Docket:	:	A.06-07-017
Exhibit Number	:	
Commissioner	:	John Bohn
Admin. Law Judge	:	Christine Walwyn
DRA Project Mgr.	:	Yoke Chan
	:	

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT ON THE COST OF CAPITAL

CALIFORNIA WATER SERVICE COMPANY
BAKERSFIELD, DIXON, KING CITY, OROVILLE, SELMA, SOUTH SAN FRANCISCO, WESTLAKE, AND WILLOWS DISTRICTS

Test Year 2007-2008
Applications 06-07-017 ~ 024

For authority to increase water rates located in its
Bakersfield, Dixon, King City, Oroville, Selma, South San Francisco, Westlake, and Willows Districts.

San Francisco, California
December 1, 2006

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CHAPTER 1: INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

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3   This report contains the recommendations of the Water Branch (WB) of the

4   Division of Ratepayers Advocates (DRA) regarding rate of return for the fiscal

5   years 2007 - 2008 through 2009 - 2010 for eight districts[1] of the California Water

6   Service Company (CWS) in connection with A.06-07-017 through A.06-07-024.

7   DRA recommends a return on equity (ROE) of 9.54%, while CWS requests an

8   ROE of 12.37% for this General Rate Case (GRC) period. DRA and CWS use the

9   same methodology to determine the embedded cost of long-term debt. DRA

10   concurs with CWS' long-term debt rate for the 2007 Test Year of 6.75% and

11   6.71% for the year 2008 and 6.62% for the year 2009. DRA recommends a rate of

12   return (ROR) for CWS of 8.31% for the years 2007-2010. These returns compare

13   to those requested by CWS of 9.91%, 9.90%, 9.86%, and 9.84%. The difference

14   that exists between CWS and DRA regarding capital structure results from DRA

15   recommending a single ROR, determined for the Test Year 2007 - 2008, and

16   applied to 2008 - 2009 and 2009 - 2010. A summary of CWS' request and DRA's

17   recommendations is provided in Table 1-1.

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[1] The eight districts are Bakersfield, Dixon, King City, Oroville, Selma, South San Francisco, Westlake, and Willows.

Table 1-1

California Water Service Company
Comparison of Requested and DRA Recommended
Rate of Return
For the Years 2007 through 2009

	California Water Service			DRA Recommended		
	Capital Structure	Cost Factor	Weighted Cost	Capital Structure	Cost Factor	Weighted Cost
Test Year 2007						
Long-Term Debt	43.00%	6.75%	2.90%	43.00%	6.75%	2.90%
Preferred Stock	0.50%	4.19%	0.02%	0.50%	4.19%	0.02%
Common Equity	56.50%	12.37%	6.99%	56.50%	9.54%	5.39%
Total	100%		9.91%	100%		8.31%
Test Year 2008						
Long-Term Debt	43.00%	6.71%	2.89%	43.00%	6.71%	2.89%
Preferred Stock	0.50%	4.19%	0.02%	0.50%	4.19%	0.02%
Common Equity	56.50%	12.37%	6.99%	56.50%	9.54%	5.39%
Total	100%		9.90%	100%		8.29%
Test Year 2009						
Long-Term Debt	43.00%	6.62%	2.85%	43.00%	6.62%	2.85%
Preferred Stock	0.50%	4.19%	0.02%	0.50%	4.19%	0.02%
Common Equity	56.50%	12.37%	6.99%	56.50%	9.54%	5.39%
Total	100%		9.86%	100%		8.26%

1

| 1 | **CHAPTER 2: QUANTITATIVE ANALYSIS** |

2 **A. INTRODUCTION**

3   The market's required return on equity is not directly observable. Implicit in stock

4 prices, however, are investors' expected returns. Investors expect returns as

5 compensation for the risk they assume by virtue of them making their capital available to

6 the company. Analytical techniques based on finance theory have been developed to

7 infer the return on equity from stock-price data. DRA uses two financial models,

8 Discounted Cash Flow (DCF) and Risk Premium (RP), to estimate investors' expected

9 ROE for CWS.

10 **B. COMPARABLE GROUP**

11   DRA has determined a range of ROEs for CWS by applying the DCF and RP

12 Models to a group of comparable water utilities. Results derived from the DCF may be

13 biased and less reliable when applied to a specific company, such as one with unusually

14 high or unusually low dividend growth rates. Applying the DCF and RP Models to a

15 larger sample, such as DRA's comparable group, serves to correct such biases. DRA

16 chose five utilities as the comparable group using the following criteria: (1) water

17 operations that account for at least 70% of the utility's revenues and (2) the utility's stock

18 is publicly traded. This same comparable group, with the inclusion of CWS, has been

19 used by DRA in other analyses.

20   Table 2-1 shows the financial characteristics for the comparable group of

21 companies: American States Water, Connecticut Water Service, Middlesex Water, Aqua

22 America, and San Jose Water. CWS' comparable group of water companies includes the

23 previously mentioned companies. CWS also uses a selection of gas utilities in

24 developing its estimates. This practice of including gas utilities in the development of

25 ROE forecasts has repeatedly been rejected by this Commission, most recently in CWS'

1   Antelope Valley District General Rate Case.[2] DRA does not consider gas companies in

2   its comparable group consistent with Commission direction.

3   In the past some water utilities have rebutted the use of staff's data and models by

4   taking individual components out of context to supposedly illustrate that staff's results

5   are not reasonable. Since staff bases its recommended ROE on an average of results

6   using various components (all described in the following discussion), taking an individual

7   component and calculating the models in such a "vacuum" is incorrect. This

8   "recalculation" of staff's models in this way is improper and should not be applied to the

9   results calculated in this report.

10   **C. Discounted Cash Flow Model**

11   The DCF Model reflects the current market price of a share of common stock

12   equal to the present value of the expected future stream of dividends and the future sale

13   price of a share of stock, discounted at the investor's discount rate. The expected rate of

14   return is expressed by the discount rate that equates the market price of the stock to the

15   present value of the flow of cash receipts. The DCF Model solves for the investor's

16   discount rate as follows:

17            $r = D_1/P_0 + g,$

18   where:

19   r = the investor's expected return on equity,

20   D_1 = the expected dividend in the next period,

21   P_0 = the market price in the current period, and

22   g = the expected future dividend growth rate.

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[2] Decision 06-08-011, page 37.

| 1 | **1) Dividend Yield** |

2   The dividend yield depends on next year's dividends per share[3] and the current

3   stock price. The next year's expected dividend yield, Div_1/P_o, can be estimated by

4   multiplying the current dividend yield, Div_o/P_o, by one plus the expected growth rate, g.

5   Table 2-2 shows the current annualized dividend yields for the comparable group.

6   The average yield is 2.76% over the most recent three-month period of May 2006

7   through July 2006, 2.71% for the most recent six-month period of February 2006 through

8   July 2006, and 2.69% for the twelve-month period of August 2005 through July 2006.

9   Three different periods are used in order to mitigate period specific biases and to consider

10 both current and long-term trends.

| 11 | **2) Growth Rates** |

12   The DCF Model assumes that dividends grow at a constant rate, **g**, and continue

13 growing at that rate for the foreseeable future. In order to balance the historical and

14 forecasted growth rates, DRA examined three types of growth rates to estimate future

15 dividend growth: (1) historical dividend and earnings growth rates, (2) sustainable growth

16 rates, and (3) forecasted growth rates.

| 17 | **(a)** Historical Growth Rates |

| 18 | **(i)**   *Earnings and Dividend Growth* |

19   Historical growth rates can provide a useful indication about future growth when

20 past conditions can be reasonably expected to continue. Table 2-3 shows the average

21 historical earnings and dividend growth rates of the comparable group for the period

22 1996 through 2005, with both five- and ten-year averages. Even though dividend per

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3 Adjusted to account for the quarterly compounding of the dividends in order to adjust for the time value
of money. If the dividends were paid only once a year, then it would be larger, to account for the time
value of money. Since the dividends are paid quarterly, the total of those 4 payments are less than what
one yearly payment would have been, since the investor has the opportunity to invest it and earn on it.

1   share growth is preferable, since an exact correlation can be made to other components in

2   the DCF Model (dividends are part of the dividend yield calculation), earnings are

3   necessary to generate dividends, so earnings growth is also included in this analysis.

4   Concerns have been raised in other cases that the historical growth rates used by

5   DRA are not similar to those being forecasted. Therefore the historical growth rates are

6   not indicative of future growth. One only has to look at some of the component years of

7   the historical earnings growth rates listed on Table 2-3, for example, 1996, 2001, 2002,

8   and 2004, to see that they are in a relative range comparable to those forecasted earnings

9   growth rates on Table 2-4.

10   The average historical five- and ten-year earnings growth rates calculated by DRA

11   are 6.50% and 5.30%. The average historical five- and ten-year dividend growth rates

12   calculated by DRA are 2.78% and 2.69 %. In D.06-08-011 this Commission adopted an

13   adjustment to DRA's methodology for calculating growth rates. This adjustment was to

14   remove historic dividend growth rates from DRA's calculation of forecasted growth

15   rates. Removing historic dividend growth rates from the estimate of future dividend

16   growth was requested by CWS, as best as DRA can determine, simply because it was the

17   lowest of the three historical growth factors DRA uses to determine its' estimated growth

18   rate in its DCF model. DRA believes strongly that historic dividend growth rates are an

19   integral part of a valid forecast of expected dividend growth, which in turn, is an integral

20   part of the forecasted growth rate used in the DCF model. For this reason DRA has

21   continued its practice of including historic dividend growth in its forecast of expected

22   dividend growth.

23   **(ii)**   *Sustainable Growth*

24   The expected future dividend growth rate can also be measured by examining the

25   sustainable growth rate, which is equal to the product of the retention ratio and the book

26   return on equity. Growth in earnings and dividends can only be sustained if part of

27   earnings is reinvested by the company. DRA calculates sustainable growth per the

1   method discussed in <u>The Cost of Capital – Estimating the Rate of Return for Public</u>

2   <u>Utilities,</u>[4] which states that sustainable growth is measured as "[T]he rate of return on

3   book equity, ROE, times the proportion of earnings that is retained within the firm, …

4   instead of being paid out as dividends…….The sustainable growth rate, … was

5   calculated by multiplying the five-year average book return on equity by the earnings

6   retention rate (the retention rate is one minus the dividend payout rate)."[5] The group's

7   average five-year sustainable growth rate is 3.22% and the ten-year sustainable growth

8   rate is 3.19% (Table 2-3).

9   **(iii)**   *Overall Historical Growth*

10   Based on the average historical earnings, dividend, and sustainable growth rates,

11   the average historical growth is 3.94%.

12   **(b)** Forecasted Growth Rates

13   DRA also considered several forecasted earnings growth rates, including Zack's,

14   First Call, Value Line, and Reuters, as shown on Table 2-4. DRA took a weighted

15   average of the forecasts, based on the number of companies for which each organization

16   provides a forecast.[6] This average is 6.91%.

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[4] <u>The Cost of Capital – Estimating the Rate of Return for Public Utilities</u>, by A. Lawrence Kolbe and James A. Read Jr., with George R. Hall, 1985.

[5] Ibid., pages 55 and 99.

[6] DRA weights the average of each forecaster by taking the number of its data points, dividing by the total number of data points, and then multiplying this by the average. This operation is performed for each column, and then totaled to determine the overall weighted average of the forecasts.

1   **(c)** Conclusion - Growth Rate

2   Based on the above discussion, DRA has determined an average growth rate of

3   5.43%.[7]

4   **3) Results of DCF Model**

5   The results of the DCF Model using data from the comparable group are

6   summarized in Table 2-5 and the formula referred to on page 2-2. Based on current

7   dividend yields (Table 2-2) and an expected dividend growth of 5.43%, the expected

8   three-month dividend yield for the comparable group is 3.19%, the expected six-month

9   dividend yield is 2.71%, and the expected twelve-month dividend yield is 2.69%.

10   Combining the expected three-, six-, and twelve-month yields with the expected growth

11   rates produces expected returns on equity of 8.34%, 8.29%, and 8.26%, with an average

12   of 8.30%.

13   CWS estimates 10.01% for its DCF model using its water utilities comparable

14   group, 12.35% using its gas utilities comparable group. For its combined comparable

15   group its DCF estimate is 11.42%. (Correcting for an error in CWS' calculations results

16   in a combined comparable group DCF estimate of 11.20%.)

17   **D. Risk Premium Model**

18   The Risk Premium Model recognizes that investors have different requirements

19   regarding risk and return for common stocks as compared to bonds. The RP equation is

20   written as follows:

21   **kt = kd + RP,**

22   where **kt** is the cost of equity, **kd** is the cost of debt, and **RP** is the Risk Premium.

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[7] Average of the Average Historical Growth Rate of 3.94% and Average Forecast Growth Rate of 6.91%.

1   This model is based upon the assumption that investments in common stock are

2 riskier than investments in long-term debt (bonds), since stockholders are but residual

3 claimants to earnings and assets in the event of liquidation. As a result, investors holding

4 common stock expect higher returns. In order to develop the required return on equity,

5 this greater risk is stated as a premium, which is added to the estimated cost of long-term

6 debt. As a result of the variance in historical premiums, an average risk premium is

7 calculated over an extended period of time, five and ten years in this case.

8   DRA applied the RP Model to the same comparable group used in the DCF model

9 in order to determine the appropriate return on equity for CWS. DRA used historical

10 earned ROE's for the comparable group in order to estimate the stockholder's average

11 expected return on equity. These returns are easily accessible to the investor (annual

12 reports and financial web sites) and require no computation. An alternative is to use the

13 authorized ROE, but this is rejected by DRA because the authorized ROE is not always

14 an accurate measure of what is expected by investors. The authorized ROE can be

15 distorted by the effect of settlements (the ROE could be inflated or deflated to account for

16 trade-offs in other areas of a settlement) as well as by penalties imposed or premiums

17 applied to an authorized ROE by a Commission. The annual yields on 10-year and 30-

18 year Treasury bonds were subtracted from the comparable group's average returns on

19 equity for each year to determine the annual risk premium.

20   **1) Results of Risk Premium Model**

21   Table 2-6 presents forecasted interest rates for the test period, taken from Data

22 Resources Inc. (DRI) report for August 2006. DRI has consistently been accepted by the

23 Commission for use in determining the cost of capital.[8] For the period 2006 to 2009, the

24 average forecasted rate for 10-Year Treasury bonds is 5.42% and the average forecasted

25 rate for 30-Year Treasury bonds is 5.60%.

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[8] 38 CPUC 2nd at pages 233 & 238, Southwest Gas Corp., et al (1990) and 46 CPUC 2nd at pages 319,

1   Table 2-7 provides the results of the Risk Premium Model for DRA's comparable

2   group. The average premiums are 5.36% and 4.93% for the ten-year period and 5.73%

3   and 5.05% for the five-year period, based upon 10-year Treasury bond yields and the 30-

4   year Treasury bond yields, respectively.

5   To derive return on equity, DRA combined the average equity risk premiums with

6   the average interest rate forecasts for the test period. Based on the 10-year risk

7   premiums, DRA calculated an expected return on equity of 10.53% for the 30-year

8   Treasury bond yield and 10.78% for the 10-year Treasury bond yield. Using the 5-year

9   risk premiums produced expected returns of 11.15% for the 10-year Treasury bond yield

10   and 10.65% for the 30-year Treasury bond yield. Combining these results, DRA

11   calculated an average ROE of 10.78%. CWS' RP models result in an estimated ROE of

12   10.62% for its water comparable group, 14.21% for its gas utilities comparable group,

13   and 12.41% for its combined comparable group.

14   **E. Summary of Model Results**

15   Table 2-8 summarizes the results of the DCF and RP models prepared by DRA.

16   Averaging the results of these financial models produces an expected return on equity of

17   9.54%. CWS' models, excluding gas utilities, yield an average of 10.32% before any

18   adjustments are made. For comparison purposes Graph 2-1 is shown below. This graph

19   shows the average authorized ROEs and RORs for Class A water utilities since 1993. It

20   should be noted that CWS' requested ROE of 12.37% significantly exceeds any

21   authorized ROE for a Class A water utility since 1993 and its' most recent authorized

22   ROE. CWS was most recently authorized an ROE of 10.16% for its Antelope Valley

23   district in D.06-08-011.

(continued from previous page)
360-361, Pacific Gas & Electric Co. (1992).

Graph 2-1
Average Authorized ROE & ROR
Class A
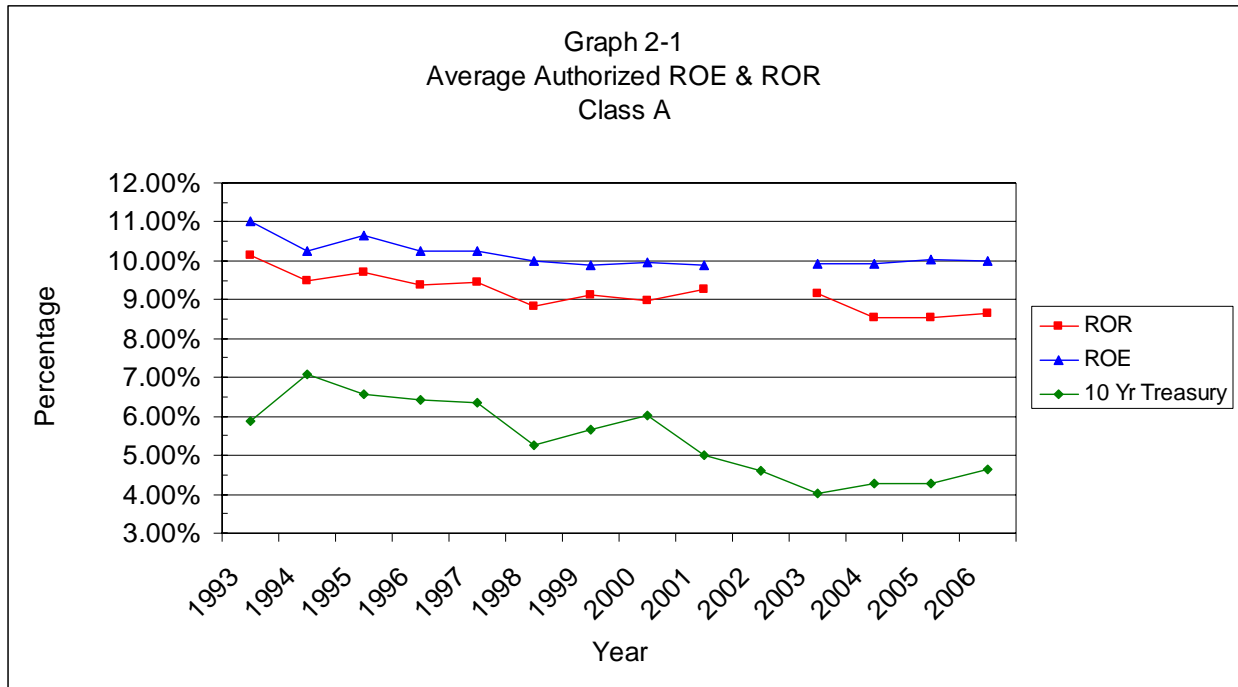
1

Table 2-1
California Water Service
Comparable Group
2006

Company	S&P Bond Rating	Average Common Equity Ratio	Market to Book
American States Water	A-	50.9%	2.26
Connecticut Water Service	A	55.6%	2.02
Middlesex Water	A-	43.6%	2.29
Aqua America	A+	47.3%	3.37
SJW Corp.	N/A	56.8%	2.57
Average	A	50.9%	2.50

Source: S&P, SEC 10K (for year 2005)

2

Table 2-2
California Water Service
Current Annualized Dividend Yield
Comparable Group

Company	3-Month Dividend Yield %	6-Month Dividend Yield %	12-Month Dividend Yield %
American States Water	2.38	2.46	2.64
Connecticut Water Service	3.57	3.47	3.43
Middlesex Water	3.71	3.68	3.56
Aqua America	1.87	1.69	1.48
San Jose Water	2.29	2.25	2.32
Average	**2.76**	**2.71**	**2.69**

Current Yield = Do/Po

Source: Yahoo Finance

1

Table 2-3
California Water Service
Average Historical 5- & 10-year Growth Rate
Comparable Group
1996-2005

Year	Earnings Growth %	Dividend Growth %	Sustainable Growth %
1996	12.94	2.17	3.75
1997	-0.72	2.69	3.16
1998	4.59	3.03	3.20
1999	4.69	2.51	3.25
2000	-0.99	2.59	2.45
2001	8.32	2.81	3.38
2002	8.37	3.61	3.52
2003	-4.55	3.50	2.44
2004	17.89	3.14	3.18
2005	2.45	0.80	3.58
5-Year (2001-2005)	**6.50**	**2.78**	**3.22**
10-Year (1996-2005)	**5.30**	**2.69**	**3.19**
Overall Historical Average			**3.94**

1

Table 2-4
California Water Service
Forecasted Earnings Growth Rates

Company	ZACK'S %	First Call %	Valueline %	Reuters
American States Water Co.	6.00	4.50	4.50	4.50
Connecticut Water Service	-	4.07	-	-
Middlesex Water	6.00	3.50	-	3.50
Aqua America	8.75	10.32	11.00	11.00
SJW Corp.	-	12.20	-	-

1

**Overall Weighted Average
of Forecasted Growth Rates** | **6.91** |

Table 2-5
California Water Service
Discounted Cash Flow Model Summary
Comparable Group

Component		Comparable Group %
3-Month Current Yield 1/		2.76
Growth Rate	2/	5.43
Expected Yield	3/	2.91
ROE	*4/*	*8.34*
6-Month Current Yield 1/		2.71
Growth Rate	2/	5.43
Expected Yield	3/	2.86
ROE	*4/*	*8.29*
12-Month Current Yield 1/		2.69
Growth Rate	2/	5.43
Expected Yield	3/	2.83
ROE	*4/*	*8.26*

1/ Current Yield = Do/Po
2/ Growth Rate = g
3/ Expected Yield = D1/Po = Do/Po * (1 + g)
4/ ROE = D1/Po + g

1

Table 2-6
California Water Service
Forecast of Interest Rates - Average Year

Description	Forecast Date	Forecast 2006 %	Forecast 2007 %	Forecast 2008 %	Forecast 2009 %	*Average for 2007-2009* %
30-Year Treasury Bonds	DRI - 08/06	5.06%	5.30%	5.57%	5.94%	**5.60%**
10-Year Treasury Bonds	DRI - 08/06	5.00%	5.22%	5.39%	5.65%	**5.42%**
Baa Corporate Bonds	DRI - 08/06	6.76%	7.34%	7.48%	7.74%	**7.52%**
Aa Public Utility Bonds	DRI - 08/06	6.13%	6.81%	6.98%	7.24%	**7.01%**

1

Table 2-7
California Water Service
Risk Premium Analysis
Comparable Group

Year	Return on Equity 1/ %	Average Yearly Yields		Risk Premium	
		30-Year T-Bond %	10-Year T-Bond %	30-Year T-Bond %	10-Year T-Bond %
1995	11.34	6.88	6.57	4.46	4.77
1996	11.84	6.70	6.44	5.14	5.40
1997	11.28	6.60	6.35	4.68	4.93
1998	10.98	5.58	5.26	5.40	5.72
1999	10.84	5.87	5.65	4.97	5.19
2000	9.80	5.94	6.03	3.86	3.77
2001	10.62	5.49	5.02	5.13	5.60
2002	10.72	5.41	4.61	5.31	6.11
2003	9.38	5.02	4.01	4.36	5.37
2004	9.66	5.12	4.27	4.54	5.39
2005	10.46	4.56	4.29	5.90	6.17

10-Year Average Premium	4.93	5.36
5-Year Average Premium	5.05	5.73
Forecasted Interest Rates for 2006-2009	5.60	5.42

Projected Returns on Equity

	30-Year	10-Year
10-Year Average	*10.53*	*10.78*
5-Year Average	*10.65*	*11.15*

1/ Earned ROE is used because it is most accessable to the investor.

* From Year 2002 on, the historical from the Federal Reserve is for 25 year plus long term bonds

Table 2-8
California Water Service
Summary of Model Results
Comparable Group

Discounted Cash Flow Model

Growth Rate	<u>5.43</u>
Three-Month ROE	8.34
Six-Month ROE	8.29
Twelve-Month ROE	8.26
DCF Average	*8.30*

Risk Premium Model

	5-Year	10-Year
30-Year Treasury Bond	10.65	10.53
10-Year Treasury Bond	11.15	10.78
RP Average		*10.78*

Return on Equity Average	*9.54*

1

1   **CHAPTER 3: RISK AND ECONOMIC CONDITIONS**

2   **A. Overview**

3   In Chapter Two of this report, DRA determined that common equity

4   investors expect to earn an average return of 9.54%. This determination is the

5   result of a quantitative analysis using market-based financial models and financial

6   data from a group of water companies of comparable risk. In addition to this

7   quantitative analysis, DRA assesses the level of business and financial risk faced

8   by CWS. Also included in the present chapter is DRA's recommended capital

9   structure.

10   A company's total risk is the combination of business risk and financial

11   risk. Business risk may be defined as the uncertainty inherent in the projections of

12   future operating income relating to the fundamental nature of the company's

13   business.   Given the nature of the industry, the business risk of a regulated utility

14   consists primarily of regulatory risk, weather, and demographics. Financial risk

15   relates to the amount of debt in the capital structure; the larger the debt portion, the

16   greater the financial risk.

17   **B. Regulatory Risk**

18   A multitude of mechanisms are provided by the Commission which reduce

19   regulatory risk and protect utility earnings. These tools insulate investor-owned

20   utilities from inflation, regulatory lag, estimating errors, input price variability,

21   loss due to catastrophic events, the cost of Safe Drinking Water Act (SDWA)

22   compliance, and water contamination. These mechanisms include - Balancing

23   accounts for Purchased Water, Purchased Power, and Pump Taxes; Memorandum

24   Accounts for Catastrophic Events; Future Test Years; Memorandum Accounts for

25   SDWA compliance; 50% Fixed Cost Recovery; and Construction Work in

26   Progress in Rate Base.

1   **1) Elimination of Earnings Test**

2   CWS' regulatory and business risk has been reduced as a result of the

3 elimination of the earnings test. The Commission has recently eliminated the

4 earnings test for the recovery of the water supply balancing account under

5 collections.[9] The elimination of the earnings test will allow water utilities to

6 recover the full amount of the under collected balance regardless of the level of

7 utility earnings above the Commission authorized rate of return. The removal of

8 the earnings test will now allow the water utilities to further enhance profits and

9 basically eliminate their regulatory risk associated with the recovery of water

10 supply costs.

11 **C. Financial Risk**

12   Financial risk relates to the amount of debt used in the capital structure.

13 The greater the ratio of debt to equity, the greater the financial risk. For regulated

14 utilities, the percentage of debt and equity included in the capital structure has a

15 direct impact on rates charged ratepayers. A balanced capital structure should

16 make prudent use of debt, provide financial stability to a utility, and produce

17 reasonable rates for its customers, as well as continuity of service.

18   CWS has proposed a capital structure consisting of long-term debt and

19 common equity. CWS' projected average common equity ratio for the years 2006

20 – 2009 is 57.00%, which is higher than the comparable group's average of 50.9%.

21 DRA concurs with CWS' capital structure. By maintaining this capital structure

22 CWS has lower financial risk, as the result of its' higher than average common

23 equity ratio compared to the comparable group's average common equity ratio.

24 As noted below, CWS maintains a good credit rating and does not appear to have

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[9] D.06-04-037, mimeo, p. 2.

1   difficulty attracting capital at reasonable rates. It has also been financially healthy

2   enough to pay dividends for 248 consecutive quarters.[10]

3   **1) Standard & Poor's Assessment**

4   A company's total risk (business risk plus financial risk) is indicative of its

5   overall financial integrity and ability to attract capital. Standard & Poor's (S&P),

6   a rating agency used by DRA and many utilities, evaluates a company's total risk

7   in order to assign a credit rating, which is a direct measure of capital attraction.

8   S&P's evaluation includes a subjective analysis of business risk, including such

9   things as managerial quality and regulatory environment. A quantitative analysis

10   is also done, consisting of a group of financial ratios designed to measure how

11   well a company can generate earnings and cash flow to meet its debt obligations.

12   These ratios are a mix of measures relating to both business and financial risk. A

13   rating of "AAA" through a "BBB" is considered "investment grade". Any rating

14   lower than a "BBB" would be considered speculative and more susceptible to

15   adverse circumstances or economic conditions. S&P rates CWS. CWS' rating is

16   A+.[11]

17   **D. Conclusion**

18   CWS' low business risk and healthy financial ratios based on S&P

19   benchmarks are indications of financial health. CWS financial health allows it

20   access to financing at reasonable rates.

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[10] California Water Service Group, Press Release November 1, 2006.

[11] Standard and Poor's, November 17, 2006.

1   **CHAPTER 4: COMMENTS ON CWS' METHODOLOGY**

2   **A. Introduction**

3   CWS has presented DCF and RP Models in support of its requested ROE of

4   12.37%. DRA does not agree with the following components of CWS'

5   analysis:

6   • Comparable Group Water Companies,

7   • Upwards adjustments totaling 45 basis points for the claimed risks

8   associated with recovery of certain costs, small size of districts,

9   supply mix, and bias in Commission methodologies.

10   **B. Comparable Group Selection**

11   As noted in Chapter 2 CWS has once again included gas utilities in its

12   comparable group. This only serves to increase the estimates for ROE since gas

13   utilities are more risky as indicated by the higher average for the comparable

14   group of gas utilities as compared to the comparable group of water utilities. This

15   practice has repeatedly been soundly rejected by this Commission.[12] By including

16   the gas utilities in its analysis CWS' analysis is flawed at its inception. This helps

17   to explain why CWS' requested ROE is so much greater than that approved in its

18   most recent GRC or any other ROE approved by this Commission for a water

19   utility since 1993. This difference in comparable groups explains the difference

20   between DRA's and CWS' estimates.

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[12] See D.06-08-011, page

1   **C. Requested Risk Adjustments**

2   CWS makes adjustments to its ROE forecasts for what it believes to be its

3   unique risk that are not captured by the DCF and RP models used. These risk

4   adjustments amount to an additional 45 basis points. DRA believes that it is

5   unnecessary to make these adjustments since the models by using a comparable

6   group and an average of estimates accounts for variations in risk and provides a

7   reasonable estimate of ROE for CWS. Furthermore, this adjustment is arbitrary

8   and not supported by any empirical data.

9   CWS adds 10 basis points to compensate for the lag in recovery of Pension,

10 Medical Health, and Retiree Health costs. These risks are also faced by the

11 comparable group companies and therefore captured in the DCF model. DRA

12 therefore believes this adjustment is unnecessary.

13   CWS adds 15 basis points by suggesting that since the rate setting process

14 is done on a district by district process its ROE should be more in line with the

15 authorized ROEs of Class B, C, and D water systems. This suggestion is

16 vigorously rejected by DRA. CWS is a large Class A water utility. DRA

17 therefore believes this adjustment is unnecessary.

18   CWS adds 10 basis points to compensate for changes in water production

19 mix. This is an operational (business) risk that all of the comparable group

20 companies face and as such the DCF model captures this risk. DRA therefore

21 believes this adjustment is unnecessary.

22   CWS adds 10 basis points to compensate for its perceived bias in

23 Commission methodologies that it believes have contributed to lower authorized

24 ROEs over the last 10 years compared to comparable utilities. Also, CWS claims

25 that cost recovery methodologies contributed to it not earning its authorized rate of

26 return in recent years. DRA does not believe there is a built in bias in the

1   Commission's methodologies. DRA suggests CWS may be misleading itself by

2   including gas utilities in its analysis. Finally, authorized ROEs are not a

3   guaranteed return, but an opportunity for the utility to earn this level of return on

4   shareholders' invested funds. CWS may have not earned its authorized ROE in

5   recent years but may exceed it in future years, as it has at times in the past. DRA

6   therefore believes this adjustment is unnecessary.

CHAPTER 5: COST OF LONG-TERM DEBT

A. Determination of Cost of Long-Term Debt

The cost of long-term debt consists of interest and issuance expenses for all long-term bonds and notes, both outstanding and projected for the test period. The majority of the cost is derived from embedded costs, with the balance consisting of estimated costs for projected new debt issues. Since debt is a contractual arrangement, the terms for existing bonds are known. The costs of new debt issues are dependent, however, on forecasts of interest rates. The effective cost of long-term debt is computed as the ratio of the annual charge for the balance outstanding divided by the net proceeds of the balance outstanding.

B. Long-Term Debt Cost in the Test Period

CWS has projected new issues of long-term debt of more than $80 million during 2008 – 2010, consisting of $30 million in 2008, $30 million in 2009, and $20 million in 2010. CWS has estimated of new debt is 5.95%, 5.83%, and 6.04% in 2008, 2009, and 2010, respectively. This results in CWS' cost of long-term debt of 6.76%, 6.75%, 6.71%, 6.62%, and 6.67% in 2006, 2007, 2008, 2009, and 2010.

DRA reviewed an August 2006 DRI forecast of Aa-rated public utility bond yields. (Table 2-6) CWS' forecasts are slightly lower than the DRI forecasts for the years 2007 through 2009. On this basis, DRA finds CWS' forecasts reasonable. DRA uses the 2007 test year value in its final determination of recommended ROR for the test years.

QUALIFICATIONS AND PREPARED TESTIMONY OF
PATRICK E. HOGLUND

Q.1.   Please state your name and business address.

A.1.   My name is Patrick E. Hoglund. My business address is 505 Van
       Ness Avenue, San Francisco, California.

Q.2.   By whom are you employed and in what capacity?

A.2.   I am employed by the California Public Utilities Commission - DRA
       Water Branch - as a Utilities Engineer.

Q.3.   Please briefly describe your educational background and work
       experience.

A.3.   I am a graduate of the University of California, Berkeley, with a
       Bachelor of Science Degree in Industrial Engineering and
       Operations Research. I am also a graduate of the University of
       Rochester, William E. Simon School of Business with a Master of
       Business Administration Degree with concentrations in Finance and
       Corporate Accounting. I am a licensed professional Industrial
       Engineer.

       I have been employed by the California Public Utilities Commission
       since 2005. My current assignment is within DRA – Water where I
       work on Class A General Rate Cases. From 1999 through August
       2004, I was a Senior Rates Analyst at Pacific Gas and Electric
       Company, where I worked on a variety of revenue requirements
       issues related to natural gas. From 1990 through 1997, I was
       employed by the California Public Utilities Commission. During

1		this time I worked on small water utility rate cases, large water
2		utility rates cases, and also worked in the Telecommunications and
3		Energy Branches of the former Commission Advisory and
4		Compliance Division, as well as in the Division of Ratepayer
5		Advocates.
6	Q.4.	What are your responsibilities in this proceeding?
7	A.4.	I am responsible for DRA's Water Branch Report On the Cost of
8		Capital For California Water Service Company in this proceeding.
9	Q.5.	Does this conclude your prepared testimony?
10	A.5.	Yes, it does.