is not of concern to diversified investors.

**Q. How does Vail's financial risk exposure compare to that of Staff's sample group of water companies?**

A. JAC-4 shows the capital structures of the six sample water companies as of December 31, 2011, and Vail's adjusted capital structure as of the December 31, 2011 test year end. As shown, the sample water utilities were capitalized with approximately 51.6 percent debt and 48.4 percent equity, while Vail's capital structure consists of 0.0 percent debt and

100.0 percent equity. Thus, unlike Staff's sample companies, Vail has no debt in its capital structure and, accordingly, has no exposure to financial risk.

**Q. Is firm-specific risk measured by beta?**

A. No. Firm-specific risk is not measured by beta.

**Q. Is the cost of equity affected by firm-specific risk?**

A. No. Since firm-specific risk can be eliminated through diversification, it does not affect the cost of equity.

**Q. Can investors expect additional returns for firm-specific risk?**

A. No. Investors who hold diversified portfolios can eliminate firm-specific risk and, consequently, do not require any additional return. Since investors who choose to be less than fully-diversified must compete in the market with fully-diversified investors, the former cannot expect to be compensated for unique risk.

## VI. ESTIMATING THE COST OF EQUITY

*Introduction*

**Q. Did Staff directly estimate the cost of equity for Vail?**

A. No. Since Vail is not a publicly-traded company, Staff is unable to directly estimate its cost of equity due to the lack of firm-specific market data. Instead, Staff estimated the Company's cost of equity indirectly, using a representative sample group of publicly traded water utilities as a proxy, taking the average of the sample group to reduce the sample error resulting from random fluctuations in the market at the time the information is gathered.

**Q. What companies did Staff select as proxies or comparables for Vail?**

A. Staff's sample consists of the following six publicly-traded water utilities: American States Water, California Water, Connecticut Water Services, Middlesex Water, Aqua America and SJW Corp. Staff chose these companies because they are publicly-traded and receive the majority of their earnings from regulated operations.

**Q. What models did Staff implement to estimate Vail's cost of equity?**

A. Staff used two market-based models to estimate the cost of equity for Vail: the DCF model and the CAPM.

**Q. Please explain why Staff chose the DCF and CAPM models.**

A. Staff chose to use the DCF and CAPM models because they are widely-recognized market-based models and have been used extensively to estimate the cost of equity. An explanation of the DCF and CAPM models follows.

*Discounted Cash Flow Model Analysis*

**Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.**

A. The DCF method of stock valuation is based on the theory that the value of an investment is equal to the sum of the future cash flows generated from the aforementioned investment discounted to the present time. This method uses expected dividends, market price and dividend growth rate to calculate the cost of capital. Professor Myron Gordon pioneered the DCF method in the 1960s. The DCF method has become widely used to estimate the cost of equity for public utilities due to its theoretical merit and its simplicity. Staff used the financial information for the relevant six sample companies in the DCF model and averaged the results to determine an estimated cost of equity for the sample companies.

**Q. Does Staff use more than one version of the DCF?**

A. Yes. Staff uses two versions of the DCF model: the constant-growth DCF and the multi-stage or non-constant growth DCF. The constant-growth DCF assumes that an entity's dividends will grow indefinitely at the same rate. The multi-stage growth DCF model assumes the dividend growth rate will change at some point in the future.

The Constant-Growth DCF

**Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?**

A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2 :

$$K = \frac{D_1}{P_0} + g$$

where :
$K$ = the cost of equity
$D_1$ = the expected annual dividend
$P_0$ = the current stock price
$g$ = the expected infinite annual growth rate of dividends

Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of $10 per share, an expected annual dividend of $0.45 per share and an expected dividend growth rate of 3.0 percent per year has a cost of equity to the entity of 7.5 percent reflected by the sum of the dividend yield ($0.45/ $10 = 4.5 percent) and the 3.0 percent annual dividend growth rate.

**Q. How did Staff calculate the expected dividend yield ($D_1/P_0$) component of the constant-growth DCF formula?**

A. Staff calculated the expected yield component of the DCF formula by dividing the expected annual dividend ($D_1$) by the spot stock price ($P_0$) after the close of market on January 23, 2013, as reported by *MSN Money*.

**Q. Why did Staff use the January 23, 2013, spot price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?**

A. The current, rather than historic, market price is used in order to be consistent with financial theory. In accordance with the Efficient Market Hypothesis, the current stock price is reflective of all available information on a stock, and as such reveals investors' expectations of future returns. Use of historical average stock prices illogically discounts the most recent information in favor of less recent information. The latter is stale and is representative of underlying conditions that may have changed.

**Q. How did Staff estimate the dividend growth (g) component of the constant-growth DCF model represented by Equation 2?**

A. The dividend growth component used by Staff is determined by the average of six different estimation methods, as shown in Schedule JAC-8. Staff calculated historical and projected growth estimates on dividend-per-share ("DPS"),[2] earnings-per-share ("EPS")[3] and sustainable growth bases.

[2] Derived from information provided by *Value Line*.
[3] Derived from information provided by *Value Line*.

**Q. Why did Staff examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?**

A. Historic and projected EPS growth are used because dividends are related to earnings. Dividend distributions may exceed earnings in the short run, but cannot continue indefinitely. In the long term, dividend distributions are dependent on earnings.

**Q. How did Staff estimate historical DPS growth?**

A. Staff estimated historical DPS growth by calculating a compound annual DPS growth rate for each of its sample companies over the 10-year period, 2002-2011. As shown in Schedule JAC-5, the average historical DPS growth rate for the sample was 3.4 percent.

**Q. How did Staff estimate projected DPS growth?**

A. Staff calculated an average of the projected DPS growth rates for the sample water utilities from *Value Line* through the period, 2015-2017. The average projected DPS growth rate is 3.7 percent, as shown in Schedule JAC-5.

**Q. How did Staff estimate historical EPS growth rate?**

A. Staff estimated historical EPS growth by calculating a compound annual EPS growth rate for each of its sample companies over the 10-year period, 2002-2011. As shown in Schedule JAC-5, the average historical EPS growth rate for the sample was 4.2 percent.

**Q. How did Staff estimate projected EPS growth?**

A. Staff calculated an average of the projected EPS growth rates for the sample water utilities from *Value Line* through the period, 2015-2017. The average projected EPS growth rate is 7.0 percent, as shown in Schedule JAC-5.

**Q. How does Staff calculate its historical and projected sustainable growth rates?**

A. Historical and projected sustainable growth rates are calculated by adding their respective retention growth rate terms (br) to their respective stock financing growth rate terms (vs), as shown in Schedule JAC-6.

**Q. What is retention growth?**

A. Retention growth is the growth in dividends due to the retention of earnings. The retention growth concept is based on the theory that dividend growth cannot be achieved unless the company retains and reinvests some of its earnings. The retention growth is used in Staff's calculation of sustainable growth shown in Schedule JAC-6.

**Q. What is the formula for the retention growth rate?**

A. The retention growth rate is the product of the retention ratio and the book/accounting return on equity. The retention growth rate formula is:

Equation 3 :

$$\text{Retention Growth Rate} = br$$

where : $b$ = the retention ratio (1 – dividend payout ratio)
$r$ = the accounting/book return on common equity

**Q. How did Staff calculate the average historical retention growth rate (br) for the sample water utilities?**

A. Staff calculated the mean of the 10-year average historical retention rate for each sample company over the period, 2002-2011. As shown in Schedule JAC-6, the historical average retention (br) growth rate for the sample is 2.9 percent.

**Q. How did Staff estimate its projected retention growth rate (br) for the sample water utilities?**

A. Staff used the retention growth projections for the sample water utilities for the period, 2015-2017, from *Value Line.* As shown in Schedule JAC-6, the projected average retention growth rate for the sample companies is 4.3 percent.

**Q. When can retention growth provide a reasonable estimate of future dividend growth?**

A. The retention growth rate is a reasonable estimate of future dividend growth when the retention ratio is reasonably constant and the entity's market price to book value ("market-to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably constant in recent years. However, the market-to-book ratio for the sample water utilities is 2.1, notably higher than 1.0, as shown in Schedule JAC-7.

**Q. Is there any financial implication of a market-to-book ratio greater than 1.0?**

A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to earn an accounting/book return on its equity that exceeds its cost of equity. The relationship between required returns and expected cash flows is readily observed in the fixed securities market. For example, assume an entity contemplating issuance of bonds with a face value of $10 million at either 6 percent or 8 percent and, thus, paying annual interest of $600,000 or $800,000, respectively. Regardless of investors' required return on similar bonds, investors will be willing to pay more for the bonds if issued at 8 percent than if the bonds are issued at 6 percent. For example, if the current interest rate required by investors is 6 percent, then they would bid $10 million for the 6 percent bonds and more than $10 million for the 8 percent bonds. Similarly, if equity investors require a 9 percent return and expect an entity to earn accounting/book returns of 13 percent, the

market will bid up the price of the entity's stock to provide the required return of 9 percent.

**Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of equity analyses in recent years?**

A. Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates.

**Q. Do the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity in this case continue to include a stock financing growth rate term?**

A. Yes.

**Q. What is stock financing growth?**

A. Stock financing growth is the growth in an entity's dividends due to the sale of stock by that entity. Stock financing growth is a concept derived by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[4] Stock financing growth is the product of the fraction of the funds raised from the sale of stock that accrues to existing shareholders (v) and the fraction resulting from dividing the funds raised from the sale of stock by the existing common equity (s).

[4] Gordon, Myron J. *The Cost of Capital to a Public Utility.* MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

**Q. What is the mathematical formula for the stock financing growth rate?**

A. The mathematical formula for stock financing growth is:

Equation 4:

$$\text{Stock Financing Growth} = vs$$

where: $v$ = Fraction of the funds raised from the sale of stock that accrues to existing shareholders

$s$ = Funds raised from the sale of stock as a fraction of the existing common equity

**Q. How is the variable *v* presented above calculated?**

A. Variable $v$ is calculated as follows:

Equation 5:

$$v = 1 - \left( \frac{book\ value}{market\ value} \right)$$

For example, assume that a share of stock has a $30 book value and is selling for $45. Then, to find the value of $v$, the formula is applied:

$$v = 1 - \left( \frac{30}{45} \right)$$

In this example, $v$ is equal to 0.33.

**Q. How is the variable *s* presented above calculated?**

A. Variable $s$ is calculated as follows:

Equation 6:

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

For example, assume that an entity has $150 in existing equity, and it sells $30 of stock. Then, to find the value of *s*, the formula is applied:

$$s = \left(\frac{30}{150}\right)$$

In this example, *s* is equal to 20.0 percent.

**Q. What is the *vs* term when the market-to-book ratio is equal to 1.0?**

A. A market-to-book ratio of 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders, i.e., the term *v* is equal to zero (0.0). Consequently, the *vs* term is also equal to zero (0.0). When stock financing growth is zero, dividend growth depends solely on the *br* term.

**Q. What is the effect of the *vs* term when the market-to-book ratio is greater than 1.0?**

A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment greater than the cost of equity. Equation 5 shows that, when the market-to-book ratio is greater than 1.0, the *v* term is also greater than zero. The excess by which new shares are issued and sold over book value per share of outstanding stock is a contribution that accrues to existing stockholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Continued growth from the *vs* term is dependent upon the

continued issuance and sale of additional shares at a price that exceeds book value per share.

**Q. What *vs* estimate did Staff calculate from its analysis of the sample water utilities?**

A. Staff estimated an average stock financing growth of 2.0 percent for the sample water utilities, as shown in Schedule JAC-6.

**Q. What would occur if an entity had a market-to-book ratio greater than 1.0 as a result of investors expecting earnings to exceed its cost of equity, and subsequently experienced newly-authorized rates equal only to its cost of equity?**

A. *Ceteris paribus*, holding all other factors constant, one would expect market forces to move the company's stock price lower, closer to a market-to-book ratio of 1.0, to reflect investor expectations of reduced expected future cash flows.

**Q. If the average market-to-book ratio of Staff's sample water utilities were to fall to 1.0 due to authorized ROEs equaling their cost of equity, would inclusion of the vs term be necessary to Staff's constant-growth DCF analysis?**

A. No. As discussed above, when the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders because the *v* term equals to zero and, consequently, the *vs* term also equals zero. When the market-to-book ratio equals 1.0, dividend growth depends solely on the *br* term. Staff's inclusion of the *vs* term assumes that the market-to-book ratio continues to exceed 1.0 and that the water utilities will continue to issue and sell stock at prices above book value with the effect of benefitting existing shareholders.

**Q. What are Staff's historical and projected sustainable growth rates?**

A. Staff's estimated historical sustainable growth rate is 4.9 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth rate is 6.3 percent based on retention growth projected by *Value Line.* Schedule JAC-6 presents Staff's estimates of the sustainable growth rate.

**Q. What is Staff's expected infinite annual growth rate in dividends?**

A. Staff's expected dividend growth rate (g) is 4.9 percent, which is the average of historical and projected DPS, EPS, and sustainable growth estimates. Staff's calculation of the expected infinite annual growth rate in dividends is shown in Schedule JAC-8.

**Q. What is Staff's constant-growth DCF estimate for the sample utilities?**

A. Staff's constant-growth DCF estimate is 8.0 percent, as shown in Schedule JAC-3.

The Multi-Stage DCF

**Q. Why did Staff implement the multi-stage DCF model to estimate Vail's cost of equity?**

A. Staff generally uses the multi-stage DCF model to consider the assumption that dividends may not grow at a constant rate. The multi-stage DCF uses two stages of growth, the first stage (near-term) having a four-year duration, followed by the second stage (long-term) of constant growth.

**Q. What is the mathematical formula for the multi-stage DCF?**

A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : $P_0$ = current stock price
$D_t$ = dividends expected during stage 1
$K$ = cost of equity
$n$ = years of non – constant growth
$D_n$ = dividend expected in year n
$g_n$ = constant rate of growth expected after year n

**Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?**

A. First, Staff projected future dividends for each of the sample water utilities using near-term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which equates the present value of the forecasted dividends to the current stock price for each of the sample water utilities. Lastly, Staff calculated an overall sample average cost of equity estimate.

**Q. How did Staff calculate near-term (stage-1) growth?**

A. The stage-1 growth rate is based on *Value Lines*'s projected dividends for the next twelve months, when available, and on the average dividend growth (g) rate of 4.9 percent, calculated in Staff's constant DCF analysis for the remainder of the stage.

**Q. How did Staff estimate long-term (stage-2) growth?**

A. Staff calculated the stage-2 growth rate using the arithmetic mean rate of growth in Gross Domestic Product ("GDP") from 1929 to 2011.[5] Using the GDP growth rate assumes that the water utility industry is expected to grow at the same rate as the overall economy.

**Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?**

A. Staff used 6.5 percent to estimate the stage-2 growth rate.

**Q. What is Staff's multi-stage DCF estimate for the sample utilities?**

A. Staff's multi-stage DCF estimate is 9.5 percent, as shown in Schedule JAC-3.

**Q. What is Staff's overall DCF estimate for the sample utilities?**

A. Staff's overall DCF estimate is 8.8 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (8.0%) and multi-stage DCF (9.5%) estimates, as shown in Schedule JAC-3.

*Capital Asset Pricing Model*

**Q. Please describe the CAPM.**

A. The CAPM is used to determine the prices of securities in a competitive market. The CAPM model describes the relationship between a security's investment risk and its market rate of return. Under the CAPM, an investor requires the expected return of a security to equal the rate on a risk-free security plus a risk premium. If the investor's expected return does not meet or beat the required return, the investment is not economically justified. The model also assumes that investors will sufficiently diversify

[5] www.bea.doc.gov.

their investments to eliminate any non-systematic or unique risk.[6] In 1990, Professors Harry Markowitz, William Sharpe, and Merton Miller earned the Nobel Prize in Economic Sciences for their contribution to the development of the CAPM.

**Q. Did Staff use the same sample water utilities in its CAPM and DCF cost of equity estimation analyses?**

A. Yes. Staff's CAPM cost of equity estimation analysis uses the same sample water companies as its DCF cost of equity estimation analysis.

**Q. What is the mathematical formula for the CAPM?**

A. The mathematical formula for the CAPM is:

Equation 8:

$$K = R_f + \beta (R_m - R_f)$$

where:
$R_f$ = risk free rate
$R_m$ = return on market
$\beta$ = beta
$R_m - R_f$ = market risk premium
$K$ = expected return

The equation shows that the expected return (K) on a risky asset is equal to the risk-free interest rate ($R_f$) plus the product of the market risk premium ($R_m - R_f$) multiplied by beta ($\beta$) where beta represents the riskiness of the investment relative to the market.

[6] The CAPM makes the following assumptions: 1) single holding period; 2) perfect and competitive securities market; 3) no transaction costs; 4) no restrictions on short selling or borrowing; 5) the existence of a risk-free rate; and 6) homogeneous expectations.

**Q. What is the risk-free rate?**

A. The risk-free rate is the rate of return of an investment free of default risk.

**Q. What does Staff use as surrogates to represent estimations of the risk-free rates of interest in its historical and current market risk premium CAPM methods?**

A. Staff uses separate parameters as surrogates for the estimations of the risk-free rates of interest for the historical market risk premium CAPM cost of equity estimation and the current market risk premium CAPM cost of equity estimation. Staff uses the average of three (5-, 7-, and 10-year) intermediate-term U.S. Treasury securities' spot rates in its historical market risk premium CAPM cost of equity estimation, and the 30-year U.S. Treasury bond spot rate in its current market risk premium CAPM cost of equity estimation. Rates on U.S. Treasuries are largely verifiable and readily available.

**Q. What does beta measure?**

A. Beta is a measure of a security's price volatility, or systematic risk, relative to the market as a whole. Since systematic risk cannot be diversified away, it is the only risk that is relevant when estimating a security's required return. Using a baseline market beta coefficient of 1.0, a security having a beta value less than 1.0 will be less volatile (i.e., less risky) than the market. A security with a beta value greater than 1.0 will be more volatile (i.e., more risky) than the market.

**Q. How did Staff estimate Vail's beta?**

A. Staff used the average of the *Value Line* betas for the sample water utilities as a proxy for the Company's beta. Schedule JAC-7 shows the *Value Line* betas for each of the sample water utilities. The 0.71 average beta coefficient for the sample water utilities is Staff's

estimated beta value for Vail. A security with a beta value of 0.71 has less volatility than the market.

**Q. What is the market risk premium ($R_m - R_f$)?**

A. The market risk premium is the expected return on the market, minus the risk-free rate. Simplified, it is the return an investor expects as compensation for market risk.

**Q. What did Staff use for the market risk premium?**

A. Staff uses separate calculations for the market risk premium in its historical and current market risk premium CAPM methods.

**Q. How did Staff calculate an estimate for the market risk premium in its historical market risk premium CAPM method?**

A. Staff uses the intermediate-term government bond income returns published in the Ibbotson Associates' *Stocks, Bonds, Bills, and Inflation 2012 Yearbook* to calculate the historical market risk premium. Ibbotson Associates calculates the historical risk premium by averaging the historical arithmetic differences between the S&P 500 and the intermediate-term government bond income returns for the period 1926-2011. Staff's historical market risk premium estimate is 7.1 percent, as shown in Schedule JAC-3.

**Q. How did Staff calculate an estimate for the market risk premium in its current market risk premium CAPM method?**

A. Staff solves equation 8 above to arrive at a market risk premium using a DCF-derived expected return (K) of 12.87 (2.2 + 10.67[7]) percent using the expected dividend yield (2.2 percent over the next twelve months) and the annual per share growth rate (10.67 percent)

[7] The three to five year price appreciation is 50%. $1.50^{0.25} - 1 = 10.67\%$.

that *Value Line* projects for all dividend-paying stocks under its review[8] along with the current long-term risk-free rate (30-year Treasury note at 3.02 percent) and the market's average beta of 1.0. Staff calculated the current market risk premium as 9.85 percent,[9] as shown in Schedule JAC-3.

**Q. What is the result of Staff's historical market risk premium CAPM and current market risk premium CAPM cost of equity estimations for the sample utilities?**

A. Staff's cost of equity estimates are 6.3 percent using the historical market risk premium CAPM and 10.0 percent using the current market risk premium CAPM.

**Q. What is Staff's overall CAPM estimate for the sample utilities?**

A. Staff's overall CAPM cost of equity estimate is 8.2 percent which is the average of the historical market risk premium CAPM (6.3 percent) and the current market risk premium CAPM (10.0 percent) estimates, as shown in Schedule JAC-3.

## VII. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS

**Q. What is the result of Staff's constant-growth DCF analysis to estimate the cost of equity for the sample water utilities?**

A. Schedule JAC-3 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

$$k = 3.1\% + 4.9\%$$

$$k = \mathbf{8.0\%}$$

[8] January 25, 2013 issue date.
[9] 12.87% = 3.02% + (1) (9.85%).

Staff's constant-growth DCF estimate of the cost of equity for the sample water utilities is 8.0 percent.

**Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity for the sample utilities?**

A. Schedule JAC-9 shows the result of Staff's multi-stage DCF analysis. The result of Staff's multi-stage DCF analysis is:

| **Company** | **Equity Cost Estimate (k)** |
|---|---|
| American States Water | 9.0% |
| California Water | 9.8% |
| Aqua America | 9.0% |
| Connecticut Water | 9.7% |
| Middlesex Water | 10.3% |
| SJW Corp | 9.2% |
| **Average** | **9.5%** |

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.5 percent.

**Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?**

A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 8.8 percent. Staff calculated an overall DCF cost of equity estimate by averaging Staff's constant growth DCF (8.0 percent) and Staff's multi-stage DCF (9.5 percent) estimates, as shown in Schedule JAC-3.

**Q. What is the result of Staff's historical market risk premium CAPM analysis to estimate of the cost of equity for the sample utilities?**

A. Schedule JAC-3 shows the result of Staff's CAPM analysis using the historical risk premium estimate. The result is as follows:

$$k = 1.3\% + 0.71 * 7.1\%$$

$$k = 6.3\%$$

Staff's CAPM estimate (using the historical market risk premium) of the cost of equity to the sample water utilities is 6.3 percent.

**Q. What is the result of Staff's current market risk premium CAPM analysis to estimate the cost of equity for the sample utilities?**

A. Schedule JAC-3 shows the result of Staff's CAPM analysis using the current market risk premium estimate. The result is:

$$k = 3.0\% + 0.71 * 9.8\%$$

$$k = 10.0\%$$

Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the sample water utilities is 10.0 percent.

**Q. What is Staff's overall CAPM estimate of the cost of equity for the sample utilities?**

A. Staff's overall CAPM estimate for the sample utilities is 8.2 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (6.3 percent)

and the current market risk premium CAPM (10.0 percent) estimates, as shown in Schedule JAC-3.

**Q. Please summarize the results of Staff's cost of equity analysis for the sample utilities.**

A. The following table shows the results of Staff's cost of equity analysis:

**Table 2**

| Method | Estimate |
|---|---|
| Average DCF Estimate | 8.8% |
| Average CAPM Estimate | 8.2% |
| **Overall Average** | **8.5%** |

Staff's average estimate of the cost of equity to the sample water utilities is 8.5 percent.

## VIII. FINAL COST OF EQUITY ESTIMATES FOR VAIL

**Q. Please compare Vail's capital structure to that of the six sample water companies.**

A. The average capital structure for the sample water utilities is composed of 48.4 percent equity and 51.6 percent debt, as shown in Schedule JAC-4. Vail's capital structure is composed of 100.0 percent equity and 0.0 percent debt. In this case, since Vail's capital structure is less leveraged than that of the average sample water utilities' capital structure, its stockholders bear less financial risk than the sample water utilities.

**Q. Does Vail's reduced financial risk affect its cost of equity?**

A. Yes. As previously discussed, financial risk is a component of market risk and investors require compensation for market risk. Since Vail's financial risk is less than that of the average sample water companies, its cost of equity is lower than that of the sample water companies.

**Q. Is Staff recommending a downward financial risk adjustment to Vail's cost of equity in recognition of the Company having less exposure to financial risk than the sample water utilities?**

A. No. Because Vail does not have access to the capital markets, Staff is not recommending a downward financial risk adjustment to the Company's cost of equity.

**Q. Does Staff have established criteria for determining when to apply a downward financial risk adjustment?**

A. Yes. Staff normally applies two criteria in assessing whether application of a downward financial risk adjustment is appropriate. The first consideration is whether the utility has a reasonably economical capital structure. Staff considers a capital structure composed of no more than 60 percent equity to meet this condition. If equity exceeds 60 percent, as it does for Vail, Staff considers application of a downward financial risk adjustment to be appropriate if the utility meets the second criteria. The second condition is whether the utility has access to equity capital markets. As noted above, Vail does not have access to the equity capital markets; accordingly, Staff does not recommend a downward financial risk adjustment to the Company's cost of equity.

**Q. Did Staff consider factors other than the results of its technical models in its cost of equity analysis?**

A. Yes. In consideration of the relatively uncertain status of the economy and the market that currently exists, Staff is proposing an Economic Assessment Adjustment to the cost of equity. In this case, Staff recommends a 60 basis point (0.6 percent) upward Economic Assessment Adjustment, as shown in Schedule JAC-3.

**Q. What is Staff's ROE estimate for Vail?**

A. Staff determined a COE estimate of 8.5 percent for Vail based on cost of equity estimates for the sample companies of 8.8 percent for the DCF and 8.2 percent for the CAPM. Staff recommends adoption of a 60 basis point upward Economic Assessment Adjustment resulting in a 9.1 percent Staff-recommended ROE, as shown in Schedule JAC-3.

## IX. RATE OF RETURN RECOMMENDATION

**Q. What overall rate of return did Staff determine for Vail?**

A. Staff determined a 9.1 percent ROR for the Company, as shown in Schedule JAC-1 and the following table:

**Table 3**

| | Weight | Cost | Weighted Cost |
|---|---|---|---|
| Long-term Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 9.1% | 9.1% |
| **Overall ROR** | | | **9.1%** |

## X. STAFF RESPONSE TO COMPANY'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

**Q. Please summarize Mr. Bourassa's analyses and recommendations.**

A. Mr. Bourassa recommends a 10.40 percent ROE based on estimates derived from two constant growth DCF analyses, two CAPM analyses, and two Build-up risk premium models designed as a check for reasonableness to his DCF and CAPM results, using a proxy sample of six publicly-traded water companies. He proposes a capital structure consisting of 0.0 percent long-term debt and 100.0 percent equity. Mr. Bourassa's recommended ROE includes a downward 120 basis point financial risk adjustment, and an

upward 100 basis point small company risk premium. His overall recommended rate of return for the Company is 10.4 percent.

For purposes of his constant growth DCF analyses, Mr. Bourassa gives a 50 percent weight to the estimates derived from his primary Future Growth DCF model and a 50 percent weight to the estimates derived from his Past and Future Growth DCF model; thus, effectively providing an overall 75 percent weight to the results obtained from his Future Growth DCF. In his primary Future Growth DCF model, Mr. Bourassa relies exclusively on analysts' forecasts for EPS growth to estimate the dividend growth (g) component. In his Past and Future Growth DCF model, Mr. Bourassa estimates his dividend growth (g) rate by giving 50 percent weight to historical measures of growth in annual share price, BVPS, EPS and DPS over a five-year period, and 50 percent weight to the dividend growth rate obtained from his primary Future Growth DCF model (See TJB Schedule D-4.4). For purposes of calculating the current dividend yield ($D_0/P_0$) in each of his two constant growth DCF models, Mr. Bourassa claims to use a spot price date of July 10, 2012 for the current market price ($P_0$) of each sample company.[10] However, a check of market trading prices for each of his sample companies on that date suggests he has understated the current market price ($P_0$) for all sample companies except one.

For purposes of his CAPM analyses, Mr. Bourassa presents estimates based upon both historical and current market risk premia. In both, however, he uses a 3.2 percent forecasted risk free ($R_f$) rate based, in part, upon estimates from Value Line and Blue Chip Consensus Forecasts for the 30-year long-term Treasury yield covering the period, 2012-2013 (See TJB Schedule D-4.10). In his Current Market Risk Premium CAPM model, Mr. Bourassa calculates a DCF-derived market risk premium ($R_m - R_f$), using as

[10] Direct Testimony of Thomas J. Bourassa, p. 29, lines 19-21; and TJB Schedule D-4.7, footnote 1.

inputs *Value Line's* current dividend yield and 3-5 year price appreciation projection for the 1700 stocks under its review (See TJB Schedule D-4.11).

**Q. Does Staff have any comments on Mr. Bourassa's sole reliance on analysts' forecasts of EPS growth rates to estimate dividend growth rate (g) in his Future Growth DCF analysis?**

A. Yes. Exclusive reliance on analysts' forecasts of earnings growth to forecast DPS is inappropriate because it assumes that investors do not look at other relevant information such as historical dividend and earnings growth. Generally, analysts' forecasts are known to be overly optimistic. Sole use of analysts' forecasts to calculate the expected dividend growth rate, (g), serves to inflate that component of the DCF model and, consequently, the estimated cost of equity. The appropriate growth rate to use in the DCF model is the dividend growth rate expected by *investors*, not by analysts. Investors are assumed to be rational, and as such will want to take into consideration all relevant available information prior to making an investment decision. Therefore, it is reasonable to assume that investors would consider both historical measures of past growth, as well as analysts' forecasts of future growth.

**Q. Does the narrative of Mr. Bourassa's Direct Testimony state the fact that he relies exclusively on analysts' forecasts of EPS growth to estimate the expected dividend growth rate (g) in his Future Growth DCF model?**

A. No. Mr. Bourassa states only that "I have used analyst growth forecasts, where available,"[11] and that "I use as a primary estimate of growth analysts' forecasts of growth."[12] Only when referring to TJB Schedule D-4.6 does one learn that he has relied exclusively on analysts' forecasts of EPS growth to estimate (g).

[11] Direct testimony of Mr. Thomas J. Bourassa, page 30, lines 1-2.
[12] Direct testimony of Mr. Thomas J. Bourassa, page 30, lines 13-14.

**Q. Does Staff have evidence to support its assertion that exclusive reliance on analysts' forecasts of earnings growth in the DCF model would result in inflated cost of equity estimates?**

A. Yes. Experts in the financial community have commented on the optimism in analysts' forecasts of future earnings.[13] A study cited by David Dreman in his book *Contrarian Investment Strategies: The Next Generation* found that *Value Line* analysts were optimistic in their forecasts by 9 percent annually, on average for the 1987 – 1989 period. Another study conducted by David Dreman found that between 1982 and 1997, analysts overestimated the growth of earnings of companies in the S&P 500 by 188 percent.

Burton Malkiel, of Princeton University, conducted a study of the 1- and 5-year earnings forecasts made by some of the most respected names in the investment business. His results showed that when compared with actual earnings growth rates, the 5-year forecasts made by professional analysts were far less accurate than estimates derived from several naïve forecasting models, such as the long-run growth rate in national income. In the following excerpt from his book, *A Random Walk Down Wall Street*, Professor Malkiel discusses the results of his study:

> When confronted with the poor record of their five-year growth estimates, *the security analysts honestly, if sheepishly, admitted that five years ahead is really too far in advance to make reliable projections*. They protested that although long-term projections are admittedly important, they really ought to be judged on their ability to project earnings changes one year ahead. Believe it or not, it turned out that their one-year forecasts were even worse than their five-year projections.

[13] See Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. p. 100. Dreman, David. *Contrarian Investment Strategies: The Next Generation*. 1998. Simon & Schuster. New York. pp. 97-98. Malkiel, Burton G. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New York. p. 175.
Testimony of Professors Myron J. Gordon and Lawrence I. Gould, consultant to the Trial Staff (Common Carrier Bureau), FCC Docket 79-63, p. 95.

> The analysts fought back gamely. They complained that it was unfair to judge their performance on a wide cross section of industries, because earnings for high-tech firms and various "cyclical" companies are notoriously hard to forecast. *"Try us on utilities," one analyst confidently asserted. At the time they were considered among the most stable group of companies because of government regulation. So we tried it and they didn't like it. Even the forecasts for the stable utilities were far off the mark.*[14] (Emphasis added)

**Q. Are investors aware of the problems related to analysts' forecasts?**

A. Yes. In addition to books, there are numerous published articles appearing in *The Wall Street Journal* and other financial publications that cast doubt on the accuracy of research analysts' forecasts.[15] Investors, being keenly aware of these inherent biases in forecasts, will use other methods to assess future growth.

**Q. Should DPS growth be considered in a DCF analysis?**

A. Yes. As previously stated in Section VI of this testimony, the current market price of a stock is equal to the present value of all expected future dividends, not future earnings. Professor Jeremy Siegel from the Wharton School of Finance stated:

> Note that the price of the stock is always equal to the present value of all future *dividends* and not the present value of future earnings. Earnings not paid to investors can have value only if they are paid as dividends or other cash disbursements at a later date. Valuing stock as the present discounted value of future earnings is manifestly wrong and greatly overstates the value of the firm.[16]

[14] Malkiel, Burton G. A Random Walk Down Wall Street. 2003. W.W. Norton & Co. New York. p. 175

[15] See Smith, Randall & Craig, Suzanne. "Big Firms Had Research Ploy: Quiet Payments Among Rivals." *The Wall Street Journal*. April 30, 2003. Brown, Ken. "Analysts: Still Coming Up Rosy." *The Wall Street Journal*. January 27, 2003. p. C1. Karmin, Craig. "Profit Forecasts Become Anybody's Guess." *The Wall Street Journal*. January 21, 2003. p. C1. Gasparino, Charles. "Merrill Lynch Investigation Widens." *The Wall Street Journal*. April 11, 2002. p. C4. Elstein, Aaron. "Earnings Estimates Are All Over the Map." *The Wall Street Journal*. August 2, 2001. p. C1. Dreman, David. "Don't Count on those Earnings Forecasts." *Forbes*. January 26, 1998. p. 110.

[16] Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. P. 93.

For valuation purposes, therefore, earnings paid out in the form of a dividend have paramount relevancy to investors. Dividends, unlike earnings, can not be manipulated or overstated. Thus, historical DPS growth should receive appropriate consideration when estimating the market cost of equity in the DCF model.

**Q. Does Staff have reason to believe that Mr. Bourassa has overstated the current dividend yield ($D_0/P_0$) component in each of his two constant growth DCF models?**

A. Yes. In his testimony, Mr. Bourassa states that he used a spot price date of July 10, 2012 to obtain current market ($P_0$) prices for each of his six sample companies. Without exception, however, a check of market trading prices for that date reveal that the spot prices presented in TJB Schedule D-4.7 do not fall within the actual July 10, 2012 trading range for any of Mr. Bourassa's sample companies, and that with one exception (SJW Corporation), the current market ($P_0$) price displayed for each sample company has been understated.

**Q. What affect does an understated current market ($P_0$) price have upon the calculation of a current dividend ($D_0/P_0$) yield?**

A. Because the ($P_0$) value is in the denominator of the current dividend ($D_0/P_0$) yield equation, an understatement to ($P_0$) results in an overstatement to ($D_0/P_0$).

**Q. Does an overstatement to the current dividend ($D_0/P_0$) yield flow through to the calculation of next year's expected dividend ($D_1/P_0$) yield in the DCF model?**

A. Yes, and the overstatement to the expected dividend yield is magnified, as ($D_1/P_0$) represents the current dividend yield ($D_0/P_0$) multiplied by the quantity (1 + g). Furthermore, this magnified overstatement to ($D_1/P_0$) ultimately flows through to the estimate to be derived for the cost (k) of equity from the DCF model.

**Q. Did Staff endeavor to quantify the magnitude of the overstatement to Mr. Bourassa's DCF cost of equity estimates stemming from the understatement of his July 10, 2012 spot prices ($P_0$)?**

A. Yes, Staff has prepared two Exhibits with which to do so. In Exhibit JAC-A, Staff presents corrections to TJB Schedule D-4.7, demonstrating that Mr. Bourassa's understated July 10, 2012 spot ($P_0$) prices led to an overstatement of his current dividend ($D_0/P_0$) yield of 17.4 basis points. In Exhibit JAC-B, Staff presents corrections to TJB Schedule D-4.8, and demonstrates that Mr. Bourassa's 17.4 basis point overstatement to the current dividend ($D_0/P_0$) yield ultimately resulted in a 20 basis point overstatement to both the expected dividend ($D_1/P_0$) yield and his DCF estimate for the market cost (k) of equity. (Please refer to Staff Exhibits JAC-A and JAC-B for details, as well as the written observation accompanying each.)

**Q. How does Mr. Bourassa calculate the expected dividend growth (g) rate used in his Past and Future Growth DCF model?**

A. Mr. Bourassa estimates the expected dividend growth rate by providing 50 percent weight to historical measures of growth in average annual share price, book value per share, earnings per share and dividends per share for his sample companies over a five-year period and 50 percent weight to the average of analysts' forecasts for EPS growth used in his Future Growth DCF (See TJB Schedule D-4.4).

**Q. Does Staff have any comment on Mr. Bourassa's use of growth in average annual share price to estimate the expected dividend growth (g) component in his Past and Future Growth DCF model?**

A. Yes. In and of itself, share price appreciation is not a determinant of dividend growth, and for this reason Staff considers its use as a growth parameter to be inappropriate. However,

as Mr. Bourassa has utilized it as a parameter by which to estimate dividend growth, Staff would point out that in both his five- and ten-year historical growth DCF analyses, share price growth has exceeded that of dividend growth. Specifically, in his five-year historical growth analysis (See TJB Schedule D-4.4), average share price growth (4.19%) exceeded average DPS growth (3.33%) by 25.8 percent (((.0419/.0333) – 1) = 25.8%), and in his ten-year historical growth analysis (See TJB Schedule D-4.5), average share price growth (5.27%) exceeded average DPS growth (3.08%) by 71.1 percent (((.0527/.0308) – 1) = 71.1%).

**Q. As it relates to the cost of equity, what is the significance of Mr. Bourassa's sample water companies having experienced share price growth in excess of DPS growth over both the last five- and ten-year periods?**

A. Simply stated, it is an indication that the cost of equity for publicly-traded water utilities has fallen over each of the last 5 and 10 year periods. When the market price per share of common stock for a given firm rises faster than does the dividend paid on a per share basis, the dividend yield falls. As dividend yields fall, investors pay more for an equivalent unit of return on their investment, resulting in a lower cost of equity. Markets are efficient, and because prices for publicly traded stocks can rise only if investors are willing to bid up the share price, when share price growth exceeds DPS growth over a five- or ten-year period, the willingness of investors to continue to bid up share prices is reflective of investor expectations that market returns have fallen. Thus, Mr. Bourassa's use of share price growth increases his cost of equity estimate at a time when share price growth actually reflects a decrease in cost of equity. This incongruous outcome is the result of choosing an inappropriate parameter for dividend growth in the DCF model.

**Q. Turning to Mr. Bourassa's CAPM analyses, does Staff agree with his use of a forecasted risk-free interest rate?**

A. No. The appropriate risk-free interest rate to be used is the current rate borne by investors in the market. Use of a forecasted risk-free rate only serves to overstate the estimated market cost of equity.

**Q. What risk-free rate does Mr. Bourassa use in his CAPM analyses?**

A. In both his historical and current market risk premia CAPM analyses, Mr. Bourassa uses a forecasted risk-free rate ($R_f$ ) based, in part, upon estimates from Value Line and Blue Chip Consensus Forecasts for the 30-year long-term Treasury yield covering the period, 2012-2013. The forecasted rate used by Mr. Bourassa in his CAPM analyses is 3.2 percent. At present, the current 30-year long-term Treasury yield is 3.0 percent, suggesting that he has overstated the risk-free rate in his CAPM analysis by 20 basis points.

**Q. For purposes of his Current Market Risk Premium CAPM analysis, how does Mr. Bourassa compute the current market risk premium ($R_m - R_f$) component?**

A. As shown in TJB Schedule D-4.11, Mr. Bourassa computes a DCF-derived current market risk premium utilizing as inputs the average current dividend yield and 3 to 5 year price appreciation potential growth rate projected for the 1700 stocks under its review. A review of TJB Schedule D-4.11 shows that Mr. Bourassa's recommended dividend yield ($D_0/P_0$) is 2.74 percent, and that his recommended growth (g) rate based upon Value Line's 3-5 year price appreciation potential is 16.64 percent (See TJB Schedule D-4.11, footnotes 1 and 3). However, this Value Line dividend yield is currently 2.2 percent (not 2.74%), and a growth rate based upon Value Line's projected 3-5 year current price appreciation of 50 percent would translate into an annual compound growth rate of 10.67

percent (not 16.64%). Accordingly, Mr. Bourassa's computation has significantly overstated the current market risk ($R_m - R_f$) premium in his Current Market Risk Premium CAPM.

**Q. Does Staff have any comment regarding Mr. Bourassa's proposed 100 basis point small company risk premium?**

A. Yes. The Commission previously ruled in Decision No. 64282[17] for Arizona Water that firm size does not warrant recognition of a risk premium stating, "We do not agree with the Company's proposal to assign a risk premium to Arizona Water based on it size relative to other publicly traded water utilities...." The Commission confirmed its previous ruling in Decision No. 64727[18] for Black Mountain Gas agreeing with Staff that "the 'firm size phenomenon' does not exist for regulated utilities, and that therefore there is no need to adjust for risk for small firm size in utility regulation." All companies have firm-specific risks; therefore, the existence of unique risks for a company does not lead to the conclusion that its total risk is greater than other entities. Moreover, as previously discussed, investors cannot expect compensation for firm-specific risk since it can be eliminated through diversification.

## XI. CONCLUSION

**Q. Please summarize Staff's recommendations.**

A. Staff recommends that the Commission adopt an 9.1 percent overall rate of return for the Company based on a capital structure composed of 0.0 percent debt and 100.0 percent equity, Staff's 8.5 percent cost of equity estimate, and Staff's 60 basis point (0.6 percent) upward economic assessment adjustment.

[17] Dated December 28, 2001.
[18] Dated April 17, 2002.

**Q. Does this conclude your Direct Testimony?**

A. Yes, it does.

**Vail Water Company - Cost of Capital Calculation**
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

| [A] | [B] | [C] | [D] |
|---|---|---|---|
| Description | Weight (%) | Cost | Weighted Cost |
| Staff Recommended Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 9.1% | 9.1% |
| Weighted Average Cost of Capital | | | **9.1%** |
| Company Proposed Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 10.4% | 10.4% |
| Weighted Average Cost of Capital | | | **10.4%** |

**[D] : [B] x [C]**

**Supporting Schedules: JAC-3 and JAC-4.**

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Vail Water Company - Cost of Capital Calculation
Final Cost of Equity Estimates
Sample Water Utilities

| [A] | [B] | | [C] | | [D] | | [E] |
|---|---|---|---|---|---|---|---|
| **DCF Method** | | | $D_1/P_0$ [1] | + | $g$ [2] | = | **k** |
| Constant Growth DCF Estimate | | | 3.1% | + | 4.9% | = | 8.0% |
| Multi-Stage DCF Estimate | | | | | | = | 9.5% |
| Average DCF Estimate | | | | | | | **8.8%** |
| **CAPM Method** | **Rf** | + | $\beta$ [5] | x | **(Rp)** | = | **k** |
| Historical Market Risk Premium [3] | 1.3% | + | 0.71 | x | 7.1% [6] | = | 6.3% |
| Current Market Risk Premium [4] | 3.0% | + | 0.71 | x | 9.8% [7] | = | 10.0% |
| Average CAPM Estimate | | | | | | | **8.2%** |
| | | | | | Average of Overall Estimates | | **8.5%** |
| | | | | | Economic Assessment Adjustment | | 0.6% |
| | | | | | Sub-Total | | 9.1% |
| | | | | | Financial risk adjustment | | 0.0% |
| | | | | | **Total** | | **9.1%** |

1 MSN Money and Value Line

2 Schedule JAC-8

3 Risk-free rate (Rf) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustreas.gov

4 Risk-free rate (Rf) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustreas.gov

5 Value Line

6 Historical Market Risk Premium (Rp) calculated from Ibbotson Associates SBBI 2012 Yearbook data

7 Testimony

Vail Water Company - Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

| [A] Company | [B] Debt | [C] Common Equity | [D] Total |
|---|---|---|---|
| American States Water | 46.0% | 54.0% | 100.0% |
| California Water | 53.3% | 46.7% | 100.0% |
| Aqua America | 53.9% | 46.1% | 100.0% |
| Connecticut Water | 57.1% | 42.9% | 100.0% |
| Middlesex Water | 43.3% | 56.7% | 100.0% |
| SJW Corp | 55.7% | 44.3% | 100.0% |
| Average Sample Water Utilities | **51.6%** | **48.4%** | **100.0%** |
| Vail Water - Actual Capital Structure | **0.0%** | **100.0%** | **100.0%** |

**Source:**
**Sample Water Companies from Value Line**

Vail Water Company - Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|
| Company | Dividends Per Share **2003 to 2012** DPS[1,2] | Dividends Per Share Projected DPS[1,3] | Earnings Per Share **2002 to 2011** EPS[1] | Earnings Per Share Projected EPS[1] |
| American States Water | 3.9% | 5.9% | 5.1% | 4.7% |
| California Water | 1.2% | 3.4% | 6.2% | 8.6% |
| Aqua America | 7.7% | 4.5% | 7.3% | 5.6% |
| Connecticut Water | 1.7% | 3.5% | 0.4% | 9.1% |
| Middlesex Water | 1.7% | 1.9% | 2.4% | 8.3% |
| SJW Corp | 4.4% | 3.0% | 3.7% | 5.5% |
| Average Sample Water Utilities | **3.4%** | **3.7%** | **4.2%** | **7.0%** |

1 Value Line

2 Value Line -- Ten- year historical dividend growth updated from 2003-2012 as it is known and measureable.

3 Value Line -- Projected DPS growth covers the four-year period, 2012-2016.

Vail Water Company - Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|
| Company | Retention Growth **2002 to 2011** br | Retention Growth Projected br | Stock Financing Growth vs | Sustainable Growth **2002 to 2011** br + vs | Sustainable Growth Projected br + vs |
| American States Water | 3.6% | 5.3% | 2.5% | 6.1% | 7.8% |
| California Water | 2.2% | 4.8% | 2.2% | 4.4% | 7.0% |
| Aqua America | 4.4% | 5.2% | 2.3% | 6.7% | 7.6% |
| Connecticut Water | 2.2% | 4.0% | 1.0% | 3.2% | 5.0% |
| Middlesex Water | 1.3% | 3.3% | 3.7% | 5.0% | 7.0% |
| SJW Corp | 3.7% | 3.2% | 0.1% | 3.8% | 3.3% |
| Average Sample Water Utilities | **2.9%** | **4.3%** | **2.0%** | **4.9%** | **6.3%** |

**[B]: Value Line**
**[C]: Value Line**
**[D]: Value Line and MSN Money**
**[E]: [B]+[D]**
**[F]: [C]+[D]**

Vail Water Company - Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|
| Company | Symbol | Spot Price 1/23/2013 | Book Value | Mkt To Book | *Value Line* Beta $\beta$ | Raw Beta $\beta raw$ |
| American States Water | AWR | **51.03** | 22.26 | 2.3 | **0.70** | 0.52 |
| California Water | CWT | **19.35** | 11.40 | 1.7 | **0.65** | 0.45 |
| Aqua America | WTR | **26.99** | 9.49 | 2.8 | **0.60** | 0.37 |
| Connecticut Water | CTWS | **29.76** | 13.67 | 2.2 | **0.75** | 0.60 |
| Middlesex Water | MSEX | **19.52** | 11.97 | 1.6 | **0.70** | 0.52 |
| SJW Corp | SJW | **26.77** | 15.36 | 1.7 | **0.85** | 0.75 |
| Average | | | | **2.1** | **0.71** | **0.53** |

**[C]: Msn Money**

**[D]: Value Line**

**[E]: [C] / [D]**

**[F]: Value Line**

**[G]: (-0.35 + [F]) / 0.67**

Vail Water Company - Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

| [A] | [B] |
|---|---|
| Description | g |
| DPS Growth - Historical[1] | 3.4% |
| DPS Growth - Projected[1] | 3.7% |
| EPS Growth - Historical[1] | 4.2% |
| EPS Growth - Projected[1] | 7.0% |
| Sustainable Growth - Historical[2] | 4.9% |
| Sustainable Growth - Projected[2] | 6.3% |
| Average | **4.9%** |

1 Schedule JAC-5

2 Schedule JAC-6

Vail Water Company - Cost of Capital Calculation
Multi-Stage DCF Estimates
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [H] | [I] |
|---|---|---|---|---|---|---|---|
| Company | Current Mkt. Price ($P_o$)[1] 1/23/2013 | Projected Dividends[2] (Stage 1 growth) ($D_t$) $d_1$ | $d_2$ | $d_3$ | $d_4$ | Stage 2 growth[3] ($g_n$) | Equity Cost Estimate ($K$)[4] |
| American States Water | 51.0 | 1.30 | 1.36 | 1.43 | 1.50 | 6.5% | 9.0% |
| California Water | 19.4 | 0.66 | 0.69 | 0.73 | 0.76 | 6.5% | 9.8% |
| Aqua America | 27.0 | 0.69 | 0.73 | 0.76 | 0.80 | 6.5% | 9.0% |
| Connecticut Water | 29.8 | 0.98 | 1.03 | 1.08 | 1.14 | 6.5% | 9.7% |
| Middlesex Water | 19.5 | 0.77 | 0.81 | 0.85 | 0.89 | 6.5% | 10.3% |
| SJW Corp | 26.8 | 0.74 | 0.78 | 0.82 | 0.86 | 6.5% | 9.2% |

Average **9.5%**

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : $P_0$ = current stock price
$D_t$ = dividends expected during stage 1
$K$ = cost of equity
$n$ = years of non – constant growth
$D_n$ = dividend expected in year n
$g_n$ = constant rate of growth expected after year n

1 [B] see Schedule JAC-7

2 Derived from Value Line Information

3 Average annual growth in GDP 1929 - 2011 in current dollars.

4 Internal Rate of Return of Projected Dividends

Vail Water Company
Docket No. W-01651B-12-0339

Exhibit JAC-A

**Staff Correction to Bourassa Schedule D-4.7**
(Current Dividend Yields for Water Utility Sample Group)

| | Actual Trading Prices as of July 10, 2012 (Bourassa Spot Price Date) | | | | Bourassa Spot Price | Variance from Actual Closing Price | | Bourassa Proposed | | | Staff Corrected | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [A] | [B] | [C] | [D] | [E] | [F] | [G] | [H] | [I] | [J] | [K] | [L] | [M] | [N] |
| Company | Open 10-Jul-12 | High 10-Jul-12 | Low 10-Jul-12 | Close 10-Jul-12 | Bourassa 10-Jul-12 | Dollars ($) | Percent (%) | Bourassa Spot Price 10-Jul-12 (Po) | Current Dividend (Do) | Current Dividend Yield (Do/Po) | Actual Close 10-Jul-12 (Po) | Trailing 12-Month Dividend (Do) | Current Dividend Yield (Do/Po) | Overstatement to (Do/Po) |
| 1 American States Water | $ 41.00 | $ 41.20 | $ 40.74 | $ 41.14 | $ 36.36 | $ 4.78 | 13.15% | $ 36.36 | $ 1.10 | 3.03% | $ 41.14 | $ 1.12 | 2.72% | 0.30% |
| 2 Aqua America | 26.00 | 26.23 | 25.88 | 26.08 | 22.23 | 3.85 | 17.32% | 22.23 | 0.63 | 2.83% | 26.08 | 0.64 | 2.45% | 0.38% |
| 3 California Water | 18.72 | 18.83 | 18.68 | 18.77 | 17.94 | 0.83 | 4.63% | 17.94 | 0.62 | 3.46% | 18.77 | 0.62 | 3.30% | 0.15% |
| 4 Connecticut Water | 29.75 | 30.25 | 29.54 | 29.80 | 28.23 | 1.57 | 5.56% | 28.23 | 0.94 | 3.33% | 29.80 | 0.95 | 3.17% | 0.16% |
| 5 Middlesex Water | 19.09 | 19.14 | 18.90 | 19.13 | 18.50 | 0.63 | 3.41% | 18.50 | 0.73 | 3.95% | 19.13 | 0.74 | 3.84% | 0.10% |
| 6 SJW Corporation | 23.89 | 24.09 | 23.70 | 24.05 | 24.32 | (0.27) | -1.11% | 24.32 | 0.69 | 2.84% | 24.05 | 0.70 | 2.89% | -0.05% |
| Averages | | | | | | $ 1.90 | 7.16% | | | 3.24% | | | 3.06% | 0.174% |

Observation: For purposes of his current dividend yield calculation (Do/Po), Mr. Bourassa claims to use a spot price (Po) date of July 10, 2012 (see Footnote 1, TJB Schedule D-4.7). Without exception, however, the spot prices used by Mr. Bourassa do not fall within the actual trading range for any of his six sample companies on that date. As shown above, on average Mr. Bourassa understates the actual July 10, 2012 closing price for each of his sample companies by $1.90 per share, or 7.16 percent. In dollar terms, the largest understatement ($4.78) is to American States Water ($41.14 - $36.36 = $4.78); in percentage terms, the largest understatement (17.32%) is to Aqua America's stock price ($3.85 / $22.23). The spot price used for SJW Corporation ($24.32) is the only spot price overstated by Mr. Bourassa. By understating his July 10, 2012 spot prices, Mr. Bourassa reduces the denominator (Po) of the current dividend yield (Do/Po) equation, resulting in an overstatement to the current dividend yield. As shown above, Mr. Bourassa's July 10, 2012 sample average current dividend yield (Do/Po) has been overstated by 17.4 basis points (3.24% - 3.06% = 0.174%).

[A]: Opening Stock Price, July 10, 2012
[B]: Intra-day High Stock Price, July 10, 2012
[C]: Intra-day Low Stock Price, July 10, 2012
[D]: Closing Stock Price, July 10, 2012
[E]: Bourassa Spot Price for July 10, 2012 (Source:TJB Schedule D-4.7)
[F]: [D] - [E]
[G]: [F] / [E]
[H]: [E]
[I]: Bourassa Current Dividend (Do) (Source: TJB Schedule D-4.7)
[J]: [I] / [H]
[K]: [D]
[L]: Actual Trailing 12-Month Dividend (Do), as of July 10, 2012
[M]: [L] / [K]
[N]: ([J] - [M])

Sources:
Historical Market Prices for July 10, 2012: Yahoo Finance.
Trailing 12-Month Dividend for July 10, 2012: Value Line.

Vail Water Company
Docket No. W-01651B-12-0339

Exhibit JAC-B

**Staff Correction to Bourassa Schedule D-4.8**
(DCF Constant Growth)

| | Bourassa Proposed | | | | Staff Corrected | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | [A] | [B] | [C] | [D] | [E] | [F] | [G] | [H] | [I] |
| | Average Current Dividend Yield (Do/Po) | Expected Dividend Yield (D1/Po) | Dividend Growth Rate (g) | Indicated Cost of Equity (k) | Average Current Dividend Yield (Do/Po) | Expected Dividend Yield (D1/Po) | Dividend Growth Rate (g) | Indicated Cost of Equity (k) | Overstatement to DCF Cost of Equity Estimate |
| DCF - Past & Future Growth | 3.24% | 3.42% | 5.65% | 9.1% | 3.06% | 3.24% | 5.65% | 8.9% | 0.2% |
| DCF - Future Growth | 3.24% | 3.46% | 6.87% | 10.3% | 3.06% | 3.27% | 6.87% | 10.1% | 0.2% |
| Average DCF Estimate | 3.24% | 3.44% | 6.26% | **9.7%** | 3.06% | 3.26% | 6.26% | **9.5%** | 0.2% |

Observation: As shown above, the Bourassa proposed average DCF cost of equity is overstated by 20 basis points (9.7% - 9.5% = 0.2%). Mr. Bourassa's inflated 3.24 percent spot price current dividend yield (Do/Po) flows through to the calculation of his expected dividend yield (D1/Po), and ultimately to his indicated cost of equity (k). As demonstrated in Exhibit JAC-A, properly calculated the current dividend yield (Do/Po) should be 3.06 percent, resulting in the Staff corrected reductions to both (D1/Po) and (k) shown above.

[A]: Average Current Dividend Yield (Do/Po) - Bourassa Proposed (Source: TJB Schedule D-4.8)
[B]: Expected Dividend Yield (D1/Po) - Bourassa Proposed [D1/Po = Do/Po * (1+g)]
[C]: Dividend Growth (g) Rate: Average of Past & Future Growth (Source: TJB Schedule D-4.4, colunm [7])
Dividend Growth (g) Rate: Average of Analysts' Forecasts of EPS Growth (Source: TJB Schedule D-4.6, colunm [5])
[D]: [B]+[C]
[E]: Average Current Dividend Yield (Do/Po) - Staff Corrected (Source: Exhibit JAC-A, colunm [J])
[F]: Expected Dividend Yield (D1/Po) - Staff Corrected [D1/Po = Do/Po * (1+g)]
[G]: Dividend Growth (g) Rate: Average of Past & Future Growth (Source: TJB Schedule D-4.4, colunm [7])
Dividend Growth (g) Rate: Average of Analysts' Forecasts of EPS Growth (Source: TJB Schedule D-4.6, colunm [5])
[H]: [F]+[G]
[I]: [D]-[H]

**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER-SMITH
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON | ) | DOCKET NO. W-01651B-12-0339 |

DIRECT

TESTIMONY

OF

MARLIN SCOTT, JR

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

FEBRUARY 25, 2013

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## TABLE OF CONTENTS FOR EXHIBIT MSJ

**EXECUTIVE SUMMARY**
**VAIL WATER COMPANY**
**DOCKET NO. W-01651B-12-0339**

## Conclusions

A. The Arizona Department of Environmental Quality reported no deficiencies and has determined that Vail Water Company's ("Company") system, PWS No. 10-041, is currently delivering water that meets the water quality standards required by 40 C.F.R. 141 and Arizona Administrative Code, Title 18, Chapter 4.

B. The Company is located in the Arizona Department of Water Resources' ("ADWR") Tucson Active Management Area and ADWR reported the Company's system is in compliance with its requirements governing water providers and/or community water systems.

C. According to the Arizona Corporation Commission Utilities Division Compliance Section, the Company had no delinquent compliance issues.

D. The Company has a Commission approved curtailment tariff.

E. The Company has a Commission approved backflow prevention tariff.

## Recommendations

1. Staff recommends the removal of Well No. 6 totaling to $268,743 from the plant-in-service because this Well No. 6 is considered excess capacity in this rate proceeding.

2. Staff recommends the removal of identified plant facilities totaling to $281,388 from the plant-in-service because these plant items no longer exist and are not used and useful in this rate proceeding.

3. Staff recommends an annual water testing expense of $13,667 be adopted for this proceeding. In the next rate case filing, the Company should submit a comparison of what its total estimated water testing expense would be as a participant in MAP compared to a non-participate in MAP with consideration of all waivers/reduced monitoring for all applicable contaminants.

4. Staff recommends that the Company file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of a decision in this proceeding, at least seven Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission review and approval. These BMP templates are available on the Commission's website. The Company may request

cost recovery of the actual costs associated with the implemented BMPs in its next general rate application.

5. Staff recommends that the Company use Staff's current recommended water depreciation rates by individual National Association of Regulatory Utility Commissioners category as shown in Table I-1.

6. Staff recommends approval of the proposed service line and meter installations charges as shown in Table J-1.

7. Staff finds the Company's proposed Central Arizona Water Project appropriate and its estimated cost of $1,956,321 to be reasonable. Since this project is currently under construction, the project should not be included in rate base because it is not used and useful.

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

## INTRODUCTION

**Q. Please state your name, place of employment and job title.**

A. My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation Commission ("Commission" or "ACC"), Utilities Division, 1200 West Washington Street, Phoenix, Arizona 85007. My job title is Utilities Engineer.

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

A. I have been employed by the Commission since November 1987.

**Q. Please list your duties and responsibilities.**

A. As a Utilities Engineer, specializing in water and wastewater engineering, my responsibilities include: the inspection, investigation, and evaluation of water and wastewater systems; preparing reconstruction cost new and/or original cost studies, cost of service studies and investigative reports; providing technical recommendations and suggesting corrective action for water and wastewater systems; and providing written and oral testimony on rate applications and other cases before the Commission.

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

A. I have analyzed approximately 581 cases covering various responsibilities for the Utilities Division.

**Q. Have you previously testified before this Commission?**

A. Yes, I have testified in 91 proceedings before this Commission.

**Q. What is your educational background?**

A. I graduated from Northern Arizona University in 1984 with a Bachelor of Science degree in Civil Engineering Technology.

**Q. Briefly describe your pertinent work experience.**

A. Prior to my employment with the Commission, I was Assistant Engineer for the City of Winslow, Arizona, for about two years. Prior to that, I was a Civil Engineering Technician with the U.S. Public Health Service in Winslow for approximately six years.

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

A. I am a member of the National Association of Regulatory Utility Commissioners' Staff Subcommittee on Water.

## PURPOSE OF TESTIMONY

**Q. Were you assigned to provide the Utilities Division Staff ("Staff") engineering analysis and recommendation for the Vail Water Company ("Company") in this proceeding?**

A. Yes. I reviewed the Company's application, and responses to data requests, and inspected its water system on December 27, 2012. This testimony and its attachment present Staff's engineering evaluation.

## ENGINEERING REPORT

**Q. Please describe the attached Engineering Report, Exhibit MSJ.**

A. The attached Exhibit MSJ presents the details and analyses of Staff's findings for the Company's water system. Exhibit MSJ contains the following major topics: (1) a description of the water system, (2) water use, (3) growth, (4) plant-in-service

adjustments, (5) compliance with the rules of the Arizona Department of Environmental Quality, Arizona Department of Water Resources, and the ACC, (6) depreciation rates, (7) service line and meter installation charges, (8) Central Arizona Project issues, and (8) tariff filings.

My conclusions and recommendations from the Engineering Report are contained in the "Executive Summary", above.

**Q. Does this conclude your Direct Testimony?**

A. Yes, it does.

**Engineering Report for Vail Water Company**

**Docket No. W-01651B-12-0339 (Rates)**

**February 25, 2013**

## A. LOCATION OF VAIL WATER COMPANY ("COMPANY")

The Company provides water service to the community of Vail which is located approximately 15 miles southeast of Tucson. Figure A-1 shows the location of the Company within Pima County and Figure A-2 shows the approximate 15.8 square-miles of certificated area.

## B. DESCRIPTION OF WATER SYSTEM

This water system was field inspected on December 27, 2012, by Arizona Corporation Commission ("ACC" or "Commission") Staff member Marlin Scott, Jr., in the accompaniment of Manny Oros, representing the Company. The current operation of this water system covers nine different pressure zones that consist of four wells, seven storage tanks, seven booster systems and a distribution system serving approximately 3,900 service connections during the test year ending December 2011. Figure A-3 shows a system schematic of the water system. A detailed plant facility description is as follows:

Table 1. Well Data

| Well No. | ADWR ID No. | Pump | Flow, GPM | Casing Size & Depth | Meter Size | Year Drilled |
|---|---|---|---|---|---|---|
| 3 | 55-625703 | 100-Hp turbine | 600 | 12" x 614' | 8" | 1974 |
| 5 | 55-087814 | 300-Hp turbine | 975 | 14" x 924' | 8" | 1981 |
| 6 | 55-087817 | 200-Hp turbine | 700 | 14" x 759' | 8" | 1981 |
| 8 | 55-087816 | 300-Hp turbine | 1,200 | 14" x 845' | 10" | 1981 |
| | | Total: | 3,475 GPM | | | |

Notes: All wells have pellet chlorination systems and 5,000 gallon surge tanks.

Table 2. Storage Tanks

| Capacity | Quantity (Each) | Location |
|---|---|---|
| 600,000 | 1 | I-Zone Reservoir |
| 550,000 | 1 | I-Zone Reservoir |
| 500,000 | 2 | Andrada & Sundown Booster Sites |
| 290,000 | 1 | Agassiz Booster Site |
| 100,000<br>100,000 | 1<br>1 | Well #3<br>(Sundown – out of service for maintenance) |
| Total: 2,640,000 gallons | 7 | |

Table 3. Pumping Facilities

| Location | Booster Systems | Storage Tanks (From Table 2 above) |
|---|---|---|
| I to J Zone Booster Site | 40, 20 & 10-Hp boosters with two 5,000 gallon surge tanks. | |
| 3380 Booster Site | 30, 30 & 20-Hp boosters with two 5,000 gallon surge tanks. | |
| Well #3 | Two 25-Hp booster pumps with 5,000 gallon pressure/surge tank | 100,000 gallon storage tank |
| Sundown Booster Site | 50, 50 & 20-Hp boosters and 5,000 gallon surge tank.<br>20 & 25-Hp transfer boosters to lift to Andrada Booster Site | 500,000 gallon storage tank<br>(100,000 gallon storage tank – out of service for maintenance) |
| Andrada Booster Site | 40, 30 & 20-Hp boosters with 5,000 gallon surge tank. | 500,000 gallon storage tank |
| Shasta Booster Site | 30, 20 & 10-Hp boosters with two 5,000 gallon surge tanks. | |
| Agassiz Booster Site | 60, 25 & 15-Hp boosters with 5,000 gallon surge tank | 290,000 gallon storage tank |

Table 4. Water Mains

| MAINS | | |
|---|---|---|
| Size | Material | Length (feet) |
| 2-inch | GIP | 8,456 |
| 4-inch | PVC | 44,107 |
| " | ACP | 2,393 |
| " | DIP | 1,124 |
| 6-inch | PVC | 126,215 |
| " | ACP | 26,426 |
| " | DIP | 7,983 |
| 8-inch | PVC | 160,008 |
| " | ACP | 3,522 |
| " | DIP | 1,618 |
| 10-inch | PVC | 8,067 |
| " | ACP | 8,454 |
| " | DIP | 88 |
| 12-inch | PVC | 93,459 |
| " | ACP | 12,894 |
| " | DIP | 2,864 |
| | Total: | 507,678 feet or 96.15 miles |

Table 5. Customer Meters

| Size | Quantity |
|---|---|
| 5/8 x 3/4-inch | 3,708 |
| 3/4-inch | 103 |
| 1- inch | 24 |
| 1-1/2-inch | 21 |
| 2-inch | 40 |
| 3-inch compound | 3 |
| 4-inch | - |
| 6-inch | - |
| Total: | 3,899 |

Table 6. Fire Hydrants

| Size | Quantity |
|---|---|
| Standard | 421 |
| | |

Table 7. Structures and Operation Equipment

| Location | Structures & Treatment Equipment |
|---|---|
| Wells | #3 – 120 ft. by 120 ft. of chain link fencing ("CLF").<br>#5 – 100 ft. by 100 ft. of block fencing.<br>#6 – 75 ft. by 120 ft. of CLF.<br>#8 – 100 ft. by 100 ft. of block fencing. |
| Booster Sites | I to J – 100 ft. by 100 ft. block fencing.<br>3380 – 60 ft. by 60 ft. block fencing.<br>Sundown – 225 ft. by 225 ft. of block/CLF.<br>Andrada – 150 ft. by 150 ft. of CLF.<br>Shasta – 50 ft. by 100 ft. of CLF.<br>Agassiz – 150 ft. by 200 ft. of CLF. |
| All Sites | Equipped with radio-telemetry. |
| Office | 57 ft. by 35 ft. steel building |
| | |

System Modifications

Since the last rate case in 1999, the Company has added/replaced more than $18 million of new plant primarily with Advances in Aid of Construction. These system modifications included the addition or upgrades of wells, storage tanks, booster systems and water mains.

## C. WATER USE

Water Sold

Based on the information provided by the Company, water use for the test year ending December 2011 is presented in Figure C-1. The customer consumption experienced a high monthly average water use of 305 gallons per day ("GPD") per connection in June and a low monthly average water use of 190 GPD per connection in December for an average annual use of 244 GPD per connection.

Non-Account Water

Non-account water should be 10 percent or less. The Company reported 382,210,000 gallons pumped and 344,580,000 gallons sold during the test year, resulting in a difference of 9.8 percent. This 9.8 percent is within the acceptable limit of 10 percent. The Company should closely monitor its water loss to ensure that it remains below 10 percent.

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

System Analysis

The water system serves nine different pressure zones within the 15.8 square-miles of certificated areas. Given its current well capacity of 3,475 GPM and storage capacity of 2.64 million gallons, it appears the system has excessive well capacity to serve the present customer base and reasonable growth.

Using the Company's 2011 test year data, the Company reported its highest peak use month as June with 35,693,000 gallons sold to 3,895 customers. Based on this data, Staff estimates the average daily demand during this peak month to be 305 GPD per connection for evaluating storage capacity sufficiency. For well capacity evaluation, Staff used 0.27 GPM per connection (=305 x 1.25 factor / 1440) for the peak day demand. Using these factors, Staff determined that:

1. The total well capacity totaling 3,475 GPM could adequately serve approximately 12,870 connections (=3,475 / 0.27). This total well capacity is excessive for the test year customer base of approximately 3,900 connections.

2. The storage capacity totaling 2,640,000 gallons, minus the fire flow requirement (1,500 GPM at 2 hours = 180,000 GPD), could adequately serve up to approximately 8,065 connections ((=2,640,000 - 180,000) / 305). Staff does not consider this current storage capacity excessive because of the location of the storage tanks that serve peak day demand with fire flow requirements throughout the nine different pressure zones in the 15.8 square-mile service area.

3. Figure D-1 shows a growth projection from the test year 2011 customer base of 3,900 connections to approximately 4,450 connections by December 2016.

To determine which one of the four wells should be excluded from this proceeding, Staff's evaluation consisted of the following:

a. Well No. 3 is located south of one of the railroad tracks where the only interconnection is located between the old North and South Systems. If this railroad crossing is ever disrupted, Well No. 3 could continue to serve customers in the southern area of the system. For this reason, Staff believes Well No. 3 should remain in rate base.

b. Wells No. 5, No. 6 and No. 8 are all located in the northern area of the water system. Since Well No. 6 is the lowest producing well, Staff selected this well for removal from this rate case. (See Section E for cost of Well No. 6.)

## D. GROWTH

Figure D-1 depicts the customer growth using linear regression analysis by using the number of customers obtained from annual reports that were submitted to the Commission. At the end of December 2011, the Company had approximately 3,900 customers and is projected to have approximately 4,450 customers by 2016.

## E. PLANT-IN-SERVICE ADJUSTMENTS

Excess Well Capacity

Based on the above system analysis, Staff posits that the Company's water system has excess well capacity and recommends that Well No. 6 not be included in this rate proceeding. In the prior rate case under Docket Nos. W-01651B-99-0351 and W-01651B-99-0406, the cost of Well No. 6 was reported at $91,686. In response to Staff's Data Request MSJ 7.1, the Company reported plant improvements/additions to Well No. 6 totaling $177,057 from the last rate case to the present rate case as follows:

Table E-1. Excess Well Capacity

| Acct. No. | Plant Items | Year Installed | Original Cost |
|---|---|---|---|
| 307 | Well #6 | | |
| | – cost in prior rate case | 1998 | $ 91,686 |
| | – plant additions reported in present rate case | 2003 | $ 177,057 |
| | | | |
| | Total: | | $ 268,743 |

As a result, Staff recommends the removal of Well No. 6 totaling to $268,743 from plant-in-service because Well No. 6 is considered excess capacity in this rate proceeding.

Not Used and Useful Plant

During its field inspection, Staff used the prior rate case Engineering Report and noted a number of plant facilities that were no longer in existence due to system modifications. In

response to Staff's Data Request MSJ 4.1 (as amended on February 18, 2013), the Company provided the following list of plant items that need to be retired:

Table E-2. Plant Not Used and Useful

| Acct. No. | Plant Items | Year Installed | Year Retired | Original Cost | Total per Acct. |
|---|---|---|---|---|---|
| 304 | Well #2 - Fencing | 1961 | 2005 | $ 656 | |
| | Golos - Fencing | 1980 | 2004 | $ 1,602 | |
| | Patterson - Fencing | 1978 | 2000 | $ 1,322 | |
| | Old Andrada - Fencing | 1980 | 2004 | $ 1,602 | |
| | | | | | $ 5,182 |
| 311 | Well #6 - 75 HP well pump | 1981 | 2003 | $ 11,893 | |
| | Well #6 - Two 30 HP transfer/booster pumps | 1981 | 2003 | $ 2,903 | |
| | VV Ranch -Two 5 HP booster pumps | 1989 | 2004 | $ 2,479 | |
| | Well 3 - 75 HP well pump | 1980 | 2006 | $ 9,532 | |
| | Well #2 - Two 25 HP, one 20 HP & one 15 HP booster/transfer pumps | 1961 | 2005 | $ 1,531 | |
| | Well #2 - 250 gallon surge tank | 1961 | 2005 | $ 426 | |
| | Golos - 5 HP booster pump | 1980 | 2004 | $ 834 | |
| | Patterson - Two 2 HP booster pumps | 1978 | 2000 | $ 1,141 | |
| | Patterson - Three 40 gallon bladder tanks | 1978 | 2000 | $ 830 | |
| | Old Andrada - Two 20 HP booster pumps | 1980 | 2004 | $ 2,344 | |
| | | | | | $ 33,913 |
| 330 | Well #6 - 10,000 gallon storage tank | 1981 | 2003 | $ 10,889 | |
| | Well #6 - 3,000 gallon pressure tank | 1981 | 2003 | $ 10,072 | |
| | VV Ranch - 15,000 gallon storage tank | 1989 | 2002 | $ 16,333 | |
| | VV Ranch - 2,000 gallon pressure tank | 1989 | 2004 | $ 6,806 | |
| | Well #3 - 1,000 gallon surge tank | 1980 | 2006 | $ 2,976 | |
| | Well #2 - 100,000 gallon storage tank | 1961 | 2005 | $ 26,222 | |
| | Well #2 - 5,000 gallon pressure tank | 1961 | 2005 | $ 3,278 | |
| | Golos - 50,000 gallon storage tank | 1980 | 2004 | $ 45,778 | |
| | Golos - 3,000 gallon pressure tank | 1980 | 2004 | $ 8,469 | |
| | Old Andrada - 100,000 gallon storage tank | 1980 | 2004 | $ 91,556 | |
| | Old Andrada - 5,000 gallon pressure tank | 1980 | 2002 | $ 11,445 | |
| | Old Andrada - 3,000 gallon pressure tank | 1980 | 2004 | $ 8,469 | |
| | | | | | $242,293 |
| | Totals: | | | $ 281,388 | $281,388 |

Staff recommends removal from plant-in-service the above identified plant facilities totaling $281,388 because these plant items no longer exist and are not used and useful in this rate proceeding.

## F. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

According to an ADEQ Compliance Status Report dated September 27, 2012, ADEQ reported no deficiencies and has determined that the Company's system, PWS No. 10-041, is currently delivering water that meets the water quality standards required by 40 C.F.R. 141 and Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expense

According to the above ADEQ Compliance Status Report, the Company served a population of 11,814 people. According to ADEQ regulations, all public water systems serving less than 10,000 people are required to participate in the ADEQ Monitoring Assistance Program ("MAP"). Although the Company serves more than 10,000 people, the Company has elected to participate in MAP. MAP samples for regulated inorganic/volatile organic/synthetic organic chemicals, asbestos, radionuclides, nitrate, nitrite, sulfate and nickel. MAP does not monitor for bacteria, lead & copper or disinfection byproducts.

The Company reported its water testing expense at $3,906 during the test year. Staff's Data Request MSJ 4-7 asked the Company to conduct a water testing exercise comparing expenses if the Company participates or does not participate in MAP. Staff found the Company's data request response incomplete and, sent out another data request, MSJ 6.1, as a follow-up to MSJ 4-7. Based on the Company's response to MSJ 6-1, Staff has estimated the Company's water testing expense at $13,667 with participation in MAP as shown in Table E-1. Staff recommends that $13,667 be adopted for this proceeding. In the next rate case filing, the Company should submit a comparison of what its total estimated water testing expense would be as a participant in MAP compared to a non-participate in MAP with consideration of all waivers/reduced monitoring for all applicable contaminants.

## G. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Compliance

The Company's water system is located in the Tucson Active Management Area ("AMA"). On November 16, 2012, ADWR reported that the Company's system is in compliance with its requirements governing water providers and/or community water systems.

Best Management Practice Tariffs

According to the ADWR website, the Company is within the Tucson AMA but does not participate in ADWR's Modified Non-Per Capita Conservation Program ("NPCCP").

Staff recommends that the Company file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of a decision in this proceeding, at least seven

BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission review and approval. These BMP templates are available on the Commission's website. The Company may request cost recovery of the actual costs associated with the implemented BMPs in its next general rate application.

## H. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

On April 5, 2012, the Utilities Division Compliance Section reported that the Company had no delinquent ACC compliance issues.

## I. DEPRECIATION RATES

In the prior rate case, the Company was granted use of Staff's older depreciation rates by individual National Association of Regulatory Utility Commissioners category. In this case, the Company is adopting Staff's current typical and customary water depreciation rates. Staff recommends that the Company use Staff's current depreciation rates listed in Table I-1.

## J. SERVICE LINE AND METER INSTALLATION CHARGES

The Company has requested changes to its service line and meter installation charges. Since the Company may at times install meters on existing service lines, it would be appropriate for those customers to only be charged for the meter installation. In addition, the Company has been installing telemetry units for remote meter reading and is requesting authorization to charge an additional $150.00 for each meter installation over and above Staff's recommended typical installation charges. Staff recommends approval of the proposed charges shown in Table J-1 and these charges would apply to properties not already being served by the Company.

## K. CURTAILMENT TARIFF

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

## L. BACKFLOW PREVENTION TARIFF

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

## M. OFF-SITE FACILITIES HOOK-UP FEE ("HUF") TARIFF

Existing Off-Site HUF Tariff

The Company has an Off-Site Facilities Hook-Up Fee Tariff, starting at $420.00, that was approved by Decision No. 60585, dated January 14, 1998, which was initially applicable only to the south system. This tariff was to be applicable to the north system when the north and south systems were physically connected. The interconnection of the two systems was completed on March 14, 2002. Fees collected under this tariff are used to pay for backbone plant such as wells and storage tanks.

## N. CENTRAL ARIZONA PROJECT ("CAP") ISSUES

CAP Hook-Up Fee Tariff

The Company has a CAP Hook-Up Fee Tariff, starting at $1,000, that was approved by Decision No. 62450, dated April 14, 2000, which was initially applicable only to the north system and would be applicable to the entire system after the interconnection of the north and south systems has been completed. The interconnection of the two systems was completed on March 14, 2002.

CAP Recovery Fee (Service Charge)

The Company has a CAP Recovery Fee of $0.32 per 1,000 gallons of usage that was also approved by Decision No. 62450. This Recovery Fee was initially applicable only to the north system and was to apply to the entire system once the interconnection of the north and south systems was completed which occurred on March 14, 2002. The Company is requesting to discontinue this Recovery Fee and is seeking approval of a CAP Surcharge Mechanism to recover the CAP-related costs for the delivery of CAP water to its service territory.

Proposed CAP Project

The Company's proposed CAP Project includes the delivering of finished CAP water into the Company's service area by connecting to the City of Tucson's delivery system and constructing a booster station and approximately 1.8 miles of transmission main. This CAP transmission main will connect to the Company's existing system near Well No. 5 and the CAP water will be further transported through approximately three miles of existing main to the I-Zone Reservoir site. The booster station will be constructed to deliver CAP water beginning at 800 GPM and phased-in up to 1,500 GPM. The proposed CAP Water Project is shown in Table N-1 below and Staff finds this project appropriate and its cost reasonable. Since this project is currently under construction, the project should not be included in rate base because it is not used and useful.

Table N-1. CAP Project

| Phase | CAP Project – Plant Items | Unit | Quantity | Unit Price | Amount |
|---|---|---|---|---|---|
| | Engineering (actual cost) | | | | $88,415 |
| | Easements (actual cost) | | | | $23,109 |
| | Legal (actual cost) | | | | $6,321 |
| | Field Survey (actual cost) | | | | $3,008 |
| | Recording Fees (actual cost) | | | | $84 |
| | Review Fees ADEQ (actual cost) | | | | $1,000 |
| | Title Insurance (actual cost) | | | | $831 |
| | | | | | |
| I | 16-inch DIP | LF | 1,693 | $90.50 | $153,217 |
| | 16-inch valve | EA | 3 | $5,945 | $17,835 |
| | 12-inch valve | EA | 4 | $2,315 | $9,260 |
| | Flushing outlet | EA | 1 | $2,175 | $2,175 |
| | Corrosion Test Station | EA | 3 | $1,725 | $5,175 |
| | Connect to existing system | LS | 1 | $3,000 | $3,000 |
| | Testing | LS | 1 | $2,500 | $2,500 |
| | Subtotal: | | | | $193,162 |
| | (Change-out 12" main vs. 16" main) | | | | ($91,925) |
| | Subtotal: | | | | $101,236 |
| | Sales tax at 7.10% | | | | $4,672 |
| | Subtotal – Phase I: | | | | $105,908 |
| | | | | | |
| II | 16-inch restrained DIP | LF | 4,128 | $135 | $557,280 |
| | 16-inch DIP | LF | 3,472 | $110 | $381,920 |
| | 16-inch valve | EA | 7 | $5,800 | $40,600 |
| | 12-inch valve | EA | 3 | $4,000 | $12,000 |
| | 2-inch air release valve | EA | 1 | $1,900 | $1,900 |
| | Cathodic protection | LS | 1 | $18,000 | $18,000 |
| | Subtotal - Mains: | | | | $1,011,700 |
| | | | | | |
| | Booster Station/Electrical | | | | $525,000 |
| | Contingency at 10% (on remaining construction only) | | | | $153,670 |
| | Tax at 7.1% (on booster station only) | | | | $37,275 |
| | Subtotal - Phase II: | | | | $1,727,645 |
| | | | | | |
| | **TOTAL:** | | | | **$1,956,321** |
| | Phase I is actual cost. | | | | |
| | Phase II is estimated cost as of 2-1-13. | | | | |

FIGURES



TABLES

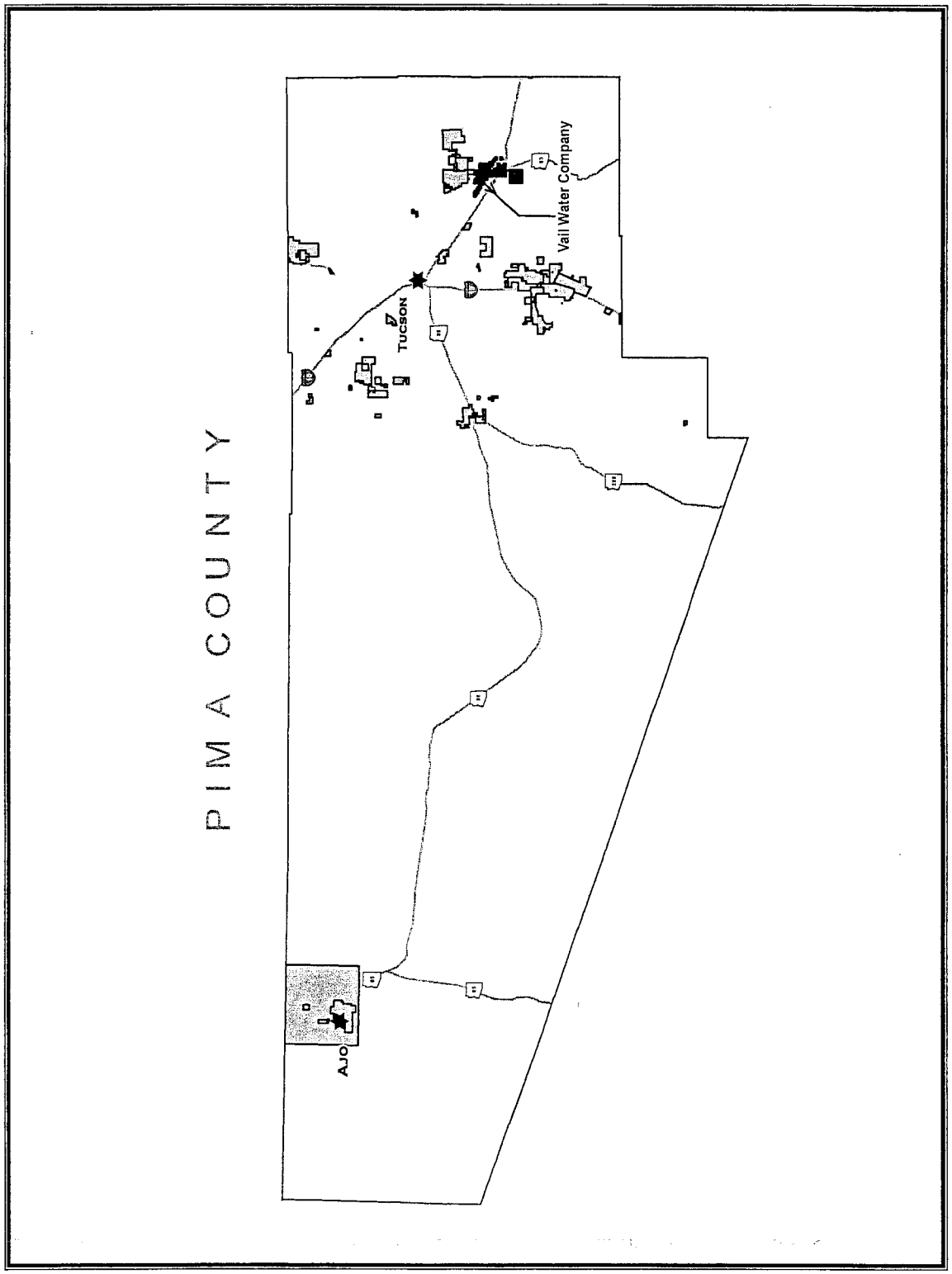


Figure A-1. Pima County Map

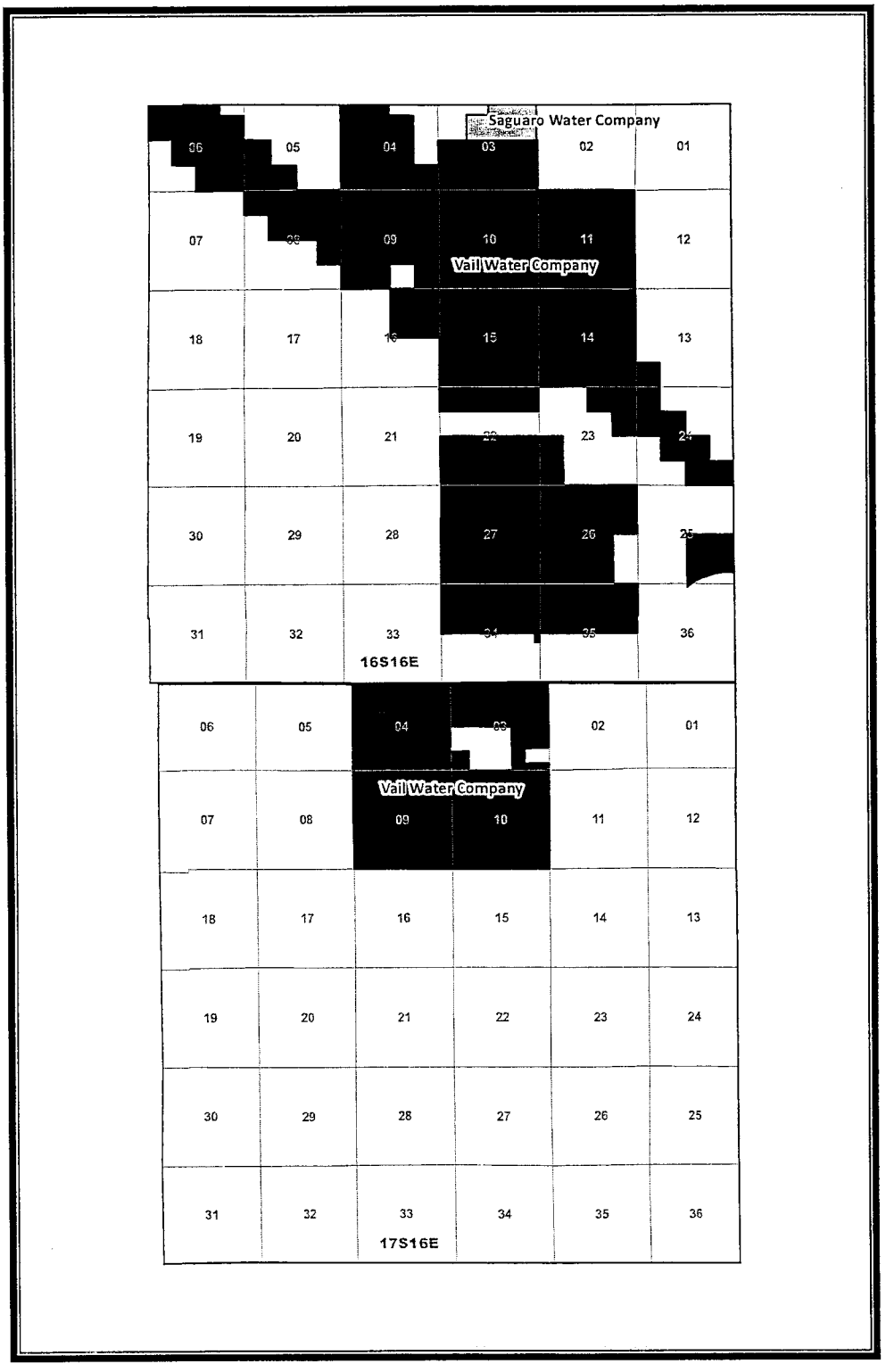


Figure A-2. Certificated Area

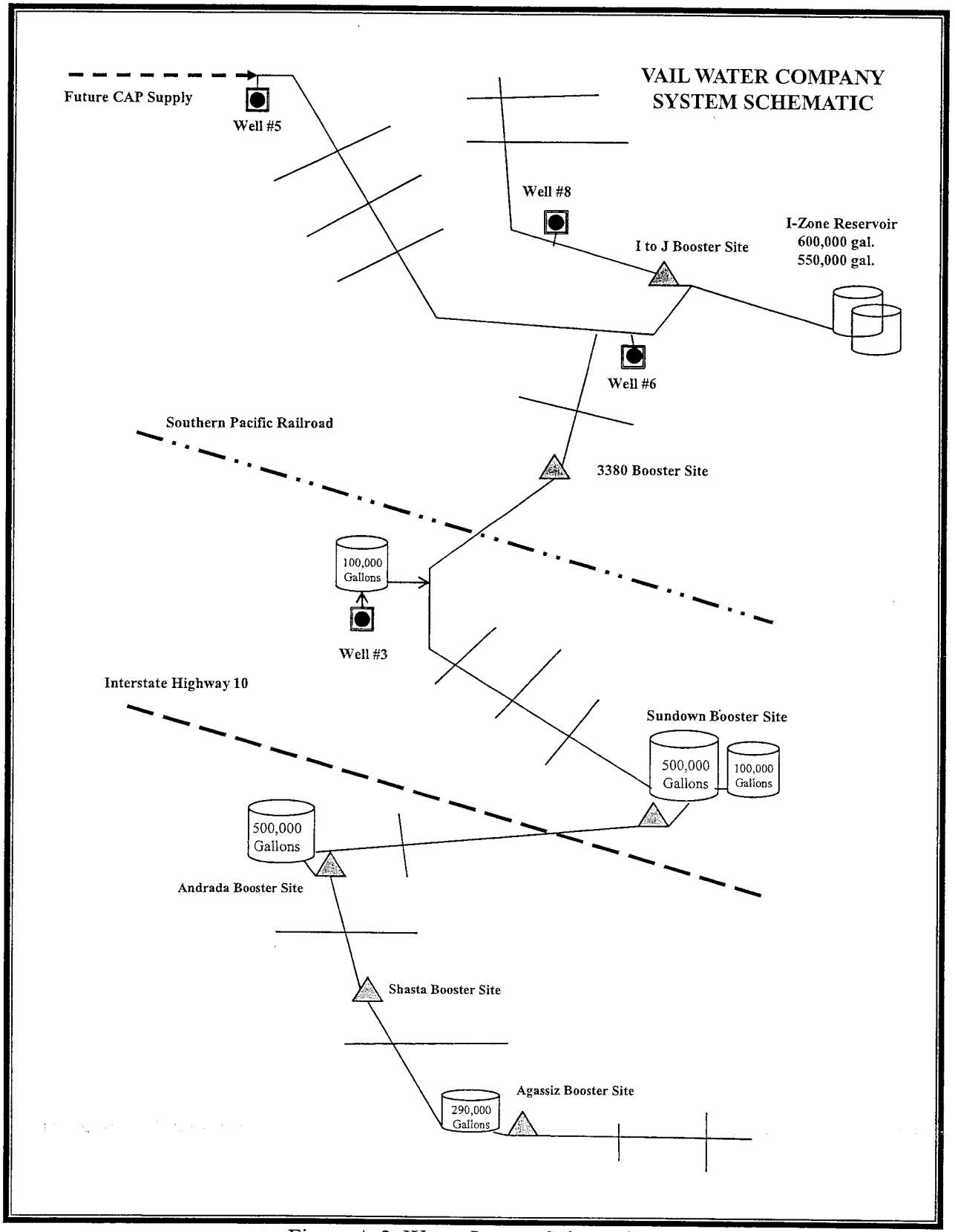


Figure A-3. Water System Schematic

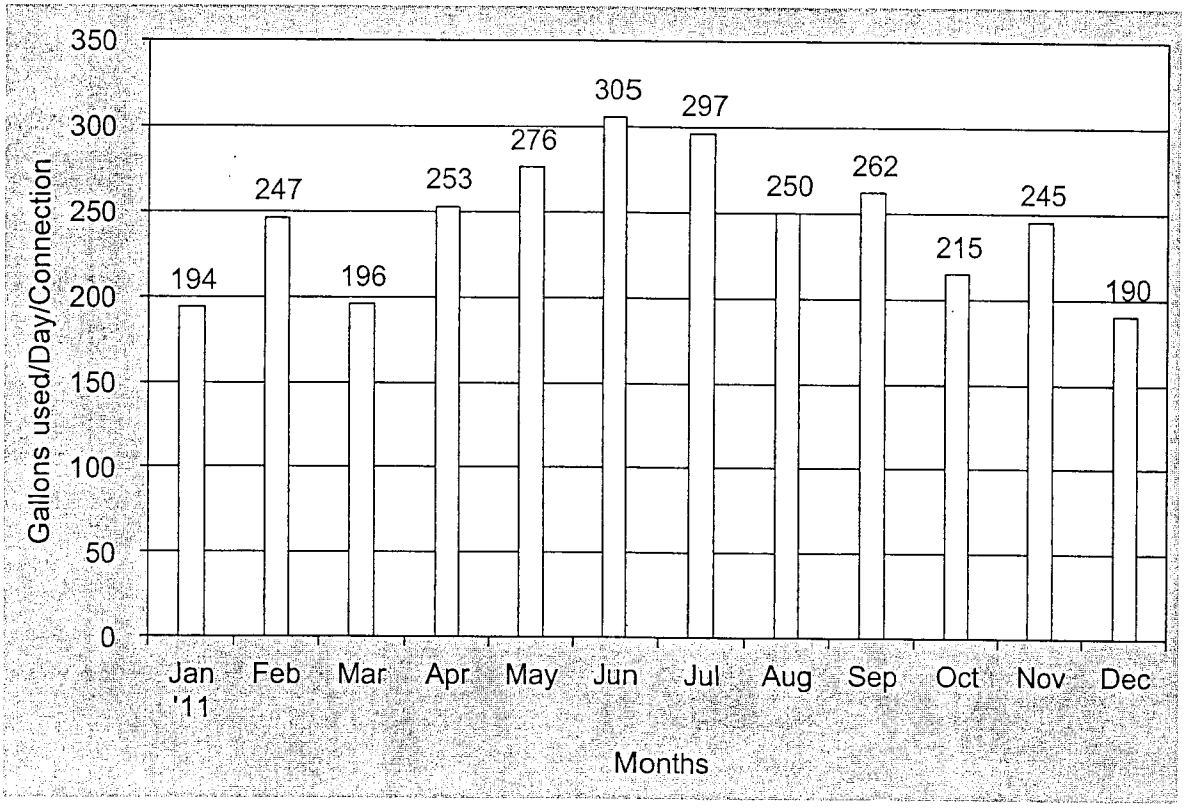


Figure C-1. Water System Use

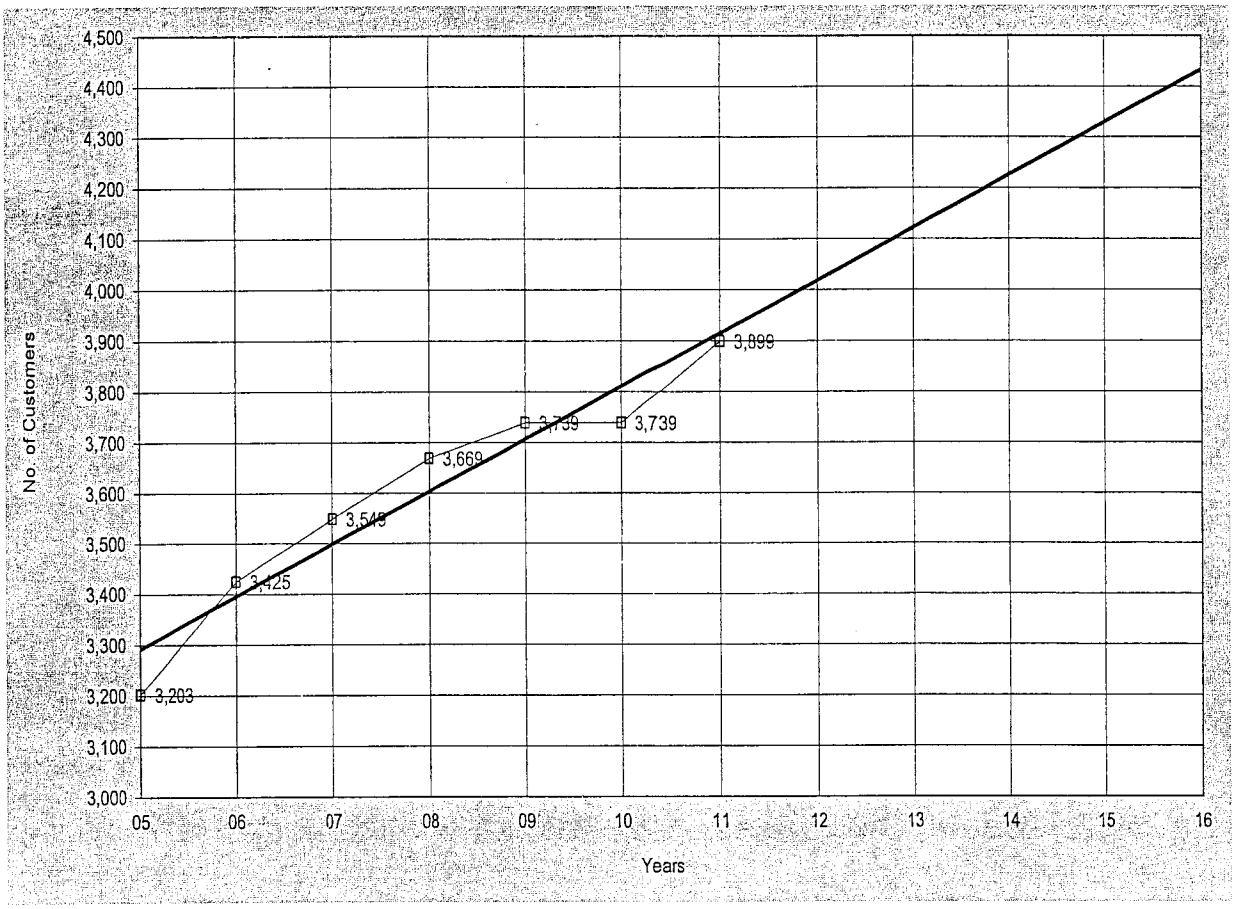


Figure D-1. Water System Growth

Table E-1. Water Testing Expense

| Monitoring | Cost per test | No. of test | Annual Cost |
|---|---|---|---|
| Total coliform – 10 samples monthly | $20 | 120 | $2,400 |
| MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs | MAP | MAP | $10,147 |
| Lead & Copper – 20 samples per 3 years | $33 | 20 | $220 |
| D/DBP – Trihalomethanes – annually<br>– Haloacetic Acids – annually | $110<br>$115 | 4<br>4 | $440<br>$460 |
| Total | | | **$13,667** |

Note: ADEQ's MAP invoice for the 2012 Calendar Year was $10,147.07.

Table I-1. Water Depreciation Rates

| NARUC Acct. No. | Depreciable Plant | Average Service Life (Years) | Annual Accrual Rate (%) |
|---|---|---|---|
| 304 | Structures & Improvements | 30 | 3.33 |
| 305 | Collecting & Impounding Reservoirs | 40 | 2.50 |
| 306 | Lake, River, Canal Intakes | 40 | 2.50 |
| 307 | Wells & Springs | 30 | 3.33 |
| 308 | Infiltration Galleries | 15 | 6.67 |
| 309 | Raw Water Supply Mains | 50 | 2.00 |
| 310 | Power Generation Equipment | 20 | 5.00 |
| 311 | Pumping Equipment | 8 | 12.5 |
| 320 | Water Treatment Equipment | | |
| 320.1 | Water Treatment Plants | 30 | 3.33 |
| 320.2 | Solution Chemical Feeders | 5 | 20.0 |
| 330 | Distribution Reservoirs & Standpipes | | |
| 330.1 | Storage Tanks | 45 | 2.22 |
| 330.2 | Pressure Tanks | 20 | 5.00 |
| 331 | Transmission & Distribution Mains | 50 | 2.00 |
| 333 | Services | 30 | 3.33 |
| 334 | Meters | 12 | 8.33 |
| 335 | Hydrants | 50 | 2.00 |
| 336 | Backflow Prevention Devices | 15 | 6.67 |
| 339 | Other Plant & Misc Equipment | 15 | 6.67 |
| 340 | Office Furniture & Equipment | 15 | 6.67 |
| 340.1 | Computers & Software | 5 | 20.00 |
| 341 | Transportation Equipment | 5 | 20.00 |
| 342 | Stores Equipment | 25 | 4.00 |
| 343 | Tools, Shop & Garage Equipment | 20 | 5.00 |
| 344 | Laboratory Equipment | 10 | 10.00 |
| 345 | Power Operated Equipment | 20 | 5.00 |
| 346 | Communication Equipment | 10 | 10.00 |
| 347 | Miscellaneous Equipment | 10 | 10.00 |
| 348 | Other Tangible Plant | --- | --- |

NOTE: Acct. 348 – Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

Table J-1. Service Line and Meter Installation Charges

| Meter Size | Current Total Charges | Proposed Service Line Charges | (1) Proposed Meter Charges | Proposed Total Charges |
|---|---|---|---|---|
| 5/8 x3/4-inch | $400 | $445 | $305 | $750 |
| 3/4-inch | $440 | $445 | $405 | $850 |
| 1-inch | $500 | $495 | $465 | $960 |
| 1-1/2-inch | $675 | $550 | $675 | $1,225 |
| 2-inch Turbine<br>2-inch Compound | -<br>$1,660 | $830<br>$830 | $1,195<br>$2,040 | $2,025<br>$2,870 |
| 3-inch Turbine<br>3-inch Compound | -<br>$2,150 | $1,045<br>$1,165 | $1,820<br>$2,604 | $2,865<br>$3,769 |
| 4-inch Turbine<br>4-inch Compound | -<br>$3,135 | $1,490<br>$1,670 | $2,820<br>$3,795 | $4,310<br>$5,465 |
| 6-inch Turbine<br>6-inch Compound | -<br>$6,190 | $2,210<br>$2,330 | $5,175<br>$7,070 | $7,385<br>$9,400 |
| | | | | |

Note: (1) Proposed meter charges based on Staff's estimated typical installation charges plus $150 additional charge for meter telemetry unit for remote meter reading.

BEFORE THE ARIZONA CORPORATION COMMISSION

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SUSAN BITTER SMITH

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON. | DOCKET NO. W-01651B-12-0339<br><br>**STAFF'S NOTICE OF FILING TESTIMONY IN SUPPORT OF SETTLEMENT AGREEMENT** |

Staff of the Arizona Corporation Commission ("Staff") hereby files the Testimony of L. John LeSueur in Support of the Settlement Agreement in the above docket.

RESPECTFULLY SUBMITTED this 3rd day of May 2013.

Brian E. Smith, Attorney
Bridget A. Humphrey, Attorney
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 3rd day of May 2013 with:

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Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

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EXHIBIT
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ADMITTED

Copy of the foregoing mailed this
3rd day of May 2013 to:

Christopher Volpe, Vice President
Vail Water Company
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Suite 200
Tucson, Arizona 85710

Michael McNulty
Michael Hallam
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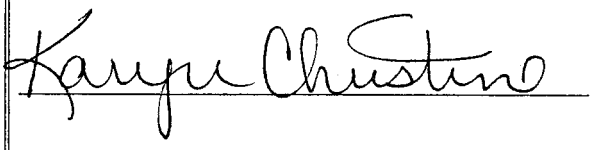
Phoenix, Arizona 85004



**BEFORE THE ARIZONA CORPORATION COMMISSION**

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF VAIL WATER COMPANY FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR AN INCREASE IN ITS RATES AND CHARGES BASED THEREON | ) | DOCKET NO.W-01651B-12-0339 |

# TESTIMONY

# IN SUPPORT OF

# THE SETTLEMENT AGREEMENT

L. JOHN LESUEUR

ASSISTANT DIRECTOR

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 3, 2013

## TABLE OF CONTENTS

**EXECUTIVE SUMMARY**
**VAIL WATER COMPANY**
**DOCKET NO. W-01651B-12-0339**

Mr. LeSueur's testimony supports the adoption of the Settlement Agreement ("Agreement") proposed by the parties in this case. Mr. LeSueur's testimony describes the settlement process as transparent and productive, and explains why Staff believes the adoption of the Agreement is in the public interest.

## I. INTRODUCTION

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

A. My name is John LeSueur. I am employed by the Arizona Corporation Commission ("Commission") as an Assistant Director in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Please state your educational background.**

A. I graduated from the University of Texas School of Law in 2003 with a Juris Doctorate and from Brigham Young University in 2000 with a Bachelor's Degree in Economics.

**Q. Please describe your professional work experience.**

A. I am a member of the Arizona State Bar. From September 2003 through November 2006, I worked as an environment and natural resources attorney for Fennemore Craig. I worked on cases involving the Federal Clean Water Act, the Federal Safe Drinking Water Act, and Arizona's Underground Storage Tank Assurance Fund.

From January 2007 thru December 2012, I was employed by the Commission as a policy advisor for Commissioner Gary Pierce. As policy advisor, I advised Commissioner Pierce on all cases and legal matters pending before the Commission.

In January 2013, I began working in my current capacity as Assistant Division Director for the Utilities Division. In my current role, I review submissions that are assigned to the Utilities Division, make policy recommendations to the Director, and supervise Staff's preparation of testimony and Staff Reports that are submitted for the Commission's consideration.

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

A. My purpose is to explain why Staff supports the adoption of the proposed settlement agreement ("Agreement"). My testimony will address the settlement process, provide an overview of the Agreement's provisions, and discuss public interest considerations.

**Q. Did you participate in the settlement discussions that resulted in the Agreement?**

A. Yes, I did.

**Q. How is your testimony organized?**

A. My testimony has four sections. Section I is this introduction, Section II discusses the settlement process, Section III provides an overview of the Agreement, and Section IV presents Staff's view of the public interest supporting the adoption of the Agreement.

## II. SETTLEMENT PROCESS

**Q. Please describe the settlement process.**

A. On June 27, 2012, Vail Water Company ("Vail" or "Company") filed an application for a rate increase with the Commission. The only two parties in this case are Staff and the Company; no other parties have applied for intervention. Shortly after the Company filed its rebuttal testimony on March 25, 2013, the Company expressed interest in initiating settlement discussions as a potential means for resolving the outstanding disputed issues. On April 10, 2013, Staff docketed notice that the parties may enter into settlement discussions as early as April 16, 2013. Staff met with representatives of the Company on April 16, 2013, and began the discussions that culminated in the Agreement.

**Q. How would you characterize the process?**

A. I would describe the process as transparent and productive.

## III. AGREEMENT

**Q. Please describe Sections 1, 7 and 8 of the Agreement.**

A. These are boilerplate provisions that Staff routinely includes in the settlement agreements it enters into. Section 1 contains the recitals of the Agreement and establishes the predicate circumstances. Section 7 sets forth the procedure for the Commission's eventual adoption, modification or rejection of the Agreement, as well as the parties' rights and responsibilities therefrom. Section 8 contains standard miscellaneous provisions.

**Q. Please describe Section 2 of the Agreement.**

A. I view this Section as the backbone of the Agreement. It sets forth the Company's test year revenue, along with the revenue increase it needs to meet its revenue requirement. It also establishes the Company's fair value rate base at $3,315,108. One of the key issues resolved by the parties during the settlement discussions was the appropriate treatment of the Central Arizona Project ("CAP") recharge credits that the Company accumulated since its last rate case. The Agreement treats those credits as a component of rate base because the Company acquired them with Company revenues, not customer contributions, and because the credits are used and useful in the provision of service to its customers.

**Q. Were the Company's existing CAP recharge credits funded, at least in part, via the Company's CAP Hook-up Fee?**

A. Yes, they were.

**Q. Is it not Staff's usual recommendation with respect to assets acquired via hook-up fees to exclude them from rate base?**

A. It is. The reason Staff has agreed to different treatment in this case is because the Commission specifically ordered that the CAP hook-up fees be treated as revenues in the Company's last rate case (Decision No. 62450). In the last case, Staff recommended that the Company's CAP hook-up fees be treated as a deferred credit, but the Commission ordered that they be treated as revenue. Because the Company funded the CAP recharge credits with revenue, and not customer contributions, Staff believes it is appropriate to include the CAP recharge credits in the calculation of rate base in this case.

**Q. But even if the CAP recharge credits are rate base eligible, are they currently used and useful?**

A. That is an interesting question because it raises the issue of who should pay for the transition of the Company from depletable to renewable water supplies. Who benefits from the long-term sustainability of the aquifer, current or future customers? Staff concludes the answer is both. In fact, even if there were no growth in the Vail service area, the Company would still need to use CAP water to comply with the State's policy of reducing the use of groundwater. In order to avoid the potential for discouraging the Company from making reasonable and prudent expenditures in transitioning towards a renewable water supply, Staff concludes it is appropriate for the Commission to view the Company's existing CAP recharge credits as used and useful so the Company can continue to timely recover the expenses associated with acquiring those credits.

**Q. With respect to the agreed upon fair value rate base of $3,315,108, has Staff changed its recommendation on the excess capacity issue identified in Marlin Scott's Direct Testimony?**

A. Yes, after reviewing the Rebuttal Testimony of Kara D. Festa, Staff now understands why Well #6 is needed for the system operation and demand. Her additional information provided clarifications related to, 1) updated well flow data, 2) Well #3's production can only serve the south service area and not the north service area, 3) Well #5's operation also addresses a low pressure area, and 4) all the north service area wells (#5, #6 and #8) are needed to provide the high construction water use. Staff concurs with the Company that Well #6 is not excess capacity but instead is used and useful in this rate proceeding.

**Q. Has Staff also changed its recommendation on the plant retirement issue identified in Marlin Scott's Direct Testimony?**

A. Yes, after reviewing the Rebuttal Testimony of Thomas J. Bourassa and his clarification of the Company's response to Staff's Data Request MSJ 4.1, Staff concurs with the Company that plant retirements should be shown at $92,956.

**Q. Please describe Section 3.**

A. Section 3 proposes a 9.1 percent cost of equity for the Company, based on a 100 percent common equity capital structure. To place that number in perspective, it is 90 basis points below the cost of equity Staff is recommending for Arizona Water (which essentially has a 50 percent debt / 50 percent equity capital structure) in a settlement agreement Staff has signed in Docket No. W-01445A-12-0348. It is also 145 basis points below the cost of equity the Commission recently recognized for Arizona Water in Decision No. 73736.

Staff concludes that a reason it is appropriate to award Vail a lower cost of equity than Arizona Water is due to Vail's 100 percent equity capital structure. However, Staff recognizes that a 9.1 percent cost of equity may not have been achievable outside of a settlement agreement. Under the circumstances, Staff concludes that the 9.1 percent cost of equity is a significant ratepayer benefit of this Agreement.

**Q. Please describe Section 4.**

A. I would describe this as the second most important Section of the Agreement. The parties agree that the Company should recover the costs it incurs in transitioning from a depletable to a renewable water supply via a CAP Surcharge. Since 2000, Vail has been recharging its CAP allocation in Marana near the CAP canal at a recharge facility operated by Kai Farms. The recharge facility is over 30 miles from Vail's service area. By the end of 2015, Vail intends to begin direct use of its CAP allocation within its service territory. It is negotiating a wheeling agreement with the City of Tucson, and submitted for Commission review on April 18, 2013, final plans for the direct use of CAP water within its service territory.

Staff concludes that these efforts are in the public interest. As I stated earlier, Staff concludes that the Company's existing and future ratepayers are benefiting from the Company's efforts to bring renewable CAP water into its service territory.

Staff recognizes that delivering CAP water into the Company's service territory is not easy, nor is it free. Accordingly, Staff supports the Agreement's proposal to create a CAP Surcharge. The purpose of the CAP Surcharge would be to allow the Company to timely and transparently recover its CAP water and delivery costs from its customers.

As described in the Proposed Plan of Administration for the CAP Surcharge, which will be filed prior to the May 7, 2013 hearing, the CAP Surcharge will include the following components:

- Component 1 - Variance from Combined CAP Municipal and Industrial ("M&I") Capital and CAP Delivery Charges included in Base Rates – This component is based upon variances between the combined CAP M&I capital and CAP delivery charges in effect for the applicable year and the combined rates ($105.87 per acre-foot) included in base rates.

- Component 2 - Tucson Water Wheeling Fees – This component is based upon the fees set forth in the final Wheeling Agreement between Vail and Tucson Water and the volume of water delivered to Vail's service territory as defined by the Wheeling Agreement.

- Component 3 – Periodic Unrecovered Recharge Credits – This component applies the rate variance calculated in Component 1 to any excess of the total CAP allocation (in acre-feet) and the total water wheeled to customers. It is an asset that represents the CAP costs included in long term storage credits reserved for future use.

- Component 4 – Prior Year Under/(Over) Recovery – This component represents the over/under recovery of the prior year's costs through the surcharge.

- Component 5 - Long Term Storage Credit Recovery – This component reflects the value of Long Term Storage Credits to be recovered from ratepayers and used to

offset CAGRD fees. The amount for recovery from ratepayers is calculated using average inventory cost. Vail will provide documentation to support these amounts.

- Component 6 - Gain on Sale of Long Term Storage Credits – This component reflects the customers' share (50 percent) of any profit resulting from the sale of Long Term Storage Credits to third parties.

- Component 7 - Excess Water Loss Disallowance – This component is a disallowance of CAP M&I capital and CAP delivery charges based on unaccounted for water loss in Vail's system in excess of 10 percent. If Vail's water loss for the 12 months prior to the date of filing for a new surcharge exceeds 10 percent, the total amounts of the other components will be reduced by the percentage that water loss is in excess of 10 percent.

**Q. Please describe Section 5.**

A. Section 5 states that the Company agrees to Staff's proposed rate design, which is Staff's typical rate design that it routinely proposes in water utility rate cases pending before the Commission. Staff's proposed rates are designed to recover almost 37 percent of revenue from the monthly minimum, and just over 63 percent of revenue from the commodity rate.

**Q. Please describe Section 6.**

A. The Company retains management services from TEM Corp. This Section requires the Company to obtain time sheets from TEM Corp. to support the management fees requested for recovery in future rate cases. Staff concludes that this sufficiently resolves all issues raised in this case regarding management expenses.

The Section also proposes that the Company's CAP Hook Up Fee Tariff be eliminated as CAP water and delivery costs will be recovered, as I discussed above, in the base rate and via the CAP Surcharge.

**Q. Are there any outstanding issues in this case not addressed by the Agreement?**

A. The parties intended the Agreement to be a global settlement of the issues raised in this case. During the pre-hearing conference on May 2, 2013, however, the Administrative Law Judge asked whether the Company had agreed to Staff's recommendation that it adopt at least five Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission review and consideration. Although it is not explicitly stated in the Agreement, Staff has confirmed that the Company will accept Staff's recommendation.

## IV. PUBLIC INTEREST

**Q. Please explain why Staff believes adoption of the Agreement is in the public interest.**

A. Staff believes adoption of the Agreement is in the public interest for the following reasons:

1. The Agreement contains a 9.1 percent cost of equity, which Staff believes is balanced in favor of minimizing rates for ratepayers;
2. The Agreement fairly resolves a potentially litigious issue concerning the treatment of the Company's existing CAP recharge credits; and
3. The Agreement provides for timely and transparent recovery of the costs incurred in bringing renewable CAP water into the Company's service territory and thereby reducing Vail's reliance on groundwater.

**Q. Does this conclude your testimony?**

A. Yes.