





1 **MEMORANDUM**

2 The Division of Ratepayer Advocates (“DRA”) of the California Public  
3 Utilities Commission (“Commission”) prepared this report presenting its analysis  
4 and recommendations in the Apple Valley Ranchos Water Company’s (“AVR”)  
5 general rate case (“GRC”) A.11-01-001. In this GRC, the **AVR requests**  
6 **authorization to increase rates charged for water service by \$3,896,590 or**  
7 **20.0 % in Test Year 2012**, by \$547,241 or 2.35% in Escalation Year 2013, and  
8 by \$786,254 or 3.35% in Escalation Year 2014. AVR requests to use a rate of  
9 return on equity of 10.20% and a rate of return on rate base of 9.42%. These rates  
10 were adopted by the Commission in D.10-10-035.

11 Yoke Chan and Pat Ma serve as DRA’s project coordinators in this  
12 proceeding, and are responsible for the overall coordination in the preparation of  
13 this report. DRA’s witnesses prepare testimony on AVR’s GRC requests.  
14 Appendix A of this report contains the qualifications of DRA’s witnesses.

15 DRA’s legal counsel for this case is Maria Bondonno.

## TABLE OF CONTENTS

1		
2	EXECUTIVE SUMMARY.....	v
3	CHAPTER 1: OVERVIEW AND POLICY .....	1-1
4	A. INTRODUCTION.....	1-1
5	B. DISCUSSION .....	1-1
6	C. CONCLUSION .....	1-3
7	CHAPTER 2: WATER CONSUMPTION AND OPERATING	
8	REVENUES.....	2-1
9	A. INTRODUCTION.....	2-1
10	B. SUMMARY OF RECOMMENDATIONS .....	2-1
11	C. DISCUSSION .....	2-2
12	D. CONCLUSION .....	2-20
13	CHAPTER 3: OPERATIONS AND MAINTENANCE;	
14	ADMINISTRATIVE AND GENERAL EXPENSES.....	3-1
15	A. INTRODUCTION.....	3-1
16	B. SUMMARY OF RECOMMENDATIONS .....	3-2
17	C. DISCUSSION .....	3-2
18	D. CONSERVATION.....	3-15
19	E. CONCLUSION .....	3-20
20	CHAPTER 4: PAYROLL, PENSION AND BENEFITS .....	4-1
21	A. PAYROLL EXPENDITURES.....	4-1
22	B. PENSIONS AND BENEFITS (P&Bs) – AVR.....	4-12
23	C. PENSIONS AND BENEFITS (P&Bs) – GENERAL OFFICE .....	4-21
24	CHAPTER 5: TAXES OTHER THAN INCOME .....	5-1
25	A. INTRODUCTION.....	5-1
26	B. SUMMARY OF RECOMMENDATIONS .....	5-1
27	C. DISCUSSION .....	5-1
28	D. CONCLUSION .....	5-3
29	CHAPTER 6: INCOME TAXES.....	6-1
30	A. INTRODUCTION.....	6-1

1	B. SUMMARY OF RECOMMENDATIONS .....	6-1
2	C. DISCUSSION .....	6-1
3	D. CONCLUSION .....	6-5
4	CHAPTER 7: UTILITY PLANT-IN-SERVICE .....	7-1
5	A. INTRODUCTION.....	7-1
6	B. SUMMARY OF RECOMMENDATIONS .....	7-1
7	C. DISCUSSION .....	7-4
8	D. WATER QUALITY .....	7-32
9	E. CONCLUSION .....	7-34
10	CHAPTER 8: DEPRECIATION RESERVE AND	
11	DEPRECIATION EXPENSE.....	8-1
12	A. INTRODUCTION.....	8-1
13	B. SUMMARY OF RECOMMENDATIONS .....	8-1
14	C. DISCUSSION .....	8-1
15	D. CONCLUSION .....	8-3
16	CHAPTER 9: RATEBASE.....	9-1
17	A. INTRODUCTION.....	9-1
18	B. SUMMARY OF RECOMMENDATIONS .....	9-1
19	C. DISCUSSION .....	9-1
20	CHAPTER 10: CUSTOMER SERVICE.....	10-1
21	A. INTRODUCTION.....	10-1
22	B. SUMMARY OF RECOMMENDATIONS .....	10-1
23	C. DISCUSSION .....	10-1
24	D. CONCLUSION .....	10-6
25	CHAPTER 11: GENERAL OFFICE.....	11-1
26	A. INTRODUCTION.....	11-1
27	B. SUMMARY OF RECOMMENDATIONS .....	11-2
28	C. DISCUSSION .....	11-2
29	D. CONCLUSION .....	11-21

1	CHAPTER 12: CONVERSION TO MONTHLY BILLING;	
2	EXISTING MEMORANDUM AND BALANCING	
3	ACCOUNTS; PLANT AUDIT .....	12-1
4	A. INTRODUCTION.....	12-1
5	B. SUMMARY OF RECOMMENDATIONS .....	12-1
6	C. DISCUSSION .....	12-1
7	D. CONCLUSION .....	12-26
8	CHAPTER 13: NEW MEMORANDUM AND	
9	BALANCING ACCOUNTS .....	13-1
10	A. INTRODUCTION.....	13-1
11	B. AVR’S REQUEST FOR A PENTION BALANCING ACCOUNT.....	13-1
12	C. HEALTH CARE MEMORNADUM ACCOUNT .....	13-3
13	D. PRESSURE REDUCING VALVE MODERNIZATION	
14	MEMORANDUM ACCOUNT .....	13-10
15	E. CONCLUSION .....	13-13
16	CHAPTER 14: MAIN REPLACEMENTS .....	14-1
17	A. INTRODUCTION.....	14-1
18	B. SUMMARY OF RECOMMENDATIONS .....	14-1
19	C. DISCUSSION .....	14-2
20	D. CONCLUSION .....	14-19
21	CHAPTER 15: RATE DESIGN .....	15-1
22	A. INTRODUCTION.....	15-1
23	B. SUMMARY OF RECOMMENDATIONS .....	15-1
24	C. DISCUSSION .....	15-2
25	D. CONCLUSION .....	15-15
26	CHAPTER 16: STEP RATE INCREASE.....	16-1
27	A. FIRST ESCALATION YEAR .....	16-1
28	B. SECOND ESCALATION YEAR .....	16-1
29	C. ESCALATION YEARS’ REVENUE REQUIREMENTS.....	16-2
30	<b>APPENDIX A – QUALIFICATIONS AND PREPARED TESTIMONY</b>	
31	<b>APPENDIX B – ATTACHMENTS TO DRA’S REPORT</b>	

1 **EXECUTIVE SUMMARY**

2 In its Application 11-01-001, filed on January 3, 2011, AVR requests a  
3 (domestic) rate increase of 20.0% in Test Year 2012, 2.35% in Escalation Year  
4 2013, and 3.32% for Escalation Year 2014. DRA in this report presents its  
5 analysis and recommendations that result in an estimated increase of 5.7% in the  
6 Test Year 2012 , an estimated *decrease* of 10.7% in Escalation Year 2013, and an  
7 estimated increase of 2.13% for Escalation Year.

8 **Key Recommendations**

- 9 1. DRA recommends that AVR’s rate of return of 9.42%, adopted in Decision 10-  
10 10-035, be used in this proceeding.
- 11 2. DRA recommends that the Commission adopt DRA’s results of operations for  
12 AVR (domestic & irrigation) which are based on *lower* estimates for O&M  
13 expenses, A&G expenses, plant additions and ratebase, and *higher* sales  
14 estimates. Some of DRA’s key adjustments are:
- 15 a. O&M and A&G Expense: Lower payroll and pensions and benefits  
16 estimates; and disallowance of all increased costs associated with the bi-  
17 monthly to monthly billing conversion request. (See Chapter 3.)
- 18 b. Plant Investment and Rate Base: Disallowance and/or reduction of various  
19 plant investment requests (e.g., main replacements; Mockingbird booster  
20 pump station; and office expansion). AVR’s plant addition estimate for the  
21 three-year 2011-2013 period exceeds DRA’s estimate by 63%(see  
22 Chapters 7& 14); higher Deferred Income Tax estimates to incorporate the  
23 impact of the Tax Relief Act signed by President Obama on December 17,  
24 2010 (see Chapter 9).
- 25 3. DRA recommends that AVR develop a main replacement plan with specific  
26 targets and goals to be filed in its next GRC.

- 1 4. DRA recommends that the Commission adopt DRA’s estimates for Park Water  
2 Company’s (“Park”) general office expenses and rate base and the allocation of  
3 those components to Park’s division/subsidiaries which include AVR  
4 (domestic and irrigation). (See Chapter 11.)
- 5 5. DRA recommends that the Commission reject AVR’s request to convert from  
6 bi-monthly to monthly customer billing. (See Chapter 12.)
- 7 6. DRA recommends that the Commission allow AVR to track conservation  
8 expenses in a capped One-Way Balancing Account for the three years of this  
9 GRC cycle. (See Chapter 3.)
- 10 7. DRA does not oppose AVR’s requests to amortize the balances in its existing  
11 balancing accounts and memorandum accounts with a few exceptions. (See  
12 Chapter 12.)
- 13 8. DRA recommends that the Commission reject AVR’s request to establish a  
14 new Pension Balancing Account, a new Health Care Memorandum Account,  
15 and a new Pressure Reducing Valve Memorandum Account. (See Chapter 13.)
- 16 9. DRA recommends that AVR continue its conservation rate design trial  
17 program and that AVR’s proposed modifications to the tier breakpoints and  
18 price differential between tiers be adopted. (See Chapter 15.)
  - 19 (1) Adopt DRA’s estimates for miscellaneous revenue and DRA’s  
20 recommended changes to the reconnection charge, bad check fee,  
21 deposit fee, facilities fee, and supplemental water acquisition.
  - 22 (2) Continue to allow AVR’s Low Income Assistance Program and its  
23 related regulatory account and increase the LIRA discount and  
24 related surcharge amount by the adopted rate increase for the Test  
25 Year 2012.

### Organization of Report

Chapter Number	Description	Witness
-	Executive Summary	Yoke Chan; Pat Ma
1	Overview and Policy	Yoke Chan; Pat Ma
2	Water Consumption and Operating Revenues	Mandy Rasmussen
3	Operations & Maintenance, Administrative & General, and Conservation Expenses	Herbert Merida; Toni Canova
4	Payroll, Pensions and Benefits Expenses (for both AVR and GO)	James Simmons
5	Taxes Other Than On Income	Toni Canova
6	Income Taxes	Toni Canova
7	Utility Plant In Service	Pat Ma; Mandy Rasmussen
8	Depreciation Reserve and Depreciation Expense	Yoke Chan
9	Rate Base	Yoke Chan
10	Customer Service	Toni Canova
11	Park Water Company's General Office	Kenneth Bruno
12	Monthly Billing Conversion; Existing Memorandum Balancing Accounts; Plant Audit	Nickolay Kotyrlo
13	New Memo/Balancing Accounts	James Simmons
14	Main Replacements	Mandy Rasmussen
15	Rate Design	Mandy Rasmussen
16	Step Rate Increase	Yoke Chan
Appendix A	Qualifications	All
Appendix B	Attachments to Chapters 2 and 4	

1

## CHAPTER 1: OVERVIEW AND POLICY

2

### A. INTRODUCTION

3

4

5

6

7

8

On January 3, 2011, Apple Valley Ranchos Water Company (“AVR”) filed A.11-01-001 requesting authority to increase rates charged for its domestic water service by \$3,896,590 or 20.0 % in Test Year 2012, by \$545,241 or 2.35% in Escalation Year 2013, and by \$786,254 or 3.35% in Escalation Year 2014. For its irrigation water service, the requested increases are 4.03% for 2012, 0.62% for 2013 and 0.40% for 2014.

9

10

11

12

AVR estimates that its proposed increases will produce revenues providing a rate of return on equity (“ROE”) of 10.20% and a rate of return on ratebase (“ROR”) of 9.42% for the years 2012 through 2013. These rates of return were authorized by the Commission in D.10-10-035.<sup>1</sup>

13

14

15

16

17

This report sets forth DRA’s analysis and recommendations on AVR’s general rate case requests. DRA presents at the end of this chapter Tables 1-1 through 1-3 which compare AVR’s and DRA’s Summary of Earnings for the Domestic System for the Test Year 2012. Table 1-4 compares AVR’s and DRA’s Summary of Earnings for the Irrigation System for Test Year 2012.

18

### B. DISCUSSION

19

20

21

22

AVR operates two water systems - domestic and irrigation, each having its own results of operations (“RO”). AVR’s domestic system generates about \$20 million in annual revenues and has 23 wells and 19,000+ customers. Its irrigation system generates approximately \$250,000 in annual revenues, and has

---

<sup>1</sup> 2010 Cost of Capital decision for San Jose Water Company, Valencia Water Company, Park Water Company and Apple Valley Ranchos Water Company, San Gabriel Valley Water Company, and Suburban Water Systems.

1 one well and one customer. This one well pumps into a series of lakes, from  
 2 which the customer takes metered lake water to irrigate a golf course.<sup>2</sup>

3 **1) AVR – Domestic**

4 Table 1-A below provides a comparison of AVR’s and DRA’s estimated  
 5 domestic revenue requirement increases for Test Year 2012, both based on a  
 6 9.42% ROR (Escalation Years’ increases are discussed in Chapter 16 – Step Rate  
 7 Increase of this report.) The differences between DRA’s and AVR’s revenue  
 8 requirement increase estimates are due to DRA’s adjustments as summarized in  
 9 the Executive Summary of this report.

10 **Table 1-A**  
 11 **Test Year 2012 Revenue Requirement Increase (Domestic)**

	<b>Amount of Increase</b>	<b>Percent Increase</b>
<b>AVR</b>	\$3,896,590	20.0%
<b>DRA</b>	\$1,110,000	5.7%
<b>Difference</b>	\$2,786,590	14.3%

12 Table 1-B presents a comparison of DRA’s and AVR’s estimates for ROR  
 13 for the Test Year 2012 at present rates and at AVR-proposed rates. As shown, at  
 14 AVR-proposed rates, DRA estimates that the company will earn an ROR of  
 15 13.71%, which is 4.29% higher than its authorized 9.42% ROR for Test Year  
 16 2012.

17 **Table 1-B**  
 18 **RORs at Present Rates and at AVR-Proposed Rates (Domestic)**

	<b>DRA</b>	<b>AVR</b>	<b>Difference</b>
<b>Present Rates</b>	7.55%	3.93%	3.62%
<b>AVR-Proposed Rates</b>	13.71%	9.42%	4.29%

<sup>2</sup> AVR Revenue Requirement Report, page 6.



TABLE 1-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## SUMMARY OF EARNINGS

TEST YEAR 2012

(AT PRESENT RATES)

Item	DRA Estimate	AVR Estimate	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	19,604.6	19,240.2	(364.4)	-1.9%
Operating expenses:				
Operation & Maintenance	6,328.0	6,759.2	431.3	6.8%
Administrative & General	5,945.8	7,041.1	1,095.3	18.4%
Depreciation & Amortization	2,759.4	2,879.0	119.6	4.3%
Taxes other than income	756.6	785.2	28.6	3.8%
State Corp. Franchise Tax	228.9	36.7	(192.2)	-84.0%
Federal Income Tax	786.9	131.8	(655.1)	-83.2%
Total operating exp.	16,805.6	17,633.1	827.5	4.9%
Net operating revenue	2,799.1	1,607.1	(1,192.0)	-42.6%
Rate base	37,072.8	40,910.4	3,837.6	10.4%
Return on rate base	7.55%	3.93%	-3.62%	-48.0%

TABLE 1-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## SUMMARY OF EARNINGS

TEST YEAR 2012

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	AVR Estimate	AVR exceeds DRA	
			Amount	%
	(Thousands of \$)			
Operating revenues	23,552.3	23,127.0	(425.3)	-1.8%
Operating expenses:				
Operation & Maintenance	6,341.4	6,772.4	431.1	6.8%
Administrative & General	5,983.8	7,080.2	1,096.4	18.3%
Depreciation & Amortization	2,759.4	2,879.0	119.6	4.3%
Taxes other than income	756.6	785.2	28.6	3.8%
State Corp. Franchise Tax	573.3	375.7	(197.6)	-34.5%
Federal Income Tax	2,054.2	1,379.0	(675.1)	-32.9%
Total operating exp.	18,468.6	19,271.6	802.9	4.3%
Net operating revenue	5,083.6	3,855.4	(1,228.2)	-24.2%
Rate base	37,072.8	40,910.4	3,837.6	10.4%
1 Return on rate base	13.71%	9.42%	-4.29%	-31.3%

TABLE 1-3

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## SUMMARY OF EARNINGS

TEST YEAR 2012

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present	
			Amount	%
	(Thousands of \$)			
Operating revenues	19,604.6	20,714.6	1,110.0	5.7%
Operating expenses:				
Operation & Maintenance	6,328.0	6,331.7	3.8	0.1%
Administrative & General	5,945.8	5,956.3	10.5	0.2%
Depreciation & Amortization	2,759.4	2,759.4	0.0	0.0%
Taxes other than income	756.6	756.6	0.0	0.0%
State Corp. Franchise Tax	228.9	325.7	96.9	42.3%
Federal Income Tax	786.9	1,092.6	305.6	38.8%
Total operating exp.	16,805.6	17,222.4	416.8	2.5%
Net operating revenue	2,799.1	3,492.3	693.2	24.8%
Rate base	37,072.8	37,072.8	0.0	0.0%
1 Return on rate base	7.55%	9.42%	1.87%	24.8%

TABLE 1-4

## APPLE VALLEY RANCHOS WATER COMPANY-IRRIGATION

## SUMMARY OF EARNINGS

TEST YEAR 2012  
(Thousands of \$)

	PRESENT		AVR		PROPOSED		AVR	
	DRA Estimate	AVR Estimate	exceeds DRA Amount	%	DRA Estimate	AVR Estimate	exceeds DRA Amount	%
OPERATING REVENUES	255.0	243.2	(11.8)	-4.6%	217.55	253.0	35.45	16.3%
TOTAL REVENUES	255.0	243.2	(11.8)	-4.6%	217.6	253.0	35.5	16.3%
OPERATIONS & MAINTENANCE								
PAYROLL-OPERATIONS	3.9	4.1	0.2	1.6%	3.9	4.1	0.2	1.6%
OPERATIONS-OTHER	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
PURCHASED WATER	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
PURCHASED POWER	72.1	100.4	28.3	39.2%	72.1	100.4	28.3	39.2%
REPLENISHMENT CHARGES	23.5	25.7	2.2	9.5%	23.5	25.7	2.2	9.5%
CHEMICALS	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
UNCOLLECTIBLES	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
PAYROLL-MAINTENANCE	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
MAINTENANCE-OTHER	1.2	0.8	(0.4)	-30.8%	1.2	0.8	(0.4)	-30.8%
PAYROLL-CLEARINGS	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
CLEARINGS-OTHER	2.9	2.9	0.0	0.0%	2.9	2.9	0.0	0.0%
SUBTOTAL O & M	103.6	133.9	30.3	29.2%	103.6	133.9	30.30	29.2%
ADMINISTRATIVE & GENERAL								
PAYROLL	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
PAYROLL-BENEFITS	1.5	2.4	0.9	57.0%	1.5	2.4	0.9	57.0%
INSURANCE	1.63	1.64	0.0	0.4%	1.63	1.64	0.0	0.4%
FRANCISE REQTS	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
OUTSIDE SERVICES	5.2	5.7	0.5	9.9%	5.2	5.7	0.5	9.9%
OFFICE SUPPLIES	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
A & G - OTHER	0.054	0.057	0.0	5.6%	0.054	0.057	0.00	5.6%
MISCELLANEOUS	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
RENTS	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
GENERAL OFFICE ALLOCATION								
A & G EXPENSES	15.0	16.8	1.8	12.3%	15.0	16.8	1.8	12.3%
AVR ALLOCATION								
A & G EXPENSES	25.8	33.2	7.4	28.7%	25.8	33.2	7.4	28.7%
SUBTOTAL A & G	49.2	59.8	10.6	21.6%	49.2	59.8	10.6	21.6%
AD VALOREM TAXES	3.817	3.832	0.0	0.4%	3.8	3.8	0.0	0.4%
PAYROLL TAXES	0.841	0.936	0.1	11.3%	0.841	0.936	0.1	11.3%
RECOVER UNDERCOLLECTION								
DEPRECIATION	18.4	18.6	0.2	1.1%	18.4	18.6	0.2	1.1%
CA INCOME TAX	7.2	1.5	(5.7)	-79.3%	3.9	1.5	(2.4)	-61.8%
FEDERAL INCOME TAXES	23.8	4.5	(19.3)	-81.1%	11.6	7.7	(4.0)	-34.0%
TOTAL EXPENSE	206.9	223.1	16.2	7.8%	191.4	226.3	34.9	18.2%
NET REVENUES	48.1	20.1	(28.0)	-58.2%	26.1	26.7	0.6	2.2%
RATE BASE	277.6	283.7	6.05	2.18%	277.6	283.7	6.05	2.18%
1 RATE OF RETURN	17.33%	7.09%	-10.24%	-59.1%	9.42%	9.42%	0.0	0.0%

1                   **CHAPTER 2: WATER CONSUMPTION AND OPERATING**  
2                   **REVENUES**

3                   **A. INTRODUCTION**

4                   This chapter presents DRA’s analysis and recommendation on the average  
5                   number of customers, water sales per customer, unaccounted for water, and  
6                   operating revenues for AVR in the Test Year 2012, and Escalation Year 2013.  
7                   DRA reviewed AVR’s Revenue Requirement Report, supporting workpapers, data  
8                   request responses, and method of estimating water consumption and operating  
9                   revenues. AVR’s service area is in and near the Town of Apple Valley in San  
10                  Bernardino County, California.

11                  **B. SUMMARY OF RECOMMENDATIONS**

12                  Tables 2-1 through 2-7, at the end of this chapter, show AVR and DRA’s  
13                  estimates for the average number of customers, water consumption, operating  
14                  revenues, and DRA’s recommendations. For the Test Year 2012, the total number  
15                  of customers estimated by AVR and DRA are 19,498 and 19,333, respectively.  
16                  AVR’s estimated total water supply is 9,875.1 Kccf (100,000 cubic feet), while  
17                  DRA’s estimate is 8,841.7 Kccf. AVR’s estimated unaccounted-for-water for  
18                  2012 is 9% for domestic and 85.9% for gravity irrigation, while DRA’s estimate is  
19                  8.0% for domestic and 77.2% for gravity irrigation.

20                  Using the present rates and AVR’s proposed rates, DRA’s calculation of  
21                  total operating revenues for the Test Year 2012 are \$19,859,600 and \$23,817,600,  
22                  respectively. AVR’s estimates are \$19,482,123 and \$23,383,136, respectively.  
23                  The differences in estimated customers, consumption, unaccounted-for-water and  
24                  operating revenues are due to the correction of errors in some calculations and/or a  
25                  difference in methodology as discussed below.

1           **C. DISCUSSION**

2           According to the Rate Case Plan, utilities are required to forecast customer  
3 growth using a five-year average of the change in the number of customers by  
4 customer class. Should an unusual event occur, or be expected to occur, such as  
5 the implementation or removal of limitation on the number of customers, then an  
6 adjustment to the five-year average will be made. Further, the applicant utility and  
7 DRA must calculate consumption by using a multiple regression to forecast per-  
8 customer usage for the residential and commercial customer classes in general rate  
9 cases, based on the Standard Practice No. U-2 and “Supplement to Standard  
10 Practice No. U-25” with the following improvements:

- 11           • Use monthly data for 10 years, if available;
- 12           • Use 30-year average for forecast values for temperature and rain;  
13           and
- 14           • Remove periods from the historical data in which sales restrictions  
15           were imposed or the Commission provided the utility with sales  
16           adjustment compensation, but replace with additional historical data  
17           to obtain 10 years of monthly data, if available.<sup>3</sup>

18           DRA and AVR both calculated unit consumption by performing a  
19 regression analysis for residential class projections. For the commercial customer  
20 class, DRA agrees with AVR that a regression analysis is not the best method  
21 available for forecasting the unit consumption in this rate case cycle. AVR cited  
22 the regression analysis R-squared statistic as being too low for the results to  
23 provide reliable forecasts for the commercial customer class unit consumption.<sup>4</sup>  
24 DRA reviewed the results of AVR’s regression analysis for commercial customers

---

<sup>3</sup> D.07-05-062 (R.06-12-016), Appendix, p. A-23, Footnote 4.

<sup>4</sup> AVR’s Revenue Requirement Report Workpapers, p. 3-1r, 2<sup>nd</sup> footnote.

1 and also performed its own regression analysis. Due to an apparent shift in usage  
2 in 2006, the best available data for unit consumption by the commercial class in  
3 this rate case cycle is from 2006 through 2010.<sup>5</sup> Therefore, DRA recommends the  
4 5-year average be used in place of the new committee method for the commercial  
5 class unit consumption forecast in this general rate case cycle.

6 According to the Rate Case Plan, water sales for classes of service other  
7 than residential and commercial (such as irrigation, industrial, public authority,  
8 and others) should be forecasted based on total consumption by class using the  
9 best available data.<sup>6</sup> AVR did not have a uniform method for forecasting the unit  
10 consumption for the industrial, public authority, private fire, public authority –  
11 irrigation, pressure irrigation, gravity irrigation, and temporary construction  
12 customer classes. For each class, DRA compared the AVR proposed unit  
13 consumption forecast to the 5-year average and in each case found the 5-year  
14 average to provide the best available data.<sup>7</sup>

15 Over 90 percent of AVR’s customers are residential customers and it is  
16 anticipated that growth will be far below the 5-year average for residential  
17 customers. DRA agrees with AVR’s residential customer growth and 2012 unit  
18 use projections, but has several recommendations for the remaining customer  
19 classes. DRA is mostly concerned with errors in various calculations and over  
20 estimated conservation use reductions and loss of customers.

21 Customers and unit consumption are the basis for all revenue forecasts, so  
22 the subsequent comparison of revenue will reflect the changes made in these  
23 projections. The water supply estimates then take into account any changes in

---

<sup>5</sup> Attachment 2-A in Appendix B – *DRA Comparison of Commercial Class Unit Consumption Forecast Methods*

<sup>6</sup> D.07-05-062 (R.06-12-016), Appendix, p. A-23, Footnote 5

<sup>7</sup> Attachment 2-B in Appendix B – *DRA Comparison of Unit Consumption Forecast Methods for all Customer Classes other than Residential and Commercial*

1 estimated customers, unit consumption, and unaccounted for water. For water  
2 supply, a distinction is made between the ‘domestic’ customer classes and the  
3 ‘gravity irrigation’ customer. This unique customer, a golf course on Jess Ranch,  
4 has a special agreement and situation involving a fishing nursery and connected  
5 ponds. This along with the way water sales and supply are used to calculate  
6 unaccounted for water results in a large amount of reported unaccounted for water.  
7 In order to allow AVR to reasonably assess the unaccounted for water in the  
8 system, the gravity irrigation customer is shown with a unique unaccounted for  
9 water percentage. This practice is consistent with past GRCs.

10 **1) Customers**

11 DRA reviewed AVR’s estimates for the number of customers for all classes  
12 and agrees with the estimate for the change in number of customers per year for  
13 the residential customer class, but discovered an error in the 5-year average  
14 calculations used in all other customer class estimates. AVR mistakenly took the  
15 difference in customers from 2005 to 2009 (which includes only four changes in  
16 the number of customers) and divided by five.<sup>8</sup> DRA recommends using AVR’s  
17 estimate for the residential customer class and using the corrected 5-year average  
18 calculation for all other customer classes. DRA further recommends including  
19 2010 recorded data for this analysis in order to use the most recent and best  
20 available data.

21 **a) Residential**

22 The residential class 5-year average growth has been 453 customers/year,  
23 from 2004 to 2009 (AVR mistakenly calculated 265 customers/year). However,

---

<sup>8</sup> The difference in customers from 2005 to 2009 includes changes from 2005 to 2006, 2006 to 2007, 2007 to 2008, and 2008 to 2009 which is only four changes in the number of customers. Dividing this value by four would have been a 4-year average. AVR divided this value by five resulting in a meaningless number. A correct 5-year average ending in 2009 would have been the difference in customers from 2004 to 2009, divided by five.

1 growth has substantially slowed in the last four years with an average of 33  
2 customers per year from 2006-2007 through 2009-2010, which includes a loss of  
3 216 residential customers in 2009-2010. AVR projects 50 new customers per  
4 year, all of whom are expected to move into existing homes in 2011 and 2012 (25  
5 in the Jess Ranch retirement community and 25 within the general service area).<sup>9</sup>

6 DRA agrees with AVR that the current state of the economy and the real  
7 estate downturn provides a justified ‘unusual event’ and allows for a deviation  
8 from the 5-year average, the preferred forecast tool for customer projections  
9 within the Rate Case Plan.<sup>10</sup> DRA agrees with AVR that the 5-year average  
10 residential customer growth rate is too high to use as a projection for this GRC  
11 cycle.

12 DRA suggests using AVR’s proposed 50 customers/year, and starting with  
13 the 2010 recorded number of customers of 17,376. This would project 17,476 in  
14 the Test Year 2012, and 17,526 in the Escalation Year 2013, both of which are  
15 lower than the number of residential customers in 2009 due to the loss of 216  
16 residential customers in 2010.

17 **b) Business/Commercial**

18 The commercial class 5-year average growth has been 19 customers/year,  
19 from 2004 to 2009 (AVR mistakenly calculated 8 customers/year). DRA suggests  
20 using the 5-year average growth, from 2005 to 2010, of 13 customers per year  
21 starting with the 2010 recorded number of customers of 1,319. This would project  
22 1,345 in the Test Year 2012, and 1,358 in the Escalation Year 2013.

---

<sup>9</sup> AVR’s Revenue Requirement Report Workpapers, p. 6-11.

<sup>10</sup> D.07-05-062 (R.06-12-016), Appendix, p. A-23, Footnote 4.

1           **c) Industrial, Public Authority, Public Authority – Irrigation, and**  
2           **Gravity Irrigation**

3           DRA agrees with AVR’s customer projections of zero growth for  
4 Industrial, Public Authority, Public Authority – Irrigation, and Gravity Irrigation.  
5 All of these customer classes have had a consistent number of customers for the  
6 last five years or longer. The current counts for these classes are 2 Industrial  
7 customers, 42 Public Authority customers, 5 Public Authority – Irrigation  
8 customers, and 1 Gravity Irrigation customer.

9           **d) Private Fire**

10          AVR estimated 5 new private fire customers per year, however, there were  
11 27 new private fire customers in 2010. This growth is believed to be associated  
12 with commercial customer growth.<sup>11</sup> DRA recommends using the 5-year average  
13 growth (2005-2006 through 2009-2010) of 22 customers per year. This would  
14 project 255 private fire customers in the Test Year 2012, and 277 in the Escalation  
15 Year 2013.

16          **e) Pressure Irrigation**

17          The Pressure Irrigation customer class provides service to common areas  
18 within the Jess Ranch Community.<sup>12</sup> AVR proposes 11 new customers per year.  
19 DRA recommends using the 5-year average change (2005-2006 through 2009-  
20 2010) of 15 customers per year. This would project 184 in the Test Year 2012,  
21 and 199 in the Escalation Year 2013.

22          The Pressure Irrigation customer class also includes Apple Valley Country  
23 Club (“AVCC”) irrigation service used for the AVCC golf course and common

---

<sup>11</sup> AVR’s response to DRA’s data request MMR-3, Item 5.

<sup>12</sup> AVR’s Revenue Requirement Report, page 18.

1 areas. AVR removed AVCC irrigation data from its GRC application and  
2 Pressure Irrigation customer class projections because AVR anticipated the AVCC  
3 would bypass service from AVR.<sup>13</sup> The Town, in operational control of AVCC,  
4 had planned to construct a new private well to replace the single irrigation well at  
5 the AVCC that failed in 2009.<sup>14</sup> This new private well would allow AVCC to  
6 bypass service from AVR.

7 However, in March 2011, after AVR filed its GRC application, the Town  
8 agreed to a tariff deviation and discounted commodity rate from AVR instead of  
9 bypassing service from AVR by constructing a new private well. In exchange for  
10 a lower commodity rate, the Town will lease to AVR, at no charge, the water  
11 rights necessary to provide irrigation service to AVCC equal to 110 percent of the  
12 estimated annual average irrigation water produced by AVR.<sup>15</sup> This agreement is  
13 subject to Commission approval of Advice Letter 165-W filed by AVR on April 7,  
14 2011.<sup>16</sup>

15 DRA agrees with AVR to include the sales forecast for the AVCC as a  
16 unique customer class and to reflect the reduced leased water rights in operation  
17 and maintenance expenses.<sup>17</sup> This change is reflected by DRA's addition of a new  
18 customer class, "AVCC" in its consumption and sales forecasts.

19 DRA is including this customer and applying the discounted commodity  
20 rate under an assumption that the proposed tariff deviation (after review of the

---

<sup>13</sup> AVR's Revenue Requirement Report, page 19.

<sup>14</sup> Id.

<sup>15</sup> Tariff Deviation Agreement between Apple Valley Ranchos Water Company and the Town of Apple Valley, March 10, 2011. (Attachment 'W-21' through 'W-25' to Advice Letter 165-W)

<sup>16</sup> AVR's Advice Letter 165-W is included in this report as Attachment 15-A in Appendix B.

<sup>17</sup> AVR's response to DRA's data request MMR-3, Item 1 and associated e-mails from Michelle Nguyen, Rate Analyst, Park Water Company to Amanda Rasmussen, DRA's Water Branch. March 24, 2011, at 11:39AM and 4:23PM PT (on file with author).

1 reasonableness of the discounted commodity rate) will be approved by the CPUC  
2 through the processing of Advice Letter 165-W, or if necessary, in the next GRC.

3 **f) Temporary Construction**

4 The temporary construction customer class differs from other classes in that  
5 there is no meaning in a growth per year value, rather a rolling average number of  
6 customers over a year is estimated. AVR assumes all temporary construction will  
7 be related to new commercial customers, and suggests they will be equal to the  
8 number of new commercial projects each year (mistakenly calculated as 8 per  
9 year). The 5-year average (2006 –2010) number of customers (not growth) has  
10 been 28 temporary construction customers. There were zero temporary  
11 construction customers in 2010. DRA recommends using the 4-year average  
12 (2007–2010) of 22 temporary customers per year. This would project 22  
13 customers in both test year 2012 and escalation year 2013.

14 **g) Customer Growth Factor**

15 A customer growth factor is used in some expense estimates discussed  
16 throughout this report. AVR assumed an average customer growth factor of 0.38  
17 percent. To reflect the recommended changes in customer growth discussed in  
18 this chapter, DRA assumes an average customer growth factor of 0.52 percent for  
19 some expense estimates. Table 2-A presents this calculation.

20 **Table 2-A – Customer Growth Factor Calculation**

	<b>AVR</b>	<b>DRA</b>
Projected Number of Customers in 2011	19,435	19,233
Projected Number of Customers in 2014	19,656	19,533
<b>3-year Average Annual Percent Growth (customer growth factor)</b>	<b>0.38%</b>	<b>0.52%</b>

1           **2) Average Unit Consumption**

2           Customer unit consumption has been somewhat unstable in the last 5 years.  
3           This may be due to several factors such as an unstable economy,<sup>18</sup> local  
4           encouragement of conservation, rate increases, the 2009 implementation of a  
5           conservation rate design that provides an incentive to save water, the recent 2007-  
6           2010 drought, and/or recent statewide legislation encouraging water conservation.  
7           However, DRA does not see a need to deviate from the standard forecast tools and  
8           recommends continuing to use the 5-year average unit consumption for most  
9           customer classes and using a regression analysis for the residential customer class.  
10          The projected unit consumption using the standard forecast tools, as suggested by  
11          DRA, is able to properly capture the recent effects of all factors including  
12          conservation and economic fluctuations.

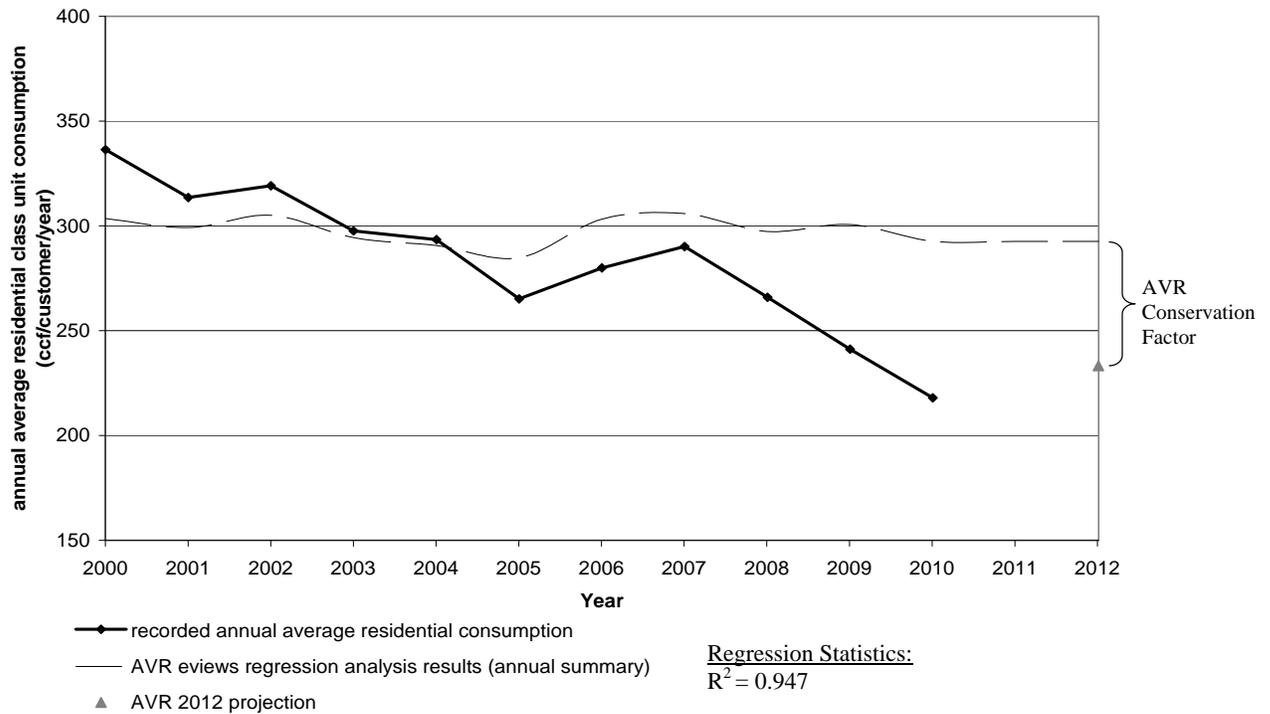
13           **a) Residential**

14          Both AVR and DRA performed a regression analysis using Econometric  
15          Views (eviews) software to follow the Rate Case Plan for residential unit  
16          consumption forecasts. AVR included temperature, precipitation, and monthly  
17          dummy variables in its analysis. Use of these variables produced a forecast that  
18          closely follows the monthly changes in unit water use,<sup>19</sup> but does not reflect the  
19          overall downward trend in annual residential water use during recent years. See  
20          Figure 2-A for a graphical representation of AVR’s regression analysis compared  
21          to the actual downward trend in residential unit consumption. AVR did  
22          acknowledge the downward trend in its analysis by applying a ‘conservation  
23          factor’ subtracted from the eviews projected unit consumption value.

---

**18** Executive Summary of this Report.

**19** See Attachment 2-C in Appendix B for a graph of the bi-monthly unit consumption data used to determine the annual average unit consumption shown in Figure 2-A.



1  
2

**Figure 2-A – AVR regression analysis**

3  
4  
5  
6  
7

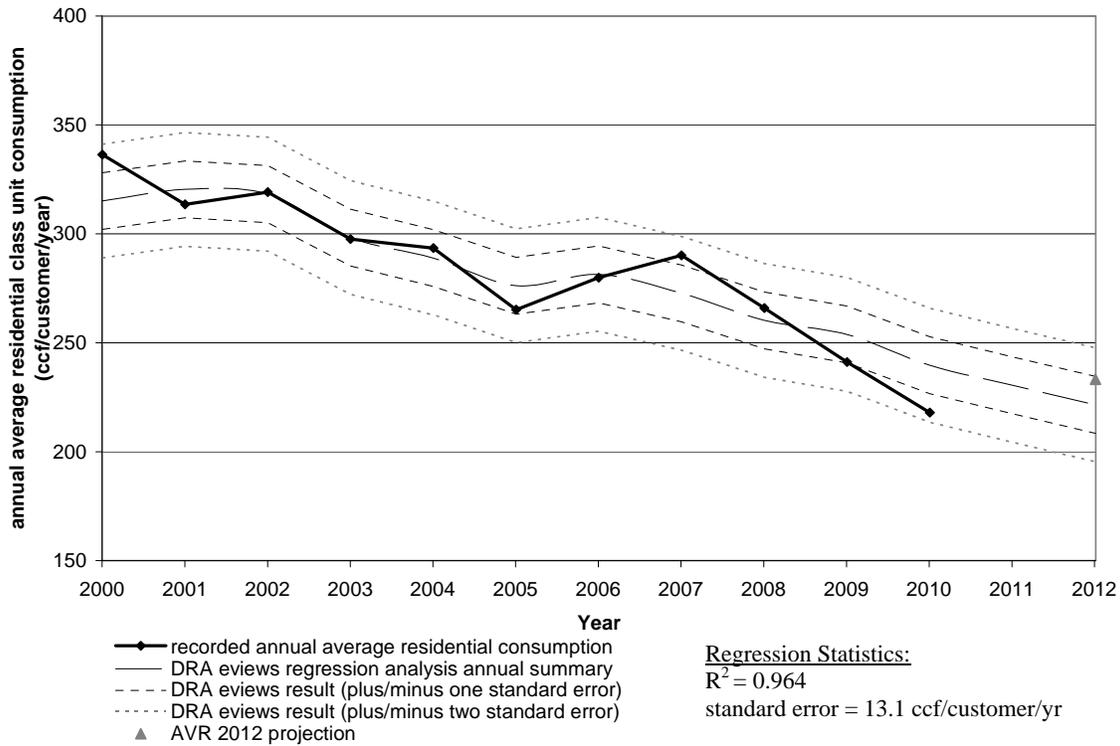
DRA does not agree with AVR’s use of this conservation factor because it deviates from the Rate Case Plan. Further, AVR’s assumption that the entire difference from the regression analysis is due strictly to conservation is not correct. Consumption has also been impacted by the drought, recession, and other factors.

8  
9  
10  
11  
12

To check the validity of AVR’s unit consumption estimate, DRA performed a second regression analysis that included ‘time’ as a variable. DRA, while disagreeing with the method of applying a conservation factor, agrees with the water use per customer projection of 233.2 ccf per customer per year for the residential class because AVR’s 2012 projection is within one standard error<sup>20</sup> of

<sup>20</sup> “[The standard error of the regression] is a summary measure of the size of the prediction errors. It has the same units as the dependent variable and is a measure of the magnitude of the residuals. About two-thirds of the residuals will lie in a range from minus one standard error to plus one standard error, and 95 percent of the residuals will lie in a range from minus two to plus two standard errors.” EViews User’s Guide, Version 2.0, Page 160, Chapter 7: Regression.

1 DRA’s 2012 projection from the regression analysis. Further, the 2010 recorded  
 2 water use per residential customer of 218 ccf per customer per year is within two  
 3 standard errors of DRA’s 2010 projection. Please see Figure 2-B for a graphical  
 4 representation of DRA’s regression analysis.



5  
6

**Figure 2-B – DRA regression analysis<sup>21</sup>**

7 While the 2012 projected residential unit use is greater than the recorded  
 8 unit use in 2010, DRA maintains its validity. A bounce back in unit use is  
 9 common, especially following drought conditions and the expectation of at least  
 10 partial recovery of the economy over the next several years. Although  
 11 consumption has consistently dropped since 2007, California has been in a drought

<sup>21</sup> The standard error presented in Figure 2-B is an annualized value from the eviews output for the regression analysis based on monthly data. The standard error for the monthly forecast values was 3.77 ccf/customer/month, and when multiplied by the square root of 12, is 13.1 ccf/customer/year, the standard error for the annual average.

1 from 2007 to 2010. On March 30, 2011, Governor Brown declared an end to the  
2 recent drought in California. Although the general long-term consumption trend  
3 will likely continue to decline with continued conservation efforts, a bounce back  
4 is likely in the short-term within this rate case cycle. In addition, the economy is  
5 expected to have some level of recovery over the next several years that will likely  
6 also contribute to a bounce back in water consumption.

7 The test year forecast of sales per customer per year must also be used in  
8 the escalation year, in accordance with the Rate Case Plan.<sup>22</sup> However, to reflect  
9 AVR's anticipated effect of increased water conservation programs, AVR reduced  
10 the resulting average annual usage forecast by one percent in each escalation  
11 year.<sup>23</sup> DRA does not agree with AVR's use of a one percent reduction in  
12 residential customer class water use in the escalation years because doing so  
13 deviates from the Rate Case Plan. DRA instead uses the same value (233.2 ccf per  
14 customer per year) for the residential customer class for both the Test Year 2012  
15 and Escalation Year 2013.

#### 16 **b) Public Authority and Public Authority Irrigation**

17 AVR used the same approach, using eviews and subtracting a conservation  
18 factor, to forecast the average annual consumption per customer, for the test year  
19 for Public Authority and Public Authority – Irrigation customers. These customer  
20 classes have far greater variability in the per user trends over the last ten years and  
21 a regression analysis does not appear to provide a better estimate than the 5-year  
22 average.<sup>24</sup> Besides the chosen methodology, AVR mistakenly used half the annual

---

<sup>22</sup> “Opinion Adopting Revised Rate Case Plan for Class A Water Utilities,” Decision 08-05-062, May 24, 2007, p. A-20, number 8.

<sup>23</sup> AVR's Revenue Requirements Report, page 19.

<sup>24</sup> Attachment 2-B in Appendix B – *DRA Comparison of Unit Consumption Forecast Methods for all Customer Classes other than Residential and Commercial.*

1 per customer value in the analysis for Public Authority – Irrigation. Therefore,  
2 DRA recommends using the 5-year annual average (2006 – 2010) for these  
3 customer classes, 7,156.9 ccf per customer per year for Public Authority and  
4 6,196.2 for Public Authority – Irrigation, as opposed to AVR’s estimates of  
5 7,038.4 for Public Authority and the mistaken value of 2,811.2 for Public  
6 Authority – Irrigation.

7 **c) Commercial, Pressure Irrigation, Gravity Irrigation, Private Fire,**  
8 **Temporary Construction, and AVCC**

9 DRA does not agree with AVR’s projections of 90% of the five-year  
10 average (or reviews value, if applicable) as the estimated water use for the  
11 commercial, pressure irrigation, gravity irrigation, private fire, and temporary  
12 construction customer classes.

13 AVR’s Revenue Requirement Report (page 19) says the reason  
14 Commercial, Pressure Irrigation, and Temporary Construction customer classes  
15 were estimated at 90% of the five-year average was that it “assumes these  
16 customer groups will achieve one-half of the [conservation] goal as set forth in  
17 SBx7-7.” The October 2010 “Methodologies for Calculating Baseline and  
18 Compliance Urban Per Capita Water Use” guidance document from the California  
19 Department of Water Resources illustrates the calculation required to determine  
20 compliance with the 20 percent reduction set forth in SBx7-7 (the Water  
21 Conservation Act of 2009). The baseline per capita consumption is defined as “a  
22 continuous 10-year period ending no earlier than December 31, 2004, and no later  
23 than December 31, 2010.” If the period 1996 to 2005 is used for AVR, according  
24 to preliminary estimates by DRA, AVR’s domestic sales in 2010 are an  
25 approximate 30% reduction in per capita water use thereby surpassing the  
26 20x2020 target. Therefore, a 10% reduction from current usage is not an  
27 appropriate target for the current rate case cycle.

1 For this general rate case, and until a clear conservation plan is in place,  
2 DRA recommends using a 5-year average (2006–2010) to project future water use  
3 in the Commercial, Pressure Irrigation, and Temporary Construction,<sup>25,26</sup>  
4 customer classes. DRA’s estimates are then 675.7, 2,290.2, and 2,824.9 ccf per  
5 customer per year versus AVR’s proposed 640.6, 2,062.0, 423.7 ccf per customer  
6 per year.

7 The irrigation water use proposed by AVR and the Town of Apple Valley  
8 in a tariff deviation in Advice Letter 165-W,<sup>27</sup> filed April 7, 2011, associated with  
9 the Apple Valley Country Club has been added by DRA with a new place holder  
10 “AVCC” customer class. The AVR forecasted consumption by the AVCC is  
11 143,748 ccf (330 AF) per customer per year.<sup>28</sup> AVR removed the historical and  
12 forecasted consumption by the AVCC from the Pressure Irrigation customer class  
13 in the current GRC application workpapers.<sup>29</sup> DRA agrees with AVR to now  
14 include this AVCC customer class, with the AVR assumed consumption and using  
15 the proposed discounted commodity rate, in sales projections for this GRC.<sup>30</sup>

---

**25** AVR did not have any temporary construction customers for the year 2010, therefore a 5 year average for that class was calculated using 2005 to 2009.

**26** For the Temporary Construction customer class, AVR mistakenly calculated the monthly average rather than the annual average for use in water consumption projections.

**27** AVR’s Advice Letter 165-W is included in this report as Attachment 15-A in Appendix B.

**28** E-mail from Michelle Nguyen, Rate Analyst, Park Water Company to Amanda Rasmussen, DRA’s Water Branch. March 24, 2011, 4:14PM PT (on file with author)

**29** AVR’s Revenue Requirement Report, page 19.

**30** AVR’s response to DRA’s data request MMR-3, Item 1 and associated e-mails from Michelle Nguyen, Rate Analyst, Park Water Company to Amanda Rasmussen, DRA’s Water Branch. March 24, 2011, at 11:39AM and 4:23PM PT (on file with author).

1           **d) Private Fire**

2           AVR forecasts 90% of the 5-year average value for private fire unit  
3 consumption. Private fire is not considered an area where water conservation may  
4 be applied. DRA recommends applying the 5-year average for the private fire  
5 water use projection of 5.9 ccf per customer per year rather than AVR's estimate  
6 of 4.8 ccf per customer per year. While private fire is metered, there is no quantity  
7 charge applied to private fire customers, and therefore, no revenues are derived  
8 from the private fire service commodity rates. However, the total water supply  
9 and production forecasts do incorporate this consumption.

10           **e) Gravity Irrigation**

11           Water use by the sole gravity irrigation customer, the Jess Ranch golf  
12 course, has increased nearly two fold since 2005 due to an expansion to a 27-hole  
13 golf course.<sup>31</sup> Conservation has not been observed in the water use trends by the  
14 gravity irrigation system, and, additionally, there is no specific plan for  
15 encouraging this user to conserve water. AVR adjusted data from 2000 through  
16 2005 by doubling all monthly values in an attempt to normalize data to more  
17 closely fit within a regression analysis model. AVR included this adjusted data in  
18 a regression analysis and used 90 percent of the forecasted value as the Gravity  
19 Irrigation usage in 2012. However, the 5-year average from 2006 to 2010 includes  
20 all years of the course having the current 27-hole structure, so with no adjustments  
21 to the data required, the 5-year average from 2006 to 2010 is the best available  
22 data. DRA recommends using the 5-year average of 540,481 ccf per customer per  
23 year instead of AVR's proposed 511,321 ccf per customer per year.

---

**31** AVR's response to DRA's data request MMR-3, Item 6.

1           **f) Industrial**

2           AVR’s proposed unit consumption for the Industrial customer class is  
3 based on an evIEWS regression analysis. The two industrial customers within the  
4 AVR service area include a mailbox manufacturer and an aero-space industry  
5 fastener supplier.<sup>32</sup> Both customers have manufacturing facilities on Waalew  
6 Road in Apple Valley with negligible landscaping water needs. Neither of these  
7 industrial customers appears to use water differently based on rainfall and/or  
8 temperatures; therefore, their water use should not be predicted using climatologic  
9 variables in an econometric study. Further, AVR mistakenly calculated half of the  
10 annual use per customer when conducting the Industrial customer class  
11 econometric study. DRA recommends using the 5-year average (2006–2010)  
12 methodology to forecast 706.3 ccf per customer per year for the Industrial  
13 customer class rather than AVR’s estimate of 311.3 ccf per customer per year.

14           **3) Water Sales**

15           Water sales are the product of the number of customers and their average  
16 water use. For the Test Year 2012, DRA’s forecasted total water sales are 5,946.0  
17 Kccf for domestic and 540.5 Kccf for gravity irrigation as opposed to AVR’s  
18 5,686.4 Kccf for domestic and 511.3 Kccf for gravity irrigation.

19           **4) Total Water Supply and Unaccounted for Water**

20           The total water supply represents the sum of water sales and unaccounted  
21 for water. For the Test Year 2012 using the projections discussed in this chapter,  
22 DRA’s estimate for the total water supply is 8,841.7 Kccf (6,471.1 Kccf for  
23 domestic and 2,370.5 Kccf for gravity irrigation) compared to AVR’s estimate of  
24 9,875.1 Kccf (6,248.7 Kccf for domestic and 3,626.4 Kccf for gravity irrigation).

---

<sup>32</sup> AVR’s response to DRA’s data request MMR-3, item 4.

1 Unaccounted for water includes real and apparent losses. Real losses are  
2 those caused by leaks in mains, service connections, valves, hydrants, or storage  
3 tank overflows and leaks. Apparent losses include meter measurement  
4 inaccuracies, data handling errors, and unauthorized consumption. Unaccounted  
5 for water is determined as the difference between the total amount of water  
6 produced and the total amount of water recorded for sales.

7 Because of the unique conditions for the Gravity Irrigation customer  
8 regarding supply and unaccounted for water, determinations are considered  
9 separately from the rest of the system. The remaining customer classes are  
10 collectively referred to as the ‘domestic’ system.

11 AVR’s forecast of unaccounted for water for the domestic system is 9.0  
12 percent. The unaccounted for water in 2008 was 12.8 percent, and not counting  
13 that year, the unaccounted for water from 2005 to 2009 ranges from 8.5 to 9.2  
14 percent. “AVR has taken many steps to reduce the amount of unaccounted for  
15 water in the last five years.”<sup>33</sup> AVR described its practices to reduce unaccounted  
16 for water in its Response to the Minimum Data Requirement:

17 “We have replaced approximately 10% of our residential meters  
18 annually. We continue to stay aggressive with our meter change out  
19 program in efforts to reduce unaccounted water. We have invested heavily  
20 in our main, emergency main, and service replacement programs over the  
21 past five years and continue to replace water main and water services in  
22 efforts to reduce main and service leaks, thus reducing unaccounted water.  
23 We consistently monitor our service pressure throughout our water system  
24 and take steps to reduce service pressure in specific pressure zones in  
25 efforts to reduce unaccounted water.”<sup>34</sup>

---

<sup>33</sup> AVR’s Revenue Requirement Report, page 34.

<sup>34</sup> AVR’s Response to Minimum Data Requirement II.E.5.

1 In addition to meter replacement, main replacement, and pressure  
 2 management, AVR may also have an opportunity for an economic benefit with  
 3 proactive leak detection to find and repair hidden leaks.<sup>35</sup> In 2007, a detailed  
 4 water audit was performed for AVR by Water Systems Optimization, Inc.  
 5 (“WSO”). The findings of this water audit included a conclusion that there is an  
 6 estimated 401.7 acre-feet of total annual hidden losses, of which 267 acre-feet is  
 7 potentially (and economically) recoverable. This 267 acre-feet, if subtracted from  
 8 the 2012 projected 9.0 percent unaccounted for water, results in an adjusted 7.3  
 9 percent unaccounted for water. Table 2-B presents this calculation.

10 **Table 2-B – Potential Reduction in Unaccounted for Water from Proactive**  
 11 **Leak Detection**

AVR 2012 Projected Total Sales	13,054.2 acre-feet
AVR 2012 Projected Unaccounted for Water (9.0%)	1,291.1 acre-feet
Potentially Recoverable Hidden Leak Losses	267.0 acre-feet
Adjusted Unaccounted for Water (Projected less Potentially Recoverable)	1,024.1 acre-feet
Adjusted Total Production	14,078.3 acre-feet
<b>Adjusted Unaccounted for Water</b>	<b>7.3%</b>

12 DRA recommends the Commission adopt an unaccounted for water target  
 13 of 8.0 percent in 2012 for AVR’s domestic system because it captures the potential  
 14 to further reduce unaccounted for water. AVR is actively working to reduce the  
 15 unaccounted for water with meter installations, main replacements, and pressure  
 16 management, and has the additional opportunity to recover hidden losses. This  
 17 opportunity alone may have the potential to reduce the percent of unaccounted for  
 18 water even further below this target.

---

<sup>35</sup> Chapter 14 – Main Replacements, Section C.1(a) Leak Loss, of this Report.

1 AVR's forecast of unaccounted for water for the Gravity Irrigation system  
2 is 85.9 percent. AVR referred to its forecast as the most recent 2-year average, but  
3 mistakenly used the 2-year average from the last GRC. The 2-year average of the  
4 most recent recorded data, 2008 and 2009, is 77.2 percent. This high water loss  
5 for the Gravity Irrigation system is attributed to evaporation and seepage in a  
6 series of lakes. AVR is required to maintain specific water levels at these lakes for  
7 fishery, and as a source to irrigate greenbelts and the golf course at Jess Ranch. A  
8 water supply agreement between AVR and Jess Ranch Water Company requires  
9 AVR to maintain the water level for various lakes in exchange for sufficient water  
10 rights at no cost to AVR. DRA recommends using the corrected 2-year recorded  
11 average for unaccounted water of 77.2 percent for Gravity Irrigation.

## 12 **5) Operating Revenue**

13 Operating revenue is calculated by multiplying the number of customers by  
14 their applicable water use and applying the current tariff rates (effective January 1,  
15 2011) for the present revenue and the proposed rates for the proposed revenue.

16 For Test Year 2012, the total operating revenues calculated by DRA are  
17 \$19,859,633 at present rates and \$23,817,600 at AVR's proposed rates. AVR's  
18 calculations are \$19,482,123 at current rates and \$23,383,136 at AVR's proposed  
19 rates.

20 AVR calculated 2013 proposed revenue at existing rates mistakenly using  
21 the 2012 proposed rates. This assumes that the 2012 proposed rates will be  
22 adopted. DRA does not agree with the 2012 proposed rates, but, for proper  
23 comparative purposes only, followed this method instead of using the 2011 rates  
24 as the existing rates. This does not have an impact on tariff rates, but will make  
25 the differences between AVR and DRA proposed rates for 2013 clearer for  
26 purposes of analysis in this GRC.

1           **D. CONCLUSION**

2           After investigation and analysis, DRA recommends the Commission adopt  
3 the values discussed in this chapter regarding the average number of customers,  
4 water sales per customer, unaccounted for water, and operating revenues for AVR  
5 in the Test Year 2012 and Escalation Year 2013.

TABLE 2-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	17,476	17,742	266	1.5%
Commercial	1,345	1,320	(25)	-1.9%
Industrial	2	2	0	0.0%
Public Authority	42	42	0	0.0%
Public Authority Irrigation	5	5	0	0.0%
Private Fire	255	189	(66)	-25.9%
Pressure Irrigation	184	189	5	2.7%
Gravity Irrigation	1	1	0	0.0%
Construction	22	8	(14)	-63.6%
Apple Valley Country Club	1	0	(1)	-100.0%
Total Metered Connections	19,333	19,498	165	0.9%
<u>Total Active Connections</u>				
1 Include Fire Protection	19,333	19,498	165	0.9%
Exclude Fire Protection	19,078	19,309	231	1.2%

TABLE 2-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	17,526	17,792	266	1.5%
Commercial	1,358	1,328	(30)	-2.2%
Industrial	2	2	0	0.0%
Public Authority	42	42	0	0.0%
Public Authority Irrigation	5	5	0	0.0%
Private Fire	277	204	(73)	-26.4%
Pressure Irrigation	199	200	1	0.5%
Gravity Irrigation	1	1	0	0.0%
Construction	22	8	(14)	-63.6%
Apple Valley Country Club	1	0	(1)	-100.0%
Total metered connections	19,433	19,582	149	0.8%
<u>Total Active Connections</u>				
1 Include Fire Protection	19,433	19,582	149	0.8%
Exclude Fire Protection	19,156	19,378	222	1.2%

TABLE 2-3

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	233.2	233.2	0.0	0.0%
Commercial	675.7	640.6	(35.1)	-5.5%
Industrial	706.3	311.3	(395.0)	-55.9%
Public Authority	7,156.9	7,038.4	(118.5)	-1.7%
Public Authority - Irrigation	6,196.2	2,811.2	(3,385.0)	-54.6%
Pressure Irrigation	2,290.2	2,062.0	(228.2)	-10.0%
Gravity Irrigation	540,481.0	511,321.0	(29,160.0)	-5.4%
Construction	2,824.9	423.7	(2,401.2)	-85.0%
Private Fire	5.9	4.8	(1.1)	-18.6%
1 AVCC	143,748.0	0.0	(143,748.0)	-100.0%

TABLE 2-3a

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## WATER SALES PER AVERAGE CUSTOMER

## ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
	(CCF/CONN./YR)			
Residential	233.2	230.9	(2.3)	-1.0%
Commercial	675.7	640.6	(35.1)	-5.5%
Industrial	706.3	311.3	(395.0)	-55.9%
Public Authority	7,156.9	7,038.4	(118.5)	-1.7%
Public Authority - Irrigation	6,196.2	2,811.2	(3,385.0)	-54.6%
Pressure Irrigation	2,290.2	2,062.0	(228.2)	-10.0%
Gravity Irrigation	540,481.0	511,321.0	(29,160.0)	-5.4%
Construction	2,824.9	423.7	(2,401.2)	-85.0%
Private Fire	5.9	4.8	(1.1)	-18.6%
1 AVCC	143,748.0	0.0	(143,748.0)	-100.0%

TABLE 2-4

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## TOTAL SALES AND SUPPLY

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Kccf per Year)				
<u>Domestic Sales</u>				
Residential	4,075.4	4,137.4	62.0	1.5%
Commercial	908.8	845.6	(63.2)	-7.0%
Industrial	1.4	0.6	(0.8)	-55.9%
Public Authority	300.6	295.6	(5.0)	-1.7%
Pressure Irrigation	421.4	389.7	(31.7)	-7.5%
Private Fire Service	1.5	0.0	(1.5)	-100.0%
AVCC	143.7	0.0	(143.7)	-100.0%
Public Authority Irrigation	31.0	14.1	(16.9)	-54.6%
Construction	62.1	3.4	(58.8)	-94.5%
Total domestic sales	5,946.0	5,686.4	-259.6	-4.4%
Unaccounted For Water	525.1	562.4	37.2	7.1%
AVR	9.0%			
DRA	8.0%			
Total delivered - domestic	6,471.1	6,248.7	(222.4)	-3.4%
<u>Gravity Irrigation Sales</u>				
Unaccounted For Water	540.5	511.3	(29.2)	-5.4%
AVR	85.9%			
DRA	77.2%			
Total delivered - Gravity Irrigation	1,830.0	3,115.1	1,285.0	70.2%
Total delivered	2,370.5	3,626.4	1,255.9	53.0%
Total delivered	8,841.7	9,875.1	1,033.5	11.7%
<u>Supply</u>				
Pumped Water	8,841.7	9,875.1	1,033.5	11.7%
Purchased Water	0.0	0.0	0.0	0.0%
1 Total production	8,841.7	9,875.1	1,033.5	11.7%

TABLE 2-5

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## TOTAL SALES AND SUPPLY

## ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
	(Kccf per Year)			
<u>Domestic Sales</u>				
Residential	4,087.1	4,107.6	20.5	0.5%
Commercial	917.6	850.7	(66.9)	-7.3%
Industrial	1.4	0.6	(0.8)	-55.9%
Public Authority	300.6	295.6	(5.0)	-1.7%
Pressure Irrigation	455.7	412.4	(43.4)	-9.5%
Private Fire Service	1.6	0.0	(1.6)	-100.0%
AVCC	143.7	0.0	(143.7)	-100.0%
Public Authority Irrigation	31.0	14.1	(16.9)	-54.6%
Construction	62.1	3.4	(58.8)	-94.5%
Total domestic sales	6,000.9	5,684.4	-316.6	-5.3%
Unaccounted For Water	529.9	562.2	32.3	6.1%
AVR	9.0%			
DRA	8.0%			
Total delivered - domestic	6,530.8	6,246.6	(284.3)	-4.4%
<u>Gravity Irrigation Sales</u>				
Unaccounted For Water	540.5	511.3	(29.2)	-5.4%
AVR	85.9%			
DRA	77.2%			
Total delivered - Gravity Irrigation	2,370.5	3,626.4	1,255.9	53.0%
Total delivered	8,901.4	9,873.0	971.6	10.9%
<u>Supply</u>				
Pumped Water	8,901.4	9,873.0	971.6	10.9%
Purchased Water	0.0	0.0	0.0	0.0%
1 Total production	8,901.4	9,873.0	971.6	10.9%

TABLE 2-6

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## OPERATING REVENUES

TEST YEAR 2012

(AT PRESENT RATES)

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>Metered Revenues</u>				
Residential	13,822.5	14,034.2	211.7	1.5%
Commercial	3,095.7	2,935.1	(160.5)	-5.2%
Industrial	4.7	2.9	(1.8)	-38.1%
Public Authority	838.0	826.7	(11.2)	-1.3%
Fire Service	274.1	203.0	(71.1)	-25.9%
Public Authority Irrigation	32.9	22.3	(10.6)	-32.3%
Irrigation - Pressure	1,155.8	1,090.1	(65.7)	-5.7%
Irrigation - Gravity	255.0	243.2	(11.8)	-4.6%
Temporary Service	222.4	37.5	(184.9)	-83.1%
AVCC	108.1	0.0	(108.1)	-100.0%
Subtotal	19,809.2	19,395.1	(414.2)	-2.1%
Misc Revenue	50.4	87.0	36.6	72.7%
Deferred Revenues	0.025	0.025	0.0	0.0%
Total revenues	19,859.6	19,482.1	(377.5)	-1.9%
Total revenues without Irrigation - Gravity	19,604.6	19,238.9	(365.7)	-1.9%

1

TABLE 2-7

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## OPERATING REVENUES

TEST YEAR 2012

(AT AVR PROPOSED RATES)

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>Metered Revenues</u>				
Residential	16,548.6	16,879.9	331.3	2.0%
Commercial	3,708.5	3,511.1	(197.4)	-5.3%
Industrial	5.6	3.4	(2.2)	-39.5%
Public Authority	1,021.0	1,007.1	(14.0)	-1.4%
Fire Service	329.7	244.2	(85.5)	-25.9%
Public Authority Irrigation	41.2	26.8	(14.4)	-34.9%
Irrigation - Pressure	1,410.5	1,327.8	(82.6)	-5.9%
Irrigation - Gravity	265.3	253.1	(12.2)	-4.6%
Temporary Service	265.5	42.6	(222.9)	-84.0%
AVCC	133.8	0.0	(133.8)	-100.0%
Subtotal	23,729.7	23,296.1	(433.6)	-1.8%
Misc Revenue	87.9	87.0	(0.8)	-0.9%
Deferred Revenues	0.025	0.025	0.0	0.0%
Total revenues	23,817.6	23,383.1	(434.4)	-1.8%
Total revenues without Irrigation - Gravity	23,552.3	23,130.0	(422.3)	-1.8%

1

1                   **CHAPTER 3: OPERATIONS AND MAINTENANCE;**  
2                   **ADMINISTRATIVE AND GENERAL EXPENSES**

3                                   **(DOMESTIC & IRRIGATION)**

4                   **A. INTRODUCTION**

5                   This chapter presents DRA’s analysis and recommendations on Operation  
6 and Maintenance (“O&M”), Administrative and General (“A&G”), and  
7 Conservation expenses for Apple Valley Ranchos Water Company (“AVR”) for  
8 Test Year 2012. Table 3-A shows a comparison of total Domestic O&M expense  
9 estimates at present rates for 2012 and Table 3-B shows a comparison of total  
10 Domestic A&G expense estimates at present rates for 2012. Table 3-C shows a  
11 comparison of total Irrigation O&M expense estimates at present rates for 2012  
12 and Table 3-D shows a comparison of total Irrigation A&G expense estimates at  
13 present rates for 2012.

14                   **Table 3-A: Comparison of Total O&M Expenses Estimates**  
15                                   **Domestic Test Year 2012**

Item	DRA	AVR, Domestic	AVR Exceeds DRA
O&M Expenses	\$6,327,726	\$6,759,235	\$431,509 or 6.82%

16                   **Table 3-B: Comparison of Total A&G Expenses Estimates**  
17                                   **Domestic Test Year 2012**

Item	DRA	AVR, Domestic	AVR Exceeds DRA
A&G Expenses	\$5,945,808	\$7,041,302	\$1,095,494 or 18.42%

1  
2

**Table 3-C: Comparison of Total O&M Expenses Estimates  
Irrigation Test Year 2012**

Item	DRA	AVR, Irrigation	AVR Exceeds DRA
O&M Expenses	\$103,582	\$133,944	\$30,362 or 29.31%

3  
4

**Table 3-D: Comparison of Total A&G Expenses Estimates  
Irrigation Test Year 2012**

Item	DRA	AVR, Irrigation	AVR Exceeds DRA
A&G Expenses	\$49,220	\$59,823	\$10,603 or 21.54%

5

**B. SUMMARY OF RECOMMENDATIONS**

6  
7  
8  
9  
10

The differences in the above tables are mainly a result of the changes in water production recommended by DRA's revenue witness in Chapter 2 and the removal of costs associated with AVR-proposed monthly billing conversion. DRA recommends that the Commission adopt DRA's O&M and A&G expense estimates.

11

**C. DISCUSSION**

12  
13  
14  
15  
16  
17  
18  
19

DRA conducted an independent analysis of AVR's workpapers and methods of estimating the O&M and A&G Expenses for Test Year 2012. AVR uses a five-year average of historical expenses adjusted for inflation as the basis for projecting Test Year 2012 with the exception of Operations-Other, Purchased Power, Leased Water Rights, Replenishments, Customers-Other, Uncollectibles, Maintenance-Other, Clearings-Other, Insurance, Regulatory Commission Expense, Franchise Requirements, Outside Services, A&G-Other, and Allocation from AVR.

1 DRA uses five-year averages of historical expenses (2006-2010) adjusted  
2 for inflation to assess the reasonableness of AVR's estimates, except where  
3 otherwise noted.

4 AVR stated that they used the most recent DRA inflation factors when they  
5 filed their application on January 3, 2011. The inflation factors used by DRA, for  
6 normalization and escalation, are developed from DRA's Energy Cost of Service  
7 Branch ("ECOS") memorandum dated February 28, 2011. DRA found that AVR  
8 did not use the same inflation factors in their estimates. DRA's inflation factors,  
9 which are generally lower than AVR's, are presented below.

10 **Calendar Year Inflation Rates (%)**

YEAR	NON-LABOR	LABOR	COMPOSITE 60/40 SPLIT
2006	5.5	3.4	4.8
2007	3.0	3.2	3.4
2008	6.2	2.9	5.0
2009	(3.6)	3.8	(1.4)
2010	4.9	(0.3)	3.7
2011	4.4	1.6	3.6
2012	1.7	1.9	2.2
2013	2.3	1.7	2.6
2014	4.1	1.9	3.8

11 Tables 3-1 and 3-2, at the end of this chapter, summarize the O&M, A&G,  
12 and Conservation expenses DRA recommends and compares them with those  
13 AVR requests for Test Year 2012. Each expense listed is discussed below.

1           **1) O&M AND A&G EXPENSES**

2                           **(a) OPERATIONS PAYROLL**

3           For an estimate of Operations Payroll expenses, please refer to Chapter 4,  
4 Payroll, Pensions and Benefits, of this Report.<sup>36</sup>

5                           **(b) OPERATIONS - OTHER**

6           AVR used a five-year escalated average of recorded dollar expenses for all  
7 line items, with the exception of three, to estimate the Domestic Test Year 2012  
8 expense of \$194,639. AVR did not use the five-year escalated average of  
9 recorded dollar expenses for the following line items:

10           (1) Water Treatment Operations Expense, which is based on a three-year  
11 average; (2) maintenance of SCADA, which is based on a three-year  
12 average; and (3) addition of uniforms for the proposed new employees.

13           DRA used the same five-year escalated average of recorded dollar expenses  
14 methodology for all line items, except that the recorded 2010 amount was used  
15 instead of an estimate, corrected the three-year average for Water Treatment which  
16 AVR placed as a hardcoded number, and removed the new uniform expenses as a  
17 result of DRA's recommended payroll disallowance<sup>37</sup> to determine DRA's  
18 Domestic Test Year estimate amount of \$185,845. DRA asserts that its estimates  
19 and recommendations are reasonable and should be adopted by the Commission.

20                           **(c) PURCHASED POWER**

21           The cost of electricity needed to operate the pumping and delivery of water  
22 is called purchased power. Both AVR and DRA use the same Southern California  
23 Edison and Southwest Gas rates for their calculations. The estimate of purchased  
24 power varies with the quantities of water delivered. AVR developed the total

---

<sup>36</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.

<sup>37</sup> Id.

1 amount of power required for Test Year 2012 from the ratio of power  
2 consumption and water production (KWH/Therms per CCF) by individual wells  
3 and boosters from the 2007-2009 three-year average. The 2010 amount was not  
4 available for the three-year average. This ratio was multiplied by the estimated  
5 Test Year water production and rates to calculate the Domestic Test Year power  
6 consumption cost of \$941,917. AVR used the same methodology to compute the  
7 Irrigation Test Year 2012 amount of \$100,363.

8 DRA finds AVR's methodology to be reasonable but estimates a higher  
9 amount of sales and water production compared to AVR for the Domestic Test  
10 Year, as discussed in Chapter 2, Water Consumption and Operating Revenues, of  
11 this Report.<sup>38</sup> DRA also removes amounts of what related to Well 24 which has  
12 been placed on inactive status.<sup>39 40</sup> As a result, DRA estimates \$918,707 for  
13 Domestic Test Year 2012. Using the above methodology, DRA estimates the  
14 Irrigation Test Year amount to be \$72,077. DRA asserts that its estimates and  
15 recommendations are reasonable and should be adopted by the Commission.

16 (d) LEASED WATER RIGHTS

17 AVR estimated that for Test Year 2012 it will need 4,664.24 acre-feet of  
18 leased water rights at a rate of \$356.81 per acre foot, based on the total cost of  
19 transfer of leased water rights divided by the adjusted amount of transfer acre feet  
20 from the sources that AVR leases water rights from, resulting in a total cost of  
21 \$1,664,248. AVR's leased water proposal is based on current and future demand  
22 while they continue to make efforts to purchase water rights. DRA finds AVR's  
23 methodology to be reasonable but estimates a higher amount of sales and water

---

<sup>38</sup> See DRA testimony of Mandy Rasmussen (Chapter 2) on Water Consumption and Operating Revenues.

<sup>39</sup> See AVR's Data Request response to PPM-2 question 2.

<sup>40</sup> Conference call with Scott Weldy, General Manager of AVR, on March 1, 2011.

1 production relative to AVR for the Test Year as discussed in Chapter 2 of DRA's  
2 Report <sup>41</sup> and also subtracted 359 acre feet associated with the Apple Valley  
3 Country Club from the total that AVR needs to purchase. With the increases in  
4 sales and water production and the Apple Valley Country Club adjustment, DRA  
5 estimates the need for 4,797.411 acre-feet of leased water rights and charges of  
6 \$1,711,764 for Test Year 2012. DRA asserts that its estimates and  
7 recommendations are reasonable and should be adopted by the Commission.

8 (e) REPLENISHMENT

9 AVR estimated total replenishment charges for Domestic and Irrigation  
10 consist of two assessments - the Make-up Assessment and the  
11 Administrative/Biological Assessment. The assessments are obligations required  
12 by the Mojave River Basin Water Master and levied on pumpers to offset the costs  
13 of administering a stipulated judgment and purchasing replacement and make-up  
14 water in the basin. AVR's and DRA's estimates for the replenishment charges are  
15 shown in the table below:

---

<sup>41</sup> See DRA testimony of Mandy Rasmussen (Chapter 2) on Water Consumption and Operating Revenues.

### Replenishment Costs

Assessments	AVR Domestic	AVR Irrigation	DRA Domestic	DRA Irrigation
Make-Up	\$146,160	\$19,320	\$146,160	\$19,320
Ad/Bio	\$61,971	\$6,410	\$64,096	\$4,190
TOTAL	\$208,131	\$25,730	\$210,256	\$23,510
Make-Up Water	1,218 AF	161 AF	1,218 AF	161 AF
Make-Up Unit Cost	\$120	\$120	\$120	\$120
TOTAL	\$146,160	\$19,320	\$146,160	\$19,320
Ad/Bio Water	14,345.24 AF	8,325 AF	14,837.11 AF	5,442 AF
Ad/Bio Unit Cost	\$4.32	\$0.77	\$4.32	\$0.77
TOTAL	\$61,971	\$6,410	\$64,096	\$4,190

2           DRA finds AVR's methodology to be reasonable but estimates a higher  
3 amount of sales and water production as compared to AVR for the Domestic Test  
4 Year as discussed in Chapter 2 of this report. With the increases in sales and  
5 water production, DRA estimates total Replenishment charges to be \$210,256 for  
6 Domestic Test Year 2012. As a result of the lower Unaccounted for Water  
7 discussed in Chapter 2 of this Report, DRA recommends the Irrigation Test Year  
8 2012 amount of \$23,510.<sup>42</sup> DRA asserts that its estimates and recommendations  
9 are reasonable and should be adopted by the Commission.

<sup>42</sup> See DRA testimony of Mandy Rasmussen (Chapter 2) on Water Consumption and Operating Revenues.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

(f) CHEMICALS

For Chemicals expense AVR based its Domestic Test Year 2012 estimate on a five-year average of recorded constant dollar data from 2006-2010, then escalated by their inflation factor to estimate \$27,469. DRA used the same methodology except that the recorded 2010 amount was used instead of an estimate to arrive to the Test Year 2012 amount of \$26,364. DRA asserts that its estimate is reasonable and should be adopted by the Commission.

(g) PAYROLL - CUSTOMERS

For an estimate of Payroll – Customers expenses please refer to Chapter 4 of this Report.<sup>43</sup>

(h) CUSTOMERS - OTHER

AVR, in general, used a five-year escalated average of recorded dollar expenses for all line items except for items affected by AVR’s monthly billing request, budgeted items, and website maintenance to estimate the Test Year 2012 expense of \$330,246 (conservation is discussed separately). DRA used the same methodology except that the monthly billing amounts in total of \$160,998 were removed (see Chapter 12 of this Report),<sup>44</sup> 5-year averages were used instead of budgeted amounts, Conservation expenses of \$77,957 were removed and reflected as a separate line item and the recorded 2010 amount was used instead of an estimate to arrive at the Test Year amount of \$163,687. DRA asserts that its estimate is reasonable and should be adopted by the Commission.

---

<sup>43</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.  
<sup>44</sup> See DRA testimony of Nick Kotyrlo (Chapter 12) on Monthly Billing Conversion; Existing Memorandum and Balancing Accounts; Plant Audit.

1 (i) CONSERVATION

2 For an estimate of Conservation expenses, please refer to Section D of this  
3 Chapter.

4 (j) PAYROLL MAINTENANCE

5 For an estimate of Payroll Maintenance expenses, please refer to Chapter 4  
6 of this Report.<sup>45</sup>

7 (k) MAINTENANCE - OTHER

8 AVR used a five-year escalated average of recorded dollar expenses for all  
9 line items except for Well Maintenance, for which AVR used estimates (budgeted  
10 amounts) to estimate the Domestic Test Year 2012 expense of \$766,745. The  
11 same five-year escalated average methodology was used to compute the Irrigation  
12 Test Year 2012 amount of \$831.

13 DRA used the same methodology except that a 5-year average was used for  
14 Well Maintenance and the recorded 2010 amount was used instead of an estimate.  
15 This resulted in DRA's Domestic Test Year amount of \$675,266 and an Irrigation  
16 Test Year 2012 amount of \$1,219. DRA asserts that its estimates are reasonable  
17 and should be adopted by the Commission.

18 (l) PAYROLL - CLEARINGS

19 Payroll - Clearings expenses are shown in Table 4-A in Chapter 4.<sup>46</sup>

20 (m) DEPRECIATION - CLEARINGS

21 Depreciation - Clearings expenses are shown in DRA's R.O. Tables 8-1  
22 and 8-2 in Chapter 8.<sup>47</sup>

---

<sup>45</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.

<sup>46</sup> Id.

<sup>47</sup> See DRA testimony of Yoke Chan (Chapter 8) on Depreciation Reserve and Depreciation  
(continued on next page)

1 (n) CLEARINGS - OTHER

2 AVR used a five-year escalated average of recorded dollar expenses for all  
3 line items except for certain items based on payroll, monthly billing, and the  
4 addition of one new vehicle, to estimate the Domestic Test Year 2012 expense of  
5 \$274,484. The same five-year escalated average methodology was used to  
6 compute the Irrigation Test Year 2012 amount of \$2,942.

7 DRA used the same methodology except that the categories based on  
8 payroll reflect the recommendations from the payroll witnesses, the monthly  
9 billing amounts were removed (see Chapter 12 of this Report),<sup>48</sup> the new Ford  
10 Explorer was not allowed (see Chapter 7 of this Report),<sup>49</sup> and the recorded 2012  
11 amount was used instead of an estimate to arrive to the Domestic Test Year  
12 amount of \$254,918 and the Irrigation Test Year 2012 amount of \$2,875. DRA  
13 asserts its estimates are reasonable and should be adopted by the Commission.

14 (o) UNCOLLECTIBLES

15 AVR estimates an Uncollectibles factor as a percentage of Present Revenue  
16 of 0.34%, based on a 6-year average, for Domestic Test Year 2012. DRA found  
17 AVR's estimate based on a 6 year average to be reasonable.

18 (p) A&G PAYROLL

19 For an estimate of A&G Payroll expenses, please refer to Chapter 4 of this  
20 Report.<sup>50</sup>

---

(continued from previous page)  
Expense.

<sup>48</sup> See DRA testimony of Nick Kotyrlo (Chapter 12) on Monthly Billing Conversion; Existing Memorandum and Balancing Accounts; Plant Audit.

<sup>49</sup> See DRA testimony of Pat Ma (Chapter 7) on Utility Plant in Service.

<sup>50</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.

1 (q) EMPLOYEE BENEFITS

2 For an estimate of Employee Benefits expenses, please refer to Chapter 4 of  
3 this Report.<sup>51</sup>

4 (r) INSURANCE

5 AVR's Insurance expense consists of Workmen's Compensation and other  
6 business liability policies, such as auto insurance, that are based on annual  
7 premiums and estimated premium increases anticipated by the utility's insurance  
8 broker. Workmen's Compensation premiums are also tied to estimated overall  
9 payroll. AVR based its Domestic Test Year estimate by starting with the current  
10 annualized premiums and factoring in any change in insurance rates forecasted by  
11 AVR's insurance broker and, where appropriate, adding a factor for changes in  
12 payroll consistent with the test year estimates made by the Company to estimate  
13 \$772,403. The same methodology was used to compute the Irrigation Test Year  
14 amount of \$1,639. The forecasted increases in insurance rates are based on  
15 AVR's insurance broker's recommendations.

16 DRA finds AVR's method to be reasonable but adjusted the amounts as a  
17 result of the payroll recommended in Chapter 4 of this Report.<sup>52</sup> As a result, DRA  
18 estimates \$749,503 for Domestic Test Year 2012. Using the same methodology,  
19 DRA estimates the Irrigation Test Year 2012 amount to be \$1,631. DRA asserts  
20 that its estimates are reasonable and should be adopted by the Commission.

21 (s) UNINSURED PROPERTY DAMAGE

22 For Uninsured Property Damage expense, AVR based its Domestic Test  
23 Year estimate on a five-year average of recorded constant dollar data from 2006-  
24 2010, then escalated by their inflation factor to estimate \$10,906. DRA used the

---

<sup>51</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.

<sup>52</sup> See DRA testimony of Jim Simmons (Chapter 4) on Payroll, Pensions and Benefits.

1 same methodology, except that the recorded 2010 amount was used instead of an  
2 estimate and the composite inflation factor was used to escalate to the Test Year  
3 amount of \$11,246. DRA asserts that its estimate is reasonable and should be  
4 adopted by the Commission.

5 (t) REGULATORY COMMISSION EXPENSE

6 AVR's Regulatory expense estimate is \$92,950 for Domestic Test Year  
7 2012. AVR's Regulatory Commission Expense estimate is developed by starting  
8 with the historical recorded costs incurred in the previous AVR rate case for Test  
9 Year 2009 (D.08-09-026), excluding the costs of AVR's outside consultant for  
10 cost of capital and adding one-third of the total costs incurred for the recent cost of  
11 capital proceeding (A.09-05-003). These costs are escalated to 2009 from 2006 to  
12 develop the test year estimate. The total is then amortized over three years.

13 DRA found AVR's projected cost method to be reasonable, but adjusted  
14 their estimates to reflect DRA's escalation rates. DRA's calculated regulatory  
15 commission expense for AVR is \$94,018 for Domestic Test Year 2012.

16 (u) FRANCHISE REQUIREMENTS

17 AVR Franchise Requirements estimate for Domestic is \$191,532 for Test  
18 Year 2012. Franchise Fees are paid to the County of San Bernardino and to the  
19 Town of Apple Valley and are estimated by AVR for the test year as 1.0% of  
20 gross revenues (excluding the revenues associated with the Irrigation system and  
21 miscellaneous fees).

22 DRA used a five-year recorded average, from 2006-2010, Franchise Fee  
23 rate of 0.95% , multiplied by operating revenue (less uncollectibles) to project its  
24 estimate of \$185,765 for Domestic Test Year 2012. DRA asserts its estimate is  
25 reasonable and should be adopted by the Commission.

1 (v) OUTSIDE SERVICES

2 AVR based its Outside Services expense on the five-year average of  
3 recorded expenses (2006 - 2010) escalated to result in the Domestic Test Year  
4 2012 amount of \$268,643. In addition, a one-time amount of \$25,000 has been  
5 added to the Domestic Test Year amount to reflect AVR's compliance with  
6 D.10-10-019, the Commission's newly adopted rules and procedures governing  
7 affiliate transactions. The same five-year escalated average methodology was  
8 used to compute the Irrigation Test Year 2012 amount of \$5,717.

9 DRA used the same methodology except that the recorded 2010 amount  
10 was used instead of an estimate and the \$25,000 proposed by AVR was removed,  
11 because justification to include costs in a General Rate Case to comply with  
12 D.10-10-019 was not found in that decision, to arrive to the Domestic Test Year  
13 amount of \$240,504. DRA estimates the Irrigation Test Year 2012 amount to be  
14 \$5,207. DRA asserts that its estimates are reasonable and should be adopted by  
15 the Commission.

16 (w) A&G - OTHER

17 AVR used a five-year escalated average of recorded dollar expenses for all  
18 line items, with the exception of six, to estimate the Domestic Test Year 2012  
19 expense of \$513,992. The same five-year escalated average methodology was  
20 used to compute the Irrigation Test Year 2012 amount of \$57. AVR did not use  
21 the five-year escalated average of recorded dollar expenses for the following line  
22 items:

23 (1) Cellular, (2) Nextel, and (3) Other Administrative General expenses, which  
24 are budgeted amounts by AVR; (4) Company Membership, adds \$55,560 for  
25 the California Water Association (CWA) dues in 2011; (5) Bank Fees which  
26 reflects the implementation of AVR's monthly billing request; and (6) the  
27 Corporate A&G Allocation which is based off General Office Payroll.

1 DRA used the same five-year escalated average of recorded dollar expenses  
2 methodology for all line items, except that the recorded 2010 amount was used  
3 instead of an estimate, used a five-year escalated average, applying 38% of the  
4 CWA dues requested as has been done by DRA with other Class “A” water  
5 utilities, while removing the monthly billing amount for Bank Fees, and used the  
6 Corporate A&G Allocation recommended in Chapter 11, General Office, of this  
7 Report<sup>53</sup> to arrive to the Domestic Test Year 2012 amount of \$443,695. Using the  
8 same methodology, DRA estimates the Irrigation Test Year 2012 amount to be  
9 \$54. DRA asserts that its estimates are reasonable and should be adopted by the  
10 Commission.

11 (x) A&G TRANSFERRED

12 AVR A&G Transferred estimate for Domestic is (\$237,198) for Test Year  
13 2012. DRA’s Transferred estimate for Domestic, due to changes in capital budget  
14 as recommended in Chapter 7, Utility Plant in Service, of this Report,<sup>54</sup> is  
15 (\$169,634) for Test Year 2012. DRA asserts that its estimate is reasonable and  
16 should be adopted by the Commission.

17 (y) RENTS

18 For Rent expense AVR based its Domestic Test Year 2012 estimate on a  
19 five-year average of recorded constant dollar data from 2006-2010, then escalated  
20 by their inflation factor to estimate \$17,142. DRA used the same methodology  
21 except that the recorded 2010 amount was used instead of an estimate to arrive to  
22 the Test Year 2012 amount of \$17,137. DRA asserts that its estimate is reasonable  
23 and should be adopted by the Commission.

---

<sup>53</sup> See DRA testimony of Ken Bruno (Chapter 11) on General Office.

<sup>54</sup> See DRA testimony of Pat Ma (Chapter 7) on Utility Plant in Service.

1 (z) GENERAL OFFICE ALLOCATION

2 For an estimate of General Office Allocation expenses, please refer to  
3 Chapter 11 of this Report.<sup>55</sup>

4 (aa) ALLOCATION FROM AVR

5 AVR Allocation to Irrigation estimates were (\$33,216) for Domestic Test  
6 Year 2012 and \$33,216 for Irrigation Test Year 2012. DRA found AVR's  
7 methodology reasonable except that DRA used this report's recommended A&G  
8 amounts to arrive to the Domestic Test Year 2012 amount of (\$25,827) and  
9 Irrigation Test Year 2012 amount of \$25,827. DRA asserts that its estimates are  
10 reasonable and should be adopted by the Commission.

11 **D. CONSERVATION**

12 This section presents DRA's analysis and recommendations of AVR's  
13 conservation expenses for Test Year 2012 and Escalation Years 2013 and 2014.  
14 AVR requests conservation budgets of \$77,957, \$81,187, and \$84,552 for 2012,  
15 2013 and 2014, respectively. DRA disagrees with AVR's estimates for  
16 conservation budgets and recommends \$42,200, \$43,500 and \$45,400 in 2012,  
17 2013, and 2014, respectively.

18 In AVR's Revenue Requirement Report, Chapter II, under Conservation  
19 Programs section (pages 11 – 12) it states that AVR has hired a consultant to  
20 prepare a Water Conservation Efficiency Plan ("Plan"), and that AVR anticipates  
21 the completion of the plan during the course of this proceeding, and the Plan will  
22 be provided to the Commission staff.

23 To date, AVR has not provided a copy of the Plan to DRA's staff for  
24 review. DRA has made numerous inquiries to AVR regarding the completion date

---

<sup>55</sup> See DRA testimony of Ken Bruno (Chapter 11) on General Office.

1 of the Plan.<sup>56</sup> DRA also requested the Plan in a data request sent to AVR on April  
2 6, 2011. AVR's response was that the consultant preparing the Plan was out of  
3 state on a family emergency and that AVR was unable to ascertain a completion  
4 date.<sup>57</sup> Thus, as of this date, DRA has not received a copy of the Plan. DRA  
5 needs to review the Plan in order to understand the various components, and to  
6 verify that the forecasted expenses are justified.

7 **(a) Conservation Estimates**

8 For this GRC, AVR used the conservation projected costs developed by  
9 the consultant hired to prepare the Plan. The consultant estimated \$75,664,  
10 \$77,934, and \$80,272 for 2012, 2013 and 2014, respectively. As stated above,  
11 AVR has failed to provide the Plan that was allegedly relied upon to support these  
12 estimate numbers.

13 For conservation estimates used in AVR's workpapers under O&M  
14 expenses, AVR used a three-year average of the consultant's estimates to derive  
15 \$77,957 for Test Year 2012. For Escalation Year 2013, AVR escalated the Test  
16 Year estimate by its composite escalation factor of 3.7%, and AVR's growth  
17 factor of 0.38% to derive \$81,187. AVR then escalated its 2013 estimate by its  
18 composite escalation factor (3.75%) and growth factor (0.38%) to derive \$84,552  
19 for the 2014 Escalation Year estimate.

20 Since AVR failed to provide DRA with the Plan for review. DRA based its  
21 cost estimates on recorded 2009 and 2010 conservation expenses. The  
22 Conservation Memorandum Account established for tracking conservation costs to

---

<sup>56</sup> Tiffany Thong emails of January 31, 2011, and March 3, 2011.

<sup>57</sup> AVR's response to Data Request ALC-04, question 1.

1 be spent over AVR's last three-year rate case cycle was capped at \$300,000.<sup>58</sup> As  
2 of this report AVR spent \$30,378 in 2009, \$91,246 in 2010, and budgeted \$90,650  
3 to be spent in 2011. None of these costs were included in rates for the last GRC  
4 (2009 – 2011), but were tracked in the Conservation Memorandum Account.  
5 Even if AVR spends the \$90,650 budgeted for 2011, they will still have under-  
6 spent and not reached the \$300,000 cap set forth in the Conservation  
7 Memorandum Account, ( $\$30,378 + \$91,246 + \$90,650 = \$212,274$ ). Because  
8 AVR has under-spend the capped Memorandum Account by \$87,726, DRA finds  
9 that AVR does not warrant having a larger conservation budget for this GRC.

10 DRA found that most of AVR's conservation expenses were for customer  
11 information and outreach (such as participation in school programs, workshops,  
12 and festival giveaways), distribution of water saving devices (i.e. high efficient  
13 hose nozzles and shower heads), rebates, and consultant fees to Maureen Erbeznik  
14 & Associates. In 2010, AVR paid \$42,800 to the consultant to develop the  
15 Conservation Efficiency Plan. DRA removed the \$42,800 from the 2010 expenses  
16 because consultant fees were a one-time expense paid for Plan development and  
17 are not re-occurring conservation costs. Thus, AVR's actual 2010 costs for  
18 conservation were \$48,446.

19 Additionally, AVR residential consumption has gone down consistently  
20 since 2007, and the general long-term consumption trend is expected to continue  
21 to decline.<sup>59</sup> DRA's preliminary estimates show that AVR has surpassed the 20 %  
22 reduction by 2020 set forth in SBx7-7 – the Water Conservation Act of 2009. For

---

<sup>58</sup> Settlement Agreement in D.08-09-026, for Apple Valley Ranchos Water Company's last GRC.

<sup>59</sup> For more discussion on customer consumption see Chapter 2 – Water Consumption and Operating Revenues.

1 further discussion see Chapter 2 – Water Consumption and Operating Revenues of  
2 this report. Hence, DRA recommends lowering AVR’s conservation spending.

3 Since AVR has under-spent on conservation in the past three years, coupled  
4 with declining consumption, it is highly unlikely that AVR will need to spend  
5 significantly more on conservation during the next three years.

6 DRA calculated a two-year average of the conservation expense totals of  
7 \$30,378 for 2009 and \$48,446 for 2010 (having removed the one-time consultant  
8 costs of \$42,800) to calculate the two-year average of \$39,412. DRA multiplied  
9 the two-year average by the composite escalation factor for each year (3.6% for  
10 2011, 2.2% for 2012, 2.6% for 2013, and 3.8% for 2014), plus applied DRA’s  
11 recommended five-year customer growth factor of .52%, to estimate Base Year  
12 2011, Test Year 2012 and each Escalation Year (2013 & 2014) estimates. DRA  
13 rounded its estimates to \$42,200 for Test Year 2012, \$43,500 for Escalation Year  
14 2013, and \$45,400 for Escalation Year 2014, which totals \$131,100 for this GRC  
15 three-year cycle.

16 **(b) Establish a One-way Balancing Account**

17 AVR’s conservation expenses should be tracked in a capped, one-way  
18 balancing account that shows the difference between dollars spent on conservation  
19 and dollars collected in rates for conservation. This one-way balancing account  
20 should be subject to refund so that any unspent funds will be returned to the  
21 ratepayers in AVR’s next GRC filing. A capped, one-way balancing account is  
22 commonly used in Class A water companies as an accountability mechanism to  
23 track conservation expenses.<sup>60</sup>

---

<sup>60</sup> The Commission adopted one-way balancing accounts for the following water utilities and districts: San Gabriel Valley Water Company’s Fontana Company Division, California American Water’s Sacramento, Larkfield, Village, Coronado, and Monterey districts, California Water  
(continued on next page)

1 DRA recommends the Commission allow AVR to establish a conservation  
2 one-way balancing account with a cap of \$131,100.

3 **(c) Reporting**

4 The Commission should require AVR to keep records of its conservation  
5 programs and to report the results of its conservation program to the Commission  
6 on an annual basis.

7 The Commission is now considering a Proposed Decision of President  
8 Peevey in the proceedings A.06-09-006, A06-10-026, A.06-11-009, A.06-11-010,  
9 A. 07-03-019, Order Instituting Investigation to Consider Policies to Achieve the  
10 Commission's Conservation Objectives for Class A Water Utilities, Phase II. This  
11 proposed decision, in Ordering Paragraph 2, if adopted, sets forth reporting  
12 requirements upon all Class A water utilities regarding their conservation  
13 programs, and requires modifications to Schedule E-3 of a utilities Annual Report,  
14 Description of Water Conservation Programs, beginning in 2012. Attachment 1 to  
15 this proposed decision describes the reporting requirements for all Class A water  
16 utilities regarding their Conservation Programs.

17 DRA recommends that AVR comply with the reporting requirement when  
18 this proposed decision is adopted by the Commission. If, however, this proposed  
19 decision is not adopted by the Commission, AVR should be required to prepare a  
20 similar annual report that summarizes its conservation activities implemented each  
21 year, analyses the effectiveness of such activities, and specifies estimates of actual  
22 water savings. AVR should be required to submit this annual report to the  
23 Division of Water and Audits with a copy to DRA. This reporting requirement

---

(continued from previous page)

Service's (D.-06-08-011) Antelope Valley, Bear Gulch, Dominguez-South Bay, Hermosa-  
Redondo, Kern River Valley, Marysville, Palos Verdes, and Redwood Valley districts.

1 will also be useful in the next GRC to allow DRA to review the Plan and its  
2 accomplishments, which DRA was not able to do in this proceeding.

3 DRA recommends the Commission adopt DRA's conservation expense  
4 estimates of \$42,200 for Test Year 2012, \$43,500 for Escalation Year 2013, and  
5 \$45,400 for Escalation Year 2014. DRA also recommends the Commission  
6 require AVR to establish a One-Way Balancing Account with a cap of \$131,100  
7 for this GRC three-year cycle, and provide annual reporting of its conservation  
8 program accomplishments.

9 **E. CONCLUSION**

10 DRA recommends that the Commission adopt its O&M and A&G expense  
11 estimates and recommendations as described above.

TABLE 3-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## OPERATION &amp; MAINTENANCE EXPENSES

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>At present rates</u>				
Operating Revenues less irrigation gravity	19,604.6	19,240.2		
Uncollectible rate	0.34000%	0.34000%		
Uncollectibles	66.7	65.4	(1.2)	-1.9%
<u>Operation &amp; Maintenance Expenses</u>				
Operations Payroll	702.3	786.7	84.4	12.0%
Operations Other	185.9	194.6	8.7	4.7%
Purchased Water	0.0	0.0	0.0	0.0%
Purchased Power	918.7	941.9	23.2	2.5%
Leased Water Rights	1,711.8	1,664.2	(47.6)	-2.8%
Replenishment Assessment	210.3	208.1	(2.2)	-1.0%
Chemicals	26.4	27.5	1.1	4.0%
Payroll - Customers	588.7	624.6	35.9	6.1%
Customers - Other	163.7	330.2	166.5	101.7%
Conservation Expenses	43.5	78.0	34.5	79.2%
Payroll - Maintenance	400.4	416.9	16.5	4.1%
Maintenance - Other	675.3	766.7	91.4	13.5%
Payroll - Clearings	116.4	121.5	5.1	4.4%
Depreciation - Clearings	263.0	258.2	(4.8)	-1.8%
Clearings - Other	254.9	274.5	19.6	7.7%
Uncollectibles	66.7	65.4	(1.2)	-1.9%
Total O & M Expenses	6,328.0	6,759.2	431.3	6.8%
<u>At proposed rates</u>				
Operating Revenues less irrigation gravity	23,552.3	23,127.0		
Uncollectible rate	0.34000%	0.34000%		
Uncollectibles	80.1	78.6		
1 Total O & M Expenses (incl uncoll)	6,341.4	6,772.4	431.1	6.8%

TABLE 3-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## ADMINISTRATIVE &amp; GENERAL EXPENSES

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>AT PRESENT RATES</u>				
Oper. Rev. less uncoll.	19,554.2	19,153.2	(401.1)	-2.1%
Fran. Tax rate	0.95%	1.00%	0.001	5.3%
A&G Payroll	1,273.3	1,729.1	455.8	35.8%
Employee Benefits	1,233.4	1,477.4	244.0	19.8%
Insurance	749.5	772.4	22.9	3.1%
Uninsured Property Damage	11.3	10.9	(0.4)	-3.5%
Regulatory Commission Expense	94.0	92.9	(1.1)	-1.1%
Franchise Requirements	185.8	191.5	5.8	3.1%
Outside Services	240.5	268.6	28.1	11.7%
A&G Other	443.7	514.0	70.3	15.8%
A&G Transferred	(169.6)	(237.2)	(67.6)	39.9%
Rents	17.1	17.1	0.0	0.0%
General Office Allocation	1,892.6	2,237.6	345.0	18.2%
A&G Allocation	(25.8)	(33.2)	(7.4)	28.7%
Total A & G Expenses	5,945.8	7,041.3	1,095.5	18.4%
<u>AT PROPOSED RATES</u>				
Franchise Requirements	223.7	230.4		
Other Expenses Total	5,760.0	6,849.8	1,089.7	18.9%
1 Total A & G Expenses	5,983.8	7,080.2	1,096.4	18.3%

1                   **CHAPTER 4: PAYROLL, PENSION AND BENEFITS**

2                   **A. PAYROLL EXPENDITURES**

3                   **1) Introduction**

4                   This section discusses DRA's analysis of AVR's operating service area  
5 payroll expenses for Test Year 2012 in this general rate case ("GRC"). The next  
6 section (B) contains DRA's discussion of AVR's Pensions and Benefits.

7                   **2) Summary of Recommendations**

8                   DRA recommends the Commission approve two of AVR's five requested  
9 positions in 2011: a new Customer Service Representative (CSR);<sup>61</sup> and a new  
10 Assistant General Manager (AGM) position. DRA does not recommend approval  
11 of AVR's remaining three requested positions because the functions of these new  
12 positions are specializations of ongoing activities that AVR's existing employees are  
13 already doing. DRA already reflects these costs in Test Year 2012 Payroll  
14 expenditures.<sup>62</sup> DRA automatically includes such costs because it uses AVR's  
15 historical 2010 payroll data to forecast AVR's Test Year 2012 payroll revenue  
16 requirement. The historical data reflect the costs of these ongoing activities,

---

<sup>61</sup> AVR's requested new CSR is a conversion of one CSR from temporary to permanent status. In its *Revenue Requirements*, AVR describes 3 additional new positions. In its calculations, AVR includes the costs of funding an Assistant General Manager (AGM), bringing the total number of requested new positions to 5. AVR characterizes this new-position-equivalent request as a resulting from a "promotion or reorganization." However, as explained further below, because this request adds over \$100,000 to revenue requirements (over \$65,000 of salary plus benefits of 60%), it is more accurately described as a new position request than as a simply the result of a "promotion or reorganization" although AVR may have actually promoted an existing employee to this position.

<sup>62</sup> For example, AVR requests a new position for Water Quality Control Specialist. AVR's existing employees already possess the expertise of this position resulting from AVR's necessity to comply with federal and state water regulations. Similarly, at least some of AVR's existing employees possess the skills necessary for AVR's requested new positions, for example the Asset Management Project Coordinator, and the existing Asset Manager Supervisor. AVR describes this latter position as resulting from its promotions and reorganizations that occurred during the historical period before this GRC. Finally, Meter Readers currently perform the water audits that AVR proposes for its requested Water Audit Conservation Specialist position.

1 including employees' training and development. AVR does not need to add the costs  
2 of three new additional positions to reach a reasonable level of test year revenue  
3 requirements. Moreover, AVR has not provided adequate justification to support  
4 these requests.

5 The remaining differences between AVR and DRA's Test Year 2012  
6 payroll expense estimates are due to the following: (1) differences in escalation  
7 factors; and (2) AVR's inclusion of forecasted merit pay raises, which DRA does not  
8 include in its forecasts due to AVR's payment of these to all, or almost all of its  
9 employees.

### 10 3) Discussion

#### 11 (a) AVR's Payroll Requests

12 AVR requests five new operating service area-level positions, which  
13 represents an approximate 12% increase over AVR's Base Year 2010 number of  
14 43 permanent full time positions.<sup>63</sup> DRA believes this request is excessive given  
15 that AVR itself estimates that it will experience insignificant growth over the  
16 three-year period of this GRC (2012-2014) as measured by the total number of  
17 water service connections throughout its operating service area.<sup>64</sup> AVR has failed

---

<sup>63</sup> AVR requests 5 new positions: four new positions and a new full time AGM position added to payroll expenses in 2011 at an annual salary of \$160,000 (2010 dollars) plus Pensions and Benefits. This accounts for an approximate \$60,000 increase in AVR's direct payroll expenses in 2011 over Base Year 2010. At the end of 2010, AVR shows 43 permanent, full time employees, including on position for an AGM. AVR converted one temporary position, a CSR, to permanent status in 2011, bringing the number of employees to 44 for 2011 and added the full year cost of an AGM in 2011. DRA includes the costs of these two new positions in its Test Year 2012 forecast. In addition to these two new positions, AVR proposes to employ 3 additional new, permanent, and full time positions in 2012, which DRA excludes.

<sup>64</sup> AVR projects a growth rate in total service connections of only 0.7 % for Base Year 2010 through Test Year 2012, resulting in AVR's average annual compound growth rate of only 0.35%. DRA believes AVR's estimates of growth reflect AVR's expectation of a slow-growth, if not recessionary economy. Moreover, conservation may also negatively impact AVR's operational levels as measured by average customer water usage demand.

1 to explain or provide evidence of any significant increase in regulatory or legal  
2 requirements over the Base Year 2010 historical period, which serves as the  
3 baseline from which forecasts are made. Hence, AVR has failed to justify its  
4 request for three of the five new operating service area level positions.

5 (b) AVR's Payroll Methodology

6 For Test Year 2012, AVR arrives at its requested Test Year 2012 payroll  
7 expense by (1) forecasting AVR's expected staffing level; and (2) escalating all  
8 costs to AVR's requested Test Year 2012 level by 4.0% annually for 2011 and  
9 2012. Of this amount, 2% is a cost of living increase effective January 1 of each  
10 year, 2011 and 2012 and the other 2.0% is a "merit raise"<sup>65</sup> given on April 1<sup>st</sup> of  
11 each year to all employees.

12 AVR estimates its payroll expenses for its service area in this GRC on an  
13 individual employee basis. AVR then assigns the costs for each employee to the  
14 following three expense categories: (1) Operations, (2) Maintenance, and (3)  
15 Administrative and General ("A&G"). AVR's calculations use the same approximate  
16 distribution observed for 2010 recorded labor costs to assign labor costs among each  
17 of the three categories for calendar years 2011 through 2014, with insignificant  
18 differences due to changes in the labor distribution caused by AVR's requested  
19 additional positions, which DRA excludes.

---

<sup>65</sup> DRA places the term "merit raise" in parentheses because, although AVR characterizes it in this manner, as explained further below, this pay increase does not appear to be strictly based upon merit. When AVR grants a merit raise, it automatically gives it annually to all, or almost all of its employees in April of each year. Accordingly, it is more in the nature of an additional cost of living, or non-specific pay increase that is generally unrelated to employees' performance. AVR's payment of such automatic Wages and Salaries increases might be unjustified in the current labor market if AVR is paying more in total compensation, including benefits, than is necessary for it to attract and maintain qualified workers.

1 DRA has reviewed AVR's allocation/cost assignment methodology and  
2 believes that it produces reasonable results. DRA uses the same labor distribution  
3 as AVR uses to assign labor costs to each of the three expense categories.

4 (c) Labor Escalation Rates

5 (i) DRA and AVR use different labor escalation rates for 2010-  
6 2012.

7 AVR's employees are not members of any union. In cases where a utility  
8 has no union contract in force, such as this one, DRA applies inflation factors that  
9 it develops from data provided by *Global Insight's U.S. Economic Outlook* to  
10 forecast labor escalation costs.<sup>66</sup> Specifically, DRA applies the forecast of the  
11 Labor component of the Consumer Price Index ("CPI-U") as a reasonable, rationale,  
12 and supportable substitute for a negotiated union wage increase to escalate payroll  
13 to estimate Test Year 2012 costs. To escalate payroll expenses from 2010 to 2011,  
14 DRA begins with the actual wages paid in 2010, which include the cost of living  
15 increase that AVR granted its employees of 2%, effective January 1, 2010, plus  
16 the annualized effect of the 2% "merit" increase that AVR granted its employees  
17 effective on April 1, 2010. DRA escalates this to the Projected Year 2011 using a  
18 CPI-U Labor escalation rate of 1.6%. For 2011-2012, DRA applies an escalation  
19 rate of 1.9%, resulting in a cumulative escalation of approximately 3.53%  
20 (1.016\*1.019=1.0353). These escalation factors are issued monthly by DRA's  
21 Energy Cost of Service branch in its monthly escalation factors for labor costs  
22 developed from data provided by Global Insight, Inc. The factors DRA uses in  
23 this Report are based on DRA ECOS' February 2011 calculation of those rates.  
24 Thus, DRA's projected labor inflation factors are fair and reasonable and reflect  
25 the slow growth, if not recessionary wage environment, in the current economy.

---

<sup>66</sup> DRA uses actual negotiated wage increases to escalate labor when a Union contract is in force, however all of AVR's employees are non-union.

1 AVR's requested 12% increase in the number of its employees and its total  
2 requested composite 4.0% annual labor salary and wage increases are excessive,  
3 unrealistic, and unreasonable in light of the current economic woes of the State of  
4 California and the nation. DRA points out that other labor groups are  
5 experiencing declining wages.<sup>67</sup>

6 (ii) California Currently Has the Highest Unemployment Rate  
7 in the Nation at 12.2%

8 The Bureau of Labor Statistics reports that California's unemployment rate  
9 stood at 12.2%, the highest in the nation.<sup>68</sup> In light of the current economic  
10 situation in California, the Commission should reject AVR's requested 12%  
11 increase in its number of positions and its 8.16% cumulative annual wage  
12 escalation factor. These requested pay hikes, when combined, increase AVR's  
13 payroll by over 20% ( $1.04 \times 1.04 \times 1.12 = 21.1\%$ ), over Base Year 2010. A 20%  
14 increase in payroll costs is excessive and unreasonable in an essentially flat growth  
15 economic environment. DRA's forecasted Test Year 2012 payroll expenditures  
16 are appropriate and reasonable, if not necessary in the current slow-growth  
17 economy, and will provide AVR with a more than adequate level of payroll  
18 expenditures for Test Year 2012.

---

<sup>67</sup> The most recent two-year contract negotiated between the Service Employees International Union (SEIU) and the State of California, included one unpaid furlough day of leave per month, resulting in a 4.6% across-the-board wage cut for most state workers; and an increase to employees' pension contributions of 3% per annum. This follows a previous furlough program applicable to many state employees from July 1, 2010 through June 30, 2010 (12 months), representing an approximate 13.8% decrease in pay.

<sup>68</sup> See <http://www.bls.gov/web/laus/laumstrk.htm>, viewed on 4/13/11. Moreover, California's unemployment rate was only slightly improved from the level DRA had noted more than 1 year earlier, on 2/10/10 at 12.4% in its *Payroll Report for the California Water Service Company*.

1 (d) DRA’s Recommended Payroll

2 Below are DRA’s recommended payroll expense totals for AVR’s  
 3 operating service area with a comparison to AVR’s requested payroll.

**Table 4-A**

**APPLE VALLEY RANCHOS WATER COMPANY-DOMESTIC  
 TEST YEAR 2012 PAYROLL EXPENDITURES**

SME Description	DRA- Recommended	AVR- Requested	DRA (Less than) AVR	
			Amount	%
PAYROLL-OPERATIONS	702,286	775,704	(73,418)	-9.5%
PAYROLL-CUSTOMERS	588,717	617,998	(29,281)	-4.7%
PAYROLL-MAINTENANCE	400,366	416,938	(16,572)	-4.0%
PAYROLL-CLEARINGS	116,393	121,492	(5,099)	-4.2%
A & G PAYROLL	1,273,364	1,449,559	(176,195)	-12.2%
<b>GRAND TOTAL</b>	<b>3,081,126</b>	<b>3,381,691</b>	<b>(300,565)</b>	<b>-8.9%</b>
Capitalized Payroll	107,691	112,062	(4,371)	-3.9%
Irrigation Payroll	3,918	4,077	(159)	-3.9%
<b>Total</b>	<b>3,192,735</b>	<b>3,497,830</b>	<b>(305,095)</b>	<b>-8.7%</b>

4

5 (e) DRA’s Methodology for Estimating AVR’s Test Year 2012  
 6 Payroll

7 DRA compared AVR’s requested payroll calculation for Projected Year  
 8 2011 to AVR’s Base Year 2010 payroll expenditures and reconciled the variances  
 9 between them. After making several adjustments, DRA then used AVR’s  
 10 Projected Year 2011 payroll spreadsheet to calculate AVR’s Test Year 2012  
 11 payroll. DRA then used AVR spreadsheet’s allocation of payroll to distribute  
 12 costs to the Uniform System of Accounts (USOA) for Class A Water Utilities.

1 (f) DRA's Adjustments to AVR's Payroll Calculation

2 The first major adjustment that DRA makes to AVR's Base Year 2010  
3 payroll is to reflect AVR's request to add approximately \$66,500 to AVR's 2011  
4 payroll to reflect AVR's filling of a new full time Assistant General Manager  
5 (AGM) in 2010. AVR characterizes this position as the result of a  
6 reorganization,<sup>69</sup> but its description indicates that it is equivalent to a new position  
7 because of its significant financial impact on Test Year 2012 expenses:

8 "[T]his position was created in August of 2004.  
9 However, in the previous GRC, AVR assumed that the  
10 duties formerly performed by the AGM would be met  
11 through the combination of multiple positions  
12 including the then new position of Superintendent of  
13 Facilities. AVR now believes that its organizational  
14 structure and business requirements are best served  
15 with the position of AGM."<sup>70</sup>

16 For the Test Year 2012, AVR's payroll calculation reflects an approximate  
17 \$72,800 in additional direct payroll costs for the new AGM position, which results  
18 in a total AVR-requested AGM salary of approximately \$172,349. DRA similarly  
19 includes an additional significant increase for this new position, though using a  
20 lower cumulative escalation rate of 3.53% for 2011 and 2012, resulting in a salary  
21 of approximately \$165,600 for DRA's forecast of AVR's Test Year 2012. By  
22 recommending approval of AVR's AGM request and by including the significant  
23 costs of this additional position, DRA expects AVR to be able to demonstrate a  
24 significant improvement in its operational efficiency because this relatively high  
25 salary level implies a highly qualified and skilled AGM.

---

<sup>69</sup> AVR's *Revenue Requirements Report Final*, pp.29-30.

<sup>70</sup> Id.

1           The second major adjustment that DRA makes to arrive at its estimate of  
2 AVR's Test Year 2012 Payroll is to reduce AVR's requested bonuses for  
3 Projected Year 2011, from approximately \$40,000 to \$10,000, the amount that  
4 AVR actually paid in Base Year 2010. AVR has failed to convince DRA that its  
5 proposed 400% increase in bonuses in Test Year 2012 is necessary, especially in  
6 light of the current economic environment.

7           As previously stated, DRA also included AVR's estimated cost effect of  
8 AVR's conversion of a Customer Service Representative (CSR) from temporary to  
9 permanent full time status in 2011. DRA also includes the increased Pensions and  
10 Benefits that AVR began paying this employee in 2011.<sup>71</sup> Finally, DRA excludes  
11 the three new positions that AVR requested for Test Year 2012 because AVR  
12 failed to justify its need for these additional new positions. DRA points out  
13 AVR's current employees are already performing the functions that AVR  
14 describes for these three new positions, or can perform them, with some additional  
15 training, and with AVR's new AGM to oversee their training and development.

16           Personnel training and development is an ongoing process within most  
17 prudently-managed companies, including AVR. DRA believes that such costs are  
18 already fully included in AVR's historical expenses. AVR's extensive description  
19 of its promotions and reorganizations in its Testimony provides evidence that such  
20 training and development have been on-going within AVR for several years.<sup>72</sup> In  
21 the current, economic environment, which is characterized by slow growth and a

---

<sup>71</sup> DRA includes the medical and dental insurance that AVR requests for the new CSR, which is \$19,055 annually for Test Year 2012 (2011 expense of \$18,700 x 1.019 CPI-U.)

<sup>72</sup> "There are several new positions that result from reorganization or promotion and do not represent additions to head count including the position of Assistant General Manager, Lead Customer Service Representative, Asset Manager Supervisor, Cross Connection Control Specialist, and Control/Instrumentation Technician." (*Revenue Requirements Report* Final, p. 29.) As noted above, DRA found that one of these "reorganization and promotions" (the new AGM) is equivalent to a new position because AVR includes a significant increase in expenses

(continued on next page)

1 virtual jobs market recession, AVR should be *reducing* its workforce to increase  
2 productivity to a level similar to that of the overall economy. Approval of AVR's  
3 wish list of new positions will cause unnecessary, additional rate increases.

4 Finally, as previously stated, DRA used the February, 2011 forecast of the  
5 CPI-U for Projected Year 2011 and Test Year 2012, resulting in a composite  
6 increase over the 2-year period of 3.53% while AVR requests to escalate its  
7 payroll costs by a cumulative factor of 8.16% ( $1.04 \times 1.04 = 1.816$ ).

#### 8 Merit Raises

9 As previously stated, AVR includes the projected costs of an estimated<sup>73</sup>  
10 2% annual merit increase in addition to a 2% annual cost of living increase for  
11 2011 and 2012 in its revenue requirement requests. DRA uses recently forecasted  
12 CPI-U (Wage) escalation factors developed according to a Commission-adopted  
13 DRA methodology and excludes AVR's requested merit increases. DRA opposes  
14 inclusion of these increases because AVR failed to provide sufficient justification  
15 to support approval. Moreover, as explained below, AVR failed to grant a merit  
16 increases in 2009 even after the Commission had approved it in the Test Year  
17 2009 GRC.

---

(continued from previous page)

related thereto. DRA includes the costs of the new AGM in its Test Year 2012 estimates.

<sup>73</sup> AVR estimates an average merit increase of 2% per employee for purposes of presenting its requests in this GRC. However, on 5/6/11, AVR's Mr. Edward Jackson explained in a telephone call with DRA's James Simmons that the actual merit increases vary by individual employee within a range of percentages: some employees will receive increases that are higher, and some lower than AVR's estimated 2% overall merit raise increase.

1 AVR's shows the following 5-year history and projected merit raises:<sup>74</sup>

2 Year

3 2007 & 2008 - **All employees received a merit base pay increase.**

4 2009 - **No merit base pay increases were granted.**

5 2010 – **Merit raise granted to all but three (3) employees.** One of those  
6 who did not receive a merit raise is the newly hired Assistant General Manager,  
7 for which AVR requests an explicit increase in direct labor costs of \$72,000 for  
8 Test Year 2012. The other positions that did not receive merit raises were the  
9 Administrative Assistant/HR and the Civil Engineer Assistant 2.

10 2011 - **Merit raise granted to all but 2 employees** - Civil Engineer  
11 Assistant 2 and Meter Reader Foreperson.

12 2012-2013 - **AVR projects all employees will receive a merit raise in**  
13 **this GRC request.**

14 When asked if AVR adjusted its pay scales to reflect merit raises, AVR  
15 responded that it indexed the pay scales for cost of living increases, but not for  
16 merit raises.<sup>75</sup> When asked if AVR granted an employee a merit raise who is  
17 already earning a wage that is at the top of the pay scale, AVR responded that it  
18 did not.<sup>76</sup>

19 Regarding 2009, in which AVR states that it did not grant any merit raises,  
20 the last GRC cycle covered Test Year 2009 through 2011. The Commission

---

<sup>74</sup> AVR's Response to Data Request JJS-11.

<sup>75</sup> E-mail from Edward Jackson, AVR, to James Simmons, DRA, 4/28/11.

<sup>76</sup> Id.

1 approved funding in AVR's rates for a merit raise in the last GRC as one of the  
2 terms of the AVR-DRA adopted Settlement, as follows:

3 Also, DRA disallowed the inclusion of a 2% merit increase  
4 for employees, as of April 1, 2009. Discussions between the  
5 Parties about the company's process for determining merit  
6 increases removed the concerns that resulted in DRA's  
7 recommendation to disallow 2009 merit increases. DRA  
8 accepts the use of 2% for merit increases in AVR's  
9 application. (A.08-01-002, Settlement Agreement, p. 7.)

10 Because the Commission approved AVR's requested merit raise in the last  
11 GRC for Test Year 2009 and AVR did not grant a 2009 merit raise to its  
12 employees, AVR overstated its 2009 payroll expenses in the previous GRC.  
13 Consequently, AVR's rates were higher than they needed to be by the amount that  
14 the Commission approved and included in AVR's revenue requirement for merit  
15 raises that AVR collected from ratepayers but did not pay to its employees. In the  
16 current GRC, AVR requests an estimated merit raise of 2% for each of the years  
17 2010 through Test Year 2012. DRA includes the annualized effect of AVR's 2010  
18 merit raise but excludes AVR's requested merit raises for 2011 and 2012 as  
19 unjustified.

20 Due to AVR's failure to justify the requested merit raises in this GRC,  
21 DRA recommends that the Commission deny AVR's request for inclusion of merit  
22 raises in revenue requirements for 2011 and 2012.

#### 23 **4) Conclusion**

24 The Commission should adopt DRA's forecast of AVR's labor  
25 expenditures for Test Year 2012 in the total amount of \$3,193,000, as fair and  
26 reasonable.

1 **B. PENSIONS AND BENEFITS (P&Bs) – AVR**

2 **1) Introduction**

3 This section discusses DRA's analysis of AVR's operating service area  
 4 Pensions and Benefits in this GRC. Table 4B in the next section shows DRA's  
 5 recommended Test Year 2012 General Office Pensions and Benefits compared  
 6 with AVR's requested amounts.

7 **2) Summary of Recommendations**

8 The following table shows DRA's recommended level of Test Year 2012  
 9 Pensions and Benefits for AVR's Operating Service Area:

Table 4-B

**APPLE VALLEY RANCHOS WATER CO.  
 SERVICE AREA EMPLOYEE BENEFITS EXPENSE SUMMARY  
 FOR PROJECTED YEARS 2011 AND 2012**

Line No.		DRA		AVR			
		Recommended	2012	Requested	2012	DRA (Less than) AVR	
		2012		2012	Amount	%	
1	Medical Insurance	\$	472,000	\$	551,000	\$ (79,000)	-14.4%
2	Dental Insurance		36,000		40,000	(5,000)	-11.5%
3	Life Insurance		10,000		11,000	(1,000)	-7.6%
4	Accident D & D Insurance		2,000		2,000	-	-7.6%
5	Disability-Long Term		13,000		14,000	(1,000)	-7.6%
6	401 (k) Plan		67,000		87,000	(20,000)	-22.9%
7	Group Pension		416,000		503,000	(87,000)	-17.3%
8	PBOP		157,000		172,000	(15,000)	-8.7%
9	Service Awards		2,000		2,000	-	-1.3%
10	Educational Assistance		2,000		2,000	-	1.1%
11	EAP/Wellness Program		3,000		5,000	(1,000)	-30.4%
12	Defined Contribution-401A Exp		56,000		61,000	(5,000)	-8.9%
13	Other		19,000		19,000	-	-0.9%
16	Net Benefits Adjustment		(21,000)		6,000	(27,000)	-465.0%
10	17	Total Benefits	\$ 1,234,000	\$	1,475,000	\$ (241,000)	-16.4%

11 **3) DISCUSSION**

12 AVR seeks \$ 1,475,000 for P&B expenses for Test Year 2012. DRA's  
 13 total recommendation for P&Bs is \$1,234,000, as discussed below, a reduction of  
 14 \$ 241,000, or 16.4% from AVR's requested amount.

1           The greatest differences between DRA’s forecast and AVR’s requests are  
2 due to Group Pension (\$87,000) and Medical Expenses and (\$79,000.) To  
3 estimate AVR’s Group Pension Expenses, as discussed in more detail below, DRA  
4 uses AVR’s Base Year 2010 level, escalated to Test Year 2012. DRA does not  
5 use AVR’s post-2010 GRC Pension Expense estimates. To estimate AVR’s  
6 Medical Expenses, DRA uses AVR’s Projected Year 2011 request, which  
7 represents a 23% increase over AVR’s 2010 recorded expenses, and then escalates  
8 this amount to Test Year 2012 using the CPI-U labor factor of 1.9%. AVR uses an  
9 8.5%<sup>77</sup> medical escalation factor that its actuarial consultant provided and adds  
10 additional medical insurance premiums for 4 new requested positions. For Test  
11 Year 2012, DRA’s generally lower P&B expenses are proportional to DRA’s  
12 reduced payroll projections for O&M and A&G, and reflect DRA’s most recent  
13 inflation estimates.

14                           (a) Dental and Health Insurance

15           AVR calculates these expenses using the January 2011 invoice premium  
16 levels, applied to AVR’s requested payroll positions, which are the same as those  
17 that DRA recommends. AVR’s testimony reports an increase of 9.8% in medical  
18 premiums in 2011 over those of 2010, while AVR’s application reflects a 23%  
19 increase in the medical insurance costs in 2011.<sup>78</sup> AVR explained these variances  
20 in response to DRA’s Request JJS-9. The difference is attributable to employees’  
21 reclassification: 1) between Health Maintenance Organization (HMO) and  
22 Preferred Provider Organization (PPO) plans, and; 2) among the classes of single,  
23 single and spouse, and family coverage.

---

<sup>77</sup> AVR’s Revenue Requirements Report Final, pp.29-30.

<sup>78</sup> AVR’s testimony refers to yet a third increase of 22%.

1 DRA agrees with these reclassifications and adjusts the 2011 medical  
2 premiums to include AVR's estimated medical insurance cost for the new  
3 Customer Service Representative in 2011. DRA then escalates this amount to Test  
4 Year 2012 using the labor inflation factor of 1.9%, resulting in DRA's test year  
5 estimate of \$472,000. AVR also escalates its 2010 recorded amount by 23% in  
6 2011, and then escalates the expense to Test Year by using an escalation factor of  
7 8.5%, which AVR describes as "based on the projected increase in the medical  
8 cost trend used by AVR's outside actuaries for calculation of AVR's  
9 Postretirement Health and Life Benefits Actuarial Valuation."<sup>79</sup> AVR also adds  
10 medical insurance expenses for the 3 new requested positions for Test Year 2012.

11 DRA believes that AVR can exercise a much greater level of control over  
12 the growth of its medical insurance costs than reflected in its estimated escalation  
13 factors. AVR's insurance broker Mercer estimates that AVR will be subject to an  
14 excise tax in 2018 for having high-cost medical insurance plans. The excise tax  
15 applies to what are commonly called "Cadillac" health insurance plans. Clearly,  
16 AVR is providing its employees exceptionally high levels of health insurance  
17 benefits in dollar terms. DRA recommends that AVR scale back its health  
18 insurance plans' coverage to a more reasonable level resulting in significant  
19 savings over its current level. Therefore, DRA does not recommend approval of  
20 any higher escalation factor than that reflected in DRA's Test Year 2012 estimate  
21 of 1.9% for 2012.

22 For Dental Insurance Expenses, DRA adjusts to AVR's calculated increase  
23 for 2011, which uses AVR's January 2011 premiums, reflecting a \$5,180, or 17%  
24 increase over the 2011 level, and adds coverage for AVR's new Customer Service  
25 Representative. DRA then escalates this to Test Year 2012 using the CPI-U labor

---

<sup>79</sup> AVR's *Revenue Requirements Report Final*, p. 42.

1 factor of 1.9% to arrive at a test year estimate of \$36,000, which is \$5,000 or  
2 11.5% lower than AVR's estimate of \$40,000. AVR's estimate uses a 5.5%  
3 inflation factor for 2012 and provides coverage for AVR's requested 3 new  
4 employees, which DRA excluded from its payroll estimates.

5 DRA's estimation method of medical and dental insurance coverage is  
6 preferable to AVR's because it is based upon DRA's recommended payroll levels  
7 for Test Year 2012.

8 (b) Life Insurance, Accident D & D Insurance, and  
9 Disability-Long Term.

10 The above expenses are all driven by the amount of payroll estimates.  
11 DRA uses AVR's Projected Year 2011 level, reducing the amounts proportionally  
12 by DRA's lower payroll estimates, and then escalates them to Test Year 2012 by  
13 applying the 2012 labor escalation factor of 1.9%. AVR requests an amount that  
14 is a total of \$2,000 or 7.6% higher due to AVR's higher payroll estimates.

15 (c) Retirement Savings.

16 These are matching contributions made by the company to employees'  
17 401(k) plans and are, therefore, proportional to payroll expenses. AVR's  
18 estimated retirement savings reflect a 26% increase from \$69,383 to \$87,375 from  
19 2010 to 2012. The increase is based on applying *estimated* employee contribution  
20 of 3% of payroll to AVR's estimated 2012 payroll. AVR assumed that employees  
21 will take greater advantage of AVR's matching of their 401(k) contributions, than  
22 they did in Base Year 2010.

23 DRA maintains the 2010 historic contribution rate of 2.1% of retirement  
24 savings benefits paid to recorded payroll and multiplied this percentage by DRA's  
25 recommended Test Year 2012 total level of payroll. This method results in a Test  
26 Year 2012 estimate of \$67,000, which is \$(20,000) or 22.9% less than AVR's

1 request. DRA's recommended Test Year 2012 number is preferred because it  
2 takes into account the 2010 historical contribution rate of employee contributions  
3 to retirement savings and DRA's recommended payroll size.

4 (d) Group Pension Plan.

5 AVR's Group Pension Plan is proportional to payroll. AVR's estimated  
6 \$503,000 in retirement plan contributions for Test Year 2012, reflecting AVR's  
7 revised actuarial assumptions and its higher requested payroll, with which DRA  
8 disagrees.

9 DRA calculates its estimate of Test Year 2012 Pension Expenses beginning  
10 with the 2010 level of Pension Expense of \$402,000, which corresponds to the  
11 amount of Pension Expenses determined by AVR's June 30, 2010 actuarial report  
12 for calendar year ended 12/31/2010. DRA then applies the 2011 and 2012 labor  
13 escalation factors of 1.6% and 1.9%, respectively, to arrive at the Test Year 2012  
14 estimate of \$416,000. DRA's recommended Test Year 2012 amount of Pension  
15 Expense is \$87,000, or 17.3% lower than AVR's requested amount. DRA's  
16 recommended number is preferable to AVR's because it uses DRA's inflation  
17 estimates for 2011-2012 and actuarial data that AVR's actuary AON Consulting  
18 provided prior to recent questionable changes to those assumptions, as explained  
19 in more detail below.

20 For purposes of calculating its requests for this GRC, AVR reflects  
21 significantly different actuarial assumptions from those that its actuary AON  
22 Consulting used in preparing AVR's 2010 actuarial report. Table 4-C below  
23 compares the assumptions that AVR's 2010 actuarial report used with those it is  
24 now using to calculate Pension Expenses in this GRC.

1

Table 4-C

	AVR Actuarial Assumptions	
	2010	2012
Expected Return on Plan Assets	5.00%	3.65%
Discount Rate	5.75%	5.25%

2

3 AVR states that the Expected Return on Plan Assets of 3.65% is the  
4 average return earned by its Pension Fund over the past ten years.<sup>80</sup> This  
5 represents a significant decrease from the 2010 estimate of 5% that AVR’s actuary  
6 AON Consulting used in the 2010 actuarial report. As projected earnings on the  
7 Pension Assets shrink, the amounts that AVR claims that it will have to contribute  
8 towards the Pension Benefit Obligation increase. Similarly, AVR significantly  
9 decreases its discount rate, which is used to discount Pension Benefits to their  
10 present value. The same interest rates is used to annually accrue interest on the  
11 Benefits Obligation in order that it will build up to the future amount AVR will  
12 ultimately have to pay. By using a lower discount rate, AVR increases the present  
13 value of its Pension Benefits Obligation, thereby increasing the amounts that AVR  
14 calculates that it must now contribute.

15 DRA requested AVR to recalculate its Pension Expenses using different  
16 assumptions for the Expected Return on Plan Assets and Discount Rate.<sup>81</sup> AVR

---

<sup>80</sup> AVR’s Response to Data Requests JJS-2 and JJS-3.

<sup>81</sup> DRA Data Request JJS-7, dated 3/18/11, Q.9 asks:

“9.Recalculation of the Periodic Pension Expenses (attached to AVR's 2/18/11 Response to Data Request JJS-2), assuming a discount rate of 5.75% and assuming an Expected Return on Assets equal to:

- a. Five percent;
- b. the current yield of the portfolios' Plan Assets;
- c. the current yield of the most favorable long term annuity contract or other fixed income investment(s) that Park can obtain.”

AVR’s 3/28/11 Response:

(continued on next page)

1 declined to provide these recalculations in the absence of DRA’s assurance that it  
2 would recommend full recovery of the associated expense of the actuary’s services  
3 employed to make these calculations. Because DRA does not believe AVR’s  
4 2012 actuarial assumptions are reasonable, DRA uses the 2010 estimate of  
5 Pension Expenses as a more reliable estimate available escalated to Test Year  
6 2012. DRA notes that, even AVR’s 2010 estimated return on plan assets of 5% is  
7 conservative relative to other pension plans that DRA has reviewed. Nevertheless,  
8 DRA uses it because AVR’s 2010 estimated return on plan assets reflects AVR’s  
9 choice to invest the funds in very conservative investments: cash, cash-  
10 equivalents, and fixed income assets. AVR declined to provide a description of  
11 the alternative investments that AVR had considered in its response to DRA’s  
12 Data Request.<sup>82</sup> Nevertheless, DRA believes that AVR can earn significantly  
13 more on its plan assets if it pursues alternative investments, while still addressing  
14 its concerns about risk by keeping a conservative investment allocation.

15 (e) Post-retirement Benefits Other than Pensions (PBOPs)

16 These are non-Pension Expenses paid for the benefit of retired persons.  
17 Unlike Group Pension Plan expenses, the Commission limits the amount allowed  
18 for ratemaking to AVR’s tax-deductible contributions to VEBA and 401(h) plans  
19 according to the actuarial valuation of AVR’s PBOPs by AVR’s outside actuary.<sup>83</sup>  
20 DRA uses AVR 2012 PBOPs estimate as reasonable, but pro-rates it downward by

---

(continued from previous page)

“AVR and DRA have discussed the fact that AVR would incur additional outside consultant costs to run the additional scenarios requested by DRA. Absent a statement from DRA that the additional cost of this information is in the interest of ratepayers and should be allowed as rate case expense recoverable over the three-year rate case period, AVR will not provide a response to the above request. DRA has not asked for this type of information historically. There is no reasonable basis for AVR to have forecasted rate case expenses to include these additional costs.”

<sup>82</sup> Id., Q. 8.

<sup>83</sup> AVR’s *Revenue Requirements Report Final*, p. 42-43.

1 DRA's approximate 9 percentage reduction from AVR's requested Test Year 2012  
2 payroll level, which yields a test year estimate of \$157,000, which is \$15,000, or  
3 8.8% less than AVR's requested amount of \$ 172,000. DRA's recommended  
4 number is preferred because it takes into account DRA's recommended payroll  
5 level and the most recently available labor inflation estimates for 2011-2012.

6 (f) Service Awards, Educational Assistance, EAP/Wellness Program

7 DRA forecasts AVR's service awards, educational assistance, and its  
8 EAP/Wellness Program expenses using AVR's inflation-adjusted 5-year average,  
9 re-calculated using DRA's approved historical labor inflation factors. AVR used a  
10 5-year average as well, employing its own escalation factors, with one exception:  
11 for the EAP/Wellness Program, AVR used a "2011 budget" amount that reflects a  
12 \$1,500, or 46.4% increase from Base Year 2010 to Test Year 2012. DRA's  
13 estimate using a 5-year average is more reliable than AVR's "budgeted" amount  
14 for 2011 because, given the substantial increase AVR requests for this expense,  
15 the inflation-adjusted historical amounts are preferable because they are known  
16 and certain while AVR's "budgeted" amounts may not be prudently spent.

1 (g) Defined Contribution-401A Expenses

2 AVR offers this benefit to recently hired employees in lieu of its Group  
3 Pension (Defined Benefits) Plan. AVR estimates its 401-A expenses based on  
4 AVR's per-eligible 2010 employee payment, escalated by 3% to Test Year 2012,  
5 as follows: 18 employees were eligible in 2011 (including AVR's new CSR) and  
6 21 in 2012. DRA uses the same per-employee contribution level, applied to the  
7 same number of 18 employees in 2011 as AVR. However, DRA escalates this  
8 amount by DRA's 1.9% labor inflation factor to Test Year 2012, resulting in an  
9 estimate of \$56,000, which is \$5,000 or 8.9% less than AVR's request of \$61,000  
10 for Test Year 2012.

11 (h) Other Benefits

12 DRA forecasts Other Benefits using AVR's inflation-adjusted 5-year  
13 average of these expenses, re-calculated using DRA's approved historical labor  
14 inflation factors. AVR used a 5-year average as well, employing its own  
15 escalation factors, although AVR's results are not materially different from  
16 DRA's.

17 (i) Net Benefits Adjustment

18 These amounts are driven by Payroll, Pensions and Benefits calculated as  
19 described above. These transfers reflect Pensions and Benefits Expenses  
20 transferred **out** for capitalized payroll and Irrigation Service and expenses  
21 transferred **into** AVR from Park Water's General Office and Central Division  
22 payroll charged to AVR.

1 **C. PENSIONS AND BENEFITS (P&Bs) – GENERAL OFFICE**

2 **1) Summary of Recommendations**

3 DRA applied the same methodologies to forecast AVR’s General Office  
 4 Pensions and Benefits (P&B) as DRA used to calculate AVR’s Operating Service  
 5 Area’s. The following table summarizes the differences between DRA’s  
 6 recommended and AVR’s requested Pensions and Benefits for AVR’s General  
 7 Office employees:

**Table 4D**

**PARK WATER COMPANY - GENERAL OFFICE  
 EMPLOYEE BENEFITS EXPENSE  
 FOR PROJECTED YEARS 2011 AND 2012**

<b>Line No.</b>	<b>Description</b>	<b>DRA</b>		<b>AVR</b>	
		<b>Recommended</b>	<b>Requested</b>	<b>DRA (Less than)</b>	<b>AVR</b>
		<b>2012</b>	<b>2012</b>	<b>Amount</b>	<b>%</b>
1	Medical Insurance	\$ 310,000	\$ 398,000	\$ (87,000)	-21.9%
2	Dental Insurance	23,000	28,000	(5,000)	-17.9%
3	Life Insurance	12,000	14,000	(3,000)	-21.4%
4	Accident D & D Insurance	2,000	2,000	-	0.0%
5	Disability-Long Term	16,000	19,000	(3,000)	-15.8%
6	401 (k) Plan	89,000	137,000	(48,000)	-35.0%
7	Group Pension	566,000	735,000	(168,000)	-22.9%
8	PBOP	114,000	141,000	(26,000)	-18.4%
9	Service Awards	2,000	2,000	-	0.0%
10	Educational Assistance	2,000	2,000	-	0.0%
11	EAP/Wellness Program	5,000	7,000	(2,000)	-28.6%
12	Defined Contribution-401A E:	29,000	39,000	(10,000)	-25.6%
13	Other	21,000	21,000	-	0.0%
14	Net Benefits Adjustment	(203,000)	(281,000)	78,000	8.8%
15	Total Benefits (Note 1)	\$ 989,000	\$ 1,264,000	\$ (274,000)	18.1%

8 Note 1: Totals may not add due to rounding

9 **2) Conclusion**

10 The Commission should adopt DRA’s recommended level of Test Year  
 11 2012 Pensions and Benefits for AVR’s General Office.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

## **CHAPTER 5: TAXES OTHER THAN INCOME**

### **A. INTRODUCTION**

This chapter presents DRA’s analysis and recommendations on Taxes Other Than Income for the Apple Valley Ranchos Water Company (“AVR”) General Rate Case Test Year 2012. The category of Taxes Other Than Income is comprised of ad valorem tax (property taxes), and payroll taxes.

### **B. SUMMARY OF RECOMMENDATIONS**

Differences between AVR’s and DRA’s estimates for Taxes Other Than Income are primarily due to differences in net plant in service and estimated payroll expenses. The methodologies used by AVR in estimating future taxes and fees are detailed below. A comparison of DRA’s and AVR’s Taxes Other Than Income are shown in Table 5-1.

### **C. DISCUSSION**

#### **1) AD VALOREM TAXES**

AVR estimates future ad valorem taxes based on the estimated assessed value placed on AVR’s property for the Test Year by the San Bernardino County Assessor’s Office and the ad valorem tax rates currently in effect. The estimates of the assessed value are calculated based on the estimated plant additions, retirements, advances, contributions, Construction Work in Progress (“CWIP”), and Materials and Supplies (“M&S”) using the same assessment methodology used by the San Bernardino County Assessor’s Office.<sup>84</sup> DRA accepts this methodology and notes that differences between AVR and DRA estimates are due to differences in estimations of future plant.

---

<sup>84</sup> AVR’s Revenue Requirements Report, Chapter V, Taxes – Other Than Income, pg 51.

1 DRA’s plant estimate is less than AVR’s plant estimate, thus DRA’s tax  
 2 estimate should be lower. However, AVR has a linking error in its workpapers,  
 3 which caused AVR’s ad valorem tax number to be under-estimated. DRA’s ad  
 4 valorem tax estimate appears greater than AVR’s in Table 5-1 due to this error.

5 **2) PAYROLL TAXES**

6 Payroll taxes include three components: (1) Federal Insurance Contribution  
 7 Act (“FICA”) tax consisting of Old Age Benefits (Social Security Tax) and  
 8 Medicare, (2) Federal Unemployment Insurance (“FUI”), and (3) State  
 9 Unemployment Insurance (“SUI”). All three components have statutory limits  
 10 governing the maximum percentage that can be collected from employers (*see*  
 11 *table, below*).

PAYROLL TAXES		2011 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.20%	Social Security Tax is 6.2% applied to only the first \$109,950 of an employee’s salary.
	Medicare Tax	1.45%	No salary limitations.
FUI Tax		0.80%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first \$7,000 of employee wages (\$56 per employee).
SUI Tax (CA)		4.40%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

12 AVR estimates future payroll taxes using the effective tax rates and  
 13 limitations applicable in 2011. These are applied to AVR’s estimated 2012  
 14 payroll budget after removing those portions allocated to Park’s Central Basin  
 15 Division and Park’s General Office.

16 DRA used DRA’s estimated Test Year 2012 payroll (as stated in Chapter 4  
 17 of this report) to calculate payroll taxes by applying the tax percentages, as shown

1 in table above, to the DRA estimated 2012 payroll. Differences between AVR's  
 2 estimated payroll taxes and DRA's estimated payroll taxes are the result of  
 3 differences in the estimates of 2012 payroll.

4 **D. CONCLUSION**

5 DRA recommends Commission adoption of DRA's estimates of Taxes  
 6 Other Than Income that are presented in Table 5-1.

TABLE 5-1

APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

TAXES OTHER THAN INCOME  
 (PAYROLL TAXES AND AD VALOREM TAXES)

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Payroll Taxes				
Apple Valley Ranchos	236.3	288.3	52.0	22.0%
General Office Allocation	68.2	75.9	7.7	11.3%
Ad Valorem taxes				
Apple Valley Ranchos	445.3	414.1	(31.2)	-7.0%
General Office Allocation	6.8	6.9	0.1	0.9%
7 Taxes other than income	756.6	785.2	28.6	3.8%

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27

**CHAPTER 6: INCOME TAXES**

**A. INTRODUCTION**

This chapter presents DRA’s analysis and recommendations on Income Taxes for Apple Valley Ranchos Water Company (“AVR”) Test Year 2012. In developing its recommendations, DRA reviewed AVR’s Revenue Requirement Report, application workpapers, data request responses, and other information obtained from the California Franchise Tax Board and the Internal Revenue Service (“IRS”). DRA’s and AVR’s tax estimates and tax deductions for AVR Domestic are compared in Tables 6-1 and 6-2, and AVR Irrigation tax estimates are in Table 6-3.

**B. SUMMARY OF RECOMMENDATIONS**

The difference between AVR’s and DRA’s estimate is due primarily to differences in estimated revenues, expenses, and ratebase. DRA agrees with the methods AVR used to calculate Income Taxes, except for the method AVR used to calculate the Qualified Production Deduction (“QPD”). Although DRA disagrees with AVR’s methodology, it agrees with the QPD estimate.

**C. DISCUSSION**

**1) California Corporate Franchise Tax (“CCFT”) and Federal Income Tax (“FIT”) Deductions.**

Tax deductions and credits in this proceeding were calculated in accordance with the normalization requirements of the Economic Recovery Tax Act of 1981 (“ERTA”). Further, the provisions of the Tax Equity and Fiscal Responsibility Act of 1982 (“TEFRA”) have been incorporated in the tax deduction estimates. Finally, the provisions of the Tax Reform Act of 1986 (“TRA 86”) have been estimated and included into this GRC in accordance with the requirements of Decision 87-09-026 dated September 10, 1987, Decision 87-12-028 dated December 9, 1987 and Decision 88-01-061 dated January 28, 1988.

1           Some of the provisions of TRA 86 have been incorporated into California  
2 Corporation Franchise Tax (“CCFT”) law in the California Bank and Corporation  
3 Tax Fairness, Simplification and Conformity Act of 1987 (“State Tax Act of  
4 1987”). The provisions have been estimated and integrated into the CCFT  
5 calculations for this GRC.

6           CCFT and FIT are calculated using estimated present and proposed  
7 revenues, estimated tax-deductible expenses, interest, and tax depreciation. Both  
8 DRA and AVR use a tax rate of 8.84% to calculate the state income tax, and a tax  
9 rate of 34% to calculate the federal income tax.

10           For the Test Year 2012, AVR used the Test Year CCFT at present rates as a  
11 deduction from the calculation of Test Year FIT. For the Escalation Year 2013,  
12 AVR used the Test Year 2012 CCFT at proposed rates as the deduction for the  
13 FIT calculation. DRA agrees with this methodology. See Tables 6-1 and 6-2 for  
14 comparison of DRA and AVR’s tax estimates for Domestic, and Table 6-3 for  
15 Irrigation.

## 16           **2) Tax Depreciation**

17           According to AVR, the federal and state tax depreciation for plant of  
18 vintage prior to 1981 is calculated according to AVR’s actual tax depreciation  
19 methodology. AVR uses two liberalized depreciation methodologies; (1) double  
20 declining balance depreciation using rates based on certain total life assumptions;  
21 and (2) straight-line depreciation using shortened total life assumptions. For plant  
22 of vintage 1981 and later, the ratemaking federal tax depreciation was estimated  
23 by applying the straight-line remaining life “book” depreciation rates to the tax  
24 basis plant additions.<sup>85</sup>

---

<sup>85</sup> AVR’s Revenue Requirements Report, Chapter IX, page 92.

1 AVR also states that the state tax depreciation is estimated by using AVR's  
2 straight-line remaining life or "book" depreciation methodology. These rates are  
3 applied to the Test Year Plant estimates. For Irrigation, the federal and state tax  
4 depreciation is calculated using the same straight-line remaining life depreciation  
5 methodology. Test Year estimates are derived by applying the straight-line  
6 remaining life "book" depreciation rates to the estimated plant additions.

7 Park Water Company's General Office state and federal tax depreciation  
8 deductions are allocated to AVR using the allocation factor described in AVR's  
9 Report on the General Office in Chapter 11.

10 DRA agrees with AVR's method to estimate depreciation for estimated  
11 income tax calculations. Tables 6-1 and 6-2 compare DRA and AVR's estimates.

12 **3) Interest Expense Deduction**

13 AVR states that the ratemaking interest expense deduction is calculated as  
14 the authorized <sup>86</sup> weighted cost of long-term debt from AVR's capital structure  
15 multiplied by the rate base. DRA agrees with this method. AVR and DRA's  
16 interest expense deduction estimates are shown on Tables 6-1 and 6-2.

17 **4) Qualified Production Deduction ("QPD") or**  
18 **Domestic Production Activities Deduction**  
19 **("DPAD")**

20 Beginning in 2010, Section 199 of the Internal Revenue Code, as enacted as  
21 part of the American Jobs Creation Act of 2004, allows the applicable rate of 9%  
22 to calculate the Qualified Production Deduction ("QPD"), also referred to as the  
23 Domestic Production Activities Deduction ("DPAD"). AVR states that the tax  
24 deduction for the QPD is estimated by taking 9% of the production related portion

---

<sup>86</sup> D.10-10-035, Cost of Capital proceeding, pg 21.

1 of AVR's federal taxable income prior to the state tax deduction.<sup>87</sup> The  
2 percentage that AVR uses as the production related portion, or Qualified  
3 Production Activities Income ("QPAI"), is 48.22%, which comes from AVR's  
4 workpaper WP9-69r. AVR states that "the detailed calculation was performed by  
5 Park's independent auditors according to the Internal Revenue Code Section 199  
6 and filed with Park's 2009 Federal Tax Return."<sup>88</sup>

7 When asked how this percentage was derived, AVR states that the  
8 percentage used was calculated by first separating activities into qualified and  
9 non-qualified production activities. Park's auditor identified AVR's qualified  
10 production activities ("QPA") according to IRS Code Section 199. The 48.22% is  
11 that portion of the QPA in relation to the total revenues minus the allocable  
12 deductions.<sup>89</sup> (AVR workpaper 9-69r)

13 In AVR's Income Tax Calculation Table IX-A,<sup>90</sup> the formula to calculate  
14 AVR's Qualified Production Deduction is: total operation revenues minus total  
15 expenses (but not including interest expense), multiplied by QPAI rate of 48.22%,  
16 multiplied by the 2010 DPAD allowable 9% rate, or calculated as:

17 
$$\text{QPD} = (\text{Operating Revenues} - \text{Total Expenses} + \text{Interest}) \times 48.22\% \times 9\%$$

18 DRA, while disagreeing with the method of calculating a QPAI percentage,  
19 agrees with the QPAD estimate.

---

<sup>87</sup> AVR's Revenue Requirement Report, Chapter IX, Taxes on Income, pg. 93.

<sup>88</sup> AVR's response to DRA data request ALC-03, question #2.

<sup>89</sup> AVR's response to DRA data request ALC-03, question #2, and spreadsheet provided.

<sup>90</sup> AVR's Revenue Requirement Report, pg 94, or AVR's workpapers, pg 9-1r, AVR Expense 2012r, tab IncTx 2012.

1           The differences in income taxes between DRA and AVR for Test  
2 Year 2012 are due to differences in estimates of revenues and expenses.

3           **D. CONCLUSION**

4           DRA recommends Commission adoption of DRA's estimates of Income  
5 Taxes that have been calculated and presented in Tables 6-1 and 6-2 for Domestic,  
6 and Table 6-3 for Irrigation.

TABLE 6-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## TAXES BASED ON INCOME

TEST YEAR 2012

(PRESENT RATES)

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues less Irrigation	19,604.6	19,240.2	(364.4)	-1.9%
Deductions:				
O & M expenses	6,328.0	6,759.2	431.3	6.8%
A & G expenses	5,945.8	7,041.3	1,095.5	18.4%
Taxes not on Income	756.6	785.2	28.6	3.8%
Interest	1,334.6	1,472.8	138.2	10.4%
Meals Adjustment	(12.4)	(13.7)	(1.3)	10.5%
Income before taxes	5,252.0	3,195.4	(2,056.6)	-39.2%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Depreciation	(2,663.1)	(2,780.1)	(117.0)	4.40%
Taxable income for CCFT	2,588.9	415.2	(2,173.7)	-84.0%
CCFT Rate	8.84%	8.84%		
CCFT	228.9	36.7	(192.2)	-84.0%
<u>Federal Income Tax</u>				
Tax Depreciation	2,422.8	2,568.4	145.6	6.01%
State Corp Franch Tax	228.9	36.7	(192.2)	-84.0%
QPAD	285.8	202.6	(83.3)	-29.1%
Taxable income for FIT	2,314.5	387.7	(1,926.8)	-83.2%
FIT Rate	34.00%	34.00%		
FIT	786.9	131.8	(655.1)	-83.2%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Net Federal Income Tax	786.9	131.8	(655.1)	-83.2%
1 Total FIT & CCFT	1,802.7	300.4	(1,502.4)	-83.3%

TABLE 6-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## TAXES BASED ON INCOME

TEST YEAR 2012

(AVR PROPOSED RATES)

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues less Irrigation	23,552.3	23,127.0	(425.3)	-1.8%
Deductions:				
O & M expenses	6,341.4	6,772.4	431.1	6.8%
A & G expenses	5,983.8	7,080.2	1,096.4	18.3%
Taxes not on Income	756.6	785.2	28.6	3.8%
Interest	1,334.6	1,472.8	138.2	10.4%
Meals adjustment	(12.4)	(13.7)	(1.3)	10.5%
Income before taxes	9,148.3	7,030.1	(2,118.2)	-23.2%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Depreciation	(2,663.1)	(2,780.1)	(117.0)	4.40%
Taxable income for CCFT	6,485.2	4,249.9	(2,235.2)	-34.5%
CCFT Rate	8.84%	8.84%		
CCFT	573.3	375.7	(197.6)	-34.5%
<u>Federal Income Tax</u>				
Tax Depreciation	2,422.8	2,568.4	145.6	6.01%
State Corp Franch Tax	228.9	36.7	(192.2)	-84.0%
QPAD	454.9	369.0	-85.9	-18.9%
Taxable income for FIT	6,041.7	4,056.0	(1,985.7)	-32.9%
FIT Rate	34.00%	34.00%		
FIT	2,054.2	1,379.0	(675.1)	-32.9%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Net Federal Income Tax	2,054.2	1,379.0	(675.1)	-32.9%
1 Total FIT & CCFT	4,681.6	3,133.8	(1,547.9)	-33.1%

TABLE 6-3

## APPLE VALLEY RANCHOS WATER COMPANY-IRRIGATION

## INCOME TAX

TEST YEAR 2012  
(Thousands of \$)

	PRESENT		AVR		PROPOSED		AVR	
	DRA Estimate	AVR Estimate	exceeds DRA Amount	%	DRA Estimate	AVR Estimate	exceeds DRA Amount	%
OPERATING REVENUES	255.00	243.19	-11.8	-4.6%	217.6	253.0	35.5	16.3%
EXPENSES								
OPER & MAINT	103.6	133.9	30.3	29.2%	103.6	133.9	30.3	29.2%
UNCOLLECTIBLES	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
ADMIN & GENERAL	49.2	59.8	10.6	21.6%	49.2	59.8	10.6	21.6%
FRANCHISE FEES	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
AD VALOREM TAXES	3.8	3.8	0.0	0.4%	3.8	3.8	0.0	0.4%
PAYROLL TAXES	0.8	0.9	0.1	11.3%	0.8	0.9	0.1	11.3%
MEALS ADJUSTMENT	-0.100	-0.105	0.0	5.0%	-0.100	-0.105	0.0	5.0%
SUBTOTAL	157.384	198.429	41.0	26.1%	157.4	198.4	41.0	26.1%
DEDUCTIONS								
CA TAX DEPRECIATION	5.8	17.6	11.8	205.9%	5.8	17.6	11.8	205.9%
INTEREST 3.6% of RB	10.0	10.2	0.2	2.2%	10.0	10.2	0.2	2.2%
CA TAXABLE INCOME	81.9	16.9	-64.9	-79.3%	44.4	26.8	-17.7	-39.8%
CCFT @ 8.84%	7.2	1.5	-5.7	-79.3%	3.9	2.4	-1.6	-39.8%
DEDUCTIONS								
FED. TAX DEPRECIATION	6.1	17.9	11.8	194.4%	6.1	17.9	11.8	194.4%
INTEREST	10.0	10.2	0.2	2.2%	10.0	10.2	0.2	2.2%
CA TAX	7.2	1.5	-5.7	-79.3%	7.2	1.5	-5.7	-79.3%
QPAD	4.2	1.9	-2.3	-54.2%	2.6	2.4	-0.2	-9.3%
FIT TAXABLE INCOME	70.1	13.2	-56.9	-81.1%	34.2	22.6	-11.7	-34.0%
FIT (BEFORE ADJUSTMENT) @ 34.00%	23.8	4.5	-19.3	-81.1%	11.6	7.7	-4.0	-34.0%
PRORATED ADJUSTMENT								
INVESTMENT TAX CREDIT	0.0	0.0	0.0	0.0%	0.0	0.0	0.0	0.0%
1 NET FEDERAL INCOME TAX	23.8	4.5	-19.3	-81.1%	11.6	7.7	-4.0	-34.0%

1                   **CHAPTER 7: UTILITY PLANT-IN-SERVICE**

2                   **A. INTRODUCTION**

3                   DRA reviewed and analyzed AVR’s application, testimony, workpapers  
4 and responses to DRA’s data requests related to AVR’s utility plant investment  
5 requests in its GRC Application 11-01-001 (“A.11-01-001”). DRA also conducted  
6 a field investigation of AVR’s water system and Park Water Company’s General  
7 Office on February 7-8, 2011.

8                   Section B below presents a summary of DRA’s recommendations on  
9 AVR’s plant investment requests, presented in Chapter VI of AVR’s Revenue  
10 Requirement Report. DRA’s total utility plant-in-service estimates for Test Year  
11 2012 and Escalation Year 2013 are shown in Tables 7-1 and 7-2 at the end of this  
12 Chapter. Section C presents in detail DRA’s recommended adjustments to AVR’s  
13 requested plant additions. Section D addresses AVR’s water quality related issues  
14 raised by AVR in Chapter X of its Revenue Requirement Report.

15                   **B. SUMMARY OF RECOMMENDATIONS**

16                   Table 7-A presents AVR’s and DRA’s plant-in-service estimates for 2011-  
17 2013. AVR’s estimates exceed DRA’s by 1.9% in 2011, 3.1% in 2012 and 4.6%  
18 in 2013.

19   **Table 7-A**  
20   **AVR’s and DRA’s Plant-in Service Estimates**

Ln.	Plant-In-Service, End of Year	AVR	DRA	AVR exceeds DRA	
				Amount	%
1	2011, estimated	\$106,467,661	\$104,516,000	\$1,951,661	1.9%
2	Test Year 2012	\$111,160,966	\$107,792,500	\$3,368,466	3.1%
3	Escalation Year 2013	\$116,463,234	\$111,376,700	\$5,086,534	4.6%

21  
22                   Table 7-B presents AVR’s and DRA’s estimated plant addition totals (or  
23 capital budgets) for 2011-2013 and recorded plant addition total for 2010.

1  
2

**Table 7-B**  
**AVR's and DRA's Plant Addition Estimates**

Ln.	Year	AVR	DRA	AVR exceeds DRA	
				Amount	%
1	2010 recorded *	\$2,783,081			
2	2011	\$4,252,277	\$2,451,757	\$1,800,520	73%
3	2012	\$4,351,158	\$2,866,998	\$1,484,160	52%
4	2013	\$4,503,758	\$2,718,554	\$1,785,204	66%
5	3-yr total	\$13,107,193	\$8,037,309	\$5,069,884	63%

3

*\* Per AVR's response to DRA's data request PPM-1.2.*

4           Table 7-B shows the significant differences between AVR's proposed  
5 capital budgets and its actual expenditure in 2010. **AVR spent \$2.8 million on**  
6 **plant additions in 2010 (line 1 of Table 7-B). AVR's proposed 2011-2013**  
7 **capital budgets ranging from \$4.3 to \$ 4.5 million are 153% to 162% of its**  
8 **actual 2010 spending level.** In contrast, DRA's recommended capital budgets  
9 ranging \$2.5 million and \$2.9 million are much closer to AVR's recorded 2010  
10 capital spending level. DRA believes the adjustments recommended herein, in  
11 total, result in 2011-2013 annual capital budgets that closely track AVR's actual  
12 spending level in 2010.

13           DRA's recommended capital budgets include the adjustments listed in  
14 Table 7-C below, with brief descriptions following the table. (For ease of  
15 reference, the number preceding each description refers to the line number in  
16 Table 7-C.)

1  
2

**Table 7-C**  
**Summary of DRA's Adjustments to AVR's Plant Requests**

Ln.	Adjustments	Year(s)	AVR	DRA	AVR exceeds DRA	
					Amount	%
1	Annual Escalation Rate	2011-2013	3.42%	3.21%	0.21%	-
2	Main Replacements	2011-2013	\$5,495,517	\$3,410,653	\$2,084,864	61%
3	Mockingbird BPS & Del Oro Main	2011-2012	\$819,000	\$0	\$819,000	100%
4	Office Expansion	2011-2013	\$702,026	\$21,000	\$681,026	3243%
5	Automated Meter Reading	2011-2013	\$1,413,179	\$1,278,402	\$134,777	11%
6	Vehicle Purchases	2011-2013	\$335,776	\$239,300	\$96,476	40%
7	Vactor Trailer Purchase	2012	\$82,731	\$52,200	\$30,531	58%
8	Miscell. Well Site Improvements	2011-2013	\$500,000	\$147,700	\$352,300	239%
9	Pump & Motor Replacements	2011-2013	\$931,382	\$387,509	\$543,873	140%
10	SCADA Installations and Upgrades	2011-2013	\$661,446	\$578,300	\$83,146	14%
11	Air & Vacuum Valve Installations	2011-2013	\$126,633	\$42,125	\$84,508	201%
12	Valve Replacements; New Fire Hydrants; Service Line Replacements	2011-2013	\$635,149	\$476,724	\$158,425	33%

3

4

1. DRA applies a lower annual escalation rate used in plant cost forecasts (3.21% versus AVR's 3.42%).

5

6

2. DRA adjusts unit cost for and recommends deferral of various main replacement/installation projects.

7

8

3. DRA removes the Mockingbird Booster Pump Station project in 2011 and the associated Del Oro main project in 2012.

9

10

4. DRA removes the office expansion project and associated office furniture and equipment in 2012 and 2013.

11

12

5. DRA accepts AVR's proposed 2011 through 2013 replacement rate for its Automated Meter Reading project, but uses lower unit cost estimates in calculating the total costs.

13

14

15

6. DRA accepts AVR's vehicle requests except for the following purchase adjustments: removing one Ford Explorer in 2011, deferring one Ford Ranger from 2012 and 2013, removing one F350 Supercab in 2013, and lowering the new backhoe's cost estimate in 2013.

16

17

18

- 1 7. DRA accepts AVR's request to purchase a Vactor Trailer in 2012 but uses  
2 a lower cost estimate.
- 3 8. DRA reduces AVR's annual budgets for Miscellaneous Well Site  
4 Improvement projects.
- 5 9. DRA reduces AVR's annual budgets for Pump and Motor Replacement  
6 projects.
- 7 10. DRA reduces AVR's annual budgets for Supervisory Control and Data  
8 Acquisition ("SCADA") installation/upgrades.
- 9 11. DRA reduces AVR's annual budgets for air and vacuum valve  
10 installation/replacements.
- 11 12. DRA reduces AVR's annual budgets for three other Transmission and  
12 Distribution plant accounts: valve replacements, new fire hydrant  
13 installations and service line replacements.

## 14 C. DISCUSSION

15 In this Section, DRA presents its analysis and recommended adjustments to  
16 AVR's requested plant additions.

### 17 1) Annual Escalation Rate

18 In developing estimated capital budgets for certain projects and plant  
19 accounts for years 2011 through 2013, AVR applies an annual escalation rate of  
20 3.42% to the base year's estimate.<sup>91</sup> AVR calculates the escalation rate based on  
21 data from the Construction Cost Index ("CCI") published by the Engineering

---

<sup>91</sup> For example, if the cost estimate for a given plant item is developed in 2011 dollars, AVR would multiply the estimate by 1.0342 to arrive at an estimate for 2012.

1 News Record.<sup>92</sup> AVR uses 2005-2009 CCI data to arrive at the five-year average  
2 annual escalation rate of 3.42%. Using the same methodology but with 2006-2010  
3 CCI data,<sup>93</sup> DRA arrives at a more up-to-date annual escalation rate estimate of  
4 3.21%. DRA's lower escalation rate results in lower cost estimates for various  
5 plant additions ranging from main replacement projects to vehicle purchases.

## 6 2) Main Replacements and Installations

7 Chapter 14 of this Report discusses in detail AVR's requests and DRA's  
8 recommendations for main replacement projects for 2011-2013.

## 9 3) Mockingbird Booster Pump Station ("BPS") and the Associated 10 Del Oro Main Installation

11 AVR proposes to install a BPS at the existing Mockingbird tank site in  
12 2011 at an estimated cost of \$640,000.<sup>94</sup> AVR also requests authorization to  
13 install the Del Oro 12-inch main project in 2012, which AVR asserts would  
14 connect the Jess Ranch Zone, via the Mockingbird tank and BPS, to the Main  
15 Pressure Zone and "improve transmission for flow."<sup>95</sup> The cost of the proposed  
16 Del Oro main project is \$179,000. Table 7-D shows the total cost requested by  
17 AVR for these two related projects.

18 **Table 7-D**  
19 **Mockingbird BPS & Del Oro 12" Main Projects**

Line	Description	2011	2012	Total
1	Mockingbird BPS	\$640,000	-	\$640,000
2	Del Oro 12" Main	-	\$179,000	\$179,000
3	<b>Total Project Cost</b>	<b>\$640,000</b>	<b>\$179,000</b>	<b>\$819,000</b>

20  
<sup>92</sup> AVR Revenue Requirement Report Workpapers, Volume 2 of 2, page 6-34.

<sup>93</sup> AVR's response to DRA's data request PPM-1, Item 1.

<sup>94</sup> AVR Revenue Requirement Report, page 62.

<sup>95</sup> AVR Revenue Requirement Report Workpapers, Volume 2 of 2, page 6-20r.

1 In its Revenue Requirement Report, AVR briefly described the benefits of  
2 the BPS project.

- 3 • The BPS *“will allow excess source of supply pumping capacity in the*  
4 *Jess Ranch Pressure Zone to be utilized by the rest of the AVR water*  
5 *system, which delays the need for an additional well in the Main Zone.”*
- 6 • *“There is currently no way for the water from wells in the Jess Ranch*  
7 *Pressure Zone to be utilized in other parts of the water system.”*
- 8 • *“By providing this connection in the south end of the Main Pressure*  
9 *Zone, flow capacity and pressure will be improved for that area.”*
- 10 • AVR also indicated in its response to DRA’s data request that *“[f]or the*  
11 *future, AVR must consider such things as deviations in demands due to*  
12 *such things as weather, growth and changes in customer usage. It is*  
13 *currently estimated that as long as the BPS is installed and the existing*  
14 *wells continue to function adequately, the next well will not be required*  
15 *until approximately 2015.”*<sup>96</sup>

16 As discussed below, DRA finds that AVR’s demand and production  
17 capacity data do not support the construction of the BPS and associated Del Oro  
18 main projects.

19 First, although the BPS was approved and authorized for recovery in  
20 AVR’s last GRC Decision 08-09-026, AVR has not added the BPS as scheduled in  
21 2009. AVR states that *“[t]his project was originally projected in the previous*

---

<sup>96</sup> AVR’s response to DRA’s data request PPM-5, Item 4.

1 *rate case for construction in 2009, but was deferred because the reduction in*  
 2 *demands and drastic slowdown of growth.*<sup>97</sup> [Emphasis added.]

3 DRA asked AVR to provide a quantitative comparison between the  
 4 demand/growth level that caused deferral of the BPS in 2009 and the current  
 5 demand/growth projection. In response, AVR provided its “*most recent demands*  
 6 *in the AVR system*” based on production records and a summary of the source of  
 7 supply capacity and calculations, as represented in Tables 7-E and 7-F below.<sup>98</sup>  
 8 According to AVR, based on the provided data, “*it is clear to see that the Main*  
 9 *Zone is in need of more source capacity to make sure the source of supply*  
 10 *capacity criterion is met.*”<sup>99</sup>

11 **Table 7-E**  
 12 **System Demands, Based on Production Records**  
 13 (per AVR’s Response to DRA’s Data Request PPM-05)

Ln.	Demand, in Gallons Per Minute or GPM	2006	2007	2008	2009	2010
1	Average Day Demand, or ADD	10,367	10,780	9,755	9,148	8,194
2	Maximum Day Demand, or MDD	22,235	24,536	20,326	20,558	19,512
3	MDD, Jess Ranch only	2,824	3,116	2,581	2,611	2,478
4	<b>MDD, Excluding Jess Ranch</b>	<b>19,411</b>	<b>21,420</b>	<b>17,745</b>	<b>17,947</b>	<b>17,034</b>
5	<b>Annual Change *</b>	-	<b>10%</b>	<b>-17%</b>	<b>1%</b>	<b>-5%</b>

14 \* Calculated by DRA.

<sup>97</sup> AVR Revenue Requirement Report, page 62.

<sup>98</sup> AVR’s response to DRA’s data request PPM-5, Item 4.

<sup>99</sup> AVR’s response to DRA’s data request PPM-5, Item 4.

1  
2  
3

**Table 7-F**  
**Source of Supply Capacity and Calculations**  
(Using Data from AVR's Response to DRA's Data Request PPM-05)

Ln.	Description	Gallons Per Minute (GPM)
1	Total Production Capacity per Table D-1 in 2010 PUC Report	29,582
2	Less Ag Well Capacity	(3,684)
3	Total Production Capacity in Potable Water System in 2010	25,898
4	Less Well 24 (Well is currently out of commission due to low water level)	(872)
5	Total Production Capacity in Potable Water System (currently)	25,026
6	Less Jess Ranch Production Capacity	(4,662)
7	Total Production Capacity Without Jess Ranch	20,364
8	Less Well 33 Capacity	(2,422)
9	Total Production Capacity Without Jess Ranch and Well 33	17,942
10	Total Production Capacity With Jess Ranch and Without Well 33	22,604
11	Total Production Capacity With Jess Ranch and Without Well 36	21,843

4  
5 After a careful review of the demand and supply capacity data provided by  
6 AVR, DRA arrives at a very different conclusion. Table 7-E above indicates that  
7 the Maximum Day Demand (“MDD”) of the system excluding the Jess Ranch area  
8 (i.e., Main Pressure Zone) began declining in 2008 (by 17%) and has continued to  
9 decline through 2010 (by 5%). (See Line 4 of Table 7-E.) Additionally, by its  
10 own estimates, AVR’s customer base dropped by 1% in 2010 and is expected to  
11 stay relatively flat in this GRC forecast cycle, increasing by less than 0.05% each  
12 year.<sup>100</sup>

13 Based on the documented decline in AVR’s system demands set forth in  
14 Table 7-E above, DRA calculates that 17,034 gallons per minute (“GPM”) is a  
15 reasonable approximation of the Main Pressure Zone’s MDD (Table 7-E, line 4).  
16 Based on supply capacity data set forth in Table 7-F above, DRA calculates that  
17 the available production capacity for the Main Pressure Zone is at least 17,942  
18 GPM (Table 7-F, line 9). This 17,942 GPM production capacity to meet the Main  
19 Pressure Zone’s MDD is equal to the system capacity minus the Agricultural

<sup>100</sup> AVR’s Revenue Requirement Report Workpapers (Updated), page 2-4rr.

1 Wells, the Jess Ranch wells, Well 24, and Well 33 (the largest well in the  
2 zone).<sup>101</sup>

3 In summary, construction of the BPS and the Del Oro main project is not  
4 warranted at this time. Data from Tables 7-E and 7-F above indicate that current  
5 conditions regarding demand and supply do not warrant approval of these projects  
6 at this time. Therefore, for the purposes of estimating plant-in-service balances in  
7 this rate case, DRA recommends that the Commission disallow all estimated costs  
8 associated with the BPS and the Del Oro main project. If AVR chooses to  
9 construct these projects before demonstrating the capacity need as discussed  
10 herein, DRA recommends that the Commission disallow all costs associated with  
11 these projects.

#### 12 **4) Office Expansion Project**

13 AVR requests to expand its main office building by approximately 2,200  
14 square feet; the expansion would be to the north portion of the existing  
15 building.<sup>102</sup> According to AVR, the expansion would allow it to address a  
16 shortage of office space and to adjust the locations of various departments, add  
17 additional meeting space, and make the building more functional.<sup>103</sup>

18 Although not specifically described in AVR's Revenue Requirement  
19 Report, the total cost of this project is \$702,026 and includes costs associated with  
20 preparing a master plan, construction (spread over two years), and office furniture  
21 and equipment for the added space. Table 7-G summarizes the various costs  
22 associated with AVR's office expansion project request.

---

<sup>101</sup> 29,582 GPM – 3,684 GPM – 4,662 GPM – 872 GPM – 2,422 GPM = 17,942 GPM  
(production capacities presented in Table 7-F).

<sup>102</sup> AVR Revenue Requirement Report, page 67.

<sup>103</sup> Id.

1  
2

**Table 7-G**  
**AVR's Estimates for the Office Expansion Project**

Line	Description	2011	2012	2013	Total
1	Master Plan	\$21,000	-	-	\$21,000
2	Construction	-	\$325,000	\$325,000	\$650,000
3	Furniture & Equipment	-	-	\$31,026	\$31,026
4	<b>Total Project Cost</b>	<b>\$21,000</b>	<b>\$325,000</b>	<b>\$356,026</b>	<b>\$702,026</b>

Source:

Line 1. From AVR's Revenue Requirement Report Workpapers, page 6-30r.

Line 2. From AVR's Revenue Requirement Report Workpapers, page 6-23r & 6-28r.

Line 3. From AVR's Revenue Requirement Report Workpapers, page 6-28r,  
embedded in 2013 office furniture budget of \$47,984.

3

4 DRA has reviewed AVR's proposal and information provided in response  
5 to DRA's data requests. DRA finds that AVR has not adequately supported the  
6 need for the project and the cost estimates for the project. Specifically, AVR has  
7 not clearly delineated how it arrived at the additional office space needed and its  
8 proposal is based on design and cost information that is outdated and possibly  
9 overstated.

10 Inadequate Delineation and Support of Need.

11 In support of its request, AVR stated that it needs to meet the 100 square  
12 feet of office/business area per employee.<sup>104</sup> AVR calculates its existing usable  
13 square footage of all of its offices to be 2,987 square feet excluding hallways,  
14 restrooms, meeting space, and reserve room, and plans to add 2,200 square feet of  
15 building space.<sup>105</sup> DRA asked AVR to expand and support its determination of its  
16 total office space requirement and the additional space needed.<sup>106</sup> DRA was  
17 particularly interested in the support for the 100 square feet per employee

<sup>104</sup> AVR's Revenue Requirement Report, page 67.

<sup>105</sup> Id.

<sup>106</sup> DRA's data request PPM-5, Item 8.

1 standard, as well as how AVR uses that standard and its employee count to arrive  
2 at the amount of additional space needed.

3 In its response, on March 28, 2011, AVR provided a three-page excerpt  
4 from the 2007 California Building Code with no accompanying explanation.<sup>107</sup>  
5 DRA then requested additional explanation regarding the applicability of the 2007  
6 California Building Code to AVR's space requirement calculations.<sup>108</sup> On April  
7 18, 2011, AVR provided DRA with the 2010 version of the California Building  
8 Code also without an explanation on how AVR arrived at the requested additional  
9 square footage. AVR has failed to meet the burden of proof in justifying the need  
10 for this project.

11 Outdated and Possibly Changing Design.

12 In response to DRA's request for information regarding the design of the  
13 proposed addition, AVR provided what it referred to as a preliminary plan dated  
14 November 4, 2007.<sup>109</sup> Based on this draft "Apple Valley Ranchos Water Co.

---

<sup>107</sup> AVR's response to DRA's data request PPM-5, Item 8i.

<sup>108</sup> Excerpt of email communications from Pat Ma of DRA to Ed Jackson of Park/AVR on April 4/8/2011, 11:37AM (email on file with author):

*1. Re. Questions PPM-5.8.i and ii. AVR provided a copy of the 2007 California Building Code but did not explain how it applies to AVR. Specifically I'm looking for an explanation of (1) how AVR arrives at the 100 sq/ft of office/business area per employee and (2) how the space requirement for AVR field employees is considered (i.e., how many employees does AVR use to arrive at its total office space needs.) Basically, while the description of general need for office expansion is useful, it did not completely address my questions. The information I'm looking for is a quantitative comparison between total existing office/business area and total required office/business area which as AVR stated is a function of the 100 sq ft per employee requirement.*

*1a. As noted above, the AVR included the 2007 California Building Code excerpt. Please confirm this is the latest applicable version of the Code that AVR must comply to. If not, please provide the latest applicable version of the Code.*

<sup>109</sup> AVR's response to DRA's data request PPM-5, Item 7.

1 *Office Additions*” engineering drawing, DRA calculates a space addition of  
2 approximately 2,380 square feet to the existing main office building.

3 During DRA’s tour of the AVR main office on February 8, 2011, DRA  
4 staff asked for additional details about the expansion plan. AVR staff responded  
5 that there was a plan, but did not produce it. AVR staff indicated that the  
6 company was still considering options relative to the final design. DRA asserts  
7 that it is unreasonable for AVR to ask the Commission to approve a \$702,000  
8 capital investment based on a 2007 preliminary plan that is likely to undergo  
9 substantial changes before its scheduled construction in 2012-2013.

10 Outdated Cost Estimates.

11 In response to DRA’s request for supporting documentation and  
12 calculations for the project’s construction cost estimate of \$650,000, AVR  
13 provided the following:

14 **Table 7-H**  
15 **AVR’s Estimates for the Office Expansion Project**

Line	Description	Cost
1	Office Construction (2,300 sq. ft. at \$242/sq. ft)	\$556,600
2	Site Work	\$10,000
3	Permit	\$5,500
4	Design	\$30,000
5	Contingency (4%)	\$24,084
6	Administrative Burden	\$25,047
7	<b>Total Construction Cost</b>	<b>\$651,231</b>

16 *Source: AVR's response to DRA's data request PPM-5, Item 7.*

17 DRA questions the validity and accuracy of the above cost estimate for  
18 forecasting and ratemaking purposes for several reasons. One, DRA finds  
19 discrepancies in the amount of square footage in AVR’s estimates and supporting  
20 documents. In its Revenue Requirement Report, AVR states that it plans to add  
21 2,200 square feet of building space. The above cost estimate, however, reflects an  
22 addition of 2,300 square feet. Yet, the preliminary plan shows a 2,380 square foot

1 addition. These discrepancies cause concern about how much space AVR really  
2 needs.

3 Two, AVR's construction cost estimates are outdated. AVR's description  
4 of how it arrived at the office construction cost of \$556,600 (Line 1 of Table 7-H  
5 above) is as follows:

6 *"This cost estimate is primarily based on a verbal estimate from a local*  
7 *building contractor (Conco Construction) of \$200 per square foot. Since*  
8 *this estimate was obtained in 2006 cost the cost was escalated based on*  
9 *historic construction cost indexes."*<sup>110</sup> [Emphasis added.]

10 If AVR "*feels strongly enough about the need for more building space to*  
11 *consider this a high enough priority to be included in the planned capital*  
12 *expenditures,"*<sup>111</sup> it would be reasonable to expect that AVR would have invested  
13 some time and effort into acquiring a more updated cost estimate. Given the  
14 general slow down in construction since then,<sup>112</sup> it is simply imprudent for AVR  
15 to not seek new and additional construction cost estimates from more than one  
16 local building contractors. For the same reason, it is unreasonable for AVR to  
17 apply a 3.42% annual escalation factor to the 2006 estimate without consideration  
18 of available local construction resources.

19 Three, it is puzzling that while AVR relies on an October 2007 preliminary  
20 plan, it chooses to use a cost estimate obtained in 2006.

21 Four, assuming additional space is needed, AVR should at least consider  
22 leasing office space as an alternative to expanding its office building.

---

<sup>110</sup> AVR's response to DRA's data request PPM-5, Item 7.

<sup>111</sup> AVR's response to DRA's data request PPM-5, Item 8.

<sup>112</sup> Many empty storefronts and abandoned housing developments were evident during DRA's tour of AVR's service area.

1 For all of the above reasons, DRA asserts that AVR has not adequately  
2 demonstrated the need for this office expansion project or provided the  
3 Commission with a well-defined plan and a valid cost estimate. Therefore, DRA  
4 recommends that Commission deny AVR’s request for this office expansion  
5 project, except for AVR-requested \$21,000 for the site master plan.

6 DRA also recommends that AVR, if it chooses to include a request for an  
7 office expansion project in its next GRC, provide the Commission with more  
8 detailed design, verifiable justification, and up-to-date cost information. DRA’s  
9 2011 plant estimate includes \$21,000 for the preparation of a site master plan that  
10 would provide a comprehensive assessment of its existing buildings and office  
11 space requirements. The Commission should also require AVR to demonstrate  
12 that the office expansion project would cost less than leasing office space.

13 **5) Automated Meter Reading (“AMR”) Meter**  
14 **Replacement Project**

15 AVR proposes to continue the installation of its Automated Meter Reading  
16 system on a ten-year target cycle.<sup>113</sup> AVR began installing AMRs in 2005 and  
17 plans to convert 80% of its system to AMRs by 2012.<sup>114</sup>

18 DRA requested and reviewed AVR’s recorded number of AMR  
19 installations since 2005.<sup>115</sup> DRA agrees with AVR’s estimated number of  
20 installations and cost estimates for larger-sized meters for 2011 through 2013.  
21 DRA also agrees with AVR’s estimated number of installations for its smaller  
22 (¾”-1”) meter installations for 2011 through 2013. DRA does not, however, agree  
23 with AVR’s unit cost estimates for smaller meters for the reasons stated below.

---

<sup>113</sup> AVR Revenue Requirement Report, page 61.

<sup>114</sup> Id.

<sup>115</sup> AVR’s response to DRA’s data request PPM-3, Item 2.

1           AMR Unit Cost for Smaller ¾-1” Meters.

2           AVR’s unit cost for smaller ¾-1” meters is based on the budgeted cost of  
3 \$200 for 2010.<sup>116</sup> AVR then applies its 3.42% annual escalation rate to estimate  
4 the 2011, 2012 and 2013 unit costs, which are as follows:<sup>117</sup>

	<u>AVR’s AMR</u> <u>Unit Cost Estimate</u>
5           2010, base year estimate	\$200.00
6           2011, escalated estimate	\$206.84
7           2012, escalated estimate	\$214.92
8           2013, escalated estimate	\$221.23

9           DRA uses the same methodology in developing its AMR unit cost  
10 estimates, but, instead of using AVR’s budgeted 2010 unit cost of \$200, DRA uses  
11 the recorded 2010 unit cost of \$180.74 provided to DRA by AVR in its data  
12 response.<sup>118</sup>

13           As part of the same response to DRA’s inquiry, AVR provided unit cost  
14 quotes dated 1/1/2011 from B.E.S.T Meter Company, Inc (“B.E.S.T.”) for various  
15 meter sizes and meter types.<sup>119</sup> AVR applied the 2011 meter price quotes (for  
16 different meter sizes and types) to the corresponding recorded number of meter  
17 installations in 2010 and arrived at a 2011 weighted unit cost estimate of  
18 approximately \$194 (compared to its original unit cost estimate of \$200). The  
19 price quotes provided by AVR are not supported by any other quotes for  
20 comparison purposes. Additionally, DRA called B.E.S.T but was unable to  
21 confirm the accuracy of the price information AVR provided.  
22  
23

---

<sup>116</sup> AVR’s response to DRA’s data request PPM-3, Item 1.

<sup>117</sup> AVR’s Revenue Requirement Report Workpapers, Volume 2 of 2, Section 6.

<sup>118</sup> AVR’s March 11, 2011 revised response to DRA’s data request PPM-3, Item 1.

<sup>119</sup> AVR’s response to DRA’s data request PPM-3, Item 1.

1 DRA recommends using the 2010 recorded, weighted average unit cost of  
 2 \$180.74 because it reflects both the most recent actual costs incurred by AVR and  
 3 the latest mix of (various sized) installed meters. Doing so results in a more  
 4 accurate estimate of unit costs for 2011-2013. Using the recorded 2010 unit cost  
 5 and DRA's updated escalation rate produces the following AMR unit costs, which  
 6 are approximately 9.7% less than AVR's estimates.

	<u>DRA's AMR</u> <u>Unit Cost Estimate</u>
7 2010, base year estimate	\$180.74
8 2011, escalated estimate	\$186.55
9 2012, escalated estimate	\$192.54
10 2013, escalated estimate	\$198.72

13 Table 7-I below summarizes AVR's and DRA's cost estimates for AMR  
 14 meter installations. DRA recommends that Commission adopt DRA's 2011-2013  
 15 AMR cost estimates as reasonable.

16 **Table 7-I**  
 17 **AMR Meter Cost Estimates**

Ln.	Description	Quantity	AVR Unit Cost	AVR Total Cost	DRA Unit Cost	DRA Total Cost	Difference
	<u>2011</u>						
1	3/4-1" AMRs, 10-yr replacement program	1,800	\$206.84	\$372,314	\$186.55	\$335,784	-\$36,530
2	3/4-1" AMRs, damage/downsizing replace.	300	\$206.84	\$62,052	\$186.55	\$55,964	-\$6,088
3	3" meter, replacement	3	\$5,000.00	<u>\$15,000</u>	\$5,000.00	<u>\$15,000</u>	<u>\$0</u>
4	<b>2011 AMR Total:</b>			<b>\$449,366</b>		<b>\$406,747</b>	<b>-\$42,619</b>
	<u>2012</u>						
5	3/4-1" AMRs, 10-yr replacement program	1,800	\$213.92	\$385,049	\$192.54	\$346,571	-\$38,478
6	3/4-1" AMRs, damage/downsizing replace.	300	\$213.92	\$64,175	\$192.54	\$57,762	-\$6,413
7	3" meter, replacement	4	\$12,500.00	\$50,000	\$12,500.00	\$50,000	\$0
8	<b>2012 AMR Total:</b>			<b>\$499,224</b>		<b>\$454,333</b>	<b>-\$44,891</b>
	<u>2013</u>						
9	3/4-1" AMRs, 10-yr replacement program	1,800	\$221.23	\$398,219	\$198.72	\$357,705	-\$40,515
10	3/4-1" AMRs, damage/downsizing replace.	300	\$221.23	<u>\$66,370</u>	\$198.72	<u>\$59,617</u>	<u>-\$6,752</u>
11	<b>2013 AMR total:</b>			<b>\$464,589</b>		<b>\$417,322</b>	<b>-\$47,267</b>
12	<b>2011-2013 AMR Total:</b>			<b>\$1,413,179</b>		<b>\$1,278,402</b>	<b>-\$134,777</b>

19 **6) Vehicle Purchases**

20 AVR's vehicle purchase requests include four new trucks in 2011, three  
 21 new trucks in 2012, and three new trucks and a new backhoe in 2013. AVR

1 references its 10-year and/or 120,000 mile replacement criteria in its Revenue  
 2 Requirement Report (page 64).

3 Table 7-J below summarizes the types and costs of the requested vehicle  
 4 purchases, based on information from AVR's Revenue Requirement Report and  
 5 Workpapers, and AVR's response to DRA's data request PPM-5.

6 **Table 7-J**  
 7 **AVR's Vehicle Purchase Request**

Line	Year	Vehicle Purchase Request	Vehicle ID # & type to be replaced per Rev Req Report	AVR Request
1	2011	Ranger	04-1 Ranger	\$25,200
2		Ranger	04-2 Ranger	\$25,200
3		Ranger	(Addition)	\$25,200
4		Explorer	(Addition)	\$31,500
5			<b>2011 TOTAL:</b>	<b>\$107,100</b>
6	2012	Ranger	06-2 Ranger	\$26,062
7		Ranger	03-1 Ranger	\$26,062
8		Ranger	03-2 Ranger	\$26,062
9			<b>2012 TOTAL:</b>	<b>\$78,186</b>
10	2013	Util truck	04-5 F350 Supercab	\$33,692
11		Ranger	96-1 Ranger	\$26,953
12		Backhoe	HOE1	\$89,845
13			<b>2013 TOTAL:</b>	<b>\$150,490</b>
14			<b>3-YEAR TOTAL:</b>	<b>\$335,776</b>

8  
 9 DRA addresses AVR's requested vehicle purchases by year in the  
 10 following subsections:

11 2011 Vehicle Purchases

12 For 2011, AVR requests replacing two existing Rangers: Unit 04-1 and  
 13 Unit 04-2. DRA calculated the projected mileage on these two vehicles using  
 14 actual year-end 2010 mileage data.<sup>120</sup> DRA agrees that the proposed

<sup>120</sup> Based on information from AVR's Revenue Requirement Report Workpapers, page 6-43r  
 (continued on next page)

1 replacements meet AVR's vehicle replacement criteria and are reasonable.  
2 Therefore, DRA recommends approval of AVR's request of \$25,200 per  
3 replacement Ranger.

4 AVR also requests purchasing two new vehicles as additions to its existing  
5 fleet: (1) one new Explorer SUV to be used by AVR's "*new Assistant General*  
6 *Manager and as a pool car*", and (2) one new Ranger to be used as an extra truck  
7 for "*sample taking or as a floater truck to facilitate maintenance of the fleet.*"<sup>121</sup>

#### 8 New Explorer in 2011

9 It should be noted that the "new" Assistant General Manager ("AGM")  
10 referred to by AVR is not related to a new position, but to an employee who joined  
11 AVR in late 2010 to replace an employee terminated from that position. To  
12 understand why the AGM position now needs an assigned vehicle, DRA asked  
13 AVR the following questions: (1) why the "new" AGM cannot use one of the pool  
14 vehicles, (2) what is the estimated number of miles per month the AGM was  
15 required to travel since November 2010, (3) what vehicle did he use for these  
16 travels, and (4) why does the AGM require a new \$30,000 Explorer instead of a  
17 lower cost Ranger.

18 AVR responded generally to DRA's questions, but did not provide the  
19 specific details requested by DRA.<sup>122</sup> AVR described how it plans to use the new  
20 Explorer, but did not provide specific supporting data in response to items 2 and 3  
21 above. AVR also did not explain the changes in the position's job duties that  
22 necessitate the provision of a company vehicle, or how the AGM was not able to

---

(continued from previous page)  
and response to DRA's data request PPM-04, Attachment PPM-4, k-a, b Vehicle Worksheet.

<sup>121</sup> AVR Revenue Requirement Report, pages 64-65.

<sup>122</sup> AVR's response to DRA's data request PPM-5.k.c.

1 perform his duties since he was hired in late 2010 because the lack of an assigned  
2 vehicle. DRA is not convinced that the AGM requires an assigned vehicle and,  
3 therefore, recommends it be disallowed by the Commission. This is an instance  
4 where AVR has a clear opportunity to find a way to better utilize its existing  
5 resources to avoid adding to its cost of service and should do so, especially under  
6 the current economic conditions.

7 New Ranger in 2011

8 DRA recommends allowing AVR to purchase one new Ranger. This adds  
9 one additional pool vehicle that would be available for the AGM, if needed.

10 2012 Vehicle Purchases

11 For 2012, AVR requests replacing three existing Rangers: Unit 06-2, Unit  
12 03-2, and Unit 03-1.<sup>123</sup> DRA accepts the need to replace Unit 03-2 and 03-1, but  
13 opposes replacement of Unit 06-2 in 2012. AVR projected that Unit 06-2 would  
14 be 6 years old and have a projected mileage of 149,472 in 2012.<sup>124</sup> DRA  
15 calculated the projected mileage on all three vehicles using actual year-end 2010  
16 mileage data and determined that Unit 06-2 is not expected to meet AVR's vehicle  
17 replacement criteria of 10 years or 120,000 miles in 2012.<sup>125</sup> Unit 06-2 added  
18 20,168 miles in 2010 and had a total of 72,585 miles at the end of 2010.  
19 Assuming the same rate of 20,168 miles per year, Unit 06-2 would only have  
20 112,921 miles by the end of 2012. Therefore, replacement in 2012 does not meet

---

<sup>123</sup> AVR's Revenue Requirement Report, page 65.

<sup>124</sup> Id.

<sup>125</sup> Based on information from AVR's Revenue Requirement Report Workpapers, page 6-43r and response to DRA's data request PPM-04, Attachment PPM-4, k-a, b Vehicle Worksheet.

1 AVR's own vehicle replacement criteria of 10 years or 120,000 miles.<sup>126</sup> DRA  
2 opposes replacement of Unit 06-2 in 2012, but recommends replacement in 2013.

3 2013 Vehicle Purchases

4 For 2013, AVR requests replacing an existing Ranger Unit 96-1 and an  
5 existing utility truck Unit 04-5 (F350 Supercab).<sup>127</sup> DRA accepts the need to  
6 replace Unit 96-1, but opposes replacement of utility truck Unit 04-5. AVR  
7 projected that the Unit 04-5 would be 9 years old and have a projected mileage of  
8 203,076 in 2013.<sup>128</sup> DRA calculated the projected mileage on the vehicles using  
9 actual year-end 2010 mileage data and determined that Unit 04-5 is not expected  
10 to meet AVR's vehicle replacement criteria of 10 years or 120,000 miles in  
11 2013.<sup>129</sup> Unit 04-5 added 10,226 miles in 2010 and had a total of 82,911 miles as  
12 of the end of 2010. Assuming the same rate of 10,226 miles per year, Unit 04-5  
13 would only have 113,589 miles by the end of 2013. Therefore, replacement in  
14 2013 does not meet AVR's vehicle replacement criteria of 10 years or 120,000  
15 miles.<sup>130</sup> Hence, DRA opposes replacement of Unit 04-5 in 2013.

16 2013 Backhoe Replacement

17 AVR requests replacing a backhoe (Unit HOE1) in 2013 at an estimated  
18 cost of \$89,845. DRA agrees with the need to replace the backhoe, but estimates  
19 the cost at \$84,600. AVR developed its \$89,845 cost estimate based on an

---

<sup>126</sup> Based on information from AVR's Revenue Requirement Report Workpapers, page 6-43r and response to DRA's data request PPM-04, Attachment PPM-4, k-a, b Vehicle Worksheet.

<sup>127</sup> AVR's Revenue Requirement Report, page 65.

<sup>128</sup> Id.

<sup>129</sup> Based on information from AVR's Revenue Requirement Report Workpapers, page 6-43r and response to DRA's data request PPM-04, Attachment PPM-4, k-a, b Vehicle Worksheet.

<sup>130</sup> Based on information from AVR's Revenue Requirement Report Workpapers, page 6-43r and response to DRA's data request PPM-04, Attachment PPM-4, k-a, b Vehicle Worksheet.

1 estimated base cost of \$80,000 plus two years of escalation (at AVR's 3.42%  
2 annual escalation rate) and a 5% burden (overhead) factor. DRA requested  
3 support for the \$80,000 base cost estimate and received a vendor (Case D3  
4 Equipment) quote of \$75,608 for the backhoe.<sup>131</sup> DRA's estimate of \$84,600 is  
5 based on the quoted amount, escalated by DRA's updated escalation rate of 3.21%  
6 and the same 5% burden factor.

7 DRA recommends that the Commission authorize the purchase of the  
8 backhoe at a cost of \$84,600, which is \$5,245 less than requested by AVR.

9 2011-2013 Adjustments

10 In summary, for 2011 DRA recommends disallowing one of the four  
11 requested vehicle purchases – the Explorer, estimated at \$31,500. For 2012, DRA  
12 recommends disallowing one of the three requested vehicle purchases – a Ranger,  
13 estimated at \$26,062, to replace the existing Unit 06-2. For 2013, DRA  
14 recommends disallowing AVR's request to purchase one utility truck, estimated at  
15 \$33,692, to replace Unit 04-5. DRA also recommends an adjustment to AVR's  
16 request for the backhoe, from \$89,845 to \$84,600. In addition, consistent with  
17 DRA's analysis regarding Unit 06-2, DRA recommends that AVR be allowed to  
18 replace the Unit 06-2 with a new Ranger in 2013 (instead of 2012 as requested by  
19 AVR.) The cost estimate for this replacement Ranger escalated to 2013 is  
20 \$26,953.

21 Table 7-K below provides a summary of AVR's request and DRA's  
22 recommendation for vehicle purchases for 2011-2013. DRA recommends a total  
23 reduction of \$96,476 or 29% from AVR's total 3-year request.

---

<sup>131</sup> AVR's response to DRA's data request PPM-4, Attachment PPM-4, 1-a, Backhoe Quote.

1  
2

**Table 7-K**  
**AVR's and DRA's Vehicle Purchase Estimates**

Line	Year	Vehicle Purchase Request	Vehicle ID # & type to be replaced per Rev Req Report	AVR Request	DRA Recommendation	Difference
1	2011	Ranger	04-1 Ranger	\$25,200	\$25,200	\$0
2		Ranger	04-2 Ranger	\$25,200	\$25,200	\$0
3		Ranger	(Addition)	\$25,200	\$25,200	\$0
4		Explorer	(Addition)	\$31,500	\$0	-\$31,500
5	2012		<b>2011 TOTAL:</b>	<b>\$107,100</b>	<b>\$75,600</b>	<b>-\$31,500</b>
6		Ranger	06-2 Ranger	\$26,062		-\$26,062
7		Ranger	03-1 Ranger	\$26,062	\$26,062	\$0
8		Ranger	03-2 Ranger	\$26,062	\$26,062	\$0
9			<b>2012 TOTAL:</b>	<b>\$78,186</b>	<b>\$52,100</b>	<b>-\$26,086</b>
10	2013	Util truck	04-5 F350 Supercab	\$33,692	\$0	-\$33,692
11		Ranger	96-1 Ranger	\$26,953	\$26,953	\$0
12		Backhoe	HOE1	\$89,845	\$84,600	-\$5,245
13		Ranger	06-2 Ranger		\$26,953	\$26,953
14			<b>2013 TOTAL:</b>	<b>\$150,490</b>	<b>\$111,600</b>	<b>-\$38,890</b>
15	<b>3-YEAR TOTAL:</b>			<b>\$335,776</b>	<b>\$239,300</b>	<b>-\$96,476</b>

3  
4

**7) Vactor Trailer**

5  
6  
7  
8  
9  
10  
11

AVR requests to purchase a Vactor trailer in 2013 at an estimated cost of \$82,731. The request is not specifically described in AVR's Revenue Requirement Report, but was included as a line item in the workpapers. At DRA's request, AVR provided supporting information on the Vactor trailer.<sup>132</sup> AVR explained that the Vactor trailer will be used to facilitate its construction operations, but did not provide DRA with any calculations supporting the \$82,731 cost estimate.

12  
13  
14

DRA agrees with the need for the Vactor trailer, but estimates the cost at \$52,200. DRA requested support for AVR's estimate and received a vendor (United Rentals) quote of \$46,646 for the trailer.<sup>133</sup> DRA's estimate of \$52,200 is

<sup>132</sup> AVR's response to DRA's data request PPM-4.n.

<sup>133</sup> AVR's response to DRA's data request PPM-4, Attachment PPM-4, 1-a, Backhoe Quote.

1 based on the quoted amount, escalated by DRA’s updated annual escalation rate,  
2 plus 5% burden factor.

3 DRA recommends that the Commission authorize the purchase of the  
4 Vactor trailer at a lower cost estimate of \$52,200, which is \$30,531 less than  
5 requested by AVR.

6 **8) Well Site Improvement Budgets**

7 For well site improvements, AVR requests annual budgets of \$740,000 for  
8 2011, \$300,000 for 2012, and \$200,000 for 2013.<sup>134</sup> These budgets contain two  
9 components: one related to specific, planned projects such as the Mockingbird  
10 BPS and one intended to cover the cost of “as-needed” site improvements.

11 Planned project budgets.

12 Of the 2011 budget, \$640,000 is related to the Mockingbird BPS discussed  
13 in Section C.3 of this Chapter; DRA recommends that the BPS project be  
14 disallowed. For 2012, AVR requests \$100,000 for specific well site improvements  
15 at Well 18; DRA finds this request reasonable and recommends approval thereof.

16 “As-needed” well site improvement budgets.

17 Without including any explanation as to how it arrived at the proposed  
18 budget amounts, AVR requests the following budgets to cover as-needed well site  
19 improvements:

20	2011	\$100,000
21	2012	\$200,000
22	2013	\$200,000

23 For as-needed improvements, unless AVR can demonstrate significant  
24 increased needs in the next three years, DRA asserts it is reasonable to consider

---

<sup>134</sup> AVR Revenue Requirement Report, page 62.

1 past expenditure levels in determining future years' budgets. In response to  
 2 DRA's data request, AVR provided the annual recorded site improvements  
 3 expenditures that include "as-needed" improvements and exclude planned project-  
 4 specific improvements.<sup>135</sup> The annual average from 2006-2010 recorded costs,  
 5 normalized to 2011 dollars, is only \$47,668. DRA's estimates are based on this  
 6 five-year average, escalated to future years using its updated annual escalation  
 7 rate. Table 7-L provides a summary of recorded costs and AVR's and DRA's  
 8 estimates. DRA recommends that the Commission adopt DRA's estimates for as-  
 9 needed well site improvement budgets: \$47,700 for 2011, \$49,200 for 2012 and  
 10 \$50,800 for 2013.

11  
 12

**Table 7-L  
 As-Needed Well Site Improvement Budgets**

Ln.	Year	Recorded, normalized to 2011 \$	AVR	DRA	Difference
	Recorded				
1	2006	\$62,404			
2	2007	\$9,360			
3	2008	\$86,568			
4	2009	\$7,721			
5	2010	\$72,288			
6	<b>5-yr Average</b>	<b>\$47,668</b>			
	Estimated				
7	2011		\$100,000	\$47,700	-\$52,300
8	2012		\$200,000	\$49,200	-\$150,800
9	2013		\$200,000	\$50,800	-\$149,200
10	2011-2013 Total		\$500,000	\$147,700	-\$352,300

13

14 **9) Pump/Motor Replacement Budget**

15 AVR requests \$300,081, \$310,344 and \$320,957 for emergency pump and  
 16 motor replacement budgets for 2011, 2012 and 2013, respectively.<sup>136</sup> In its

<sup>135</sup> AVR's response to DRA's data request PPM-4, Item h.

<sup>136</sup> AVR Revenue Requirement Report, page 61,

1 Revenue Requirement Report, AVR did not provide any explanation as to how the  
2 budgets were developed. DRA’s examination of the AVR’s workpapers revealed  
3 that AVR’s estimates are essentially average recorded cost<sup>137</sup> multiplied by a 2.25  
4 gross-up factor.

5 DRA asked AVR to explain why it applied the 2.25 factor to gross-up the  
6 historical average expenditure. AVR states that the reason for the factor is “*to*  
7 *ensure there is enough money budgeted in this area if and when several*  
8 *pump/motors fail in any given year,*” but provides no empirical support for the  
9 2.25 factor.

10 DRA follows AVR’s approach in using historical average cost with three  
11 differences: (1) DRA includes 2010 actual cost data in its five-year average  
12 calculations (AVR uses 2005-2009 data), (2) DRA uses its updated annual  
13 escalation factor of 3.21%, and (3) DRA does not apply the 2.25 factor to the  
14 historical average. DRA agrees that, for as-needed replacements, there would be  
15 variation from year to year. However, AVR has not cited any evidence to explain  
16 and support why the need in all three forecast years would more than double the  
17 average expenditures in recent years. Given the variation in recorded expenditures  
18 in this account, it is just as likely that the actual need for a future year will be less  
19 than the historical level. DRA asserts, therefore, that AVR’s historical  
20 expenditures reasonably reflect 2011-2013 needs on average.

21 Table 7-M provides a summary of recorded costs and AVR’s and DRA’s  
22 estimates for pump/motor replacement budgets. DRA recommends that the  
23 Commission adopt DRA’s estimates for the pump and motor replacement budget  
24 of \$125,107 for 2011, \$129,127 for 2012 and \$133,275 for 2013.

---

<sup>137</sup> Average cost per project times average number of projects per year.

1  
2

**Table 7-M  
Pump and Motor Replacement Budgets**

Ln.	Year	Recorded, normalized to 2010 \$	AVR	DRA	Difference
1	<b>2006-2010 Avg. <u>Estimated</u></b>	<b>\$121,213</b>			
2	2011		\$300,081	\$125,107	-\$174,974
3	2012		\$310,344	\$129,127	-\$181,217
4	2013		\$320,957	\$133,275	-\$187,682
5	2011-2013 Total		\$931,382	\$387,509	-\$543,873

3

4 **10) Supervisory Control and Data Acquisition (“SCADA”) Budgets**

5 AVR requests SCADA budgets of \$324,000, \$189,000 and \$148,446 for  
6 2011, 2012, and 2013, respectively.<sup>138</sup> Generally, DRA agrees with the need for  
7 continued investment and upgrades in SCADA system. However, DRA finds  
8 AVR’s proposed budgets to be out of step with its actual spending in recent years.  
9 Recorded SCADA spending for the last three years ranges from only \$86,000 to  
10 \$126,000, averaging at \$104,000 per year or about one-third of AVR’s requested  
11 annual budgets.

12 Additionally, DRA notes that AVR’s proposed budgets changed drastically  
13 from what AVR provided in its response to DRA’s Supplemental Data Request  
14 (“SDR”) #71, submitted in this application.<sup>139</sup> Table 7-N provides a comparison  
15 of AVR’s budget estimates in SDR #71 and those in AVR’s application.

<sup>138</sup> AVR’s Revenue Requirement Report, page 63.

<sup>139</sup> AVR’s response to SDR’s Question 71.d.

1  
2

**Table 7-N  
AVR's SCADA Budgets**

Ln.	Year	Recorded, normalized to 2011 \$	AVR, Supplemental Data Response #71	AVR, Application
	Recorded			
1	2006	\$721,101		
2	2007	\$435,934		
3	2008	\$85,928		
4	2009	\$126,320		
5	2010	\$98,739	\$262,500	
6	<b>5-yr Average</b>	<b>\$186,700</b>		
	Estimated			
7	2011		\$157,500	\$324,000
8	2012		\$130,000	\$189,000
9	2013		\$136,188	\$148,446
10	2011-2013 Total		\$423,688	\$661,446

3

4 As shown on Line 7 of Table 7-N, AVR increased its proposed budget for  
5 SCADA in 2011 from \$157,500 to \$324,000, a 206% increase. AVR explained  
6 that the budget amounts provided in SDR #71 were preliminary budgets and that it  
7 has added additional budget dollars for 2011. These additions include specific  
8 projects totaling \$74,000 and “SCADA conversions and upgrades” totaling  
9 \$92,000.<sup>140</sup> With AVR only spending \$98,739 or only 38% of its \$262,500  
10 SCADA budget for 2010, DRA is concerned with the potential for overbudgeting  
11 and/or underspending by AVR.

12 DRA asserts that AVR’s actual cost for implementing SCADA conversions  
13 and upgrades is a good indication of its expected level of spending in 2011-2013,  
14 on average. Therefore, DRA develops AVR’s SCADA budgets based on its five-  
15 year (2006-2010) recorded spending levels, normalized and escalated. DRA  
16 recommends that the Commission adopt DRA’s SCADA budgets of \$186,700 for  
17 2011, \$192,700 for 2012 and \$198,900 for 2013. In the determining the

1 appropriate level of SCADA spending, the Commission should also consider  
 2 AVR's actual spending relative to its adopted budgets. AVR spent \$126,320 in  
 3 2009 and \$98,739 in 2010 (lines 4 and 5 of Tables 7-O below), amounts far below  
 4 the \$300,000 budgets adopted for 2009 and 2010 in AVR's last GRC Decision  
 5 08-09-026. Additionally, as shown in Table 7-O, DRA's three-year budget total  
 6 for 2011-2013 still exceeds AVR's own budget total included in SDR #71 by 36%.

7  
 8

**Table 7-O  
 SCADA Budgets**

Ln.	Year	Recorded, normalized to 2011 \$	AVR, Supplemental Data Response #71	AVR, Application	DRA	Difference
1	Recorded 2006	\$721,101				
2	2007	\$435,934				
3	2008	\$85,928				
4	2009	\$126,320				
5	2010	\$98,739	\$262,500			
6	<b>5-yr Average</b>	<b>\$186,700</b>				
	Estimated					
7	2011		\$157,500	\$324,000	\$186,700	-\$137,300
8	2012		\$130,000	\$189,000	\$192,700	\$3,700
9	2013		\$136,188	\$148,446	\$198,900	\$50,454
10	2011-2013 Total		\$423,688	\$661,446	\$578,300	-\$83,146

9

**11) Air and Vacuum Valve Replacement/Installations**

10

11 AVR requests annual budgets of \$40,800 for 2011, \$42,195 for 2012, and  
 12 \$43,648 for 2013 for replacing and installing air and vacuum valves.<sup>141</sup> The  
 13 annual budgets are calculated by multiplying the estimated unit cost times 12  
 14 replacement/installation units. AVR states that its historical data indicates that it

(continued from previous page)

<sup>140</sup> AVR's response to DRA's data request PPM-4, Item j.d.

<sup>141</sup> AVR Revenue Requirement Report, page 60.

1 has been replacing and/or installing new valves at a rate of 12 per year.<sup>142</sup> AVR's  
2 estimated unit costs are based on 2005-2009 recorded average, normalized and  
3 escalated.

4 In response to DRA's request, AVR provided recorded air and vacuum  
5 valve replacement/installations for 2005-2010, as follows.<sup>143</sup>

	<u>Year</u>	<u>Number of Replacement/Installations</u>
6		
7		
8	2005	12
9	2006	19
10	2007	8
11	2008	0
12	2009	3
13	2010	5

14 The higher level of activity in 2005 and 2006 reflects the expansion of  
15 AVR's system (i.e., new housing developments) in those years. Because that level  
16 of construction activity is not expected in the 2011-2013 due to the downturn in  
17 the economy and real estate market, DRA uses the most recent four-year average  
18 (2007-2010) to approximate the number of replacement/installations for 2011-  
19 2013. That average is four units per year. DRA develops the 2011-2013 budgets  
20 based on four units per year, AVR's unit cost (\$3,400 in 2011 dollars) and DRA's  
21 updated annual escalation rate.

22 Table 7-P below provides a summary of recorded data, AVR's requests,  
23 and DRA's recommendation for air and vacuum valve replacement/installations.  
24 DRA recommends that the Commission adopt DRA's estimates of \$13,600 for  
25 2011, \$14,037 for 2012 and \$14,488 for 2013, which reflect recent years' level of  
26 installation and replacement activity.

---

<sup>142</sup> Per AVR's response to DRA's data request PPM-4c.a., the reference to 14 per year in AVR's Revenue Requirement Report is an error and should be 12 per year.

<sup>143</sup> AVR's response to DRA's data request PPM-4, Attachment PPM-4, c-a 2005-2010 AirVacs.

1  
2

**Table 7-P  
SCADA Budgets**

Ln.	Year	Recorded	AVR	DRA	Difference
	<u>Recorded</u>				
1	Avg no. units/ year	4	12	4	
2	Unit cost	\$3,400	\$3,400	\$3,400	
	<u>Estimated</u>				
3	2011		\$40,800	\$13,600	-\$27,200
4	2012		\$42,195	\$14,037	-\$28,158
5	2013		\$43,638	\$14,488	-\$29,150
6	2011-2013 Total		\$126,633	\$42,125	-\$84,508

3

*\* Normalized to 2011 dollars.*

4  
5

**12) Valve Replacements, New Fire Hydrants and Service Line Replacements Budgets.**

6  
7  
8  
9

In this section, DRA presents its analysis and recommendations for three Transmission and Distribution plant accounts: (1) Valve Replacements, (2) New Fire Hydrants, and (3) Service Line Replacements. DRA's analysis applies to all three accounts.

10  
11  
12

AVR developed its annual budgets by multiplying its estimated number of installation/replacements per year by estimated unit cost. Its estimated unit cost is based on a five-year, 2005-2009, recorded average, normalized and escalated.

13  
14  
15  
16  
17  
18

DRA follows the same approach with two adjustments: (1) DRA adjusts AVR's estimated number of installation/replacements per year to reflect the average of actual number of installation/replacements per year from the most recent five years, 2006-2010,<sup>144</sup> and (2) DRA applies its updated annual escalation factor to arrive at its future years' budgets, using the same base year's unit cost proposed by AVR.

<sup>144</sup> 2010 data provided by AVR in its response to DRA's data request PPM-04.

1 DRA recommends that the Commission adopt DRA's budget estimates  
 2 which reflect recent year's installation/replacements activity levels in these three  
 3 plant accounts. The following tables provide a summary of recorded data, AVR's  
 4 requests, and DRA's recommendations for Valve Replacements, New Fire  
 5 Hydrants and Service Line Replacements.<sup>145</sup>

6  
7

**Table 7-Q  
Valve Replacements**

Ln.	Year	Recorded	AVR	DRA	Difference
	<u>Recorded</u>				
1	Avg no. units/ year	9	12	9	
2	5-yr avg unit cost*	\$2,065	\$2,213	\$2,065	
	<u>Estimated</u>				
3	2011		\$26,555	\$18,583	-\$7,972
4	2012		\$24,828	\$19,180	-\$5,648
5	2013		\$25,677	\$19,797	-\$5,880
6	2011-2013 Total		\$77,060	\$57,560	-\$19,500

8

\* Normalized to 2011 dollars.

9  
10

**Table 7-R  
New Hydrants**

Ln.	Year	Recorded	AVR	DRA	Difference
	<u>Recorded</u>				
1	Avg no. units/ year	1	4	1	
2	5-yr avg unit cost*	\$3,200	\$3,207	\$3,200	
	<u>Estimated</u>				
3	2011		\$12,827	\$3,200	-\$9,627
4	2012		\$13,266	\$3,303	-\$9,963
5	2013		\$13,719	\$3,409	-\$10,310
6	2011-2013 Total		\$39,812	\$9,913	-\$29,899

11  
12

\* Normalized to 2011 dollars.

<sup>145</sup> AVR's requests are presented in AVR's Revenue Requirement Report, pages 59 through 61.

1  
2

**Table 7-S  
Service Line Replacements**

Ln.	Year	Recorded	AVR	DRA	Difference
	<u>Recorded</u>				
1	Avg no. units/ year	111	140	111	
2	5-yr avg unit cost*	\$1,190	\$1,193	\$1,190	
	<u>Estimated</u>				
3	2011		\$166,982	\$132,127	-\$34,855
4	2012		\$172,694	\$136,372	-\$36,322
5	2013		\$178,601	\$140,753	-\$37,848
6	2011-2013 Total		\$518,277	\$409,251	-\$109,026

3

*\* Normalized to 2011 dollars.*

4

#### **D. WATER QUALITY**

5

In this Section, DRA addresses AVR’s water quality related issues.

6

Specifically, DRA presents its analysis and recommendations on issues raised by

7

AVR in Chapter X of its Revenue Requirement Report. DRA consulted with

8

engineers from the California Department of Public Health (“CDPH”) assigned to

9

oversee the AVR water system. DRA also reviewed the preliminary “Report on

10

Water Quality for Apple Valley [Rancho] Water Company in Response to its

11

Application 11-01-001 for a General Rate Case Increase” prepared by the Division

12

of Water and Audits.

13

AVR raised two water quality issues in its Revenue Requirement Report:

14

(1) preparation of a required report addressing any Public Health Goals (“PHGs”)

15

that have been exceeded; and (2) potential new regulation on hexavalent

16

chromium (“chromium-6”) and how it might affect AVR’s operations and costs.

17

#### PHG Reports

18

California Health and Safety Code Section 116470 (2) [b] requires water

19

utilities to prepare a report every three years about contaminants that exceed PHGs

20

in drinking water. PHGs are established by the California’s Office of

21

Environmental Health Hazard Assessment (“OEHHA”). They are levels of

1 contaminants in drinking water that would not be expected to pose a significant  
2 health risk to individuals consuming an average of two liters a day of that water  
3 over a 70-year lifetime.<sup>146</sup>

4 AVR states that, for the 2001, 2004 and 2007 reports, it contracted with an  
5 outside consulting engineering firm to perform a planning level cost of treatment  
6 study to determine the technology and costs for meeting PHGs.<sup>147</sup> For the 2010  
7 report, its engineering staff applied the engineering cost index to the 2007 cost  
8 estimate to avoid the consulting cost associated with this report. AVR proposes to  
9 spend an outside contract amount of \$30,000 for the 2013 PHG report; the cost of  
10 the last planning level study in 2007 was \$20,000. DRA finds AVR's proposal  
11 reasonable.

#### 12 Potential Chromium-6 Regulation

13 AVR raises the possibility of quarterly monitoring that may be required by  
14 the end of 2012 if the chromium-6 PHG is finalized in 2011 and the CDPH is able  
15 to set a Maximum Contaminant Level ("MCL") by the end of 2011. AVR also  
16 reports that, based on its limited existing monitoring data, chromium-6 has been  
17 found in as many as 20 of its wells.

18 DRA discussed this issue with the CDPH engineer assigned to the AVR  
19 system and reviewed information posted on the OEHHA website, but is not able to  
20 confirm the regulatory timeline assumed by AVR. Nevertheless, DRA does not  
21 object to AVR's plan to respond to the potential Chromium-6 regulation in this  
22 GRC cycle.

23

---

<sup>146</sup> [http://www.oehha.ca.gov/public\\_info/facts/chrom6facts.html](http://www.oehha.ca.gov/public_info/facts/chrom6facts.html)

<sup>147</sup> AVR Revenue Requirement Report, page 96.

1           **E. CONCLUSION**

2           AVR’s requested capital budgets are summarized in its Revenue  
3 Requirement Report Workpapers, Volume 2 of 2, Section 6-Plant, pages 6-13r,  
4 6-19r and 6-25Ar. Tables 7-T, 7-U and 7-V below provide a comparison between  
5 AVR’s requested and DRA’s recommended capital budgets. DRA recommends  
6 that the Commission adopt DRA’s recommended adjustments, capital budgets,  
7 and plant-in-service balances as presented herein.

1  
2

**Table 7-T  
Comparison of Capital Budgets for 2011**

2011 PLANT ADDITIONS	AVR	DRA	AVR exceeds DRA	
			Amount	%
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$ 2,476,186</b>	<b>\$ 1,711,740</b>	<b>\$ 764,447</b>	<b>44.7%</b>
T&D Tanks	120,000	120,000	-	0.0%
T&D Main Extensions	-	-	-	-
T&D Main Replacements	1,230,961	587,924	643,036	109.4%
T&D Emergency Main Replace.	373,565	372,814	751	0.2%
T&D Air Vacs	40,800	13,600	27,200	200.0%
T&D Valve Replacements	24,828	18,583	6,244	33.6%
T&D New Valves	6,783	6,770	14	0.2%
T&D Fire Hydrant Replacements	24,636	24,586	50	0.2%
T&D New Fire Hydrants	12,827	3,200	9,627	300.8%
T&D Service Line Replacements	166,982	132,127	34,855	26.4%
T&D New Services	25,438	25,387	51	0.2%
T&D Meter Purchases	449,366	406,747	42,619	10.5%
<b>PRODUCTION</b>	<b>1,444,081</b>	<b>439,507</b>	<b>1,004,574</b>	<b>228.6%</b>
Pump & Motor Replacements	300,081	125,107	174,974	139.9%
Site Improvements	740,000	47,700	692,300	1451.4%
Water Treatment	80,000	80,000	-	0.0%
SCADA/Security Monitoring	324,000	186,700	137,300	73.5%
<b>GENERAL PLANT</b>	<b>332,010</b>	<b>300,510</b>	<b>31,500</b>	<b>10.5%</b>
Communication Equipment	5,250	5,250	-	0.0%
Computer Equipment	96,810	96,810	-	0.0%
GIS Mapping	32,760	32,760	-	0.0%
Office/Structure Improvements	26,250	26,250	-	0.0%
Office Furniture & Equipment	15,855	15,855	-	0.0%
Security Equipment	6,300	6,300	-	0.0%
Safety Equipment/Materials	5,250	5,250	-	0.0%
Tools & Equipment	36,435	36,435	-	0.0%
Transportation	107,100	75,600	31,500	41.7%
Land Acquisition	-	-	-	0.0%
<b>COST OF REMOVAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>
<b>TOTAL 2011</b>	<b>\$ 4,252,277</b>	<b>\$ 2,451,757</b>	<b>1,800,520</b>	<b>73.4%</b>

3

1  
2

**Table 7-U  
Comparison of Capital Budgets for 2012**

2012 PLANT ADDITIONS	AVR	DRA	AVR exceeds DRA	
			Amount	%
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$ 2,720,975</b>	<b>\$ 1,945,535</b>	<b>\$ 775,440</b>	<b>39.9%</b>
T&D Tanks	15,000	15,000	-	0.0%
T&D Main Extensions	259,000	80,000	179,000	224%
T&D Main Replacements	1,247,130	778,315	468,815	60.2%
T&D Emergency Main Replace.	386,343	384,791	1,552	0.4%
T&D Air Vacs	42,195	14,037	28,158	200.6%
T&D Valve Replacements	25,677	19,180	6,497	33.9%
T&D New Valves	7,015	6,987	28	0.4%
T&D Fire Hydrant Replacements	25,479	25,376	102	0.4%
T&D New Fire Hydrants	13,266	3,303	9,963	301.6%
T&D Service Line Replacements	172,694	136,372	36,322	26.6%
T&D New Services	27,953	27,840	112	0.4%
T&D Meter Purchases	499,224	454,333	44,891	9.9%
<b>PRODUCTION</b>	<b>899,344</b>	<b>572,627</b>	<b>326,717</b>	<b>57.1%</b>
Pump & Motor Replacements	310,344	129,127	181,217	140.3%
Site Improvements	300,000	150,800	149,200	98.9%
Water Treatment	100,000	100,000	-	0.0%
SCADA/Security Monitoring	189,000	192,700	(3,700)	-1.9%
<b>GENERAL PLANT</b>	<b>730,839</b>	<b>348,837</b>	<b>382,002</b>	<b>109.5%</b>
Communication Equipment	5,430	5,419	11	0.2%
Computer Equipment	100,121	99,920	201	0.2%
GIS Mapping	33,880	33,812	68	0.2%
Office/Structure Improvements	325,000	-	325,000	100.0%
Office Furniture & Equipment	16,397	16,364	33	0.2%
Security Equipment	6,515	6,502	13	0.2%
Safety Equipment/Materials	5,430	5,419	11	0.2%
Tools & Equipment	159,881	129,301	30,580	23.7%
Transportation	78,186	52,100	26,086	50.1%
Land Acquisition	-	-	-	0.0%
<b>COST OF REMOVAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>
<b>TOTAL 2012</b>	<b>\$ 4,351,158</b>	<b>\$ 2,866,998</b>	<b>1,484,160</b>	<b>51.8%</b>

3

1  
2

**Table 7-V  
Comparison of Capital Budgets for 2013**

2013 PLANT ADDITIONS	AVR	DRA	AVR exceeds DRA	
			Amount	%
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$ 3,048,836</b>	<b>\$ 1,945,772</b>	<b>\$ 1,103,063</b>	<b>56.7%</b>
T&D Tanks	-	-	-	-
T&D Main Extensions	-	-	-	-
T&D Main Replacements	1,857,962	889,023	968,939	109.0%
T&D Emergency Main Replace.	399,556	397,153	2,403	0.6%
T&D Air Vacs	43,638	14,488	29,151	201.2%
T&D Valve Replacements	26,555	19,797	6,759	34.1%
T&D New Valves	7,255	7,212	44	0.6%
T&D Fire Hydrant Replacements	26,350	26,191	159	0.6%
T&D New Fire Hydrants	13,719	3,409	10,310	302.4%
T&D Service Line Replacements	178,601	140,753	37,848	26.9%
T&D New Services	30,609	30,425	184	0.6%
T&D Meter Purchases	464,589	417,322	47,267	11.3%
<b>PRODUCTION</b>	<b>749,403</b>	<b>462,975</b>	<b>286,429</b>	<b>61.9%</b>
Pump & Motor Replacements	320,957	133,275	187,683	140.8%
Site Improvements	200,000	50,800	149,200	293.7%
Water Treatment	80,000	80,000	-	0.0%
SCADA/Security Monitoring	148,446	198,900	(50,454)	-25.4%
<b>GENERAL PLANT</b>	<b>705,519</b>	<b>309,807</b>	<b>395,712</b>	<b>127.7%</b>
Communication Equipment	5,615	5,593	23	0.4%
Computer Equipment	103,545	103,130	415	0.4%
GIS Mapping	35,039	34,899	140	0.4%
Office/Structure Improvements	325,000	-	325,000	100.0%
Office Furniture & Equipment	47,984	16,890	31,094	184.1%
Security Equipment	6,738	6,711	27	0.4%
Safety Equipment/Materials	5,615	5,593	23	0.4%
Tools & Equipment	25,493	25,391	102	0.4%
Transportation	150,488	111,600	38,888	34.8%
Land Acquisition	-	-	-	0.0%
<b>COST OF REMOVAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>
<b>TOTAL 2013</b>	<b>\$ 4,503,758</b>	<b>\$ 2,718,554</b>	<b>1,785,204</b>	<b>65.7%</b>

3

TABLE 7-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## PLANT IN SERVICE

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	104,516.0	106,467.7	1,951.7	1.9%
Gross Additions	3,562.3	4,981.2	1,418.9	39.8%
Retirements	<u>(285.8)</u>	<u>(287.9)</u>	<u>(2.1)</u>	<u>0.7%</u>
Net Additions	3,276.5	4,693.3	1,416.8	43.2%
Plant in Service - EOY	107,792.5	111,161.0	3,368.5	3.1%
Weighting Factor	50.00%	50.00%		
1 Wtd. Avg. Plant in Service	106,154.3	108,814.3	2,660.1	2.5%

TABLE 7-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## PLANT IN SERVICE

## ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	107,792.5	111,161.0	3,368.5	3.1%
Gross Additions	3,878.6	5,598.8	1,720.2	44.3%
Retirements	<u>(294.4)</u>	<u>(296.5)</u>	<u>(2.1)</u>	<u>0.7%</u>
Net Additions	3,584.2	5,302.3	1718.1	47.9%
Plant in Service - EOY	111,376.7	116,463.2	5,086.5	4.6%
Weighting Factor	50.00%	50.00%		
1 Wtd. Avg. Plant in Service	109,584.6	113,812.1	4,227.5	3.9%

1                   **CHAPTER 8: DEPRECIATION RESERVE AND**  
2                   **DEPRECIATION EXPENSE**

3                   **A. INTRODUCTION**

4                   This chapter sets forth DRA’s analyses and recommendations  
5 regarding depreciation reserve and expense for AVR. Tables 8-1 and 8-2 at  
6 the end of the chapter provide DRA’s and AVR’s estimates for  
7 Depreciation Reserve and Depreciation Expense for Test Year 2012 and  
8 Escalation Year 2013.

9                   **B. SUMMARY OF RECOMMENDATIONS**

10                  DRA agrees with the methods used to calculate depreciation reserve  
11 and depreciation expense for Test Year 2012 and Escalation Year 2013.  
12 Differences between DRA and AVR are due to differences in AVR’s  
13 application estimates, AVR’s update, and DRA’s plant estimates. The  
14 update provided by AVR in February 2011 included actual 2010 End of  
15 Year (“EOY”) depreciation reserve balance which is 0.47% higher than the  
16 estimated 2010 EOY balance used in its application.

17                  **C. DISCUSSION**

18                  Proposed depreciation rates for this GRC are based on a new  
19 remaining life study performed by AVR. The proposed rates were  
20 calculated in accordance with a straight-line remaining life curve using  
21 plant and reserve balances as of 2009 beginning of year, consistent with  
22 Standard Practice U-4. Depreciation accruals for Test Year 2012 and  
23 Escalation Year 2013 are based on the proposed depreciation rates applied  
24 to the average respective estimated annual plant balances.

1 AVR proposed two significant changes in depreciation rates for  
2 Account 392 Transportation and Account 39830/60 Computer Equipment  
3 (desktops) as shown below.

4 **Table 8-A**  
5 **Apple Valley Ranchos Water Company**  
6 **Selected Plant Accounts and Composite Depreciation Rates**

	<b>Existing</b>	<b>Proposed</b>
Transportation	7.77%	14.83%
Computer Equipment (desktops)	7.63%	13.16%
Composite	2.81%	2.98%

7 DRA reviewed AVR's new remaining life study and discovered that  
8 the main reason for higher depreciation rates associated with transportation  
9 and computer equipment (desktops) is due to an increase in the gross plant  
10 numbers. As the gross plant numbers increase, the annual accrual also  
11 increases. Concurrently, the remaining life of these two accounts decreases  
12 and the combination of higher annual accrual and lower remaining life  
13 increase the depreciation rate. DRA also reviewed and agrees with AVR's  
14 proposed changes of net salvage percentage, which conforms to its recorded  
15 net salvage data. In the remaining life study, transportation and computer  
16 equipment (desktops) represent only 1.6 % of the total gross plant and the  
17 impact of AVR's proposed depreciation rates for transportation and  
18 computer equipment is minimal. Therefore, DRA agrees with AVR's  
19 proposed overall composite depreciation rate of 2.98%.



TABLE 8-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## DEPRECIATION RESERVE &amp; EXPENSE

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	25,931.4	25,869.7	(61.7)	-0.2%
Accruals				
Clearing Accounts	263.0	258.2	(4.8)	-1.8%
Depreciation Expense	2,613.5	2,730.9	117.4	4.5%
Contribution	137.0	134.9	(2.1)	-1.5%
Total Accruals	3,013.5	3,124.0	110.5	3.7%
Retirements	(297.2)	(301.9)	(4.7)	1.6%
Depreciation Reserve - EOY	28,647.7	28,691.9	44.2	0.2%
Weighting Factor	50.00%	50.00%		
Wtd. Avg. Depr. Reserve	27,289.6	27,280.8	(8.8)	0.0%
General Plant alloc to Irrigation	-5.3	-5.6	(0.2)	4.3%
Main Office Depreciation Exp	95.0	97.4	2.4	2.6%
Amortization	56.3	56.3	0.0	0.0%
1 Irrigation Depreciation	18.4	18.6	0.2	1.1%

TABLE 8-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## DEPRECIATION RESERVE &amp; EXPENSE

ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	28,647.7	28,691.9	44.2	0.2%
Accruals				
Clearing Accounts	276.4	274.4	(2.0)	-0.7%
Depreciation Expense	2,719.0	2,880.3	161.3	5.9%
Contribution	137.1	135.3	(1.8)	-1.3%
Total Accruals	3,132.5	3,289.9	157.4	5.0%
Retirements	(306.1)	(310.9)	(4.8)	1.6%
Depreciation Reserve - EOY	31,474.1	31,670.8	196.7	0.6%
Weighting Factor	50.00%	50.00%		
Wtd. Avg. Depr. Reserve	30,060.9	30,181.4	120.5	0.4%
General Plant alloc to Irrigation	-5.7	-6.0	(0.3)	5.5%
Main Office Depreciation Exp	98.8	102.9	4.1	4.2%
Amortization	56.3	56.3	0.0	0.0%
1 Irrigation Depreciation	18.8	19.1	0.3	1.6%

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

**CHAPTER 9: RATEBASE**

**A. INTRODUCTION**

This chapter sets forth DRA’s analysis and recommendations regarding ratebase. Tables 9-1 and 9-2 at the end of this chapter compare DRA’s and AVR’s estimates. Differences are due to different estimates of plant additions, depreciation reserve, working cash allowance, and use of 2010 recorded updates provided by AVR.

**B. SUMMARY OF RECOMMENDATIONS**

DRA recommends a weighted average ratebase for AVR as shown in Table 9-A below.

**Table 9-A  
Apple Valley Ranchos Water Company  
2012 and 2013 Weighted Average RateBase**

	DRA Wtg. Avg. Ratebase (\$000)	AVR Wtg. Avg. Ratebase (\$000)	AVR Exceeds DRA Amount By (\$000)	AVR Exceeds DRA Amount By %
2012	\$37,072.8	\$40,910.4	\$3,837.6	10.4%
2013	\$36,743.0	\$42,847.8	\$6,104.8	16.6%

Tables 9-1 and 9-2 at the end of this chapter provide a summary of DRA’s and AVR’s weighted average rate base.

**C. DISCUSSION**

**1) Materials and Supplies**

AVR’s estimated expense for materials and supplies (“M&S”) for Test Year 2012 is based on a percentage of the average number of customers in the Test Year. This percentage is based on a 5-year average calculated from the

1 relationship between M&S recorded amounts and average numbers of customers  
2 per year (2005 – 2009). DRA agrees with this methodology and estimates  
3 \$308,000 for Test Year 2012, and \$309,600 for Escalation Year 2013, compared  
4 to AVR’s estimates of \$310,800 for Test Year 2012 and \$312,000 for Escalation  
5 Year 2013. The differences are due to DRA’s calculations of different number of  
6 customers as discussed in Chapter 2 of this report.

7 **2) Working Cash Allowance**

8 AVR’s estimate of the working cash allowance is determined using the  
9 Detailed Basis set out in accordance with Standard Practice U-16. This method  
10 includes the Lead-Lag study, and the Operational Cash Requirement. DRA agrees  
11 with AVR’s methodology. The differences between DRA’s and AVR’s estimates,  
12 shown in Tables 9-1 and 9-2 below, result from different expense estimates, plant  
13 additions, and different revenue lag days. AVR uses 35.99 for revenue lag days.  
14 As discussed in Chapter 12, DRA recommends maintaining the bi- monthly billing  
15 and, therefore, DRA uses 50.84 for revenue lag days, which was used in AVR’s  
16 previous general rate case.

17 **3) Advances**

18 The difference in Advances is attributable to the differences in number of  
19 commercial customers.

20 **4) Deferred Income Taxes**

21 The difference in Deferred Income Taxes is attributable to the differences  
22 in plant estimates and the bonus depreciation. The Tax Relief Act signed by  
23 President Obama on December 17, 2010 provides for 100% bonus depreciation for  
24 certain property placed after September 8, 2010 and before January 1, 2012 and  
25 50% bonus depreciation for property placed into service thereafter and before  
26 January 1, 2013 and for property placed into service in 2013 where construction  
27 begins prior to January 1, 2013. DRA’s Deferred Income Taxes reflect the 100%

1 bonus depreciation in 2012 and 50% bonus depreciation in 2013 whereas AVR's  
2 Deferred Income Taxes do not reflect this bonus depreciation.

3 **5) Net-to-Gross Multiplier**

4 The net-to-gross multiplier represents the change in gross revenue required  
5 to produce a unit change in net revenue. DRA recommends that the net-to-gross  
6 multipliers shown in the table below be applied in developing the revenue  
7 requirement change calculation for the Test Year 2012. AVR and DRA used  
8 different methodology to calculate the net-to-gross multiplier. DRA subtracted the  
9 California Corporate Franchise Tax ("CCFT") and Domestic Production Activities  
10 ("DPA") before calculating the Federal Income Tax ("FIT") while AVR did not  
11 perform this part of calculation. DRA's methodology is consistent with the  
12 income tax calculation where CCFT and DPA are deducted to compute the taxable  
13 income for FIT. DRA's method is more appropriate and should be used.

14 **Table 9-B**  
15 **Apple Valley Ranchos Water Company**  
16 **Test Year 2012**  
17 **Net-to-Gross Multiplier**

<b>DRA</b>	<b>AVR</b>
1.602014	1.772159

TABLE 9-1

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2012

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	106,154.3	108,814.3	2,660.1	2.5%
less General Plant	(67.4)	(71.1)	(3.7)	5.4%
Work in Progress	0.0	0.0	0.0	0.0%
Materials & Supplies	308.0	310.8	2.8	0.9%
Working Cash - Lead-Lag	670.5	(36.2)	(706.7)	-105.4%
Working Cash Fixed Portion				
AVR	138.7	267.7	129.0	93.0%
Main Office	43.2	43.6	0.4	1.0%
Wtd. Avg. Depr. Res.	(27,289.6)	(27,280.8)	8.8	0.0%
Wtd. Avg. Depr. Res., GenPlant	33.8	33.2	(0.6)	-1.9%
Advances	(31,082.9)	(31,583.3)	(500.4)	1.6%
Contributions	(2,023.0)	(1,920.9)	102.1	-5.0%
Unamortized ITC	(61.4)	(61.4)	0.0	0.0%
Deferred Income Taxes	(10,305.6)	(8,204.9)	2,100.7	-20.4%
Method 5 Adjustment	1.4	1.4	0.0	0.0%
Main Office Allocation	559.5	600.1	40.6	7.2%
Average Rate Base	37,072.8	40,910.4	3,837.6	10.4%
Interest Calculation:				
Avg Rate Base	37,072.8	40,910.4	3,837.6	10.4%
x Weighted Cost of Debt	3.60%	3.60%	0.0	0%
Interest Expense	1,334.6	1,472.8	138.2	10.4%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	1,334.6	1,472.8	138.2	10.4%

1

TABLE 9-2

## APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

## WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2013

Item	DRA	AVR	AVR exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	109,584.6	113,812.1	4,227.5	3.9%
less General Plant	(71.2)	(77.4)	(6.2)	8.8%
Work in Progress	0.0	0.0	0.0	0.0%
Material & Supplies	309.6	312.0	2.4	0.8%
Working Cash - Lead-Lag	766.4	3.2	(763.2)	-99.6%
Working Cash Fixed Portion				
AVR	(55.1)	116.7	171.8	-311.8%
Main Office	35.4	35.8	0.4	1.0%
Wtd. Avg. Depr. Reserve	(30,060.9)	(30,181.4)	(120.5)	0.4%
Wtd. Avg. Depr. Res., IRR	38.9	38.4	(0.5)	-1.2%
Advances	(31,246.1)	(31,661.0)	(414.9)	1.3%
Contributions	(1,920.9)	(1,820.8)	100.1	-5.2%
Unamortized ITC	(56.6)	(56.6)	0.0	0.0%
Deferred Income Taxes	(11,062.6)	(8,272.1)	2,790.5	-25.2%
Method 5 Adjustment	0.995	0.995	0.0	0.0%
Main Office Allocation	486.3	599.0	112.7	23.2%
Average Rate Base	36,743.0	42,847.8	6,104.8	16.6%
Interest Calculation:				
Avg Rate Base	36,743.0	42,847.8	6,104.8	16.6%
x Weighted Cost of Debt	3.60%	3.60%	0.00%	0.0%
Interest Expense	1,322.7	1,542.5	219.8	16.6%
less Cap. Interest	0.0	0.0	0.0	0.0%
1 Net Interest Expense	1,322.7	1,542.5	219.8	16.6%

TABLE 9-3

APPLE VALLEY RANCHOS WATER COMPANY - DOMESTIC

NET-TO-GROSS MULTIPLIER

TEST YEAR 2012 & ESCALATION YEAR 2013

Item	DRA	AVR
1) Uncollectibles %	0.34000%	0.34000%
2) 1-Uncoll (100%-line 1)	99.66000%	99.66000%
3) Franchise tax rate	0.95000%	0.94000%
4) Local Franchise (line 3*line 2)	0.94677%	0.93680%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	1.28677%	1.27680%
8) 1-Subtotal (100%-line7)	98.71323%	98.72320%
9) CCFT (line 8 * 8.84%)	8.72625%	8.72713%
10) Domestic Production Activities	9.00000%	0.00000%
11) FIT (line 8 minus line 9 minus line 10 * 34%)	27.53557%	33.56589%
12) Total taxes paid (ln 7+ln 9+ln 11)	37.54859%	43.56982%
13) Net after taxes (1-line 12)	62.45141%	56.43018%
1 Net-to-Gross Multiplier (1/line 12) =	1.601245	1.772159

1                                   **CHAPTER 10: CUSTOMER SERVICE**

2                                   **A. INTRODUCTION**

3                                   DRA has reviewed Apple Valley Ranchos Water Company’s (“AVR”)  
4 filing, responses to DRA data requests, and data obtained from the Commission’s  
5 Consumer Affairs Branch regarding customer complaints.

6                                   **B. SUMMARY OF RECOMMENDATIONS**

7                                   DRA finds AVR’s customer service satisfactory and the customer service  
8 process reasonable.

9                                   **C. DISCUSSION**

10                                   **1) Customer Calls and Complaints**

11                                   The AVR’s customer service representatives (“CSR”) handle all customer  
12 service calls, inquiries, and complaints. According to AVR, when a customer calls  
13 with a high water bill inquiry the CSR reviews the previous water usage to  
14 determine how much higher the bill in question is compared to past usage. The  
15 CSR then asks the customer if they recall leaving a garden hose running during the  
16 billing period in question. The CSR also asks if the customer had any plumbing  
17 repairs recently that could account for the higher than average usage.<sup>148</sup>

18                                   If none of these occurred then a service order is generated to have the  
19 customer’s water meter re-read by the meter reading department. This re-read  
20 occurs the day after the customer has contacted AVR’s customer service office.  
21 AVR then calls the customer with the results of the re-read. If the re-read proves  
22 to be correct and the customer still thinks there is a problem, a meter reading  
23 supervisor is sent out to meet with the customer and perform a water audit. A data  
24 log from the Automated Meter Reading (“AMR”) device can also be reviewed

---

<sup>148</sup> AVR’s response to DRA data request ALC-01, Question 1.

1 with the customer as part of the water audit. The water audit can help determine  
2 the cause of the high water usage. The staff performing the audit may make  
3 suggestions to help the customer lower their water usage, such as adjusting their  
4 water sprinkler system to reduce over watering, or monitor their water usage and  
5 keep a daily log. This allows the customer to determine how much water is being  
6 used and when it is used.<sup>149</sup>

7 AVR may suggest that the customer check their property for water leaks.  
8 AVR may also instruct the customer how to read their water meter to check if the  
9 meter is registering water use when no water is being used on the property. This  
10 would indicate that something is leaking on the customer's property, and further  
11 investigation by the customer is needed, and any leaks repaired.<sup>150</sup>

12 The Commission's General Order ("GO") 103-A<sup>151</sup> has standardized  
13 reporting requirements so the Commission can monitor service quality and  
14 changes in utility customer service performance. With regards to AVR's ability to  
15 comply with GO 103, Appendix E for telephone performance standards, according  
16 to AVR, it is unable to provide statistics on the number and nature of customer  
17 calls, inquiries and complaints. AVR's current telephone system is not an  
18 automated call distribution system ("ACD") and it does not allow for call tracking  
19 of the type and time of incoming calls. AVR does plan to implement an ACD  
20 telephone system in the future,<sup>152</sup> then it will be able to comply with Appendix E  
21 of GO 103A regarding specific reporting standards for telephone calls.

---

<sup>149</sup> AVR's response to DRA's data request ALC-01, Question 1.

<sup>150</sup> AVR's response to DRA's data request ALC-01, Question 1.

<sup>151</sup> General Order 103-A, California Public Utilities Commission Rules Governing Water Service, including minimum standards for operation, maintenance, design and construction, Section VIII, Customer Service and Reporting Standards for Water and Wastewater Utilities.

<sup>152</sup> Ed Jackson's email reply of February 22, 2011, Question 1.

1 GO 103A, Appendix E has reporting requirements with regards to billing,  
2 meter reading and work completion. Beginning in 2010, AVR began manually  
3 tracking specific phone calls regarding billing and meter reading performance  
4 standards, such as, misapplied payments, scheduled appointments made and kept,  
5 misread meters, and bills skipped or not mailed within 7 days. AVR tracked the  
6 customer calls that generated service orders for meter re-reads related to high  
7 water bills and customer requests for water audits. In 2008, customer calls  
8 regarding high water bills generated 303 special read service orders and 132 water  
9 audits were performed. In 2009, customer calls generated 489 special read service  
10 orders and 183 water audits were performed. Customer calls in 2010 generated  
11 521 special read service orders and 247 water audits were performed.<sup>153</sup> AVR  
12 asserts that the increase in customer requests for meter re-reads and water audits is  
13 due to the initiation of tiered rates beginning in January 2009, and resulting higher  
14 customer water bills.<sup>154</sup> Tiered rates may be the cause for increased customer  
15 requests for meter re-reads and water audits due to higher water bills.

## 16 2) Informal Complaints

17 Customer complaints referred by the Commission's Consumer Affairs  
18 Branch to AVR in the past three years are low compared to number of customers.  
19 Out of 19,221 total customers there were no informal complaints filed in 2008. In  
20 2009, five informal complaints were filed out of 19,296 total customers (or  
21 0.03%), three were concerning high water usage and two were about service  
22 charges. Fourteen informal complaints were filed in 2010 out of 19,361 total  
23 customers (or 0.07%), seven were regarding rates and balancing account recovery  
24 surcharges, six were regarding high water bills, and one complaint was regarding

---

<sup>153</sup> AVR's response to DRA's data request ALC-01, Question 3.

<sup>154</sup> Ed Jackson's email reply of February 22, 2011, Question 3.

1 account information from a customer who was not the property owner.<sup>155</sup>  
2 According to AVR, the increase in complaints during the last two years can be  
3 attributed to the implementation of tiered rates beginning in January of 2009.  
4 Without call statistics DRA is unable to verify that tiered rates caused an increase  
5 in complaints. Hopefully, AVR will acquire an ACD type of telephone call system  
6 and have the ability to track calls and gather statistics on types of calls received.

7 At this time DRA finds that AVR is providing reasonable customer service,  
8 and its customer service processes and procedures are adequate.

### 9 **3) Water Quality Complaints**

10 In response to a Data Request concerning water quality complaints, AVR  
11 states:

12 “Customer water quality complaints phoned in are given to an  
13 employee familiar with such calls. Procedures from the AWWA  
14 publication “Handling Water Quality Complaints” are instituted.  
15 These consist of identifying the problem, isolating the area of  
16 concern, and physically responding if no solution to its cause can be  
17 determined, i.e., fire department activity in the area, leaks on the  
18 water main in the area, or flushing in the vicinity of the problem.  
19 This is done as quickly as possible to assuage any fears the customer  
20 may have. Customer contacts are followed by a phone call or letter  
21 making sure the problem was temporary and to provide sample  
22 water quality results as needed.”<sup>156</sup>

23 According to AVR, they handle the majority of water quality complaints by  
24 educating the customer as to what causes the problems, and assuring the customers  
25 that AVR has required system monitoring and water sampling regulated by the

---

<sup>155</sup> AVR’s Revenue Requirement Report, page 9, and response to DRA data request ALC-01, Question 11.

<sup>156</sup> AVR’s response to DRA’s data request ALC-01, Question 6.

1 California Department of Public Health.<sup>157</sup> In addition, AVR publishes a  
2 “Consumer Confidence Report and Annual Water Quality Report” which contains  
3 water quality information and is available on AVR’s web site.

4 AVR tracks service orders dealing with water quality complaints by  
5 category of the type of service order in its Customer Information System along  
6 with maintaining a written copy for three years.<sup>158</sup> Water quality complaint data  
7 for the last three years (2008, 2009 and 2010) is shown in Table 10-A below.

8 There are six categorizes for the different kinds of water quality complaints.

9 These categories are defined as follows:

- 10 • Taste or odor – water taste can be stronger than usual from chlorine,  
11 or the affects of chlorination may cause a chlorine odor, or a musty  
12 odor the customer is not accustomed to.
- 13 • Color – water not clear, or looks “rusty” or dirty.
- 14 • Turbidity – water can have trapped air causing a milky appearance,  
15 or sand in the water causing a cloudy appearance.
- 16 • Pressure - can be either too low or excessive.
- 17 • Illness – would be accompanied by a doctor’s report.
- 18 • Other – hardness, or a complaint not in a defined category.

---

<sup>157</sup> AVR’s response to DRA’s data request ALC-01, Question 7.

<sup>158</sup> AVR’s response to DRA’s data request ALC-01, Question 9.

1

Table 10-A – AVR Water Quality Customer Complaints<sup>159</sup>

Types of complaints	2008	2009	2010
Taste & Odor	12	11	11
Color	6	10	5
Turbidity	3	7	1
Pressure	0	0	0
Illness	0	0	1
Other	0	3	8
Total	21	31	26
Number of customers	19,221	19,296	19,361
Total as % of customers	0.11%	0.16%	0.13%

2           Based on the information above, DRA finds AVR’s water quality  
3 complaints are low compared to the number of customers. Thus, DRA finds this  
4 to be acceptable.

5           **D. CONCLUSION**

6           As a result of DRA’s review of customer calls, informal complaints and  
7 water quality complaints, DRA finds AVR’s customer service to be adequate.  
8 DRA recommends the Commission find AVR’s customer service to be  
9 satisfactory at this time. DRA advises AVR to continue its efforts to improve  
10 customer service through continued CSR training.

---

<sup>159</sup> AVR’s response to DRA’s data request ALC-01, Question 4.

1 **CHAPTER 11: GENERAL OFFICE**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analysis and recommendations for Park Water  
4 Company’s (“PWC”) General Office allocation factors, expenses, plant,  
5 depreciation reserve, and ratebase. PWC is headquartered in Downey, California,  
6 and provides utility service in two states, Montana and California. In Montana,  
7 Mountain Water Company is a wholly owned subsidiary of PWC. In California,  
8 water service is provided in and around the Town of Apple Valley in San  
9 Bernardino County by Apple Valley Ranchos (“AVR”), a wholly owned  
10 subsidiary of PWC. Water service is also provided in Los Angeles County by the  
11 Central Basin Division, an operating unit of PWC. PWC also has its non-utility  
12 affiliate Specialized Industrial Coating Company (SICC) and a unique customer,  
13 Jess Ranch Irrigation, to which AVR provides water service.<sup>160</sup>

14 PWC’s General Office provides engineering, financial, information  
15 technology, regulatory, water quality, and other management services to its  
16 Central Basin Division (“division”) and its subsidiaries. The costs of these  
17 services are either directly assigned or allocated to each division/subsidiary in  
18 accordance with the Commission’s 4-Factor method. Costs that cannot be  
19 specifically identified and directly charged to a division/subsidiary are also  
20 allocated using this 4-Factor method. DRA points out that any PWC General

---

<sup>160</sup> Prior to 1997, Jess Ranch Utilities (“JRU”) was a wholly owned subsidiary of PWC and provided water and sewer service to the Town of Apple Valley. In January 1997, PWC merged Jess Ranch Utilities with its subsidiary AVR. In 1998, PWC purchased the town of Apple Valley’s water system. In 1999, PWC sold AVR’s sewer division (part of JRU) to the Town of Apple Valley. These transactions resulted in sewer service being provided by the Town of Apple Valley to all residents of the Town and water service being provided by AVR to the customers within its service territory. General Office Test Year 2012, Chapter 1, p. 1.

1 Office allocations and expenses established in this proceeding will also apply to  
2 PWC's Central Basin Division's 2013 Test Year GRC.<sup>161</sup>

3 **B. SUMMARY OF RECOMMENDATIONS**

4 PWC's estimates total 2012 General Office expenses of \$7,911,597  
5 which exceeds DRA's \$6,811,740 estimate by \$1,099,857. The majority of this  
6 difference, \$1,067,799, which represents approximately 97.1% of the difference  
7 between the DRA and PWC estimate, is explained by examining the differences in  
8 three main categories: A&G Payroll, Employee Pensions & Benefits, and Outside  
9 Services. The remaining \$31,941 difference is primarily due to the effects of  
10 differing inflation factors used by PWC and DRA. These DRA General Office  
11 estimates yield TY-2012 AVR Domestic expenses of \$1,892,592, and AVR  
12 Irrigation expenses of \$15,001, both net of taxes and depreciation. DRA also  
13 estimated AVR's share of General Office Rate Base to be \$563,913 in 2012 and  
14 \$490,145 in 2013.<sup>162</sup>

15 **C. DISCUSSION**

16 **1) General Office-A&G Payroll**

17 PWC estimates TY-2012 GO A&G Payroll Expenses of \$4,382,874, while  
18 DRA estimates GO A&G Payroll Expenses of \$3,616,965. The difference of  
19 \$765,909 results from DRA's recommendations to disallow three new positions,  
20 disallow President/CEO and Assistant Secretary salaries, adjust co-CEO  
21 Schilling's salary downward, disallow the 2% merit increase, disallow bonuses,  
22 and use of different escalation factors.

---

<sup>161</sup> See A-18 of D.07-05-062 (Rate Case Plan)

<sup>162</sup> See Table 11-C

1 PWC has included both Co-CEO Schilling and existing President/CEO  
2 Wheeler's salaries in this GRC application. In response to a data request, DRA  
3 has learned that PWC plans to eliminate the existing President/CEO and Assistant  
4 Secretary positions following completion of the Carlyle Group's acquisition of  
5 PWC, which is pending before the Commission in A.11-01-019. <sup>163</sup> The plan is  
6 for current Co-CEO Schilling to become the new CEO/President after the  
7 acquisition.

8 For purposes of analyses, illustration, and consistency in DRA's RO tables,  
9 and to ensure that reductions in costs due to any Commission approved acquisition  
10 are included and coordinated with this GRC, DRA makes the assumption that  
11 PWC's application for acquisition by the Carlyle Group will be approved. This  
12 assumption in no way reflects any position DRA has taken regarding the  
13 acquisition.

14 DRA did not include the current President/CEO and Assistant Secretary  
15 salaries and associated benefits in its forecast of PWC's General Office and A&G  
16 payroll. DRA recommends that the current President/CEO's salary and the  
17 Assistant Secretary's salary be disallowed from this GRC for the reasons stated  
18 above, these positions will be eliminated upon acquisition.

---

<sup>163</sup> See AVR's response to Data Request KAB-002-Question 1

1 (a) **New President/CEO's Salary**

2 PWC is requesting authorization to pay new President/CEO Schilling a  
3 2012 year end salary of \$494,458. DRA recommends that the \$494,458 be  
4 adjusted downward to \$334,923 (a \$159,535 or 32.26% decrease). DRA asserts  
5 that PWC has not justified the high dollar amount it is requesting.

6 In response to a data request, PWC stated that Co-CEO Schilling was hired  
7 in 2009 at an annual salary of \$450,000, an amount that was negotiated between  
8 Mr. Schilling and President/CEO of PWC Wheeler. PWC described the \$450,000  
9 salary for Co-CEO Schilling as “the amount necessary to attract Mr. Schilling to  
10 take the position at Park.”<sup>164</sup> PWC then admitted that Mr. Schilling was the only  
11 candidate interviewed for the position of Co-CEO.<sup>165</sup>

12 DRA asserts that this agreement between President/CEO Wheeler and Mr.  
13 Schilling resulted in an above market salary for Co-CEO Schilling. Clearly,  
14 PWC's failure to interview more than one candidate is evidence that PWC did not  
15 fully consider market costs when hiring Mr. Schilling. Thus, DRA opposes the  
16 inclusion of the inflated portion of Mr. Schilling's salary, which DRA estimates at  
17 \$159,535, and recommends that it be disallowed.

18 PWC stated that it used the American Water Works Association  
19 (“AWWA”) Water Utility Compensation Survey 2010 when determining its pay  
20 rates, including executive salaries.<sup>166</sup> PWC, however, failed to discuss how that  
21 survey justifies CO-CEO Schilling's 2009 salary of \$450,000, or PWC's year end  
22 2012 estimate of \$494,458. DRA analyzed the AWWA 2010 Water Utility

---

<sup>164</sup> See AVR's response to Data Request KAB-003-Question 6

<sup>165</sup> See AVR's response to Data Request KAB-003-Question 5

<sup>166</sup> See AVR's response to Data Request KAB-003-Question 9

1 Compensation Survey, for the year 2010, and found that the “Top Executive”  
2 position in the “All Participants-California” section ranged on average from  
3 \$152,709 to \$202,916, with a midpoint of \$187,855. The highest average salary on  
4 the report for the Top Executive position was listed in the section entitled “All  
5 Water/Waste Water Participants” at \$327,696. In addition, DRA compared CEO  
6 salaries at two CPUC regulated Class A water utilities, Great Oaks Water Company  
7 (approximately half the size of PWC) and San Gabriel Water Company  
8 (approximately twice the size of PWC), as measured by the number of  
9 connections. This comparison revealed CEO salaries of \$299,255 for Great  
10 Oaks<sup>167</sup> and \$474,314 for San Gabriel.<sup>168</sup>

11 Upon considering both of the above and factoring in inflation, DRA  
12 determined that an ending 2012 salary of \$334,923 is more than reasonable for the  
13 new President/CEO. In fact, it is significantly above current President/CEO  
14 Wheeler’s 2011 salary included in rates of \$259,147.

15 **(b) Merit and COLA Increases**

16 PWC has included both a merit and COLA increase for year 2011 and  
17 2012. Consistent with DRA’s AVR payroll estimates and recommendations, DRA  
18 recommends disallowing this 2% Merit increase to current 2011 salaries, 2012 Test  
19 Year, and escalation year salaries as explained in Chapter 4 of DRA’s Report.<sup>169</sup>  
20 DRA agrees with the inclusion of the COLA increase but has adjusted the COLA  
21 figures to be consistent with DRA’s Energy Cost of Service Branch’s February  
22 2011 Escalation factors (see Chapter 3).

---

<sup>167</sup> See D.10-11-034

<sup>168</sup> DRA and San Gabriel Valley Water Company stipulated to the CEO salary of \$474,314 in a settlement submitted to the Commission in January 2011, and that settlement is pending before the Commission in A.10-07-019

<sup>169</sup> See DRA Report—Chapter 4

1 (c) **General Office Bonuses**

2 PWC has included bonuses of \$66,000, \$67,576, and \$69,189 for years  
3 2012, 2013, and 2014 respectively. Barring any decision specifically authorizing  
4 this PWC bonus program, DRA objects to ratepayers paying for what would  
5 amount to a non-Commission approved bonus program. DRA would not object to  
6 shareholders paying this bonus. Combined this recommended disallowance results  
7 in a three year total decrease of \$202,765.

8 (d) **New Positions**

9 DRA recommends disallowance of the three new positions that PWC  
10 requested in this GRC. These requested positions amount to PWC “wants” over  
11 “operational needs” and considering the current economic conditions and the AVR  
12 forecast of less than 1% growth, DRA recommends against the additions of the  
13 Network/Field Systems Support Specialist, the Information Security / Document  
14 Retention Specialist / and the Senior Tax Accountant positions. When DRA  
15 inquired as to the justification for these positions, PWC indicated in a data response  
16 that each position will help relieve other General Office staff, including  
17 management who are currently filling the need that PWC says will be alleviated by  
18 adding these positions. However, GO overtime expenses<sup>170</sup> in aggregate for year  
19 2010 were only \$10,807 indicating that while staff may be spending time  
20 supporting other projects, PWC’s total 2010 overtime costs do not justify any of  
21 these three requested positions. DRA further discusses each request as follows:

22 (i) DRA recommends disallowance of PWC’s request for a  
23 Network/Field Systems Support Specialist position. Since PWC has projected a  
24 2012 salary for this requested Network/Field Systems Support Specialist of

---

<sup>170</sup> See AVR’s response to Data Request KAB-006-Question 1

1 \$84,485 and PWC's 2010 overtime expenses for the Information Technology  
2 group as a whole was a mere \$6,487, DRA feels that the overtime costs do not  
3 justify adding this additional position. DRA suggests that any additional workload  
4 can be met by continuing to offer overtime as needed or reallocation of work  
5 assignments in the group as needed.

6 (ii) DRA recommends disallowance of PWC's request for an  
7 Information Security / Document Retention Specialist position. The Information  
8 Security / Document Retention Specialist position was described to DRA staff in  
9 February 24, 2011 field interview of PWC's Senior VP of Administration Mary  
10 Young as stemming from the proliferation of security as part of Mr. Wheeler's  
11 vision. DRA witnessed PWC's security surveillance and advanced technology  
12 operations at PWC and remote sites but continuing to grow security at such an  
13 aggressive pace, absent any security based issues, is hasty in a minimal customer  
14 growth environment and results in ever increasing ratepayer cost with little in the  
15 way of expected ratepayer benefits. PWC already has the ability to monitor well  
16 sites and other infrastructure with live video feeds and monitoring but DRA does  
17 not feel that PWC has met its burden of convincing DRA that the additional staff  
18 person is necessary.

19 (iii) DRA recommends disallowance of PWC's request for a  
20 Senior Tax Accountant. As part of the justification for this position PWC  
21 indicated in its General Office Report<sup>171</sup> that "*Several reasons exist to consider*  
22 *expanding the staff by one person. For example, in the auditors' management*  
23 *letter comments to the Board of Directors, one of their concerns is that they are*  
24 *auditing some of their own work, mainly the tax expense and deferred tax*  
25 *calculations, of which they currently determine the balance.*" DRA is not

---

<sup>171</sup> See AVR's General Office Report TY-2012, Chapter III- Pg. 7

1 persuaded by this argument as it appears that PWC has provided an argument for a  
2 position that they are not requesting, that of an independent Internal Auditor, not a  
3 Senior Tax Accountant.

4 **2) General Office Employee Pension and Benefits**

5 PWC estimates TY-2012 GO Pension & Benefits of \$1,263,710 while DRA  
6 estimates \$989,398. The main driver of this \$274,312 difference between the  
7 PWC and DRA estimates is due to differing assumptions in the Group Pension,  
8 Medical Insurance and the expected results from the decrease in employee count.  
9 Please refer to Chapter 4, Pension and Benefits Chapter, of this Report for a  
10 detailed discussion.

11 **3) General Office – Outside Services**

12 PWC estimates that 2012-TY Outside Services will total \$613,570 which is  
13 \$27,578 above DRA’s estimate of \$585,992. PWC deviated from using the  
14 historical 5-year average by adding an additional \$38,000 per year to the 5-year  
15 average for what is described in a spreadsheet comment as “Audit Cost for Benefit  
16 Plan”. AVR did not provide justification for this additional cost in PWC’s  
17 testimony nor in its General Office Report. DRA followed up with PWC in a data  
18 request regarding this deviation from the 5-year average and according to AVR’s  
19 April 20, 2011 data response PWC informed DRA that “*In 2008 and prior years,*  
20 *the audit fees associated with the benefit plans were paid for by the plans*  
21 *themselves. In 2009, the Company decided to have the audit fees associated with*  
22 *the benefit plans paid for out of expense and recorded in account 7200.14*  
23 *(Benefits Consulting)....”* <sup>172</sup> DRA is concerned that there may be some duplicate  
24 efforts for cost recovery embedded in the historical numbers for some of the  
25 Retirement / 401K / Employee Benefit Plan / and VEBA trust expenses. Further,

---

<sup>172</sup> See AVR’s response to Data Request KAB-10-Question 1

1 DRA believes that the cost savings associated with not including the audits costs  
 2 in the benefit plans should offset the costs of hiring an outside auditor, thus  
 3 making the \$38,000 per year unnecessary. To avoid the likelihood of AVR’s  
 4 double recovery of previous audit expenses embedded in historical costs, which  
 5 are the basis for AVR’s forecasts in this GRC, DRA recommends the use of the 5-  
 6 year average adjusted for historical inflation excluding this \$38,000 amount from  
 7 DRA’s forecast.

8 **TABLE 11-A: General Office Expenses**

<b>2012</b>	<b>DRA</b>	<b>PWC</b>	<b>\$ Difference</b>	<b>% Difference</b>
PAYROLL-CUSTOMERS	\$0	\$0	\$0	0.0%
PAYROLL-MAINTENANCE	\$39,052	\$39,052	\$0	0.0%
MAINTENANCE-OTHER	\$429,210	\$435,275	-\$6,065	-1.4%
PAYROLL-CLEARINGS	\$32,734	\$32,734	\$0	0.0%
DEPRECIATION-CLEARINGS	\$25,452	\$27,807	-\$2,355	-8.5%
CLEARINGS-OTHER	\$69,814	\$71,634	-\$1,820	-2.5%
A & G PAYROLL	\$3,616,965	\$4,382,874	-\$765,909	-17.5%
EMPLOYEE BENEFITS	\$989,398	\$1,263,710	-\$274,312	-21.7%
INSURANCE	\$94,888	\$94,902	-\$14	0.0%
UNINSURED PROPERTY DAMAGE	\$296	\$304	-\$8	-2.6%
REG. COMM. EXPENSE	\$29,319	\$29,347	-\$29	-0.1%
OUTSIDE SERVICES	\$585,992	\$613,570	-\$27,578	-4.5%
A & G - OTHER	\$353,496	\$347,089	\$6,408	1.8%
A & G TRANSFERRED CREDIT	(\$16,313)	(\$16,313)	\$0	0.0%
PROPERTY TAXES	\$22,472	\$22,472	\$0	0.0%
PAYROLL TAXES	\$225,310	\$248,429	-\$23,119	-9.3%
DEPRECIATION	\$313,654	\$318,710	-\$5,057	-1.6%
<b>Total Expenses 2012</b>	<b>\$6,811,740</b>	<b>\$7,911,597</b>	<b>-\$1,099,857</b>	<b>-13.90%</b>

9 **4) Allocations and 4-Factor Methodology**

10 The Commission’s 4-Factor procedure<sup>173</sup> is used to allocate the General  
 11 Office expenses and rate base to each of PWC divisions and subsidiaries. The  
 12 four factors (or categories) that ultimately determine the 4-Factor percentages are  
 13 the following: (1) operation and maintenance expenses, (2) plant in service, (3)

<sup>173</sup> July 26, 1956 Procedure entitled “Allocation of Administrative and General Expenses and Common Utility Plant”

1 direct payroll, and (4) number of customers. The 4-Factor allocation percentages  
2 are then determined by dividing the totals for each division or subsidiary by the  
3 total of all divisions and subsidiaries. These percentages are subsequently applied  
4 to each division or subsidiary as its allocation of the General Office expenses. The  
5 allocation factors that PWC has presented for this rate case are 37.94% for Central  
6 Basin, 30.56% for AVR, 31.15% for Missoula, 0.23% for Jess Ranch Irrigation,  
7 and a 0.14% allocation to SICC<sup>174</sup>. DRA sent a data request asking PWC to  
8 identify the changes to the 4-Factor variables based on recorded 2010 data. This  
9 update using recorded 2010 data resulted in updated 4-Factor percentages of  
10 38.62% for Central Basin, 30.28% for AVR, 30.72% for Missoula, and 0.24% for  
11 Jess Ranch Irrigation. The 0.14% allocation to SICC remained unchanged. DRA  
12 reviewed, accepted, and utilized these updated 4-Factor percentages in the DRA  
13 General Office estimates. The calculations for the original PWC percentages are  
14 included in Table 1-M of the PWC's General Office Report. The updated 4-Factor  
15 calculations and percentages are included in response to DRA's data request<sup>175</sup>.

16 PWC estimated total General Office expenses to be \$7,321,986, not  
17 including taxes and depreciation. When multiplied by the AVR allocation factor  
18 of 30.56%, the allocated total is \$2,237,599 for Test Year 2012. DRA estimates  
19 total General Office expenses to be \$6,250,304, not including taxes and  
20 depreciation. Using the updated AVR allocation factor of 30.28%, results in an  
21 allocation of General Office expenses to AVR of \$1,892,592 as shown in Chapter  
22 3, Table 3-2.

---

<sup>174</sup> The SICC allocation factor of 0.14% was determined through PUC Settlement. DRA has found this factor to be reasonable in this rate case.

<sup>175</sup> See AVR's response to Data Request KAB-11

1                   **5) Services Performed by Affiliate SICC**

2                   As part of this General Rate Case analysis, DRA staff learned that affiliate  
3 SICC adds a “Net Profit Factor” additive to all of its costs. These costs, both  
4 capitalized and expensed, are ultimately passed on to ratepayers. In response to a  
5 data request, PWC informed DRA that SICC adds a “net profit factor” to all  
6 services it performs on behalf of PWC and affiliated companies as follows:

7                   *“The fees charged by SICC to AVR are based on the cost of providing the service  
8 including a 10.15% net profit factor. The costs of service include the expenses  
9 associated with SICC’s labor, materials, and equipment as well as a net profit  
10 factor of 10.15% based on Park’s authorized return on equity of 10.15%.  
11 Assuming the combined tax rate (both Federal and State) of 40%, SICC applies a  
12 gross-up percentage of 16.92% to the actual cost of providing the service to AVR.  
13 The 16.92% is derived by dividing 10.15% by 60% (100% minus the tax rate of  
14 40%).” <sup>176</sup>*

15                   PWC further stated that *“Park believes the above method used by SICC to  
16 determine its rates provides assurance that the value of the services received by  
17 Park, AVR, and Mountain Water Company are priced at or below market levels.”*

18                   DRA sent several data requests to inquire about this methodology.<sup>177</sup> DRA  
19 finds it curious that SICC is not a regulated utility, yet opts for a tax inflated return  
20 on equity based methodology to determine its prices. However, the methodology  
21 itself may be irrelevant provided PWC can justify that these SICC services are  
22 priced at or below market levels.

23                   In this regard, DRA sent a data request to AVR/PWC requesting PWC  
24 identify any and all Commission Decision/s that authorized AVR/PWC to include  
25 a net profit factor for SICC in capitalized costs or expenses that have been paid for  
26 by ratepayers. PWC responded as follows:

---

<sup>176</sup> See AVR’s response to KAB-004, Question 7

<sup>177</sup> See Data Requests KAB-004, KAB-007, and KAB-009

1 “In the testimony prepared by DRA in the previous AVR rate case (A.08-01-002, D.08-  
2 09-026) DRA took issue with SICC’s use of a cost plus method in determining the pricing  
3 of services provided to AVR. The Commission authorized the costs of services provided  
4 by SICC to AVR. Additionally, the Commission did authorize an affiliate transaction rule  
5 for Park and AVR. The settlement agreement adopted by the Commission in D.08-09-026  
6 states the following:

7 **Pricing of Services from the Affiliate to the Utility.** Costs of service provided by an  
8 affiliate to the utility shall be considered reasonable if it at or below the lowest of (a) the  
9 cost which would have been incurred by the Utility if it provided such services on  
10 comparable terms, (b) the rate which would have been charged to the Utility by an  
11 unaffiliated party for the provision of comparable services on comparable terms, or (c)  
12 the rate which would have been charged by the affiliate to an unaffiliated party for the  
13 provision of comparable service on comparable terms.

14 As stated above, it is Park’s belief that the pricing of services by SICC provides  
15 assurance that AVR consistently receives services at a market rate or a rate which would  
16 have been charged by an unaffiliated party for the provision of comparable services on  
17 comparable terms. Park believes that SICC’s pricing methodology provides assurance of  
18 compliance with the above Affiliate Transaction Rule.” <sup>178</sup>

19 DRA notes that the language from settlement is derived from D.98-06-068,  
20 in regards to a joint settlement adopted by the Commission to authorize Southwest  
21 Water Company reorganization to form a holding company.<sup>179</sup> Although the  
22 decision mentions cost of service and rates charged in general terms from the  
23 affiliate to the utility, there is no mention of whether or not Southwest Water  
24 Company affiliates can include a pre-tax profit margin on services provided to the  
25 utility.

26 DRA estimates that AVR/Park has included \$147,992 in the test year which  
27 leads to total 2012-2014 forecasted expenses of \$462,629.<sup>180</sup> DRA points out that  
28 AVR/Park has failed to provide evidence in its application, work papers, or  
29 otherwise demonstrating that SICC’s services have been, or will be provided, at  
30 market rates or at rate that would have been charged by an unaffiliated party for

---

<sup>178</sup> See AVR’s response to Data Requests KAB-009, Question 6

<sup>179</sup> 80 CPUC 2d, D.98-06-068, p. 586.

<sup>180</sup> See AVR’s General Office Workpaper 2-5r

1 comparable services. Therefore, DRA recommends disallowing the inclusion of  
2 these SICC estimates in this GRC.<sup>181</sup>

3 DRA also learned that all SICC charges are first booked to Central Basin  
4 division and then distributed to General Office based on the AVR's land usage  
5 study factor methodology. Thus, DRA will need to examine any remaining direct  
6 charges to Central Basin in PWC's next Central Basin GRC and may need to make  
7 adjustments for any unreasonable historical charges if DRA discovers that PWC  
8 failed to meet its burden that the services provided to the utility by its affiliate  
9 were priced at the lower of cost or market.

10 DRA is also concerned that SICC is much closer than a "traditional  
11 affiliate". For instance, SICC is owned by current President/CEO Wheeler, SICC  
12 has had no external customers, other than PWC, Central Basin, and AVR since at  
13 least 2008, Mr. Wheeler's son works as a Painter/Landscaper for SICC,<sup>182</sup> SICC  
14 is located at PWC's headquarters in Downey, CA, and their primary business is  
15 serving PWC and its affiliates. PWC has indicated that SICC's primary business  
16 is the application of specialized coatings to utility plant facilities for PWC, AVR,  
17 and PWC's affiliate Mountain Water Company in Montana. SICC also provides  
18 landscape maintenance services to the grounds of PWC, landscaping at Central  
19 Basin's remote sites (e.g., well sites) and painting and janitorial services at PWC.  
20 It appears that SICC operates more like a PWC service company and benefits from  
21 the umbrella like protection offered by PWC. For the reasons stated above, DRA  
22 recommends disallowing AVR/PWC's estimates regarding its affiliate SICC.

---

<sup>181</sup> If AVR is unable to provide sufficient documentation to justify its estimate of \$462,629 of SICC expenses for this rate case cycle, DRA will need to remove this amount from its estimate of AVR's General Office expenses by submitting an Errata.

<sup>182</sup> See AVR's response to KAB-007, Question 8.

1                   **6) Carlyle Acquisition of PWC**

2                   DRA inquired through a data request<sup>183</sup> about the anticipated effects of the  
3 Carlyle acquisition<sup>184</sup> of PWC and its affiliates. DRA sought the information to  
4 ensure that ratepayers are not paying for any costs associated with the transaction  
5 and that any benefits are properly incorporated in DRA’s GRC analyses. PWC  
6 informed DRA that “*should the CPUC approve Park’s application and the*  
7 *transaction is consummated several changes will occur that will impact the*  
8 *revenue requirement of this case. Park’s current President and Assistant*  
9 *Secretary will cease to be employees of the Company, certain activities of these*  
10 *individuals will be absorbed by existing employees. The current President will*  
11 *become a consultant to the Company. The Board of Directors of Park will be*  
12 *reconstituted. The unregulated affiliate SICC will no longer be owned by Park.”*

13 DRA also notes that in response to this data request that PWC indicated that  
14 Professional Service expenses will increase of \$125,000 and Board of Directors  
15 fees will need to be increased by \$33,500 to \$75,000 for 2012.<sup>185</sup> DRA notes that  
16 since AVR did not include these expenses in its Application, procedurally<sup>186</sup> DRA  
17 will not adjust these figures in its estimate in accordance with the Rate Case Plan.  
18 DRA has included the anticipated effects of not including the President and  
19 Assistant Secretary in the GRC because it notes that these changes will occur  
20 regardless of the outcome<sup>187</sup> of the Carlyle acquisition and DRA will not support  
21 the dual CEO’s salaries. DRA also recommends that any acquisition related  
22 charges that PWC incurs be booked “below the line” so as not to affect the  
23 historical average for future PWC General Rate Cases. This would include

---

<sup>183</sup> See AVR’s response to KAB-002

<sup>184</sup> See A.11-01-019

<sup>185</sup> See AVR’s response to KAB-002, Question 2

<sup>186</sup> See A-9 of D.07-05-062 (Rate Case Plan)

1 acquisition related charges such as legal & consulting expenses, travel, meals, etc.  
2 DRA further suggests that PWC be ordered to identify any and all such charges at  
3 time of acquisition should regulatory approval of PWC acquisition by Carlyle be  
4 granted.

5 **7) General Office Plant**

6 PWC requested several additional plant items identified in Chapter V of AVR's  
7 General Office report. PWC estimated \$342,566 in 2012 and \$397,336 in 2013  
8 for these requested plant items. DRA estimates for the plant items total \$109,306  
9 and \$139,606 for years 2012 and 2013 respectively. DRA sent a data request<sup>188</sup>  
10 and discussed many of the General Office plant items with the senior management  
11 during a field visit to PWC headquarters on February 24-25, 2011 in Downey, CA.  
12 DRA has included Table 11-B that shows the requested plant items, the difference  
13 between PWC and DRA's estimates, and a reference where each item with a  
14 variance is discussed in this chapter.

---

(continued from previous page)

<sup>187</sup> See AVR's response to KAB-003, Question 1

<sup>188</sup> See AVR's response to Data Request KAB-005-Question 9

1 **TABLE 11-B: General Office Additional Plant Items 2012 & 2013**

<b>2012 Test Year</b>	<b>DRA</b>	<b>PWC</b>	<b>\$ Difference</b>	<b>% Difference</b>	<b>Reference</b>
Corporate Pool Car	\$0	\$31,500	-\$31,500	-100%	11-C.7.a
Document Retention	\$25,000	\$70,000	-\$45,000	-64%	11-C.7.b
CIS Enhancements	\$7,500	\$17,500	-\$10,000	-57%	11-C.7.c
Accounting and Financial Reporting	\$5,000	\$8,300	-\$3,300	-40%	11-C.7.d
Information Systems	\$0	\$141,460	-\$141,460	-100%	11-C.7.e
Financial Reporting Software Licenses	\$10,000	\$12,000	-\$2,000	-17%	11-C.7.f
Financial Forecasting	\$10,000	\$10,000	\$0	0%	11-C.7.g
Cyber Security - Mobile Device Management & Security	\$25,000	\$25,000	\$0	0%	N/A
Office of the President	\$1,400	\$1,400	\$0	0%	N/A
Revenue Requirements	\$1,800	\$1,800	\$0	0%	N/A
Engineering	\$10,150	\$10,150	\$0	0%	N/A
Risk Management	\$800	\$800	\$0	0%	N/A
Human Resources	\$3,856	\$3,856	\$0	0%	N/A
Water Quality	\$3,500	\$3,500	\$0	0%	N/A
Executive	\$5,300	\$5,300	\$0	0%	N/A
<b>Total Plant 2012</b>	<b>\$109,306</b>	<b>\$342,566</b>	<b>-\$233,260</b>	<b>-68.1%</b>	

<b>2013 Test Year</b>	<b>DRA</b>	<b>PWC</b>	<b>\$ Difference</b>	<b>% Difference</b>	<b>Reference</b>
Document Retention	\$0	\$100,000	-\$100,000	-100%	11-C.7.b
CIS Enhancements	\$5,000	\$17,500	-\$12,500	-71%	11-C.7.c
Financial Forecasting	\$100,000	\$100,000	\$0	0%	11-C.7.g
Information Systems	\$0	\$145,230	-\$145,230	-100%	11-C.7.e
Financial Reporting Software Licenses	\$3,600	\$3,600	\$0	0%	11-C.7.f
Accounting and Financial Reporting	\$3,600	\$3,600	\$0	0%	11-C.7.d
Office of the President	\$3,900	\$3,900	\$0	0%	N/A
Revenue Requirements	\$1,000	\$1,000	\$0	0%	N/A
Engineering	\$12,050	\$12,050	\$0	0%	N/A
Risk Management	\$800	\$800	\$0	0%	N/A
Human Resources	\$4,056	\$4,056	\$0	0%	N/A
Water Quality	\$500	\$500	\$0	0%	N/A
Executive	\$5,100	\$5,100	\$0	0%	N/A
<b>Total Plant 2013</b>	<b>\$139,606</b>	<b>\$397,336</b>	<b>-\$257,730</b>	<b>-64.9%</b>	

1                   **(a) General Office Plant – Corporate Pool Car**

2                   PWC has requested \$31,500 for a replacement vehicle to replace an aging  
3 2002 Crown Victoria with approximately 150,000 miles. DRA does not  
4 recommend that PWC purchase a replacement vehicle but rather reduce its  
5 corporate fleet by one vehicle. DRA learned through a data request<sup>189</sup> that on  
6 average all six vehicles are checked out at the same time only once per month.  
7 This PWC response suggests that due to the infrequent use of all six vehicles  
8 simultaneously, the cost to replace this worn vehicle, and thereby maintain PWC's  
9 fleet of six vehicles is not justified. DRA therefore recommends that PWC should  
10 retire the 2002 Crown Victoria and reduce its fleet by one vehicle. Thus DRA  
11 recommends the full disallowance of the proposed replacement vehicle cost.

12                   **(b) General Office Plant – Document Retention**

13                   PWC is requesting \$170,000 for a document retention project. Although  
14 PWC communicated its desire to begin this project, it has yet to do so. PWC  
15 informed DRA through a data request<sup>190</sup> that “*We have not begun a formal*  
16 *Document Retention project and implementation because there is no one available*  
17 *to work on this project*”. DRA is not in the least way convinced that this project  
18 will cost \$170,000 and would characterize these cost estimates as premature and  
19 unsupported. Further, DRA does not accept the conditional logic that PWC cannot  
20 start this project without a new hire. PWC did include a detailed description of  
21 their vision for this project but has essentially no foundation for its project cost  
22 estimates. DRA agrees with the inclusion of \$25,000, which was the amount

---

<sup>189</sup> See AVR's response to Data Request KAB-007-Question 5

<sup>190</sup> See AVR's response to Data Request KAB-005-Question 7

1 PWC included in workpapers<sup>191</sup> to hire system selection consultants for the  
2 project and thereby allow PWC to develop better cost estimates in their next GRC.

3 **(c) General Office Plant – CIS Enhancements**

4 PWC is requesting \$17,500 per year for additional licenses and the addition  
5 of added functionality of its CIS system. PWC informed DRA staff that each  
6 license costs \$2,500. DRA recommends that PWC is allowed \$7,500 in 2012 and  
7 \$5,000 in 2013 of the requested amounts. These figures are based on the DRA  
8 suggestion that PWC review all of the existing employees that have CIS licenses  
9 and determine if efficiencies can be met by reallocating CIS licenses to employees  
10 with greater need to access the CIS system. If PWC can find efficiencies in this  
11 manner it can better use the additional dollars to add functionality to the CIS  
12 system.

13 **(d) General Office Plant – Accounting & Financial Reporting**

14 PWC has requested \$11,900 for additions to its Accounting and Financial  
15 Reporting plant items. Since DRA has recommended disallowance of the Senior  
16 Tax Accountant requested position, it also recommends that PWC exclude the cost  
17 of the associated new hire plant items including a new computer, cell phone, and  
18 miscellaneous hardware and software. DRA's estimate for additional plant items  
19 in this area is \$8,600 for the two test years.

20 **(e) General Office Plant – Information Systems**

21 PWC has estimated Information System expenses of \$286,690 total for  
22 2012 and 2013. PWC provided DRA with a breakdown of each item and  
23 estimated cost in their Capital Budget, but PWC's cost estimation methods were

---

<sup>191</sup> See General Office Workpaper 5-15D

1 not sufficiently supported with objective and verifiable support. DRA believes  
2 that PWC has not met its burdens of “need analysis, cost comparison, and  
3 evaluation” as mandated by the Rate Case Plan.<sup>192</sup> As such DRA recommends  
4 full disallowance of the 2012 and 2013 Information Systems costs.

5 **(f) General Office Plant – Financial Reporting & Licenses**

6 PWC has estimated total Financial Reporting & License costs of \$15,600  
7 for the test years. DRA estimates the expenses to be \$13,600 stemming from the  
8 anticipated reduction in at least one user license that may not be required since  
9 DRA has recommended disallowances of three requested employees.

10 **(g) General Office Plant – Financial Forecasting**

11 PWC has requested \$110,000 for the purchase of a Financial Forecasting  
12 system. This planned Financial Forecasting system will update the existing  
13 archaic PWC forecasting system of numerous error prone spreadsheets and linked  
14 files. Although PWC has yet to select a vendor, in speaking with senior PWC  
15 management, DRA learned that PWC has previously had product demonstrations  
16 by several firms and narrowed the list down to a few remaining vendors. DRA  
17 suggests that PWC continue with these worthwhile efforts and select a vendor to  
18 implement the Financial Forecasting system. DRA agrees with the need to have  
19 better financial forecasting tools which may help support more efficient future rate  
20 cases. DRA recommends full allowance of this \$110,000 for the final selection  
21 and purchase of a Financial Forecasting System.

22 **8) General Office Ratebase**

23 PWC estimates that the General Office average ratebase will be \$1,963,710  
24 and \$1,960,409 in years 2012 and 2013 respectively. Through the 4-factor

---

<sup>192</sup> See Page 14 of D.04-06-018 and A-19 of D.07-05-062

1 allocation method, PWC estimates this will amount to an allocation to AVR of  
2 \$604,564 and \$603,548 in years 2012 and 2013. DRA has recommended  
3 adjustment to various General Office plant items as detailed in the previous  
4 section. These recommended plant adjustments, combined with the effects of  
5 lower deferred taxes, and a lower depreciation reserve<sup>193</sup> result in a decrease of  
6 General Office Average Rate Base by \$116,026 in 2012 and \$354,429 in 2013.  
7 The DRA estimates for General Office Ratebase are \$1,847,684 in 2012 and  
8 \$1,605,980 in 2013, which yields an average rate base allocation to AVR of  
9 \$563,913 in 2012 and \$490,145 in 2013. DRA's General Office Rate Base  
10 Summary is included in Table 11-C.

<b>TABLE 11-C</b>				
<b>GENERAL OFFICE RATE BASE SUMMARY</b>				
	<b>DRA</b>		<b>PWC</b>	
	<b>2012</b>	<b>2013</b>	<b>2012</b>	<b>2013</b>
Plant in Service	\$9,217,928	\$9,314,294	\$9,491,521	\$9,725,361
CWIP <sup>194</sup>	10,000	110,000	10,000	110,000
Less:				
Depreciation Reserve	6,798,836	7,062,726	6,923,325	7,186,683
Deferred Taxes <sup>195</sup>	744,449	834,251	622,826	683,231
Net Main Office Investment (End-of-Year)	1,684,642	1,527,317	1,955,370	1,965,448
PWC Average Rate base	1,847,684	1,605,980	1,963,710	1,960,409
4-Factor Allocation- Allocated to AVR (Including Jess Ranch) <sup>196</sup>	\$563,913	\$490,145	\$604,564	\$603,548

<sup>193</sup> DRA agrees with PWC's depreciation rates

<sup>194</sup> DRA agrees with PWC to include the Financial Forecasting System in CWIP

<sup>195</sup> Includes anticipated effects of Bonus Depreciation

<sup>196</sup> Includes Rate Base Allocation to Jess Ranch of \$4,434 in 2012 and \$3,854 in 2013

1           **D. CONCLUSION**

2           DRA asks that the Commission adopt the DRA estimated PWC General  
3 Office expenses of \$6,811,740 which represents a total Test Year 2012 General  
4 Office decrease of \$1,099,857 or 13.9%. DRA's update of the 4-Factor allocation  
5 percentages, and net of taxes and depreciation, yields a General Office expense  
6 allocation to AVR of \$1,892,592 in Test Year 2012 which represents and a  
7 decrease of \$345,007 or 15.42% from the PWC AVR estimate. Further, DRA  
8 recommends that the Commission adopt the DRA adjusted General Office Plant  
9 figures which when combined with the resulting effects of lowered deferred taxes  
10 and lower depreciation reserves will lead to a rate base of \$563,913 in 2012 and  
11 \$490,145 in 2013 compared to PWC'S estimates of \$604,564 in 2012 and  
12 \$603,548 in 2013.

1           **CHAPTER 12: CONVERSION TO MONTHLY BILLING;**  
2           **EXISTING MEMORANDUM AND BALANCING ACCOUNTS;**  
3           **PLANT AUDIT**

4           **A. INTRODUCTION**

5           This chapter presents DRA’s analysis and recommendations on: (1) AVR’s  
6 request to convert from bi-monthly to monthly billing, (2) AVR’s requests related  
7 to its existing memorandum and balancing accounts, and (3) DRA’s audit of  
8 AVR’s plant balances.

9           **B. SUMMARY OF RECOMMENDATIONS**

10           1. DRA objects to AVR’s request to convert from bi-monthly to monthly  
11 billing for the reasons described in Section C of this chapter.

12           2. With a few exceptions, DRA does not oppose AVR’s requests related to  
13 its existing memorandum and balancing accounts.

14           3. DRA reviewed AVR’s supporting documents and does not oppose  
15 AVR’s request to include year-end 2009 balance of \$36,930,411 for recorded net  
16 plant investment in rate base.

17           **C. DISCUSSION**

18           **1) Conversion from Bi-Monthly to Monthly Billing**

19           AVR requests conversion from bi-monthly to monthly billing in  
20 Application 11-01-001. DRA objects to AVR’s request to convert from bi-  
21 monthly to monthly billing for the reasons described below.

22           (a) Discussion

23           Currently, AVR bills customers on a bi-monthly basis. In this application,  
24 AVR requests conversion to monthly billing asserting such change will result in  
25 benefits to customers, as specified below. DRA has reviewed AVR’s work  
26 papers, data responses, and conducted additional research on this issue. DRA

1 disagrees that changing from bi-monthly billing to monthly billing will result in  
2 any benefits to customers. In fact, AVR admits that the costs to customers will  
3 increase as a result of implementation.<sup>197</sup>

4 (i) AVR claims that conversion to monthly billing will result in a  
5 reduction in its working cash component of ratebase and a  
6 reduction in revenue lag.

7 In Table 12-A below, DRA's presents its cost-benefit analysis of AVR's  
8 request to convert to monthly billing based on data provided by AVR in response  
9 to one of DRA's data requests.<sup>198</sup>

---

<sup>197</sup> See AVR's Water Revenue Requirements Report, pages 27-28.

<sup>198</sup> See AVR's response to DRA's data request NVK 2, Q. 3

1

**Table 12-A: Cost-benefit analysis of monthly billing request.**

			<b>TY 2012</b>	TY 2012
<u>Monthly Billing Costs</u>			AVR	DRA
Operation-Other	7780 Uniforms		\$930	\$930
Customer-Other	6500.902 Temp labor-Cust Acct Mtr Rdg		\$16,501	\$16,501
	6500.903 Temp Labor-Cust Acct Rec/Coll		\$18,269	\$18,269
	7060.1 Customer-Billing & Related		\$68,898	\$68,898
	7717.903 Oth-Cust Acct Rec/Coll		\$23,344	\$23,344
	7719.903 Mailing Service		\$26,516	\$26,516
	7840 Customer Service Forms		\$7,470	\$7,470
			\$160,998	\$160,998
Clearings-Other	8205.964 Fuel-Trans Cl		\$1,296	\$1,296
A & G - Other	7080 Bank Fees		\$38,562	\$38,562
<b>Total Monthly Billing Costs</b>			<b>\$201,786</b>	<b>\$201,786</b>
<u>Monthly Billing Savings</u>				
	Working Cash Increased (Bi-Monthly)		\$806,332	\$806,332
	Rate of Return		9.42%	9.42%
	Revenue		\$75,956	\$75,956
	Net-To-Gross Multiplier		1.772159	1.602014
<b>Total Net Savings</b>			<b>\$134,607</b>	<b>\$121,683</b>
<b>Difference between costs and savings</b>			<b>-\$67,179</b>	<b>-\$80,103</b>

2

In Table 12-A, DRA shows the increased annual costs to AVR's customer that will result from conversion to monthly billing.

3

4

DRA's analysis of AVR's data, coupled with adjustments such as reduction of net to gross multiplier and the number of projected customers, clearly shows that a conversion to monthly billing results in costs exceeding savings and an unnecessary increase to AVR's customers. DRA's cost-benefit analysis set forth above in Table 12-A clearly shows that the only quantifiable benefit from conversion to monthly billing is reduction in working cash as a result of the decreased revenue lag (a \$121,683 reduction in revenue requirement).<sup>199</sup>

5

6

7

8

9

10

<sup>199</sup> See DRA's calculation in Table 12-A.

1 However, as Table 12-A above shows, that benefit does not outweigh the  
2 additional annual costs to AVR's customers (\$80,103).

3 (ii) AVR claims monthly billings received closer to when the  
4 services are provided will result in the following benefits:

5 (1) Reduced water usage by sending timelier price signals to  
6 customers.

7 This same issue, the timing of billing and any impact on water usage, was  
8 addressed by DRA in A.09-01-001 filed by Park Water Company (AVR's parent  
9 company). Hence, in D.09-12-001 Park Water Company and DRA agreed that  
10 conversion will not be implemented in this rate case cycle, because of cost impact.  
11 DRA found that the benefits of a conversion to monthly billing are unknown and  
12 difficult to quantify, while the costs are known and significant.<sup>200</sup> The data  
13 provided by AVR<sup>201</sup> already indicates that with bi-monthly billing consumption  
14 decreased significantly in the past three years.

15 **Table 12-B: Annual Unit Consumption**

Residential Units		
Year	ccf/cust	%
2006	279.91	
2007	290.11	4%
2008	265.95	-8%
2009	241.14	-9%
2010	218	-10%

16 DRA points out that AVR's claim that receiving a water bill earlier may  
17 reduce water usage appears to be a theoretical assumption by AVR asserted in its

---

<sup>200</sup> See D. 09-12-001, Settlement Agreement, page 5.

<sup>201</sup> See AVR's spreadsheet "final unit use 2012r".

1 application.<sup>202</sup> AVR has failed to produce any supporting documentation or other  
2 evidence that supports this claim.

3 (2) Help customers’ budget water costs.

4 AVR has failed to produce any strong evidence supporting its claim that  
5 conversion to monthly billing helps customers’ budget water costs. For example,  
6 AVR did not conduct any customer surveys indicating customers’ preferences for  
7 bi-monthly versus monthly billing. The only evidence AVR provided is a report  
8 from the “Water Research Foundation, Best Practices in Customer Payments.”  
9 That report found that some low-income customers of water utilities are better able  
10 to afford to pay bills that are issued more frequently in smaller amounts.<sup>203</sup> In  
11 essence, all the report tells us is that some low income customers like to be billed  
12 on a monthly basis. The report does not address the rest of a utilities’ customer  
13 base – the customers that are not low income. Hence, AVR has not provided  
14 sufficient evidence to support its assertion that monthly billing would help  
15 customers budget their water costs.

16 (3) Help customers discover leaks sooner.

17 AVR claims that receiving a water bill earlier may help customers identify  
18 leaks due to increases in their costs. DRA points out that AVR’s claim appears to  
19 be a theoretical assumption by AVR asserted in its Revenue Requirement  
20 Report.<sup>204</sup> AVR has failed to produce any supporting documentation or other  
21 evidence that supports this claim.

22 DRA examined how much total credit is given annually to customers for  
23 excessive water usage due to broken pipes or other leaks. The table below shows

---

<sup>202</sup> See AVR Revenue Requirements Report, page 27.

<sup>203</sup> See AVR Data Response, NVK-2, Q.1; Chapter 8, page 45.

<sup>204</sup> See Revenue Requirements Report, pages 27-28.

1 total annual courtesy credit adjustments given to customers. The average is \$8,377  
2 for years 2005 through 2010.

3 **Table 12-C**

<b>Courtesy Credit Adjustment</b>	
2010	\$14,768
2009	\$ 13,551
2008	\$5,469
2007	\$6,137
2006	\$6,925
2005	\$3,411
Average	<b>\$8,377</b>

4 DRA has concluded that it is more cost-effective for customers to receive  
5 annual courtesy credit adjustments than to pay the costs associated with  
6 conversion to monthly billing. The increased costs associated with conversion do  
7 not justify the additional expense.

8 (iii) AVR claims that conversion to monthly billing will result in  
9 a reduction of energy costs associated with moving water throughout the state.  
10 AVR's claim is based on the assumption that monthly billing will alert customers  
11 about increase in water usage earlier and decrease water consumption thereby  
12 reducing the need for more water to be moved through out the state.<sup>205</sup> In  
13 addition, AVR's water supply comes from well water while energy costs  
14 associated with moving water throughout the state are related to surface water.  
15 AVR's claim appears to be another theoretical assumption made in its application  
16 without any supporting documentation or other evidence.

17 DRA also reviewed and considered additional comments made by the  
18 Town of Apple Valley ("TAV") and Apple Valley Unified School District  
19 ("AVUSD"). The Protest by the TAV, dated February 2, 2011, points out that

---

<sup>205</sup> See AVR's Revenue Requirement Report, page 27.

1 “the change from bi-monthly to monthly billing, may result in increased expenses  
2 for ratepayers, which should be avoided.”<sup>206</sup> Moreover, in its Motion for Party  
3 Status filed on January 21, 2011, AVUSD states, “in light of the current economic  
4 crisis in California causing extreme budget cuts to education, any further rate  
5 increase would cause harm to the students and community of Apple Valley.”<sup>207</sup>

6 DRA’s review of AVR’s WRAM balancing accounts indicated that  
7 consumption has already decreased by 20%. Moreover, AVR’s management  
8 verbally indicated that they did not anticipate any significant growth due to the  
9 downturn in the economy affecting the town of Apple Valley and the rest of  
10 California. Specifically, AVR’s management explained during DRA’s field visit  
11 that the housing market is a significant drag on the local economy, that housing  
12 prices have plummeted while foreclosures have increased, and they did not  
13 anticipate any significant growth in AVR’s customer base.<sup>208</sup> In addition, AVR’s  
14 estimates expect customer growth to remain relatively flat in this GRC forecast  
15 cycle.<sup>209</sup>

16 In addition, conversion to monthly billing will result in unnecessary  
17 increases in AVR’s staff and printing and mailing costs. The increases in printing  
18 and mailing will have a negative effect on the environment that can be avoided by  
19 not converting to monthly billing. Even with bi-monthly billing, AVR should  
20 encourage its customers to subscribe to online statements and take other measures  
21 to reduce any negative impact on the environment.

---

<sup>206</sup> See Prehearing Conference Statement of the Town of Apple Valley, page 2.

<sup>207</sup> See Motion of AVUSD for Party Status, page 3.

<sup>208</sup> Per Scott Weldy, Manager of AVR, on DRA’s February 8, 2011 field visit.

<sup>209</sup> AVR’s Revenue Requirement Report’s Updated Workpapers, page 2-4rr.

1 (b) Conclusion

2 After a thorough and careful analysis, DRA has determined that conversion  
3 to monthly billing is not in the best interest of the ratepayers. DRA has concluded  
4 that conversion to monthly billing is unnecessary at this time and the harm to  
5 AVR's customers outweighs any benefits. DRA points out that AVR has failed to  
6 produce documentation or other evidence supporting this request. Moreover,  
7 considering the stagnant economy in AVR's service area, such a change would  
8 cause more harm to the local economy. Therefore, DRA recommends disallowing  
9 AVR's request for conversion to monthly billing.

10 **2) 2008 Reserve Balancing Account**

11 AVR requests that the Commission approve recovery of the under-collected  
12 balance in the 2008 Reserve Balancing Account (an Incremental Cost Balancing  
13 Account, hereafter referred to as "2008 ICBA")<sup>210</sup> through a temporary surcharge.  
14 This 2008 ICBA has tracked the difference between AVR's authorized production  
15 costs and its actual costs.

16 DRA does not oppose recovery of the under-collected balance of \$205,667,  
17 including interest, through a temporary 12-month surcharge. DRA notes that  
18 ICBAs have been replaced with WRAM and MCBA accounts, therefore, DRA  
19 recommends that AVR's 2008 ICBA account be closed and the balance  
20 transferred to an expense balancing account in order to facilitate the temporary  
21 surcharge.

---

<sup>210</sup> AVR erroneously referred to its 2008 ICBA as its "2008 Reserve Balancing Account."

1 (a) Examination Scope and Objectives

2 DRA's examination scope and procedures includes verifying the accuracy  
3 of the requested amount including calculation of interest and determining whether  
4 this amount is eligible for recovery.

5 (b) Examination Procedures and Results

6 AVR requested recovery of an under-collected \$205,667, including interest,  
7 in its 2008 ICBA, which was previously authorized in D.03-06-072. AVR  
8 provided information for the costs incurred above its authorized rates in its data  
9 response.<sup>211</sup> The following table shows the allocation of expenses:

10 **Table 12-D (interest not included)**

2008 ICBA

	Total
<b><u>Domestic</u></b>	
Purchased Power-Electric	0
Purchased Power-Gas	0
Replenishment-Adm Assess	\$1,476
Replenishment-Bio Res Assess.	\$251
Replenishment-Make-up Assess.	\$(12,737)
Leased Water Rights	\$216,600
Total	\$205,590
<b><u>Irrigation</u></b>	
Purchased Power-Electric	\$16,224
Replenishment-Bio Res Assess.	\$439
Replenishment-Make-up Assess.	\$(17,595)
Total	\$(932)
Grand Total	<b>\$204,658</b>

<sup>211</sup> Provided in response DRA request NVK-1

1 DRA reviewed the above balances and supporting spreadsheets. DRA also  
2 reviewed the leased water rights balance in the 2008 ICBA of \$216,600, which is  
3 the largest balance. AVR provided additional information regarding payments  
4 made for leased water rights, such as the names of the leaseholders, amount of  
5 transferred acre feet, and total payments made to lease holders for years 2008,  
6 2009, and 2010. DRA requested additional evidence for two payments in the  
7 amounts of \$572,863 and \$269,500 made to Jess Ranch Water Company and  
8 Wagner Family Trust for leased water rights. AVR provided copies of checks and  
9 signed contracts as evidence of payments. DRA agrees with AVR's calculations  
10 and does not oppose recovery of the \$205,667, including interest. Pursuant to  
11 Standard Practice U-27W, the surcharge should be spread over a 12 month period  
12 because it represents less than 5% of gross revenues.

13 (c) Conclusion

14 DRA does not oppose recovery of \$205,667, including interest. DRA  
15 recommends that the Commission close this 2008 ICBA, transfer the outstanding  
16 balance to an expense balancing account, and authorize recovery through a  
17 temporary 12-month surcharge.

18 **3) 2009 Incremental Cost Balancing Account and 2010**  
19 **Incremental Cost Balancing Account**

20 AVR requests the Commission approve recovery of the under-collected  
21 balance in the 2009 ICBA and 2010 ICBA in the amounts of \$10,615 and \$28,192,  
22 respectively. These ICBAs track the difference between AVR's authorized  
23 production costs and its actual costs for the company's unmetered gravity  
24 irrigation system provided to Jess Ranch Golf Course. Both accounts were  
25 previously authorized in D.03-06-072. In addition, AVR requests to continue this  
26 ICBA for its unmetered gravity irrigation system.

27 DRA does not oppose recovery of the under-collected balance in the 2009  
28 ICBA and 2010 ICBA in the amounts \$10,615 and \$28,192, including interest, and

1 recommends recovery through a temporary 12-month surcharge. DRA does not  
2 does oppose AVR's request to continue its ICBA for its unmetered gravity  
3 irrigation system, as specified below.

4 (a) Examination Scope and Objectives

5 DRA's examination scope and procedures includes verifying the accuracy  
6 of the requested amount including calculation of interest and determining whether  
7 this amount is eligible for recovery.

8 (b) Examination Procedures and Results

9 DRA requested supporting documents and reviewed spreadsheets provided  
10 by AVR to Data Request NVK-1, Question 2. The spreadsheets provided  
11 information on costs associated with the 2009 and 2010 ICBAs. The largest  
12 balances resulted from energy costs, which are \$18,809 for 2009, and \$27,769 for  
13 2010.

14 DRA primarily focused on energy costs and reviewed incremental energy  
15 costs increases. DRA's review did not find any apparent discrepancies. In  
16 addition, DRA reviewed AVR's interest calculations, which appear to be correct.  
17 DRA does not oppose AVR's requested recovery of its 2009 and 2010 ICBA  
18 under-collected balances in the amounts of \$10,615 and \$28,192, respectively.  
19 DRA recommends recovery through a 12-month surcharge. Pursuant to Standard  
20 Practice U-27W, the surcharge should be spread over a 12 month period because it  
21 represents less than 5% of gross revenues. DRA also recommends that  
22 continuation of AVR's ICBA because its gravity irrigation system is unmetered;  
23 therefore, WRAM and MCBA accounts do not apply.<sup>212</sup>

---

<sup>212</sup> WRAM and MCBA accounts require meters at the point of sale.

1 (c) Conclusion

2 Based on DRA’s review, the Commission should grant AVR’s request to  
3 collect its ICBA 2009 and 2010 under-collections of \$10,615 and \$28,192  
4 respectively through a temporary 12 month surcharge.

5 **4) 2010 Water Revenue Adjustment Mechanism and**  
6 **Modified Cost Balancing Accounts**

7 AVR’s 2010 Water Revenue Adjustment Mechanism and Modified Cost  
8 Balancing Account (“WRAM/MCBA”) was first authorized in D.08-09-026, dated  
9 September 18, 2008. In order to amortize the balance in the account, AVR is  
10 required to file an annual information-only report by March 31, if the combined  
11 net balance exceeds 2% of the total recorded revenue requirement for the prior  
12 year. The purpose of WRAM/MCBA is to eliminate the financial disincentives  
13 related to water conservation by decoupling water sales from revenues.

14 AVR is not requesting *recovery* of the outstanding balance in its 2010  
15 WRAM/MCBA.<sup>213</sup> AVR is requesting Commission *authorization to continue* its  
16 2010 WRAM/MCBA beyond the end of 2011, and to authorize recovery in  
17 accordance with the final Commission’s decision to be issued in A.10-09-017.<sup>214</sup>

18 AVR and other Class A water utilities filed A.10-09-017, asking the  
19 Commission to modify the amortization period of WRAM/MCBA balances to 18  
20 months or less to ensure recovery within a 24-month period. The main reason for  
21 A.10-09-017 is a potential conflict between the WRAM/MCBA amortization  
22 periods and a financial accounting standard (Emerging Issues Task Force Issue  
23 No. 92-7), which does not allow companies to book assets on its balance sheet that  
24 cannot be recovered within a 24-month period.

---

<sup>213</sup> See AVR response to DRA’s data request NVK-1, 3

<sup>214</sup> See A.11-01-001, pages 7 and 8.

1           DRA reviewed AVR's 2010 WRAM/MCBA outstanding balance and did  
2 not find any apparent mistakes. As of December 31, 2010, AVR's 2010  
3 WRAM/MCBA balancing account has an outstanding under-collected balance of  
4 \$2,134,311. DRA does not oppose AVR's request to continue its 2010  
5 WRAM/MCBA accounts until such time that the Commission modifies these  
6 accounts in A.10-09-017 or in an industry-wide proceeding. However, DRA notes  
7 that a proposed decision has not been issued by the ALJ in A.10-09-017, and is  
8 unknown at this time when a final decision will be adopted by the Commission.  
9 DRA recommends that AVR continue to apply Standard Practice U-27 until the  
10 Commission issues a final decision in A.10-09-017.

11                           (a) Examination Scope and Objectives

12           DRA's examination scope and procedures includes verifying the accuracy  
13 of AVR's outstanding balance in its WRAM/MCBA account, including  
14 calculation of interest, and whether AVR should be able to continue its  
15 WRAM/MCBA beyond the end of 2011. DRA also will monitor disposition of  
16 A.10-09-017 in order to reflect the final decision in this proceeding.

17                           (b) Examination Procedures and Results

18           DRA reviewed AVR's revenue and expense requirement and compared  
19 adopted with recorded. The following table shows recorded and adopted revenue  
20 requirement and expenses:  
21

Table 12-E

**APPLE VALLEY RANCHOS WATER CO. - DOMESTIC  
2010 WRAM & MCBA - THRU DECEMBER**

	<b>Total</b>	<b>% Difference</b>
<b><u>WRAM Revenue</u></b>		
Recorded	\$11,555,840	
Adopted	\$14,510,690	
1 Difference Under/(Over)	(\$2,954,850)	20%
<b><u>Sources of Supply</u></b>		
<b><u>Purchased Power-Electric &amp; Gas</u></b>		
Recorded	\$1,044,290	
Adopted	\$1,172,499	
2 Difference Under/(Over)	\$(128,209)	-11%
<b><u>Replenishment-Adm&amp;Bio</u></b>		
Recorded	\$57,117	
Adopted	\$59,685	
3 Difference Under/(Over)	\$(2,568)	-4%
<b><u>Replenishment-Make-Up</u></b>		
Estimated	\$151,110	
Adopted	\$127,920	
4 Difference Under/(Over)	\$23,190	15%
<b><u>Replenishment-Leased Water Rights</u></b>		
Estimated	\$1,522,460	
Adopted	\$2,237,989	
5 Difference Under/(Over)	\$(715,529)	-47%
6 <b>Total Sources of Supply</b> (2 + 3 + 4 + 5)	\$(823,116)	
7 <b>Net Total Under/(Over)</b> (1 + 6)	(\$2,131,734)	
<b><u>Interest Calculations</u></b>		
Interest Rates		
Monthly Interest	(\$2,576)	
<b>Total Including Interest</b>	<b>(\$2,134,311)</b>	
<b><u>Water Usage</u></b>		
Adopted ccf	6,624,996	
Actual ccf	5,324,480	
Difference Under/(Over)	1,300,516	20%

1           The data was derived from AVR's response to DRA's data request NVK-1,  
2 Question 3b. Overall, water usage has declined by 20%, which corresponds with  
3 the decline in required revenue. DRA conducted a price variance analysis for  
4 purchased power to determine whether AVR calculations are reasonable. DRA's  
5 results were the same as AVR's. In addition, DRA reviewed supporting  
6 spreadsheets with detailed estimates of Replenishment Leased Water Rights and  
7 Replenishment Make-up. Currently, AVR uses estimates because the final  
8 numbers from Mojave Water Agency are not available yet. According to AVR, it  
9 will make adjustments in a future filing of an advice letter if there is a difference.  
10 DRA evaluated AVR's calculation of accrued interest and did not find any  
11 apparent mistakes. DRA does not recommend recovery of this balance at this  
12 time, but expects AVR to file an advice letter requesting recovery.

13           AVR and other Class A water utilities filed A.10-09-017, which requests  
14 modification of the amortization period of WRAM/MCBA balances from 18  
15 months or less to ensure recovery within a 24-month period. The main reason for  
16 A.10-09-017 is a potential conflict with a financial accounting standard (Emerging  
17 Issues Task Force Issue No. 92-7). AVR requests to continue with  
18 WRAM/MCBA accounts and the final decision rendered in this proceeding should  
19 reflect the Commission's disposition of A.10-09-017.<sup>215</sup> DRA will not address  
20 this issue in this GRC, since it is being addressed in A.10-09-017 and at this time  
21 there is no final disposition in A.10-09-017.

22           (c) Conclusion

23           DRA does not oppose AVR's request to continue with WRAM/MCBA  
24 accounts as the Commission may address this issue in A.10-09-017 or an industry-  
25 wide proceeding. Since there is no decision in A.10-09-017, DRA is unable to use  
26 the outcome from A.10-09-017 in this proceeding.

---

<sup>215</sup> See A.11-01-001, pages 7 and 8.

1                   **5) Conservation Proceeding Memorandum Account**

2                   The Conservation Proceeding Memorandum Account (“CPMA”) tracks  
3 Class A water utilities’ legal and related expenses incurred in participating in  
4 Investigation (I.) 07-01-022, which established policies to achieve conservation  
5 objectives for Class A water utilities. D.08-02-036 authorized CPMA’s for  
6 Suburban Water Company and other Class A water utilities. In D.10-04-001, the  
7 Commission reaffirmed its authorization of CPMA’s for all Class A water utilities.

8                   In this application, AVR requests approval to transfer the balance in its  
9 CPMA account to a Conservation Proceeding Expense Balancing Account  
10 (“CPEBA”) and recover the outstanding balance of \$36,339 through a temporary  
11 surcharge.<sup>216</sup>

12                   DRA does not oppose this request and the recovery of the \$36,339,  
13 including interest, through a temporary 12 month surcharge. In addition, DRA  
14 recommends closing CPMA after the outstanding balance has been transferred to  
15 CPEBA.

16                   (a) Examination Scope and Objectives

17                   DRA’s goal is to verify expenditures in this CPMA and to determine its  
18 appropriateness and accuracy.

19                   (b) Examination Procedures and Results

20                   DRA sampled expenditures reflected in AVR’s general ledger for this  
21 account. The following table shows the invoices selected for review, the year  
22 when each expense was incurred, the allocation percentage, and the dollar amount  
23 allocated to the account.

---

<sup>216</sup> See A. 11-01-001, page 9.

1

**Table 12-F<sup>217</sup>**

<b>Vendor</b>	<b>GL Date</b>	<b>Amount Charged Park Water</b>	<b>Allocation %</b>	<b>Allocation</b>	<b>% of total</b>
<b>2007</b>					
Utility Resources, Inc.	11/29/2007	\$ 7,200.00	0.4562	\$ 3,284.64	10.0%
Utility Resources, Inc.	12/28/2007	\$ 14,168.54	0.4562	\$ 6,463.69	19.6%
<b>2008</b>					
Fulbright & Jaworski LLP	1/24/2008	\$ 20,317.53	0.4647	\$ 9,441.56	28.7%
Fulbright & Jaworski LLP	3/13/2008	\$ 8,131.18	0.4647	\$ 3,778.56	11.5%
Fulbright & Jaworski LLP	4/24/2008	\$ 9,746.90	0.4647	\$ 4,529.38	13.8%
Utility Resources, Inc.	1/31/2008	\$ 8,662.50	0.4647	\$ 4,025.46	12.2%
Utility Resources, Inc.	3/6/2008	\$ 1,840.00	0.4647	\$ 855.05	2.6%
<b>2009</b>					
Fulbright & Jaworski LLP	3/5/2009	\$ 673.39	0.463	\$ 311.78	0.9%
Fulbright & Jaworski LLP	4/9/2009	\$ 312.50	0.463	\$ 144.69	0.4%
Fulbright & Jaworski LLP	10/1/2009	\$ 156.25	0.463	\$ 72.34	0.2%
<b>Total of invoices reviewed</b>				\$ 32,907.15	
<b>Total requested for recovery</b>				\$ 36,339.37	
<b>Percentage of invoices reviewed</b>				91%	

2 DRA reviewed AVR's general ledger and amounts booked to the CPMA to  
3 determine whether they were related to the Commission's conservation  
4 proceeding. Because AVR is a subsidiary of Park Water Company, the total  
5 number on the invoices shown above in Table 12-F was partially allocated to  
6 AVR. DRA reviewed AVR's allocation methodology and AVR's calculation of  
7 accrued interest and did not find any apparent mistakes.

8 (c) Conclusion

9 DRA does not oppose transfer of the outstanding balance of its CPMA to a  
10 CPEBA, and recovery of the \$36,339, including interest, through a temporary 12-  
11 month surcharge. DRA recommends closing CPMA after the outstanding balance  
12 has been transferred to CPEBA.

<sup>217</sup> The data is derived from AVR's response to DRA's Data Request NVK-1, Q. 4a.

1                   **6) Conservation Memorandum Accounts**

2                   In D.08-09-026, the Commission authorized AVR to establish a  
3 Conservation Memorandum Account (“CMA”) with a cap amount of \$300,000  
4 and a termination date of December 31, 2011. AVR requests Commission  
5 authorization to file a Tier 1 Advice Letter after December 31, 2011, to amortize  
6 the outstanding balance in its CMA for 2009, 2010, and 2011. <sup>218</sup>

7                   DRA recommends the Commission approve AVR’s request to file a Tier 1  
8 Advice Letter to amortize the outstanding balance of \$110,094 recorded in its  
9 CMA for expenses AVR incurred from 2009 through December 31, 2010. For  
10 2011 expenses recorded in AVR’s CMA, DRA recommends AVR file a Tier 3  
11 Advice Letter after December 31, 2011 (instead of a Tier 1 Advice Letter) ,  
12 because DRA has not had the opportunity to review these expenses for  
13 reasonableness.

14                   (a) Examination Scope and Objectives

15                   DRA’s goal is to review the expenses booked to CMA for reasonableness  
16 and determine whether AVR should be allowed to file a Tier 1 Advice Letter to  
17 collect any outstanding balance prior to its termination date of December 31, 2011.

18                   (b) Examination Procedures and Results

19                   As of December 31, 2010, AVR’s recorded balance in this account was  
20 \$110,094, including interest. DRA requested sample of invoices for the balances  
21 recorded in the account, which amounted to \$95,650. This amount represents 87%  
22 of the recorded amount. In addition, DRA reviewed interest calculations and did  
23 not find any apparent mistakes. The invoices and records reviewed support the  
24 balances recorded in this CMA. DRA paid special attention to possible  
25 duplication of invoices and verified that expenses are appropriate for this CMA.

---

<sup>218</sup> See A.11-01-001, p. 9.

1 DRA reviewed AVR's request to file a Tier 1 Advice Letter after December  
2 31, 2011 to amortize the outstanding balance in the account after its termination.  
3 Because DRA had an opportunity to review some of the expenses recorded for  
4 2009 and 2010, DRA will not oppose AVR's request to file a Tier 1 Advice Letter  
5 after December 31, 2011 for the outstanding balance of \$110,094. In regard to  
6 2011 expenses, which are not available for review, DRA recommends that AVR  
7 file a Tier 3 Advice Letter after December 31, 2010. Standard Practice U-27-W  
8 specifically states that any memorandum account requires a Tier 3 Advice Letter  
9 with full justification of all expenses.<sup>219</sup>

10 (c) Conclusion

11 DRA recommends the Commission approve AVR's request to file a Tier 1  
12 Advice Letter to amortize the outstanding balance of \$110,094, including interest,  
13 recorded in the account as of December 31, 2010. However, DRA recommends  
14 AVR file a Tier 3 Advice Letter for the balance accumulated in 2011 for the  
15 reasons stated above.

16 **7) Outside Services Memorandum Account**

17 AVR requests Commission authorization to file a Tier 1 Advice Letter after  
18 December 31, 2011 to amortize the outstanding balance in its Outside Services  
19 Memorandum Account ("OSMA") for 2009, 2010, and 2011, and to continue this  
20 OSMA through December 31, 2014.<sup>220</sup>

21 In D.08-09-026, the Commission authorized AVR to establish an OSMA  
22 with a cap amount of \$205,000, and a termination date of December 31, 2011.  
23 This account is unique to AVR because it tracks costs related to a project being  
24 considered by Mojave Water Agency. If implemented, this project would result in

---

<sup>219</sup> See Standard Practice U-27-W, page 11.

<sup>220</sup> See A.10-01-001, page 9.

1 wells being drilled in AVR's service territory and water being distributed to other  
2 water providers within the water basin.

3 DRA points out that the water rights adjudication allows holders of water  
4 rights to pump anywhere within the basin, it is not limited to their own service  
5 territory. An entity may find it more cost effective to drill wells in one area and  
6 build the distribution pipeline to its service territory than to build a treatment  
7 plants on existing wells. Such project may have detrimental effects on supply and  
8 quality for AVR's customers."<sup>221</sup>

9 DRA recommends the Commission approve AVR's request to file a Tier 1  
10 Advice Letter to amortize the outstanding balance of \$131,126 recorded in its  
11 OSMA for expenses AVR incurred from 2009 through December 31, 2010. For  
12 2011 expenses recorded in AVR's OSMA, DRA recommends AVR file a Tier 3  
13 Advice Letter after December 31, 2011 (instead of a Tier 1 Advice Letter) ,  
14 because DRA has not had the opportunity to review these expenses. DRA does  
15 not oppose AVR's request to continue the OSMA through December 31, 2014,  
16 provided AVR does not request to increase the cap of \$205,000, set forth in  
17 D.08-09-026.

18 (a) Examination Scope and Objectives

19 DRA's goal is to review the expenses booked to OSMA for reasonableness  
20 and determine whether AVR should be allowed to file a Tier 1 Advice Letter to  
21 collect any outstanding balance prior to its termination date of December 31, 2011.  
22 In addition, DRA will review whether to allow the OSMA to continue until  
23 December 31 2014.

---

<sup>221</sup> For details see the Settlement Agreement adopted by D. 08-09-026, page 18.

1 (b) Examination Procedures and Results

2 As of December 31, 2010, AVR's recorded balance in this account was  
3 \$131,126, including interest. DRA requested sample of invoices in the amount of  
4 \$126,465 for the balances recorded in the account. This amount represents 97% of  
5 the recorded amount. In addition, DRA reviewed interest calculations and did not  
6 find any apparent mistakes. The invoices and records reviewed support balances  
7 recorded in this memorandum account. DRA paid special attention to possible  
8 duplication of invoices and verified that expenses are appropriate for OSMA.

9 DRA reviewed AVR's request to file a Tier 1 Advice Letter after December  
10 31, 2011 to amortize the under-collected balance in the account after its  
11 termination. Because DRA had an opportunity to review some of the expenses  
12 recorded for 2009 and 2010, DRA will not oppose AVR's request to file a Tier 1  
13 advice letter for the outstanding balance \$131,126 as of December 31, 2010. In  
14 regard to 2011 expenses, which are not available for review, DRA recommends  
15 that AVR file a Tier 3 Advice Letter after December 31, 2011. Standard Practice  
16 U-27-W specifically states that any memorandum account requires a Tier 3  
17 Advice Letter with full justification of all expenses.<sup>222</sup>

18 DRA reviewed AVR's request to continue with this account through  
19 December 2014 and finds this request reasonable. This account is intended to  
20 protect water supply within AVR's service territory; therefore, it appears to be  
21 reasonable to allow continuation of this account. DRA will not oppose AVR's  
22 request with a cap of \$205,000. This is the same amount that DRA and AVR  
23 agreed to in D.08-09-026.

24 (c) Conclusion

25 DRA recommends the Commission approve AVR's request to file a Tier 1  
26 Advice Letter to amortize the under-collected balance of \$131,126 recorded in the

---

<sup>222</sup> See Standard Practice U-27-W, page 11.

1 account as of December 31, 2010. However, DRA recommends AVR to file a  
2 Tier 3 Advice Letter for the balance accumulated in 2011 for the reasons stated  
3 above. DRA will not oppose AVR's request to extend this account through  
4 December 31, 2014, if the company agrees to the cap of \$205,000.

5 **8) Plant Audit**

6 This section discusses of the results of DRA's review of AVR's recorded  
7 2009 year-end plant in service balance and accumulated depreciation, both of  
8 which provide the starting basis for developing the test year rate base  
9 computations in this GRC application.

10 (a) Discussion

11 DRA reviewed AVR's 2009 year-end balance for Net Plant Investment  
12 included in rate base. DRA's review focused on 2009 Plant Additions and  
13 Accumulated Depreciation. DRA also reviewed AVR's audited financial  
14 statements for years 2007, 2008 and 2009 for Park Water Company ("PWC"),  
15 which is the parent company of AVR. The audit reports produced by Peasley,  
16 Aldinger & O'Bymachov, An Accountancy Corporation found that, as a whole,  
17 AVR's financial statements did not contain material misstatements. Such reports  
18 provide additional assurance that balances are fairly presented by the company.

19 DRA used 2008's year end balance of \$96,166,249 for Utility Plant as a  
20 starting point for its review. In 2009, AVR claimed additions of \$3,345,492.  
21 Table 12-G below shows total plant additions in 2009.

**Table 12-G<sup>223</sup>**

NARUC ACCT. NO.	CA. ACCT. NO.	DESCRIPTION	2009
ADDITIONS			
301	301	ORGANIZATION	0
30101	301	(CONTRIBUTED) ORGANIZATION	
303	303	MISC. INTANGIBLE PLANT	0
306	306	LAND & LAND RIGHTS	\$(215,511)
30601	306	(CONTRIBUTED) LAND & LAND RIGHTS	
310	310	PLT-SRC SUP LAND & LND RTS	\$406,600
311	311	STRUCTURES & IMPROVEMENT	0
31101	311		
314	315	WELLS & SPRINGS	0
31401	315	(CONTRIBUTED), WELLS & SPRINGS	0
317	317	OTHER SOURCES & SUPPLY	0
321	321	PUMPING-STRUCT./IMPROV.	\$7,975
32101	321	(CONTRIBUTED) PUMPING-STRUCT./IMPROV.	0
328	324	PUMPING OTHER EQUIPMENT	\$98,660
32801	324	(CONTRIBUTED) PUMPING OTHER EQUIPMENT	\$5,017
332	332	WATER TREATMENT EQUIP.	\$12,271
342	342	RESERVOIRS & TANKS	\$644,416
34201	342	(CONTRIBUTED) RESERVOIRS & TANKS	0
343	343	T & D MAINS	\$627,819
34301	343	(CONTRIBUTED) T & D MAINS	\$7,888
345	345	T & D SERVICES	\$227,469
34501	345	(CONTRIBUTED) T & D SERVICES	\$19,748
346	346	T & D METERS	\$572,692
34601	346	(CONTRIBUTED) T & D METERS	0
348	348	T & D HYDRANTS	\$109,235
34801	348	(CONTRIBUTED) T & D HYDRANTS	\$27,153
390	371	STRUCTURES & IMPROVEMENTS	\$101,905
391	372	OFFICE FURNITURE & EQUIPMENT	\$7,763
39110	372	OFFICE MACHINERY	0
392	373	TRANSPORTATION EQUIPMENT	\$94,022
394	378	TOOLS, SHOP, GARAGE EQUIPMENT	\$12,445
395	375	LABORATORY EQUIPMENT	0
396	377	POWER OPERATED EQUIPMENT	0
397	376	COMMUNICATION EQUIPMENT	\$24,399
39710	376	TELEMETRY EQUIPMENT	\$139,087
39830	372	COMPUTER EQUIP. -DESKTOPS	\$75,068
39840	372	COMPUTER EQUIP. - SYSTEM	\$159,666
39860	372	COMPUTER EQUIP. -DESKTOPS	
399	390	OTHER TANGIBLE PROPERTY	\$179,703
TOTAL ADDITIONS			<b>\$3,345,492</b>

2 DRA requested a randomly selected sample of source documents such as  
3 vendor invoices, material costs, labor costs, and overhead allocation to verify that  
4 such additions were accurately booked. Table 12-H below shows the dollar  
5 amounts traced to the source documents.

<sup>223</sup> This information has been taken from spreadsheet AVR Ratebase 12r.

Table 12-H<sup>224</sup>

Company	Subsidiary	GL Date	General Ledger Asset Additions
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 500,888.49
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 24,475.50
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 1,431.24
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 886.13
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 269.66
04100	34200 - Reservoir & Standpipes	10/31/2009	\$ 1,046.17
04100	34300 - Mains	10/31/2009	\$ 3,566.43
04100	34300 - Mains	10/31/2009	\$ 12,638.20
04100	34300 - Mains	10/31/2009	\$ 2,571.22
04100	34300 - Mains	10/31/2009	\$ 2,457.54
04100	34300 - Mains	10/31/2009	\$ 32,162.04
04100	34300 - Mains	10/31/2009	\$ 7,162.83
04100	34300 - Mains	10/31/2009	\$ 2,336.60
04100	34300 - Mains	10/31/2009	\$ 25,450.72
04100	34300 - Mains	10/31/2009	\$ 784.44
04100	34300 - Mains	10/31/2009	\$ 1,987.17
04100	34300 - Mains	10/31/2009	\$ 959.31
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 1,798.71
04100	34300 - Mains	10/31/2009	\$ 959.31
04100	34300 - Mains	10/31/2009	\$ 959.32
04100	34300 - Mains	10/31/2009	\$ 1,798.71
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 2,158.46
04100	34300 - Mains	10/31/2009	\$ 1,798.72
04100	34300 - Mains	12/31/2009	\$ 214.41
04100	34300 - Mains	12/31/2009	\$ 214.41
04100	34300 - Mains	12/31/2009	\$ 1,072.05
04100	34300 - Mains	12/31/2009	\$ 1,572.34
04100	34300 - Mains	12/31/2009	\$ 5,969.88
04100	34300 - Mains	12/31/2009	\$ 9,327.94
04100	34300 - Mains	12/31/2009	\$ 857.64
04100	34300 - Mains	12/31/2009	\$ 857.49
04100	34300 - Mains	12/31/2009	\$ 5,285.83
04100	34300 - Mains	12/31/2009	\$ 5,285.83
04100	34300 - Mains	12/31/2009	\$ 5,285.83
04100	34300 - Mains	12/31/2009	\$ 1,243.72
04100	34300 - Mains	12/31/2009	\$ 5,285.83
04100	34300 - Mains	12/31/2009	\$ 994.98
04100	34500 - Services	10/31/2009	\$ 1,438.97
04100	34500 - Services	10/31/2009	\$ 959.29
04100	34500 - Services	12/31/2009	\$ 1,263.16
04100	34500 - Services	12/31/2009	\$ 1,263.16
04100	34500 - Services	12/31/2009	\$ 1,263.16
04100	34500 - Services	12/31/2009	\$ 1,263.16
04100	34500 - Services	12/31/2009	\$ 1,263.16
04100	34500 - Services	12/31/2009	\$ 1,263.12
			\$ 699,101.50
	% of total additions reviewed		21%
	<b>Total Additions</b>		\$ 3,345,492

<sup>224</sup> This table is prepared by DRA.

1 DRA reviewed source documents for 21% of the additions made in 2009,  
 2 and did not find any apparent mistakes in the amounts recorded and verified. In  
 3 addition, DRA reviewed accumulated depreciation balance and supporting  
 4 spreadsheets with depreciation schedules. This review did not reveal any apparent  
 5 mistakes in the company’s depreciation calculations and recorded amounts. Table  
 6 12-I below show AVR’s calculated net plant investment included in rate base for  
 7 years 2008 and 2009.

8 **Table 12-I<sup>225</sup>**

AVERAGE BALANCES	2008	2009
PLANT IN SERVICE	\$93,945,228	\$97,670,425
WORK IN PROGRESS	\$1,160,924	\$580,462
MATERIALS & SUPPLIES	\$238,094	\$239,641
WORKING CASH		0
SUBTOTAL	\$95,344,246	\$98,490,528
LESS:		
DEPRECIATION RESERVE	\$18,167,171	\$20,172,498
ADVANCES	\$32,279,093	\$32,154,040
CONTRIBUTIONS	\$2,216,797	\$2,221,632
UNAMORTIZED ITC	\$80,767	\$75,930
DEFERRED INCOME TAX	\$6,659,630	\$7,734,147
SUBTOTAL	\$59,403,458	\$62,358,247
PLUS:		
METHOD 5 ADJUSTMENT	\$8,865	\$5,661
NET DISTRICT RATE BASE	\$35,949,653	\$36,137,943
MAIN OFFICE ALLOCATION		\$792,469
TOTAL RATE BASE	\$35,949,653	\$36,930,411

<sup>225</sup> AVR’s spreadsheet “AVR Ratebase 12r.”

1           Due to time constraints DRA only conducted a limited review of net plant  
2 investment. Based on the supporting documents reviewed by DRA, no apparent  
3 mistakes were noticed in calculation of net plant investment for rate base and the  
4 recorded amounts tested.

5                           (b) Conclusion

6           DRA selectively reviewed documents or work papers for 2009 additions to  
7 plant assets. Of the total assets added, DRA reviewed and traced 21% to the  
8 source documents. DRA also reviewed supporting documentation for  
9 accumulated depreciation. Based on the limited review conducted by DRA, no  
10 apparent discrepancies were found in AVR's records for plant in service and  
11 accumulated depreciation balances; therefore, DRA does not oppose AVR's  
12 request to include year-end 2009 balance of \$36,930,411 for recorded net plant  
13 investment in rate base.

14                           **D. CONCLUSION**

15           DRA recommends that the Commission adopt DRA's recommendations as  
16 discussed above.

1                                   **CHAPTER 13: NEW MEMORANDUM AND**  
2                                   **BALANCING ACCOUNTS**

3                   **A. INTRODUCTION**

4                   This Chapter addresses AVR’s three requests for Balancing and/or  
5 Memorandum Accounts: Pension Balancing Account; Health Care Memorandum  
6 Account; and Pressure Reducing Valve Modernization Memorandum Account.

7                   **B. AVR’S REQUEST FOR A PENSION BALANCING**  
8                   **ACCOUNT**

9                   **1) Introduction**

10                  AVR requests that the Commission authorize a new Pension Balancing  
11 Account to track the difference between authorized pension contributions included  
12 in rates in this proceeding and the costs actually incurred. AVR seeks such an  
13 account because of the projected increase in required pension funding resulting  
14 from volatile market conditions. The amounts to be recorded in the proposed  
15 Pension Balancing Account would be limited to the difference between the SFAS  
16 87 expense, as determined by AVR’s outside actuary and recorded as expense, and  
17 AVR’s recovery of costs for ratemaking purposes. AVR is seeking similar  
18 treatment previously afforded to other Class A water utilities including California  
19 American Water Company (D.10-06-38), California Water Service Company  
20 (D.10-12-017) and Golden State Water Company (D.10-11-035).

21                  **2) Summary of Recommendations**

22                  As explained in Chapter 4 of DRA’s Report on AVR’s Payroll, Pensions  
23 and Benefits, DRA disagrees with AVR’s requested amount of Pension Expenses  
24 in this case. DRA’s review of AVR’s 2010 Actuarial Report (“2010 Report”),  
25 AVR’s workpapers and AVR’s Responses to DRA’s Data Requests reveals that  
26 AVR has inappropriately changed its actuarial assumptions since its 2010 Report  
27 and consequently overstates the Pension Expenses it requests in this GRC. DRA

1 has concerns about these assumptions and about the prudence of AVR's  
2 management of its Pension Plan Assets. Therefore, DRA recommends that the  
3 amount of Pension Expenses be based upon AVR's 2010 recorded expenses,  
4 which reflect more reasonable assumptions than AVR uses to request its Pension  
5 Expenses for Test Year 2012.

6 **3) Discussion**

7 DRA points out that a Balancing Account is not the appropriate vehicle for  
8 AVR to track its Pension Expenses. Balancing Accounts are used to track actual  
9 *approved* costs against a utility's recovery of such costs in rates, which the  
10 Commission has found to be prudent, just and reasonable. Given the issues that  
11 DRA raises regarding their reasonableness, the Commission cannot conclude that  
12 AVR's Pension Expenses are reasonable until it resolves these issues in AVR's  
13 next GRC.

14 **4) Conclusion**

15 DRA recommends that AVR track in a memorandum account its pension  
16 costs against the amount of Pension Expenses that the Commission adopts in this  
17 GRC. A memorandum account will allow AVR to track, any shortfall or over-  
18 recovery of Pension Expenses subject to a prudence review in AVR's next GRC.  
19 A memorandum account is the appropriate vehicle for AVR to track its Pension  
20 Expenses, pending the Commission's resolution of the issue of AVR's prudent  
21 management of its Pension Plan assets in AVR's next GRC. At that time, AVR  
22 can request a true up of the amount that the Commission authorizes for its Pension  
23 Expenses in this GRC with the prudently incurred excess or shortfall amounts that  
24 it actually records in a memorandum account.

1           **C. HEALTH CARE MEMORADUM ACCOUNT**

2           **1) Introduction**

3           In its Revenue Requirements Report, AVR requests the establishment of a  
4 “Health Care Memorandum Account” to track the additional costs related to the  
5 Patient Protection and Affordable Care Act (“PPACA” or “Affordable Care Act”,  
6 or “Health Care Reform Act”) passed in March 2010:

7           Health Care Memorandum Account

8           AVR requests that the Commission authorize a new  
9 memorandum account that covers unknown and  
10 potentially significant increases to medical expenses  
11 resulting from the newly enacted national health care  
12 legislation. The Health Care Memorandum Account  
13 would track costs not covered in rates related to the  
14 temporary reinsurance program for pre-Medicare  
15 retirees, incremental costs for health care stop-loss  
16 insurance and dependents of employees who now  
17 qualify coverage under the new Federal legislation.  
18 AVR is seeking similar treatment afforded to  
19 California Water Service in A.09-07-001 (D.10-12-  
20 017).<sup>226</sup>

21           Related to this request, AVR proposes that, in lieu of escalation, the  
22 Commission provide for AVR’s recovery of specific employee and retiree health  
23 care expenses in the 2013 and 2014 escalation year filings. Accordingly, AVR  
24 requests that the Commission authorize advice letter filings for the escalation  
25 years in the ordering paragraphs of the decision issued for this GRC  
26 application.<sup>227</sup>

---

<sup>226</sup> AVR’s *Revenue Requirements Report Final*, p. 102-103, *emphasis added*.

<sup>227</sup> AVR’s request states: “AVR proposes to remove health care expense and retiree health care expense from any calculations of revenue requirement changes for AVR’s 2013 and 2014 escalation year filings. Health care is a significant expense item subject to exclusion from escalation according to the rate case plan. The Commission’s rate case plan requires an adjustment for “all non-recurring and significant expense items,” and thus expressly removes

(continued on next page)

1 The sections below set forth DRA’s analysis, comments, and  
2 recommendations on AVR’s request for a Health Care Memorandum Account.

3 **2) Summary of Recommendations**

4 Based on DRA’s research and analysis of the Health Care Reform Act and  
5 of the information provided by AVR, DRA does not recommend approval of  
6 AVR’s request for a Health Care Memorandum Account because: (1) AVR’s  
7 request does not meet the critical threshold criteria that the costs must be of a  
8 substantial nature: AVR’s insurance broker Mercer does **not** expect the PPACA to  
9 have a significant impact on AVR during the period of this GRC; (2) the request is  
10 premature and overly broad; (3) some provisions of the PPACA are already in  
11 effect, and their financial impacts are therefore, already reflected in AVR’s  
12 requests for recovery of its January 1, 2011 level of premiums for Medical  
13 Insurance Expenses in this GRC; and (4) the request does not meet the  
14 Commission’s standard for establishing a memorandum account for the additional  
15 reasons specified below.

16 The Commission should also deny AVR’s request for a Health Care  
17 Memorandum Account to track AVR’s *actual Medical Expenses*, in lieu of the  
18 normal adjustment for such expense in AVR’s annual Attrition/Escalation Filings.  
19 This request violates the Commission’s rate case process by providing AVR with  
20 an after-the-fact recovery of all Medical Insurance costs, rather than by approving  
21 a reasonable estimate thereof. Approval of AVR’s request would damage AVR’s  
22 incentive to spend responsibly on health care costs. Such perverse incentives  
23 would severely compromise the Commission’s goal of approving reasonable and  
24 just rates for AVR while preserving AVR’s incentives to control its costs.

---

(continued from previous page)

certain items from the escalation process. In lieu of escalation, AVR proposes that specific employee and retiree health care expense be used in the 2013 and 2014 escalation year filings.” Id., p. 100.

1                   **3) Discussion**

2                   (a) AVR’s Request Does Not Meet the Commission’s Criteria for a  
3                   Memorandum Account.

4                   The Commission has articulated the criteria it considers for authorizing the  
5                   establishment of a memorandum account in multiple decisions, including  
6                   D.04-06-018, and in Standard Practice U-27-W, paragraph 44. These factors are  
7                   as follows:

8                   (1) the expense is caused by an event of an exceptional  
9                   nature that is not under the utility’s control;

10                  (2) the expense could not have been reasonably  
11                  foreseen in the utility’s last general rate case and will  
12                  occur before the utility’s next scheduled rate case;

13                  (3) the expense is of a substantial nature in that the  
14                  amount involved is worth the effort of processing a  
15                  memorandum account; and

16                  (4) the ratepayers will benefit by the memorandum  
17                  account treatment.

18                  While the Commission has found these four factors useful in guiding its  
19                  deliberation, the Commission has not applied a fixed set of factors in considering  
20                  whether to establish a memorandum account.<sup>228</sup> In D.10-11-034, the Commission  
21                  stated that “at different times, the Commission has applied these factors,  
22                  considered only some of these factors, or relied on other public policy  
23                  considerations in determining whether to authorize a memorandum account.”<sup>229</sup>  
24                  Moreover, the Commission clarified that “[r]egardless of the specific factors  
25                  considered, the question presented to the Commission in all instances is whether a

---

<sup>228</sup> D.10-11-034 (November 19, 2010), p. 45.

<sup>229</sup> Id.

1 utility should be permitted to seek recovery of these costs at a later date without  
2 encountering retroactive ratemaking issues.”<sup>230</sup>

3 (b) AVR’s Medical Insurance Broker Does Not Anticipate  
4 Significant Impacts from Health Care Reform until 2018.

5 AVR’s request does not meet one of the critical threshold criteria for  
6 approval of a memorandum account, namely that the expense must be of a  
7 substantial nature because the amount involved must be worth the effort of  
8 processing a memorandum account. AVR’s insurance broker Mercer<sup>231</sup> does not  
9 expect the PPACA to have a significant impact on AVR’s health costs until at  
10 least 2018, which is beyond the three-year cycle of this GRC (2012 through  
11 2014).<sup>232</sup> In 2011-2013, Mercer states that the impact of Health Care Reform is  
12 expected to be “minimal”, “insignificant”, “indirect” or “uncertain”,<sup>233</sup> while in  
13 2014, its effect is described as “negligible” or “moderate.”<sup>234</sup> Not until 2018 does  
14 Mercer describe the anticipated impact as “significant.”<sup>235</sup> Ironically, the  
15 potentially significant cost that Mercer identifies for 2018 is an excise tax  
16 triggered by AVR’s payment of benefits to its employees that exceed a high-cost  
17 threshold set by the PPACA (i.e. payment of high cost benefits for what are  
18 described as “Cadillac” plans.)<sup>236</sup> This and other costs of Health Care Reform are

---

<sup>230</sup> Id.

<sup>231</sup> AVR’s *Revenue Requirements Report Final*, p. 42; see Attachment 13-A in Appendix B.

<sup>232</sup> See Attachment 13-A in Appendix B, AVR’s partial Response to Data Request JJS-1. The Mercer Report refers to Health Care Reform Act’s effect on Park Water, which will directly and indirectly impact AVR. In this discussion, when DRA refers to the impact on AVR, it includes its impact on Park Water Company as a whole.

<sup>233</sup> Mercer Report, p. 6 (Attachment 13-A in Appendix B.)

<sup>234</sup> (Id., p. 10)

<sup>235</sup> (Id.)

<sup>236</sup> 40% excise tax on health coverage in excess of \$10,200/\$27,500 in 2014...  
Effective by 2018

...

(continued on next page)

1 largely within AVR's control, thus failing to meet another of the Commission's  
2 criteria for a memorandum account, i.e. that the costs must be beyond the utility's  
3 control. DRA's allowances for inflation in its Test Year 2012 estimates and the  
4 Commission's normal allowances for inflation in AVR's annual Escalation Filings  
5 thereafter will provide AVR with additional revenue to cover all "insignificant" to  
6 "moderate" increases in costs.

7 Ratepayers should not bear the burden of any excise taxes that AVR must  
8 pay under the PPACA's as a result of its provision of "Cadillac" or high cost  
9 plans. In the next 7 years between now and 2018, AVR will have more than  
10 sufficient time to prepare and anticipate changes by which it can mitigate or  
11 entirely avoid these costs. For example, AVR could scale back its health care  
12 benefits, choose not to provide employees with "Cadillac plans," pass excess costs  
13 through to its employees, or, notably, as its consultant Mercer suggests, eliminate  
14 health care coverage altogether and pay its employees compensation in lieu  
15 thereof.<sup>237</sup> Of importance, other portions of the PPACA have not yet been

---

(continued from previous page)

A new 40% excise tax on high cost ("Cadillac") insurance plans is introduced. The tax (as amended by the reconciliation bill) is on the cost of coverage in excess of \$27,500 (family coverage) and \$10,200 (individual coverage), and it is increased to \$30,950 (family) and \$11,850 (individual) for retirees and employees in high risk professions. The dollar thresholds are indexed with inflation; employers with higher costs on account of the age or gender demographics of their employees may value their coverage using the age and gender demographics of a national risk pool. (footnote references omitted.)

Source: [http://en.wikipedia.org/wiki/Patient\\_Protection\\_and\\_Affordable\\_Care\\_Act](http://en.wikipedia.org/wiki/Patient_Protection_and_Affordable_Care_Act), viewed on 4/20/11.

<sup>237</sup> For example, a survey conducted by Towers Watson finds that, to cope with the tax and other increases, 88% of employers will pass increases to employees, while 74% will reduce health benefits and programs. Source: [http://ebn.benefitnews.com/blog/daily\\_diversion/employers-crash-testing-plans-to-avoid-cadillac-tax-2683675-1.html](http://ebn.benefitnews.com/blog/daily_diversion/employers-crash-testing-plans-to-avoid-cadillac-tax-2683675-1.html), viewed 4/20/11. "This [survey](#) of more than 650 mid- to senior-level benefit professionals provides a snapshot of how employers are responding to a host of health care reform challenges that have far-reaching implications for retention, recruitment, productivity, workforce planning, change management and every aspect of the evolving employer-employee deal ... Towers Watson is a leading global professional services company that helps organizations improve performance through effective people, risk and

(continued on next page)

1 implemented. Hence, there is no need to authorize a memorandum account for  
2 regulations and additional health care requirements that do not yet exist.

3           Regarding Commission criterion #4, i.e. whether approval of AVR’s  
4 request will provide benefits to ratepayers, providing AVR with a Health Care  
5 Memorandum Account is most likely to harm them. Allowing AVR to track its  
6 health care costs for future recovery will provide AVR with little incentive to  
7 responsibly manage its health care costs because it will effectively shift the risks  
8 of increasing health care costs from AVR to AVR’s ratepayers. Once AVR  
9 receives a Health Care Memorandum Account, it will have incentives that are  
10 perverse to economic efficiency because AVR will perceive that potentially all  
11 future medical costs will be born by ratepayers, even if they are only remotely  
12 connected to the Health Care Reform Act. For the same reasoning, the  
13 Commission should deny AVR’s request to track *all* health care costs in a  
14 memorandum account to be recovered in full and treated separately from AVR’s  
15 other costs in annual Attrition/Escalation filings.

16           In D.10-12-017 (California Water Service Company (“CWS”)), the  
17 Commission authorized a memorandum account to track costs associated with  
18 provisions of the PPACA that had become effective.<sup>238</sup> The Commission,  
19 however, limited tracking to three specific cost elements: (1) temporary  
20 reinsurance program for pre-Medicare retirees; (2) incremental costs for health  
21 care stop-loss insurance (related to the PPACA’s mandatory removal of coverage  
22 caps); and (3) dependents of employees who now qualify for coverage under  
23 Health Care Reform.

---

(continued from previous page)

financial management. With 14,000 associates around the world, we offer solutions in the areas  
of employee benefits, talent management, rewards, and risk and capital management.”

<sup>238</sup> In D. 10-12-017, the Commission adopted a medical memorandum account for CWS via a  
settlement, which does not set precedent. The timing of the impact of Health Care Reform was

(continued on next page)

1 AVR's insurance broker Mercer found that the first cost element  
2 (temporary reinsurance program for pre-Medicare retirees) and third cost element  
3 (dependents of employees who now qualify for coverage under the Health Care  
4 Reform Act) will **not** have a significant impact on AVR. Mercer also found that  
5 the second cost element (stop loss insurance increases) does **not** apply to AVR.  
6 Hence, AVR's own insurance broker has provided evidence that any costs  
7 elements resulting from the PPACA will not have a significant impact on AVR.  
8 Therefore, they do not meet a critical threshold Commission criterion that the  
9 costs must be substantial in nature to be considered for tracking in a memorandum  
10 account. Consequently, AVR's request for a Health Care Memorandum Account  
11 does not meet Commission's mandated criteria for memorandum account  
12 treatment as specified in D.04-06-018 (discussed above).

#### 13 **4) Conclusion**

14 DRA recommends applying the traditional GRC approach, which is to  
15 provide AVR with rate recovery of DRA's reasonable estimates of AVR's health  
16 care costs. This approach will not only allow AVR to recover its reasonable  
17 health care costs, but will also provide AVR with incentives to control costs.  
18 DRA's forecasts use AVR's actual January 2011 medical insurance premium  
19 levels, escalated to Test Year 2012, representing a 25% increase over the Base  
20 Year 2010 level. DRA also includes inflation allowances in its forecasts. Hence,  
21 DRA's forecasts provide reasonable estimates of AVR's Test Year 2012 medical  
22 insurance costs thereby providing AVR with more than adequate recovery of all  
23 costs associated with the Health Care Reform Act.

24 In conclusion, DRA recommends that the Commission deny AVR's  
25 request for a Health Care Memorandum Account for the reasons specified above.

---

(continued from previous page)  
also different in that case from AVR's in this GRC.

1 DRA recommends that the Commission allow AVR recovery of DRA’s  
2 reasonable forecast of employee health care costs in rates.

3 **D. PRESSURE REDUCING VALVE MODERNIZATION**  
4 **MEMORANDUM ACCOUNT**

5 **1) Introduction**

6 AVR requests that the Commission authorize a new memorandum account  
7 that:

8 [C]overs the unknown costs associated with the  
9 research, development and demonstration of Pressure  
10 Reducing Valve modernization technology. AVR  
11 plans to investigate the possibility of recovering  
12 wasted electrical energy while at the same time  
13 optimizing water system pressures and the flow of  
14 water in the distribution system through the use of  
15 modern electrical regenerative flow control valve  
16 technology. (AVR’s *Revenue Requirements Report*, p.  
17 107.)

18 **2) Summary of Recommendations**

19 DRA does not recommend approval of AVR’s Pressure Reducing Valve  
20 (“PRV”) Modernization Memorandum Account Request. AVR has not shown,  
21 nor can it provide any assurances, that the projects will be cost-effective. Within  
22 the framework of this GRC, AVR must show, or in the case of a memorandum  
23 account, must be able to guarantee that all future costs that AVR requests for  
24 recovery are reasonable and prudently incurred before the Commission can  
25 authorize their recovery. The projects AVR requests to track are Research,  
26 Development and Demonstration (“RD&D”) technology trial projects, whose  
27 outcomes are unknown, and whose cost-effectiveness AVR cannot guarantee. The  
28 Commission has already approved PRV-related RD&D projects in Resolution  
29 W-4854. In that Resolution, the Commission stated that it would authorize the  
30 utilities recovery of their RD&D costs if they were shown to be prudently  
31 incurred, but explicitly stated that the utilities did not need to guarantee a

1 successful outcome (i.e. that the projects would actually work) for the  
2 Commission to authorize the utilities to recover their costs. AVR should await the  
3 results of these trials before seeking authority to place its ratepayers at risk by  
4 conducting trials that are extraneous to the projects approved in Resolution  
5 W-4854.

6 **3) Discussion**

7 The Commission, in Resolution W-4854, authorized San Jose Water  
8 Company, Golden State Water Company, California American Water Company  
9 and California Water Service Company to establish new and separate  
10 memorandum accounts to track the costs associated with the research,  
11 development, & demonstration of six pressure-reducing valve modernization  
12 projects. The Commission's approval was limited to these four utilities who  
13 sought approval of memorandum accounts to track six projects in order to be  
14 eligible for federal grant money for projects begun prior to 12/31/2010 and  
15 completed before 12/31/2014.<sup>239</sup> The purpose of the projects is to demonstrate  
16 the new technology and to evaluate the societal cost effectiveness of the PRV  
17 modernization program.

18 In Resolution W-4854, the Commission authorized the Memorandum  
19 Accounts as follows:

20 This resolution authorizes Water Utilities to  
21 commence implementation of an RD&D program to  
22 test use of regenerative FCVs [Flow Control Valves];  
23 expedites Commission consideration and approval so  
24 projects and ratepayers benefit from federal tax credits;

---

<sup>239</sup> AVR's request is not timely because it occurs after 12/31/2010, the cut off date for beginning projects that qualify for federal grant money. This criterion had provided one of the Commission's immediate reasons for its expeditious approval of the 6 projects requested in Resolution W-4854. This condition does not apply to AVR's request and time is, therefore, not of the essence in this case.

1 approves the establishment of a separate memorandum  
2 account for each water utility to track the costs  
3 associated with the proposed RD&D projects; and  
4 directs Water Utilities, and encourages electrical  
5 utilities, to work with Division of Water and Audits  
6 (DWA) to finalize project details, select an  
7 engineering and design firm, and develop appropriate  
8 measurement, verification and evaluation protocols.  
9 (R. W-4854, p. 2.)

10 ...

11 The electrical regenerative Flow Control Valves (FCVs)  
12 to be installed in the proposed projects are specifically  
13 designed for one-to-one replacement of PRVs. This  
14 technology was introduced to the market earlier this  
15 year and although promising, remains unproven.  
16 Therefore the proposed projects are appropriately  
17 classified as RD&D, enabling evaluation of the  
18 technology on a small scale before resources are  
19 committed for large scale installations. As such,  
20 determination as to funding responsibility for the FCV  
21 projects are appropriately at the discretion of the  
22 Commission. (Id., p. 4.)

23 The Resolution states “*Approval of these advice letters addresses an*  
24 *important issue, but it is narrow, focused and confined to four utilities and*  
25 *RD&D.*” (Id., p. 11, *emphasis added.*) Because approval of RD&D memorandum  
26 accounts is confined to the four utilities named therein, Resolution W-4854 was  
27 not a blanket authorization of such RD&D programs for other water utilities.  
28 Rather, it approved trial projects and instituted a collaborative process between the  
29 electric and water utilities named therein and the Division of Water and Audits,  
30 who is directed to work on the selection of consultants and the development of  
31 appropriate measurement, verification, and evaluation protocols. The Resolution  
32 approves tracking of the RD&D costs of the projects exclusively at ratepayers’  
33 risk even if the trials fail and/or do not prove to be economically cost-justified.  
34 The projects approved in Resolution W-4854 employ an as-yet unproven

1 technology and will not be broadly introduced until the technology and societal  
2 cost-effectiveness has been proven.

3 AVR and other utilities should await the results of the Commission-  
4 approved trials before proceeding to install similar devices whose costs it intends  
5 to ultimately recover from ratepayers.<sup>240</sup> Informed by the results of those trials,  
6 AVR can better determine the feasibility of regenerative pressure reducing valve  
7 devices before proceeding to install them. This alternative approach will mitigate  
8 forcing ratepayers to bear additional, unnecessary risks of economic losses,  
9 beyond those which ratepayers already bear following the Commission's approval  
10 of RD&D projects in Resolution W-4854. Approval of additional RD&D trials to  
11 more than the four named utilities in R. W-4854 is also objectionable because it  
12 will place unanticipated and unnecessary additional stress on Commission staff  
13 resources, who are actively involved in the projects' planning, monitoring and  
14 oversight.

#### 15 **4) Conclusion**

16 DRA recommends rejection of AVR's request. AVR should await the  
17 results of the 6 trial projects that the Commission authorized four utilities to  
18 conduct in Resolution W-4854.

#### 19 **E. CONCLUSION**

20 For the reasons explained in this Chapter, DRA recommends that the  
21 Commission deny AVR's requests for Pension Expense Balancing, Health Care  
22 Memorandum, and Pressure Reducing Valve Modernization Memorandum  
23 Accounts.

---

<sup>240</sup> AVR, of course is free to proceed to explore and experiment with the new technologies at shareholders' expense, assuming such trials are within all health and safety laws and do not disrupt AVR's adequate provision of services. AVR should record the costs of such trials below-the-line for ratemaking purposes.



1 expenditures and amount of work performed over the last three  
2 years.

3 4. AVR determine the economic level of intervention for leak detection  
4 in the Test Year 2012 and Escalation Year 2013 and conduct  
5 proactive repairs to distribution mains to recover leakage from  
6 otherwise hidden leaks (those that do not surface).

7 5. AVR include in its 8-inch PVC projects' cost forecasts a unit cost  
8 estimate of \$57.29 per linear foot (in 2010 dollars), which more  
9 closely reflect the historical normalized costs of similar AVR  
10 projects.

11 A summary of costs for the AVR proposed and DRA recommended main  
12 replacement projects, including emergency main replacements, is provided in  
13 Table 14-A. These estimates are also included in Chapter 7 of this report as  
14 Transmission and Distribution Main Replacements and Emergency Main  
15 Replacements.

16 **Table 14-A – Total Main Replacements**  
17 **(planned and emergency main replacements combined)**

	<b>AVR Proposed</b>	<b>DRA Recommended</b>	<b>Difference</b>	<b>Percent Difference</b>
2011	\$ 1,604,526	\$ 960,717	\$ (643,809)	-40%
2012	\$ 1,633,473	\$ 1,163,048	\$ (470,425)	-29%
2013	\$ 2,257,518	\$ 1,286,888	\$ (970,630)	-43%

18 **C. DISCUSSION**

19 **1) AVR's Current Main Replacement Program**

20 AVR currently has 450 miles of main in its distribution system for its sole  
21 service area in and near the town of Apple Valley, located in San Bernardino

1 County, California. AVR has made recent improvements to its distribution system  
2 and leak loss, but does not have a clear main replacement plan for the future.

3 AVR assesses its transmission and distribution system each year to  
4 determine the order of priority and proposed year for main replacement projects.  
5 AVR's transmission and distribution system assessment includes "using hydraulic  
6 models, collecting and analyzing data through the Fixed Assets system, examining  
7 infrastructure data through a comprehensive geographic information system (GIS),  
8 reviewing leak frequency, determining costs, and considering liability risks.  
9 [AVR] prioritizes [its] infrastructure needs and prepares a five-year capital budget  
10 that is updated annually."<sup>241</sup> This assessment does not include analysis of  
11 comprehensive distribution system statistics with specific targets or goals that  
12 would provide direction and purpose to AVR's main replacement program.

13 AVR has tracked the location and number of leaks in the system each year  
14 and has lowered the annual number of leaks. "Aggressive main replacements have  
15 reduced the annual leak rate from about 3,000 [in 1995] to about 650 [in 2009]."  
16 <sup>242</sup> However, AVR does not have a target range for the number of leaks per year  
17 or a specific method to determine when a main replacement is required instead of  
18 leaving the existing main in place and performing far less costly leak repairs.

19 The number of leaks and unaccounted for water for AVR's distribution  
20 system have decreased and the average age of the systems mains is within the  
21 useful life of typical water mains. While this is encouraging, DRA is concerned  
22 that some of the proposed main replacements in this GRC, if installed, would have  
23 a diminishing return on investment. The decrease in the number of leaks may not  
24 provide economic justification for the investment in main replacement.

---

<sup>241</sup> AVR's Response to Minimum Data Requirement Item II.E.18.

<sup>242</sup> AVR's Revenue Requirement Report, page 55.

1 Table 14-B lists various distribution system statistics for AVR in 2004 and  
 2 2009. These statistics illustrate the success of AVR’s main replacement program  
 3 over the last 5+ years, but do not have a corresponding target or goal.

4 **Table 14-B – Distribution System Statistics**

	<b>2004</b>	<b>2009</b>
Number of Leaks per Year	1,274	645
Leaks per year per 100 Miles <sup>a</sup>	312	143
Average Age of Mains	n/a	25.5 years <sup>b</sup>
Infrastructure Leakage Index (ILI) <sup>c</sup>	n/a	1.43
Unaccounted for Water (Domestic)	11.7%	8.5%

5 a – AVR had 408 miles of main in 2004 and 450 miles of main in 2009. *Based on additions and retirement data*  
 6 *within AVR’s response to Minimum Data Requirement II.E.11*  
 7 b – AVR mistakenly calculated the average age of mains as 32 years  
 8 c – The Infrastructure Leakage Index is a ratio in which a value of 1.0 indicates all ‘actual real losses’ are  
 9 ‘unavoidable real losses’

10 To date, AVR has focused the main replacement program on replacing  
 11 mains within ‘leak hot spots’ in an effort to reduce the number of leaks in the  
 12 system and the amount of unaccounted for water. Looking forward, AVR is in the  
 13 process of switching this focus towards the system’s large transmission mains:

14 “Now that the number of leaks has been reduced substantially, AVR  
 15 is planning to address the need to replace some of the aging large  
 16 transmission mains. While these mains may not have as many leaks as  
 17 some of the smaller mains in the system, their replacement is required due  
 18 to a number of factors... the high cost to repair a leak [in a large  
 19 transmission main] and to correct the damage it may cause... the  
 20 importance of the main and the consequences of failure... and the need for  
 21 improved transmission.”<sup>243</sup>

22 This switch in focus is reflected in the types of projects AVR is proposing  
 23 in this rate case cycle:

---

<sup>243</sup> AVR’s Revenue Requirement Report, page 56.

- 1 • Four 8-inch PVC projects to replace existing steel mains in
- 2 residential areas with ‘leak hot spots’
- 3 • Eight large transmission main replacement projects
- 4 • Three projects associated with other tank and road construction
- 5 projects

6 Discussion of AVR’s proposed projects are divided into three categories in  
7 Sections 2, 3, and 4 of this Chapter following a discussion of general system-wide  
8 recommendations in sub-sections (a) – (e).

9 (a) Leak Loss

10 AVR’s primary assessment of its main replacement program has been the  
11 number of leaks. GIS mapping software tracks the location of leaks throughout  
12 the service area and allows AVR to determine ‘leak hot spots.’ AVR has  
13 confirmed in its response to a Minimum Data Requirement that these leaks are  
14 primarily those where water rises to the surface and does not include hidden leaks.

15 “[AVR] currently [does] not employ a leak detection company or  
16 program. [AVR has], in the past, enlisted the services of leak detection  
17 companies and have never had the results that make the costs of these  
18 programs economical. It is [AVR’s] experience that in Apple Valley, leaks  
19 do not run underground undetected but surface and become visible. They  
20 are reported and repaired in a timely manner.”<sup>244</sup>

21 DRA points out that the Commission’s Embedded Energy in Water Pilot  
22 Program<sup>245</sup> included a leak detection project that involved AVR as one of three  
23 water agencies selected from Southern California Edison’s water utility customers.

---

<sup>244</sup> AVR’s Response to Minimum Data Requirement Item I.I.E.7. Italics added.

<sup>245</sup> D.07-12-050 Order Approving Pilot Water Conservation Programs within the Energy Utilities’ Energy Efficiency Programs, Section 6.6.3.6 – Water Leak / Leak Detection and Water System Loss Control Study

1 This pilot program involved a top down water audit<sup>246</sup> of AVR’s 2007 water  
2 balance data performed by Water Systems Optimization, Inc. (“WSO”).  
3 Following the audit, a field leak detection and repair campaign was conducted on  
4 site to show AVR staff how leak detection is performed and to prove that water  
5 savings can be attained.<sup>247</sup> The results of the water audit and leak detection and  
6 repair campaign were reviewed in a follow up study by WSO and later evaluated  
7 by ECONorthwest. The study by WSO showed that AVR has a number of hidden  
8 leaks with enough water loss to support economic leak loss intervention. This  
9 study included the calculation of the economic frequency of intervention for leak  
10 detection.<sup>248</sup>

11 Using American Water Works Association (“AWWA”) Manual 36  
12 (“M36”) for Water Audits and Loss Control Programs’ guidelines, based on 2007  
13 data from AVR, WSO’s audit and study determined that it is economically  
14 feasible to perform a proactive leak loss intervention on a rotating 37 percent of  
15 the distribution system each year.<sup>249</sup>

16 DRA’s preliminary calculations, based on 2009 data from AVR, using the  
17 same procedures in AWWA Manual 36, estimate that it is economically feasible  
18 for AVR to perform proactive leak loss intervention on a rotating 41 percent of the  
19 total distribution system each year. DRA’s estimate includes AVR’s increase in

---

<sup>246</sup> “The top down water audit is a process of identification and validation of the different types of water volumes that collectively add up to each agency’s total water supply for the audit period. In a top down audit, all water volume components are evaluated starting with each agency’s total system input and working down (through a process of subtraction) to validate water consumption and then identify real water losses.” *Embedded Energy in Water Pilot Programs Impact Evaluation, Final Report*. ECONorthwest, March 9, 2011, page 95.

<sup>247</sup> *Embedded Energy in Water Pilot Programs Impact Evaluation, Final Report*. ECONorthwest, March 9, 2011, page 97.

<sup>248</sup> *Ibid.*, page 104.

<sup>249</sup> *Ibid.*

1 the cost of leased water and the increase in amount of main in the system. Table  
 2 14-C presents a summary of the results from WSO and DRA.

3 **Table 14-C – Comparison of the Economically Feasible Intervention**  
 4 **Frequency for 2007 and 2009<sup>250</sup>**

	2007 <sup>a</sup>	2009 <sup>b</sup>
Miles of main in the system	431	450
Cost of Intervention, CI	\$250/mile	\$250/mile
Cost of Leased Water, CV	\$293/acre-ft (\$0.899 /1,000 gallons)	\$360/acre-ft <sup>c</sup> (\$1.105 /1,000 gallons)
Intervention Frequency, IF <sup>d</sup>	32.3 months	29.2 months
Percent of system to survey per year <sup>c</sup>	37%	41%

5 a – calculated by WSO and presented in *Embedded Energy in Water Pilot Programs Impact Evaluation, Final*  
 6 *Report*. ECONorthwest, March 9, 2011, page 104.  
 7 b – preliminary calculation by DRA  
 8 c – email from Ed Jackson, Park Water Company to Patricia Ma, DRA’s Water Branch. (February 11, 2011.  
 9 10:07AM PT.), Attached PowerPoint file, ‘2011 PUC Presentation 2.8.11’ slide 33.  
 10 d – AWWA M36 formula for intervention frequency and percent of system to survey per year (see footnote 10).  
 11 RR is the approximate annual rate of rise of leakage, assumed by WSO for AVR as 33 MG in 2007, or, 0.21  
 12 gallons per mile per day. DRA used this same assumption for its preliminary calculation for 2009.

13 The WSO 2007 water audit of AVR determined that AVR had 401.7 acre-  
 14 feet of hidden losses (water leaks) where water did not come to the surface. Of  
 15 that, 267 acre-feet was potentially recoverable leakage that could have been

<sup>250</sup> The formulas for the Intervention Frequency and the percent of the distribution system to survey (from AWWA M36):

$$IF(months) = \sqrt{0.789 \times \left[ \frac{CI(\$ / mile) / CV(\$ / 1,000 gallons)}{RR(1,000 gallons / mile / day)} \right]}$$

$$Percent\ of\ System\ to\ Survey\ per\ Year = \frac{100\% \times 12(months / year)}{IF(months)}$$

1 prevented with a proactive leak loss intervention program at the calculated  
2 intervention frequency.<sup>251</sup> In 2007, at \$250/mile, the cost to perform this  
3 proactive leak loss intervention on 37% of AVR’s distribution mains would have  
4 been \$40,000 a year. DRA recommends AVR incorporate these finding in its  
5 assessment to further determine the feasibility of a leak detection program.  
6 Proactive leak loss intervention, when appropriate, may be a far more economical  
7 solution compared to just focusing on main replacements.

8 (b) Infrastructure Leakage Index

9 The Infrastructure Leakage Index (“ILI”), a statistic encouraged by the  
10 AWWA, calculates the ratio of the amount of actual real losses (leak loss) to the  
11 amount of real losses that are considered to be unavoidable. This calculation  
12 considers the length of main and number of connections among other factors. An  
13 ILI of 1.0 is the ideal target value; however the economic ILI target is generally  
14 greater than 1.0. AVR did not include an economic leak loss and/or an economic  
15 ILI target<sup>252</sup> in this GRC application.

16 AVR’s ILI value of 1.43, in 2009, has been reduced from 1.61 in 2007 and  
17 is below the average ILI of 3.2 in California among the 17 agencies for which data  
18 were available.<sup>253</sup> DRA encourages AVR to determine an economic leak loss  
19 amount and ILI target to better track the success and future needs in main  
20 replacement and repair for its transmission and distribution system. DRA also

---

<sup>251</sup> *Embedded Energy in Water Pilot Programs Impact Evaluation, Final Report*. ECONorthwest, March 9, 2011, page 104.

<sup>252</sup> The economic leak loss represents the most cost effective level of leakage given the current valuation of water lost. The economic ILI then represents the ratio of the economic leak loss over the unavoidable leak loss.

<sup>253</sup> *Secondary Research for Water Leak Detection Program and Water System Loss Control Study, Final Report*. Water Systems Optimization, Inc., December 2009

1 recommends AVR use several distribution system statistics in its analysis for main  
2 replacements.

3 (c) Asset Management Program

4 AVR currently does not have a formal asset management program. AVR's  
5 Revenue Requirement Report provides the following statement in regard to  
6 planning for a future asset management program:

7 "[AVR is] in the process of developing a more formal method of  
8 asset management planning that would link information from various  
9 databases and increase automation of the identification and prioritization  
10 process for replacement and refurbishment of assets. [AVR is] also  
11 interested in gaining a better understanding of long-range asset  
12 refurbishment and replacement needs in order to develop sound long-term  
13 funding policies. We have received one consulting firm's proposal for an  
14 asset replacement master plan. We are also investigating other options  
15 including purchasing software modules that are linked to GIS. Once these  
16 options are determined, we will be weighing which is the best approach  
17 including, what are the benefits and downsides, what resources will be  
18 needed internally and externally, what are the costs of each approach, and  
19 how long will it take to complete."<sup>254</sup>

20 DRA encourages AVR to continue developing this asset management  
21 program as the decisions regarding main replacement and/or repair and the cost  
22 and benefits of main replacements become more complex.<sup>255</sup> DRA recommends  
23 AVR include specific distribution system statistic targets as part of this asset  
24 management program.

---

<sup>254</sup> AVR's Response to Minimum Data Requirement Item II.E.18.

<sup>255</sup> AVR has requested, in this GRC, a new position for an Asset Management Project Coordinator. Chapter 4 - *Payroll, Pensions and Benefits* of this Report discusses the recommended disallowance of this new position. AVR currently employs at least an Asset Management Supervisor, two Fixed Asset Analyst 1's, and one Civil Engineer Assistant 2 available to develop an asset management program.

1 (d) Planned Main Replacement Projects

2 Table 14-D summarizes all planned main replacement projects proposed by  
 3 AVR with the proposed costs and construction year.

4 **Table 14-D – AVR’s Proposed Planned Main Replacement Projects**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Roanoke / St Timothy	7160	8"	PVC	\$ 70.33	\$ 503,534
	Hilltop Tank 1 Northside Piping	240	24"	STL	\$ 300.00	\$ 72,000
	Hwy 18 / AV Road	650	12"	DIP	\$ 99.56	\$ 92,819
	Tract 4053 (South)	8000	8"	PVC	\$ 70.33	\$ 562,607
<b>2011 Total</b>						<b>\$1,230,961</b>
2012	Yucca Loma (Bridge)	1700	8"	PVC	\$ 72.73	\$ 123,643
	Hilltop above ground main (west side)	660	24"	STL	\$ 283.44	\$ 187,070
	Hilltop above ground main (east side)	700	24"	STL	\$ 283.44	\$ 198,407
	Rancherias (Chickasaw to Oneida Esmnt)	1000	24"	DIP	\$ 283.44	\$ 283,439
	Arcata/Lodema	6250	8"	PVC	\$ 72.73	\$ 454,571
<b>2012 Total</b>						<b>\$1,247,130</b>
2013	Hilltop from above ground to Sitting Bull	1900	24"	DIP	\$ 250.00	\$ 523,000
	Hilltop above ground to Lyons Park	2200	20"	DIP	\$ 165.92	\$ 365,034
	Rancherias Esmnt from Lyons Park to Erie	1600	20"	DIP	\$ 165.92	\$ 265,480
	Rancherias Esmnt from Erie to Hopi	1600	20"	DIP	\$ 165.92	\$ 265,480
	Pohez/Symeron N of Chapae	1650	8"	PVC	\$ 75.22	\$ 124,112
	Seneca Easement AV Road to Choco	2400	16"	DIP	\$ 131.19	\$ 314,857
<b>2013 Total</b>						<b>\$1,857,962</b>

1 Table 14-E summarizes all planned main replacement projects with DRA's  
 2 recommended costs<sup>256</sup> and construction year.

3 **Table 14-E – DRA’s Recommended Planned Main Replacement Projects**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Roanoke / St Timothy	7160	8"	PVC	\$ 59.13	\$ 423,368
	Hilltop Tank 1 Northside Piping	240	24"	STL	\$ 299.39	\$ 71,854
	Hwy 18 / AV Road	650	12"	DIP	\$ 99.39	\$ 92,691
<b>2011 Total</b>						<b>\$ 587,912</b>
2012	Tract 4053 (South)	8000	8"	PVC	\$ 61.03	\$ 488,221
	Yucca Loma (Bridge)	1700	8"	PVC	\$ 61.03	\$ 103,747
	Hilltop above ground main (west side)	660	24"	STL	\$ 282.29	\$ 186,309
<b>2012 Total</b>						<b>\$ 778,277</b>
2013	Hilltop above ground main (east side)	700	24"	STL	\$ 291.35	\$ 203,943
	Rancherias (Chickasaw to Oneida Esmnt)	1000	24"	DIP	\$ 291.35	\$ 291,347
	Arcata/Lodema	6250	8"	PVC	\$ 62.99	\$ 393,666
<b>2013 Total</b>						<b>\$ 888,957</b>

4 (e) Emergency Main Replacements

5 Table 14-F summarizes AVR’s proposed and DRA’s recommended budget  
 6 for emergency main replacement projects for this rate case cycle. The differences  
 7 in the DRA recommended budget are associated with the use of the updated  
 8 escalation factor (3.21% instead of 3.42%) discussed in Chapter 7 of this report  
 9 (Utility Plant in Service).

10 **Table 14-F – AVR Proposed and DRA Recommended Emergency Main**  
 11 **Replacement Budgets**

	2011	2012	2013
AVR Proposed Budget	\$ 373,565	\$ 386,343	\$ 399,556
DRA Recommended Budget	\$ 372,805	\$ 384,772	\$ 397,931

<sup>256</sup> All DRA recommended cost estimates in this chapter reflect the recommended change in escalation factor (3.21%) as discussed in Chapter 7 of this report (Utility Plant in Service).

1                   **2) Main Replacement Projects involving 8-inch PVC in**  
2                   **Residential Areas with ‘Leak Hot Spots’**

3                   AVR proposes four projects in this GRC that involve replacing existing  
4 steel mains in residential areas with ‘leak hot spots.’ These include, in order of  
5 priority, the Roanoke/Saint Timothy and Tract 4053 (South) projects in 2011, the  
6 Arcata/Lodema project in 2012, and the Pohez/Symeron N of Chapae project in  
7 2013.

8                   ‘Leak hot spots’ are identified by AVR visually using a GIS based leak  
9 map that includes historic leak locations. This map has been the primary tool for  
10 AVR to locate the best areas for main replacements and has resulted in a decrease  
11 in annual leak counts. This method, however, does not allow AVR to conduct a  
12 cost/benefit analysis for the main replacement program or to determine what the  
13 economic leak loss may be for the system.

14                  Aside from continuing to use the GIS based leak map, DRA recommends  
15 AVR use of a comprehensive cost/benefit analysis for the main replacement  
16 program to determine what the economic leak loss may be for the system.

17                  DRA recommends maintaining AVR’s proposed order of priority for main  
18 replacements, but postponing the Tract 4053 (South) project from 2011 to 2012,  
19 the Arcata/Lodema project from 2012 to 2013, and the Pohez/Symeron N of  
20 Chapae project from 2013 until AVR’s next rate case cycle. This schedule more  
21 closely reflects the annual expenditures and amount of work performed over the  
22 last three years.

23                  As stated above, AVR has not provided adequate justification in this GRC  
24 to increase the rate of main replacement. Although AVR’s use of the GIS based  
25 leak map has resulted in less leaks, DRA asserts that AVR’s assessment of leak  
26 loss will be far more accurate when AVR adds the use of a comprehensive  
27 cost/benefit analysis for its main replacement program. DRA is concerned that an

1 increased rate of replacement based solely on the GIS based leak map will result in  
2 diminishing returns on investment for mains. Moreover, DRA recommends AVR  
3 develop a main replacement plan with specific targets and goals for its distribution  
4 system to provide more clear direction on the appropriate amount of main  
5 replacements for each year.

6 (a) Unit Cost Estimate for 8-inch PVC

7 In addition to the timing of these projects, DRA recommends using a lower  
8 unit cost estimate for 8-inch PVC pipe. The 5-year average unit cost of 8-inch  
9 PVC (normalized to 2009 and escalated to 2010) based on AVR's past projects is  
10 \$46.58 per linear foot (LF). AVR replaced this unit cost with a value of  
11 \$68.00/LF for 2010, which is then escalated for the years 2011, 2012, and 2013.  
12 AVR described the projects used to compute the \$46.58/LF as including "a  
13 significant quantity of main replacements done by in-house forces in easements,"  
14 and describes the proposed 8-inch PVC projects as "done by contractors which  
15 includes pavement, engineering, inspection, traffic control and contractor  
16 overheads."<sup>257</sup>

17 In response to DRA's request for supporting information, AVR provided a  
18 sample of six projects with unit cost data for recent AVR projects that required  
19 contractors, similar to those proposed in this GRC, who were used to install 8-inch  
20 PVC pipe.<sup>258</sup> DRA notes that these projects (which have costs per linear foot  
21 greater than \$46.58) are for projects that installed only 8 to 79 feet of 8-inch PVC  
22 pipe. The proposed 8-inch PVC projects for this rate case cycle involve 1,650 to

---

<sup>257</sup> E-mail with Attachment from Edward Jackson, Director of Revenue Requirements, Park Water Company to Amanda Rasmussen, DRA's Water Branch (March 28, 2011, 9:01 AM PT) (on file with author).

<sup>258</sup> E-mail with Attachment from Edward Jackson, Director of Revenue Requirements, Park Water Company to Amanda Rasmussen, DRA's Water Branch (March 30, 2011, 6:28 PM PT) (on file with author).

1 8,000 feet of pipe, which will most likely have a lower cost per foot than the six  
 2 projects cited due to discounted bulk purchases of pipe and/or an economy of  
 3 scale.

4 DRA agrees the unit costs may be higher with the proposed projects that  
 5 involve a contractor, replacing pavement, and other added expenses. Therefore,  
 6 DRA recommends that a 2010 unit cost of \$57.29/LF for 8-inch PVC (half the  
 7 difference between \$68.00 and \$46.58) be used for escalated cost estimates for this  
 8 rate case cycle. By using this adjusted unit cost, DRA’s project cost estimates  
 9 more closely reflect the historical normalized costs of similar AVR projects.  
 10 Thus, DRA recommends the Commission adopt its recommended unit cost, which  
 11 is approximately 23 % higher than historical normalized costs to reflect the  
 12 anticipated costs associated with using a contractor, replacing pavement, and other  
 13 added expenses.

14 Table 14-G presents AVR’s proposed main replacement projects with 8-  
 15 inch PVC in residential areas. AVR proposes these projects because it considers  
 16 them areas with ‘leak hot spots’ as identified using the GIS based leak map.

17 **Table 14-G – AVR’s Proposed Main Replacement Projects with 8-inch PVC**  
 18 **in Residential Areas with ‘Leak Hot Spots’**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Roanoke / St Timothy	7160	8"	PVC	\$ 70.33	\$ 503,534
	Tract 4053 (South)	8000	8"	PVC	\$ 70.33	\$ 562,607
2012	Arcata/Lodema	6250	8"	PVC	\$ 72.73	\$ 454,571
2013	Pohez/Symeron N of Chapae	1650	8"	PVC	\$ 75.22	\$ 124,112
<b>Total:</b>					<b>\$</b>	<b>1,644,824</b>

19 Table 14-H presents DRA’s recommended main replacement projects with  
 20 8-inch PVC in residential areas with ‘leak hot spots.’ This recommendation  
 21 maintains the same order of priority as proposed by AVR, but postpones one

1 project from 2011 to 2012, one project from 2012 to 2013, and one project from  
 2 2013 to be proposed in the next GRC if warranted by a main replacement plan.  
 3 This recommendation also incorporates unit costs that more closely reflect AVR's  
 4 historical unit costs for 8-inch PVC projects.

5 **Table 14-H – DRA’s Recommended Main Replacement Projects with 8-inch**  
 6 **PVC in Residential Areas with ‘Leak Hot Spots’**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Roanoke / St Timothy	7160	8"	PVC	\$ 59.13	\$ 423,368
2012	Tract 4053 (South)	8000	8"	PVC	\$ 61.03	\$ 488,221
2013	Arcata/Lodema	6250	8"	PVC	\$ 62.99	\$ 393,666
<b>Total:</b>						<b>\$ 1,305,255</b>

7 **3) Main Replacement Projects involving Large**  
 8 **Transmission Mains**

9 AVR proposes eight large transmission main replacement projects in 2011-  
 10 2013, of which five are proposed in 2013. DRA recommends AVR complete  
 11 these large transmission main replacement projects in the same order of priority  
 12 but at a pace that more closely reflect the annual expenditures and amount of work  
 13 performed over the last three years.

14 For the five projects proposed in 2013, DRA recommends the Commission  
 15 require AVR to provide justification for those in the next GRC using the specific  
 16 target and goals developed through a main replacement plan.

17 As stated above, AVR has had a successful main replacement program in  
 18 the past but has not provided justification or reason in this GRC to increase the  
 19 rate of main replacement. DRA is concerned that an increased rate of replacement  
 20 based solely on the GIS based leak map will result in diminishing returns on  
 21 investment for mains. Moreover, DRA recommends AVR develop a main  
 22 replacement plan with specific targets and goals for its distribution system to

1 provide more clear direction on the appropriate amount of main replacements for  
 2 each year.

3 Table 14-I presents AVR's proposed large transmission main replacement  
 4 projects.

5 **Table 14-I – AVR's Proposed Large Transmission Main Replacement**  
 6 **Projects**

Year	Description	Quantity (LF)	Size	Type <sup>259</sup>	Estimated Unit Cost per Foot	Estimated Total
2012	Hilltop above ground main (west side)	660	24"	STL	\$ 283.44	\$ 187,070
	Hilltop above ground main (east side)	700	24"	STL	\$ 283.44	\$ 198,407
	Rancherias (Chickasaw to Oneida Esmnt)	1000	24"	DIP	\$ 283.44	\$ 283,439
2013	Hilltop from above ground to Sitting Bull	1900	24"	DIP	\$ 250.00	\$ 523,000
	Hilltop above ground to Lyons Park	2200	20"	DIP	\$ 165.92	\$ 365,034
	Rancherias Esmnt from Lyons Park to Erie	1600	20"	DIP	\$ 165.92	\$ 265,480
	Rancherias Esmnt from Erie to Hopi	1600	20"	DIP	\$ 165.92	\$ 265,480
	Seneca Easement AV Road to Choco	2400	16"	DIP	\$ 131.19	\$ 314,857
<b>2012-2013 Total:</b>						<b>\$ 2,402,765</b>

<sup>259</sup> All of AVR's proposed large transmission main replacement projects, for this GRC, include steel or DIP pipe specifications. This reflects a recent change to AVR's specifications for construction to now require class 200 PVC or another material be used for large diameter pipe installations. This change was made after two recent pipe failures of 16-inch, class 150, C905 PVC DR 18 pipes (email from Scott Weldy, General Manager, AVR, to Amanda Rasmussen, DRA's Water Branch. April 29, 2011, 12:45PM PT.) AVR is working with the PVC pipe manufacturer and a third party testing lab to understand the possible causes of these failures. (Ibid.) If AVR finds that the manufacturer's pipe was faulty, DRA expects AVR to take any means possible to get reimbursement for the replacement of those mains from the manufacturer.

1 Table 14-J presents DRA’s recommended large transmission main  
 2 replacement projects. This recommendation maintains the same order of priority  
 3 as proposed by AVR, but postpones two projects from 2012 to 2013 and five  
 4 projects from 2013 to be proposed in the next GRC if warranted by a main  
 5 replacement plan.

6 **Table 14-J – DRA’s Recommended Large Transmission Main Replacement**  
 7 **Projects**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2012	Hilltop above ground main (west side)	660	24"	STL	\$ 282.29	\$ 186,309
2013	Hilltop above ground main (east side)	700	24"	STL	\$ 291.35	\$ 203,943
	Rancherias (Chickasaw to Oneida Esmnt)	1000	24"	DIP	\$ 291.35	\$ 291,347
<b>Total:</b>						<b>\$ 681,599</b>

8 **4) Main Replacement Projects Associated with other**  
 9 **Tank and Road Construction Projects**

10 There are three main replacement projects that are associated with other  
 11 tank and road construction projects that AVR has prioritized to coincide with the  
 12 other projects rather than based on the urgency to replace the existing main. These  
 13 other projects include the Hilltop Tank 1 Northside piping project and two road  
 14 construction projects by the Town of Apple Valley, the Highway 18 and Apple  
 15 Valley Road project, and the Yucca Loma Bridge project.

16 The Hilltop Tank 1 Northside piping project is related to the Hilltop Tank  
 17 connection upgrades discussed in Chapter 7 of this report (Utility Plant in  
 18 Service). The Highway 18 and Apple Valley Road project involves 650 feet of 12-  
 19 inch Ductile Iron Pipe (“DIP”) to replace 8 and 12-inch steel. The Yucca Loma  
 20 Bridge project proposed for 2012 involves 1,700 feet of realignment and  
 21 replacement of 8-inch PVC.

1 Table 14-K presents AVR's main replacement projects associated with  
 2 other tank and road construction projects.

3 **Table 14-K – AVR Proposed Projects Associated with other Tank and Road**  
 4 **Construction Projects**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Hilltop Tank 1 Northside Piping	240	24"	STL	\$ 300.00	\$ 72,000
	Hwy 18 / AV Road	650	12"	DIP	\$ 99.56	\$ 92,819
2012	Yucca Loma (Bridge)	1700	8"	PVC	\$ 72.73	\$ 123,643
<b>Total:</b>						<b>\$ 288,463</b>

5 Table 14-L presents DRA's recommended main replacement projects  
 6 associated with other tank and road construction projects. DRA recommends no  
 7 change to the proposed construction years for these three projects because it  
 8 follows the DRA recommendation for the Hilltop Tank project (discussion in  
 9 Chapter 7) and the Town of Apple Valley's road construction schedule. The  
 10 differences in the total costs DRA recommends are associated with using the  
 11 updated escalation factor (3.21%) discussed in Chapter 7 of this report (Utility  
 12 Plant in Service) and the adjusted unit cost of 8-inch PVC (\$57.29 per LF in 2010  
 13 dollars) discussed in section 2(a) of this chapter.

14 **Table 14-L – DRA Proposed Main Replacement Projects Associated with**  
 15 **other Tank and Road Construction Projects**

Year	Description	Quantity (LF)	Size	Type	Estimated Unit Cost per Foot	Estimated Total
2011	Hilltop Tank 1 Northside Piping	240	24"	STL	\$ 299.39	\$ 71,854
	Hwy 18 / AV Road	650	12"	DIP	\$ 99.39	\$ 92,691
2012	Yucca Loma (Bridge)	1700	8"	PVC	\$ 61.03	\$ 103,747
<b>Total:</b>						<b>\$ 268,291</b>

1                   **5) Emergency Main Replacements**

2                   DRA has reviewed and agrees with AVR’s proposed estimates for  
3 emergency main replacements. These cost estimates are based on historical data  
4 averaged and normalized to 2010, and escalated to the test year and escalation  
5 year. The differences in DRA’s proposed spending is associated with using the  
6 updated escalation factor (3.21%) discussed in Chapter 7 of this report (Utility  
7 Plant in Service).

8                   **6) New Main Extension**

9                   AVR proposes one project, in 2012, for a new main extension. This project  
10 involves a 12-inch DIP transmission pipeline in Del Oro Road from the existing  
11 Mockingbird Pipeline at Del Oro and Merion east to the existing transmission  
12 main in the easement east of Kiowa. This main extension *increases* the  
13 transmission capability from the Jess Ranch Pressure Zone to the Main Pressure  
14 Zone and is directly dependent on the completion of the Mockingbird Pump  
15 Station. Because this main is directly dependent on the completion of the  
16 Mockingbird Pump Station, DRA recommends it be disallowed consistent with  
17 DRA’s recommendation to disallow the Mockingbird Booster Pump Station  
18 project.<sup>260</sup>

19                   **D. CONCLUSION**

20                   Table 14-M through Table 14-O summarize the main replacement spending  
21 in the last three recorded years (2008, 2009, and 2010), and AVR’s and DRA’s  
22 proposed spending for the next three years (2011, 2012, and 2013). Tables 14-M  
23 and 14-N provide planned main replacements and emergency main replacements,  
24 respectively, to allow the reader to compare this report to the values presented in

---

<sup>260</sup> See Chapter 7 of this report, Utility Plant in Service, for further discussion of this project and DRA’s position to disallow this proposed new main.

1 AVR's capital budget workpapers. Table 14-O combines these categories to  
 2 provide a better comparison to AVR's historical main replacement spending,  
 3 which does not distinguish between planned and emergency main replacements.

4 **Table 14-M – Planned Main Replacements**

<b>Authorized (Previous Three Years)</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>3-year Average</b>
Authorized by the Commission	\$ 525,764	\$ 260,104	\$ 822,800	\$ 536,223
<b>Proposed (Next Three Years)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>3-year Average</b>
AVR	\$ 1,230,961	\$ 1,247,130	\$ 1,857,962	\$ 1,445,351
DRA	\$ 587,912	\$ 778,277	\$ 888,957	\$ 751,715

5 **Table 14-N – Emergency Main Replacements**

<b>Authorized (Previous Three Years)</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>3-year Average</b>
Authorized by the Commission	\$ 277,889	\$ 272,743	\$ 428,388	\$ 326,340
<b>Proposed (Next Three Years)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>3-year Average</b>
AVR	\$ 373,565	\$ 386,343	\$ 399,556	\$ 386,488
DRA	\$ 372,805	\$ 384,772	\$ 397,931	\$ 385,169

6 **Table 14-O – Total Main Replacements**  
 7 **(planned and emergency main replacements combined)**

<b>Authorized and Recorded (Previous Three Years)</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>3-year Average</b>
Authorized by the Commission	\$ 803,653	\$ 532,847	\$ 1,251,188	\$ 862,563
Recorded Main Replacement Spending <sup>a</sup>	\$ 1,294,085	\$ 499,798	n/a	\$ 896,942
<b>Proposed (Next Three Years)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>3-year Average</b>
AVR	\$ 1,604,526	\$ 1,633,473	\$ 2,257,518	\$ 1,831,839
DRA	\$ 960,717	\$ 1,163,048	\$ 1,286,888	\$ 1,136,884

a - "Actual expense was over the adopted due to additional projects: Symeron Road Main Replacement (\$331,000), Apple Valley Road/Yucca Loma Main Relocation (\$52,000), and Upsize of Dale Evan Main Replacement from 12" to 16" (\$97,000). These projects were unplanned but made necessary due to Town of Apple Valley road improvement projects." AVR's Minimum Data Requirements, II.D.6(3)

1           As shown in Table 14-O, DRA’s proposed main replacement budget is  
2 closer to the authorized and recorded main replacement average spending over the  
3 most recent recorded three years. DRA recommends the Commission adopt  
4 DRA’s proposed cost and planned construction years for the main replacement  
5 projects discussed in this chapter.

6           DRA recommends AVR develop a main replacement plan with specific  
7 targets and goals for its distribution system to provide more clear direction on the  
8 appropriate amount of main replacements for each year. These plans ideally will  
9 ensure continued success of the main replacement program, lessen the chance of  
10 diminishing returns on investment, and economically reduce hidden leak loss.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

## CHAPTER 15: RATE DESIGN

### A. INTRODUCTION

This chapter presents DRA’s analysis and recommendations on AVR’s proposed rate design, miscellaneous revenue and fees, and low-income assistance program. AVR requests authorization to continue the conservation rate design trial program<sup>261,262</sup> with modifications to the tier breakpoints and tier price differentials. AVR also requests increases to various fees and charges and continuance of its low-income assistance program.

### B. SUMMARY OF RECOMMENDATIONS

DRA has reviewed AVR’s current conservation rate design and the proposed modifications to the tier breakpoints and price differential between tiers. DRA performed this review considering the increased number in customer complaints that AVR considers being related to the rate design. DRA finds AVR’s proposed changes modest and unlikely to be the specific cause of any future increase in customer complaints. DRA recommends the Commission adopt AVR’s conservation rate design for residential and non-residential customers as described in this chapter.

DRA has reviewed AVR’s miscellaneous revenue calculations and the proposed increases in reconnection charges and bad check fees. DRA recommends a more modest increase to AVR’s reconnection charge and bad check

---

<sup>261</sup> The conservation rate design trial program also includes the WRAM and MCBA program discussed in Chapter 12 of this report. Although no recommended changes are proposed by DRA for either the rate design or WRAM/MCBA, future recommendations may be made to follow Commission decisions regarding the entire trial program through the Conservation OII (I.07-01-022, D.08-02-036).

<sup>262</sup> Apple Valley Ranchos Water Company, its parent company Park Water Company, and three other Class A water utilities have jointly filed application A.10-09-017 to modify D.08-02-036, D.08-06-002, D.08-08-030, D.08-09-026, D.08-11-023, D.09-05-005, D.09-07-021, and D.10-06-038 regarding the Amortization of WRAM-Related Accounts. Future

(continued on next page)

1 fees resulting in an estimate of \$63,778 in miscellaneous revenue versus AVR's  
2 estimate of \$87,045 for the Test Year 2012.

3 DRA has reviewed AVR's low-income assistance program and the  
4 proposed 20% increase in the discount amount for qualifying customers (equal to  
5 the proposed overall rate increase) and the proposed 104% increase in the  
6 surcharge amount for all remaining metered customers.<sup>263</sup> DRA recommends  
7 increasing both the discount and surcharge amount by the adopted rate increase for  
8 the Test Year 2012.

9 **C. DISCUSSION**

10 AVR's proposed rate design is a continuation of the trial program adopted  
11 by D.08-09-026 (A.08-01-002). The proposed rate design is based on the  
12 conservation rate design contained in the Settlement Agreement between Park  
13 Water Company and DRA, dated June 15, 2007, and adopted in the Conservation  
14 OII (I.07-01-022, D.08-02-036).

15 AVR currently provides service under the following tariff schedules:

<u>Schedule No.</u>	<u>Name</u>
17 1	Residential General Metered Service
18 2	Gravity Irrigation Service
19 3	Non-Residential General Metered Service
20 4	Non-Metered Fire Service
21 LC	Late Payment Charge
22 UF	Public Utilities Commission Reimbursement Fee
23 CARW	California Alternative Rates for Water
24 CARW SC	California Alternative Rates for Water – Surcharge
25	

---

(continued from previous page)

recommendations may be made to follow Commission decisions regarding these WRAM/MCBA accounts.

<sup>263</sup> The CARW surcharge is not applied to non-metered fire service, gravity irrigation service, or customers who qualify for the CARW discount.

1                   **1) RESIDENTIAL SERVICE RATE DESIGN**

2                   AVR’s proposed rate design for residential customers would continue the  
3 recently implemented conservation rate design trial program with some  
4 adjustments, which are discussed in the following sections.

5                   (a) Present Rate Design

6                   The current trial program includes increasing block rates in three tiers,  
7 which charge higher volumetric rates for increased water usage. The tier  
8 breakpoints are based on AVR’s consumption patterns and seasonality. The  
9 consumption range for Tier 1 is designed to capture indoor water use and is  
10 intended to include residential customers with low to average consumption. The  
11 consumption range for Tier 2 increases to the mid-point between the average  
12 monthly annual consumption and the average monthly summer consumption. All  
13 consumption over Tier 2 is considered Tier 3.<sup>264</sup>

14                  In the present rate design, Tier 1 includes consumption up to and including  
15 the first 14 ccf (hundred cubic feet) per month at the volumetric rate of \$2.157 per  
16 ccf. Tier 2 includes all usage over 14 ccf through 29 ccf per month at the  
17 volumetric rate of \$2.277 per ccf. Tier 3 includes all usage over 29 ccf per month  
18 at the volumetric rate of \$2.397 per ccf. Since AVR bills residential customers on  
19 a bi-monthly basis, twice the monthly values are used as the tier breakpoints as  
20 presented on customer bills (Tier 1 includes the first 28 ccf, Tier 2 includes usage  
21 over 28 ccf through 58 ccf, and Tier 3 includes usage over 58 ccf.)

22                  Volumetric rates for Tiers 1, 2, and 3 in the present rate design are set with  
23 a price differential of 5 percent so that the 2<sup>nd</sup> tier is 95 percent of the 3<sup>rd</sup> tier and  
24 the 1<sup>st</sup> tier is 90 percent of the 3<sup>rd</sup> Tier.

---

<sup>264</sup> AVR’s Revenue Requirement Report, p. 107.

1           The present rate design recovers more of the fixed costs in the volumetric  
2 charge than in the service charge, which follows the guidelines within the  
3 conservation rate design trial program. Prior to this trial program, implemented by  
4 AVR in 2009, more of the fixed costs were recovered in the service charges.

5                           (b) Proposed Rate Design

6           The proposed rate design adjusts the consumption breakpoint between Tier  
7 1 and Tier 2 and between Tier 2 and Tier 3, and increases the price differential  
8 between the volumetric rates.

9           AVR used a 2009 bill tabulation analysis to calculate the average winter  
10 usage and assumed this value as an approximation of average indoor use. Because  
11 the average unit consumption in 2009 by residential customers have declined since  
12 the last AVR rate design bill tabulation analysis using 2007 data,<sup>265</sup> the resulting  
13 change in consumption patterns indicates a need to change the tier breakpoints.<sup>266</sup>  
14 Using this more current data from the 2009 bill tabulation analysis, AVR proposes  
15 that the breakpoint between Tier 1 and Tier 2 shifts from 14 ccf to 13 ccf per  
16 month and the breakpoint between Tier 2 and Tier 3 shifts from 29 ccf to 26 ccf  
17 per month.

18           AVR also proposes to change the volumetric price differential between the  
19 tiered rates from 5 percent to 10 percent. The proposed volumetric rate for Tier 1  
20 is \$2.538 per ccf, for Tier 2 is \$2.855 per ccf, and for Tier 3 is \$3.172 per ccf.

---

<sup>265</sup> E-mail from Michelle Nguyen, Rate Analyst, Park Water Company to Amanda Rasmussen, DRA's Water Branch. March 24, 2011, 11:39AM PT (on file with author).

<sup>266</sup> The 2009 average residential customer class unit consumption is nearly 17% that of 2007 (AVR Revenue Requirement Report Workpapers 3-1r) and the 2010 unit consumption is another 10% less than 2009. (AVR Revenue Requirement Report Update Workpaper 2-4rr.)

1           DRA’s Table 15-1 below presents AVR’s current rate design and rates, as  
 2 presented in AVR’s tariff sheets, and compares them to AVR’s proposed rate  
 3 design and rates as presented in Appendix B of AVR’s Revenue Requirement  
 4 Report.<sup>267</sup>

5           **Table 15-1 – AVR’s Current Rate Design vs. AVR’s Proposed Rate Design**

<b>Residential</b>	<b>AVR’s Current Rate Design and Rates</b>	<b>AVR’s Proposed Rate Design and Rates</b>
Tier 1	0 – 14 ccf	0 – 13 ccf
	\$2.157/ccf	\$2.538/ccf
Tier 2	Over 14 – 29 ccf	Over 13 – 26 ccf
	\$2.277/ccf	\$2.855/ccf
Tier 3	Over 29 ccf	Over 26 ccf
	\$2.397/ccf	\$3.172/ccf
Price differential between each tier	5%	10%

6           DRA opposes AVR’s proposed rate increases illustrated in Table 15-1  
 7 above but supports the rate design methodology used to determine the tier  
 8 breakpoints and the adjusted price differential between tiers. DRA recommends  
 9 that the Commission adopt AVR’s proposed conservation rate design for  
 10 residential customers for use in the Test Year 2012 rate case cycle.

---

<sup>267</sup> DRA uses AVR’s proposed rates for the purposes of illustration in this rate design chapter. However, DRA’s use of AVR’s proposed rates should not be interpreted to mean that DRA agrees with AVR’s proposed rates. Because of DRA’s recommendations in this Report that result in a lower revenue requirement, the actual rates adopted by the Commission will likely be lower than those proposed by AVR. As with past GRCs, DRA does not determine the specific rates associated with its proposed operating revenue. AVR’s proposed rates represent the highest possible rates and the highest possible bill impacts for this GRC.

(c) DRA’s Review of the Impact on Customer Bills by AVR’s  
Proposed Rate Design

DRA’s Table 15-2 below demonstrates the amount and percent increase for residential 5/8-inch meter bi-monthly bills for various quantities of water (10 through 100 ccf). This table includes the volume of 38.87 ccf per bi-monthly bill, which corresponds to AVR’s proposed average consumption of 233.2 ccf per customer per year and to the average bill amount presented in AVR’s customer notice regarding this rate increase application (19.43 ccf/customer/month).

**Table 15-2 – Example Bi-Monthly Bill Amounts at Present and AVR’s Proposed Rates (Residential 5/8-inch meter)<sup>268</sup>**

	Total Bill Quantity (ccf)	Bi-Monthly Bill Amount		Amount Increase	Percent Increase
		Present Rates and rate design	AVR’s Proposed Rates and rate design		
Tier 1	10	\$63.07	\$71.26	\$8.19	12.99%
	20	\$84.64	\$96.64	\$12.00	14.18%
Tier 2	30	\$106.45	\$123.29	\$16.84	15.82%
	<b>38.87</b>	<b>\$126.65</b>	<b>\$148.61</b>	<b>\$21.96</b>	<b>17.34%</b>
	40	\$129.22	\$151.84	\$22.62	17.50%
	50	\$151.99	\$180.39	\$28.40	18.68%
Tier 3	60	\$175.00	\$211.47	\$36.47	20.84%
	70	\$198.97	\$243.19	\$44.22	22.23%
	80	\$222.94	\$274.91	\$51.97	23.31%
	90	\$246.91	\$306.63	\$59.72	24.19%
	100	\$270.88	\$338.35	\$67.47	24.91%

Table 15-2 above shows that AVR’s proposed conservation rate design results in a rate increase to all customers, but the highest rate increase will be to high-use customers. This creates an incentive for customers to use less water. Water conservation is consistent with state goals and should lower all customers’

<sup>268</sup> The overall proposed rate increase by AVR for 2012 is 20.0%.

1 costs in the long-term by lowering operation and production costs and expenses.  
2 As stated above, DRA opposes AVR's proposed rate increases but supports  
3 AVR's rate design methodology.

4 DRA's Table 15-3 below demonstrates the effect on volumetric tier pricing  
5 by changing the price differential from 5% to 10%, as proposed by AVR, and the  
6 corresponding increase or decrease in each tier's price per ccf.

7 **Table 15-3 – Price per ccf for each Tier with a 5 Percent and 10 Percent Price**  
8 **Differential**

<b>Residential</b>	<b>AVR Proposed Rate Design (modified to include a 5% price differential)</b>	<b>AVR Proposed Rate Design (as proposed with a 10% price differential)</b>	<b>Tier Rate Amount Increase (Decrease) due to increase in price differential</b>
Tier 1	\$2.682/ccf	\$2.538/ccf	(\$0.144)/ccf
Tier 2	\$2.831/ccf	\$2.855/ccf	\$0.024/ccf
Tier 3	\$2.980/ccf	\$3.172/ccf	\$0.192/ccf

9 Table 15-3 shows that a 10 percent price differential results in a lower price  
10 per unit for Tier 1 usage, which provides further financial incentive for customers  
11 to conserve water in order to stay within the Tier 1 rate. DRA notes that both the  
12 5% and 10% price differentials are modest with \$0.15 to \$0.30 differences  
13 between tier unit prices.

1 DRA’s Table 15-4 below demonstrates the effect on bills by changing the  
 2 price differential from 5% to 10%, as proposed by AVR, and the corresponding  
 3 amount and percent increase or decrease for several quantities of water.

4 **Table 15-4 – Example Bi-Monthly Bill Amounts at AVR Proposed Rates with**  
 5 **5 Percent and 10 Percent Price Differentials (Residential 5/8-inch meter)**

	Total Bill Quantity (ccf)	Bi-Monthly Bill Amount at AVR Proposed Rates		Amount Increase (Decrease) due to an increased Price Differential	Percent Increase (Decrease) due to an increased Price Differential
		AVR proposed rate design– modified to include a 5% Price Differential	AVR proposed rate design with a 10% Price Differential (as proposed)		
Tier 1	10	\$72.70	\$71.26	(\$1.44)	- 2.02%
	20	\$99.52	\$96.64	(\$2.88)	- 2.98%
Tier 2	30	\$126.94	\$123.29	(\$3.65)	- 2.96%
	<b>38.87</b>	<b>\$152.05</b>	<b>\$148.61</b>	<b>(\$3.44)</b>	<b>- 2.31%</b>
	40	\$155.25	\$151.84	(\$3.41)	- 2.24%
	50	\$183.56	\$180.39	(\$3.17)	- 1.76%
Tier 3	60	\$213.06	\$211.47	(\$1.58)	- 0.75%
	70	\$242.86	\$243.19	\$0.34	0.14%
	80	\$272.66	\$274.91	\$2.26	0.82%
	90	\$302.46	\$306.63	\$4.18	1.36%
	100	\$332.26	\$338.35	\$6.10	1.80%

6 Table 15-4 above shows that AVR’s proposed increase in price differential,  
 7 when considered by itself, results in a bill amount decrease for Tier 1 and Tier 2  
 8 usage and only a bill amount increase to high-use customers in Tier 3. This  
 9 creates incentive for customers to use less water. As stated above, water  
 10 conservation is consistent with state goals and should lower all customers’ costs in  
 11 the long-term by lowering operation and production costs and expenses. DRA  
 12 supports this gradual increase in price differential.

1 (d) DRA's Recommendations for the Residential Customer Class  
2 Rate Design

3 DRA does not agree with AVR's proposed rate increase because the sum of  
4 DRA's recommendations throughout this report will result in a lower revenue  
5 requirement and the actual rates adopted by the Commission will likely be lower  
6 than those proposed by AVR. However, DRA does find AVR's rate design  
7 methodology to be reasonable including the proposed tier breakpoints and increase  
8 to a 10 percent tier price differential. DRA recommends that the Commission  
9 adopt AVR's proposed conservation rate design for use to determine the  
10 residential customer class rates for the Test Year 2012 rate case cycle.

11 **2) NON-RESIDENTIAL AND GRAVITY IRRIGATION**  
12 **SERVICE RATE DESIGN**

13 (a) Non-residential Service

14 AVR proposes to continue the use of a single quantity rate for AVR's non-  
15 residential customers. Due to significant variations of usage throughout these  
16 customer classes, developing increasing block rates would likely require  
17 reclassification of these customers.

18 AVR's proposed non-residential rate design projects that 70% of revenue  
19 will come from the quantity rates and 30% will come from service charges.<sup>269</sup>  
20 AVR's proposed non-residential customer service charges are based on customer  
21 meter sizes and are equal to those determined in the residential customer class rate  
22 design.

23 Fire service does not have a quantity charge, and the fixed service charge is  
24 increased by the system average percent increase.

---

<sup>269</sup> This meets the California Urban Water Conservation Council's Best Management Practice 11 threshold for a conservation-oriented rate design.

1           The Public Authority – Irrigation customer class includes irrigation water  
2 sold to the Town for its James Woody Park which has a discounted commodity  
3 rate approved by the Commission in Resolution W-4499. In this GRC, the  
4 discounted rate is adjusted using forecasted consumption to determine the charge  
5 required to create an overall rate increase equal to the system average percent  
6 increase. The same adjustment is proposed for the discounted rate for the Town’s  
7 irrigation water used at the Apple Valley County Club (“AVCC”) as presented in  
8 Advice Letter 165-W submitted by AVR on April 7, 2011.<sup>270,271</sup>

9           As discussed in Chapter 2 – Water Consumption and Operating Revenues,  
10 DRA is including this customer and applying the discounted commodity rate  
11 under an assumption that the proposed tariff deviation (after review of the  
12 reasonableness of the discounted commodity rate) will be approved by the CPUC  
13 through the processing of Advice Letter 165-W, or if necessary, in the next GRC.

14           Although DRA does not agree with AVR’s proposed rate increase for the  
15 reasons stated in Section C.1(d) above, DRA agrees with AVR’s rate design  
16 methodology and finds the proposed non-residential rate design to be reasonable.  
17 Thus, DRA recommends that the Commission adopt AVR’s proposed rate design  
18 for use to determine rates for this rate case cycle.

---

<sup>270</sup> AVR’s Advice Letter 165-W is included in this report as Attachment 15-A in Appendix B.

<sup>271</sup> The Tariff Deviation Agreement proposed for AVCC in Advice Letter 165-W is similar to the Tariff Deviation Agreement between the Town and AVR for irrigation service to James Woody Park, submitted to the Commission in Advice Letter 126-W and approved by the Commission on September 23, 2004 in Resolution No. W-4499. Both Tariff Deviation Agreements include a commodity rate subject to future pro rata increases and are not subject to any surcharges, including any water revenue adjustment mechanism (“WRAM”) surcharges. DRA recommends the Commission require the revenue from both Public Authority – Irrigation (James Woody Park) and AVCC be excluded from WRAM revenue reporting since these customers are not subject to WRAM surcharges. This will ensure that residential (and remaining non-residential) customers do not pay higher WRAM surcharges to cover under-collections from these two irrigation use customers.

1 (b) Gravity Irrigation Service

2 AVR's proposed Gravity Irrigation service charge, for the single customer,  
3 the Jess Ranch golf course, is based on the customer's meter size and is equal to  
4 that determined in the residential customer class rate design. AVR's proposed  
5 volumetric charge is based on a cost of service study that was performed by AVR  
6 and included in its Revenue Requirement Report workpapers, Section 10. This  
7 practice for the gravity irrigation customer class has been used for the last two rate  
8 case cycles and is important to ensure that this single customer is not subsidized  
9 by any other customers. The Commission should require AVR to revise this cost  
10 of service study to reflect the adopted changes in estimated consumption and  
11 expenses to determine the adopted rates for the Test Year 2012 and Escalation  
12 Years 2013 and 2014.

13 **3) MISCELLANEOUS REVENUE AND OTHER FEES**

14 (a) Miscellaneous Revenue

15 AVR's miscellaneous revenue includes reconnection fees, late fees, the  
16 leasing of space for third party communications equipment, and bad check fees.  
17 AVR estimates \$87,045 in proposed miscellaneous revenue for the Test Year  
18 2012. This proposal reflects the following increases in reconnection charges and  
19 bad check fees as requested by AVR:

- 20 • reconnection charge in Rule No. 11 from \$10 for regular working  
21 hours and \$15 for after hours, to \$35 for regular working hours and  
22 \$97 for after hours;
- 23 • bad check fee in Rule No. 9 from \$10.50 to \$12.00.

24 AVR mistakenly included these proposed fee changes in the miscellaneous  
25 revenue at present rates. AVR is proposing an increase in miscellaneous revenue

1 fees that should only be included in revenue at proposed rates.<sup>272</sup> DRA’s  
 2 Table 15-5 shows the miscellaneous revenue at present rates to be \$50,398 per  
 3 year.

4 **Table 15-5 – DRA Estimate of Miscellaneous Revenue at Present Rates<sup>273</sup>**

Fee or Charge	DRA Estimated Misc. Revenue at Present Rates
Reconnection Charge	\$12,844
Late Fees	\$29,372
Excess Capacity (Leasing of Space)	\$4,427
Bad Check Fees	\$3,755
<b>Total</b>	<b>\$50,398</b>

5 AVR’s proposed increase in the reconnection charge reflect an assumption  
 6 of half an hour of regular labor for reconnections during working hours, and one  
 7 hour of overtime labor for reconnections during after hours. The average time  
 8 required (half an hour during working hours and one hour during non-working  
 9 hours) are assumed values provided by AVR without justification in the  
 10 application or workpapers for this GRC. DRA disagrees with the assumptions  
 11 used to calculate the reconnection fees. In addition, DRA is concerned that with  
 12 an increase in shut-offs and reconnections related to the recent economic  
 13 downturn, a fee of \$97.00 may be excessive and cost prohibitive for some  
 14 customers to resume water service.

15 DRA agrees that these fees should ideally be based on the cost of service,  
 16 but does not support the assumptions related to the work time required made by  
 17 AVR in the calculation of \$35.00 during working hours and \$97.00 during after

---

<sup>272</sup> Chapter 2 – ‘Water Consumption and Operating Revenues’ of this Report presents a comparison of AVR and DRA’s calculation of revenue at both present and proposed rates. The total revenue presented in that chapter also includes miscellaneous revenue from fees discussed in this chapter.

<sup>273</sup> Miscellaneous revenue at present rates for each fee or charge is calculated using the projected number of fees or charges collected and the present fee or charge amount.

1 hours. Therefore, DRA recommends a more modest increase of \$20.00 during  
2 working hours and \$30.00 during after hours, which is twice the existing fee  
3 amounts.

4 DRA notes that the bad check fee was raised from \$5.00 to \$10.50 in the  
5 last rate case cycle and recommends for the current rate case cycle that the  
6 Commission adopt a percent increase in the bad check fee similar to the adopted  
7 rate increase for the test year.

8 AVR does not propose any changes to the late fees or excess capacity  
9 charge.

10 (b) Other Fees

11 AVR's Revenue Requirement Report and proposed tariff sheets in  
12 Appendix B of the Revenue Requirements Report reflect the following changes to  
13 other fees that do not impact miscellaneous revenue:

- 14 • deposit fee in Rule No. 7 from \$35 monthly/\$75 bimonthly to twice  
15 the estimated average bill;
- 16 • facilities fee in Rule No. 15 from \$800 to \$900;
- 17 • supplemental water acquisition fee in Rule No. 15 from \$3,500 to  
18 \$5,000.

19 AVR failed to provide DRA with supporting documentation or other  
20 justification for its proposed increases in the deposit fee, facilities fee, and  
21 supplemental water acquisition fee within its Revenue Requirement Report and/or  
22 workpapers. DRA notes that AVR requested a similar increase to the deposit fee  
23 in the last GRC, which was not adopted. DRA recommends no change to the  
24 deposit fee. DRA notes that the facilities fee was raised from \$669 to \$800 and  
25 the water acquisition fee was raised from \$3,000 to \$3,500 in the last rate case

1 cycle. Despite AVR’s failure to provide adequate justification within the Revenue  
2 Requirement Report, DRA recommends that the Commission adopt a percent  
3 increase to these fees similar to the adopted rate increase for the test year.

4 **4) LOW-INCOME ASSISTANCE PROGRAM**

5 AVR’s Low-Income Assistance Program is known as California  
6 Alternative Rate for Water (“CARW”), in effect since January 1, 2006, and  
7 authorized by the Commission in D.05-12-020. AVR’s CARW program follows  
8 the eligibility guidelines used for the energy utilities low income program,  
9 California Alternate Rates for Energy (“CARE”). The current eligibility  
10 guidelines, provided here in Table 15-6, can be found on the CPUC website and  
11 are effective June 1, 2010 through May 31, 2011.

12 **Table 15-6 – CARE eligibility guidelines** <sup>274</sup>

Household Size	CARE Income Limit
1 to 2	\$31,300
3	\$36,800
4	\$44,400
5	\$52,000
6	\$59,600
Each additional	\$7,600

13 AVR proposes that the existing CARW program be continued and that the  
14 existing discount of \$5.83 per month be increased to \$7.00 per month to reflect the  
15 same percentage increase as the proposed rate increase (20%) for the test year  
16 2012. AVR also proposes that the existing surcharge of \$0.49 per month, used to  
17 pay for the discounts through the CARW-SC tariff schedule, be increased to \$1.00  
18 per month, which is 104% of the existing surcharge. AVR did not report an under-

---

<sup>274</sup> Energy Low Income Program (CARE) webpage, last modified May 28, 2010.  
<http://www.cpuc.ca.gov/PUC/energy/Low+income/care.htm>  
(page accessed on April 13, 2011)

1 collection of its CARW regulatory account in its Revenue Requirement Report to  
2 support this 104% increase in the CARW surcharge.

3 DRA recommends that both the discount and surcharge be increased by the  
4 same percentage increase as the adopted rate increase for the Test Year 2012 in  
5 order to maintain the current level of support provided to low-income customers.

6 AVR plans to conduct a new assessment of the customers eligible for the  
7 CARW program when the data from the 2010 census becomes available.<sup>275</sup> DRA  
8 recommends the Commission require AVR to include this CARW assessment in  
9 its Test Year 2014 GRC filing.

## 10 **5) REGULATORY ACCOUNTS**

11 AVR proposes that the existing CARW Revenue Reallocation Balancing  
12 Account continue for this rate case cycle. D.05-12-020 authorized the  
13 establishment of the CARW Revenue Reallocation Balancing Account. This  
14 balancing account tracks the difference between the recorded discounts (currently  
15 \$5.83 per month) provided through the CARW tariff schedule and the surcharge  
16 (currently \$0.49 per month) collected through the CARW-SC tariff schedule.  
17 DRA notes that no request has been made to amortize the balance of this  
18 regulatory account and recommends that the existing CARW Revenue  
19 Reallocation Balancing Account be continued for this rate case cycle.

## 20 **D. CONCLUSION**

21 DRA recommends that the Commission do the following:

22 (1) Adopt AVR's proposed conservation rate design for residential and  
23 non-residential customers for use in the Test Year 2012 rate case cycle.

---

<sup>275</sup> AVR's Revenue Requirement Report, page 13.

1           (2) Adopt DRA's estimates for miscellaneous revenue and DRA's  
2 recommended changes to the reconnection charge, bad check fee, deposit fee,  
3 facilities fee, and supplemental water acquisition fee as described in this chapter.

4           (3) Continue to allow AVR's Low Income Assistance Program and its  
5 related regulatory account and increase the related discount and surcharge amount  
6 by the adopted rate increase for the Test Year 2012.

1                                   **CHAPTER 16: STEP RATE INCREASE**

2                                   **A. FIRST ESCALATION YEAR**

3                                   As specified in the Rate Case Plan, the Commission should authorize AVR  
4 to file its Escalation Years 1 and 2 rate increase requests by Tier 1 advice letter no  
5 later than 45 days prior to the first of the escalation year.<sup>276</sup> The advice letter  
6 filing should include all calculations and documentation necessary to support the  
7 requested rate change.<sup>277</sup> The requested rate increase should be subject to the pro  
8 forma earnings test, as specified in D.04-06-018.<sup>278 279</sup>

9                                   The Commission’s Water Division and Audits (“DWA”) should review the  
10 requested step rates to determine their conformity with the decision in this GRC,  
11 and should go into effect upon DWA’s determination of compliance. DWA  
12 should inform the Commission if it finds that the proposed rates are not in accord  
13 with the GRC decision. The Commission may then modify the increase. The  
14 effective date of the revised tariff schedule should be no earlier than January 1,  
15 2013. The revised schedules should apply to service rendered on and after their  
16 effective date. Should a rate decrease be in order, the rates should become  
17 effective on the filing date.

18                                   **B. SECOND ESCALATION YEAR**

19                                   For the second year, the Commission should grant an attrition adjustment  
20 for the revenue requirement increases attributable for the expense increases due to  
21 inflation and rate base increases that are not offset by the increases in revenues.

---

<sup>276</sup> D.-7-05-062, Appendix A, page 19.

<sup>277</sup> Id.

<sup>278</sup> Id.

<sup>279</sup> D.04-06-018 on page 14 states: “The escalation year increase shall be decreased to the extent the pro-forma rate of return exceeds the authorized rate of return for the 12-months ending in September for January filers and in April for July filers prior to the escalation year.”

1 The revenue change shall be calculated by multiplying DRA's forecasted inflation  
2 rate and operational attrition plus financial attrition times adopted rate base in  
3 2014 times the net-to-gross multiplier.

4 **C. ESCALATION YEARS' REVENUE REQUIREMENTS**

5 Table 16-1 below shows the Summaries of Earnings for Escalation Years  
6 2013 and 2014. To obtain the increases in these years, D.04-06-018 and  
7 D.07-05-062 require water utilities to file an Advice Letter 45 days prior to the  
8 start of the year showing all calculations supporting their requested increases.

9 The revenues shown in Table 16-1 are for illustration purposes and the  
10 actual increases would be authorized only after approval of the utility's advice  
11 letter.

Table 16-1

## SUMMARIES OF EARNINGS

## APPLE VALLEY RANCHOS WATER COMPANY

Item	DRA	DRA	% increase
	2013	2014	
	(Thousands of \$)		
Operating revenues	21,020.4	21,469	2.13%
			Esc Factor
Operation & Maintenance	6,462.2	6,707.7	1.038
Administrative & General	6,067.9	6,183.2	1.019
Depreciation & Amortization	2,868.4	2,977.4	1.038
Taxes other than income	766.8	795.9	1.038
State Corp. Franchise Tax	322.3	318.0	
Federal Income Tax	1,071.7	1,056.5	
Total operating expense	17,559.2	18,038.7	
Net operating revenue	3,461.2	3,430.1	
Rate base	36,743.0	36,413.1	
1 Return on rate base	9.42%	9.42%	

# **APPENDIX A**

## **QUALIFICATIONS**

Apple Valley Ranchos Water Company  
General Rate Case A.11-01-001  
Test Year 2012

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
YOKE CHAN**

Q.1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Yoke W. Chan and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Senior Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from the University of California at Los Angeles, with a Bachelor of Science Degree in Civil Engineering. I am a registered civil engineer in the State of California.

Q3. Briefly describe your professional experience.

A3. I have been employed by the Commission for many years and have testified and worked on many general rate case proceedings, offset rate cases, transfer and compliance matters of Class A water utilities. I have also worked on ECAC proceedings for the energy utilities.

Q4. What is your responsibility in this proceeding?

A4. I am the Co-Project Manager for this proceeding and responsible for Chapters 8, 9 and 16.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
PAT MA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Pat Ma and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science Degree in Industrial and Systems Engineering with a concentration in Management from San Jose State University in 1986. My previous professional position was as a Senior Utilities Engineer at the Commission, where I worked from 1986 to 1999 in transportation, telecommunications, energy, and water areas. I also worked briefly for the U.S. EPA, Region 9 in 1989 as an Environmental Engineer. In December 2008, I rejoined the Commission as a Utilities Engineer in the DRA's Water Branch.

I received my Professional Engineer License in Industrial Engineering in the State of California in 1989 and a Grade 2 Water Distribution Operator Certification in 2010.

Q3. What is your responsibility in this proceeding?

A3. As a witness for DRA in AVR's Application 11-01-001, I am responsible for Chapter 7- Utility Plant-in-Service. I also serve as one of the two DRA project coordinators in this general rate case.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
MANDY M. RASMUSSEN**

Q.1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Mandy M. Rasmussen and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from Colorado State University with a Bachelor of Science Degree in Environmental Engineering.

Q3. Briefly describe your professional experience.

A3. I have three years of experience as an engineering consultant. I have worked with municipalities and private companies on 1) water and wastewater treatment process design, construction, operation and maintenance, 2) distribution and collection system infrastructure design, and 3) customer growth projections and utility planning. I joined the Commission in January 2011.

Q4. What is your responsibility in this proceeding?

A4. I am responsible for Chapter 2 (Water Consumption and Operations Revenue), Chapter 14 (Main Replacements), and Chapter 15 (Rate Design).

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
HERBERT R. MERIDA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Herbert Merida and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utilities Regulatory Analyst in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from San Francisco State University, with a Bachelor of Science Degree in International Business Management, a minor in Economics, and a Master of Business Administration Degree.

Q3. Briefly describe your professional experience.

A3. Regarding my professional experience, I have been employed by the Commission for almost four years and have worked on many general rate case proceedings. Also, I have held a variety of positions at Levi Strauss & Co., Siemens A.G., the Employment Development Department, the State Compensation Insurance Fund, and most recently the Commission.

Q4. What is your responsibility in this proceeding?

A4. I am a witness for this proceeding and responsible for Operations & Maintenance Expenses and the Administrative & General Expenses.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
TONI CANOVA**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Toni Canova and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I graduated from The Evergreen State College in Olympia, Washington, with a Bachelor of Arts Degree in Environmental Studies. I have been employed by the Commission for over seven years. I have testified before the Commission in General Rate Cases involving several Class A water utilities including California Water Service Company and Park Water Company. Previously, I was employed by the State of Washington's Department of Ecology for 8 years.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for testimony in Chapter 10 - Customer Service, Chapter 5 – Taxes Other Than Income, Chapter 6 – Income Taxes, and conservation expenses portion of Chapter 3 - O & M Expenses.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
JAMES J. SIMMONS**

Q. Please state your name and business address.

A. My name is James J. Simmons. My business address is 505 Van Ness Avenue, San Francisco, California 94102.

Q. By whom, and in what capacity are you employed?

A. I am employed by the Public Utilities Commission of California (CPUC) as a Public Utilities Regulatory Analyst (PURA) V in the Division of Ratepayer Advocates (DRA).

Q. Please summarize your educational background and work experience.

A. I received a Bachelor of Science degree in Business Administration from the University of Maryland, College Park, with an emphasis in Accounting.

After graduation, I worked for six years for the West Virginia Public Utilities Commission (WVPSC), attaining the level of Senior Utilities Analyst in the Audit Division. My duties included investigation and the preparation of audit reports on a variety of water, electric, gas, and motor carrier public utilities regulated by the WVPSC, and testifying as a staff expert witness in rate setting proceedings before the WVPSC.

In November, 1984, I successfully passed the examination for Certified Public Accountant (CPA) and was awarded a CPA Certificate and License from the West Virginia Board of Accountancy in February, 1985.

I joined the staff of the CPUC in November 1985 in the Division of Ratepayer Advocates (DRA), initially employed in the class of Financial Examiner and later in the class of Public Utilities Regulatory Analyst (PURA), attaining the senior level of each. Here, I have participated in the financial examinations of major regulated public utilities, testifying in a position of ratepayer advocacy in investigations and proceedings before the CPUC. I have worked on the general rate cases (GRCs) of AT&T Communications, Pacific Bell, and General Telephone Company of California. I led a review of the affiliate transactions of Pacific Bell Directory, and I served as the DRA project manager of Roseville Telephone Company's 1995 test year GRC.

From 1996 through 2000, I worked for the CPUC's Telecommunications Division in the capacity of a senior PURA. My duties included: assisting administrative law judges and the Commission in the preparation of decisions; preparing resolutions; the review and processing of applications for certificates of public convenience and necessity of competitive local exchange telecommunications companies; and the review and processing of advice letters. There, I also served as the CPUC liaison to:

the Universal Lifeline Telephone Service (ULTS) Marketing Board; the ULTS Administrative Committee; and the Community Technology Fund. My duties included oversight and all CPUC staff administrative functions for the ULTS program, including the preparation of budgets, contracts, and the Commission resolutions authorizing them.

Since April 2001, I have been employed in the CPUC's Division of Ratepayer Advocates (DRA) as a PURA V. My current duties include participation in major proceedings before the CPUC in a position of ratepayer advocacy.

In April, 2007, I successfully passed the examination for Certified Rate of Return Analyst (CRRRA) administered by the Society of Utility and Regulatory Financial Analysts (SURFA.)

I have testified before this Commission on many occasions.

Q. What is the purpose of your testimony today?

A. I have prepared and am sponsoring DRA's Testimony on: AVR's Requests for Memorandum Accounts for Medical Expenses and Pressure Reducing Valve Modernization; a Pension Balancing Account; and DRA's Testimony on Payroll and Pensions and Benefits Expenses (both for AVR and General Office) for Test Year 2012.

Q. Does that complete your prepared direct testimony in this proceeding?

A. Yes, at this time.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
KENNETH BRUNO**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Kenneth Bruno and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Financial Examiner IV in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from San Francisco State University with a Bachelor of Science Degree in Finance.

Q3. Briefly describe your professional experience.

A3. I joined the Water Branch of the Division of Ratepayers Advocates in December 2010. I have been employed by the Commission since 2006 and have worked as a Financial Examiner in the Division of Water and Audits, and as a Public Utilities Regulatory Analyst in the Consumer Protection and Safety Division.

Q4. What is your responsibility in this proceeding?

A4. I am responsible for Chapter 11.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY  
OF  
NICKOLAY KOTYRLO**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Nickolay Kotyrlo and my business address is 505 Van Ness Avenue, San Francisco, CA 94102. I am a Financial Examiner III in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I am an expert witness in Apple Valley Ranchos GRC proceeding (A.11-01-001). I have a Bachelor's degree in Business Administration from the Pacific Union College and I am a Certified Public Account registered in the State of California. Prior to joining the Commission, I worked for almost six years at the Department of Corporations (DOC), Securities Regulations Division. At DOC I was a lead examiner and conducted various routine and non-routine examinations of investment advisers and broker-dealers. My responsibilities included reviewing financial statements, reviewing customer complaints and preparing monthly reports for management, reviewing work papers of other auditors and making recommendations for adjustments, training new employees, assisting counsel during enforcement proceedings and various other assignments.

Q3. What is your responsibility in this proceeding?

A3. I am an expert witness and sponsoring only Chapter 12 of the DRA testimony; specifically,

- Monthly Billing Conversion request
- 2008 Reserve Balancing Account
- 2009 & 2010 Incremental Cost Balancing Accounts
- 2010 Water Revenue Adjustment Mechanism and Modified Cost Balancing Account
- Conservation Proceeding Memorandum Account
- Conservation Memorandum Account
- Outside Services Memorandum Account
- Plant Review

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.