Decision **PROPOSED DECISION OF ALJ GALVIN** **(Mailed 6/10/2003)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Apple Valley Ranchos Water Company (U 346 W) for Authority to Increase Rates (as authorized by NOI 02-03-017): In 2003 of $2,775,000 or 27.1% above revenues generated by present rates, in 2004 of $497,839 or 3.8% above the revenues generated by the rates proposed for 2003, in 2005 of $507,422 or 3.7% above the 2004 revenue requirements.	Application 02-03-046 (Filed March 19, 2002)

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Marion Peleo, Attorney at Law, and Daniel R. Paige, for the Office of Ratepayer Advocates.

OPINION RESOLVING GENERAL RATE CASE

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OPINION RESOLVING GENERAL RATE CASE

I. Summary

Apple Valley Ranchos Water Company (AVR) is authorized to increase its rates by amounts designed to increase revenue by $1,600,300 or 14.89% in 2003; $309,600 or 2.46% in 2004; and $327,300 or 2.54% in 2005. The 2003 rates are effective January 1, 2003 as set forth in Decision (D.) 02-12-063, dated December 19, 2002. We authorize rates of return on rate base of 9.49% for the year 2003; 9.48% in 2004; and, 9.47% in 2005. The return on common equity (ROE) authorized by this decision is 10.10%.

As a result of the revenue increase granted by this decision, the bimonthly bill for the average residential customer using 50 hundred cubic feet (Ccf) of water with a 5/8" by ¾" meter would increase by $13.67 or 15.3% from $89.45 to $103.12 for the year 2003.

II. Application

On January 31, 2002, AVR filed its Notice of Intention to file an application for a general rate increase. On March 19, 2002, AVR filed the above-captioned application seeking rate increases of 27.1% in 2003, an additional 3.8% in 2004, and an additional 3.7% in attrition year 2005 to produce a 12.00% overall rate of return on equity for the period 2003 through 2005. Customers were advised of the proposed rate increase through publication and bill inserts.

AVR stated that its requested rate increase is necessary because the present rates are insufficient, unjust and unreasonable in that they do not produce adequate revenue to yield a fair, just and reasonable return on capital invested and to be invested in plant, property and other equipment devoted to providing utility service.

III. The System

AVR, a wholly owned subsidiary of Park Water Company (Park), is located in and adjacent to the Town of Apple Valley, East of Victorville and Interstate Route 15 in San Bernardino County. AVR, a water public utility within the context of Public Utility Code Section 216, is subject to the jurisdiction, control, and regulation of this Commission. At the close of 2001, AVR was serving approximately 14,788 customers in this high desert area. It provided 14,741 acre-feet of water from its 22 wells (all located in the Mojave River Ground Water Basin) through 2,084,584 linear feet of pipe. AVR also serves non-potable water for irrigation purposes within the Jess Ranch Community located adjacent to the town of Apple Valley.

IV. Procedural History

By Resolution ALJ 176-3085, dated April 4, 2002, the Commission preliminary designated the captioned application as "ratesetting" with a hearing indicated. A Prehearing Conference was held on May 3, 2002 to establish issues and a hearing schedule. Following this PHC, on May 20, 2002 Commissioner Peevey issued a Scoping Memo and Ruling setting a schedule that included a public participation hearing (PPH) and evidentiary hearings (EH). Administrative Law Judge (ALJ) Galvin was designated the principal hearing officer.

On July 8, 2002 and prior to the Apple Valley PPH, the Commission's Office of Ratepayer Advocates (ORA) distributed two reports on AVR's requested rate increase. The first report addressed Cost of Capital, and the second addressed Results of Operations. Respectively, these reports are Exhibits 9 and 12 in this proceeding. Based on these reports, ORA recommended an effective 1.9% decrease to produce a 9.53% overall ROE for the period 2003

through 2005. This decrease represents the leveling of a calculated 0.6% increase in 2003, a 5.8% decrease in 2004, and a 0.7% decrease in attrition year 2005.

More than 100 customers attended the July 16, 2002 PPH held in the Apple Valley City Hall, approximately half attended the afternoon and half the evening session. In total, statements were received from approximately 30 customers. Almost uniformly, the speakers opposed any increase in rates. Some customers contrasted AVR's high rates to the low rates of nearby communities and expressed a concern over repeated ruptured or leaking pipes. Two customers raised the issue of AVR substituting its treated drinking water with reclaimed water for non-potable uses, such as for park and recreational landscape.

Apart from input of the PPH speakers, the Commission received approximately 50 individual letters opposed to any rate increase. Those writing letters voiced the same concerns expressed at the PPH.

V. Evidentiary Hearing

An evidentiary hearing held in San Francisco on August 19 and 20, 2002 was necessarily continued to November 12 and 13, 2002 because the State of California's fiscal year 2002/2003 budget impasse precluded four of the six ORA witnesses, located in Los Angeles, from attending the August hearings. This continuance precluded the Commission from issuing a timely decision and from implementing rate changes on January 1, 2003, as provided for in the Commission's Rate Case Processing Plan.

By D.02-12-063, dated December 19, 2003, we affirmed delaying the evidentiary hearing to ensure that the final decision was based on a complete record with intervenor analysis. That interim decision authorized AVR's test year 2003 rates to become effective January 1, 2003. Such authority was made

with the explicit understanding that it does not constitute precedent in any future proceeding. All customers were notified that any rate change would be effective January 1, 2003.

AVR and ORA revised some of their individual test year estimates during the evidentiary hearing to correct errors. As a result, the parties were requested to file a joint comparison exhibit summarizing their final revised estimates and identifying the remaining disputed issues. This matter was submitted on March 11, 2003.

VI. Joint Comparison Exhibit

On December 16, 2002, AVR and ORA filed their joint comparison exhibit. Undisputed items being agreed to include the number of customers, a 10.0% unaccounted water allowance, capitalized payroll, leased water right and assessment, and purchased power. A detailed list of resolved items, along with agreed-upon estimates, identification of how the parties' original estimates were derived, and reasons for agreements is set forth in the comparison exhibit.

The agreed-upon estimates resulted from a review of initial positions, correction of errors, and a better understanding of the other party's revised estimates. Many of these agreements stem from the availability of more recent data to ORA after AVR filed its application.

Upon careful analysis of the record and consideration of reasons for the parties initial and revised estimates, we find that the agreed-upon estimates set forth in the joint comparison exhibit are a reasonable resolution of the initial differences, consistent with the law, and in the public interest.

The issues upon which the parties could not agree are discussed in the remainder of this decision and are shown in the following Table setting forth revised summary of earnings figures at present rates.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands) [1]

Consolidated Items	AVR	ORA	Difference	AVR	ORA	Difference
Gross Revenues	$10,386	$10,458	($72)	$12,781	$11,047	$1,734
Payroll & Benefits	2,157	1,661	496	2,275	1,717	558
O&M - Other	2,757	2,974	(217)	2,811	3,027	(216)
A&G - Other	741	604	137	901	680	221
Main Office Expense	871	719	152	896	726	170
Taxes & Depreciation	2,233	2,531	(298)	3,177	2,622	555
Total Expenses	8,759	8,489	270	10,060	8,772	1,288
Net Revenue	1,627	1,969	(342)	2,721	2,275	446
Average Rate Base	27,904	23,863	4,041	29,740	25,556	4,185
Rate of Return	5.83%	8.25%	(2.42%)	9.15%	8.90%	0.25%

[1] Amounts under $500 are rounded to the nearest thousand. For example, $500 is rounded up to $1,000. There are also minor differences due to rounding.

VII. Revenues

The differences in estimates for gross revenues are in customer consumption and miscellaneous revenues, as shown in the following tabulation.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands)

Items	AVR	ORA	Difference	AVR	ORA	Difference
Consumption	$10,382	$10,445	($63)	$12,777	$11,034	$1,743
Miscellaneous	4	13	(9)	4	13	(9)
Total Differences			($72)			$1,734

A. Customer Consumption

The following estimates applicable to the test years differed from those summarized in the joint comparison exhibit because that exhibit inadvertently reversed the consumption estimates between AVR and ORA.

Cubic Feet (CCF) Per Year

Customer Class	AVR	ORA	Difference
Public Authority	7,939.0	7,939.0	0
Pressure Irrigation	2,748.3	2,748.3	0
Gravity Irrigation	148,773.7	148,773.7	0
Industrial	317.2	317.2	0
Residential	286.0	305.7	19.7
Business	755.6	768.5	12.5

The differences in customer consumption estimates are in the Residential and Business classes. These differences resulted from AVR and ORA's use of different estimating models, time periods, and variables. AVR used the Econometric method with January 1988 through December 2001 monthly data of four variables. The variables were rainfall, temperature, time,

conservation and a dummy variable. The dummy variable was used to account for items not specifically included in the correlation, such as the number of daylight hours, wind, and evaporation.[2] ORA used the Committee method that employed the Modified Bean Method of regression analysis based on January 1988 through December 2000 annual data of three independent variables; rainfall, temperature, and time.

Both of these methods have been used in prior Commission proceedings, but neither has been adopted by the Commission.[3] The Econometric method is the latest method, which water utilities and Commission staff started using in 1992 to expand consumption data and calculations with additional variables. However, with no agreement between the utilities and Commission staff on a uniform Econometric method, parties continue to differ on the appropriate variables for deriving customer class consumption estimates.

For example, use of the Econometric method in AVR's last General Rate Case proceeding (GRC) by AVR and ORA (then called the Ratepayer Representation Branch of the Water Division) produced varied results, as noted in D.99-03-032. AVR conducted three variations of the Econometric method and ORA two variations. AVR's three variations for its 1999 test year residential class ranged from 302.1 to 323.0 Ccf and ORA's two variations from 249.7 to 350.7 Ccf. Similar results occurred for the 2000 test year. Part of these variations resulted from a bias effect of including time as a dependent variable in the Econometric method.

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[2] Exhibit 1 at p. 12.

[3] RT 178 at 4-9.

The acceptable method for estimating customer consumption prior to 1992 was the Committee method established by water utilities and Commission staff. After ten years of experience with the Econometric method, ORA reverted to the Committee method because of the results of its analysis of prior Econometric model results and actual consumption experience. That analysis showed that the Econometric model under-forecasted consumption 70% to 80% of the time while the Committee method "produced much better results."[4] ORA has also used the Committee method in estimating test year customer consumption for a recent California Water Company GRC involving 15 districts and San Gabriel Water Company's GRC.[5]

Although AVR affirms that ORA's consumption estimates for residential and business customers are correct calculations using the Bean method as ORA applied it,[6] it nevertheless rejected the results because the Committee method uses annual instead of monthly data, only uses three variables, and uses less data.

Both parties offered plausible reasons to adopt their consumption estimates. However, given the disagreement between AVR and ORA on the appropriate use and application of variable factors in the Econometric model, disparity in comparison of Econometric model results with actual results. We apply informed judgment in adopting the results of ORA's Committee method over the results of AVR's Econometric method in this proceeding. We

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[4] RT 333, at 3 to 17.

[5] Both of these proceedings resulted in stipulated agreements in regards to customer consumption. *See* A.01-09-062 *et al.* and A.01-10-028.

[6] RT 342 at 14 to 23, RT 343 at 25 to 28.

recommend that AVR and other water utilities conduct a workshop with ORA to establish an agreed upon consumption estimating method for future GRCs. We adopt the 305.7Ccf Residential and 768.5 Ccf Business consumption forecast of ORA for the 2003 and 2004 test years.

B. Miscellaneous Revenues

AVR and ORA both included estimates for non-tariff lease revenue in each of the test years. Differences in estimates resulted from the revenue percentage allocated to ratepayers.

AVR included 30%, approximately $4,000, of the approximately $13,000 projected non-tariff lease revenue in its estimates pursuant to its understanding of the ratepayer/shareholder sharing mechanism set forth in D.00-07-018.[7] ORA included the entire amount in its estimates for the test years. It did so "because the property taxes and the landscaping, rate plan and maintenance cost have been paid by the ratepayers."[8]

D.00-07-018, of which ORA was a party, established a ratepayer/shareholder mechanism for active and passive non-tariff revenues. For passive non-tariff revenues, as is the case of AVR's non-tariff leases, it provides for a 30% ratepayer and 70% shareholder split. That decision also required shareholders to absorb all incremental costs and taxes.

AVR did not identify any incremental costs or taxes. Although ORA contends that ratepayers paid all the operating costs for these leases, it had no

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[7] RE: Commission Order Instituting Rulemaking to set rules and to provide guidelines for the Privatization and Excess Capacity as it relates to investor owned water companies, R.91-10-049, dated October 27, 1997.

[8] RT 279 at 3 to 17.

idea whether associated costs were recorded as operating (ratepayer) or non-operating (non-ratepayer) expenses.[9] To comply with D.00-07-018, 30% of the non-tariff leases should be allocated to operating revenue.

Absent a modification of D.00-07-017 or substantive reasons to deviate from that decision, we cannot treat AVR any differently than we treat other water utilities under our jurisdiction. We adopt AVR's estimates for miscellaneous revenues.

VIII. Payroll

AVR and ORA agreed that 5.6% of total payroll would be capitalized. However, they disagreed on the method of forecasting payroll and associated benefits. These differences are summarized by item in the following table.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands)

Items	AVR	ORA	Difference	AVR	ORA	Difference
O&M Payroll	$	$	$271	$	$	$303
Operations	465	330		492	341	
Customer	257	183		272	189	
Maintenance	213	151		225	156	
A&G Payroll[10]	758	567	191	797	582	215
A&G Payroll Benefits	464	430	34	489	449	40
Total			$496			$558

[9] RT 279 at 25 to 29.

[10] The joint comparison exhibit's summary of earnings statements show $758,000 for AVR's 2003 test year A&G payroll while the detailed explanation on page 13 of that exhibit shows $799,100. Similar differences exist for AVR's 2004 test year A&G payroll. The amounts identified in the summary of earnings are being used for this proceeding.

Differences						

A. O&M Payroll

AVR annualized its December 31, 2002 payroll rates and added a 2.5 % cost of living (COLA) increase granted for 2002, estimates of merit salary adjustments to be granted during 2002 by individual employee, and overtime by individual employee to arrive at a December 31, 2002 payroll base. AVR employed this same process to derive its test year 2004 payroll estimate.

AVR and ORA subsequently agreed to use ORA's COLA percentages of 1.9% for 2003 and 2.7% for 2004. We concur. However, they differed on whether merit salary adjustments were appropriate.

ORA used AVR's 1999 payroll expense adopted in the last rate case (D.99-03-032) as a base. ORA used that base for test year estimates because ORA concluded from a comparison of AVR's 2001 employee salaries to other California public and private water employees that AVR's salaries were approximately 44% higher than employees of other water utilities. ORA increased that 1999 payroll base by its labor escalation factors to bring the O&M payroll estimates up to test year 2003 and 2004 levels.[11] These escalation factors are the same factors ORA and the Commission's Water Division use for all water utilities. ORA did not provide for merit increases during the test years.

ORA's estimates are flawed because they assume that the previously adopted 1999 payroll estimates are currently valid except for the need to include

[11] ORA's labor escalation factors were 3.4% for 2001, 2.8% for 2002, 1.9% for 2003, and 2.7% for 2004, as set forth in Exhibit 12.

yearly COLA increases. ORA's method ignores actual salary and workload changes that occurred from 1999 through 2002.

It is appropriate to use AVR's payroll estimates because they realistically reflect actual payroll. We adopt the payroll estimates of AVR.

B. A&G Payroll

AVR and ORA utilized the same methods for their A&G payroll estimates as they did for O&M payroll estimates and the evidence and reasoning presented concerning A&G payroll are essentially the same. Therefore, A&G payroll estimates should be calculated in a manner consistent with our O & M payroll discussion and conclusion for adopted O&M payroll estimates.

C. A&G Payroll Benefits

There are no differences between the rates AVR and ORA used for medical, dental, and post retirement benefits other than pension. The differences result solely from applying these benefits to payroll estimates. We will apply these rates to the payroll estimates being adopted in this proceeding.

IX. Operations and Maintenance – Other

The differences in the operation and maintenance – other category are in purchased power, leased water rights, replenishment charges, uncollectibles, and other estimates. These differences are itemized in the following table.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands)

Item	AVR	ORA	Difference	AVR	ORA	Difference
Purchased Power	$1,064	$1,237	($173)	$1,081	$1,257	($176)
Leased Water Rights / Assessments	359	402	(43)	378	424	(46)
Uncollectibles	48	48	0	59	51	8
Other	1,070	1,071	(1)	1,074	1,076	(2)
Total Differences			($217)			($216)

A. Purchased Power

AVR and ORA both used the current energy rates of Southern California Edison Company and Southwest Gas Company to calculate their individual expense estimates. Differences in estimates resulted solely from the use of different customer consumption estimates. AVR and ORA agreed that current energy rates should be applied to the consumption estimates being adopted in this proceeding. We concur.

B. Leased Water Rights & Assessments

AVR and ORA both used the current $70 acre-foot pumping cost to calculate their individual expense estimates. AVR and ORA agreed that the current $70 per acre-foot pumping cost should be applied to the consumption estimates being adopted in this proceeding. We concur.

C. Uncollectibles

AVR and ORA both used a .46% rate to calculate their individual estimates. Differences in estimates resulted solely from the use of different operating revenue estimates. The .46% rate should be applied to the operating revenue estimates being adopted in this proceeding.

D. Other

AVR and ORA agreed that $998,407 for test year 2003 and $998,251 for test year 2004 applicable to non-clearing accounts should be included in this category. Differences in estimates resulted solely from clearing account allocations based on different payroll, depreciation, and insurance estimates. AVR and ORA agreed that clearing account allocations should be based on the adopted payroll, depreciation, and insurance estimates. We concur.

X. Administrative and General Other Expenses

The differences in the administrative and general other expenses category are in insurance, regulatory expense, franchise fees, outside services, and A&G transfer. These differences are itemized in the following table.

	YEAR 2003			YEAR 2004		
	(Dollars in Thousands)					
Items	**AVR**	**ORA**	**Difference**	**AVR**	**ORA**	**Difference**
Insurance	$475	$351	$123	$559	$375	$184
Regulatory Expense	58	49	10	58	48	10
Franchise Fees	109	110	(1)	134	116	18
Outside Services	98	93	5	102	97	5
A&G Transfer	(205)	(205)	0	(165)	(169)	4
Total Differences			$137			$221

A. Insurance

AVR and ORA disagreed on the method of forecasting insurance expense. AVR based its estimates on actual insurance premiums for its policy year 2002-2003 and arrived at test year estimates by applying percentage increases estimated by its insurance broker. It opted to use judgment instead of a trending method to estimate insurance expense because of substantial insurance premium increases it experienced following the tragic September 11, 2001 event. Based on its approach, AVR estimated its insurance cost to be approximately $564,000 for test year 2003 and $675,561 for test year 2004. By the end of the evidentiary hearing, AVR reduced its test year estimates downward by more than $80,000 to reflect declining insurance premium increases. AVR's revised

insurance expense for test year 2003 was $475,000 and test year 2004 was $559,000.

ORA based its estimates on a linear regression analysis of prior year's recorded insurance expense.

ORA's estimating method is reasonable and should be adopted because it is based on historical increases in insurance premiums. However, ORA's test year estimates need to be adjusted because ORA did not include approximately $37,000 of insurance in its 2002 recorded year base for directors and officers, injuries and damages, and workers compensation insurance expense.[12] The 2002 insurance expense of $354,000 used by ORA should have been increased by the additional $37,000 of insurance to $391,000.

There is no record on what impact this adjustment has on ORA's test year estimates. Therefore, we use informed judgment and apply the 14.2% average annual insurance increase from recorded 1995 through 2002 insurance expense to arrive at a $446,185 insurance expense allowance for test year 2003 and a $509,543 insurance expense allowance for test year 2004.

B. Regulatory Expense

AVR based its estimate for each of the test and attrition years on the regulatory cost incurred by the most recent Park subsidiary having a contested regulatory case. AVR used actual regulatory cost incurred by Park's Santa Paula Water Works, LTD subsidiary for its test year 1992-1993 rate case (Application 91-03-026) as a base. AVR escalated that base to 2002 cost by actual increases in rates charged by its attorney and consultants between this period

[12] RT 376 at 5 to RT 377 at 7.

and by non-labor escalation for miscellaneous items. This escalated total was then amortized over the three-year rate case cycle.

ORA based its estimates on the regulatory cost AVR was authorized in its 1998 rate case (D.99-03-032).[13] ORA selected AVR's 1998 rate case for the base cost because that case involved litigation similar to this proceeding and is more recent that the 1992 base used by AVR. ORA also used factors to escalate the base cost to 2002 and amortized the resultant cost over the rate case cycle.

AVR has already incurred $129,000 in regulatory expense by the end of September 2002 for this proceeding.[14] An amortization of this amount over the rate case cycle would amount to $36,333, well under the estimates of AVR and ORA. However, AVR has incurred additional cost subsequent to that date for its participation in the November evidentiary hearing and filing of a joint comparison exhibit and opening and closing briefs. AVR is also expected to incur additional costs in filing comments on the proposed decision.

The adoption of AVR's estimates would provide it $46,000[15] to cover the costs of the subsequent activities identified above and $17,100[16] if ORA's estimate is adopted. Absent cost estimates for these additional activities we rely on informed judgment, and conclude that the adoption of AVR's estimates would provide it with more than sufficient funds for the additional activities. On

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[13] Although ORA recommended $48,700 for each test and attrition year, the joint comparison exhibit shows a lower $48,300 amount for 2004 without any explanation.

[14] RT 388 at 1 to 16.

[15] Rate case cycle of three years times $58,333 yearly amortization minus $129,000 incurred cost.

[16] Rate case cycle of three years times $48,700 yearly amortization minus $129,000 incurred cost.

the other hand, ORA's estimates should provide AVR with sufficient funds to cover the cost of these subsequent activities. We adopt ORA's $48,700 regulatory commission expense estimate.

C. Franchise Fees

AVR and ORA both used the 1.5% franchise rate currently in existence. Differences in estimates resulted solely from the use of different gross revenue estimates. AVR and ORA agreed that the current franchise fee should be applied to the gross revenues adopted in this proceeding. We concur.

D. Outside Services

The differences resulted from the treatment of costs for evaluating the vulnerability of AVR's security to terrorist attacks. AVR included $5,000 in both test years to complete this evaluation by the end of 2003, as required by the United States Environmental Protection Agency (EPA). ORA opposed any such allowance until AVR provides justification for the costs.

The September 11, 2001 terrorists' attacks have heightened the need to assess the security of public utilities. Hence, it is reasonable to include $5,000 in the 2003 test year to satisfy EPA's vulnerability assessment requirement. However, it is not reasonable to include a similar amount in the 2004 test year, as requested by AVR, because this assessment will have been completed by the end of 2003.[17] We adopt $98,000 in outside services for the 2003 test year and $97,000 for the 2004 test year.

[17] RT 214 at 5 to 8.

E. A&G Transfer

The differences between AVR's and ORA's estimates resulted solely from differences in direct A&G expense and rate base estimates. A&G transfer should be recalculated based on adopted operating expense and rate base.

XI. Main Office Expense

Main office expense consists of a four-factor allocation of Park's data processing and other general office expense allocated to AVR and other subsidiaries. Differences between AVR and ORA estimates are summarized in the following table.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands)

Items	AVR	ORA	Difference	AVR	ORA	Difference
Main Office Expense	$871	$719	$152	$896	$726	$170

The differences are due to estimating methodology. AVR used total main office cost estimates adopted for Park's Central Basin Division test year 2002 in D.01-03-078 as a base and escalated that approved cost to its test year 2003 by adding the difference between 2001 and 2002 expenses. AVR used this same method for its 2004 test year estimate.

ORA used the same 2002 base that AVR used. However, ORA escalated that cost based on its labor escalation factors to reach its test year estimates.[18] ORA subsequently clarified that it excluded bonuses, a cost-of-living factor, and

[18] Exhibit 12 at p.17.

a 10% pay increase from its base prior to applying its escalation factors. ORA derived these payroll adjustments from "current payroll data furnished by the utility instead of using the adopted payroll expense."[19]

It has been the Commission's policy to allow water utilities with multiple districts to file a main office rate case on a three-year cycle.[20] To the extent that such estimate remains valid, use of the adopted Central Basis Division main office estimate escalated to the test years is a reasonable estimating method, as used by AVR. Although ORA adjusted the previously adopted main office base to exclude bonuses, a cost-of-living factor, and 10% pay increase, it did so without any knowledge of whether those costs were included in the adopted base.[21] Absent evidence that those costs were included, there is no basis to consider adopting ORA's estimate. AVR's $870,900 test year 2003 and $896,000 test year 2004 main office expense are reasonable and should be adopted.

XII. Taxes and Depreciation

The differences in the taxes and depreciation category are in property taxes, payroll taxes, depreciation, and state and federal income taxes. These differences are summarized in the following table.

YEAR 2003 **YEAR 2004**

(Dollars in Thousands)

Items	AVR	ORA	Difference	AVR	ORA	Difference
Property Taxes	$326	$334	**($8)**	$343	$297	**$46**
Payroll Taxes	165	130	35	174	116	58
Depreciation	1,228	1,192	36	1,339	1,288	51

[19] RT 241, at 8 to 11.

[20] Exhibit 23 at p.10 and 14.

[21] RT 241 at 14 to 21.

State Income Tax	104	178	(74)	295	205	90
Federal Income Tax	410	697	(287)	1,028	718	310
Total Differences			($298)			$555

The differences between AVR's and ORA's taxes and depreciation estimates resulted solely from differences in rate base, payroll costs, expense, and revenue estimates. Taxes and depreciation should be recalculated based on the adopted rate base, payroll costs, expense, revenues, and cost of capital.

XIII. Rate Base

The differences in the rate base category are in utility plant, materials and supplies, working cash, depreciation reserve and miscellaneous items. These differences are summarized in the following table.

(Dollars in Thousands)

	YEAR 2003			**YEAR 2004**		
	AVR	**ORA**	**Difference**	**AVR**	**ORA**	**Difference**
Utility Plant						
Booster Pump Station	$295	($0)	($295)	295	($0)	($295)
New Well	1,000	(0)	(1,000)	1,000	(0)	(1,000)
Mojave Basin Adjudication	2,438	122	(2,316)	2,438	182	(2,256)
Emergency Generators	666	(0)	(666)	666	(0)	(666)
Materials & Supplies	146	135	(11)	147	136	(11)
Working Cash	814	726	(89)	789	764	(25)
Miscellaneous[22]			373			149
Less: Depreciation Reserve	11,212	11,175	(37)	12,096	12,016	(81)

[22] The amounts in this category represent the averaging of rate base adjustments and minor errors in calculating AVR and ORA's rate base numbers in the joint comparison exhibit.

Net Differences			4,041			4,185

A. Booster Pump Station

AVR and ORA differed on whether a booster pump station should be constructed in the Jess Ranch section of AVR's service territory. AVR recommended the addition of this booster pump station to move water from Jess Ranch into its main pressure zone. ORA opposed the addition of this booster pump station on the basis that AVR did not plan on proceeding with the project.

Subsequently, as part of the joint comparison exhibit, AVR agreed to defer this booster pump station from the current rate case if its request for a new well is approved. The merits of a new well are addressed in the following section. Irrespective of whether a new well is approved in this decision AVR has not demonstrated a need for its proposed Jess Ranch booster pump station. We reject AVR's request to include $295,000 in rate base for a new booster pump station.

B. New Well

AVR and ORA differed on whether a new well is needed. AVR seeks to construct a new well in the summer of 2003 to meet its water supply requirement, as required by the State of California Department of Health Services (DHS) and the Commission's General Order 103 (GO 103). That requirement is to maintain sufficient water supply to meet or exceed the maximum day demand with the largest well out of operation.

AVR testified that events that occurred in late July of 2002 further confirmed its need for a new well. This was because a high demand on the entire water system occurred while two wells were briefly out of commission due to mechanical problems. Southern California Edison Company "power imbalances" forced a couple of its other wells to operate intermittently during

the same time period a fair AVR cited as evidence of an additional need to construct a new well.[23]

ORA used a recent pump certificate provided by AVR to calculate the current production capability level and maximum day demand requirement to determine whether AVR needs a new well. The results of ORA's calculations showed that AVR's total production capability is 25,988 gpm, and if the largest well is out of service, that figure is reduced to 23,997 gpm. ORA's calculations also showed that AVR's maximum day demand requirement is 19,400 gallons per minute (gpm). This means that AVR's total production capacity currently exceeds its maximum day demand requirement by 6,588 gpm (25,988 – 19,400) and if the largest well is out of service it still exceeds AVR's maximum day demand requirement by 4,597 gpm (23,996 – 19,400).

ORA concluded from its calculations that a new well is not needed for AVR to meet its water supply requirement. Hence, ORA opposed the construction of a new well.

However, a February 6, 2002 DHS letter to AVR showed that AVR's maximum day demand requirement is only 18,930 gpm and that AVR has the ability to produce only 19,087 gpm from its active wells and 17,096 gpm if the largest active well is taken out of service. These calculations, based on pump efficiency tests conducted between September and November of 2001, demonstrate the need for an additional source of water supply. DHS further affirmed in its July 19, 2002 letter to AVR that DHS "has previously concluded in the Annual Inspection report that additional source capacity is needed to reliably

[23] Exhibit 20, at p.4.

meet the maximum day demand … [and DHS] support the construction of a new well."[24]

There are two sets of water supply calculations. One set is from ORA demonstrating that AVR has a sufficient source of water to meet its DHS and GO 103 water supply requirement based on its review of a recent pump certificate. The other is a letter from DHS demonstrating that AVR does not have a sufficient source of water to meet its water supply requirement based on pump efficiency tests.

DHS, our sister agency and the state agency best equipped to assess water supply requirements, has found that AVR is not able to meet its maximum day demand water supply requirement. Absent evidence that the assessment of DHS is incorrect, we rely on the expertise of DHS and concur with DHS that a new well is necessary. AVR should be authorized to construct a new well in the summer of 2003.

C. Mojave Basin Adjudication

AVR and ORA differed on whether the $2,400,000 cost AVR incurred in adjudicating its Mojave Basin water rights should be included in rate base.

AVR has accumulated and earned on its adjudication costs as a component of rate base in its construction work in progress (CWIP) account throughout the 10 years this adjudication has taken place. Upon the issuance of a final decision from the Riverside Superior Court by the end of 2002, AVR intends to transfer the entire amount from CWIP into its utility plant in service

[24] Exhibit E of Exhibit 20.

water rights account. Accordingly, AVR included its Mojave Basin adjudication cost in its test years' rate base estimates.

ORA recommended the entire adjudication cost be removed temporarily from rate base "because the company has benefited by having this construction work in progress for the last 10-year period."[25] ORA also recommended that the entire cost be amortized back into rate base over a 40-year period beginning 2002. However, it has no recommendation on what account the unamortized portion should be transferred to.[26]

AVR has been authorized rate base treatment for this adjudication cost in prior rate proceedings. For example, it was authorized rate base treatment for approximately $1,600,000 of its accumulated adjudication cost in its 1999 general rate proceeding (D.99-03-032).

Both shareholders and ratepayers have benefited from this adjudication since costs was first incurred. Shareholders benefited because the cost accumulated in CWIP enabled AVR to earn a return on that cost. Ratepayers have benefited because AVR has had the legal right to pump 10,418 acre feet of water annually from the Mojave basin during this adjudication. For example, AVR has been able to avoid paying $729,000[27] to acquire a comparable amount of water for its customers annually. At AVR's proposed rate of return, the annual

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[25] RT 261 at 17 to 21.

[26] RT 266 at 3 to 5.

[27] Based on the current $70 per acre-foot cost times 10,418 acre-feet of water rights equals $729,000.

revenue requirement for the accumulated adjudication cost is approximately $453,000.[28] This equates to a $276,000 annual savings to ratepayers.[29]

AVR's rate base treatment of its Mojave Basin Adjudication costs fairly benefits shareholders and ratepayers and is consistent with both the Uniform System of Accounts For Water Utilities adopted by this Commission and prior Commission ratemaking treatment. ORA's proposal to take AVR's adjudication costs out of rate base and amortize them back into rate base over a 40-year period is rejected. The entire Mojave Basin Adjudication costs should continue to be included in rate base.

D. Emergency Generators

AVR and ORA differed on the need for AVR to include eleven diesel backup generators in rate base. AVR purchased these generators to provide reliable and adequate supply of potable water to its consumers during emergency situations. Emergency situations identified by AVR included rolling blackouts, inconsistent power levels due to heavy air conditioning loads, earthquakes, and terrorists' attacks.

AVR acquired six of these generators in 1999 and two in 2001. AVR did not identify when the remaining three generators were acquired. Of these generators, one serves AVR's main office building to keep the building operational, three serve booster pumping stations to pump water from one pressure zone to another pressure zone, three are stationary at specific wells, and

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[28] Approximately $2,400,000 of adjudication cost times 10.63% requested return on rate lease times 1.7763 net its gross multiplier.

[29] Current market cost of $729,000 minus rate base recovery of $453,000 equals $276,000.

four are mobile for use at multiple wells equipped with quick electrical connections.

ORA omitted the eleven backup generators from rate base because they are used only on rare occasions by AVR.

DHS, in response to an AVR inquiry as to the need for backup generators, acknowledged that Section 116555 of the California Health and Safety Code requires each public water system to ensure that their system provides a reliable and adequate supply of potable water to its consumers at all times. DHS also affirmed that providing well sites with standby power generators would ensure a reliable supply of drinking water during interruption of electricity supply. However, it stated that emergency power generators "shall" be determined by the water system itself based on operational needs at each well and adequacy of water supply in each individual pressure zone in case of emergency interruption of electrical power.[30]

As part of the commitment to provide reliable and adequate supply of potable water, various water districts requested energy rotating outage exemptions so that water services essential to public health, safety and welfare could receive uninterruptible water service during the 2000-2001 power outages in our rulemaking investigation (R.00-10-002) into the reliability of electric power. In making that request, the water districts acknowledged current Commission regulations allowed water utilities to obtain partial or complete exemptions from rotating outages in times of emergency requiring their services

[30] Exhibit E of Exhibit 20.

such as fire fighting. However, they alleged that if an emergency did occur, the current exception would not guarantee immediate restoration of power.

The water utilities' requested exemption was denied in D.01-04-006 because water utilities already had a limited exemption and reasonably prepared for power interruptions with backup generation and other capacity for the distribution and storage during power interruptions.

By definition, backup generators are used on an irregular basis only to provide uninterruptible power in emergency situations so that customers can receive reliable water service. Having previously recognized the water utilities' ability to use backup generators to provide uninterruptible sources of water without a blanket exemption from energy outages, we are not prepared to exclude AVR's backup generators from its rate base solely because AVR wants to ensure that its system would be able to provide reliable and adequate supply of potable water to its consumers at all times.

Backup generators are a necessary component for water utility operations and should be allowed in rate base to the extent deemed necessary and useful. Although AVR has approximately one back up generator for every two of its wells, there is no basis to disallow all of AVR's backup generators. Even if we concluded that the ratio of AVR's backup generators to its wells should be one for every four wells, the adjustment would reduce the average customers' bill by an immaterial amount, less than $0.35 per month based on AVR's requested return on rate base.[31]

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[31] Calculated as follows: $666,000 recommended disallowance divided by 2 (1 to 4 ratio) equals $333,000 rate base disallowance times AVR's 10.63% requested return on rate base equals a $35,398 net revenue requirement times the 1.7763 net to gross multiplier

Footnote continued on next page

The eleven backup generators should remain in rate base because there is no evidence that AVR has an excessive number of backup generators or that the generators are not useful. However, we will require AVR to provide additional information in its next GRC so that we may revisit this issue. That additional information should include the identity of each generator by horsepower, facility intended to backup, year purchased, rate base amount, actual time placed in service as a backup facility and actual amount of time tested by year since acquired.

E. Tank Coating

AVR requested and ORA concurred that AVR should be allowed to submit an advice letter filing to recover costs deemed reasonable for recoating AVR's Desert Knolls tank after the project is completed. ORA concurred because AVR has deferred recoating this tank even though the Department of Health Services notified AVR in 1995 that the interior finish of this tank was failing.

AVR should be allowed to file an advice letter for the recovery of reasonable costs incurred in recoating its Desert Knolls tank after the project is completed.

F. Materials & Supplies

There is no difference in materials and supplies methodology. The differences in estimates for materials and supplies resulted solely from the use of different estimates for average utility plant in service. AVR and ORA agree that the utility plant in service estimates adopted in this proceeding should be used to calculate materials and supplies for the test years. We concur.

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equals $62,877 gross revenue requirement divided by 14,788 average customers equals $4.25 per year divided by 12 months equals $0.35.

G. Working Cash

There is no difference in working cash methodology. The differences in estimates for working cash resulted solely from differences in operating expenses, rate base and cost capital. AVR and ORA agree that the operating expenses, rate base and cost of capital adopted in this proceeding should be used to calculate working cash for the test years. We concur.

H. Depreciation Reserve

There is no difference in depreciation rates. The differences in estimates for depreciation reserve resulted solely from the use of different estimates for utility plant in service. AVR and ORA agree that the utility plant in service estimates adopted in this proceeding should be used to calculate depreciation reserve for the test years. We concur.

XIV. Cost of Capital

Park provides financial, administrative, accounting, engineering and data processing support for AVR and its other subsidiaries. While Park has external debt, AVR and its affiliates do not. Park serves as a common source of any necessary debt capital for its subsidiaries because with its size it can acquire debt at more favorable rates than could any of its subsidiaries. Since Park serves as the de-facto borrower for these subsidiaries by providing a source of capital through inter-company transactions, there is in effect one common capitalization for Park and its subsidiaries. Thus Park uses a consolidated capital structure applicable to all its subsidiaries. We use the same capital structure here on an estimated basis.

AVR and ORA agreed on the capital structure and long-term debt cost for AVR's test years. However, they disagreed on the appropriate return on equity

(ROE). Their recommended capital structure and ROE for the test years are shown in the following table.

	AVR			ORA		
	Capital Ratio	**Cost Factor**	**Weighted Cost**	**Capital Ratio**	**Cost Factor**	**Weighted Cost**
TEST YEAR 2003						
Long Term Debt	40.09%	8.58%	3.44%	40.09%	8.58%	3.44%
Common Equity	59.91	12.00	7.19	59.91	9.53	5.71
Total	100.00%		10.63%	100.00%		9.15%
TEST YEAR 2004						
Long Term Debt	40.09%	8.56%	3.43%	40.09%	8.56%	3.43%
Common Equity	59.91	12.00	7.19	59.91	9.53	5.71
Total	100.00%		10.62%	100.00%		9.14%
Attrition Year 2005						
Long Term Debt	40.09%	8.54%	3.42%	40.09%	8.54%	3.42%
Common Equity	59.91	12.00	7.19	59.91	9.53	5.71
Total	100.00%		10.61%	100.00%		9.13%

Equity cost is a direct measure of the utility's after-tax ROE investment. Its determination is based on subjective measurement, and not susceptible to direct measurement in the same way capital structure and embedded long-term debt costs are.

Both AVR and ORA acknowledged the well-established legal standard for determining a fair ROE, and we have many times cited that same legal standard. In the Bluefield Water Works case, the Supreme Court stated that a public utility is entitled to earn a return on the value of its property employed for the convenience of the public, and set forth parameters to assess a reasonable return.[32] That return should be "…reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and

[32] RE: Bluefield Water Works & Improvement Company v. Public Service Commission of the State of Virginia (1923) 262 US 679.

economic management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."

As the Supreme Court also noted in that case, a utility has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. In 1944, the Court again considered the rate or return issue in the Hope Natural Gas Company case, stating, "[T]he return to the equity owner should be commensurate with returns on investments in other enterprises sharing corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."[33]

Hence, we set the ROE at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility service obligation. To accomplish this objective we have consistently evaluated quantitative financial models and risk factors prior to exercising informed judgment to arrive at a fair ROE.

A. Financial Models

The quantitative models commonly used in ROE proceedings as a starting point to estimate investors' expectations for ROE are the discounted cash flow (DCF), risk premium (RP) and capital asset pricing model (CAPM). Although the parties agreed that the financial models are objective, the results are dependent on subjective inputs. Detailed description of the CAPM, DCF, and RP models are contained in the record and are not repeated here.

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[33] RE: Federal Power Commission v. Hope Natural Gas Company (1944) 320 US 591.

Although the parties agree that the models are objective, the results are dependent on subjective inputs. For example, each party used different proxy groups, betas, growth rates, and calculations of market returns. It is the application of these subjective inputs that resulted in a wide range of ROEs being recommended by the parties as shown by the results of their individual DCR, RP, and CAPM models. From these subjective inputs the parties advance arguments in support of their respective analyses and in criticism of the input assumptions used by the other party. These arguments will not be addressed extensively in this opinion, since they do not materially alter the model results. In the final analysis, it is the application of judgment, not the precision of these models, which is the key to selecting a specific ROE estimate within the range predicted by analysis.

1. AVR's Financial Models

AVR estimated the ROE that Park's investors expect to earn by applying the DCF, RP, and CAPM models to a selected proxy group of three water utilities. The criteria it used to select this proxy group were that the water utilities have bond ratings by Moody's or Standards & Poor's (S&P); that water operations account for at lest 70% of the utilities' operations; and that there be analysts' forecasts of future earnings, dividends and returns on equity.

AVR supplemented its small sample of water utilities with a separate proxy group of eight gas distribution (gas) utilities by applying the DCF and RP models. The criteria used by AVR to select this proxy group were that the gas utilities paid dividends; operations accounted for at least 70% of the utilities' operations; they had at least one bond rating of A or better; and data required to make a DCF analysis were available.

AVR derived an overall 10.6% to 12.0% ROE range from the results of its DCF, RP, and CAPM models applied to its water utilities proxy group and a 11.40% to 12.10% ROE range from the results of its DCF and RP models applied to its gas proxy, as summarized in the following table.

Model	Water Proxy	Gas Proxy[34]
DCF	10.60% - 10.90%	12.00% - 12.10%
RP#1[35]	11.10 - 11.20	11.90 - 12.10
RP#2[36]	NA[37]	11.40 - 11.50
CAPM	10.60 - 12.00	NA

2. ORA's Financial Models

ORA estimated the ROE that investors expect to earn from Park by applying a selected proxy group of seven water utilities to the DCF and RP model. The criteria used by ORA to select this proxy group were that water operations accounted for at least 70% of the utility's revenues and that the utility's stock is publicly traded.

ORA applied three variations of the DCF model to mitigate period specific biases and to consider both current and long-term trends. It also applied two variations of the RP model to its same proxy group. ORA derived an overall simplified 7.82% to 11.24% average ROE range from the results of its DCF and

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[34] AVR reduced each of these gas proxy results by 50 basis points to make its gas proxy group comparable to water utilities.

[35] Based on historical actual returns and Baa corporate bonds.

[36] Based on historical authorized ROEs.

[37] NA is not applicable.

RP models applied to its water utilities' proxy group, as summarized in the following table.

Model	Proxy		
DCF Growth Rates			
3-Month ROE	7.76%		
6-Month ROE	7.79%		
12-Month ROE	7.92%		
DCF AVERAGE			7.82%
RP Period	5 Year	10Year	
30-Year Treasury Bond	11.36%	11.06%	
10-Year Treasury Bond	11.37	11.17	
RP AVERAGE			11.24%

3. Discussion

We view the output of the quantitative financial models provided by the parties with some skepticism. Although AVR acknowledged that the Commission has found that energy utilities require higher ROEs than large water utilities in the past, it contends that new evidence "indicates" that the risk differential between water and gas utilities has been reduced or no longer exists.[38] That evidence consisted of a comparison of two risk measurements, beta and Value Line's safety rank, and notice of a June 21, 1999 Utilities & Perspectives in which S&P announced that it has created a single set of financial targets that can be applied across the different utility segments.

[38] Exhibit 3 at p. 24.

Beta is used in the CAPM model as a measurement of risks of holding a stock in a diversified portfolio. Value Line's safety rank is a measurement of risk by Value Line of the risk an investor incurs when holding an individual stock as opposed to the risk of holding the stock in a portfolio. Both measurements are based on subjective inputs and not necessarily uniformly agreed to. The S&P announcement relied upon by AVR was issued prior to D.01-04-034 in which we concluded that water utilities' risks were not comparable to those faced by energy utilities.

AVR further reduced its gas proxy results by 50 basis points to "provide a conservative adjustment for potential differences in required ROEs for gas distribution utilities and large water utilities."[39] This arbitrary reduction tends to confirm that risk differentials between water and gas utilities continue to exist. No weight is given to AVR's gas proxy results because AVR has not substantiated that our prior determinations that water utilities risks are not comparable to energy utilities' risks should be overturned.[40]

We are also skeptical of AVR's CAPM model result based on a proxy sample of only two water utilities and a comparison of that proxy group to industrial companies operating in an environment foreign to regulated water utilities. For example, industrial companies do not have the benefit of recovering their operating expenses through a 50% service charge, balancing accounts, and memorandum accounts like regulated water utilities do. Hence, we give no weight to AVR's water proxy CAPM results.

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[39] Exhibit 3 at 25.

[40] *See* for example RE: San Jose Water Company D.01-04-034 (2001), 43 CPUC2d 137 at 155-156 (1992), and 35 CPUC2d 428 at 461 (1990).

We also view ORA's DCF result with skepticism. ORA's witness acknowledged that common stock investments are riskier than long-term debt investments, thus leading investors holding common stock to expect higher returns.[41] As AVR has, we observe that ORA's average DCF result appears to demonstrate the opposite. This is because ORA's 7.82% DCF result is 76 basis points lower than the 8.58% long-term debt agreed to by the parties. We recognize that each model may have its own individual bias, whether high or low, making it appropriate to average the various model results as ORA did to arrive at its recommended 9.53% ROE for AVR. We also recognize that AVR's common equity ratio is higher than ORA's proxy group, giving the appearance that its risk is lower than the proxy group because its percentage of debt is less and risk premiums should not be based on company-specific data.

From these broad ROE ranges based on subjective inputs and our skepticism identified above, we apply informed judgment in adopting a 9.21% to 11.22% ROE range we deem fair and reasonable for AVR. We derived the floor rate by taking the simple average each party's lowest water proxy financial model results.[42] The ceiling rate was derived by the same basis, by taking the simple average of each party's highest water proxy financial model results.[43]

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[41] RT 143, at 1 to 7.

[42] AVR's 10.60% water DCF floor plus ORA's 7.82% DCF floor result divided by two equals 9.21%.

[43] AVR's 11.20% water RP ceiling plus ORA's 11.24% RP ceiling result divided by two equals 11.22%. AVR's CAPM result was excluded because of its comparison of water utilities to industrial companies.

We next assess financial, business and regulatory risk factors to determine whether a higher range of ROE is warranted for AVR so that it may continue to attract investors and fulfill its public utility service obligation.

B. Risk Factors

Risk factors consist of financial, business and regulatory risk. Financial risk is tied to the utility's capital structure. The proportion of its debt to permanent capital determines the level of financial risk that a utility faces. As a utility's debt ratio increases, a higher return on equity may be needed to compensate for that increased risk.

Business risk pertains to uncertainties resulting from competition and the economy. That is, a utility that has the most variability in operating results has the most business risk. An increase in business risk can be caused by a variety of events that include poor management, and greater fixed costs in relationship to sales volume.

Regulatory risks pertain to new risks that investors may face from future regulatory actions that we, and other regulatory agencies, might take. Assessments of these risks are conduced to determine whether there is a need to increase a ROE to compensate investors for added risks.

1. AVR's Risk Assessment

AVR concluded from its risk assessment analysis that Park's investors need to be compensated for additional risk due to factors such as its small size and uncertainty of recovering investments and expenses due to weather, potential disallowance of investments and expenses, and Resolution W-4294. AVR seeks at least 90 basis points added to the ROE determined fair and reasonable so that investors are compensated for this

additional risk. This results in its recommended 11.90% to 12.20% ROE range, of which it seeks a 12.00% ROE as fair and reasonable for its test years.

2. ORA's Risk Assessment

ORA disagreed with AVR's risk assessment and instead found from its own risk assessment that risk was low. This was based on the fact that Commission provides AVR a multitude of mechanisms designed to minimize risk. These mechanisms included balancing accounts for purchased water and power, and pump tax; memorandum accounts for catastrophic events and Safe Drinking Water Bond Act compliance; a service charge to recover 50% of its fixed cost; and, inclusion of construction work in progress in rate base.

ORA balanced these mechanisms with Park's high common equity percentage (59.91% compared to 47.82% of ORA's proxy group) to demonstrate that it faces significantly less financial risk than ORA's financial model proxy group. To confirm its low risk conclusion, ORA compared S&P benchmark financial ratios (even though S&P doesn't rate AVR or its parent Park) to see what Park's overall rating would be. Its result was a financially healthy "AA" rating.

Hence, ORA opposed any increase in AVR's test year ROE for added risk. Applying equal weight to its DCF and RP model results, ORA recommended that AVR be authorized a 9.53% ROE.

3. Discussion

AVR has previously earned a premium on its ROE due to its small size, limited sources of external financing, and the fact that its stock is not publicly traded. In D.99-03-032, its prior GRC, we authorized a 30 basis premium in AVR's ROE to fairly compensate its investors for this overall

perceived risk. AVR now seeks a 90 basis point premium based on its current risk assessment.

Some risks are inherent to the water industry. Two of these risks are cited by AVR as justification for increasing its ROE above the quantitative model ROE results. They are weather uncertainty and potential disallowance of investments and expenses.

A premium on the authorized ROE is not appropriate for inherent risks. This is because the effect of these risks should already be incorporated into the model results, to the extent that water utilities are properly included in the model proxy groups. This is affirmed by statements ORA cited in its testimony. For example, the Middlesex Water Chairman of the Board and President's annual report was quoted as saying that "The weather played a significant role, as the lack of rainfall made the second half of 1998 the driest in New Jersey in over 100 years." Also, the Connecticut Water 1998 Annual Report to Shareholders stated that the Company's profitability is primarily attributable to the sale and distribution of water, the amount of which is dependent on seasonal weather fluctuations.[44]

Clearly, weather has an impact on water utilities and is reflected in their financial statements and risk assessments by investors. Weather variation is also one of the reasons California regulated water utilities are able to recover 50% of their fixed cost through a service charge and authorized balancing and memorandum accounts.

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[44] Exhibit 9, at p.4-6.

Resolution W-4294 is a recent event. Order Instituting Rulemaking (OIR) 01-12-009 through the Commission is exploring whether purchased power and water costs should become contingent expenses afforded balancing account treatment only if the utility is earning a weather-normalized ROE less than its authorized ROE or if actual purchased power and water costs were less than anticipated.

AVR sees the Commission's pending OIR decision on Resolution W-4294 as imposing additional risk on AVR because its authorized ROE would be treated as a ceiling rather than a target ROE where it may earn more or less that its authorized ROE. We disagree, as did ORA. Irrespective of AVR's premature position on this issue, to the extent a decision is issued providing the restrictions AVR believes will be imposed, that condition would not restrict AVR from earning its authorized ROE.

Although Park's approximate 60% equity ratio is slightly higher than the average of AVR's proxy groups and the 48% average of ORA's proxy group, AVR still has a limited source of external financing and its stock is still not publicly traded, justifying a premium ROE. The evidence in this proceeding continues to support a 30 basis point premium ROE for AVR.

After considering all the evidence on the quantitative financial models based on subjective inputs, risk factors, limited source of external financing non-publicly traded stock, interest rate trends, current economy, and our informed judgment, we authorize AVR an 10.10 % ROE for its test years. This ROE is based on the lower second quarter (or 9.80%) of the 9.21% to 11.22% ROE range found reasonable for AVR and a 30 basis point ROE premium for added risk perceived by investors. This constant ROE equates to a 9.49% return

on AVR's test year 2003 rate base, 9.48% for test year 2004 rate base, and 9.47% for attrition year 2005 rate base as follows.

	Capital Ratio	Cost Factor	Weighted Cost
TEST YEAR 2003			
Long Term Debt	40.09%	8.58%	3.44%
Common Equity	59.91	10.10	6.05
Total	100.00%		9.49%
TEST YEAR 2004			
Long Term Debt	40.09%	8.56%	3.43%
Common Equity	59.91	10.10	6.05
Total	100.00%		9.48%
Attrition Year 2005			
Long Term Debt	40.09%	8.54%	3.42%
Common Equity	59.91	10.10	6.05
Total	100.00%		9.47%

When we review the historical authorized ROEs for California's Class A water utilities we find the adopted 10.10% ROE for AVR is within a reasonable range of ROEs recently authorized other California Class A water utilities. An exception to this observation is the 10.25% ROE authorized California-American Water Company (Cal-Am) in D.03-02-030. However, that higher rate was authorized because no party made any reasoned analysis on the record that would lead to a lower ROE even though subjective judgment alone justified a lower ROE. The adopted ROE is also below recent ROEs authorized the more risky energy utilities with substantially less equity.[45]

XV. Radon Memorandum Account

AVR and ORA differed on the need to establish a Radon memorandum account. AVR requested authority to establish this memorandum account so that it could comply timely with the United States Environmental Protection

[45] *See* D.02-11-027, mimeo p.35 to 38 (2002).

Agency's (EPA) revised Radon regulation that AVR anticipated would be issued in late 2002 or early 2003.

AVR made this request as part of its GRC filing and prior to EPA's adoption and issuance of revised Radon regulation because the Commission's Water Division informed AVR that "no new constituent can be added to a utility's existing water quality memorandum account unless requested by the utility in the general rate case process or by separate application."[46] AVR wants the memorandum account so that it can implement the revised regulation without compromising its financial integrity and without waiting for its next GRC or approval of a separate application. It sees no difference between its request and the Commission's D.01-03-078 approval of a similar request by AVR's sister Division, Central Basin.

ORA opposed this request because AVR could not identify what impact, if any, AVR's compliance with unknown revised regulation would have on AVR's expenses, capital costs, and earnings.

The purpose of a memorandum account is to allow a utility to track changes in expenses and capital costs incurred for a specific purpose. In this case, AVR requested the memorandum account so that it could track changes in EPA's Radon regulation that may impact AVR and may require AVR to incur additional expenses or additional treatment facilities to comply with unknown EPA revisions expected to be issued in the near future.

However, AVR is unsure whether it will need to incur additional expenses or capital costs to implement the changes and is unsure when EPA will issue the

[46] Exhibit 23.

revised regulation. Even if EPA changed its Radon regulation requiring AVR to incur additional costs, AVR has not established that it would be required to immediately comply with the changes.

What is known is that EPA has undertaken a review of its Radon regulation for at least two-years. It is also known that the Commission issued a decision authorizing the establishment of a similar memorandum account cited by AVR resulting from the adoption of a settlement agreement. However, as addressed in our prior O&M Payroll discussion, Rule 51.9 precludes adopted settlements from being used as a precedent for any principle or issue in any other proceeding. AVR's Radon memorandum account request is premature and should not be adopted.

Any change in EPA's Radon regulation would require all California Water utilities to assess the impact of those changes on their individual operations and, if impacted, assess what would be required to comply. This proposal is premature. It is more appropriate to address compliance after it is known what needs to be complied with and on an industry - not on an individual utility-basis. Accordingly, the Director of the Commission's Water Division should monitor EPA's Radon regulation review and upon EPA's issuance of any revised regulation consider the merits of issuing a generic investigation into compliance. At the same time, individual utilities should have the option of addressing know impacts through either GRC filings or separate applications.

XVI. Reduced Rates for Low Income Customers

ORA recommended that AVR establish a reduced rate program for low-income customers on the basis that Section 739.8 of the Public Utilities Code requires the Commission to consider rate relief programs for low-income ratepayers. ORA's proposed program would provide a 50% service charge

discount for residential customers who meet federal poverty guidelines. This means that one or two-person households with a household income level of $22,000 or less would qualify for the discount. Larger household sizes with threshold incomes at unspecified higher income levels would also qualify. ORA also recommended that AVR establish a memorandum account to track revenues and expenses associated with this program so that AVR may recover program costs and lost revenues from its other customers in the future.

ORA's proposal is premature because it did not conduct any study to determine the feasibility of its proposal, let alone know what percentage of AVR customers would qualify for the proposed program. However, it conceded that if a disproportionate percentage of customers qualify for this program, the program would be impractical and should not be implemented.[47]

Based on the evidence in this proceeding it is impossible to evaluate whether ORA's reduced rate program for low-income customers is practical or would create an undue economic burden on AVR's remaining customers. At the very least, customer demographic information is needed to assess the viability of such a program. Absent such information we must reject ORA's proposal. However, we are interested in programs that provide reduced rates for low-income customers. Therefore, AVR should gather demographic information about its customers and study the feasibility of offering reduced rate programs for its low-income customers and include those results in its next GRC filing.

[47] RT 314 at 17 to RT 315 at 2.

XVII. Summary of Earnings

Our adopted Summary of Earnings is shown in Appendix A. It reflects the operating revenues that would be provided at present rates and those that will be required to produce the 10.10% ROE we are authorizing for the test years.

Contrasting the Operating Revenues set forth in Appendix A, it is apparent that the rate of return which we are authorizing AVR will produce additional revenues of $1,473,900 in 2003, an increase of 13.71% over the revenues produced by existing rates. In 2004, an additional $259,700 will be produced, an increase of 2.10%. In conformity with our requirement that Class A water utilities not file general rate applications more frequently than once each three years, a third set of rates in the form of a step increase for year 2005 will be authorized to allow for attrition after 2004.[48] This attritional step increase will be $279,526, or 2.20%.

On or after November 5 in the years 2003 and 2004, AVR will be authorized to file advice letters (with appropriate work papers) to justify implementation of the step increase herein postulated for each of years 2004 and 2005. The supplemental filings will permit review of achieved rates of return before each step rate is authorized.

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[48] An attrition allowance is needed when increases in revenues and productivity to offset increases in expenses (including the effect of cost of capital) are insufficient, thereby causing a decline in the rate of return for the following year. Attrition consists of two factors - financial and operational. Financial attrition occurs when there is a change in the company's cost of capital. Operational attrition is the result of changes in operating categories, e.g. revenues, expenses, and rate base.

XVIII. Rate Design

Finally, turning to rate design, the parties agreed that metered rates would continue to provide recovery of 50% of AVR's fixed costs through the service charge component, with a single commodity rate. The resulting rates are set forth in the Tariff Schedules for the various classes of service in Appendix B. Special Condition 3 of the General Meter Service Tariff Schedule in Appendix B establishes a limited-term surcharge.[49] This surcharge is being established to provide AVR an opportunity to recover its adopted rates for the entire 2003 test year pursuant to D.02-12-063. At the same time, we minimize the rate impact on individual customers by extending the surcharge over a 24-month period.

A comparison of rates is set forth in Appendix F and Adopted Quantities including Tax Calculations are shown in Appendix D.

XIX. Comments on the Proposed Decision of the ALJ

In accordance with the Section 311 of the Public Utilities Code and Rule 77.1 of the Commission's Rules of Practice and Procedure, the proposed decision (PD) of ALJ Galvin was issued on June 10, 2003, and the parties were afforded opportunity to comment on the PD. Rule 77.3 of the Rules sets forth the scope of permissible comment, stating that comments shall focus on factual, legal or technical error, and notes that comments, which merely reargue positions taken in briefs, will be accorded no weight and are not to be filed.

Comments were timely received from AVR and ORA. AVR also filed reply comments. To the extent such comments required discussion or changes to

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[49] Authorized rates are adopted with the intent of providing a utility an opportunity, not a guarantee, to recover adopted costs and to earn a reasonable return on its investment. Hence, a balancing account, which guarantees full recovery, is not the appropriate recovery mechanism in this instance.

the proposed decision, the discussion or changes have been incorporated into the body of this order. These comments resulted in changes in both payroll and insurance estimates and clarification of the surcharge procedure. The tables attached to the proposed order have been revised to reflect the impact of these changes.

XX. Assignment of Proceeding

Michael Peevey is the Assigned Commissioner and Michael Galvin is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. AVR, a water public utility within the context of Pub. Util. Code § 216, is subject to the jurisdiction, control, and regulation of this Commission.

2. AVR is a wholly owned subsidiary of Park, and provides public utility water service in and adjacent to the Town of Apple Valley.

3. AVR sought increases over present rates of $2,775,000 (27.1%) for 2003; $497,839 (3.8%) for 2004; and, $507,422 (3.7%) for 2005.

4. Of the approximately 100 customers who attended PPHs in Apple Valley 30 customers presented their views. The views were generally in opposition to any rate increase.

5. Pursuant to Rule 6.1, by Resolution ALJ 176-3085, the Commission preliminary designated this application as a ratesetting proceeding.

6. D.02-12-063 authorized AVR's test year 2003 rates to become effective January 1, 2003.

7. AVR and ORA filed a joint comparison exhibit with a detailed list of resolved and unresolved estimates. The resolved estimates are reasonable in light of the whole record, consistent with law, and in the public interest.

8. Differences in residential and business customer consumption estimates resulted from the use of different estimating models, time periods, and variables.

9. The acceptable method for estimating customer consumption prior to 1992 was the Committee method established by water utilities and Commission staff.

10. After 10 years of experience with the Econometric method, ORA reverted to the Committee method because of its analysis of prior Econometric model results and actual consumption experience showed that the Econometric model under-forecasted consumption 70% to 80% of the time, while the Committee method produced much better results.

11. AVR affirms that ORA's consumption estimates for residential and business customers are correct calculations.

12. Although the Committee and Econometric method of calculating customer consumption estimates have been used in prior proceedings, the Commission has adopted neither method.

13. D.00-07-018 set forth a procedure for a sharing mechanism between ratepayers and shareholders for non-tariff leases.

14. AVR's 2002 payroll base reflects actual payroll.

15. Pursuant to Rule 51.8, adopted settlements do not constitute approval of, or precedent regarding any principle or in the proceeding or in any future proceeding.

16. AVR based its insurance estimates on actual insurance premiums for its policy year 2002-2003.

17. AVR incurred $129,000 in regulatory expense by the end of September 2002. AVR provided no estimate of the additional cost it incurred subsequent to September of 2002 for its participation in the November

evidentiary hearing and filing of a joint comparison exhibit and opening and closing briefs.

18. AVR included $5,000 in test years 2003 and 2004 to complete an evaluation of vulnerability assessment it expects to be completed in 2003.

19. It has been the Commission policy to allow water utilities with multiple districts to file a main office rate case on a three-year cycle.

20. A DHS letter to AVR showed that AVR's maximum day demand requirement is only 18,930 gpm and that AVR has the ability to produce only 19,087 gpm from its active wells and 17,096 gpm if the largest active well is taken out of service.

21. The information provided by DHS affirms that AVR needs an additional well.

22. AVR's rate base treatment of its Mojave Basin Adjudication cost is consistent with the Uniform System of Accounts for Water Utilities adopted by this Commission and prior Commission ratemaking treatment.

23. Section 116555 of the California Health and Safety Code requires each public water system to ensure that its system provides a reliable and adequate supply of potable water to its consumers at all times.

24. DHS delegated the assessment of need for emergency power generators to the individual water utilities.

25. D.01-04-006 denied water utilities an exemption from power outages because water utilities already had a limited exemption and reasonably prepared for power interruptions with backup generation for the distribution and storage of water during power interruptions.

26. AVR needs to recoat its Desert Knolls tank.

27. The legal standard for setting the fair ROE has been established by the United States Supreme Court in the Bluefield and Hope cases.

28. An ROE is set at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility obligation.

29. Quantitative financial modes are commonly used in ROE proceedings as a starting point to estimate investors' expectations for ROE. Although these financial models are objective, the results are dependent on subjective inputs.

30. It is the application of informed judgment, not the precision of quantitative financial models, which is the key for selecting a specific ROE.

31. The Commission concluded in D.01-04-034 that water utilities' risks were not comparable to the risks faced by energy utilities.

32. AVR used gas utilities as a proxy for its DCF and RP financial models, the results of which were reduced by 50 basis points to provide for potential differences between water and gas utilities.

33. AVR's water CAPM model result was based on a sample of two water utilities.

34. D.99-03-032 authorized AVR a 30 basis point premium in its ROE to fairly compensate its investors for perceived risk.

35. Park's 60% equity ratio is slightly higher than the average of AVR's proxy groups and the 48% average of ORA's proxy group.

36. EPA has undertaken a review of its Radon regulation, which impacts all water utilities.

37. Section 739.8 of the Public Utilities Code requires the Commission to consider rate relief programs for low-income ratepayers.

Conclusions of Law

1. The Committee method used by ORA should be used to estimate residential and business consumption.

2. The ratepayer/shareholder sharing mechanism set fort in D.00-07-018 should be used for passive non-tariff revenues.

3. AVR's payroll estimates should be adopted.

4. Insurance expense should be based on a trending method for this proceeding.

5. Regulatory commission expenses should provide AVR with sufficient funds to cover its cost.

6. It is not reasonable to include $5,000 in outside service for a vulnerability assessment in test year 2004 because AVR expects to complete that assessment in 2003.

7. The use of Park's Central Basis Division adopted main office cost for estimating AVR's share of main office expense is reasonable.

8. AVR should be authorized to construct a new well in the summer of 2003.

9. AVR's rate base treatment of Mojave Basin Adjudication cost should be consistent with the Uniform System of Accounts for Water Utilities adopted by this Commission and prior Commission ratemaking treatment.

10. Backup generators should be allowed in rate base to the extent they are deemed necessary and useful.

11. AVR should provide additional information on its backup generators in its next GRC, as specified in the preceding text.

12. AVR should be allowed to file an advice letter for the recovery of reasonable costs incurred in recoating its Desert Knolls tank after the project is completed.

13. A subjective 9.21% to 11.22% ROE range is just and reasonable for AVR, based on financial model results, cost of debt, and capital structure.

14. A 10.10% ROE is reasonable for each of AVR's test years. This ROE is based on the lower quarter of the ROE range found reasonable and increased by 30 basis points for added risk perceived by investors.

15. The Director of the Commission's Water Division should monitor EPA's review of its radon regulation and upon any changes to those regulations, assess the feasibility of issuing a generic investigation into compliance of the revised Radon regulation.

16. AVR should assess the feasibility of establishing reduced rates for its low-income customers.

17. AVR should be authorized to file the rates set forth in Appendix C.

O R D E R

IT IS ORDERED that:

1. Apple Valley Ranchos Water Company (AVR) is authorized to file the revised schedules attached to this order as Appendix B and to concurrently cancel its present schedules for such service. This filing shall comply with General Order (GO) 96 and be approved by the Commission's Water Branch. The effective date of the revised schedule shall be January 1, 2003 and apply only to service rendered on or after this effective date, as set forth in Decision (D.) 02-12-063. In order to recover the authorized rates from January 1, 2002 to August 26, 2003, the date of the Water Division's processing of the filed revised schedules, AVR is authorized to add to the quantity rate a surcharge of $0.091 per Ccf as specified in special condition 3 of the General Metered Service Tariff Schedule in Appendix B.

2. On or after November 5, 2003 and November 5, 2004, AVR is authorized to file an advice letters in conformance with GO 96-A, with appropriate supporting workpapers, requesting the step rates authorized in Appendix C of this decision for 2004 and 2005, respectively. If the rate of return on rate base for AVR, taking into account the rates then in effect and normal ratemaking adjustments for the twelve months ending September 30, 2003 and September 30, 2004, respectively, exceeds the lower of (a) the rate of return found reasonable by the Commission for any district of Park Water Company for the corresponding period in the most recent decision, or (b) the rate of return found reasonable in this order, then AVR shall file for a lesser increase. The requested rates shall be reviewed by the Commission's Water Division and shall go into effect after Water Division's determination that they conform to this order. Water Division shall inform the Commission if it finds that the proposed rates do not conform to this order or other Commission decisions. The revised tariff schedules shall be effective no earlier that January 1, 2004 and January 1, 2005, respectively, and shall apply to service rendered on and after their effective date.

3. AVR shall provide information in its next general rate case (GRC) to support the inclusion of backup generators in rate base. That additional information shall include, but not be limited to, the identity of each generator by horsepower, facility intended to backup, year purchased, rate base amount, actual time placed in service as a backup facility, and actual amount of time tested by year since acquired.

4. AVR is authorized to file an advice letter seeking Commission authorization for the recovery of reasonable costs incurred in recoating its Desert Knolls tank after the project is completed.

5. AVR shall gather demographic information about its customers for the purpose of determining the feasibility of offering reduced rate programs for its low-income customers and include those results and a recommendation for a low-income program in its next GRC. If AVR determines that such a program is not feasible, it shall explain why.

6. The Director of the Commission's Water Division shall monitor EPA's review of its radon regulation and upon any changes to those regulations assess the feasibility of issuing a generic investigation into compliance of the revised Radon regulation.

7. The summaries of earnings presented in Appendix A, and the quantities and calculations included in Appendix D, which underlie them, are adopted.

8. Application 02-03-046 is closed.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDIX A

APPENDIX A
1 of 2

APPLE VALLEY RANCHOS WATER COMPANY
Test Year 2003
Summary of Earnings

	(At Present Rates)		ADOPTED	
	AVR Updated	ORA Updated	**At Present Rates**	**At Authorized ROR**
	'(Dollars in Thousands)		(Dollars in Thousands)	
Operating Revenues:				
Water	10,384.5	10,455.9	10,743.5	**12,343.8**
Deferred	(1.6)	(1.6)	(1.6)	(1.6)
Total Revenues	10,386.1	10,457.5	10,745.1	**12,345.4**
Expenses:				
O&M Expenses				
Payroll-Operations	465.0	330.1	**465.0**	**465.0**
Operations-Other	112.1	112.1	**112.1**	**112.1**
Purchased Power	1,064.4	1,237.1	**1,237.1**	**1,237.1**
Leased Water Rights	207.9	252.7	**252.7**	**252.7**
Replenishment Charges	151.4	149.0	**149.0**	**149.0**
Chemicals	16.8	16.8	**16.8**	**16.8**
Payroll-Customer	256.9	182.4	**256.9**	**256.9**
Customers-Other	87.3	87.3	**87.3**	**87.3**
Payroll-Maintenance	213.1	151.3	**213.1**	**213.1**
Maintenance-Other	1,069.6	1,071.1	**1,069.6**	**1,069.6**
Uncollectibles 0.46%	47.8	48.1	**49.4**	**56.8**
Subtotal O&M	3,692.2	3,637.9	**3,909.0**	**3,916.4**
A&G Expenses				
Payroll	758.0	566.9	**758.0**	**758.0**
Payroll-Benefits	463.5	430.5	**463.5**	**463.5**
Insurance	472.9	349.8	**446.2**	**446.2**
Uninsured Property Damage	1.6	1.6	**1.6**	**1.6**
Regulatory Commission Expenses	58.3	48.7	**48.7**	**48.7**
Outside Services	98.3	93.3	**98.3**	**98.3**
Office Supplies	177.4	177.4	**177.4**	**177.4**
A&G Transferred	(205.0)	(205.5)	**(205.0)**	**(205.0)**
Miscellaneous	28.4	28.4	**28.4**	**28.4**
Franchise Requirements 1.05%	109.1	109.8	**112.8**	**129.6**
Main Office Allocation				
A&G Expenses	715.0	595.4	**715.0**	**715.0**
Data Processing	155.9	123.3	**155.9**	**155.9**

Subtotal A&G	2,833.4	2,319.6	**2,800.8**	**2,817.6**
Ad Valorem Taxes	326.4	333.8	**326.2**	**326.2**
Payroll Taxes	164.6	130.4	**159.7**	**159.7**
Depreciation Expenses	1,227.7	1,192.3	**1,217.1**	**1,217.1**
California Income Tax	104.2	177.6	**120.3**	**259.6**
Federal Income Tax	410.5	697.4	**466.7**	**1,002.6**
Total Operating Expenses	8,759.1	8,489.0	**8,999.80**	**9,699.20**
Net Operating Revenue	1,627.0	1,968.5	**1,745.3**	**2,646.1**
Rate Base	27,903.5	23,862.9	**27,883.0**	**27,883.0**
Rate of Return	5.83%	8.25%	**6.26%**	**9.49%**

APPENDIX A

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APPLE VALLEY RANCHOS WATER COMPANY
Test Year 2004
Summary of Earnings

	(At Present Rates)		ADOPTED		
	AVR Updated	ORA Updated	**At Present Rates**	**At 2003 Rates**	**At Authorized ROR**
	'(Dollars in Thousands)			(Dollars in Thousands)	
Operating Revenues:					
Water	12,779.6	11,044.2	10,950.6	12,588.3	**12,897.9**
Deferred	(1.3)	(2.5)	(2.5)	(2.5)	(2.5)
Total Revenues	12,780.8	11,046.7	10,953.1	12,590.8	**12,900.4**
Expenses:					
O&M Expenses					
Payroll-Operations	491.7	341.0	**491.7**	**491.7**	**491.7**
Operations-Other	115.4	115.4	**115.4**	**115.4**	**115.4**
Purchased Power	1,080.8	1,257.4	**1,257.4**	**1,257.4**	**1,257.4**
Leased Water Rights	226.3	273.9	**273.9**	**273.9**	**273.9**
Replenishment Charges	152.2	150.0	**150.0**	**150.0**	**150.0**
Chemicals	13.7	13.7	**13.7**	**13.7**	**13.7**
Payroll-Customer	271.7	188.4	**271.7**	**271.7**	**271.7**
Customers-Other	89.4	89.4	**89.4**	**89.4**	**89.4**
Payroll-Maintenance	225.3	156.3	**225.3**	**225.3**	**225.3**
Maintenance-Other	1,074.0	1,076.6	**1,074.0**	**1,074.0**	**1,074.0**
Uncollectibles 0.46%	58.8	50.8	**50.4**	**57.9**	**59.3**
Subtotal O&M	3,799.5	3,712.9	**4,012.9**	**4,020.4**	**4,021.8**
A&G Expenses					
Payroll	796.6	561.8	**796.6**	**796.6**	**796.6**
Payroll-Benefits	489.2	448.9	**489.2**	**489.2**	**489.2**
Insurance	557.5	373.8	**509.5**	**509.5**	**509.5**
Uninsured Property Damage	1.7	1.6	**1.7**	**1.7**	**1.7**
Regulatory Commission Expenses	58.3	48.3	**48.3**	**48.3**	**48.3**
Outside Services	102.0	97.0	**102.0**	**102.0**	**102.0**
Office Supplies	182.5	182.5	**182.5**	**182.5**	**182.5**
A&G Transferred	(164.5)	(168.8)	**(164.5)**	**(164.5)**	**(164.5)**
Miscellaneous	29.2	29.2	**29.2**	**29.2**	**29.2**
Franchise Requirements 1.05%	134.2	116.0	**115.0**	**132.2**	**135.5**
Main Office Allocation					
A&G Expenses	736.5	613.1	**736.5**	**736.5**	**736.5**
Data Processing	159.5	112.9	**159.5**	**159.5**	**159.5**
Subtotal A&G	[illegible]	2,436.3	**3,005.5**	**3,022.7**	**3,026.0**

	3,082.7				
Ad Valorem Taxes	342.6	296.7	**342.0**	**342.0**	**342.0**
Payroll Taxes	173.9	115.6	**168.7**	**168.7**	**168.7**
Depreciation Expenses	1,338.5	1,288.1	**1,327.9**	**1,327.9**	**1,327.9**
California Income Tax	294.8	204.7	**95.6**	**238.2**	**265.2**
Federal Income Tax	1,027.9	717.8	**327.0**	**828.0**	**931.7**
Total Operating Expenses	10,059.9	8,772.0	**9,279.60**	**9,947.90**	**10,083.30**
Net Operating Revenue	2,721.0	2,274.7	**1,673.5**	**2,642.9**	**2,817.1**
Rate Base	29,740.3	25,555.7	**29,715.7**	**29,715.7**	**29,715.7**
Rate of Return	9.15%	8.90%	**5.63%**	**8.89%**	**9.48%**

(END OF APPENDIX A)

APPENDIX B

APPENDIX B
Page 1 0f 6

APPLE VALLEY RANCHOS WATER COMPANY
Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Town of Apple Valley and vicinity, San Bernardino County.

RATES

Quantity Rates:

For all water delivered, per 100 cu. ft. ..... $ 1.320

	Per Meter Per Month
Service Charge:	
For 5/8 x ¾-inch meter	$ 18.56
For ¾-inch meter	27.85
For 1-inch meter	46.40
For 1 ½-inch meter	92.80
For 2-inch meter	148.50
For 3-inch meter	278.40
For 4-inch meter	464.00
For 6-inch meter	928.00
For 8-inch meter	1,484.80
For 10-inch meter	2,134.40

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is to be added the bimonthly charge computed at Quantity Rates.

SPECIAL CONDITIONS

1. A late charge will be imposed per Schedule No. LC.
2. In accordance with Section 2714 of the Public Utilities Code, if a tenant in a rental unit leaves owing the company, service to subsequent tenants in that unit will, at the company's option, be furnished on the account of the landlord or property owner.
3. To the above quantity rate a surcharge of $0.091 per Ccf should be added to make (N) the adopted rates become effective January 1, 2003. This surcharge will be in (N) effect for a 24-month period starting with the effective date of August 27, 2003 (N) and ending on August 26, 2005. (N)

APPENDIX B
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APPLE VALLEY RANCHOS WATER COMPANY

Schedule No. 2

GRAVITY IRRIGATION SERVICE

APPLICABILITY

Applicable to all water service from the Company's gravity irrigation system.

TERRITORY

Within the entire service area of the Company.

RATES

Quantity Rates:

For all water delivered, per 100 cu. ft. ..... $ 0.450

Per Meter
Per Month

Service Charge:

For 5/8 x ¾-inch meter	.....	$ 18.56
For ¾-inch meter	.....	27.85
For 1-inch meter	.....	46.40
For 1 ½-inch meter	.....	92.80
For 2-inch meter	.....	148.50
For 3-inch meter	.....	278.40
For 4-inch meter	.....	464.00
For 6-inch meter	.....	928.00
For 8-inch meter	.....	1,484.00
For 10-inch meter	.....	2,134.40

SPECIAL CONDITIONS

1. Service under this schedule is limited to lands not developed for residential use.

2. All outlets for this water shall be protected by sings stating: NON-POTABLE WATER – NOT FOR HUMAN CONSUMPTION.

3. A late charge will be imposed per Schedule No. LC.

4. All bills are subject to the Public Utilities Commission Reimbursement Fee set forth on

Schedule No. UF.

APPLE VALLEY RANCHOS WATER COMPANY

Schedule No. 4

NON-METERED FIRE SERVICE

APPLICABILITY

Applicable for water service to privately-owned fire hydrant and fire sprinkler systems where water is to be used only for the purpose of fire suppression or for periodic system testing.

TERRITORY

Town of Apple Valley and vicinity, San Bernardino County.

RATES

Size of Service	Per Service Per Month
2-inch	$ 21.60
3-inch	32.45
4-inch	43.20
6-inch	64.80
8-inch	86.40

SPECIAL CONDITIONS

1. The fire protection service connection shall be installed by the utility at the cost paid by the applicant. Such payment shall not be subject to refund.

2. The minimum diameter for fire protection service shall be two (2) inches, and the maximum diameter shall be not more than the diameter of the main to which the service is connected.

3. If a distribution main of adequate size to serve a private fire protection system in addition to all other normal service does not exist in the street or alley adjacent to the premises to be served, then a service main from the nearest main of adequate capacity shall be installed by the utility and the cost paid by the applicant. Such payment shall not be subject to refund.

4. Service hereunder is for private fire systems which are regularly inspected by the local fire protection agency having jurisdiction and to which no connections for other than fire suppression purposes shall be made. Service shall be installed according to specifications of the utility and shall be maintained to the satisfaction of the utility. The utility will install the detector meter listed by the Underwriters Laboratories, Inc. or other device to indicate unauthorized use, leakage, or waste of water. The cost of such installation and the cost of the meter or other device shall be paid by the applicant.

5. The utility undertakes to supply water only at such pressures as may be available at any time through the normal operation of its system.

APPLE VALLEY RANCHOS WATER COMPANY

Schedule No. 4

NON-METERED FIRE SERVICE

6. Any unauthorized use of water, other than for fire extinguishing purposes, shall be charged for at the regular established rate as set forth under Schedule No.1, and/or may be the grounds for the immediate disconnection of the service without liability to the Company.
7. A late charge will be imposed per Schedule No. LC.
8. All bills subject to the reimbursement fee set forth on Schedule No. UF

APPLE VALLEY RANCHOS WATER COMPANY

Schedule No. LC

LATE PAYMENT CHARGE

APPLICABILITY

Applicable to all service.

TERRITORY

Within the entire service area of the Company.

RATES

Late Charge: A late charge of 1.5% on unpaid balance subject to special conditions and minimum charge below:

Minimum Charge: The minimum charge is $1.00

SPECIAL CONDITIONS

1. The balance is unpaid and subject to a late charge if the bill is Past-Due, or delinquent, as defined in Rule No. 11, Section B.1.a.
2. The late charge should be imposed only once on a delinquent bill since the account would be shut off before a subsequent bill and then subject to the reconnection fee as authorized by Tariff Rule No. 11.
3. All bills shall be subject to the reimbursement fee as set forth on Schedule No. UF.

APPENDIX B

APPLE VALLEY RANCHOS WATER COMPANY

Schedule No. UF

SURCHARGE TO FUND

PUBLIC UTILITIES COMMISSION

REIMBURSEMENT FEE

APPLICABILITY

This surcharge applies to all water and sewer bills rendered under all tariff rate schedules authorized by the Commission, with the exception of resale rate schedules where the customer is a public utility.

TERRITORY

This schedule is applicable within the entire territory served by the utility.

RATES

A 1.4% (.014) surcharge shall be added to all customer bills.

In 1982, the Legislature established the Public Utilities Commission Reimbursement Fee to be paid by utilities to fund their regulation by the Commission (Public Utilities (PU) Code Section 401-443). The surcharge to recover the cost of that fee is ordered by the Commission under authority granted by the PU Code Section 433.

(END OF APPENDIX B)

APPENDIX C

APPENDIX C
Page 1 0f 3

Schedule No. 1

GENERAL METERED SERVICE

AUTHORIZED STEP INCREASES

	Rates to be Effective	
	2004	2005
Quantity Rates:		
For all water delivered, per 100 cu. ft.	$ 0.020	$ 0.007
Service Charge:		
For 5/8 x ¾-inch meter	$ 0.75	$ 1.12
For ¾-inch meter	1.15	1.65
For 1-inch meter	1.90	2.80
For 1 ½-inch meter	3.75	5.60
For 2-inch meter	6.00	8.95
For 3-inch meter	11.25	16.80
For 4-inch meter	18.75	28.00
For 6-inch meter	37.50	56.00
For 8-inch meter	60.00	89.60
For 10-inch meter	86.25	128.80

APPENDIX C
Page 2 0f 3

Schedule No. 2

GRAVITY IRRIGATION SERVICE

AUTHORIZED STEP INCREASES

	Rates to be Effective	
	2004	2005
Quantity Rates:		
For all water delivered, per 100 cu. ft.	$ 0.002	$ 0.001
Service Charge:		
For 5/8 x ¾-inch meter	$ 0.75	$ 1.12
For ¾-inch meter	1.15	1.65
For 1-inch meter	1.90	2.80
For 1 ½-inch meter	3.75	5.60
For 2-inch meter	6.00	8.95
For 3-inch meter	11.25	16.80
For 4-inch meter	18.75	28.00
For 6-inch meter	37.50	56.00
For 8-inch meter	60.00	89.60
For 10-inch meter	86.25	128.80

APPENDIX C
Page 3 0f 3

Schedule No. 4

NON-METERED FIRE SERVICE

AUTHORIZED STEP INCREASES

	Rates to be Effective	
	2004	2005
Service Charge:		
For 2-inch meter	$ 0.90	$ 1.30
For 3-inch meter	1.30	1.95
For 4-inch meter	1.75	2.60
For 6-inch meter	2.60	3.90
For 8-inch meter	3.45	5.25

(END OF APPENDIX C)

APPENDIX D

APPENDIX D
Page 1 of 5
APPLE VALLEY RANCHOS WATER COMPANY
ADOPTED QUANTITIES

NET-TO-GROSS MULTIPLIER	1.7763	
Uncollectible Rate	0.46%	
Franchise Fee	1.05%	
Federal Tax Rate	34.00%	
State Tax Rate	8.84%	
	2003	2004
DOMESTIC WATER CONSUMPTION (KCcf)		
Domestic Water Sales	5,734.5	5,844.7
Unaccounted Water (10%)	637.2	649.4
Total Water Production (KCcf)	6,371.7	6,494.1
Make-up ($130/AF)	$91,000	$91,000
Administrative ($2.35/AF)	$33,618	$34,386
Biological ($0.56/AF)	$8,011	$8,194
Total Replenishment Cost	$132,629	$133,580
Water Rights Lease (AF)	3,887	4,214
Lease Water Costs ($70/AF)	$252,681	$273,930
PURCHASED POWER		
Pumping Cost		
Electric	$1,169,267	$1,188,989
Gas	$29,509	$30,087
Total	$1,198,776	$1,219,076
Cost per A.F.		
Electric	$73.75	$73.75
Gas	$69.50	$69.50
DOMESTIC WATER CONSUMPTION (Ccf/Customer)		
Residential	305.7	305.7
Business	768.5	768.5
Public Authority	7,939.0	7,939.0
Pressure Irrigation (Landscape)	2,748.3	2,748.3
Industrial	317.2	317.2

Appendix D - Page 2 of 5
APPLE VALLEY RANCHOS WATER COMPANY
ADOPTED QUANTITIES

	2003	2004
IRRIGATION WATER CONSUMPTION (Ccf)		
Water Sales	297,547	297,547
Unaccounted Water (71.2%)	737,003.0	737,003.0
Total Water Production (Ccf)	1,034,550.0	1,034,550.0
Make-up ($130/AF)	$9,100	$9,100
Adminstrative ($2.35/AF)	$5,581	$5,581
Biological ($0.56/AF)	$1,704	$1,704
Total Replenishment Cost	$16,385	$16,835
PURCHASED POWER		
Pumping Cost		
Electric	$38,324	$38,324
Cost per A.F.	$16.14	$16.14
Water Consumption (Ccf/ Irrigation Customer)		
Metered Service	148,773.7	148,773.7

Appendix D - Page 3 of 5
APPLE VALLEY RANCHOS WATER COMPANY
ADOPTED QUANTITIES

	Utility Plant In Service (Dollars in Thousands)	
	2003	2004
UTILITY PLANT IN SERVICE		
Beginning Of Year Balance	48,217.1	52,190.6
Additions	4,380.0	3,520.0
Retirements	406.6	520.8
End Of Year Balance	52,190.6	55,189.7
Average Balance	50,203.8	53,690.1

	Apple Valley Ranchos Water Company Depreciation Reserve (Dollars in Thousands)	
DEPRECIATION RESERVE		
Beginning Of Year Balance	10,752.9	11,633.9
Annual Accrual	1,287.6	1,385.5
Net Retirements	406.6	520.8
End Of Year Balance	11,633.9	12,498.5
Average Balance	11,193.4	12,066.2

Appendix D - Page 4 of 5
APPLE VALLEY RANCHOS WATER COMPANY
ADOPTED QUANTITIES

	Adopted Rate Base Summary (Dollars in Thousands)	
RATE BASE		
AVERAGE BALANCES		
PLANT IN SERVICE	50,203.8	53,690.1
WORK IN PROGRESS	0.0	0.0
MATERIALS & SUPPLIES	145.5	147.1
WORKING CASH	802.6	776.9
SUBTOTAL	**51,151.96**	**54,614.12**
LESS:		
DEPRECIATION RESERVE	11,193.4	12,066.2
ADVANCES	8,648.5	9,296.0
CONTRIBUTIONS	1,379.9	1,302.9
UNAMORTIZED ITC	105.0	100.1
DEFERRED INCOME TAX	2,944.9	3,131.5
SUBTOTAL	**24,271.62**	**25,896.71**
PLUS:		
METHOD 5 ADJUSTMENT	31.4	27.1
NET DISTRICT RATE BASE	26,911.8	28,744.5
MAIN OFFICE ALLOCATION	971.2	971.2
TOTAL RATE BASE	27,883.0	29,715.7

Appendix D - Page 5 of 5
APPLE VALLEY RANCHOS WATER COMPANY
ADOPTED QUANTITIES

	Adopted Income Tax Calculations (Dollars in Thousands)	
INCOME TAX	2003	2004
OPERATING REVENUES	12,345.4	12,900.4
EXPENSES		
OPERATIONS & MAINTENANCE	3,859.6	3,962.5
UNCOLLECTIBLES .46%	56.8	59.3
ADMINISTRATIVE & GENERAL	2,888.0	2,890.6
FRANCHISE FEES 1.05%	129.6	135.5
AD VALOREM TAXES	326.2	342.0
PAYROLL TAXES	159.7	168.7
MEALS ADJUSTMENT	-8.5	-8.7
SUBTOTAL	7,211.4	7,549.8
DEDUCTIONS		
CA TAX DEPRECIATION	1,237.6	1,331.7
INTEREST	959.2	1,019.2
CA TAXABLE INCOME	2,937.2	2,999.6
CCFT @ 8.84%	259.6	265.2
DEDUCTIONS		
FED. TAX DEPRECIATION	1,103.9	1,329.7
INTEREST	959.2	1,019.2
CA TAX	120.3	265.2
FIT TAXABLE INCOME	2,950.6	2,742.0
FIT (BEFORE ADJUSTMENT) 34.00%	1,003.2	932.3
PRORATED ADJUSTMENT		
INVESTMENT TAX CREDIT	-0.6	-0.6
NET FEDERAL INCOME TAX	1,002.6	931.7

(END OF APPENDIX D)

APPENDIX E

APPENDIX E

APPLE VALLEY RANCHOS WATER COMPANY
ATTRITION CALCULATION FOR 2005

Financials

Rate of Return Adopted Authorized for 2005		**9.47%**
Rate of Return Adopted Authorized for 2004		**9.48%**
	Difference:	**-0.01%**

Operational

2003 Rate of Return at Present Rates		**6.26%**
2004 Rate of Return at Present Rates		**5.63%**
	Difference:	**0.63%**

Total Attrition	**0.62%**
Net to Gross Multiplier	**1.776297000**
2004 Rate Base	**$29,715,666**
2005 Attrition = Total Attrition x 2004 Rate Base x Net-to-Gross	**$327,260**

Operating Revenues for 2005 = (2004 Operating Revenue + 2005 Attrition)

Operating Revenue for 2004	**$12,900,400**
Operating Revenue for 2005	**$13,227,660**
Increase from 2004 to 2005	**2.5368%**

APPENDIX F

APPENDIX F
APPLE VALLEY RANCHOS WATER COMPANY
2003 BILL COMPARISON
APPLE VALLEY AND VICINITY

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for bi-monthly billing.

General Metered Service (5/8X3/4-inch meter)

TEST YEAR 2003

Bi-Monthly Usage (Ccf)	Present Rates	Authorized Rates	Percent Increase
0	$33.10	$37.12	12.2%
20	$55.64	$63.52	14.2%
50 (Avg)	$89.45	$103.12	15.3%
60	$100.72	$116.32	15.5%
80	$123.26	$142.72	15.8%

TEST YEAR 2004

Bi-Monthly Usage (Ccf)	Present Rates	Authorized Rates	Percent Increase
0	$37.12	$38.62	4.0%
20	$63.52	$65.42	3.0%
50 (Avg)	$103.12	$105.62	2.4%
60	$116.32	$119.02	2.3%
80	$142.72	$145.82	2.2%

(END OF APPENDIX F)