ALJ/BRS/jc

Decision 89 11 063 NOV 22 1989

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Del Este Water Company (U 175 W), a corporation, for an order authorizing it to increase rates charged for water service.	Application 89-02-050 (Filed February 27, 1989)

Messrs. McCutchen, Doyle, Brown & Enersen, by A. Crawford Greene and William J. Newell, Attorneys at Law, for Del Este Water Company, applicant.
Helen W. Yee, Attorney at Law, Sazedur Rahman, and Christopher J. Blunt, for the Commission Advisory and Compliance Division.

O P I N I O N

Summary of Decision

Del Este Water Company (Del Este) is authorized to increase its rates by amounts which are designed to increase its revenues by $239,600, or 7.95%, in 1989, and by an additional $271,400 or 8.33%, in 1990. For 1991, an adjustment of $191,200 or 5.42%, reflecting operational and financial attrition is authorized. A rate of return on rate base of 11.41% for 1989, and 11.45% for 1990 and 1991 is found to be reasonable. The authorized return on common equity (ROE) is 11.90%.

Table 1 shows the adopted summary of earnings at present and authorized rates for test years 1989 and 1990.

TABLE 1

Del Este Water Company

SUMMARY OF EARNINGS ($000)

Item	1989 Present Rates	1989 Adopted Rates	1990 Present Rates	1990 Adopted Rates
Operating revenues	3015.2	3254.8	3063.8	3526.2
Operating expenses				
Operation & maintenance	1386.0	1387.6	1431.8	1434.8
A & G expense	715.7	717.2	756.0	759.0
Depreciation	315.7	315.7	364.7	364.7
Taxes other than income	118.2	118.2	136.8	136.8
State corp. franch. tax	11.8	33.8	0	35.8
Federal income tax	0	29.9	0	31.0
Total operating expense	2547.4	2602.4	2689.3	2762.1
Net operating revenues	467.8	652.4	374.5	764.1
Rate base	5718.2	5718.2	6673.6	6673.6
Rate of return	8.18%	11.41%	5.61%	11.45%

Summary of Application

Del Este seeks rate increases of $462,700 (15.36%), $349,900 (10.02%), and $264,900 (6.79%) for the test years 1989 and 1990, and attrition year 1991. The cumulative effect of the three yearly increases would be a revenue increase of $1,077,500 or 32.17% of current revenues. The company's estimated revenue requirement is based on a requested constant ROE of 14.00% for each of the three years and overall rates of return on rate base (ROR) of 13.16%, 13.11%, and 13.16% for 1989, 1990, and 1991 respectively.

Del Este states that the increases are necessary due to very substantial increases in capital expenditures required to maintain water quality, customer growth, increased water use, changes in the cost of capital, and the need for additional financing.

Del Este estimates that at current rates, 62% of its revenues are obtained from flat rate revenues and fixed monthly service charges. The proposed rates have been escalated across the board from current rates, except for the elimination of a lifeline allowance for the first 300 cubic feet per month consumption of metered customers. For a residential customer on unmetered service with a lot size of 6,000 square feet or less, the proposed monthly increases are $1.20 (15.36%) in 1989, $0.90 (10.02%) in 1990, and $0.70 (7.07%) in 1991.

Company and System Description

Del Este is a wholly owned subsidiary of Beard Land and Investment Company, which is a closely held corporation owned by members of the Beard family. Del Este, whose corporate offices are located in Modesto, California, provides water service to more than 17,000 customers in suburban Modesto, and in the communities of Waterford, Empire, Salida, Turlock, Hillcrest, Hickman and Grayson. Except for the systems in the immediate suburbs of Modesto, most of the service areas are isolated and are served by separate systems that are not interconnected. Except a very amount of purchased water, most water is obtained from wells; Del Este obtains no surface water and has no surface storage facilities.

The company's administrative office, operating headquarters, warehouse, maintenance garage, meter repair and testing facility, and pipe storage are all located at the headquarters in Modesto. Del Este employs a staff of 24 persons in management, operating, maintenance and clerical positions. General accounting is performed by company personnel, as is construction whenever practical. Outside contractors are utilized for construction work when the quantity of work exceeds the capability of company crews. Outside services are employed for engineering, auditing, tax accounting, and legal counsel.

Del Este's recorded operating revenues for the 12 months ended December 31, 1987 were $2,817,198. Of this amount, residential service accounted for $421,805, or slightly less than 7% of total revenues. Commercial service accounted for $1,775,290, or 63%. Industrial ($471,140), public authority ($110,050), and private fire protection ($29,570) account for most of the remainder.

Public Participation and Evidentiary Hearings

Del Este served copies and provided notice of the application in accordance with the Commission's Rules of Practice and Procedure. The Water Utilities Branch (Branch) of the Commission Advisory and Compliance Division scheduled an informal public meeting in Modesto on April 4, 1989 to give Del Este's customers an opportunity to discuss the proposed rate increase and related issues with utility and Branch representatives. The notice of the meeting was mailed to customers on March 3 and 6, 1989. About 11 customers attended the meeting, four of whom requested to be notified of hearing dates. Branch reported that the meeting was dominated by complaints about the proposed rate increase. Some suggested that discounts be given to low-income retired people. A few thought the utility should turn its business over to the City of Modesto, which has lower rates. One customer expressed concern about health effects of lead pipes. William R. Beard (Beard), Vice President of Del Este, said it was unlikely that lead could leach out through the calcium deposits in the pipes, but offered to provide the name of a laboratory that could test for lead.

Two customers complained about low water pressure. Del Este subsequently investigated and found substantial deposits clogging these customers' lines beyond the service line. Pressures at the connection to the customers' lines were measured at 53-54 psi, above the 40 psi minimum allowed under General Order (GO) 103.

Duly noticed hearings which included public participation hearings, and two days of evidentiary hearings, were held in Modesto before Administrative Law Judge Stalder. Applicant presented its evidence through testimony and exhibits introduced by Beard, Ann Cowley, an engineer, and Bill Ferry (Ferry), Director of the Utility Management Division. The latter two are employed by Brown and Caldwell Consulting Engineers. Branch presented its case through the testimony and exhibits of Project Manager Sazedur Rahman, Utilities Engineers Edward Suriaga and Sheila Otteson (Otteson) of the Branch, and Public Utility Regulatory Program Specialist Christopher J. Blunt (Blunt) of the Division of Ratepayer Advocates (DRA).

No customers attended the public participation hearings. Two customers made statements at the first day of evidentiary hearings. They expressed concern about water waste, and about low afternoon pressure.

<u>Customer Service and Conservation</u>

As part of its investigations, Branch made an evaluation of Del Este's water quality and overall level of service.

Branch interviewed 11 customers and measured water pressure outside their residences in five sections of the utility's service area. All customers indicated satisfaction with the quality of water and the service of Del Este. One customer mentioned that the water pressure seemed lower in the past few years. Another expressed concern with water hardness. Customers who had occasion to call the utility with a problem said the utility responded quickly and to their satisfaction. Branch also investigated the utility's procedure for handling customer service inquiries, and found it to be satisfactory.

The Commission by Decision (D.) 86959 directed the utility to promote water conservation through:

1. Distribution of water conservation kits.

2. Promotion of consumer involvement programs and education.

3. Detection and mitigation of leaks.

4. Maintenance of operating pressures at customers' meters at or below 80 pounds per square inch (psi).

In D.86-05-064, we required every urban water supplier that provides water for municipal purposes to more than 3,000 customers, to prepare and adopt a water management plan to achieve conservation and efficient use of water. Del Este has undertaken the following actions in response D.86959 and D.86-05-064.

1. One hundred water conservation kits were distributed to customers in 1988. The kits are also available to customers upon request at the utility's office in Modesto.

2. Periodic bill inserts suggest ways to conserve water and advise customers that the City of Modesto has an ordinance that prohibits landscape watering between 2:00 p.m. and 7:00 p.m. on weekdays from June through September. A 1989 billing insert also includes tips on water conservation for gardens; it lists plants that require little water.

3. The utility responds to calls reporting water waste. The employees speak to the water waster, turn off yard sprinklers,

leave a card asking the customer not to water, or take other appropriate measures.

4. During Water Awareness Week, the utility purchased newspaper advertising that included water conservation information. It also supplied speakers to schools and other organizations upon request.

5. Del Este responds to reports of suspected leaks both on utility and on customer property. Many of the leaks located are discovered during normal operations such as meter reading and pump checking. The utility annually obtains electronic leak detection equipment to explore for leaks in older portions of its system.

Branch notes that Del Este's water supply was adequate during the 1988 drought year. Branch concludes that the conservation program is reasonable and that no further conservation-related order is needed at this time.

<u>Overview of Results of Operation</u>

Branch and Del Este agreed on all results of operations estimates at the hearings, with the exception of income tax expenses, both federal and state. Income tax varies due to the differences in recommended ROE and debt/equity ratios. The results of operations estimates agreed upon are reasonable and will be adopted. It is not necessary to discuss them in detail. The adopted income tax expenses will follow from the adopted ROE and debt/equity ratios.

<u>Summary of Earnings</u>

Tables 3 and 4 show, for test years 1989 and 1990, Del Este's and Branch's estimated summaries of earnings at present rates, including their original estimates, their revisions, and comparisons of these estimates.

TABLE 3

Applicant's and Staff's Reconciliation
Results of Operation at Present Rates-1989
Thousand of Dollars

Description	a Staff	Utility	Staff final position	Utility final position	Utility exceeds staff Dollars	Percent
Operating revenues						
Residential/commercial	670.0	670.0	670.0	670.0	0.0	0.0
Industrial	588.9	585.3	588.9	588.9	0.0	0.0
Public Authority	110.5	110.5	110.5	110.5	0.0	0.0
Flat rate commercial	1,601.5	1,601.5	1,601.5	1,601.5	0.0	0.0
Other revenues	44.3	44.3	44.3	44.3	0.0	0.0
Total revenues	3,015.2	3,011.6	3,015.2	3,015.2	0.0	0.0
Operating expenses						
Purchased power	473.1	479.5	479.7	479.7	0.0	0.0
Transport & vehicles	88.1	93.6	88.1	88.1	0.0	0.0
Materials & supplies	91.0	143.3	91.0	91.0	0.0	0.0
Payroll-O&M	520.7	520.7	520.7	520.7	0.0	0.0
Miscellaneous exp	155.3	170.8	171.6	171.6	0.0	0.0
Other O&M	34.9	35.4	34.9	34.9	0.0	0.0
Subtotal O&M	1,363.1	1,443.3	1,386.0	1,386.0	0.0	0.0
Payroll-A&G	161.2	164.5	161.3	161.3	0.0	0.0
Office supplies	60.5	65.3	60.5	60.5	0.0	0.0
Pension & benefits	153.3	153.6	143.9	143.9	0.0	0.0
Reg. Comm. Exp	46.3	19.2	46.3	46.3	0.0	0.0
Misc. general exp.	10.9	13.8	10.9	10.9	0.0	0.0
Exp capitalized	-20.3	-22.4	-20.3	-20.3	0.0	0.0
Other A&G	313.1	314.8	313.1	313.1	0.0	0.0
Subtotal A&G	705.0	708.8	715.7	715.7	0.0	0.0
Total O&M	2,068.1	2,152.1	2,101.7	2,101.7	0.0	0.0
Depreciation exp	315.7	317.8	315.7	315.7	0.0	0.0
Taxes other than income	118.2	120.2	118.2	118.2	0.0	0.0
State income tax	14.5	5.1	11.9	15.7	3.8	31.9
Federal income tax	0.0	0.0	0.0	0.0	0.0	0.0
Total operating exp.	2,516.5	2,595.2	2,547.5	2,551.3	3.8	0.1
Net operating revenues	498.7	416.4	467.7	463.9	(3.8)	(0.8)
Rate base						
Utility plant in service	12,335.9	12,406.3	12,335.9	12,335.9	0.0	0.0
Construction WIP	888.8	888.8	888.8	888.8	0.0	0.0
Materials & supplies	423.4	422.5	423.4	423.4	0.0	0.0
Working cash	(205.3)	(227.0)	(213.4)	(213.4)	0.0	0.0
Subtotal	13,442.8	13,496.6	13,434.7	13,434.7	0.0	0.0
Customer advances	2,961.0	3,000.5	2,961.0	2,961.0	0.0	0.0
Contributions	561.0	562.1	561.0	561.0	0.0	0.0
Deferred taxes	294.6	295.0	294.6	294.6	0.0	0.0
Depreciation reserve	3,899.9	3,888.3	3,899.9	3,899.9	0.0	0.0
Total deductions	7,716.5	7,745.9	7,716.5	7,716.5	0.0	0.0
Aver. Dep Rate Base	5,726.3	5,750.7	5,718.2	5,718.2	0.0	0.0
Rate of Return	8.71%	7.24%	8.18%	8.11%	(0.1)	(0.8)

a Reflects Staff revision dated June 28, 1989.

b The balances in the balancing accounts will be disposed of in accordance with the Commission's May 31, 1988, "Procedures for Maintaining Balancing Account for Water Utilities".

TABLE 4

Applicant's and Staff's Reconciliation
Results of Operation at Present Rates-1990
Thousand of Dollars

Description	a Staff	Utility	Staff final position	Utility final position	Utility exceeds staff Dollars	Percent
Operating revenues						
Residential/commercial	685.1	685.1	685.1	685.1	0.0	0.0
Industrial	578.9	558.5	578.9	578.9	0.0	0.0
Public Authority	111.0	111.0	111.0	111.0	0.0	0.0
Flat rate commercial	1,643.3	1,625.5	1,643.3	1,643.3	0.0	0.0
Other revenues	45.5	45.5	45.5	45.5	0.0	0.0
Total revenues	3,063.8	3,025.6	3,063.8	3,063.8	0.0	0.0
Operating expenses						
Purchased power	479.8	480.8	486.5	486.5	0.0	0.0
Transport & vehicles	92.7	99.6	92.7	92.7	0.0	0.0
Materials & supplies	95.8	151.2	95.8	95.8	0.0	0.0
Payroll-O&M	544.2	549.4	544.2	544.2	0.0	0.0
Miscellaneous exp	159.4	178.7	176.6	176.6	0.0	0.0
Other O&M	36.0	36.3	36.0	36.0	0.0	0.0
Subtotal O&M	1,407.9	1,496.0	1,431.8	1,431.8	0.0	0.0
Payroll-A&G	168.6	173.5	168.6	168.6	0.0	0.0
Office supplies	63.7	70.3	63.7	63.7	0.0	0.0
Pension & benefits	155.7	168.9	155.7	155.7	0.0	0.0
Reg. Comm. Exp	46.3	47.7	46.3	46.3	0.0	0.0
Misc. general exp.	11.4	14.5	11.4	11.4	0.0	0.0
Exp capitalized	(22.6)	(23.7)	(22.6)	(22.6)	0.0	0.0
Other A&G	332.9	334.9	332.9	332.9	0.0	0.0
Subtotal A&G	756.0	786.1	756.0	756.0	0.0	0.0
Total O&M	2,163.9	2,282.1	2,187.8	2,187.8	0.0	0.0
Depreciation exp	364.7	372.7	364.7	364.7	0.0	0.0
Taxes other than income	136.8	138.8	136.8	136.8	0.0	0.0
State income tax	0.0	0.0	0.0	0.0	0.0	0.0
Federal income tax	0.0	0.0	0.0	0.0	0.0	0.0
Total operating exp.	2,665.4	2,793.6	2,689.3	2,689.3	0.0	0.0
Net operating revenues	398.4	232.0	374.5	374.5	0.0	0.0
Rate base						
Utility plant in service	14,335.2	14,553.4	14,335.2	14,335.2	0.0	0.0
Construction WIP	1,070.4	1,070.4	1,070.4	1,070.4	0.0	0.0
Materials & supplies	213.4	257.2	213.4	213.4	0.0	0.0
Working cash	(217.5)	(241.9)	(226.4)	(226.4)	0.0	0.0
Subtotal	15,401.5	15,639.1	15,392.6	15,392.6	0.0	0.0
Customer advances	3,634.8	3,643.7	3,634.8	3,634.8	0.0	0.0
Contributions	589.7	591.1	589.7	589.7	0.0	0.0
Deferred taxes	271.3	273.7	271.3	271.3	0.0	0.0
Depreciation reserve	4,223.2	4,213.8	4,223.2	4,223.2	0.0	0.0
Total deductions	8,719.0	8,722.3	8,719.0	8,719.0	0.0	0.0
Aver. Dep Rate Base	6,682.5	6,916.8	6,673.6	6,673.6	0.0	0.0
Rate of Return	5.96%	3.35%	5.61%	5.61%	0.0	0.0

a Reflects Staff revision dated June 28, 1989.

b The balances in the balancing accounts will be disposed of in accordance with the Commission's May 31, 1983, "Procedures for Maintaining Balancing Account for Water Utilities".

The following issues remain in dispute

1. Rate of Return
    a. Debt
    b. Debt/Equity Ratio
    c. Return on Common Equity
2. Income Taxes
    a. Federal
    b. State

<u>Rate of Return</u>

Del Este requests RORs of 13.16% in 1989, 13.11% in 1990, and 13.16% in 1991 in order to earn an ROE of 14.00%, which is the ROE currently in effect from Del Este's most recent general rate case.

DRA recommends that the adopted ROE be within a range of 11.75% to 12.25%. Within that range, it believes the most weight should be placed on the lower portion of the range due to recent decreases in interest rates and projections of further declines in interest rates during the test periods. The recommendations for ROR corresponding to the ROE range are 11.31% to 11.57% for 1989, and 11.36% to 11.62% for 1990 and 1991.

Del Este and DRA recommendations differ in three main areas. First, DRA has estimated lower costs for new long-term debt. Second, DRA recommends a higher debt/equity ratio. Finally, DRA has determined a lower ROE requirement. These are discussed in the following sections.

<u>Debt Cost</u>

The estimates of debt costs are shown below. The embedded cost of current debt is contractual and readily available. DRA and Del Este have different estimates of interest cost on new debt issues.

	DRA	Utility
1989	10.86%	11.83%
1990	10.95%	12.01%
1991	10.95%	12.06%

During the hearings Del Este offered evidence of a commitment by Pacific Mutual Life Insurance Company for 25 year debt financing of up to $4 million at 10.85% per annum coupon rate. The $4 million is the utility's estimate of the new financing requirement during the 1989 to 1991 period. DRA recommends, and Del Este witness Ferry agrees, that since this is a firm commitment, it should be used as the cost for new long-term debt.

This changes DRA's estimated debt costs slightly, as follows:

1989	10.89%
1990	10.98%
1991	10.98%

Since the cost of long-term debt is now known, we will use these revised values in our determination of the allowable rate of return.

Debt to Equity Ratio

Del Este requests a capital structure of approximately 39% debt/61% equity for 1989 and approximately 45% debt/55% equity for 1990 and 1991.

Using updated financing information not available to Del Este when it prepared the application, DRA calculates its recommended debt/equity ratios as follows:

1989 - 42% debt/58% equity
1990 - 53% debt/47% equity
1991 - 50% debt/50% equity

The three year average is 49% debt/51% equity, which DRA argues is more beneficial to ratepayers, considering the tax implications, than the higher amounts of equity assumed by the company. DRA recommends using a constant average 49% debt/51%

equity ratio for the purposes of calculating Del Este's ROR for 1989 through 1991. DRA believes this ratio is appropriate since it enables Del Este to pay its requested dividend to investors, meet its debt obligations, maintain a reasonable capital structure, and provide adequate service at a fair price to ratepayers.

We note that although Del Este argues for a lower debt/equity ratio, its witness Ferry testified that the cost of capital is relatively flat for debt/equity ratios in the range of 40%/60% to 60%/40%, and that this broad range can generally be considered optimal. DRA's recommendation is nearly centered within this range. We conclude that Del Este's higher requested equity would benefit investors at the expense of ratepayers. We will adopt DRA's recommended debt/equity ratio as reasonable for Del Este. It is adequate for Del Este's investors and will be more beneficial to Del Este's ratepayers.

Return on Equity (ROE)

Unlike debt costs which are known in this case, determining the proper ROE is more difficult. It requires a measure of judgement and is therefore normally a source of controversy. This proceeding is no exception.

Del Este believes that the 14.00% ROE currently authorized should continue unchanged because Del Este has unique business risks.

First, Del Este notes that much institutional financing is foreclosed due to its size. Many lenders are not interested in undertaking loan arrangements of the size needed by Del Este. Since there are fewer available lenders, there is less competition and the terms are less favorable than for larger water companies. According to Del Este, this points to the need for a higher ROE than might otherwise be appropriate.

Second, Del Este argues that it is uniquely at risk due to water quality problems. Del Este is perhaps the only class A water company without either surface storage or surface supplies.

As a result, it cannot blend well water with other supplies to meet water quality requirements. It has been dealing with water quality problems, primarily nitrates, since the early 1970's. Del Este notes that water quality capital additions totaled approximately $700,000 for the period 1983 through 1987, while the 1988 through 1991 additions are budgeted at $3.3 million.

In addition, at least 12 of its wells are estimated to require wellhead treatment for DBCP[1] under the new MCL, at a cost of $250,000 to $350,000 per well. The cost for the 12 wells is about $3.5 million, with installation of the equipment expected to begin in late 1989 or early 1990. Del Este has not included the costs of additions required for DBCP in this application due to the timing of the new MCL. It requests authority from the Commission to file a separate application to increase its rates when the details of the DBCP capital improvement program are determined.

Del Este argues that while other water companies face the same quality requirements, no others face the problems of a comparable magnitude relative to the size of the utility. Therefore, it believes that it is entitled to an increased ROE over that received by other water utilities.

Third, subsequent to preparation of this application, Del Este became aware of a major new development in the Salida area, northwest of Modesto. The development would add about 2,300 new customers and cause additional income tax liability. Under the Tax Reform Act of 1986 (1986 TRA), the company has a 15-2/3% tax liability beyond the developer contributions toward tax liability. Given the size of the development relative to the utility, the

---

1 Di-Bromo Chloro Propane (DBCP) is a chlorinated hydro flurocarbon, used as an agricultural spray to control nemotodes, now banned for use in this country. It is suspected of causing sterility in humans and known to have caused cancer in laboratory animals.

effect on earnings is significant. Similar to the water quality problems, this development will add to the need for borrowing, which will be at greater cost since the risk to lenders increases as the amount of debt increases relative to equity.

In summary, for the above reasons, Del Este argues that a continuation of the currently allowed 14.00% ROE is justified.

DRA witness Blunt takes a different approach to ROE. Blunt used the guidelines established by two landmark cases in arriving at recommendations for equity returns: (Bluefield Waterworks and Improvement Company v West Virginia Public Service Commission (1923) 262 US 679; 67 L ed 1176, 43 S. Ct. 675 and Federal Power Commission v Hope Natural Gas Company (1944) 320 US 591; 88 L ed 333, 64 S. Ct. 281.) As explained by Blunt, two standards emerge from those cases.

1. A standard of capital attraction, which focuses on investors' return requirements, and is applied using market value methods such as the discounted cash flow (DCF) model and the risk premium (RP) analysis. The DCF model recognizes that the current market price of a share of common stock equals the present value of the expected future stream of dividends and the future sale price of the stock, discounted at the investor's discount rate. The discount rate is the investor's opportunity cost, or the ROR that could be earned on an investment of comparable risk.

The RP analysis assumes that the expected return for a security can be derived by adding an appropriate premium return to reflect the asset's additional risk when compared with another security, such as utility bonds or government issues.

2. The comparable earnings standard which uses the return earned on an equity investment by companies of comparable risks as a measure in setting a fair return. Branch selected a group of 12 water utility companies that it believes fit the standard of comparable earnings and share corresponding risk with Del Este.

Branch then applied the DCF, RP, and comparable earnings analyses to the group, to arrive at a recommended range for ROE. Blunt concludes that an ROE in the range of 11.75% to 12.25% is appropriate. He recommends a range rather than a single value because he believes determining ROE is not a matter of absolute precision. The mid-point of his recommended range for ROE at 12.00% compares closely with both the group average DCF discount rate at 12.06% to 12.13% (Table 5) and the risk premium analysis expected ROE that ranges from 11.82% to 12.09% (Table 6).

TABLE 5

DEL ESTE WATER COMPANY

Discounted Cash Flow Analysis -
Comparable Group of Water Public Utility Companies

COMPANY	YIELDS 3-Month 1/ (Feb-Apr) (%)	YIELDS 6-Month 1/ (Nov-Apr) (%)	AVERAGE 2/ Growth Rates (%)	EXPECTED YIELD 3-Month 3/ (Feb-Apr) (%)	EXPECTED YIELD 6-Month 3/ (Nov-Apr) (%)	DISCOUNT RATE 3-Month 4/ (Feb-Apr) (%)	DISCOUNT RATE 6-Month 4/ (Nov-Apr) (%)
American Water Works	3.54	3.70	10.58	3.92	4.09	14.50	14.67
Calif. Water Service	6.66	6.56	7.06	7.13	7.02	14.19	14.08
Connecticut Water	8.32	8.27	2.65	8.54	8.49	11.19	11.14
Consumers Water	5.64	5.24	8.11	6.08	5.63	14.19	13.74
E'Town Corporation	7.05	7.18	4.71	7.38	7.51	12.08	12.21
The Hydraulic Co.	5.29	5.38	4.60	5.53	5.62	10.13	10.22
IWC Resources Corp.	7.91	7.95	3.07	8.15	8.19	11.22	11.26
Middlesex Water Co.	6.54	6.48	4.26	6.81	6.75	11.06	11.00
Philadelphia Water	7.08	7.12	1.86	7.22	7.25	9.08	9.11
SJW Corporation	6.33	6.14	8.01	6.84	6.62	14.85	14.63
So. Calif. Water	8.10	7.88	3.42	8.37	8.14	11.79	11.56
United Water Res.	5.16	5.07	5.77	5.46	5.36	11.22	11.12
GROUP AVERAGE			5.34%	6.79%	6.72%	12.13%	12.06%

1/ Numbers Developed in Table No. 13
2/ Numbers Developed in Table No. 14
3/ (Do / Po) * (1 + g) = D1
4/ r = (D1 / Po) + g

TABLE 6

DEL ESTE WATER COMPANY

Risk Premium Analysis
Comparable Group of Water Public Utility Companies

1979 through 1988

Year	Expected ROE	"AA" Bond Yields	Premium (a-b)	2-5 Year T-Notes	Premium (a-d)	10-Year T-Notes	Premium (a-f)	30-Year T-Bills	Premium (a-h)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1979	13.13%	10.22%	2.91%	9.57%	3.56%	9.44%	3.69%	9.29%	3.84%
1980	14.19	13.00	1.19	11.29	2.90	11.47	2.72	11.30	2.89
1981	14.81	15.30	-0.49	14.06	0.75	13.91	0.90	13.44	1.37
1982	16.86	14.79	2.07	12.83	4.03	13.00	3.86	12.76	4.10
1983	15.84	12.83	3.01	10.60	5.24	11.10	4.74	11.18	4.66
1984	14.48	13.66	0.82	12.10	2.38	12.44	2.04	12.39	2.09
1985	14.22	12.06	2.16	9.95	4.27	10.62	3.60	10.79	3.43
1986	12.26	9.30	2.96	7.28	4.98	7.68	4.58	7.80	4.46
1987	11.28	9.77	1.51	7.83	3.45	8.38	2.90	8.59	2.69
1988	11.25	10.26	0.99	8.36	2.89	8.85	2.40	8.96	2.29
Average Premium: 10-Years (1979-1988)			1.71		3.45		3.14		3.18
Long Range Forecasts:[1] (1989-1991)									
DRI			10.11		8.60		8.77		8.84
Blue Chip			N/A		8.64		8.82		8.86

EXPECTED ROE:

	(c)	(e)	(g)	(i)
DRI	11.82%	12.05%	11.91%	12.02%
Blue Chip	N/A	12.09%	11.96%	12.04%

N/A - Not Available

SOURCES: Standard & Poors' Stock Guide and Forecasts from Table No. 2

Due to the current trend of declining interest rates, Blunt believes the lower portion of the range is appropriate. Table 7 demonstrates that both Data Resources Inc./McGraw Hill (DRI) and Blue Chip Financial Forecasts (Blue Chip) forecast generally declining interest rates during the test periods.

TABLE 7

DEL ESTE WATER COMPANY

Interest Rate Forecasts, Data Resources Inc./McGraw Hill and Blue Chip Financial Forecasts

Type of Issue	1989 (a)	1990 (b)	1991 (c)	AVERAGE (a+b+c)/3 (d)
3-5 Year U.S. Government				
- DRI	9.16%	8.07%	8.56%	8.60%
- Blue Chip [1/]	9.23	8.60	8.10	8.64%
10-Year Treasury Note				
- DRI	9.06	8.49	8.77	8.77%
- Blue Chip	9.25	8.80	8.40	8.82%
"AA" Utility Bond				
- DRI	10.39	9.85	10.08	10.11%
30-Year US Government Bond				
- DRI	8.98	8.59	8.95	8.84%
- Blue Chip	9.18	8.90	8.50	8.86%

1/ Average of 2- and 5-Year Forecasts.

SOURCES: Data Resources Incorporated/McGraw Hill U.S. Review, Long-Range Forecstes, March 1989 and Blue Chip Financial Forecastes, Long-Range Estimates, March 1989

DRA further notes that water public utility companies are less risky when compared to other types of public utility companies. For this reason, in the past DRA has recommended, and the Commission has authorized, lower ROE's for water public utility companies than for telecommunications or energy public utility companies.

The Commission granted Del Este an ROE of 14.00% in 1982 (D.82-09-061). Between 1982 and April 1989 the average yield on "AA" rated utility bonds declined 477 basis points. Bank prime rates and U.S. Government securities have similarly declined over that period. DRA believes that, everything else being equal, such a decline warrants a lower ROE than that found reasonable in 1982.

Discussion

We conclude that DRA's extensive analysis is convincing and balanced and that DRA's recommended range of ROE at 11.75% to 12.25% is appropriate. The Commission has adopted this methodology in other water utility general rate cases. DRA's recommended range is based on detailed financial analyses. While Del Este faults DRA's selection of 12 comparable water companies, it does not recommend a different selection. The companies selected by DRA are much larger than Del Este, apparently because of unavailability of financial information for smaller companies.

Selecting the allowable ROE within the range requires consideration of other factors. We observe that forecasts of interest rates indicate generally declining rates over the period 1989 to 1991. The cost of Del Este's new debt is now known, and compares closely to DRA's earlier estimate.

This points to allowing an ROE at the lower end of the DRA range.

Considering carefully DRA's analysis, the trend in interest rates and the cost of new debt, we conclude that an allowable ROE at 11.90% is appropriate.

Del Este's arguments for a higher ROE are not convincing. It argues that the need to redrill wells for nitrates puts it at unusual risk, yet such redrilling has occurred since the 1970s without apparent detrimental impact.

The impact of the proposed Salida development is somewhat uncertain at this time. While it very likely will take place, the timing is subject to change. The Commission and Branch appreciate that this development can have a significant impact on Del Este's earnings. Del Este and Branch reached agreement on how this issue should be handled. Under PU Code § 454, Del Este may file an application to increase its rates before its next GRC, consistent with D.88-01-061 and D.87-09-026 in Investigation No. 86-11-019, the Commission's investigation into the consequences of the 1986 TRA. Del Este could file an application for rate increase after it signs an extension agreement for the installation of facilities necessary to serve the development, and following payment of Salida-related taxes in excess of those satisfied by the developer's gross-up. It may file not more than once in each year, 1989, 1990, and 1991. We conclude that this resolves Del Este's concerns about the income tax implications of the development. We will authorize it to file an application for rate increase consistent with the provisions of the agreement.

We also consider Del Este's arguments that it has a more risky operation owing to its smaller size. While this may be an inconvenience, it does not appear to be a significant financial burden. Del Este has operated well in recent years, having earned above its authorized rate of return on rate base in four of the six years since its last GRC.

In conclusion, we find that an ROE of 11.90% will provide a fair and reasonable return to Del Este.

<u>Income Taxes</u>

Appendix D tabulates the income taxes based on the adopted debt/equity ratios and ROE.

<u>Attrition Allowance</u>

Branch recommends that an attrition adjustment to revenue be authorized for 1991. The proposed revenue adjustment is calculated by multiplying the operational attrition plus the financial attrition times the adopted rate base in 1990 times the net-to-gross multiplier, as follows:

1991 Attrition Adjustment =

= [(Oper. Attr.) + (Fin. Attr.)] x [1990 Rate Base] x [net-to-gross mult.]

= [(.0169) + (0.0)] x [$6,673,600] x [1.6956]

= $191,200

We will adopt this recommendation and allow Del Este to file for this adjustment; the resulting ROR on rate base may not exceed that adopted in this decision.

<u>Balancing Accounts</u>

Del Este requests that its balancing accounts be amortized in the authorized rates. The balancing account balances through July 31, 1989 were furnished in late-filed Exhibit 16:

Reference	Undercollection
Power Offset (Advice Letters 90 & 93)	$100,690.38
1988 Surcredit (Advice Letter 102)	31,375.00
1989 Surcredit (Advice Letter 104)	5,078.00
Total	$137,143.38

The Commission's "Procedure for Maintaining Balancing Accounts for Water Utilities" dated May 31, 1983 provides that balancing account balances that exceed two percent of the water company's most recently adopted test year gross annual revenues will be disposed of in the GRC order. If the total balance is less than five percent, it should be amortized over one year. Del Este's balance at $137,143.38 is approximately 4.6% of the adopted 1989 present rate gross revenues of $3,015,200. The rates we adopt will amortize the balance over one year.

Appendix A indicates the rates authorized for 1989 based on an ROE of 11.90%, and the amortization of the balancing accounts.

Appendix B similarly indicates the rates authorized for 1990.

Appendix C indicates the adopted quantities.

Appendix E indicates typical water bills for various usage levels at present and authorized rates.

Comments

No comments were filed on the proposed decision which was mailed on October 23, 1989. One typographical error was discovered and corrected.

Findings of Fact

1. Service provided by Del Este is satisfactory, and the water furnished meets current state drinking water standards.

2. Applicant has complied with our directives in D.86959 and D.86-05-064 to promote water conservation and to prepare and adopt a water management plan to achieve the efficient use of water.

3. Del Este obtains all its water from wells, and has no surface storage facilities.

4. Del Este's water supply was adequate during the 1988 drought year.

5. The results of operations estimates at present rates, with the exception of income taxes, were agreed to by Del Este and Branch, are reasonable and will be adopted.

6. Del Este requests a continuation of the 14.00% return on equity found reasonable in its last GRC.

7. The cost to Del Este of $4,000,000 of new debt will be 10.85%.

8. Del Este requests a capital structures of approximately 39% debt/61% equity for 1989, and 45% debt/55% equity for 1990 and 1991.

9. DRA recommends that higher debt at a three-year average of 49% debt/51% equity is more beneficial to ratepayers, considering the tax implications.

10. A debt/equity ratio of 49% debt/51% equity is reasonable for the 1989 to 1991 period.

11. Under the 1986 TRA, developer advances and contributions are taxed as income.

12. Del Este has exceeded its authorized rate of return on rate base in four of the six years since its last GRC.

13. Between the 1982 decision in Del Este's last GRC and April 1989, the average yield on "AA" rated utility bonds declined 477 basis points.

14. Branch recommends an ROE in the lower portion of the range, 11.75% to 12.25%, due to forecasts of declining interest rates.

15. Return on equity of 11.90% is reasonable for 1989 through 1991.

16. Del Este may file an application to increase rates before its next GRC after it signs an extension agreement for the Salida development, and after it pays the related taxes in excess of the developer's gross-up.

17. The balancing accounts balance is approximately 4.6% of the 1989 adopted present rates annual revenues.

18. The increases in rates and charges authorized in this decision are justified; the rates and charges authorized in this decision are just and reasonable; and the present rates and charges, insofar as they are different from those prescribed in this decision, are for the future unjust and unreasonable.

<u>Conclusions of Law</u>

1. Del Este should be authorized to amortize the balancing accounts balance over one year.

2. Del Este should be authorized to file the rates set forth in Appendix A, as specified in the following order.

3. Del Este should be authorized to file advice letters requesting rate relief as specified in the following order.

4. Del Este should be authorized to file an application requesting rate relief to offset the taxes in excess of developer contributions toward tax liability for the Salida development.

5. The effective date of the order shall be the date of signature because the revenue and expense projections were made for the test year 1989 and there is a need for additional revenues.

ORDER

IT IS ORDERED that:

1. Del Este Water Company (Del Este) is authorized to file the revised schedules attached as Appendix A. This filing shall comply with General Order (GO) 96-A. The effective date of the revised schedules shall be 5 days after the date of filing. The revised schedules shall apply to service rendered on and after their effective date.

2. On or after November 5, 1989, Del Este is authorized to file an advice letter, with appropriate supporting workpapers, requesting step rate increases for 1990 included in Appendix B, or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal rate-making adjustments for the 12 months ending September 30, 1989, exceeds the rate of return found reasonable in this order. This filing shall comply with GO 96-A, and include pro forma calculations that comply with the established procedures dated October 30, 1985, for calculating pro forma rates of return. The requested rates shall be reviewed by the Water Utilities Branch (Branch) to determine their conformity with this order and shall go into effect upon the Branch's determination of conformity. Branch shall inform the Commission if it finds that the proposed rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised tariff schedules shall be no earlier than January 1, 1990, or 40 days after filing, whichever is later. The revised schedules shall apply to service rendered on and after their effective date.

3. On or after November 5, 1990, Del Este is authorized to file an advice letter, with appropriate supporting workpapers, requesting step rate increases for 1991 included in Appendix B, or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal rate-making adjustments for the 12 months ending September 30, 1990, exceeds the rate of return found reasonable in this case. This filing shall comply with GO 96-A, and include pro forma calculations that comply with the established procedures dated October 30, 1985, for calculating pro forma rates of return. The requested rates shall be reviewed by the Branch to determine their conformity with this order and shall go into effect upon the Branch's determination of conformity. Branch shall inform the Commission if it finds that the proposed rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised tariff schedules shall be no earlier than January 1, 1991, or 40 days after filing, whichever is later. The revised schedules shall apply to service rendered on and after their effective date.

4. Del Este is authorized to file an application requesting rate relief to offset the taxes in excess of developer contributions toward tax liability for the new Salida development, after signing an extension agreement and following payment of excess Salida-related taxes. The requested rates and supporting work papers shall be reviewed by the Branch to determine their

conformity with this order, Decision (D.) 87-09-026 and D.88-01-061 in I.86-11-019, TRA 1986. The staff shall inform the assigned Administrative Law Judge. The Commission may issue an ex parte decision without further hearing.

This order is effective today.

Dated NOV 22 1989, at San Francisco, California.

G. MITCHELL WILK
President
FREDERICK R. DUDA
STANLEY W. HULETT
JOHN B. OHANIAN
PATRICIA M. ECKERT
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY.

Wesley Franklin

WESLEY FRANKLIN, Acting Executive Director

PO

APPENDIX A
Page 1

Schedule No. 1

Del Este Water Company

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Portions of Modesto and Turlock and Empire, Salida, Waterford, Hickman, Grayson, and Hillcrest and vicinity, Stanislaus County.

RATES

Service Charge:

	Per Meter Per Month	
For 5/8 x 3/4-inch meter	$ 3.70	(I)
For 3/4-inch meter	5.40	
For 1-inch meter	6.90	
For 1-1/2-inch meter	9.20	
For 2-inch meter	12.10	
For 3-inch meter	19.00	
For 4-inch meter	25.80	
For 6-inch meter	40.00	
For 8-inch meter	55.00	
For 10-inch meter	88.00	
For 12-inch meter	108.00	(I)

Quantity Rates:

For the first 10,000 cu.ft., per 100 cu.ft.	$ 0.362	(I)
For all over 10,000 cu.ft., per 100 cu.ft.	0.330	(I)

The service charge is applicable to all metered service. It is a readiness-to-serve charge to which is added the charge for water used computed at the Quantity Rates.

APPENDIX A
Page 2

Schedule No. 1

Del Este Water Company

GENERAL METERED SERVICE
(Continued)

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.017 per Ccf is to be added to the quantity rates as shown above for twelve months from the effective date of this tariff to amortize the undercollection.

2. All rates are subject to the reimbursement fee set forth on Schedule No. UF.

APPENDIX A
Page 3

Schedule No. 2

FLAT RATE SERVICE

APPLICABILITY

Applicable to all water furnished on a flat rate basis.

TERRITORY

Portions of Modesto and Turlock, and Empire, Salida, Waterford, Hickman, Grayson, and Hillcrest and vicinity, Stanislaus County.

RATES

	Per Service Connection Per Month	
For a premise served by an unmetered water connection having the following areas:		
6,000 sq. ft., or less	$ 8.45	(I)
6,001 to 10,000 sq. ft.......................	9.80	|
10,001 to 16,000 sq. ft......................	11.65	|
16,001 to 25,000 sq. ft......................	14.15	|
Over 25,000 sq. ft...........................	17.45	(I)

SPECIAL CONDITIONS

1. Meters may be installed at the option of the utility or the customer, in which event service will be furnished only under Schedule No. 1, Metered Service. A customer's request for metered service must be made in writing.

2. Customers requesting service of the following types will not be served under this schedule, but will be served under Schedule No. 1, Metered Service.

    a. Residential service connections larger than 3/4" diameter or any 3/4" residential service that, in the utility's judgment, may consume excessive water because of lot size, special equipment, or unusual use.

    b. Service connections to commercial or business establishments.

    c. Service connections for agricultural purposes.

    d. Service connections to premises containing multiple dwellings or dwellings and occupied trailer houses.

APPENDIX A
Page 4

Schedule No. 2

FLAT RATE SERVICE

SPECIAL CONDITIONS (Continued)

3. Due to the undercollection in the Balancing Account, an amount equal to 4.39% of the above rates will be added to each customer bill for twelve months from the effective date of this tariff to amortize the undercollection.

4. All rates are subject to the reimbursement fee set forth on Schedule No. UF.

APPENDIX A
Page 5

Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water furnished on a flat rate basis.

TERRITORY

Portions of Modesto and Turlock, and Empire, Salida, Waterford, Hickman, Grayson, and Hillcrest and vicinity, Stanislaus County.

RATES

	Per Month
For each inch of diameter of service connection	$ 3.20

SPECIAL CONDITIONS

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

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

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

4. All rates are subject to the reimbursement fee set forth on Schedule No. UF.

(End of Appendix A)

APPENDIX B

Each of the following increases in rates may be put into effect on the indicated date by filing a rate schedule which adds the appropriate increase to the rate which would otherwise be in effect on that date.

METERED RATES

	Effective Date 1/1/90	Effective Date 1/1/91
Service Charge		
For 5/8 x 3/4-inch meter	$ 0.35	$ 0.25
For 3/4-inch meter	0.50	0.30
For 1-inch meter	0.55	0.40
For 1-1/2-inch meter	0.75	0.55
For 2-inch meter	0.90	0.70
For 3-inch meter	1.55	1.15
For 4-inch meter	2.10	1.55
For 6-inch meter	3.20	2.40
For 8-inch meter	4.45	3.25
For 10-inch meter	6.50	4.70
For 12-inch meter	7.00	6.25
Quantity Rates:		
For the first 10,000 cu.ft., per 100 cu.ft.	$ 0.017	$ 0.021
For all over 10,000 cu.ft., per 100 cu.ft.	0.015	0.019

FLAT RATES

	1/1/90	1/1/91
6,000 sq. ft., or less	$ 0.55	$ 0.50
6,001 to 10,000 sq. ft.	0.65	0.55
10,001 to 16,000 sq. ft.	0.80	0.75
16,001 to 25,000 sq. ft.	0.90	0.85
Over 25,000 sq. ft.	1.10	1.00

PRIVATE FIRE PROTECTION

	1/1/90	1/1/91
For each of diameter of service connection	$ 0.30	$ 0.20

(End of Appendix B)

APPENDIX C
Page 1

ADOPTED QUANTITIES

Name of Company: Del Este Water Company

Net-to-Gross Multiplier: 1.6956

Federal Tax Rate: 34.12%

State Tax Rate: 9.3%

Local Franchise Tax Rate: 0.65%

Uncollectibles Rate: 0.652%

Offset Items	Test Years 1989	1990
1. Purchased Power:		
Total Production - Ccf	9,903,824	10,057,314
Acre-Feet	22,736.1 A.F.	23,088.4 A.F.
Electric:		
(a) Modesto Irrigation District		
Total Cost	$ 375,235	$ 380,563
KWh	7,696,356	7,815,634
Eff Sch Date	1/1/89	1/1/89
$/KWh Used	$ .04876	$ .04869
(b) Pacific Gas & Electric Company		
Total Cost	$ 4,527	$ 4,596
KWh	43,231	43,901
Eff Sch Date	1/1/89	1/1/89
$/KWh Used	$ .10472	$ .10469
(c) Turlock Irrigation District		
Total Cost	$ 83,804	$ 85,100
KWh	1,321,828	1,342,314
Eff Sch Date	2/1/89	2/1/89
$/KWh Used	.06340	.06340
2. Purchased Water:		
	3,000 Ccf 6.9 A.F.	3,000 Ccf 6.9 A.F.
Total Cost	$ 1,231	$ 1,231

APPENDIX C
Page 2

ADOPTED QUANTITIES
(Continued)

	1989	1990
(a) City of Modesto		
Volume	2,920 Ccf	2,920 Ccf
Cost	$ 691	$ 691
($15.59/2 months, includes 3.4 Ccf) (plus $0.22/Ccf for more than 3.4 Ccf)		
(b) City of Turlock		
Volume	80 Ccf	80 Ccf
Cost	$ 480	$ 480
($10 met. rent/month, plus $10/month) (min. charge, includes 33,000 gals.) (month, plus $0.30/1000 gal in excess) (of 30,000.)		
(c) City of Ceres		
Volume	0	0
Cost	$ 60	60
($5/month)		
3. Water Testing	$ 75,000	$ 75,000

ADOPTED QUANTITIES

Name of Company: Del Este Water Company

Payroll and Employee Benefits

	Test Years 1989	Test Years 1990
Operating and Maintenance	$1,386.0	$1,431.8
Administrative & General	715.7	756.0
Total	2,101.7	2,187.8
Payroll Taxes	51,892	55,182
Ad Valorem Taxes:		
Ad Valorem Taxes -	66,293	81,648
Tax Rate -	0.97%	0.91%

Metered Water Sales Used to Design Rates:

Range - Ccf		Usage - Ccf 1989	Usage - Ccf 1990
Block 1	0 - 3	108,274	110,653
Block 2	4 - 100	1,036,698	1,058,746
Block 3	100	2,519,378	2,496,014
Total Metered Usage		3,664,350	3,665,413

APPENDIX C
Page 4

ADOPTED QUANTITIES

Name of Company: Del Este Water Company

Customers & Usage

	No.		Usage-KCcf		Average Usage-Ccf/svc/yr.	
	1989	1990	1989	1990	1989	1990
Commercial						
Metered	3,106	3,176	1,464.2	1,497.2	471.4	471.4
Flat Rate	13,980	14,345	5,249.1	5,386.3	375.5	375.5
Industrial-Small	39	40	352.6	361.7	9,041.5	9,041.5
Industrial-Large Users	8	8	1,528.5	1,486.0	191,062.5	185,750.0
Public Authority	84	84	319.0	320.5	3,042.7	3,042.7
Subtotal	16,163	16,627	8,913.4	9,051.6		
Private Fire Protection	142	147				
Public Fire Protection	1,054	1,074				
Total	17,359	17,848				
Water Loss at 10.00%			990.4	1,005.7		
Total Water Produced			9,903.8	10,057.3		

APPENDIX C
Page 5

DEL ESTE WATER COMPANY

ADOPTED SERVICE BY METER SIZE
(all classes)

Meter Size	1989	1990
5/8" x 3/4"	671 services	686 services
3/4"	1,658	1,695
1"	482	493
1-1/2"	154	157
2"	185	189
3"	39	39
4"	29	29
6"	12	12
8"	7	7
10"	1	1
Total	3,238	3,308

FLAT-RATE SERVICES

6,000 sq. ft., or less	1,685	1,728
6,001 to 10,000 sq. ft.	9,712	9,965
10,001 to 16,000 sq. ft.	1,517	1,556
16,001 to 25,000 sq. ft.	512	525
Over 25,000 sq. ft.	555	569
Total	13,980	14,344

(End of Appendix C)

APPENDIX D

Del Este Water Company

TAXES BASED ON INCOME ($000)
TEST YEARS 1989 and 1990
(Adopted Rates)

Item	1989	1990
Taxable income		
Operating Revenues	3254.8	3526.2
Bad Debt Drawdown	4.2	4.2
Total taxable income	3259.0	3530.4
Deductions		
O & M expenses	1387.6	1434.8
A & G expenses	717.2	759.0
Taxes other than income	118.2	136.8
FICA capitalized	4.6	4.5
Benefits capitalized	11.9	12.9
Interest expense	332.5	385.8
Subtotal deductions	2572.0	2733.8
Calif. Corp. Franchise Tax		
State tax deductions	2572.0	2733.8
Net income for CCFT	687.0	796.6
Tax depreciation	323.6	411.7
Net CCFT taxable income	363.4	384.9
CCFT @9.3%	33.8	35.8
Federal Income Tax		
Subtotal deductions	2572.0	2733.8
+CCFT	33.8	35.8
Federal tax deductions	2605.8	2769.6
Net income for FIT	653.2	760.8
Tax depreciation	565.5	669.5
Net FIT taxable income	87.7	91.3
FIT @ 34.12%	29.9	31.0

(END OF APPENDIX D)

APPENDIX E

Del Este Water Company

Comparisons of typical bills for residential metered customers at various usage levels and average level at present and authorized rates for the year 1989.

GENERAL METERED SERVICE
(5/8 x 3/4-inch meters)

Schedule No. 1

Monthly Usage CCF (100 Cubic Feet)	1989 Present Rates	1989 Authorized Rates	1989 Percent Increase
0	$3.30	$3.70	12.1%
10	6.39	7.32	14.6%
17 avg	8.78	9.85	12.2%
20	9.80	10.94	11.6%
50	20.03	21.80	8.8%
100	37.08	39.90	7.6%

(End of Appendix E)

	DRA	Utility
1989	10.86%	11.83%
1990	10.95%	12.01%
1991	10.95%	12.06%

During the hearings Del Este offered evidence of a commitment by Pacific Mutual Life Insurance Company for 25 year debt financing of up to $4 million at 10.85% per annum coupon rate. The $4 million is the utility's estimate of the new financing requirement during the 1989 to 1991 period. DRA recommends, and Del Este witness Ferry agrees, that since this is a firm commitment, it should be used as the cost for new long-term debt.

This changes DRA's estimated debt costs slightly, as follows:

1989	10.89%
1990	10.98%
1991	10.98%

Since the cost of long-term debt is now known, we will use these revised values in our determination of the allowable return on equity.

Debt to Equity Ratio

Del Este requests a capital structure of approximately 39% debt/61% equity for 1989 and approximately 45% debt/55% equity for 1990 and 1991.

Using updated financing information not available to Del Este when it prepared the application, DRA calculates its recommended debt/equity ratios as follows:

1989 - 42% debt/58% equity
1990 - 53% debt/47% equity
1991 - 50% debt/50% equity

The three year average is 49% debt/51% equity, which DRA argues is more beneficial to ratepayers, considering the tax implications, than the higher amounts of equity assumed by the company. DRA recommends using a constant average 49% debt/51%

As a result, it cannot blend well water with other supplies to meet water quality requirements. It has been dealing with water quality problems, primarily nitrates, since the early 1970's. Del Este notes that water quality capital additions totaled approximately $700,000 for the period 1983 through 1987, while the 1988 through 1991 additions are budgeted at $3.3 million.

In addition, at least 12 of its wells are estimated to require wellhead treatment for DBCP under the new MCL, at a cost of $250,000 to $350,000 per well. The cost for the 12 wells is about $3.5 million, with installation of the equipment expected to begin in late 1989 or early 1990. Del Este has not included the costs of additions required for DBCP in this application due to the timing of the new MCL. It requests authority from the Commission to file a separate application to increase its rates when the details of the DBCP capital improvement program are determined.

Del Este argues that while other water companies face the same quality requirements, no others face the problems of a comparable magnitude relative to the size of the utility. Therefore, it believes that it is entitled to an increased ROE over that received by other water utilities.

Third, subsequent to preparation of this application, Del Este became aware of a major new development in the Salida area, northwest of Modesto. The development would add about 2,300 new customers and cause additional income tax liability. Under the Tax Reform Act of 1986 (1986 TRA), the company has a 15-2/3% tax liability beyond the developer contributions toward tax liability. Given the size of the development relative to the utility, the effect on earnings is significant. Similar to the water quality problems, this development will add to the need for borrowing, which will be at greater cost since the risk to lenders increases as the amount of debt increases relative to equity.

In summary, for the above reasons, Del Este argues that a continuation of the currently allowed 14.00% ROE is justified.

As a result, it cannot blend well water with other supplies to meet water quality requirements. It has been dealing with water quality problems, primarily nitrates, since the early 1970's. Del Este notes that water quality capital additions totaled approximately $700,000 for the period 1983 through 1987, while the 1988 through 1991 additions are budgeted at $3.3 million.

In addition, at least 12 of its wells are estimated to require wellhead treatment for DBCP[1] under the new MCL, at a cost of $250,000 to $350,000 per well. The cost for the 12 wells is about $3.5 million, with installation of the equipment expected to begin in late 1989 or early 1990. Del Este has not included the costs of additions required for DBCP in this application due to the timing of the new MCL. It requests authority from the Commission to file a separate application to increase its rates when the details of the DBCP capital improvement program are determined.

Del Este argues tht while other water companies face the same quality requirements, no others face the problems of a comparable magnitude relative to the size of the utility. Therefore, it believes that it is entitled to an increased ROE over that received by other water utilities.

Third, subsequent to preparation of this application, Del Este became aware of a major new development in the Salida area, northwest of Modesto. The development would add about 2,300 new customers and cause additional income tax liability. Under the Tax Reform Act of 1986 (1986 TRA), the company has a 15-2/3% tax liability beyond the developer contributions toward tax liability. Given the size of the development relative to the utility, the effect on earnings is significant. Similar to the water quality problems, this development will add to the need for

---

1 Di-Bbromo Chloro Propane (DBCP) is a chlorinated hydro fluro carbon, used as an agricultural spray to control nemotodes, now banned for use in this country. It is suspected of causing sterility in humans and known to have caused cancer in laboratory animals.

borrowing, which will be at greater cost since the risk to lenders increases as the amount of debt increases relative to equity.

In summary, for the above reasons, Del Este argues that a continuation of the currently allowed 14.00% ROE is justified.

DRA witness Blunt takes a different approach to ROE. Blunt used the guidelines established by two landmark cases in arriving at recommendations for equity returns: (Bluefield Waterworks and Improvement Company v West Virginia Public Service Commission (1923) 262 US 679; 67 L ed 1176, 43 S. Ct. 675 and Federal Power Commission v Hope Natural Gas Company (1944) 320 US 591; 88 L ed 333, 64 S. Ct. 281.) As explained by Blunt, two standards emerge from those cases.

1. A standard of capital attraction, which focuses on investors' return requirements, and is applied using market value methods such as the discounted cash flow (DCF) model and the risk premium (RP) analysis. The DCF model recognizes that the current market price of a share of common stock equals the present value of the expected future stream of dividends and the future sale price of the stock, discounted at the investor's discount rate. The discount rate is the investor's opportunity cost, or the ROR that could be earned on an investment of comparable risk.

The RP analysis assumes that the expected return for a security can be derived by adding an appropriate premium return to reflect the asset's additional risk when compared with another security, such as utility bonds or government issues.

2. The comparable earnings standard which uses the return earned on an equity investment by companies of comparable risks as a measure in setting a fair return. Branch selected a group of 12 water utility companies that it believes fit the standard of comparable earnings and share corresponding risk with Del Este.

Branch then applied the DCF, RP, and comparable earnings analyses to the group, to arrive at a recommended range for ROE. Blunt concludes that an ROE in the range of 11.75% to 12.25% is appropriate. He recommends a range rather than a single value because he believes determining ROE is not a matter of absolute precision. The mid-point of his recommended range for ROE at 12.00% compares closely with both the group average DCF discount rate at 12.06% to 12.13% (Table 5) and the risk premium analysis expected ROE that ranges from 11.82% to 12.09% (Table 6).

Appendix A indicates the rates authorized for 1989 based on an ROE of 11.90%, and the amortization of the balancing accounts.

Appendix B similarly indicates the rates authorized for 1990.

Appendix C indicates the adopted quantities.

Appendix E indicates typical water bills for various usage levels at present and authorized rates.

Findings of Fact

1. Service provided by Del Este is satisfactory, and the water furnished meets current state drinking water standards.

2. Applicant has complied with our directives in D.86959 and D.86-05-064 to promote water conservation and to prepare and adopt a water management plan to achieve the efficient use of water.

3. Del Este obtains all its water from wells, and has no surface storage facilities.

4. Del Este's water supply was adequate during the 1988 drought year.

5. The results of operations estimates at present rates, with the exception of income taxes, were agreed to by Del Este and Branch, are reasonable and will be adopted.

6. Del Este requests a continuation of the 14.00% return on equity found reasonable in its last GRC.

7. The cost to Del Este of $4,000,000 of new debt will be 10.85%.

8. Del Este requests a capital structures of approximately 39% debt/61% equity for 1989, and 45% debt/55% equity for 1990 and 1991.

9. DRA recommends that higher debt at a three-year average of 49% debt/51% equity is more beneficial to ratepayers, considering the tax implications.

10. A debt/equity ratio of 49% debt/ 51% equity is reasonable for the 1989 to 1991 period.