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Process

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Decision 90-02-042 February 23, 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of CALIFORNIA WATER SERVICE COMPANY, (U 60 W), a corporation, for an order authorizing it to increase rates charged for water service in the Bakersfield District.	Application 89-06-029 (Filed June 21, 1989)
And Related Matters.	Application 89-06-030 Application 89-06-032 Application 89-06-034 Application 89-06-035 Application 89-06-037 Application 89-06-043

McCutchen, Doyle, Brown & Enersen, by A. Crawford Greene, William Newell, Attorneys at Law, and Donald L. Houck, for applicant.

Izetta Jackson, Jean Vieth, Attorneys at Law, and Arthur A. Mangold, for the Commission Advisory and Compliance Division.

INDEX

INTERIM OPINION

Introduction

California Water Service Company (CWS or applicant) seeks authority to increase rates for water service in seven districts: Bakersfield (Application (A.) 89-06-029), Bear Gulch (A.89-06-030), Oroville (A.89-06-032), San Carlos (A.89-06-034), San Mateo (A.89-06-035), Stockton (A.89-06-037), and Visalia (A.89-06-043). Applicant's proposed rates are designed to produce a constant 13.75 percent return on equity for 1990-1992 and an overall rate of return of 12.13 percent in 1990, 12.10 percent in 1991, and 12.08 percent in 1992. The proposed revenue increases are summarized as follows:

	1990		1991		1992	
District	Amount	Percent	Amount	Percent	Amount	Percent
	(Dollars in Thousands)					
Bakersfield	$1,595.5	10.7%	$620.1	3.7%	$646.4	3.8%
Bear Gulch	1,088.5	16.7	37.8	0.5	51.5	0.6
Oroville	107.5	6.4	45.7	2.6	48.3	2.6
San Carlos	359.0	13.0	37.5	1.2	40.4	1.3
San Mateo	1,005.5	16.1	156.0	2.1	169.6	2.2
Stockton	717.4	5.9	345.8	2.7	355.9	2.7
Visalia	394.6	9.3	235.4	4.9	241.7	4.8

New Rates

After consideration of the evidence presented by CWS, the Water Utilities Branch of the Commission's Advisory and Compliance Division (Branch), and the Division of Ratepayer Advocates' (DRA) rate of return witness, we have adopted the following rate increases:

An analysis of the effect of these rates on customers is set forth in Appendix B.

Background

Present Commission policy permits major water utilities to file general rate increase applications no more frequently than once every three years. CWS's seven applications, which were consolidated into this single proceeding, meet this Commission policy. CWS operations in these districts have not been reviewed by the Commission or its staff in connection with a general rate application in the last three years. Listed below for each district is the most recent general rate application, the related Commission decision, and adopted test year.

District	Application	Decision	1st Test Year
Bakersfield	86-05-039	87-03-078	1987
Bear Gulch	84-05-004	85-03-054	1985
Oroville	84-05-008	85-03-054	1985
San Carlos	85-05-005	85-12-088	1986
San Mateo	86-05-040	87-03-078	1987
Stockton	83-03-70	83-12-037	1984
Visalia	86-05-041	87-03-078	1987

During the seven days of evidentiary hearing, CWS's evidence was presented through testimony by the Executive Vice President, the vice president of rates, the Chief Financial Officer, an engineer in charge of maintenance budgets, and the Stockton District Manager. Branch testimony was presented by the project manager and four utility engineers. Additionally, a financial analyst from DRA provided testimony concerning CWS's requested rate of return.

Present Operations

CWS presently owns and operates water systems in 40 communities in California. These water systems are grouped into 21 districts each separately operated with its own accounting and tariff schedules. CWS has a general office in San Jose, at which it performs certain functions, such as accounting, billing, engineering, and water quality control. Water meters are tested and repaired at CWS's meter repair shop in the Stockton district.

CORRECTION

THIS DOCUMENT HAS

BEEN REPHOTOGRAPHED

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LEGIBILITY

INTERIM OPINION

Introduction

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New Rates

After consideration of the evidence presented by CWS, the Water Utilities Branch of the Commission's Advisory and Compliance Division (Branch), and the Division of Ratepayer Advocates' (DRA) rate of return witness, we have adopted the following rate increases:

District	Increase		Average Metered Bill Increase	
	Amount	Percent	Amount	Percent
	(Dollars in Thousands)			
Bakersfield				
1990	$ 966.2	6.6%	$2.15	8.1%
1991	564.1	3.5		
1992	539.2	3.2		
Bear Gulch				
1990	531.5	7.1	2.74	8.2
1991	27.1	0.4		
1992	20.8	0.6		
Oroville				
1990	54.5	3.3	0.98	3.2
1991	41.6	2.4		
1992	40.2	2.3		
San Carlos				
1990	102.6	3.3	0.91	4.1
1991	18.9	0.6		
1992	17.1	0.5		
San Mateo				
1990	369.4	5.1	1.18	5.3
1991	61.1	0.9		
1992	57.4	0.7		
Stockton				
1990	58.6	0.5	0.00	0.0
1991	318.7	2.9		
1992	305.5	2.7		
Visalia				
1990	286.7	6.7	0.89	4.3
1991	164.1	3.7		
1992	158.0	3.2		

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Since CWS's operating districts are not integrated, except for the allocation of common facilities and expenses, the revenues, facilities, and expenses of one district are not affected by operations in other districts. For ratemaking purposes, each district is considered as a distinct entity.

As of December 31, 1988, CWS had invested $388,877,722 in its utility plant, served 337,344 customers, employed 550 individuals, and had a gross operating revenue in 1988 of $113,273,446.

Service Areas and Water Supply Systems

Bakersfield

The Bakersfield district is the largest of CWS's 21 districts. It comprises most of the City of Bakersfield as well as unincorporated areas of Kern County and serves an estimated population of 205,000. The service area varies in elevation from approximately 365 feet to 880 feet above sea level. In addition, CWS operates and maintains under contract the water systems owned by the City of Bakersfield.

The district's primary source of supply is obtained from 143 wells which range in depth from 249 feet to 1,370 feet. All wells are automatically controlled and electrically operated. Seven of the well pumps are equipped with automatic auxiliary engines and four are equipped with auxiliary-engine generators. A secondary source of supply is provided through five connections with the Kern County Water Agency. There are 34,687,000 gallons of storage capacity in the district which is contained in 1 elevated tank, 1 earth-banked reservoir, and 42 surface tanks.

Due to the wide range in elevations, 15 pressure zones are required to render adequate service. These zones are either fed directly from well pumps or from 61 booster pumps into the interconnected distribution system and storage. All the principle booster stations can be operated by emergency portable gasoline-powered booster pumps; five stations are equipped with diesel or natural gas engines for use during power failures.

The entire water system is monitored by a central computer located in the district's field office. Additionally, the central computer automatically controls the operation of pumps and valves.

Bear Gulch

The area served by the Bear Gulch system includes the cities of Atherton, Menlo Park, the towns of Portola Valley and Woodside, and unincorporated portions of San Mateo County. Elevations in the service area range from sea level to more than 1,000 feet above sea level. The total population of the area served is estimated at 64,400.

Bear Gulch has two sources of supply: water purchased from the City of San Francisco and water diverted from Bear Gulch Creek. The City of San Francisco supply is provided through 7 connections and accounted for 97 percent of the district's total water supply in 1988. Water from Bear Gulch Creek is diverted at two locations and fed into a storage reservoir. Located adjacent to the reservoir are water treatment facilities which chlorinate and filter the Bear Gulch Creek supply.

There are 33 pressure zones in the district which require the operation of 46 booster pumps. Additionally, three booster pumps are required to transport water to the storage reservoir from Bear Gulch Creek. The booster pumps are electrically driven and all principle booster stations can be operated with portable gasoline booster pumps. There are also two engine-driven boosters in the event of a power failure.

Water storage for the district totals 224,700,000 gallons and is maintained in 2 reservoirs and 27 surface tanks. The tank levels, booster pumps, and system pressures are monitored and controlled by a central computer located in the district's field office.

Oroville

The Oroville district is the smallest of the seven districts for which CWS has requested a rate increase. It includes the City of Oroville and unincorporated areas of Butte County. The district provides both domestic and irrigation service in hilly terrain with elevations varying from 157 feet to more than 350 feet above sea level. The total population served by the Oroville district is estimated at 11,200.

The water supply for the Oroville district comes from two sources. The principle source is a surface supply purchased from Pacific Gas and Electric Company (PG&E) at its Coal Canyon Powerhouse. From the powerhouse the water is transported nine miles through CWS's Powers Canal to the Cherokee Reservoir. Additionally, a second source of surface of supply, primarily used during the cleaning of the Powers Canal, is available at the Thermalito Power Canal turnout. Both surface supplies are delivered to the Oroville Reservoir through a one-half mile wood flume and open ditch. Finally, water from the reservoir is chlorinated, filtered, and treated with lime before it is released into the distribution system. The surface supply is supplemented by 4 wells which provided 12 percent of the total domestic production in 1988.

The Oroville district has a storage capacity of 7,209,000 gallons. This capacity is provided by two earth-type reservoirs, Cherokee and Oroville, and two steel tanks. The distribution system is controlled through a combination of local tank levels, pressures, and time controls.

San Carlos

The San Carlos district includes the City of San Carlos and an unincorporated area adjacent to the city. While the business, industrial, and easterly residential area is relatively flat, a large portion of the system is located in hilly terrain with elevations ranging from 25 feet to more than 905 feet above sea level. The population of the San Carlos district is estimated at 37,400.

All water delivered in the San Carlos district is purchased from the City of San Francisco. Additionally, there are emergency connections with Belmont County Water District and Redwood City. While some customers are supplied by gravity, there are 14 pressure zones which require 25 electrically-driven booster pumps and several pressure-regulating valves. Principle booster stations can be operated during emergencies by portable gasoline-powered booster pumps.

The San Carlos district maintains 5,790,000 gallons of storage capacity in 13 steel tanks, 3 redwood tanks, and 3 concrete reservoirs. These tanks and reservoirs float on the distribution system and are filled when tank levels drop. During periods of high demand, booster pumps supplement the reservoir feed into the system.

San Mateo

The San Mateo district includes the City of San Mateo and adjacent unincorporated territory in San Mateo County. Elevations in the district range from near sea level to 630 feet above sea level. The total population of the service area is approximately 102,500.

Water for the San Mateo system is supplied by the City of San Francisco through four connections. CWS receives, as water rights, 300,000 gallons-per-day free of charge and 75,000 gallons-per-day at five cents per thousand gallons. Additional water is purchased at regular San Francisco Water Department rates.

Thirty electrically-powered booster pumps are required to convey the water from the four sources of supply to the various pressure zones in the system. These pumps are automatically operated by various sensing devices and in an emergency can be operated by portable gasoline-powered pump.

The San Mateo system has 19 surface reservoirs and tanks with a capacity of 15,375,000 gallons. These facilities float on the distribution system and are filled when tank levels drop. During periods of high demand, booster pumps supplement the reservoir feed to the system.

Stockton

The Stockton service area includes a portion of the City of Stockton and contiguous territory in San Joaquin County. The terrain is flat with elevations ranging from 1 to 32 feet above sea level. CWS estimates that a population of 158,400 is served by the Stockton district.

Water for the Stockton district is supplied through two sources. Treated surface water is supplied from the Stockton-East Water District. In 1988 this source accounted for approximately half of the total water supply for the Stockton system. Well water provides the second source. Sixty-three electrically-powered wells ranging in depth from 240 to 603 feet pump directly into distribution and storage. Five wells have a secondary power source for emergencies. All well water is chlorinated and Calgon is added at 46 wells to inhibit manganese precipitation.

There are 11 steel storage tanks 7 of which are elevated and 1 concrete reservoir with a storage total capacity of 7,080,000 gallons. The elevated tanks float on the system, while surface storage is distributed by electrical and gasoline-powered booster pumps. Additionally, a remote control system located at Station No. 1 serves as the primary control for wells and boosters.

Visalia

The Visalia district includes the City of Visalia and adjacent unincorporated area in Tulare County. The service area is generally flat with elevations ranging from 305 to 345 feet above sea level. The population within the district is estimated at 72,000.

Water is supplied to the Visalia system from 57 wells with depths from 163 to 417 feet. All well pumps are electrically driven and pump directly into the distribution system. Sixteen wells have auxiliary engines for emergency operation.

Storage in the Visalia district is provided by 2 elevated storage tanks, each with a capacity of 300,000 gallons. These tanks float on the system.

Proceeding History

On April 25, 1989, CWS tendered Notice of Intent (NOI) to file general rate increase applications for these seven districts. Each NOI included a district and general office results of operation report and a report on CWS's financial requirements. Simultaneously with the filing of the NOI, five complete sets of CWS workpapers were furnished to Branch.

Branch accepted the NOIs for filing as of May 22, 1989 and proposed a Regulatory Lag Plan (RLP) schedule consistent with Resolution M-4705, which established an interim experimental plan. This plan provides a hearing and decision timetable for Class A water company rate applications. CWS filed these seven applications on June 21, 1989.

An Administrative Law Judge's (ALJ) ruling dated July 26, 1989 adopted a modified RLP schedule that incorporated the requirement of Public Utilities (PU) Code § 311 that an ALJ proposed decision be mailed at least 30 days prior to the Commission's decision. This plan scheduled five days of hearings starting October 23, 1989; all elements of the timetable were designed to permit a decision to be issued at the meeting of January 24, 1990.

On September 12, 1989 Branch and CWS held an informal meeting to discuss the ALJ's rate case processing plan. At the meeting the parties agreed: (1) hearings should begin on

October 24, 1989 in anticipation of Branch counsel's schedule conflict, (2) the reasonableness of the Second Amended Contract with Stockton East Water District (SEWD) should be addressed in a second phase, if necessary, and (3) an extended briefing schedule would be implemented if a conflict existed for Branch counsel due to Southern California Gas Company's general rate decision. Subsequently, the hearings were rescheduled to October 24, 1989 through October 30, 1989 with a prehearing conference on October 23, 1989. Due to the October 17, 1989 Loma Prieta earthquake, Branch requested an additional delay in the hearings.

As a result of earthquake delay, hearings were postponed a day until October 25, 1989. Because of this rescheduling, hearings did not end until November 3, 1989. This caused a commensurate delay in the November 20, 1989 briefing date.

Branch requested a further delay and the parties agreed that CWS's brief and part of Branch's brief would be filed on December 4, 1989 with the remainder of Branch's brief due on or before December 15, 1989. An ALJ ruling dated November 29, 1989 confirmed this agreement. CWS's entire brief and Branch's brief Part I, which addresses cost of capital issues, were filed on December 4, 1989. On December 15, 1989, Branch requested an additional extension and filed Part II of its brief on December 18, 1989. On December 22, 1989 Branch completed the filing of its brief. The text of stipulations was filed on January 17 and 18, 1990. The ALJ's proposed decision was filed on January 19 and personally served on parties. The appearances filed comments on January 31, 1990.

Prior to the evidentiary hearings Branch and CWS conducted an informal public meeting in each district. These meetings were noticed by a CWS bill insert and publication in a local newspaper. At the meetings Branch and CWS made preliminary statements concerning the Commission's rate case procedures, the role of the parties, and CWS's reasons for the requested rate increase. The following summarizes the public comments received at these meetings:

San Carlos

The informal public meeting was held on August 7, 1989. Five customers attended the meeting. Generally, these customers were concerned about the drought and CWS's requested increase. Although customers in attendance considered service satisfactory, one reported that CWS's prior repair work had damaged his property.

San Mateo

Four customers attended the informal public meeting held August 8, 1989. The comments addressed: (1) rate design, specifically the service charge, (2) the magnitude of the rate increase, (3) conservation, particularly the rationing allotments associated with the drought, and (4) service, with two customers stating they were well satisfied with service. In response to the comments, Branch and CWS discussed the Commission's rate design policy, the role of the California Public Utilities Commission versus the San Francisco Public Utilities Commission, the basis for the requested rate increase, and the procedures established for increasing water rationing allotments.

Bear Gulch

The informal public meeting held on August 9, 1989 was attended by five customers. One customer urged the Commission to recognize the utility's insulation from risk when authorizing a return on equity and two customers commented that the requested increase is excessive. Both Branch and CWS responded to the comments.

Stockton

Only two customers attended the informal meeting held on August 14, 1989. One customer questioned the basis for the service charge and CWS's high rates compared to city's rates. The second customer stated that his meter could not be read because it was covered with sand. Both customers felt they have experienced price-induced conservation and that service is satisfactory. Branch and CWS responded by describing the Commission's rate design policy for determining service charges. Additionally, CWS detailed the water supply conditions in the Stockton area which led CWS to participate in the formation and operation of the SEWD. CWS stated that the city's recent participation in SEWD caused CWS to lower its rates by 15 percent in June 1989 which substantially reduced the rate differential between CWS and the city.

<u>Oroville</u>

On August 15, 1989 an informal public meeting was held. Nine customers attended the meeting and six spoke about high water rates. These customers were concerned with the affordability of landscape maintenance and the chilling effect high rates have on potential industrial customers. A number of customers also stated that the meeting should have been better publicized. Finally, five customers had service complaints: three concerning taste, one concerning suspended matter, and one concerning low pressure.

At the meeting, CWS acknowledged that the Oroville district rates are high, but attributed this to the capital and operational costs associated with the Oroville treatment plant. Furthermore, CWS explained that 40 percent of the district's revenue requirement is related to the treatment plant. Subsequently, CWS investigated the five service complaints, but was unable to substantiate the claims of poor service and water quality. In response to the comments concerning high rates, Branch recommended a public participation hearing (PPH) be held in Oroville.

<u>Bakersfield</u>

Six customers attended the informal public meeting held on August 29, 1989. Three customers commented that the proposed increase was excessive; except for one low-pressure complaint, all customers reported that CWS provided good service.

Visalia

The August 30, 1989 informal public meeting had nine customers in attendance. Conservation was the major topic of discussion. Customers expressed concern over the inadequate enforcement of the City of Visalia's conservation program. Examples of water wasting by flat-rate customers and developers were cited. Furthermore, conservation enforcement was criticized for focusing more on small rather than large users.

Questions were also raised about the criteria for determining metered and flat-rate service. Some customers argued that elimination of flat-rate service would encourage conservation and defer the need for new wells. CWS responded to these comments by describing its enforcement role in conjunction with the City of Visalia's conservation program. The program allows CWS to issue written warnings, but CWS can not enforce the program's $200 penalty. Statements were made that CWS's proposed return on equity is excessive and the proposed increase would be a hardship on customers with fixed incomes. Finally, a customer urged a policy which would encourage residential fire sprinklers by eliminating private fire protection charges for residential customers.

Oroville PPH

In response to Branch's recommendation, afternoon and evening PPHs were held in Oroville on November 1, 1989. No customers attended the afternoon PPH and only three customers commented at the evening PPH. Preliminary statements concerning the Commission's ratemaking procedures and the role of the parties were made by the ALJ, Branch, and CWS. All three customers stated that they were concerned with the high level of water rates. One customer asked why the rates were substantially lower in Chico, a nearby community. CWS responded by pointing out that the higher capital cost and operating expenses of the Oroville district can be attributed to the Oroville filter plant and canal. Additionally, CWS stated that Chico is a large and rapidly growing community which benefits from economies of scale. Another customer expressed concern with the level of employee payroll. Although CWS offered a number of explanations at the PPH, the ALJ directed the company to provide a written response. CWS's written response was provided January 3, 1990. Lastly, a customer suggested that Oroville's rates could be lowered if rates in all districts were set at the same level. The customer also recommended that an ad hoc committee be formed in each community to assist the Commission in verifying utility costs. No service complaints were registered at the PPH, but one customer commented that service has always been very good.

Adopted Results

Rate of Return

We have set rates designed to allow CWS to earn a return on equity of 12.25 percent based on an equity/debt ratio of:

	Long-Term Debt	Preferred Stock	Common Equity
1990	46.10%	1.60%	52.30%
1991	47.00%	1.50%	51.50%
1992	47.80%	1.50%	50.70%

We have rejected CWS's argument that the cost of issuing new debt should be factored into the rate of return adopted here; we have adopted DRA's recommendation that no issuing costs be considered until they are actually incurred. To the extent there is a difference between DRA and CWS concerning the imbedded rate on debt, we have adopted CWS's figures. We have adopted the CWS recommended capital structure. We agree with and adopt Branch's comments concerning the ALJ's proposal to consider drought/rationing effects in deriving rate of return on equity (ROE).

Revenues

We have adopted as reasonable, CWS's last fall-back recommendation for estimating sales including residual conservation in San Carlos, San Mateo, and Bear Gulch districts.

We have adopted CWS's sales estimate for the two test years for its Visalia district.

Central Office

We have adopted CWS's estimates for group medical expenses. We have adopted actual labor costs for 1990 and 1991 as agreed to in the new union contract. We have also adopted CWS's estimates for Accounts 7993 and 7994. We have disallowed CWS's payment of compensation to its Chairman of the Board, and all expenditures relating to his automobile. We have disallowed the additional costs, including capital costs, paid by CWS on behalf of its employees as a result of their personal use of company-owned automobiles.

District Expenses

We have adopted district payroll expenses which include new hires in Bear Gulch, Oroville, and Stockton districts; for Visalia and San Mateo, we have disallowed added employees. We have adopted CWS's position that Oroville district payroll estimates be based on 1988 rather than 1987. We have adopted CWS's estimates of Other-Other/Contracted Maintenance Expenses on an interim basis, pending results of an audit, subject to refund. We have adopted, subject to audit, CWS's estimate of the charges to be allocated to its operation of the City of Bakersfield's water system under the new operating contract. We have adopted as reasonable the actual rental of CWS's new office in Oroville. We have adopted Staff's estimate for Oroville tank painting.

Rate Base

We have included in rate base a minimum average bank balance of $673,000, and another $20,000 for the payroll special deposits account; we will not project or allow additional bank service charges not compensated for by these balances. We have adopted the results of Branch's methodology to estimate for materials and supplies for all districts, even where the result is higher than CWS's. We have determined that CWS financing of wells in Bakersfield and Visalia is not in violation of the main extension rule.

Postponements

The parties have stipulated that ratemaking adjustments, if any, for CWS's new office building can be considered in its next series of general rate proceedings. If any are adopted, they will be factored into the calculations of 1991 and 1992 rates.

Finally, we have postponed a decision on the question of whether Branch still can challenge the reasonableness of rate base for the Oroville filter plant.

The question of a new standard water rate design will be taken up in another proceeding. The parties are in agreement that the question should be considered in workshops.

Phase II hearings in this matter will consider:

1. The reasonableness of expenses under the Second Amended Contract with SEWD.

2. The establishment of permanent rates based on audit reports.

3. Refunds, if any, to be made to consumers as a result of audited Bakersfield's contract expenses, and the mode of making refunds, if any.

The rate of interest on debt will be updated to include the amortized cost of issuance; recovery of such costs will be factored into rate adjustments for 1991 and 1992.

Table 1-1
California Water Service Company
Bakersfield District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$14,876.3	$14,982.5	$15,168.7	$16,113.0
Operating expenses				
Purchased water	783.0	783.0	783.0	783.0
Purchased power	3,400.4	3,384.0	3,458.7	3,458.7
Pump tax	995.6	992.6	992.6	992.6
Payroll	1,824.0	1,810.3	1,831.6	1,831.6
Purchased chemicals	1.9	1.9	1.9	1.9
Other O & M	1,477.7	1,288.7	1,467.4	1,467.4
Other A & G	-410.3	-751.4	-402.4	-402.4
G.O. prorations	1,792.3	1,694.2	1765.6	1,765.6
Business license	0.0	0.0	0.0	0.0
Taxes other than inc.	500.5	499.4	501.1	501.1
Depreciation	1,199.6	1,199.6	1,199.6	1,199.6
Bal. acct. adj.	-296.9	0.0	0.0	0.0
Subtotal	11,267.8	10,902.3	11,599.1	11,599.1
Uncollectibles	89.4	82.1	83.1	88.3
Franchise tax	216.2	216.5	220.4	234.1
State income tax	102.4	147.0	104.9	190.9
Federal income tax	543.2	691.4	551.6	837.9
Total oper. expenses	12,219.0	12,039.3	12,559.1	12,950.4
Net oper. revenues	2,657.3	2,943.2	2,609.7	3,162.6
Rate Base	28,141.4	27,684.7	28,078.3	28,078.3
Rate of Return	9.44%	10.63%	9.29%	11.26%

Table 1-2
California Water Service Company
Bakersfield District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$14,968.2	$15,066.6	$15,260.4	$16,787.0
Operating expenses				
Purchased water	783.0	783.0	783.0	783.0
Purchased power	3,420.5	3,403.4	3,476.4	3,476.4
Pump tax	1,002.6	999.6	999.6	999.6
Payroll	1,918.0	1,897.1	1,933.5	1,933.5
Purchased chemicals	2.0	2.0	2.0	2.0
Other O & M	1,586.5	1,334.5	1,570.8	1,570.8
Other A & G	-433.6	-833.2	-423.7	-423.7
G.O. prorations	1,914.9	1,778.3	1882.5	1,882.5
Business license	0.0	0.0	0.0	0.0
Taxes other than inc.	524.4	522.7	525.6	525.6
Depreciation	1,269.6	1,268.9	1,268.9	1,268.9
Bal. acct. adj.	-298.5	0.0	0.0	0.0
Subtotal	11,689.4	11,156.3	12,018.6	12,018.6
Uncollectibles	89.9	82.6	83.6	92.0
Franchise tax	217.5	217.7	221.7	243.9
State income tax	55.8	115.1	60.0	199.1
Federal income tax	406.8	604.2	421.4	884.4
Total oper. expenses	12,459.4	12,175.9	12,805.4	13,438.1
Net oper. revenues	2,508.8	2,890.7	2,454.9	3,348.9
Rate Base	30,020.0	29,316.6	29,914.0	29,914.0
Rate of Return	8.36%	9.86%	8.21%	11.20%

Table 2-1
California Water Service Company
Bear Gulch District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$6,537.4	$8,091.9	$7,540.7	$7,998.4
Operating expenses				
Purchased water	1,344.9	2,203.7	1,990.1	1,990.1
Purchased power	342.9	415.0	387.8	387.8
Pump tax	0.0	0.0	0.0	0.0
Payroll	880.3	843.9	882.8	882.8
Purchased chemicals	16.8	15.4	15.4	15.4
Other O & M	703.2	628.6	629.2	629.2
Other A & G	101.6	89.9	89.9	89.9
G.O. prorations	782.9	740.1	771.3	771.3
Business license	6.7	6.7	6.7	6.7
Taxes other than inc.	243.2	240.4	243.4	243.4
Depreciation	498.5	498.5	498.5	498.5
Subtotal	4,921.0	5,682.2	5,515.2	5,515.2
Uncollectibles	3.1	6.1	5.7	6.0
Franchise tax	50.4	62.6	58.4	62.0
State income tax	35.7	108.0	75.5	117.7
Federal income tax	217.6	458.4	350.2	490.7
Total oper. expenses	5,227.8	6,317.3	6,005.0	6,191.6
Net oper. revenues	1,309.6	1,774.6	1,535.7	1,806.8
Rate Base	16,109.0	15,986.6	16,053.6	16,053.6
Rate of Return	8.13%	11.10%	9.57%	11.26%

Table 2-2
California Water Service Company
Bear Gulch District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$6,968.4	$8,133.8	$7,967.5	$8,476.4
Operating expenses				
Purchased water	1,471.9	2215.6	2,143.4	2,143.4
Purchased power	372.5	417.1	414.9	414.9
Pump tax	0.0	0.0	0.0	0.0
Payroll	925.7	884.4	930.9	930.9
Purchased chemicals	16.8	15.4	15.4	15.4
Other O & M	758.7	669.4	675.4	675.4
Other A & G	103.1	91.3	91.3	91.3
G.O. prorations	836.5	776.8	822.5	822.5
Business license	7.1	7.1	7.1	7.1
Taxes other than inc.	254.9	251.6	255.3	255.3
Depreciation	528.9	528.3	528.3	528.3
Subtotal	5,276.1	5857.0	5,884.4	5,884.4
Uncollectibles	3.3	6.1	6.0	6.4
Franchise tax	52.7	63.0	61.7	65.7
State income tax	35.2	88.4	74.1	121.0
Federal income tax	226.8	403.8	356.2	512.4
Total oper. expenses	5,594.1	6,418.3	6,382.5	6,589.9
Net oper. revenues	1,374.3	1,715.5	1,585.0	1,886.5
Rate Base	16,929.8	16,780.7	16,851.4	16,851.4
Rate of Return	8.12%	10.22%	9.41%	11.20%

Table 3-1
California Water Service Company
Oroville District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$1,667.9	$1,667.9	$1,667.9	$1,720.5
Operating expenses				
Purchased water	54.0	54.0	54.0	54.0
Purchased power	103.7	103.8	106.4	106.4
Groundwater charges	0.0	0.0	0.0	0.0
Payroll	357.2	315.0	357.8	357.8
Purchased chemicals	39.6	39.6	39.6	39.6
Other O & M	173.7	128.2	168.0	168.0
Other A & G	30.3	28.4	34.5	34.5
G.O. prorations	208.4	196.9	205.2	205.2
Business license	0.1	0.1	0.1	0.1
Taxes other than inc.	68.7	65.0	68.7	68.7
Depreciation	122.4	122.4	122.4	122.4
Subtotal	1,158.1	1,053.4	1,156.7	1,156.7
Uncollectibles	9.3	9.0	9.0	9.2
Franchise tax	0.1	0.0	0.0	0.0
State income tax	26.0	35.7	26.4	31.3
Federal income tax	99.4	131.9	101.1	117.2
Total oper. expenses	1,292.9	1,230.0	1,293.2	1,314.5
Net oper. revenues	375.0	437.9	374.7	406.0
Rate Base	3,620.0	3,587.9	3,606.7	3,606.7
Rate of Return	10.36%	12.21%	10.39%	11.26%

Table 3-2
California Water Service Company
Oroville District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$1,673.8	$1,673.8	$1,673.7	$1,770.6
Operating expenses				
Purchased water	54.0	54.0	54.0	54.0
Purchased power	104.1	104.1	106.8	106.8
Groundwater charges	0.0	0.0	0.0	0.0
Payroll	375.1	330.2	376.4	376.4
Purchased chemicals	39.7	39.7	39.7	39.7
Other O & M	189.2	134.8	182.9	182.9
Other A & G	31.0	29.5	35.6	35.6
G.O. prorations	222.5	206.7	218.8	218.8
Business license	0.1	0.1	0.1	0.1
Taxes other than inc.	70.2	66.3	70.3	70.3
Depreciation	124.1	124.1	124.1	124.1
Subtotal	1,210.0	1,089.5	1,208.7	1,208.7
Uncollectibles	9.4	9.0	9.0	9.5
Franchise tax	0.0	0.0	0.0	0.0
State income tax	21.3	32.6	21.9	30.9
Federal income tax	85.2	122.6	87.2	117.0
Total oper. expenses	1,325.9	1,253.7	1,326.8	1,366.1
Net oper. revenues	347.9	420.1	346.9	404.5
Rate Base	3,629.1	3,593.3	3,612.6	3,612.6
Rate of Return	9.59%	11.69%	9.60%	11.20%

Table 4-1
California Water Service Company
San Carlos District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$2,753.1	$3,292.9	$3,117.0	$3,210.6
Operating expenses				
Purchased water	643.7	946.2	876.7	876.7
Purchased power	117.8	136.2	133.4	133.4
Pump tax	0.0	0.0	0.0	0.0
Payroll	310.6	308.5	311.6	311.6
Purchased chemicals	0.0	0.0	0.0	0.0
Other O & M	320.1	228.6	263.0	263.0
Other A & G	15.8	13.5	13.5	13.5
G.O. prorations	329.9	311.9	325.1	325.1
Business license	0.0	0.0	0.0	0.0
Taxes other than inc.	102.7	102.5	102.8	102.8
Depreciation	211.7	211.7	211.7	211.7
Subtotal	2,052.3	2,259.1	2,237.8	2,237.8
Uncollectibles	3.4	4.0	3.8	3.9
Franchise tax	43.3	51.8	49.0	50.5
State income tax	16.8	46.9	33.8	42.3
Federal income tax	90.9	191.0	147.4	175.9
Total oper. expenses	2,206.7	2,552.8	2,471.8	2,510.4
Net oper. revenues	546.4	740.1	645.2	700.2
Rate Base	6,246.2	6,196.3	6,219.7	6,219.7
Rate of Return	8.75%	11.94%	10.37%	11.26%

Table 4-2
California Water Service Company
San Carlos District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$2,877.3	$3,309.2	$3,267.5	$3,368.5
Operating expenses				
Purchased water	679.2	951.5	927.9	927.9
Purchased power	128.7	140.6	146.0	146.0
Pump tax	0.0	0.0	0.0	0.0
Payroll	326.2	323.3	328.3	328.3
Purchased chemicals	0.0	0.0	0.0	0.0
Other O & M	351.5	242.5	268.7	268.7
Other A & G	16.8	13.9	13.9	13.9
G.O. prorations	352.6	327.3	346.7	346.7
Business license	0.0	0.0	0.0	0.0
Taxes other than inc.	107.8	107.6	108.2	108.2
Depreciation	220.9	220.9	220.9	220.9
Subtotal	2,183.7	2,327.6	2,360.6	2,360.6
Uncollectibles	3.0	4.0	4.0	4.1
Franchise tax	45.4	52.1	51.4	53.0
State income tax	13.9	39.9	34.4	43.6
Federal income tax	84.3	171.1	152.8	183.5
Total oper. expenses	2,330.3	2,594.7	2,603.2	2,644.9
Net oper. revenues	547.0	714.5	664.3	723.6
Rate Base	6,498.0	6,438.9	6,462.7	6,462.7
Rate of Return	8.42%	11.10%	10.28%	11.20%

Table 5-1
California Water Service Company
San Mateo District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$6,239.8	$7,758.2	$7,342.7	$7,689.8
Operating expenses				
Purchased water	1,782.7	2,612.8	2,535.2	2,535.2
Purchased power	158.5	181.0	173.3	173.3
Pump tax	0.0	0.0	0.0	0.0
Payroll	666.7	651.7	660.6	660.6
Purchased chemicals	0.0	0.0	0.0	0.0
Other O & M	703.7	555.0	608.9	608.9
Other A & G	42.7	42.3	42.3	42.3
G.O. prorations	763.6	721.7	752.2	752.2
Business license	20.0	20.0	20.0	20.0
Taxes other than inc.	210.0	210.2	209.6	209.6
Depreciation	458.2	458.2	458.2	458.2
Bal. acct. adj.	68.7	0.0	0.0	0.0
Subtotal	4,874.8	5,452.9	5,460.3	5,460.3
Uncollectibles	7.6	10.5	10.0	10.4
Franchise tax	0.0	0.0	0.0	0.0
State income tax	22.9	110.2	73.4	105.6
Federal income tax	174.7	465.2	342.8	450.1
Total oper. expenses	5,080.0	6,038.8	5,886.5	6,026.4
Net oper. revenues	1,159.8	1,719.4	1,456.2	1,663.4
Rate Base	14,845.8	14,739.2	14,778.6	14,778.6
Rate of Return	7.81%	11.67%	9.85%	11.26%

Table 5-2
California Water Service Company
San Mateo District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$6,452.4	$8,050.3	$7,633.3	$8,044.7
Operating expenses				
Purchased water	1,858.4	2,616.3	2,656.8	2,656.8
Purchased power	165.6	181.2	181.9	181.9
Pump tax	0.0	0.0	0.0	0.0
Payroll	700.0	683.0	696.0	696.0
Purchased chemicals	0.0	0.0	0.0	0.0
Other O & M	769.4	566.0	622.2	622.2
Other A & G	42.7	43.7	43.7	43.7
G.O. prorations	815.8	757.5	802.0	802.0
Business license	20.0	20.0	20.0	20.0
Taxes other than inc.	219.5	218.2	219.2	219.2
Depreciation	484.0	484.0	484.0	484.0
Bal. acct. adj.	71.8	0.0	0.0	0.0
Subtotal	5,147.2	5,569.9	5,725.7	5,725.7
Uncollectibles	7.9	10.9	10.4	10.9
Franchise tax	0.0	0.0	0.0	0.0
State income tax	10.6	119.6	69.9	108.1
Federal income tax	143.4	506.2	340.8	468.0
Total oper. expenses	5,309.1	6,206.6	6,146.7	6,312.7
Net oper. revenues	1,143.3	1,843.7	1,486.5	1,732.0
Rate Base	15,567.0	15,434.4	15,471.2	15,471.2
Rate of Return	7.34%	11.95%	9.61%	11.20%

Table 6-1
California Water Service Company
Stockton District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$12,251.2	$11,039.6	$11,027.4	$11,101.3
Operating expenses				
Purchased water	3,362.1	1,787.5	1,787.5	1,787.5
Purchased power	982.1	957.6	1,061.5	1,061.5
Groundwater charges	76.4	76.5	76.5	76.5
Payroll	1,671.7	1,617.2	1,677.4	1,677.4
Purchased chemicals	12.7	12.7	12.7	12.7
Other O & M	601.5	508.7	609.9	609.9
Other A & G	114.9	103.7	103.7	103.7
G.O. prorations	1408.0	1330.9	1386.9	1,386.9
Business license	2.3	2.3	2.3	2.3
Taxes other than inc.	363.2	358.9	363.6	363.6
Depreciation	718.8	718.8	718.8	718.8
Bal. acct. adj.	-463.5	0.0	0.0	0.0
Subtotal	8,850.2	7,474.8	7,800.8	7,800.8
Uncollectibles	36.2	34.7	34.7	34.9
Franchise tax	59.7	54.0	54.0	54.3
State income tax	172.1	188.0	160.1	166.9
Federal income tax	695.1	748.1	655.2	677.8
Total oper. expenses	9,813.3	8,499.6	8,704.6	8,734.7
Net oper. revenues	2,437.9	2,540.0	2,322.8	2,366.6
Rate Base	20,901.6	21,026.7	21,026.7	21,026.7
Rate of Return	11.66%	12.08%	11.05%	11.26%

Table 6-2
California Water Service Company
Stockton District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$12,301.3	$11,075.7	$11,073.2	$11,462.4
Operating expenses				
Purchased water	3,362.1	1,787.5	1,787.5	1,787.5
Purchased power	976.2	951.8	1,055.0	1,055.0
Groundwater charges	75.9	76.0	76.0	76.0
Payroll	1,755.1	1,694.8	1,766.7	1,766.7
Purchased chemicals	12.6	12.6	12.6	12.6
Other O & M	630.3	512.7	625.4	625.4
Other A & G	124.8	108.5	108.5	108.5
G.O. prorations	1,504.3	1,397.0	1,479.0	1,479.0
Business license	2.3	2.3	2.3	2.3
Taxes other than inc.	379.5	374.8	380.4	380.4
Depreciation	757.5	757.4	757.4	757.4
Bal. acct. adj.	-465.6	0.0	0.0	0.0
Subtotal	9,115.0	7,675.4	8,050.8	8,050.8
Uncollectibles	36.3	34.7	34.8	36.0
Franchise tax	60.0	54.0	54.2	56.1
State income tax	143.3	163.9	133.8	169.7
Federal income tax	610.4	679.0	578.9	698.4
Total oper. expenses	9,965.0	8,607.0	8,852.5	9,011.0
Net oper. revenues	2,336.3	2,468.7	2,220.7	2,451.4
Rate Base	22,213.3	21,762.8	21,896.8	21,896.8
Rate of Return	10.52%	11.34%	10.14%	11.20%

Table 7-1
California Water Service Company
Visalia District
Adopted Summary of Earnings
(Dollars in Thousands)
1990

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$4,247.4	$4,294.0	$4,269.5	$4,544.1
Operating expenses				
Purchased water	0.0	0.0	0.0	0.0
Purchased power	709.6	710.4	700.9	700.9
Pump tax	0.0	0.0	0.0	0.0
Purchased chemicals	0.1	0.1	0.1	0.1
Payroll	803.8	795.0	806.6	806.6
Other O & M	430.1	391.5	454.6	454.6
Other A & G	34.9	44.2	44.2	44.2
G.O. prorations	639.3	604.3	629.8	629.8
Business license	1.0	1.0	1.0	1.0
Taxes other than inco	182.7	182.0	182.9	182.9
Depreciation	419.5	419.5	419.5	419.5
Subtotal	3,221.0	3,148.0	3,239.6	3,239.6
Uncollectibles	10.1	9.5	9.5	10.1
Franchise tax	0.0	0.0	0.0	0.0
State income tax	21.6	32.8	23.9	49.4
Federal income tax	171.7	208.8	179.2	264.1
Total operating expen	3,424.4	3,399.1	3,452.1	3,563.1
Net operating revenue	823.0	894.9	817.4	981.0
Rate Base	8,722.5	8,599.0	8,711.6	8,711.6
Rate of Return	9.44%	10.41%	9.38%	11.26%

Table 7-2
California Water Service Company
Visalia District
Adopted Summary of Earnings
(Dollars in Thousands)
1991

At Present Rates	CWS	Staff	Adopted at Present Rates	Adopted at Auth. Rates
Operating revenues	$4,362.4	$4,434.3	$4,400.1	$4,855.4
Operating expenses				
Purchased water	0.0	0.0	0.0	0.0
Purchased power	729.8	734.9	723.5	723.5
Pump tax	0.0	0.0	0.0	0.0
Purchased chemicals	0.1	0.1	0.1	0.1
Payroll	874.0	833.1	851.5	851.5
Other O & M	472.3	420.0	487.5	487.5
Other A & G	33.8	46.0	46.0	46.0
G.O. prorations	682.9	634.3	671.4	671.4
Business license	1.0	1.0	1.0	1.0
Taxes other than inco	196.0	192.8	194.2	194.2
Depreciation	451.6	451.6	451.6	451.6
Subtotal	3,441.5	3,313.8	3,426.8	3,426.8
Uncollectibles	10.4	10.4	9.8	10.8
Franchise tax	0.0	0.0	0.0	0.0
State income tax	6.5	25.1	13.9	56.1
Federal income tax	130.8	192.5	155.3	295.9
Total operating expen	3,589.2	3,541.8	3,605.7	3,789.6
Net operating revenue	773.2	892.5	794.4	1,065.8
Rate Base	9,542.8	9,232.6	9,520.2	9,520.2
Rate of Return	8.10%	9.67%	8.34%	11.20%

Rate of Return

The Commission historically has authorized a return based on CWS's company-wide projected capitalization. The financial exhibits and testimony of both CWS and DRA have followed this historical pattern. At the same time, the Commission has historically set water rates individually for each of CWS's 21 operating districts, since each district has a different cost of operations and a different utility plant investment. The table on the following page compares the CWS-requested and the DRA-recommended rate of return on total capitalization, with the adopted results.

RATE OF RETURN ON AVERAGE CAPITALIZATION

1990-1992

	Cal Water			DRA			ADOPTED		
	Capital Ratios	Effective Rate	Rate of Return	Capital Ratios	Effective Rate	Rate of Return	Capital Ratios	Effective Rate	Rate of Return
1990									
Long-term debt	46.10 %	10.46 % **	4.82 %	46.16 %	10.37 %	4.79 %	46.10	10.37	4.78 %
Preferred stock	1.60	4.19	0.07	1.63	4.19	0.07	1.60	4.19	0.07
Common equity	52.30	13.75	7.19	52.21	11.75 *	6.13	52.30	12.25	6.40
	100.00 %		12.08 %	100.00 %		10.99 %	100.00 %		11.25 %
Interest coverage									
PRE-TAX			3.35 x			3.16 x			3.27 x
AFTER-TAX			2.51 x			2.29 x			2.35 x
1991									
Long-term debt	47.00 %	10.40 % **	4.89 %	47.14 %	10.28 %	4.85 %	47.00	10.28	4.83 %
Preferred stock	1.50	4.19	0.06	1.55	4.19	0.06	1.50	4.19	0.06
Common equity	51.50	13.75	7.08	51.31	11.75 *	6.03	51.50	12.25	6.31
	100.00 %		12.03 %	100.00 %		10.94 %	100.00 %		11.20 %
Interest coverage									
PRE-TAX			3.28 x			3.10 x			3.21 x
AFTER-TAX			2.46 x			2.25 x			2.32 x
1992									
Long-term debt	47.80 %	10.35 % **	4.95 %	47.99 %	10.27 %	4.93 %	47.80	10.27	4.91 %
Preferred stock	1.50	4.19	0.06	1.47	4.19	0.06	1.50	4.19	0.06
Common equity	50.70	13.75	6.97	50.54	11.75 *	5.94	50.70	12.25	6.21
	100.00 %		11.98 %	100.00 %		10.93 %	100.00 %		11.18 %
Interest coverage									
PRE-TAX			3.23 x			3.03 x			3.15 x
AFTER-TAX			2.42 x			2.22 x			2.28 x

* Midpoint of recommended range of 11.50% to 12.00%

** Revised reflects 9.7% cost of new debt

CWS projects that its capital structure will change during the 3-year test period, with a decline in average common equity ratio from 52.30 percent in 1990 to 50.70 percent in 1992. This will be accompanied by a rise in the long-term debt ratio from 46.10 percent in 1990 to 47.80 percent in 1992. The average capital structure for the 3-year test period (rounded) is 47.0 percent long-term debt, 1.5 percent preferred stock, and 51.5 percent common equity. CWS and DRA are in substantial agreement as to the capital ratios set forth in the table. The minor difference results from CWS's use of a projected return on common equity of 12.25 percent, the most recently allowed rate, while DRA has used its recommended return of 11.75 percent for the 3-year test period.

Long-Term Debt

CWS plans to seek new debt financing through bond issues of $34 million during the period 1989-1992.

CWS's original filings estimated an interest cost of 10.50 percent based on then current interest rates. CWS has since reduced its estimate; it now projects a total cost for the 1989 debt financing of approximately 9.65 percent to 9.75 percent. CWS's financial witness testified that a private placement of $8 to $9 million of long-term bonds could be made at an interest cost of 9.4 percent to 9.5 percent, plus the cost of issuance. He estimated that issuance costs for an issue of this size would add approximately 25 basis points to effective interests charges.

DRA has used the October 1989 DRA bond yield forecast to estimate cost of new financing for CWS at 9.08 percent in 1989, 8.90 percent in 1990, 9.76 percent in 1991, and 10.43 percent in 1992. The DRA witness used this bond yield forecast, a forecast of yield to the bond purchaser, with no adjustment for cost of issuance by the seller. The DRA witness responded to CWS's evidence on cost of issuance with an estimate of such costs based on a 25-year average of issuance cost of all of CWS's outstanding First Mortgage Bonds.

CWS responded that a 25-year average does not yield an accurate forecast of new market conditions. It contends that the cost of issuance of new debt has increased significantly in the past 25 years primarily due to inflationary increases in printing costs and legal fees. Also, due to the shortening of maturities from 30 years to 20 to 25 years, annual amortization of issuance costs is higher. CWS's witness testified that the issuance cost of CWS's Series BB, $18 million, 20-year issue sold in September 1988 added 15 basis points to the coupon rate of 9.48 percent for a total effective cost of 9.63 percent. This was a much larger issue than the issues proposed during the test period and, accordingly, resulted in a lower effective issuance cost than CWS can expect for its next debt issue.

Using CWS's issuance cost estimate of 25 basis points would increase the DRA-estimated cost of new financing to 9.33 percent in 1989, 9.15 percent in 1990, 10.01 percent in 1991, and 10.68 percent in 1992. However, the DRA witness recommended that the Commission should not include issuance costs on securities not yet sold. This would mean that applicant could seek rate relief for the added costs in the annual adjustments to each district's rates. The ALJ relied on Branch representations that this is the traditional practice, and recommended that we adopt the witness' recommendation.

In its comments, CWS presents a convincing demonstration that Branch's representations are untrue. We will nevertheless adopt the ALJ's recommendations for this proceeding only. Branch and DRA should be prepared to cite authority where stating that a procedure is or is not traditional.

<u>Return on Common Equity</u>

CWS has requested a return on common equity of 13.75 percent in these proceedings. Assertedly, this level will provide common stock investors with a fair and reasonable return on a long-term investment in view of the the risks faced by the utility.

Such a return would provide pre-tax interest coverage for bondholders ranging from 3.34x in 1990 down to 3.19x in 1992; CWS asserts that this should protect its present favorable AA Bond rating.

DRA has recommended a return on common equity in the range of 11.50 percent to 12.00 percent; the witness recommends that the rate should not exceed 11.75 percent.

The DRA witness based his recommendation on a Risk Premium (RP) analysis and on a Discounted Cash Flow (DCF) analysis. These are the normal methodologies used by this Commission in numerous decisions on ROE.

Both analyses relied on comparisons between CWS and 13 other sizeable water companies; 4 of these are California companies regulated by this Commission. The following table lists those companies and compares some relevant characteristics.

CALIFORNIA WATER SERVICE COMPANY

Selected Financial Indicators -
Comparable Group of Water Public Utility Companies

Company	S&P Bond Rating	PERCENT RETURNS ON BOOK VALUE: Common Equity	PERCENT RETURNS ON BOOK VALUE: Total Capital	1/ Operating Revenue $Millions	Percent Water Revenue	Common Equity Ratio	2/ Dividend Payout Ratio	2/ Dividend Yield	2/ Market To Book Ratio
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
American Water Works	A-	12.2%	10.3%	$517.6	97%	35%	40%	4.0%	121%
Connecticut Water	N/A	12.1	9.9	28.7	100	33	95	7.4	141
Consumers Water	N/A	12.3	10.8	88.8	74	36	68	6.1	144
3/ Dominguez Wtr. Corp.	N/A	14.5	12.1	19.2	100	60	65	6.3	144
E'Town Corporation	A+	10.5	9.6	69.6	100	33	115	7.8	130
The Hydraulic Co.	A+	11.2	9.9	67.1	84	51	82	5.8	149
IWC Resources Corp.	AA	16.1	10.1	52.5	100	33	90	7.8	185
Middlesex Water Co.	N/A	12.6	9.6	24.0	100	38	84	7.2	138
Philadelphia Water	BBB	10.6	9.6	129.1	71	35	80	6.7	125
3/ SJW Corporation	N/A	8.7	8.6	58.8	100	60	90	6.6	109
3/ So. Calif. Water	N/A	9.1	9.3	20.8	88	45	112	7.9	123
3/ Southwest Water Co.	N/A	8.7	8.8	36.2	70	61	93	5.8	127
United Water Res.	A	11.2	8.5	125.6	98	35	99	5.2	194
3/ Calif. Water Service	AA+	12.8	11.6	113.5	100	53	73	6.2	148
HIGH	-	16.1%	12.1%	$517.6	100	61	112	7.9	194
LOW	-	8.7	8.5	19.2	70	33	40	4.0	109
MEAN - California	-	11.0	9.8	61.7	91	56	88	6.6	131
MEAN - Regional	-	12.2	10.3	122.6	92	37	84	6.4	147
MEAN - Group	-	11.6	9.9	100.8	92	43	87	6.5	141

1/ Income Statement Figures are for the Latest 12 Months as Available
2/ Based on Per Share Value
3/ California Companies
SOURCE: C.A. Turner Utility Report, September 1989

The DRA witness also considered historical, sustainable, and forecasted dividend growth rates in arriving at his recommendation.

CWS presented no results of financial models to support their position for 13.75 percent ROE. Instead, CWS relied upon observations of the industry and criticism of the DRA assumptions and inputs.

The principal thrust of CWS's financial testimony is that the Commission errs when it refuses to compare other types of utilities to water companies. We will not consider this concept further. It has uniformly been rejected whenever it has been raised. CWS also has numerous criticisms of the DRA analysis. It notes that the DRA recommendation is only 132 basis points above the expected cost of new debt. It points out that this is far below the RP over debt in which the Commission has traditionally allowed CWS in past decisions. For example, the 1988 CWS rate proceeding (Decision (D.) 89-04-005) allowed a differential of 175 basis points.

It claims it would be very unfair for investors to permit sharp downturns in ROE merely to match market conditions occurring after the stock has been purchased. It points out that during the period 1985 to 1989 its ROE dropped 225 basis points; during the same period its cost of debt declined only 41 basis points.

It claims that the DRA witness's DCF analysis should not have excluded CWS from the list of comparison utilities.

It also notes that DRA has changed its method of calculating growth rates to the utilities' disadvantage. The DRA witness called the change an improvement. CWS responds that a calculation of an average historical growth rate should be a simple mathematical process, one which needs no improving.

In one of the DRA tables developing the DCF analysis, its witness calculated expected return on equity for other comparable water utilities; this table added an average of historical and sustainable growth rates. CWS contends that he should have performed the same test to derive a comparable figure for CWS. It notes that some other utilities were found to have an expected yield of over 14 percent. CWS used the same technique to derive its own expected yield--13.67 percent.

CWS also contends that there are two tiers of water companies with respect to expected return. It places itself in the first tier where expected returns range from over 14 percent down to a mere 12 percent. Given such a pattern, CWS urges that it was unfair for the DRA witness to rely on a simple mathematical average to derive his recommendation for CWS. It also argues that there must be a flaw in the witness' derivation of the expected growth rate. It claims the witness did not explain the derivation of his 5 percent rate for CWS, and points to another of his exhibits which uses 6.81 percent.

The DRA witness used a standard financial publication as a source for ROE's recently allowed out-of-state utilities. CWS challenged the publication's reliability.

CWS argues that DRA's 11.75 percent is only 132 basis points over DRA's estimated cost of issuing new debt in the third year, an estimate which omits the cost of issuance. It asserts that this 132 basis point RP is far below the RPs over debt cost in which the Commission has allowed CWS over the past ten years. D.89-04-005 in CWS's 1988 series of rate cases allowed a 12.25 percent return, with a cost of new debt of 9.60 percent for 1988 and 10.5 percent for 1989, 1990, and 1991. This ROE represented a RP of 175 basis points in excess of the then current cost of new debt. This was still far below the premiums allowed from 1979 to 1987 which ranged from 2.40 percent to 4.92 percent.

CWS challenges the DRA witness' objectivity. It asserts:

> "No longer does the staff recommendation carry with it, as it did for so many years in the past, an assumption that it is a reasonable recommendation to the Commission of an appropriate level of return based on facts.

What the DRA offers is an extreme position which the Administrative Law Judge and the Commission may consider along with all other evidence. D.89-11-068, the Annual Cost of Capital Proceeding for Energy Utilities for 1990, shows that the Commission does not always adopt the DRA recommendations as the allowed ROEs. The DRA recommendations for ROE for Southern California Gas, PG&E, Southern Cal Edison, San Diego Gas & Electric, Southwest Gas and Sierra Pacific Power ranged from 12.15 percent to 12.30 percent for an average of 12.225 percent. The utilities had requested ROE's ranging from 13.25 percent to 14.00 percent for an average of 13.625 percent. The decision adopts ROEs for the year 1990 ranging from 12.85 percent to 13.05 percent for an average of 12.95 percent, 75 basis points above the DRA average recommendation. It is reasonable for water utilities to expect similar objectivity from the Commission."

Such criticisms of DRA do no credit to the position. DRA is charged with representing the best long-run interest of all utility ratepayers. DRA is not charged with establishing extreme positions before the Commission. DRA personnel are professionals who are expected to carry out their assignments with objectivity. If CWS believes that this is not being done, then such a showing should be made. If this is merely an honest disagreement between parties in litigation, then it should be treated as such.

DRA's witness testified that DRA, the Commission, and bond rating agencies all take the position that water utilities are less risky than other utilities.[1]

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1 CWS asks us to take official notice that the Commission's Chief ALJ stated in a panel discussion on November 17, 1989, held at the annual meeting of the California Water Association, that water utilities should stop comparing their level of risk with that of the energy utilities.

CWS counters that it faces a significant risk which arose in the last two years--that of loss of revenue due to compulsory rationing. It asserts that this risk has fallen entirely on the common equity holder since ample pre-tax interest coverage insured the payment of bond interest.

CWS's evidence illustrates what it characterizes as a "dramatic" drop in rate of return in the CWS's four San Mateo County districts under a mandatory 25 percent cutback in water sales. In the Bear Gulch district the return dropped from 12.22 percent for the 12 months ended July 1988 to 6.14 percent for the 12 months ended April 1989; rationing began in July of 1988 and ended in May of 1989. Despite this drop in district revenues and in contrast to its action during the 1977 drought, the Commission took no action on CWS's request for emergency rate relief. In May of 1989, CWS's Los Altos district was placed under a 25 percent mandatory rationing program. Rationing, however, had not been anticipated when a rate increase was authorized for that district in April 1989. Although a memorandum account for lost revenue has been authorized by the Commission, the possibility of any recovery is pending in the Commission's OII, I.89-03-005, ("Investigation into Means to Mitigate Effects of Drought on Water Utilities").

In such proceedings, Branch has opposed recovery of drought-induced revenue deficiencies incurred prior to May 1989, claiming that drought is one of the normal risks of being in the water utility business. In this proceeding, the DRA witness discounts the losses in earnings from the mandatory rationing program on the San Francisco Peninsula by showing that the revenue loss from the four districts, "was almost entirely offset by higher consumption in the districts not severely affected by the local water problem and by the addition of 7,000 new customers."

CWS argues that a comparison of the imbedded cost of debt for energy and water utilities suggests that bond investors may not share the DRA, Commission, and bond rating agency belief that water utilities have lower risk; the imbedded cost of debt for the energy utilities is 9.32 percent, for the water utilities (exclusive of CWS) 9.87 percent, and for CWS 10.54 percent. It argues, that "this comparison hardly supports the conclusion that CWS is less risky, even though CWS's bond rating is the highest of the companies compared."

To support his claim that water companies are less risky than other utilities, DRA's witness cited the balancing accounts allowed water utilities to recover increases in purchased power, purchased water, property taxes, and postage. CWS responds that the revenue stabilizing effect of such devices do not compare with the advantages enjoyed by energy utilities which benefit from both fuel cost and other balancing accounts.

DRA's witness cites D.86-05-064 which authorizes water utilities to collect up to 50 percent of their fixed costs through service charges as a method of reducing risk. CWS responds that this policy has not yet been in effect long enough so that it can be fully implemented in all of its districts. It also points out that the decision still leaves 50 percent of fixed costs (and all return on investment) to be recovered through water sales .

CWS points to another risk not considered by the DRA witness, that of government regulations of water quality. The requirements of the Safe Drinking Water Act are becoming more and more stringent and expensive to comply with. It also points out that water is the one public utility commodity ingested by the customer. CWS contends that potential liabilities from water contamination are tremendous. While CWS has not yet experienced any serious problems, a number of wells have required special treatment or have been shut down.

CWS also cites this Commission's recent decision in <u>San Jose Water Company</u>, D.89-10-038. There the Commission allowed San Jose a return on equity of 12.25 percent on an imputed capital structure of 53 percent common equity and 47 percent long-term debt. Since CWS projects an actual common equity ratio averaging 51.5 percent for the period 1990-1992, declining to 50.70 percent in 1992, it claims that the allowed return on equity for CWS should be higher than the 12.25 percent allowed to San Jose Water.

Citing D.89-11-068, applicable to the energy utilities, CWS asserts that a reasonable compromise would be the allowance by the Commission of an ROE of 12.50 percent, 75 basis points over the DRA recommendation of 11.75 percent.

Analysis

We have specifically rejected CWS's argument that water utilities can be compared to energy utilities.

We have also rejected CWS's presentation on the effect of the Commission's decision on drought. This is an issue before the Commission in another proceeding. We will carefully consider all factors related to the drought, and the risks faced by water utilities when a decision is reached in that proceeding. Observing that Staff has taken a particular position in that case is no more binding upon us than the position taken by the water utilities. Accordingly, no weight is given to this argument.

We are also reluctant to adopt the DRA modeling approach. Sufficient concern has been raised about uncertainties surrounding the water industry that we can not accept the models in this instance.

Rather than adopt the DRA modeling approach that indicates a reduced ROE, or CWS's assertions about increasing risk, we will adopt the same ROE adopted for CWS in its last rate case. In D.89-04-005 we adopted a ROE of 12.25 percent. We see little reason to change this figure. There are indications that risk to water utilities is increasing, and we have lowered the equity ratio in CWS's capital structure. On the other hand, interest rates have been trending downward. Maintaining the current authorized return best balances the divergent indicators of financial risk presented to the Commission in this proceeding.

Revenues

CWS and Branch differ only in the estimates of consumption for the commercial class. Three independent issues are responsible: (1) weather-normalized consumption for the three Peninsula districts, (2) residual conservation for the three Peninsula districts, and (3) weather-normalized consumption for Visalia.

Weather-Normalized Consumption
for the Three Peninsula Districts

Both the utility and Staff relied on the Committee Method to estimate weather-normalized consumption. The Committee Method is described in the supplement to Staff's Standard Practice U-25. It employs multiple regression which is a standard statistical technique. The particular application is known as the Modified Bean Method. It is used to predict normalized consumption; i.e., estimated consumption in future years unaffected by variations in temperature or rainfall.

The regression equation can be plotted as a straight line on a graph of consumption versus time. The weather-normalized data points (each data point is the normalized consumption for a different year) may or may not fall on the line of the regression equation. If all of the normalized data points fall on the straight line, the Coefficient of Determination, or R-squared, is equal to one. The closer R-squared is to the value of one, the better the normalized data fits the equation. There is no dispute that "the closer that number is to 1.0 the more reliable the regression analysis run is for predictive purposes."

CWS's Bean analyses followed the procedure set forth in Standard Practice U-25 which specifically requires the use of the last recorded year of data. There is no dispute that the year 1988 is the last full year for which recorded data is available. Accordingly, CWS's Bean analysis examined Bean runs ending with 1988, the last complete recorded year. From among these runs, CWS's witness selected as most reasonable, the Bean runs which yielded 300.7 Ccf per customer for Bear Gulch, 173.0 Ccf per customer for San Carlos, and 204.0 Ccf per customer for San Mateo.

Branch excluded 1988 consumption data from its regression analyses. It did so because mandatory rationing in 1988 reversed the normal relationship between dry weather and high consumption. Its witness instead derived an artificial consumption figure, and used this figure in developing the extrapolated value for both test years. The R-squared for Staff's runs are closer to 1.0 than those of the company.

CWS in brief concedes that the Bean analysis required by the standard practice "may be less than optimal when mandatory rationing occurs." It has therefore proposed a fall-back solution to the consumption problem. We have explained our reasons for adopting this fall-back estimate in the next topics.

<u>Residual Conservation</u>

The second issue affecting sales estimates in these three districts relates to residual conservation. Branch asserts there will be none. CWS, pointing to a long period of recovery after the 1977 drought, predicts that the drought and mandatory rationing will continue to depress sales in the test period.

Mandatory rationing commenced on July 1, 1988 and was terminated May 10, 1989. Thus May 1989 was the transition month between the implementation and lifting of mandatory rationing.

CWS contends that Branch's position "repudiates" a recent decision (D.89-04-060 in A.88-04-070 and 075) involving CWS's South San Francisco district. In that decision, the Commission found that residual conservation would last for two years and that residual conservation would be proportionally in the same amount as estimated by CWS in these proceedings. CWS's South San Francisco district was under the same mandatory rationing program as the other three peninsula districts in these proceedings. CWS argues that there is no basis for distinguishing it from the three districts at issue in this proceeding. It asserts that Branch is merely rehashing the same argument it lost once before.

Under Branch's analysis, the significant reduction in consumption occurred in the 12-month period ending April 30, 1989. It used this period instead of CWS's 13-month period ending May 31, 1989. During Branch's period the reduction was 1218.8 KCcf, or an average of 101.5 KCcf per month. During the 9-month period from April 30, 1988 to January 31, 1989, the consumption drop was 860.3 KCcf, or 95.5 KCcf per month; for the 3-month period ending April 30, 1989, the drop was only 358.7 KCcf, or 119.9 KCcf. Branch believes that these data show that reductions in water consumption occurred throughout the year and were not concentrated in the summer of 1988 as suggested by CWS. Branch reasons that consumption will continue to increase throughout the year following the lifting of mandatory rationing.

Next, Branch notes that while the recovery of 212.1 KCcf from May 30, 1989 to September 30, 1989 averaged 53.0 KCcf per month, the recovery rate increased from 44.0 KCcf per month in June to 69.7 KCcf in September. These data, in Branch's view, also support a prediction of increased recovery.

Branch also points out that consumption for the 12-month period ending September 30, 1989 was 4,903.0 KCcf, only 4.8 KCcf less than the utility originally estimated for the 12-month period ending December, 1990. Moreover, with eight months remaining before there is one full year of consumption data without mandatory rationing, Branch asserts it takes little imagination to project full recovery for test year 1990.

CWS's witness responded that the sales recovery between May 1989 and September 1989 was only a small fraction of the decline in sales between April 1988 when rationing started and May 1989 when it ended. The fact that for the 4 summer months in 1989, lost sales recovered only by 17.2 percent in San Mateo, 13.8 percent in San Carlos, and 21.3 percent in Bear Gulch, led him to conclude that there would be substantial residual conservation in these districts in the 1990 and 1991 test years. This conclusion was based in part on the fact that recovery to date had occurred during the four summer months when usage was at its peak and the opportunity to recover sales was at a maximum. It was also based on CWS's experience in 1977.

Full recovery, according to Branch, should not mean a return to the 5,927.0 KCcf for the period ending April 30, 1988, the benchmark CWS's witness used for his predictions assertion of 17.2 percent recovery at September 39, 1989. That consumption, 5,927.0 KCcf, is higher than either Branch's or the utility's estimates of weather-normalized consumption for test years 1990 and 1991; assertedly, it reflects the dry period immediately preceeding mandatory rationing.

Branch's witness stated that rationing did not produce as severe a drop in consumption as was anticipated.

CWS argues that mandatory rationing achieved the intended sales reductions.

Branch's witness argued that since she adopted the same consumption per customer for each test year, any residual conservation will be evened out by actual increases in consumption which will occur but are not included in her estimates.

Finally, Branch witness also objected to CWS's lowering of its conservation percentages for the test years to reflect the termination of rationing earlier than anticipated at the time CWS filed its rate cases without notifying her. CWS responds that the end of rationing was certainly not unknown to Branch and CWS's downward adjustment of its conservation numbers should have been anticipated.

As explained below, we have adopted a package which combines Branch's Bean results, with a limited amount of residual conservation.

Proposed Compromise

As noted in the discussion of the dispute over modified Bean method procedures, CWS's brief presented a fall-back position less extreme than that defended in hearings.

With respect to estimates of normalized commercial consumption per customer, CWS acknowledges that the predictive tools negotiated and agreed to by Branch, the California water industry, and the Commission over the years may be "less than optimal" when mandatory rationing occurs. Therefore, CWS proposes that Branch's Bean run estimates based on consumption data through 1987, but excluding any extrapolation into 1988, be adopted. The resulting sales per commercial customer would be 307.3 Ccf for Bear Gulch, 178.3 Ccf for San Carlos, and 216.8 Ccf for San Mateo. Since Branch and CWS are in agreement on estimates of commercial customers and normalized sales to other classes of customers, total normalized sales in each district for the two test years would be as follows, based on this compromise:

Sales--KCcf District

	1990	1991
Bear Gulch	5,334.5	5,361.2
San Carlos	1,941.3	1,952.6
San Mateo	5,647.1	5,654.8

With respect to residual conservation, CWS now proposes to calculate the conservation percentage attained by dividing the lowest level of sales attained (on a 12-month basis) for each district during the period of rationing--which is shown in Exhibit 68 as the 12 months ending May 1989--by the normalized sales adopted above. The resulting conservation percentage under this proposed compromise is shown below:

District	Percentage
Bear Gulch	22.4%
San Carlos	20.5%
San Mateo	16.9%

The above percentages would then be reduced by half over each of the next two-year periods (no residual conservation is assumed after three years) as found by the Commission in its recent decision regarding CWS's South San Francisco district and adjusted downward to reflect the fact that mandatory rationing ended about midyear, rather than at the end of 1989, as originally anticipated. The resulting residual conservation percentages for the three districts are shown below:

District	1990	1991
Bear Gulch	9.0%	3.0%
San Carlos	8.0%	2.7%
San Mateo	6.7%	2.2%

Reducing the adopted normalized sales for each test year by the residual conservation percentages developed above gives the total sales levels that CWS's compromise would produce for each district. The resulting sales estimates in KCcf are set forth below for each test year along with Branch's estimates.

	Bear Gulch	San Carlos	San Mateo
1990			
CWS	4,670.6	1,726.6	5,014.4
Branch	5,437.9	1,964.4	5,704.2
CWS Compromise	4,886.4	1,791.8	5,291.3
1991			
CWS	5,064.1	1,833.7	5,235.0
Branch	5,465.1	1,975.9	5,711.9
CWS Compromise	5,211.1	1,901.8	5,536.0

We have decided to accept this fall-back position. It is superior to the residual conservation positions advocated by the parties during hearing. Unlike Branch's position, it does not simply overlook the rejection of Branch's recommendation in the South San Francisco district decision. Rather, it adjusts the results of that decision to accommodate recent developments.

Furthermore, it is a more conservative position than Branch's no-conservation prediction.

It also acknowledges the weakness of CWS's position on the modified Bean dispute; CWS severely overstated the authoritative effect of the standard practice. This is not a decision or a general order which has the weight of the Commission's authority behind it. The fall-back position comes closer to recognizing that standard practices are simply internal guidelines for Staff witnesses.

We have concluded that this standard practice does not provide a reliable solution when past consumption is affected by a combination of drought and rationing. This combination reverses the assumption which underlies the Standard Practice; i.e., that dry weather correlates with higher-than-normal consumption. Since CWS's application of the Bean method did not adjust for this reversal, we would have discounted its showing even if there had been no compromise proposal. Thus, even if CWS had not offered this fall-back position, we would have adopted something very similar as reasonable.

The ALJ recommended that we modify the fall-back position in one respect. He believed that CWS had based its calculation on consumption figures which included some months in 1988 during which consumption was affected by drought. He reasoned that this could skew the results, and accordingly used Branch's artificial 1988 consumption derived by extrapolation from earlier years not impacted by drought or rationing. CWS's comment asserts that 1988 data were not used in the calculation; nothing in the record would suggest otherwise. We will therefore reject the modification proposed by the ALJ and adopt the fall-back package without modification.

Visalia Revenue

Branch projected sales of 613.2 Ccf per commercial customer. CWS projected sales of 606.9 per commercial customer.

The major portion of the difference is apparently caused by the use of different tests for deciding which of the Bean runs has produced the most reliable results. Branch's witness emphasized a high R-squared value in developing her projection. CWS's witness, claiming support from U-25, emphasized the Inverse McSnee Ratio. (This ratio evaluates the percentage of span mean consumption to verify the least standard error of the equation.)

In addition CWS's witness decided to rely on Bean runs which excluded rainfall as a factor. He asserted that Bean runs that included rainfall produced an anomalous result, correlating higher precipitation with higher consumption.

Branch's projections are easy to defend from a theoretical point of view. It must be rare for a Bean run to produce an R-squared as high as 0.927 (1.00 would indicate a perfect correlation). On the other hand, Branch's figure is higher than any recorded consumption for the past 12 years. CWS's witness also pointed out that 1986-98 average consumption was 606.8 Ccf. He also noted that this was the highest average consumption ever recorded.

The average consumption figures indicate that some unnoticed factor must be affecting Branch's estimate. We have therefore adopted CWS's estimate.

Branch's comments argue that there is a "plausible explanation" for the contrast between its estimate and recorded data. It believes that the explanation is the large number of new homes. Under Rule 77.3, we cannot consider this explanation because it is not tested by cross-examination.

<u>Rate Base</u>

<u>Materials and Supplies</u>

CWS and Branch have authored different estimates of Materials and Supplies (M&S). In general, CWS used a 13-year linear regression and Branch used a 10-year linear regression. For the Stockton district, CWS used a 7-year average because the 13-year trend produced an unreasonably high estimate. Branch adopted CWS's estimates for the Bear Gulch and Stockton districts.

In the Bear Gulch district, Branch adopted the CWS estimate because its own methodology produced a higher figure.

In discussing the differences between the two estimates, CWS's witness testified that he was not supporting any particular time span for use in making M&S estimates. He was, however, critical of Branch's selection of either its 10-year trend or CWS's estimate depending upon which method produced the lower number. Branch's witness asserted that he was following Branch policy in order to protect the ratepayers' interest. Branch believes that its duty to protect the ratepayers by keeping rates as reasonable as possible requires acceptance of the utility's estimate in the Bear Gulch district.

CWS argues that the utility must always make estimates first. Hence, it believes that applicant will always be saddled with the estimate resulting in the lowest revenue requirement, under the asserted Branch policy. It argues, "[t]his...[policy] places CWS in an impossible no-win situation."

Branch's project manager described this as a frivolous issue, because the effects on revenues of the M&S controversy could be no more than $3,000 or $4,000. CWS nevertheless insists that the issue cannot be settled. It states "the dollars involved here are small but the difference results from Branch methodology and in another situation the dollars involved could be large."

Branch counsel explained in another context that Branch was reluctant to enter into stipulations because "it might be too easy for there to be further misunderstandings about details of agreements." We believe however, that the time parties spend on settlements normally furthers the objectives of the RLP; time spent on presenting evidence, briefing, and deciding settleable issues, on the other hand, wastes a scarce and valuable resource.

Branch argues that "its ten-year period basis [is] sufficient to demonstrate any long[-]term behavior in stocking M&S. The ten-year period is also advantageous in that it is short enough to adequately weigh more recent years, reflecting newer changes in operations."

CWS seems to concede that Branch's analysis is not unsound, as long as it is consistently applied. We agree. We will, therefore, adopt Branch's calculated figures for all districts, including Bear Gulch.

Financing of Bakersfield's and Visalia's Wells

CWS's construction budgets for the Bakersfield district for years 1989, 1990, and 1991, project expenditures of $214,000, $225,000, and $235,000, respectively, for new well facilities. For the Visalia district, CWS's has budgeted in 1990 and 1991, expenditures of $205,000 and $215,000, respectively, for new well facilities. Branch does not disagree with the need for these new wells, nor does it challenge CWS's commitment to a standard well design with a capacity to serve 400-500 customers.

Branch has, nevertheless, excluded from plant additions, all three wells in Bakersfield, and both wells in Visalia from rate base. Branch contends that these wells should be financed by advances for construction from developers, rather than by CWS. Branch relies on Sections C.1.b and C.2.c of CWS's Rule 15, its Main Extension Rule.

Section C.1.b of Rule 15 (p. 2, Exh. 40) reads in part as follows:

> "If special facilities consisting of items not covered by Section C.1.a are required for the service requested and, when such facilities to be installed will supply both the main extension and other parts of the utility system, at least 50 percent of the design capacity (in gallons, g.p.m., or other appropriate units) is required to serve the

main extension, the cost of such special facilities may be included in the advance."

Section C.2.c of Rule 15 reads in part as follows:

"Whenever cost of special facilities have been advanced pursuant to Section C.1.b, or C.1.c, the amount so advanced shall be divided by the number of lots (or living units, whichever is greater) which the special facilities are designed to serve, to obtain an average advance per lot (or living unit) for special facilities. When another builder applies for a main extension to serve any lots for which the special facilities are to be used, the new applicant shall, in addition to the costs of his proposed main extension, also advance an amount for special facilities. This amount shall be the average advance per lot for special facilities for each lot to be used less 2-1/2 percent of the average advance for each year in which refunds have been due...."

Branch argues:

"The concept that an advance should not be required of a developer who will use less than 50 percent of a new facility is not well[-] founded. Surely, no one would argue that an advance should not be required of an applicant for a one[-]mile main extension for one service connection simply because the one service could not utilize 50 percent of the capacity of the main that the utility would install to conform with its system design criteria. The applicant would be expected to advance the cost of the main (less the standard free footage allowance) and assume the risk that no new services would ever be added along the main extension. A well installation is no different."

Branch also argues that the excess capacity from the planned wells is needed to serve other, later-developed, new subdivisions, not the system as a whole. It has not, however, attempted a well-by-well analysis to determine which excess capacity is needed to serve other subdivisions.

It appears to believe that CWS can successfully demand cost-sharing advances under C.2.c, which would support the entire cost of the planned wells.

Branch concedes:

> "CWS's standard well design calls for a capacity of approximately 1000 gpm, or enough to meet the peak demand of between 400 and 500 customers. Most of the new subdivisions planned in the Bakersfield and Visalia Districts serve between 70 and 200 customers."

Nevertheless, it argues:

> "Staff believes CWS's current policy inappropriately seeks to obligate existing ratepayers to subsidize new developments and protect developers from some of the risks inherent in the financial enterprise of new development. After all, new development and its developers are not utilities. No such protection of them is warranted. Staff further believes that the discretion implied by Rule 15.C.1.b applies only in cases where the 'special facilities' serve both the new subdivision and existing customers....
>
> "Branch's interpretation...of Section C.1.b is that if over 50 percent of a well's capacity is going to new development in general, as opposed to a particular new development, then an advance is required by Section C.1.b.
>
> "Staff believes CWS's current policy inappropriately seeks to obligate existing ratepayers to subsidize new developments and protect developers from some of the risks inherent in the financial enterprise of new development. After all, new development and its developers are not utilities. No such protection of them is warranted."

<u>Analysis</u>

The function of Section C.1.b is to determine when CWS can demand an advance from a subdivider. If the rule does not permit it to demand an advance, and if the subdivision is within its dedicated service territory, the subdivider has a right to have service extended without advancing costs. Under the quoted rule, the utility can demand an advance for "special facilities" only if the 50 percent test is met.

Branch apparently believes that CWS can demand "shared advances" from subdividers under C.2, even though the subdivider has a right to free well construction under C.1. Branch's interpretation overlooks the clause "Whenever cost of special facilities have been advanced pursuant to Section C.1.b....." The utility cannot implement C.2 against a second developer unless it has actually received an advance under C.1. The wording of the rule gives no basis for Staff's theory that C.2 enlarges the scope of C.1.

The basic rule is that tariffs are to be strictly construed against the maker. Whether we regard the Commission itself or the utility as the maker of this tariff item, we should interpret this rule as it would be interpreted in court--in favor of the subdivider. Branch's interpretation is too fanciful.

The next point made by CWS seems dispositive. The tariff rule uses the word "may." Therefore, even when the 50 percent test is met, CWS has discretion to decide whether to demand an advance for special facilities. Adopting Branch's adjustment would penalize CWS for exercising a right expressly provided in its tariff.

We find:

Branch's exclusion of three wells in Bakersfield and both wells in Visalia from rate base is based on a mistaken tariff interpretation.

We conclude:

1. CWS under its tariff has discretion not to demand advances for construction from developers for these wells.

2. CWS could demand a shared advance under C.2, if an advance has already been received for a particular well.

3. Under C.1, CWS cannot demand an advance from a subdivider, unless over 50 percent of well capacity is required by the residents of the planned development.

Branch is concerned about the policy implications of adopting CWS's interpretation. It can best implement this concern by seeking a rulemaking proceeding to revise the rule. The relative ease of amending tariffs is one reason courts traditionally interpret them strictly.

Working Cash Allowance; Minimum Bank Balances; Bank Service Charges

The Commission has long recognized that utilities are required to permanently invest funds, referred to as working capital, in order to transact daily business. Commission Standard Practice U-16, dated September 13, 1968, discusses the basis for providing utilities with an allowance for its working capital as follows:

> "The reason for allowing cash working capital in the rate base is to compensate investors for funds provided by them which are permanently committed to the business for the purpose of paying operating expenses in advance of receipt of offsetting revenues from its customers and in order to maintain minimum bank balances. (U-16, pp. 1-2.)
>
> "The utility's working cash requirement is predicated upon having sufficient cash balances to meet ordinary requirements of minimum bank balances, to enable the company to make timely payments for purchase of goods, services and materials, and for ordinary working funds." (U-16, pp. 1-2.)

There are two disputes over working cash, caused by: (1) Branch's disallowance of the minimum bank balance associated with CWS's cash account with the Bank of America (B of A) and (2) Branch's reduction of the payroll special deposits accounts from $20,000 to $10,000. (The remaining differences will be resolved by adopting either Branch's or CWS's estimates for expenses and revenues.)

Branch and CWS agree on the methodology, but not the level of ratemaking expenses, to be employed. Branch recommends CWS be allowed to earn a return on a minimum bank balance of $100,000, some $573,000 below CWS's request.

Branch contends:

1. CWS is already compensated for the B of A cash account by an allowance for the average lag in the payment of expenses.

2. The bank service charges related to this account are included in CWS's General Office Expenses.

Branch argues that its disallowance is consistent with the ratemaking treatment afforded other utilities.

CWS disagrees with Branch's position and believes it is inconsistent with Standard Practice U-16 and recent Commission decisions for energy, telecommunications, and water utilities. CWS cites San Jose Water Company's (SJW) recent general rate proceeding, D.89-10-038 in A.88-09-029. In that proceeding, Branch recommended that SJW, a company much smaller than CWS, be allowed to earn a minimum bank balance of $200,000. However, the Commission found that in that case, no evidence was presented to show that $200,000 was sufficient to pay monthly debts, and, accordingly, adopted a minimum bank balance of $650,000. The decision states (D.89-10-038, at mimeo. p. 44) that Branch agreed with SJW that an increase in bank service charges would be warranted if the Commission adopted a minimum bank balance of $200,000.

CWS claims that these balances enable it to obtain short-term credit at reasonable rates. Branch countered with hearsay testimony from bank officials to the effect that the balances had very little effect on the availability of short-term credit. It appears that this issue should eventually be considered with testimony from a qualified expert. We need not resolve it in this proceeding.

CWS points out an example of the daily transactions which occur in CWS's bank account; in August 1988 CWS issued 29 checks in excess of $100,000. Five of these checks, which paid for purchased water, payroll taxes, and PUC fees, exceeded $400,000. CWS's exhibit also shows that B of A's 1988 monthly service charge would have been $12,704 if there had been a zero balance in the B of A account. (An average balance of $2,062,351 would assertedly have been needed in 1988 to avoid all bank service charges.)

Branch argues that if CWS receives working cash treatment for bank balances in excess of $100,000, it would be compensated twice: once for the lead in the payment of expenses versus the lag in the receipt of customer revenues (lead lag study) and twice in the minimum bank balance.

CWS responds that the recorded bank service charges included in General Office Expenses do not reflect the full cost of maintaining a cash account with B of A. These charges only reflect costs in which CWS incurs in excess of the actual bank balances. The Branch witness made no provision for increasing CWS's bank charges to reflect Branch's recommended lower minimum bank balance.

On brief, Branch claims it was CWS's burden to quantify the amount it would have paid if the balances had been reduced to the amount recommended. We disagree. CWS's testimony was more than enough to demonstrate that a substantial amount of the savings Branch seeks would be offset by additional service charges. This was enough to shift the burden to Branch to show that the net savings would benefit the consumer.

We also note that Branch had at least some opportunity to ask CWS's witness (or its own hearsay declarant) how much the increase in service charges would be. Branch would be given an unfair advantage from both the short hearing time and the short time the utility had to prepare rebuttal, if we were to presume that there would be no offsetting increase in service charges.

We have, therefore, found:

1. There would be an offsetting increase in bank service charges if CWS were to reduce its bank balances as Branch recommends.

2. It is unclear what the net savings would be.

We have concluded that CWS's testimony was sufficient to shift the burden to Branch to show how much the increase in charges would be.

Branch's comments recommend that we compare the after-tax revenue requirement arising from the actual balances, with a requirement based on Branch's recommended balance plus the additional bank charges which would be incurred as a result of lower balances. Since the charges would be deductible, it argues that such a comparison would support a finding in its favor.

It is unfortunate that Branch did not propose such a comparison before submission. To consider it at this stage of the proceedings would violate Rule 77.3 of our Rules of Procedure, since there would be no opportunity to test the comparison on cross-examination.

Central Office Allocations

Compensation of Chairman of the Board

Ralph D. Lindberg recently retired as CWS's Chief Executive Officer. He still serves as Chairman of the Board. In addition to his retirement pay and his compensation as chairman, he receives $87,750 per year in compensation. Branch's witness testified that she disallowed the amount paid to Lindberg because:

1. She had received only a brief description of Lindberg's duties from CWS's Rate and Evaluation Assistant.

2. The minutes of the Executive Compensation Committee and Board of Directors meetings contain no description of his duties and responsibilities.

CWS argues that the witness should have asked Lindberg himself or one of CWS's officers about the position's duties. It argues that they would be better able to answer her inquiry than the assistant.

We find this argument unconvincing. The assistant apparently served as a clearing house for data requests. We know of no reason why Branch should be expected to open a special channel of communication for this one inquiry.

We also find the minutes of the Board and Compensation Committee particularly unconvincing. They show that the Board and Compensation Committee have set up a position with no defined responsibilities. It clearly has authority of undetermined scope. The incumbent apparently reports to no one. Who reports to him? We don't know. Perhaps the answer is "all executives"; perhaps the answer is "no one."

CWS's Executive Vice President testified that Lindberg was required to be available for advice, consultation, and discussion with the company's executive force on a regular basis. He stated that no major decision affecting the company's operations was ever made without consulting first with Lindberg. He testified that Lindberg:

1. Consults regularly with Mr. Stump, CWS's president, and with Mr. Houck and Mr. Ulrich, its vice presidents.

2. Consults regularly with members of the Audit Committee of the Board of Directors.

3. Consults with Ulrich on all financial matters, including long-term debt financing, income tax issues, and problems facing the company because of the taxation of Advances and Contributions under TRA 86.

4. Was involved in discussions leading up to the decision to sue the City of Stockton for $50,000,000 for invasion of CWS's service area and in discussions leading up to a similar suit against the City of Dixon.

5. Is involved in matters relating to employee benefits.

6. Gives advice and consults on personnel changes at the executive level and at the district level.

7. Gave advice and consulted on the recent Second Amendment to the Stockton-East Water District Contract which is the topic of Phase II in these proceedings.

8. Reviews each of the internal audits of CWS's districts.

9. Reviews the annual construction budgets for each district.

10. Consulted and was involved in the decision to expand the San Jose General Office.

11. Has been involved on a continuing basis in the controversy with the Internal Revenue Service as to an asserted $4,000,000 deficiency in federal income taxes for 1984 and 1985.

The utility also testified that Lindberg has unquestioned knowledge of the company and many topics including federal tax law, which are necessary for successful utility operations. The payment is assertedly compensation for Lindberg's continued availability for advice on such topics. His pension does not compensate him for such availability. He would be entitled to the full pension, even if he were to perform no work for CWS. Nor is he expected to perform such services in exchange for the director's fees he receives or by the availability to him of a company car.

CWS argues that total executive compensation is not unreasonable or excessive. Unless we were to find otherwise, it reasons that it would be an invasion of managerial discretion to disallow the salary for one position.

We disagree with CWS's position. A management decision to add employees is entitled to some deference if the justification is documented. Here, CWS's decision to compensate Lindberg was not given the careful consideration in which the Board would use to add a new executive, or even a district field worker. The failure of the Board to ask what functions this new employee is to perform, indicates to us that the position may actually be a sinecure. This is supported by the fact that there are no job specifications, and no specified responsibilities. Moreover, this new position has no defined place in the chain-of-command.

We have found that the utility has not produced evidence sufficient to carry its burden of showing what the intended function of this position is. This leaves us with more than a suspicion that it was created to suit Lindberg's needs, not the utility's. We have determined that the utility has not met its burden of persuasion.

Union Contract

The majority of CWS's employees are represented by the Utility Workers' Union of America AFL-CIO ("Union"). CWS's last two-year contract with its union employees provided for a 4.0 percent increase in 1988 and a 4.5 percent increase in 1989. For the test years 1990 and 1991, CWS estimated its payroll expense by adding an estimated 5.0 percent payroll increase for each year to its 1989 payroll.

Branch, on the other hand, applied Commission Advisory and Compliance Division (CACD) standard labor inflation rates of 4.2 percent for 1990 and 4.8 percent for 1991 to CWS's 1989 payroll to develop its test-year estimates.

CWS did not question the use of Branch's labor factors during the hearings. CWS did not expect its labor negotiations to be concluded after submission of this procedure. However, negotiations with the union concluded much earlier than expected. An agreement between CWS and the union was reached and a contract signed on November 10, 1989.

The contract calls for payroll increases approximately equal to those estimated by CWS in its original filing. The contract specifies a 5.0 percent pay increase over 1989 salaries in each of the years 1990 and 1991. In addition, to reduce the differential in pay between the clerical staff (populated primarily by women) and field personnel (predominately male), clericals were afforded an additional $600 raise per year in each of the 2 years before the application of the 5.0 percent overall increase.

CWS alleges that Branch was notified in advance of its intent to make these arguments. Branch was also provided with a copy of the contract.

CWS proposes that we take official notice of the contract, a copy of which was attached to the brief, and use actual rather than estimated wages to determine revenue requirement. Branch opposes this proposal.

CWS argues that the Commission decision in these proceedings should reflect the actual increase in payroll expenses. It argues that it is Commission policy to allow payroll increases resulting from union negotiated contracts. It cites D.89-09-048, A.89-01-004, San Gabriel Valley Water Company. We have concluded that this decision is not directly on point and offers no guidance in choosing between actual contract wages and estimates using standard escalation factors.

Our RLP Resolution M-4705 prohibits updating procedures in water company general rate cases (GRCs). In this case, however, strict application of the rule would force us to adopt a prediction which we know to be invalid. On the other hand, recognizing the actual contract will not require any delay in issuing this decision, so CWS's position conforms to the spirit, if not the letter of the resolution.

It is appropriate for the Commission to take official notice of the contract pursuant to Commission Rule 73 and California Evidence Code § 452(h). The contents of the contract are "...not reasonably subject to dispute and are capable of immediate and accurate determination by sources of reasonably indisputable accuracy."

We will therefore reject Branch's argument that we should disregard the contract because it was not made an exhibit during hearings.

Branch also argues that the contract should be reviewed for reasonableness. It suggests that the utility had inadequate motivation to bargain aggressively since its original escalation factor matched the final settlement. It contends that adopting the results of the collective bargaining agreement would send the "wrong signal" to utilities; apparently the right signal is that the Commission will act as a Monday-morning quarterback to determine whether the employer utility was sufficiently aggressive during the negotiations.

This is an area where any regulatory agency must be very concerned about the signals it sends to both labor and management. Any suggestion that we regard the CACD labor escalation factors as a ceiling or a guideline for bargaining could provoke litigation.

Recently, the City of Los Angeles, in response to political action by unions, decided not to renew the franchise of a city-regulated taxi company, until the labor dispute between it and the unions was resolved. Even though the city did not attempt to dictate the outcome, the franchisee sued. Its theory was that the city as regulator did not adequately respect the federal preemption of issues involving collective bargaining. The United States Supreme Court agreed. (Golden State etc. v Los Angeles (1986) 475

US 608. More recently, that court held that the city was liable in damages for interfering with the employer's right to bargain. (Golden State etc. v Los Angeles (1989) 58 U.S. Law Week 4033.)

Branch, is of course, free in future cases to recommend that we disregard labor contracts for wages or benefits, when exercising our ratemaking powers. However, it should demonstrate that its position was carefully chosen to minimize our exposure to to damage claims by either management or labor under the cited cases.

Considering all factors we have decided that a deviation from the RLP standard is warranted. We have taken official notice of the contract, and will incorporate the new wage scales in the adopted figures in the tables. We will not review the contract for reasonableness.

Group Medical Expenses

Under its employee medical plan, CWS self-insures employee medical expenses. These costs do not represent premiums paid to a third party insurer. Rather, they represent amounts CWS actually pays when it reimburses its employees for their medical expenses. CWS claims to have no control over these costs; they are allegedly dependent on illness rates and treatment costs.

Branch and CWS disagree on the estimated cost of group medical expenses. In 1990, Branch's estimate is $110,000 lower than CWS's estimate. In 1991, Branch's estimate is $181,000 lower.

CWS's estimates are based on its historical growth rate for these expenses. In developing its estimates, CWS first took a three-year average (1986-1988) of the recorded percentage growth in its group medical costs. This average showed an 11.2 percent annual growth rate. CWS then applied this three-year average to recorded 1988 expenses to estimate the level of these expenses for 1989 and then for test years 1990 and 1991. In contrast, Branch developed its 1990 and 1991 estimates by calculating a five-year average (1984-1988) of the recorded percentage growth in these expenses. Branch's five-year average yielded an 8.4 percent annual growth rate. Branch then applied that average to CWS's 1988 recorded expenses to arrive at its estimates for 1989 and for test years 1990 and 1991.

Branch used a five-year average because it asserts there is a five-year cycle in CWS's group medical costs. The only basis for Branch's assertion is that there were large increases in CWS's group medical costs in 1983 and 1988.

CWS challenges this analysis; it argues, "[a]n event occurring twice in five years hardly proves a five-year cycle." CWS notes the lack of any statistical analysis of the data. CWS also noted that recorded percentage increases in 1986 and 1988 are greater than those estimated by CWS for 1990 and 1991.

To show that its estimate is conservative, CWS used data for the first nine months of 1989. CWS claims the trend of those months shows a 13.7 percent annual rate of increase.

To further show that its estimate is conservative, CWS also notes that since 3 of the last 4 years' increases have ranged from almost 14 percent to 20 percent, CWS's estimate of 11.2 percent for 1989, 1990, and 1991 is probably low and certainly more reasonable than Branch's estimate of 8.4 percent.

To further demonstrate the unreasonableness of Branch's estimate, CWS used an alternative calculation, using a five-year average ending in 1989. Using Branch's methodology, but taking 1989 into account, CWS's calculation shows an average 10.7 percent growth rate. While CWS does not endorse Branch's five-year average methodology, it believes that use of the 1989 recorded data better supports its annual growth rate projection of 11.2 percent than Branch's projection of 8.4 percent.

Fundamental to Branch's analysis is its observation that there is a five-year cycle for large increases in CWS's experienced costs. However, the witness did not perform any statistical analysis to determine whether the increases in 1983 and 1988 were significant or whether they were mere flukes. The witness did not cross-check to determine if other self-insured utilities experienced large increases at the same times.

We have considered CWS's arguments that its increases over the last 4 years have ranged from almost 14 percent to 20 percent. We have also considered its statement that using a five-year average shows a 10.7 percent if 1989 is considered. We believe that the CWS estimate is conservative and reasonably reliable.

Branch's over-reliance on the cyclical relationship tends to weaken its showing to the point where it cannot be adopted. We have therefore adopted the CWS projections.

Staff argues that CWS does have such costs under its control, arguing that the utility can reduce benefits. We note that attempts by other, unregulated, employers to reduce benefits have led to bitter labor strife. We do not believe that a far-reaching policy requiring benefit reduction should be considered in a proceeding involving only a single utility. We refer to the discussion of Golden State Transit, supra.

Transportation Charges;
Personal Use of Company Automobiles

CWS allows certain executives to use company vehicles for personal use. The dispute is whether the cost of such use is a proper charge against ratepayers. (Both expense and rate base are affected by the dispute.) CWS contends that this is a reasonable and necessary part of the compensation package for those executives and thus is a proper ratepayer expense. Branch does not agree.

It is Branch's position that CWS should not recover any of the expenses or capital costs associated with such use. It asserts that "...CWS never advised staff until hearing that executive compensation was the reason for including these vehicles in the company's larger expense estimates. Second, despite Staff's requests for information in this area, a useful response was not forthcoming from CWS until less than a month before Staff filed its report and even then, the information provided could not be tracked vehicle for vehicle." It is Branch's theory that the Commission would therefore be justified in denying any recovery.

Branch's witness testified:

> "On [the CWS exhibit] it shows only the comparison of chief executive salary for Cal Water and all water companies in terms of cost per customer, percentage of revenue and percentage of plant. I do not know what are included in the total compensation. The compensation did not show the amounts for salary, pensions, bonuses, stock option and transportation. Exhibit 12 does not have any showing on whether the compensation for employers are the right level or not. For example, would an employee still work for Cal Water Service if he does not have the company's car? There's no showing if compensation by vehicle is cost-effective. There's no trade [-]off shown between cars and dollar salary. The company does not show the additional salary expense it will need to--in order to compensate the employees for loss of use of the company's vehicles."

According to CWS, the only legitimate dispute is whether the cost of this form of nonmonetary compensation, added to salary, renders the total compensation packages for those employees unreasonable.

SJW, D.89-10-038 in A.88-09-029, is the governing authority for this issue. In that decision the Commission found that SJW had not justified the personal use of company-owned vehicles as a ratepayer expense. The Commission also placed all other water utilities on notice that a clear and convincing showing would be necessary to include such costs for ratemaking purposes in the future. (Mimeo. p. 41.)

CWS claims that the delay in developing its showing and notifying Branch was caused by the fact that the the SJW decision was not released until fewer than ten days' prior to the first day of hearings in this proceeding. It also argues that this short notice made it difficult to present the kind of detailed showing needed on comparable compensation of executive compensation for comparable water utilities.

In response, Branch's witness noted a contradiction in CWS's position since its exhibit shows CWS's executive salaries both with and without the compensation reported to the IRS for each executive's personal use of a CWS-owned vehicle. It admits it does not know whether any or all of the other utilities allow personal use of company vehicles. It argues however that since stated executive salaries for the other comparable water companies do not include vehicle compensation, the comparison would be even more favorable if they do have the use of an auto.

Further, CWS notes that it does not have a stock option plan. If the executives of these other companies can participate in a stock option plan, its comparison would again understate the total compensation packages by any additional amount.

Finally, CWS explains that its comparison assumed that all other benefits are generally comparable to its own.

CWS assertedly has shown that average total executive salaries for the five most highly compensated executive officers of comparison utilities are equal to CWS's total including auto. It also notes that the six comparable water utilities on average have considerably fewer customers, less revenues, less plant, and fewer employees. The table below summarizes its showing:

	CWS	Average of Six Water Utilities
	(Dollars in Thousands)	
Executive Salaries	$596.2	$596.6
Customers	337,800	198,331
Revenues	112,726	78,040
Gross Plant	367,412	284,024
Employees	534	373

In this instance, the utility attempted to follow the holding announced in D.89-10-038 (supra), even though it was issued shortly before the hearings in this proceeding. CWS complied substantially, showing that its overall executive compensation including the personal use of company autos is comparatively reasonable. Indeed the evidence indicates that total compensation is significantly below the norm.

Branch has criticized the comparative data which CWS used. CWS concedes that it is incomplete, but argues that any omissions would tend to strengthen its comparison.

Branch has also raised the possibility that this form of compensation may not be cost-effective in a subjective sense; i.e., that the executives would accept a smaller amount of cash than the utility spends to provide autos. It had several opportunities to question these executives in the courtroom, testifying under oath. It did not ask them about cost-effectiveness. While the Commission recognizes the incentive to place automobiles in rate base, we do not assert here that CWS has been doing so at the expense of ratepayers. Such a finding is not necessary.

We have concluded that, considering the time element, CWS's showing on this issue provided some of the information needed to meet the standard established in D.89-10-038. However, the standard established in D.89-10-038 requires at least a complete showing. CWS acknowledges that a more complete showing could be made with more time to prepare. We agree. While we find that CWS has not met its burden of proof in this proceeding, we invite them to make a complete showing in their next rate case filing. We note that this is 15 of the 19 company vehicles CWS raised in this proceeding.

A 20th vehicle is also at issue. It was purchased for a new employee. The vehicle purchase was entered as a plant addition. We will also remove this vehicle from rate base pending a future showing that this vehicle is also proper compensation.

The personal miles and rate base adjustment for this vehicle are included in the calculations in Exhibit 14.

We will also disallow from expenses the personal use miles. For the vehicles in rate base the expense is $0.11/mile, and for vehicles removed from rate base the expense is $0.225/mile. The total adjustment is $26,200 for 1990 and $28,000 for 1991. This is shown in Exhibit 14.

As some guidance for water utilities in their prospective filings concerning the personal use for automobiles, we will offer some suggestions for what an acceptable showing must establish. The showing must establish that total compensation levels for employees with personal use of automobiles is reasonable, this showing should not focus only upon specific portions of compensation, but the entire package. Such a showing should consider the national market in the industry as well as the local market in which the firm competes for employees. The showing needs to establish that this form of compensation is cost-effective relative to other forms of compensation and to alternative means of providing the same vehicular service by leasing or other means of providing transportation. We will also expect full cooperation with Commission staff who will be charged with thoroughly reviewing this showing.

We wish to reiterate here that CWS made a good faith effort to make the necessary showing. However, there was insufficient time to make the necessary showing in this proceeding. We have now given sufficient guidance to Staff and the utilities to present us with the record we need to make an informed decision.

Fees to Fiscal Agents

Branch's witness noted that this category of expense fluctuated widely from year-to-year in the past, and concluded that a five-year average, adjusted to 1988 dollars and projected to the test years using Branch's nonlabor escalation factors was the appropriate methodology to employ.

Branch notes that, this methodology regularly has been used by Branch in the past, and on other accounts in this proceeding. Branch's witness noted that the 1988 adjusted expense of $81,364, which was the basis for CWS's revised estimate, was 36 percent higher than the 1987 recorded amount of $60,000.

CWS contends that a five-year average is not appropriate for estimating fees to fiscal agents or expenses for proxy statements, quarterly reports, and annual reports, because of the way they fluctuate.

Since these items generally do not fluctuate from year-to-year, but have shown significant increases to a new level in recent years, CWS proposes that 1988 recorded expenses for these items, escalated using Branch's nonlabor inflation factor, be used for test years 1990 and 1991.

We have adopted CWS's analysis for this proceeding only. In future cases, we would prefer that this issue, if it cannot be settled, be resolved by an analysis of the market factors which apparently produce large jumps in price, followed by periods of relative stability.

Proxy, Quarterly, and Annual Reports

As can be seen from the comparison table, the only remaining dispute concerning this category of expense is for Account 7994.

CWS argues that a five-year average should not be used as a base because increases in the payments come in large steps separated by several years of relative stability. CWS notes that 1984, 1985, and 1986 costs fall in the $60-65,000 range, while 1987 and 1988 fall into the $75-80,000 range. It proposes instead to use 1988 as a base year. It is willing to adjust the actual 1988 figure downward by $11,000. This figure would then be indexed by using the CACD nonlabor escalation factor.

In this instance, there is nothing of record which would justify rejecting CWS's conclusion that this is an account which does not increase steadily; rather it appears that the market price exhibits periods of stability interspersed with large price increases. We have determined that the utility's estimate is more conservative and reasonable than Branch's. It will be adopted.

<u>District Operations</u>

<u>Oroville Filter Plant</u>

Branch notes that Oroville rates are comparatively high and that the main cause is the large capital cost associated with the Oroville filter plant. Branch also notes that no Commission decision has ever resolved the question of whether this plant is too large for the number of services in the district. While it was unable to prepare a study on the dispute in this proceeding, Branch seeks a declaratory order that it is not foreclosed from seeking an adjustment in an unspecified future proceeding.

CWS takes the position that Branch and its predecessor, Hydraulics Branch, has had many opportunities over an extended period of years to conduct a reasonableness review. It argues that Branch, by failing to take up the issue at the appropriate time, should now be barred from seeking to disallow any portion of the rate base or associated operating expenses.

There is no urgent reason to decide whether Branch should be free to pursue the reasonableness question. That issue should be addressed early in the future proceeding in which Branch has chosen to raise this question. This will enable a decision to be reached before either party has invested any significant amount of time investigating and preparing exhibits on the reasonableness issue.

Disallowance of Past and
Future Employee Hires in the
Bear Gulch, Oroville, Visalia,
Stockton, and San Mateo Districts

Branch eliminated from payroll expenses a utility worker in the Bear Gulch, Oroville, and Visalia districts, a foreman in the Stockton district, and a halftime clerk in the San Mateo district. The utility worker eliminated in the Visalia district is scheduled to be hired in 1991. The other four employees eliminated by Branch were all on CWS's payroll before the filing of the applications in these proceedings.

Branch's witness testified: "...the only reason that I excluded the expenses for the payroll for these employees are (sic) because I did not think that there were sufficient growth in all these districts to warrant additional workers...."

The same reason for disallowance is given for the adjustments in Bear Gulch, Oroville, Stockton, and Visalia.

CWS claims Branch's witness lacked adequate support for the disallowed Bear Gulch district. CWS concedes that customer growth in that district has not been and is not now sufficient to warrant employment of an additional utility worker. It argues, however, that customer growth was not the reason for his employment. Rather, CWS argues that within the past three or four years, the task of responding to Underground Service Alerts (USA) in this district has become so demanding as to require one full-time employee, eight hours a day.

State law requires CWS to belong to USA and to respond to all calls for information as to the location of its water mains. Upon receipt of each such calls, CWS is required to mark the location of its mains. The time spent in responding to USA calls in the Bear Gulch district has increased from one-quarter-man-day to a full-man-day in just over four years. The cities and county served by the Bear Gulch district now require CWS to have an inspector on the job full-time when street repair work or relocation work is being done; this represents a new development.

To refute CWS's testimony as to the impact of USA in Peninsula systems, Branch's witness stated:

> "Now, I did check with the Department of Public Works of the San Mateo County, the head of the encroachment permit section by the name of Mr. Peter Bently, B-e-n-t-l-y, on October 12, 1989, 4:00 p.m., and I explained the situation to him and he mentioned, quote, No additional requirements that he thought that we would require an additional worker and additional activities as far as the company to warrant the extra worker. So that was his words, and I frankly don't know exactly what the company is talking about."

CWS responds in its brief:

> "There is nothing to indicate what was 'explained' to Bently, what, if anything, Bently knew of USA requirements, whether he was aware that those requirements had become more demanding in recent years, whether he had any information as to how many USA calls were directed to CWS weekly with respect to CWS's installations in County streets, and whether he had any information as to how many such calls were directed to CWS with respect to installations in streets in municipalities in the Bear Gulch District, namely Atherton, Menlo Park, Portola Valley and Woodside. Nor is there anything to indicate whether similar inquiries were directed to appropriate officials in any one of those four municipalities in the Bear Gulch District. To support the disallowance of the Bear Gulch utility worker on a statement made by a County employee after preparation of the Staff Bear Gulch report and after the disallowance had been reduced to writing is disingenuous at best and entitled to no weight by the Commission...."

Again, lack of customer growth was Branch witness' reason for disallowing the Oroville utility worker who has been on the payroll since 1987. CWS responds that this was the first employee added to the Oroville work force in more than 40 years, during which time some 700 customers were added in the district. Its witness testified that the district has been operating shorthanded particularly since installation of the filter plant in the mid-1970's.

In Stockton, Branch's witness disallowed a new position of general foreman created earlier this year. Again, the disallowance was based on absence of growth. Branch's witness saw "no reason for additional employee"; he asserted that he is "not telling them how to run the company" while volunteering that "they could manage and get a little bit more production and cost[-] effectiveness out of their existing employee to handle the work."

Branch's witness apparently believes that CWS should have promoted a worker to the new position "and left the worker's position vacant."

CWS responds that there has been no increase in Stockton supervisory personnel for more than 40 years. During that period, the number of field employees increased by more than 50 percent, from 25 to 38. After the new position was created, there are 9.5 employees per supervisor in Stockton compared to a company average of around 5.

In San Mateo, Branch witness' believed that the function of the new position was drought related. CWS responds that the new employee does not perform drought-related tasks. In fact, CWS claims to have reduced the work force by half-an-employee who had been working on conservation matters. In his oral testimony, Branch's witness stated:

> "As I mentioned in the exhibit, again the reason for disallowance was that the district lacks sufficient growth and the ratio of customers per employee is 1025 the way I figure it out, and for the amount of increases that they-- between 1988 and projected 1991, I don't believe it should require an additional half worker."

CWS's reason for adding the half-time employee was to assist with the normal office work load. Office personnel in CWS's districts are assertedly doing more work today than previously because of the new direct tie-in of district computers with the main computer in San Jose. For example, district personnel now can input meter readings directly into the main computer, time card information is read directly into the main computer, and new customer histories and turn-ons and turn-offs are entered into the main computer by the district offices; such work was not previously performed by district personnel. According to CWS, it is this permanent increase in the San Mateo office work load (which also serves the San Carlos district) that creates the need for a half-time employee.

Because Branch's witness approved the hiring of an additional employee in Visalia in 1989, and because he concluded that an additional man-and-a-half could be made available from gardening duties because the district now contracts out most gardening work, he disallowed an additional utility worker for 1991 in that district. Branch and CWS agree that customer growth in Visalia will be at the rate of 650 per year. CWS contends that "even assuming the availability of a man-and-a-half because of the Gardening Contract and even recognizing the hiring of a new man in 1989, it is clear that an additional employee must be added before 1994. Furthermore, USA calls in Visalia average 50 locations a week; in addition, construction project demands and the requirements of new customers for such work as meter reading, collections, and turn-ons make it clear that the new employee will be needed by 1991."

<u>Branch's Theory</u>

Branch has not cited any regulatory decision either in this state or elsewhere which supports its belief that utility staff is directly correlated with customer growth. Nor has it found any textbook or articles in relevant periodicals to support its theory. We also note that there is an apparent contradiction between this theory and the assertion that customer/employee ratios are meaningless.

We doubt that the theory has enough support to justify discarding the conventional wisdom that the number of maintenance workers depends more on the type and amount of plant, than on numbers of customers and supervisors on number of workers. Meter reading requirements used to be tied to the number of metered customers; now the presence or absence of computerized meter reading systems adds another variable. In more recent times, conventional thinking recognizes that new regulations such as those resulting from federal safe drinking water policies will require additional employees even in areas which have no significant growth. Consequently, we have found that the number of employees needed to operate a water system is not directly correlated with numbers of customers or the number of new customers.

For districts other than San Mateo and Visalia, CWS's projections can be adopted, since they are credible and at least prima facie reasonable. We will not adopt CWS's estimates for Visalia. Here the contracting-out of gardening operations should produce significant man-hour savings. CWS did not adequately explain the net effect of new manpower needs and savings.

For San Mateo, we believe that CWS should have experienced substantial man-hour savings from use of data processing and transmission. Again it has not explained the net effect of new manpower needs and technology-driven savings.

CWS argues:

> "CWS must be allowed to hire the employees it deems necessary to provide a safe and adequate water supply to its customers without running the risk of having the costs associated with those employees disallowed for ratemaking purposes without substantive justification. This is a management prerogative and an area in which Commission staff generally is not

> competent to enter. Management's judgment and discretion must be respected."

We have specifically rejected this argument. Our staff is charged with the responsibility of detecting any evidence of overstaffing. A utility management which wishes to avoid delay and litigation over such issues might well consider including detailed justification for new positions in the workpapers it must submit under the RLP.

Tank Painting and
Budgeted Maintenance

Tank painting is classified as Contracted Maintenance; however, both parties treated it as a separate item.

There were three areas of disagreement concerning this category of expense. First, Branch excluded all tank painting for 1992. Second, Branch reflected tank painting expenses in the year they will occur. Finally, Branch disallowed all painting expenses for the 250,000-gallon water storage tank at the filter treatment plant in Oroville.

CWS estimated tank painting expenses by identifying the tanks which required painting during the rate case cycle (1990-1992), estimating the costs associated with such tank painting, and averaging those costs over the three-year period. CWS claims that this is the traditional methodology for dealing with such costs. It cited; e.g., D.85-12-086, section entitled "Results of Operations-East Los Angeles District."

Branch's brief appears to concede that the Commission may adopt the CWS position on first and second issues.

With regard to the Oroville project, Branch claims:

> "Based upon a physical inspection of the tank, staff concludes that the minor rusting which has occurred since the tank was last painted 12 years ago is merely an aesthetic, not a structural concern at this time. The tank exterior is in good condition; there is no need to paint it in this test period. Furthermore, based upon a report in the October, 1989

> edition of Water Management, this tank probably would require painting only every 20 to 30 years."

Its witness contended that ratepayers in a depressed area should not be burdened with a cost which is, at present, primarily for aesthetic purposes. CWS counters that the economic conditions in the Oroville district should have no bearing on the need for maintenance. It asserts that it would be penny-wise and pound-foolish to postpone painting. It suggests that Oroville customers should not be burdened with excess costs, including those caused by imprudent delays in repainting.

CWS responds to Branch's testimony by arguing that the magazine article should be given no weight, because "[t]he record contains no information concerning the tanks referred to in the article. Questions about the painting process, location of the tanks, and condition of the tanks; i.e., was there evidence of rust, to which the statement in the magazine article applied are unanswered. Of course some tanks in some locations can go 20-30 years without repainting. [Branch's witness] never demonstrates that this tank in Oroville is one of them. Indeed, it is not."

CWS's testimony on the Oroville tank painting issue was presented by an employee who has managed CWS's maintenance program, including the upkeep and painting of all tanks in all districts, for more than 20 years. He described several photographs, (received as exhibits) of the rust on this Oroville tank. He testified:

> "Let me state that this is a 13-year-old paint job, and paint in time becomes brittle, it loses its ability to shed the water and moisture then [sic] can come in contact with the steel and migrate to the steel itself.
>
> "The top coat protects the primer underneath, which is a rust[-]inhibitive product to prevent rust occurring.

> "So that it's a common misconception really that a steel surface does not need recoating perhaps until it's badly rusted.
>
> "But those of us close to the industry or the technology realize that if you start to see rust you have waited too long because you have started to lose the metal through the corrosion process and you can't recover that metal."

Because of this testimony, CWS believes it is in the long-term interests of its Oroville customers to paint this tank in 1990 and prevent any further metal loss or deterioration due to further rusting.

We have adopted CWS's methodology for normalizing this category of cost. However, we have adopted Branch's recommended disallowance for the Oroville tank. While CWS's expert testimony is convincing on the points covered, he has nevertheless not explained to our satisfaction why this tank needs repainting after only 13 years. Even if Branch's witness had not relied on the particular magazine article, we would still consider it extraordinary that a tank, absent some unusual circumstance, should require repainting so soon. We are also concerned that the utility witness apparently did not consider the possibility of spot treating the small rusted areas as an alternative to complete recoating.

We have found that:

1. CWS's methodology for normalizing tank painting is reasonable.

2. CWS has not demonstrated that the Oroville tank needs repainting in 1990-1992.

Branch was concerned that some budgeted maintenance items might be double counted. As shown in the table, CWS's revised position eliminates all such charges which were reflected in the recorded data. It appears that there is no longer a dispute between the parties concerning double counting.

All Districts; Other-Other and Contract Maintenance

The differences between Branch's and CWS's for Other-Other amount to $393,00 for 1990 and $457,000 for 1991. The differences for contracted maintenance are $78,000 and $110,900.

Other-Other operating expense as its title implies includes all nonspecific district operating expenses; i.e., all district operating expenses except purchased water and power, chemicals, payroll, postage, transportation, and uncollectibles. (Tr. 263.) Some of the expenses in the Other-Other category are:

1. Fees paid to inspect cross-connection control devices and test underground tanks for leaks.
2. Costs for outside water analysis.
3. Phone charges for data processing and district operations.
4. Conservation expenses.
5. Gardening services.

In addition to these, there are numerous other items which have not been specifically identified.

Contracted maintenance includes services provided by outside contractors for the maintenance of district facilities. This category includes:

1. Raising valve casings.
2. Repairing fire hydrants.
3. Cleaning the powers canal in Oroville.
4. Repairing reservoirs.
5. Painting water tanks.
6. Sealing field yard pavement.
7. Painting and repairing building interiors.

CWS's original estimates in both Other-Other and contracted maintenance categories were prepared by trending the 1984-1988 recorded expenses to the 1990 and 1991 test years. Use of this method presumes that the recorded data accurately reflects expenditures that are likely to occur in the test years. If however, the recorded expenditures include large nonrecurring expenses, then trending will produce an excessive allowance. Branch's initial review left it believing that 1984-88 recorded expenses might include abnormally high or excessive expenditures.

Branch observed unusually large increases in these accounts, much larger than might be explained by inflation or consumer growth. It felt that CWS had failed to adequately explain this prior to hearing. It also argues that the explanations offered at hearing:

> "...did not, perhaps could not, explain away substantial amounts of the increased recorded expenses.... With respect to the unusual expenses which CWS did identify at the hearing, in most instances, the company failed to provide crucial information, specifically the identification of which charges are expected to occur on a regular basis in the future and which are truly an anomaly."

For this reason, Branch recommends that both the Other-Other and contracted maintenance recorded expenses be audited by the Commission's Auditing and Compliance Branch.

Because CWS has assertedly not borne its burden of proof in these areas, Branch further recommends that its estimates be adopted pending said audit.

It is clear that Branch would have done a great deal more analysis if CWS had provided information earlier. It is likely that Branch methodology would have been more sophisticated. It is inferable that its adjustment would have been smaller.

Finally, we note that the hearing schedule, even though several days were added, still did not afford Branch enough time for the kind of detailed cross-examination needed to verify or impeach CWS's broad-brush explanations.

A sophisticated utility/litigant would have recognized the notable increases in these accounts and explained them in its workpapers; CWS did not. If it had begun preparing to defend these large increases earlier in the process, it is likely that it would have made a more complete study, and possibly used more sophisticated estimating techniques.

Branch claims that the utility is to blame for not having prepared detailed explanations of the unusual growth in these accounts and/or failing to respond adequately to discovery. It also argues that the summary nature of the explanations offered at hearings renders them untrustworthy. It therefore reasons that CWS has not met its burden of proof and the much lower Branch estimates must therefore be adopted.

CWS responds that it was difficult and time-consuming to respond to Branch's data requests, since they required review of a large number of entries in the records of each district. It also points out "...this was the first proceeding in which Branch has raised this issue, [so] that the learning curve for both Branch and CWS was steep." It also conceded that its first estimates included some nonrecurring items, and that it accordingly reduced its original estimates by nearly $200,000. It further notes that it was not aware until a month prior to hearing that 1985 rather than 1988 was to be Branch's base year.

It also contends that Branch's choice of a different base year was admittedly unusual, and not adequately explained. It argued that a claim of discovery problems "is hardly justification for Branch's extraordinary estimating methodology." It argues that, "...Branch appears to be punishing CWS for what [Branch's project manager]...felt was stonewalling."

At this time, we will not attempt to assess blame for the fact that we do not have the kind of detailed record we need to determine what the appropriate trend line is for theses expenses. Both parties have agreed to an audit and to keep these proceedings open for the purposes of incorporating the auditor's work product into calculations for 1991 and 1992. The real question at present is whether we should adopt CWS's or Branch's projections on an interim basis.

Analysis

Neither party has briefed the question of burden of proof as it applies to interim relief. We will therefore compare the parties' positions on the merits and attempt to determine which of them is more likely to represent the final outcome.

In this instance Branch has recommended a very large adjustment. The size of the adjustment in each district is, in large measure, caused by the choice of base year. Branch chose as the base year, the last year covered by a GRC. However, in none of these cases, was the amount of Other-Other or contract maintenance litigated. Therefore, Branch has no apparent basis for claiming that the figures for those years are any more reliable than the last recorded year.

We also note that CWS has taken steps to eliminate $200,000 of nonrecurring charges.

Therefore, it is likely that the ultimate result will include substantial adjustments. Even so, we are convinced that more likely than not, the ultimate allowance will be closer to CWS's estimate than to Branch's.

We have consequently adopted CWS's estimate at hearing.

Allocation of Expenses Relating to Operating Contract with the City of Bakersfield

In addition to operating its own water system, CWS operates under contract the water system owned by the City of Bakersfield. This arrangement has been in effect since the late 1970's when the City of Bakersfield first acquired a water system.

CWS performs all meter reading, billing, smaller maintenance jobs and normal system operations for the City of Bakersfield. The City of Bakersfield pays the power bills, major maintenance costs, and construction expenditures. Currently, the City of Bakersfield's system has more than 14,000 customers, compared to 51,000 in CWS's system.

Under the current contract with the City of Bakersfield, a portion of CWS's total Bakersfield district costs is allocated for payment by the City of Bakersfield; the allocation is based on the number of customers in each system. A portion of general office expenses is also allocated to the City of Bakersfield on the same basis. In addition, CWS bills the City of Bakersfield 2.25 percent of its gross City of Bakersfield revenues from water sales as a management fee, currently about $80,000 per year.

Because the City of Bakersfield system has been growing at a faster rate than CWS's, the City of Bakersfield in late 1987 recognized that the cost allocation under the current contract was becoming excessive. A study made at that time by the City of Bakersfield indicated that the City of Bakersfield could operate its own system for about the same amount it was then paying CWS. Recognizing that the costs allocated to the City of Bakersfield would continue to rise, CWS thereupon (1) reduced the charges allocated to the City of Bakersfield under the contract by $10,000 per month, and (2) agreed to review the costs allocated to the City of Bakersfield and renegotiate the contract if warranted.

Starting in July of 1988, CWS kept detailed accounts of the actual costs incurred in operating the City of Bakersfield system. The resulting analysis showed that 1989 direct and allocated estimated costs incurred in operating the City of Bakersfield system were $764,700. Based on this cost estimate, CWS and the City of Bakersfield negotiated a new contract under which the City of Bakersfield agrees to pay CWS $5.50 per month for each active City of Bakersfield service, as opposed to the City of

Bakersfield's current obligation to pay each month the total allocated costs assigned to the City of Bakersfield. Although payments by the City of Bakersfield to CWS are to be made on a different basis under the new contract (namely, a charge per service as opposed to a cost allocation), there is no change in the service in which CWS is obligated to perform for the City of Bakersfield and no change in the obligations of the City of Bakersfield.

CWS's evidence shows the total charges, comprised of district and general office allocations, transferred to the City of Bakersfield during the period 1984-1988 under the current contract. The displayed charges do not include CWS's management fee which totaled $82,500 in 1988. CWS also provided estimates of charges to be allocated to the City of Bakersfield under the new contract for ratemaking purposes. These totalled $802,900 in 1990 and $843,100 in 1991, representing annual 5 percent increases above CWS's estimated 1989 cost of $764,700, used as the basis of CWS's new contract negotiations. Branch's allocated cost estimates are $1,208,700 for 1990 and $1,330,900 for 1991.

CWS claims:

> "It appears from paragraph 4.6 of Exhibit 43 and from the [Branch witness'] testimony that the witness took the 1985 charges of $752,700 allocated to City shown on Exhibit 39, raised them to 1988 dollars and increased these costs for the test years by a labor inflation factor and by customer growth estimates. There is no explanation on the record as to why the witness started with 1985 costs when 1988 costs were available to him. The result of his procedure is to arrive at a 1990 estimated allocated cost which exceeds the 1988 allocation by more than $230,000 or almost 24 percent and a 1991 estimated cost which exceeds the 1990 estimate by more than $122,000 or 10 percent. The Branch witness appears to have followed the procedure he did because he did not receive a written response from CWS justifying the $5.50 per customer per month charge under the new contract."

CWS's witness explained that the $5.50 charge was a negotiated judgment figure based on 1989 estimated costs of $764,700 which was intended to cover both the cost of service to the City of Bakersfield customers and profit to CWS.

CWS claims that if the contract were terminated, CWS's total costs would be reduced by $441,200 in 1990 and $463,300 in 1991. These reductions in expenses are $361,700 and $379,800 less, respectively, for the 2 test years than the $802,900 and $843,100 in income for those years.

Branch is apparently concerned that CWS had intentionally negotiated a contract which would compel its utility customers to subsidize the City of Bakersfield's customers.

Branch's final position is that the utility's figures should not be accepted without an audit.

The parties have stipulated for interim relief and an audit on this issue. CWS's allocation estimates are to be adopted for the purposes of calculating the revenue requirement for the Bakersfield district. The stipulated order will provide for refunds to consumers in the event that Branch is able to justify an adjustment to 1991 (or any subsequent year). In the event that the audit shows that CWS was too conservative in its allocation, it will not be able to collect any sums retroactively. No specific time limit is provided for completing the audit or resolving any disputes which might arise. CWS will establish a memorandum account as a basis for calculating the refunds if any.

The refund mechanism requires a filing within 90 days after decision herein. CWS will detail the items to be included in the memorandum account and a procedure for effecting the refunds if any.

<u>Rent--Oroville Office Space</u>

In September of 1989, CWS moved its local office into a new office building in Oroville. The lease on CWS's old office expired in September, 1989. Because of the move, the rental expense increased from $490 to $1,001 per month.

Branch seeks to disallow the increase, reducing the annual rent expense from $12,000 to $5,900. Branch believes the old premises had both adequate floor space and parking space. In view of high water rates and adverse economic conditions in Oroville, Branch believed that an improvement in offices was unwarranted. After viewing photographs of the new quarters, Branch characterized them as "luxurious."

CWS explains that it decided to move its office for several reasons. The size and shape of the old premises did not allow for an enclosed office for the district manager. His desk was out in the service area, allowing him no privacy to talk to visitors. Parking was limited, located in an unpaved lot next to the office or in the street. CWS's witness also noted that the new office was directly across the street from PG&E's local office making it convenient for customers to pay both utility bills at the same time.

CWS's witness noted that the new monthly rent was 87 cents per square foot which is representative of current office space costs in Oroville and compares favorably with the 90 cents being paid by PG&E. PG&E paid for all improvements to the building when it moved in, whereas CWS's improvements were in place when the building was completed.

Branch's witness assumed, without explaining, that the utility could renew its old lease without a increase in rental. CWS's witness, in contrast, provided some testimony concerning market conditions. While CWS's witness did not qualify himself as an expert on the business rental market in Oroville, Branch did not object to his opinion testimony. In any event, he offered his opinion subject to cross-examination concerning his qualifications and the data relied on.

CWS's opinion evidence is credible. Branch offered no opinion on whether applicant could have negotiated for the old quarters at the old price; nor did he testify that another space could have been rented at that price. We therefore conclude that CWS has justified a finding that the rental is reasonable.

Rules

It was noted that various rules in the CWS tariff book are out-of-date and should be replaced with current standard rules as follows:

Add Current Rule	Cancel CWS Existing Rule	Replace with Current Rule
-	9	9
-	12	12
-	13	13
-	14	14
-	17	17
18	-	-
-	18	19
-	19	20

RLP and Interim Decision

The RLP is intended to ensure that Class A water utilities obtain needed rate relief without undue delay and based on relatively current evidence. The plan seeks to achieve these goals by establishing a deadline for every significant step in the ratemaking process.

In this proceeding we are faced with a paradox. Here the RLP schedule was adhered to with only a two-week delay, not at all excessive considering the impact of the earthquake and other unavoidable problems. Yet, the ultimate objective has been frustrated--this is far from a final decision. Three major ratemaking issues have not yet been fully heard; final rates will not be established until 18 months, perhaps longer, after the applications were filed. Even where we have decided issues, some estimates are less than fully satisfactory because of the lack of full cross-examination; in addition both briefs bear the signs of hurried preparation.

With some confidence we can ascribe much of the delay to the schedule itself, rather than to lollygagging or obstructionism by the parties. We now have under submission rulemaking proceeding, OIR 89-03-033. One of the issues in that proceeding is whether the schedule for multidistrict proceedings such as this should be lengthened. Our decision in that case will reflect some of the lessons learned here.

Findings of Fact

1. A ROE of 12.25 percent is just and reasonable for these districts of CWS for 1990 through 1992. We estimate that this will provide needed additional debt coverage together with compensation for risk of drought.

2. A capital structure as set forth in the Rate of Return on Average Capitalization Table is likely to be in effect in the test period.

3. The rate of return does not include an adjustment for issuance costs of new debt. It is not unfair to postpone compensation for such costs until the time for adoption of step rates.

4. CWS's estimates of Visalia consumption are reasonable; Branch's estimates are too high in comparison to recent unnormalized consumption.

5. It is reasonable to use actual labor costs as set forth in the contract to calculate revenue requirement.

6. CWS's total executive compensation costs including use of autos for all executives other than the Chairman of the Board, are not excessive; no part of the total package should be disallowed.

7. CWS's estimates of test period medical costs are conservative and reliable and should be adopted to calculate revenue requirement.

8. CWS has not convinced us of the function of Lindberg's position.

9. CWS's predictions of Accounts 7993 and 7994 are more reasonable than Branch's and should be adopted to calculate revenue requirement.

10. The new positions in Bear Gulch, Oroville, San Mateo, and Stockton are reasonably necessary for additional new utility responsibilities and in Orville for long-term growth and the operation of a filter plant.

11. CWS has failed to provide enough information concerning offsetting savings to justify two additional positions; in San Mateo there should be savings from the substitution of data processing and transmission for older, labor intensive methods; in Visalia there should be offsetting savings from the use of contract gardeners.

12. The Oroville tank does not need painting in the test period.

13. Other-Other and contracted maintenance should be decided in Phase II after an audit.

14. On an interim basis, CWS's estimates for the test years are more reasonable than Branch's and should be adopted, subject to revision to be reflected in the revenue requirements, corresponding rate changes, and rate refunds as determined by the Commission upon review of a memorandum account established to track all costs properly allocable to operation of the City of Bakersfield's system.

15. CWS's estimates of Other-Other and contracted maintenance are more likely to approximate the final outcome than Branch's; they should be adopted.

16. CWS has not made an adequate showing that automobiles used primarily for personal use should be included in rates.

17. CWS's rates for 1991 and/or 1992 should be adjusted prospectively to reflect any changes in revenue requirements

resulting from the Commission's adoption of revised estimates, if any, following a staff audit and reasonableness review of Other-Other and/or contracted maintenance, excluding tank painting. Accounts in any or all of the seven districts involved herein in the Commission's decision are issued in a separate phase of this proceeding, or in the decision issued in connection with the next CWS GRC application; except that, under no circumstances should any increase in rates cause the total rate increase realized in these proceedings to exceed the amount of the proposed increase (expressed in both dollar and percentage terms) which was identified in the CWS notice to customers (required by PU Code § 454) published in connection with the 1989 GRC application for the seven districts considered herein.

18. CWS's revenue requirements and rates for 1991 and 1992 in each of the seven districts under consideration herein should prospectively incorporate and reflect the Commission's decision, when issued, in the next CWS GRC application regarding the ratemaking treatment of a proposed new office building at the CWS general headquarters in San Jose, provided that the resulting rate increase, if any, shall not cause the total rate increase realized in these proceedings to exceed the amount of the proposed increase (expressed in both dollar and percentage terms) which was identified in applicant's notice to customers (required by PU Code § 454) published in connection with the 1989 GRC application for the seven districts considered herein.

19. The rental paid for the Oroville office is reasonable.

20. Branch's methodology for estimating materials and supplies produces more reliable results than CWS; it should be adopted for all districts.

21. There would be an offsetting increase in bank service charges if CWS were to reduce its bank balances as Branch recommends.

22. It is unclear what the net savings would be.

23. Branch's exclusion of three wells in the City of Bakersfield and both wells in Visalia from rate base is based on a mistaken tariff interpretation.

24. The CWS tariff book contains outdated Rules 9, 12, 13, 14, 17, 18, and 19 and does not contain current Rule 18. CWS should be operating with the current Commission rules.

25. The estimates set forth in the adopted column of the results of operations tables are just and reasonable and should be used for determining revenue requirement.

26. All stipulations which adequately protect the public interest, are the result of arm's length negotiations, and should be adopted.

27. Since the parties have had an opportunity to comment, this decision can be made effective today.

<u>Conclusions of Law</u>

1. CWS under its tariff has discretion not to demand advances for construction from developers for these wells.

CWS could demand a shared advance under C.2, if an advance has already been received for a particular well.

Under C.1, CWS cannot demand an advance from a subdivider, unless over 50 percent of well capacity is required by the residents of the planned development.

2. It is not necessary to decide now whether and under what conditions Branch should be able to seek disallowance of rate base or expenses associated with the Oroville filter plant.

3. CWS's testimony concerning rate base treatment of bank balances was enough to shift the burden of persuasion to Branch to establish what offsetting increases in expenses would be if the balances were reduced and what the net reduction in revenue requirement should be.

INTERIM ORDER

IT IS ORDERED that:

1. California Water Service Company (CWS) is authorized to file on or after the effective date of this order the revised rate schedules for 1990 included in Appendixes B-1 through B-7 for each district. This filing shall comply with General Order 96-A. The effective date of the revised schedules shall be the date of the filing. The revised schedules shall apply only to service rendered on and after their effective date. Concurrent with this filing, CWS shall file current rules: Rule 9--Rendering and Payment of Bills, Rule 12--Information Available to Public, Rule 13--Temporary Service, Rule 14--Continuity of Service, Rule 17--Standards for Measurement of Service, Rule 18--Meter Tests and Adjustment of Bill for Meter Error, Rule 19--Service to Separate Premises and Multiple Units, and Resale of Water, and Rule 20--Water Conservation, and concurrently cancel their existing tariff rules 9, 12, 13, 14, 17, 18, and 19.

2. On or after November 5, 1990, CWS is authorized to file an advice letter for each of its Bakersfield, Bear Gulch, Oroville, San Carlos, San Mateo, Stockton, and Visalia districts, with appropriate supporting workpapers, requesting the step rate increases for 1991 shown in Appendix B attached to this order, 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 ratemaking adjustments for the months between the effective date of this order and September 30, 1990, annualized, exceeds the later of (a) the rate of return found reasonable by the Commission for CWS for the corresponding period in the then most recent rate decision, or (b) 11.25 percent. This filing shall comply with General Order 96-A. The requested step rates shall be reviewed by Staff to determine their conformity with this order and shall go into effect

upon Staff's determination of conformity. Staff 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 schedules shall be no earlier than January 1, 1991, or 40 days after filing, whichever is later. The revised schedules shall apply only to service rendered on and after their effective date.

3. On or after November 5, 1991, CWS is authorized to file an advice letter for each of its Bakersfield, Bear Gulch, Oroville, San Carlos, San Mateo, Stockton, and Visalia districts, with appropriate supporting workpapers, requesting the step rate increases for 1992 included in Appendixes B-1 through B-7 attached to this order, or to file a lesser increase in the event that the rate of return on rate base for its districts, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the months between the effective date of the increase ordered in the previous paragraph and September 30, 1991, annualized, exceeds the later of (a) the rate of return found reasonable by the Commission for CWS, the corresponding period in the then most recent rate decision, or (b) 11.20 percent. This filing shall comply with General Order 96-A. The requested step rates shall be reviewed by Staff to determine their conformity with this order and shall go into effect upon Staff's determination of conformity. Staff 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 schedules shall be no earlier than January 1, 1992, or 40 days after filing, whichever is later. The revised schedules shall apply only to service rendered on and after their effective date.

4. In the event that the Commission, in the next CWS GRC application, renders a decision on the ratemaking treatment for a new office building at the CWS general headquarters in San Jose; upon issuance of that decision, applicant is authorized to adjust

prospectively its rates for service in its Bakersfield, Bear Gulch, Oroville, San Carlos, San Mateo, Stockton, and Visalia districts in 1991 and/or 1992 for the increased revenue requirements, if any, resulting from the Commission's decision regarding the new office building, except that, under no circumstances, shall such rate increases cause the total rate increase realized in these proceedings to exceed the amount of the proposed increase (expressed in both dollar and percentage terms) which was identified in applicant's notice to customers (required by PU Code § 454) published in connection with the 1989 GRC applications for the 7 districts considered herein. In this regard, appropriate rate increases are authorized to be effected for each such district by the utility's (1) filing of separate advice letters for such rate increases, or (2) by including such rate increases in its step-rate filings, in each of the above 7 districts.

5. CWS shall adjust prospectively its rates for service in its Bakersfield, Bear Gulch, Oroville, San Carlos, San Mateo, Stockton, and Visalia districts in 1991 and 1992 either: (a) by filing separate advice letters for each district, or (b) by adjusting the step rate filings authorized by this Order. In either case, the amount of the rate adjustment, if any, shall be in accordance with Commission findings as to the change in revenue requirements, if any, in the 7 districts involved in this proceeding resulting from the adoption in such findings of revised estimates (which shall not exceed the original estimates filed by CWS in A.89-06-029 et al.) of CWS's Other-Other and/or Contracted Maintenance (excluding tank painting) Accounts. Such findings shall be made either in a later decision in this proceeding or in CWS's next series of GRC applications, prior to which Branch shall have the opportunity to audit and perform a reasonableness review of CWS's Other-Other and/or Contracted Maintenance (excluding tank painting) Accounts in any or all of the 7 districts involved in this proceeding. No rate adjustment made pursuant to this

paragraph shall cause the total rate increase authorized in these proceedings to exceed the amount of the proposed increase (expressed either in dollar or percentage terms) that CWS published, pursuant to PU Code § 454, in its notice to customers of the 7 districts involved in this proceeding.

6. CWS shall establish a memorandum account on the effective date hereof to track all costs properly allocable to operation of the City of Bakersfield's system in accordance with the following:

a. Within 90 days following the effective date hereof, CWS shall file an exhibit describing the memorandum account, showing that it is tracking all costs properly allocable to the operation of the City of Bakersfield's system and setting forth a procedure for refunding to ratepayers allocable costs, if any, which exceed the adopted test year estimates, as set forth in Exhibit 39.

b. Upon hearing testimony regarding the memorandum account (procedure and descriptions thereof), the Commission will issue an interim decision in this proceeding resolving disputes concerning the memorandum account or procedures for revision of revenue requirement estimates, corresponding rates, and refund of rates if a review of the memorandum account 3 years following the issuance of the interim decision shows that sufficient difference in the adopted estimates and actual allocable costs exists to justify rate refunds and that adoption of actual allocable costs, in lieu of the adopted estimates proposed by CWS, would result in a reduction of rates for Bakersfield district ratepayers.

The review of the memorandum account shall be triggered by either:

c. The filing of the next CWS GRC application for the Bakersfield district (in which case, such GRC applications would address the memorandum account, and the question of whether a rate refund is appropriate would be resolved in the proceeding related to such GRC applications); or

d. If such GRC application is not filed within 3 years of the effective date of this pending interim decision, a mandatory compliance filing by CWS to both the assigned ALJ and the Water Utilities Branch relating to the appropriate treatment of the memorandum account (in which case the instant proceeding would be reactivated, if necessary, to determine whether a rate refund is appropriate).

In no case, however, shall CWS be entitled to a rate increase as a result of entries in the memorandum account.

This order is effective today.

Dated February 23, 1990, 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

Neal J. Shulman

NEAL J. SHULMAN, Executive Director

Schedule No. BK-1

Bakersfield Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Bakersfield and vicinity, Kern County.

RATES

Service Charge:

	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$5.70	(I)
For 1-inch meter	9.10	|
For 1-1/2-inch meter	12.10	|
For 2-inch meter	16.20	|
For 3-inch meter	30.00	|
For 4-inch meter	41.00	|
For 6-inch meter	70.00	|
For 8-inch meter	103.00	|
For 10-inch meter	125.00	(I)

QUANTITY RATES:

Per 100 cu. ft.	0.436	(I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.013 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

Schedule No. BK-2R

Bakersfield Tariff Area

RESIDENTIAL FLAT RATE SERVICE

APPLICABILITY

Applicable to all flat rate residential water service.

TERRITORY

Bakersfield and vicinity, Kern County.

RATES

	Per Service Connection Per Month*	
For a single - family residential unit, including premises having the following areas:		
6,000 sq. ft., or less	$18.70	(I)
6,001 to 10,000 sq.ft.	21.70	|
10,001 to 16,000 sq.ft.	27.10	|
16,001 to 25,000 sq.ft.	34.45	(I)
For each additional single-family residential unit on the same premises and served from the same service connection	12.90	(I)

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

SPECIAL CONDITIONS

1. Due to the undercollection in the balancing account, an increase in rates in the amounts shown below shall be applied to the monthly flat rates shown for 12 months from the effective date of the tariff to amortize the undercollection: (N)

6,000 sq. ft., or less	$0.43	|
6,001 to 10,000 sq.ft.	0.50	|
10,001 to 16,000 sq.ft.	0.63	|
16,001 to 25,000 sq.ft.	0.79	|
Additional residential unit	0.30	(N)

(Continued)

Schedule No. BK-2R

Bakersfield Tariff Area

RESIDENTIAL FLAT RATE SERVICE

2. The above flat rates apply to service connections not larger than one inch in diameter.

3. All service not covered by the above classifications shall be furnished only on a metered basis.

4. For service covered by the above classifications, if the utility or the customer so elects, a meter shall be installed and service provided under Schedule No. BK-1, General Metered Service.

(END OF APPENDIX A-1)

California Water Service Company
Bakersfield District

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.

SCHEDULE NO. BK-1

Service Charges:

	1991	1992
For 5/8 x 3/4-inch meter	$0.30	$0.30
For 1-inch meter	0.40	0.35
For 1-1/2-inch meter	0.40	0.40
For 2-inch meter	0.60	0.60
For 3-inch meter	1.00	1.00
For 4-inch meter	2.00	2.00
For 6-inch meter	3.00	3.00
For 8-inch meter	4.00	4.00
For 10-inch meter	5.00	5.00

Quantity Rates:

Per 100 cu. ft.	0.012	0.059

SCHEDULE NO. BK-2R

Rates

6,000 sq. ft., or less	0.80	0.75
6,001 to 10,000 sq.ft.	0.80	0.85
10,001 to 16,000 sq.ft.	1.10	1.10
16,001 to 25,000 sq.ft.	1.30	1.40
Additional unit	0.50	0.50

(END OF APPENDIX B-1)

California Water Service Company
Bakersfield District

Adopted Quantities

(Dollars in thousands)

	1990	1991
1. Water Production : KCcf (1000)		
Wells	21,619	21,770
Surface Supply	0	0
Purchased Water	0	0
Total	21,619	21,770
2. Purchased Water Expenses		
Kern County Water Agency		
a. Annual Entitlement of treated water		
Acre Feet	11500	11500
Unit Cost ($/AF)	25.00	25.00
Total Cost	$287.5	$287.5
b. Improvement District		
Operating cost of conveyance facilities	$48.8	$48.8
c. Pumping Cost		
Entitlement (M.G.)	3747.3	3747.3
KWH per M.G.	1727.2	1727.2
KWH	6,472,336	6,472,336
Average cost /KWH	0.06902	0.06902
Total Cost	$446.7	$446.7
Total Purchased Water Cost	$783.0	$783.0
3. Pumped Tax		
Kern County Water Agency		
Quantity (AF)	49631.5	49631.5
Unit Cost ($/AF)	$20.0	$20.0
Total Cost	$992.6	$992.6
4. Purchased Power		
Supplier - PG&E (1-1-90)		
Production (KCcf)	21,619	21,770
Kwhr per KCcf	1606.1	1606.1
Kwhr	34,722,550	34,964,909
Unit Cost (cent/Kwhr)	9.9609	9.9426
Total Cost	$3,458.7	$3,476.4
5. Ad Valorem Taxes	$356.6	$373.6
Tax Rate	0.843%	0.843%
6. Uncollectable rate	0.005481	
7. Franchise tax rate	0.014530	
8. California corporation franchise tax	9.30%	

California Water Service Company
Bakersfield District

Adopted Quantities

9. Federal tax rate 34.12%

10. Net to gross multiplier 1.70759

11. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	7,321	7,396
1	3,344	3,379
1 1/2	515	520
2	1,116	1,127
3	196	198
4	99	100
6	35	36
8	4	3
10	0	0
	12,630	12,759

12. Metered Sales (KCcf)

	1990	1991
All water	9374.7	9467.4

13. Number of flat rate services by lot size

	1990	1991
6,000 sq. ft., or less	5263	5280
6,001 to 10,000 sq.ft.	27626	27709
10,001 to 16,000 sq.ft.	5121	5136
16,001 to 25,000 sq.ft.	839	842
Total	38849	38967
Additional unit	937	937

California Water Service Company
Bakersfield District

Adopted Quantities

14. Number of Service and Usage

	No. of Service 1990	No. of Service 1991	Usage - Kccf 1990	Usage - Kccf 1991	Ave Usage - ccf 1990	Ave Usage - ccf 1991
Commercial	12,204	12,331	7623.8	7701.5	624.7	624.7
Public Authority	336	338	1508.0	1526.0	4488.1	4514.8
Industrial	47	47	186.0	183.0	3957.4	3893.6
Other	43	43	56.9	56.9	1323.3	1323.3
Subtotal	12,630	12,759	9374.7	9467.4		
Flat Rate resid	38,849	38,967	15123.9	15169.8		
Priv Fire Prot	570	602				
Public Fire Prot	23	25				
Total	52,072	52,353				
Water Loss	9.0%		2130.3	2142.4		
Total Water Produced			26628.9	26779.6		

California Water Service Company
Bakersfield District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$16,113.0	$16,787.0
Expenses		
Purchased water	783.0	783.0
Purchased power	3,458.7	3,476.4
Pump tax	992.6	999.6
Payroll	1,831.6	1,933.5
Purchased chemicals	1.9	2.0
Other O & M	1,467.4	1,570.8
Other A & G	-402.4	-423.7
G.O. prorations	1,765.6	1,882.5
Business license	0.0	0.0
Taxes other than income	501.1	525.6
Uncollectibles	88.3	92.0
Franchise tax	234.1	243.9
Transportation depreciation	-70.2	-75.8
Interest expense	1,479.9	1,603.7
Total Deduction	12,131.6	12,613.5
State Tax Depreciation	1,928.2	2,032.3
Net Taxable Income	2,053.2	2,141.2
State Corp. Franch. Tax 9.3%	190.9	199.1
Federal Tax Depreciation	1,326.7	1,374.3
State Income Tax	190.9	199.1
Less Preferred Stock Dividend	7.9	7.9
Net Taxable Income	2,455.8	2,592.1
Fed. Income Tax 34.12%	837.9	884.4
Total Federal Income Tax	837.9	884.4
Total Income Tax	1,028.9	1,083.6

(END OF APPENDIX C-1)

APPENDIX D-1
Page 1

California Water Service Company
Bakersfield District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
500	$6.93	$7.88	13.71%
1000	9.01	10.06	11.65
2000	13.17	14.42	9.49
3000	17.33	18.78	8.37
5000	25.65	27.50	7.21
5205 (Average)	26.50	28.39	7.14
10000	46.45	49.30	6.14

(END OF APPENDIX D-1)

Schedule No. BG-1

Bear Gulch Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The communities of Atherton, Menlo Park, Portola Valley, Woodside, and vicinity, San Mateo County.

RATES

Service Charge:	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$7.50	(I)
For 1-inch meter	14.50	|
For 1-1/2-inch meter	20.50	|
For 2-inch meter	26.40	|
For 3-inch meter	50.00	|
For 4-inch meter	67.00	|
For 6-inch meter	110.00	|
For 8-inch meter	161.00	|
For 10-inch meter	200.00	(I)

QUANTITY RATES:

Per 100 cu. ft.	1.183	(C)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.026 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

(END OF APPENDIX A-2)

APPENDIX B-2
Page 1

California Water Service Company
Bear Gulch District

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.

SCHEDULE NO. BG-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.35	$0.35
For 1-inch meter	0.00	0.00
For 1-1/2-inch meter	0.00	0.00
For 2-inch meter	0.00	0.00
For 3-inch meter	0.00	0.00
For 4-inch meter	0.00	0.00
For 6-inch meter	0.00	0.00
For 8-inch meter	0.00	0.00
For 10-inch meter	0.00	0.00
Quantity Rates:		
Per 100 cu. ft.	0.00	0.00

(END OF APPENDIX B-2)

California Water Service Company
Bear Gulch District

Adopted Quantities

(Dollars in thousands)

		1990	1991
1.	Water Production : KCcf (1000)		
	Wells	0	0
	Surface Supply	592.5	592.5
	Purchased Water	4638.5	5011.3
	Total	5231.0	5603.8
2.	Purchased Water Expenses		
	San Francisco Water Department (7-1-88)		
	Total water purchased (Kccf)	4638.5	5011.3
	Unit Cost ($/AF)	0.411	0.411
	Total commodity charges	$1,906.4	$2,059.7
	Service charges	$83.7	$83.7
	Total Cost	$1,990.1	$2,143.4
3.	Purchased Power		
	Supplier - PG&E (1-1-90)		
	Production (KCcf)	5231.0	5603.8
	Kwhr per KCcf	741.5	741.5
	Kwhr	3,878,795	4,155,230
	Unit Cost (cent/Kwhr)	9.998700	9.984900
	Total Cost	$387.8	$414.9
4.	Ad Valorem Taxes	$173.6	$182.0
	Tax Rate	0.878%	0.878%
5.	Uncollectible rate	0.007520	
6.	Franchise tax rate	0.007747	
7.	California corporation franchise tax	9.3%	
8.	Federal tax rate	34.12%	
9.	Net to gross multiplier	1.68979	

California Water Service Company
Bear Gulch District

Adopted Quantities

10. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	11,552	11,610
1	3,946	3,966
1 1/2	884	889
2	390	391
3	38	38
4	12	12
6	5	5
8	1	1
10	0	0
	16,828	16,912

11. Metered Sales (KCcf)

	1990	1991
0 - 3 ccf	584.7	590.3
Over 3 ccf	4363.8	4710.8
Total	4948.5	5301.1

12. Number of Service and Usage

	No. of Service		Usage - Kccf		Ave Usage - ccf	
	1990	1991	1990	1991	1990	1991
Commercial	16,685	16,768	4760.0	5099.1	285.3	304.1
Public Authority	111	112	136.5	146.5	1229.8	1307.8
Industrial	7	7	14.1	15.2	2015.0	2175.5
Other	25	25	37.9	40.4	1517.9	1618.0
Subtotal	16,828	16,912	4948.5	5301.2		
Flat Rate resid	0	0	0.0	0.0		
Priv Fire Prot	106	111				
Public Fire Prot	8	8				
Total	16,942	17,031				
Water Loss	5.4%		282.5	302.6		
Total Water Produced			5231.0	5603.8		

California Water Service Company
Bear Gulch District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$7,998.4	$8,476.4
Expenses		
Purchased water	1,990.1	2,143.4
Purchased power	387.8	414.9
Pump tax	0.0	0.0
Payroll	882.8	930.9
Purchased chemicals	15.4	15.4
Other O & M	629.2	675.4
Other A & G	89.9	91.3
G.O. prorations	771.3	822.5
Business license	6.7	7.1
Taxes other than income	243.4	255.3
Uncollectibles	6.0	6.4
Franchise tax	62.0	65.7
Transportation depreciation	-32.1	-33.1
Interest expense	802.6	858.2
Total Deduction	5,855.1	6,253.3
State Tax Depreciation	877.4	922.2
Net Taxable Income	1,265.9	1,300.9
State Corp. Franch. Tax 9.3%	117.7	121.0
Federal Tax Depreciation	582.7	595.7
State Income Tax	117.7	121.0
Less Preferred Stock Dividend	4.7	4.7
Net Taxable Income	1,438.1	1,501.7
Fed. Income Tax 34.12%	490.7	512.4
Total Federal Income Tax	490.7	512.4
Total Income Tax	608.4	633.4

(END OF APPENDIX C-2)

APPENDIX D-2
Page 1

California Water Service Company
Bear Gulch District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
300	$8.67	$11.05	27.47%
500	11.04	13.42	21.55
1000	16.96	19.33	13.98
2000	28.80	31.16	8.19
2380 (Average)	33.30	35.66	7.06
3000	40.65	42.99	5.77
5000	64.33	66.65	3.60
10000	123.55	125.80	1.82

(END OF APPENDIX D-2)

Schedule No. OR-1

Oroville Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Oroville and vicinity, Butte County.

RATES

Service Charge:

	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$11.90	(I)
For 1-inch meter	23.20	|
For 1-1/2-inch meter	32.90	|
For 2-inch meter	42.00	|
For 3-inch meter	77.00	|
For 4-inch meter	107.00	|
For 6-inch meter	177.00	|
For 8-inch meter	264.00	|
For 10-inch meter	326.00	(I)

QUANTITY RATES:

For the first 300 cu.ft., per 100 cu.ft	0.639	(I)
For the next 29,700 cu.ft., per 100 cu.ft	0.845	|
For all over 30,000 cu.ft., per 100 cu.ft	0.725	(I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.039 per Ccf is to be added to the quantity rates as shown above for 24 months from the effective date of the tariff to amortize the undercollection. (N)

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

Schedule No. OR-2R

Oroville Tariff Area

RESIDENTIAL FLAT RATE SERVICE

APPLICABILITY

Applicable to all flat rate residential water service.

TERRITORY

Oroville and vicinity, Butte County.

RATES

	Per Service Connection Per Month *	
For a single - family residential unit, including premises having the following areas:		
6,000 sq. ft., or less	$29.95	(I)
6,001 to 10,000 sq.ft.	35.90	|
10,001 to 16,000 sq.ft.	44.90	|
16,001 to 25,000 sq.ft.	56.85	(I)
For each additional single-family residential unit on the same premises and served from the same service connection	19.95	(I)

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

SPECIAL CONDITIONS

1. The above flat rates apply to service connections not larger than one inch in diameter.

2. All service not covered by the above classifications shall be furnished only on a metered basis.

3. For service covered by the above classifications, if the utility or the customer so elects, a meter shall be installed and service provided under Schedule No. OR-1, General Metered Service.

4 . Due to the undercollection in the balancing account, an increase in rates in the amounts shown below shall be applied to the monthly flat rates shown above for 24 months from the effective date of the tariff to amortize the undercollection: (N

6,000 sq. ft., or less	$0.97	|
6,001 to 10,000 sq.ft.	1.15	|
10,001 to 16,000 sq.ft.	1.41	|
16,001 to 25,000 sq.ft.	1.96	|
Additional residential unit	0.79	(N

Schedule No. OR-2UL

Oroville Tariff Area

LIMITED FLAT RATE SERVICE

APPLICABILITY

Applicable to all flat rate water service furnished to customers taking untreated water directly from Powers Canal.

TERRITORY

Oroville and vicinity, Butte County.

RATES

	Per Month*
Alex Kosloff	$11.10 (I)

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

SPECIAL CONDITION

Service under this schedule is limited to the above service which furnished as of January 1, 1955.

Schedule No. OR-3M

Oroville Tariff Area

IRRIGATION SERVICE

APPLICABILITY

Applicable to service of untreated water from Powers Canal to irrigation districts and to irrigation or mining ditches, for uses including but not limited to the irrigation of vineyards, orchards and pasture lands.

TERRITORY

Lands located along the Powers Canal, between Coal Canyon Powerhouse and Cherokee Reservoir north of the City of Oroville, Butte County.

RATE

	Per Miner's Inch Day *
For all water delivered	$0.93 (I)

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

SPECIAL CONDITION

A miner's inch day is defined as the quantity of water equal to 1/40 of a cubic foot per second flowing continuously for a period of 24 hours.

(END OF APPENDIX A-3)

California Water Service Company
Oroville District

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.

SCHEDULE NO. OR-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.30	$0.25
For 1-inch meter	0.60	0.50
For 1-1/2-inch meter	0.90	0.70
For 2-inch meter	1.00	1.00
For 3-inch meter	2.00	3.00
For 4-inch meter	3.00	3.00
For 6-inch meter	5.00	4.00
For 8-inch meter	7.00	6.00
For 10-inch meter	8.00	7.00
Quantity Rates:		
For the first 300 cu.ft., per 100 cu.ft	0.213	0.025
For the next 29,700 cu.ft., per 100 cu.ft	0.007	0.025
For all over 30,000 cu.ft., per 100 cu.ft	0.007	0.025

SCHEDULE NO. OR-2R

6,000 sq. ft., or less	0.65	0.90
6,001 to 10,000 sq.ft.	0.60	1.00
10,001 to 16,000 sq.ft.	1.10	1.00
16,001 to 25,000 sq.ft.	0.65	1.00
Additional unit	0.35	0.70

SCHEDULE NO. OR-2UL

Alex Kosloff	0.30	0.30

SCHEDULE NO. OR-3M

For all water delivered	0.02	0.02

(END OF APPENDIX B-3)

California Water Service Company
Oroville District

Adopted Quantities

(Dollars in thousands)

	1990	1991
1. Water Production : KCcf (1000)		
Wells	92.2	92.2
Purchased -leased wells	51.1	51.1
Purchased -other	2171.5	2176.9
Total	2314.8	2320.2
2. Purchased Water Expenses		
County of Butte		
Contracted Quantities (AF)	1000	1000
Unit Cost ($/AF)	17.979	17.979
Total Cost	$18.0	$18.0
Pacific Gas & Electric Company		
Cost of water per year	$32.4	$32.4
Union Pacific Railroad		
Cost of water	$3.6	$3.6
Total purchased water	$54.0	$54.0
3. Purchased Power		
Supplier - PG&E (1-1-90)		
Production (KCcf)	1498.8	1504.2
Kwhr per KCcf	693.2	693.2
Kwhr	1,039,015	1,042,758
Unit Cost (cent/Kwhr)	10.2444	10.2410
Total Cost	$106.4	$106.8
4. Ad Valorem Taxes	$40.1	$40.3
Tax Rate	0.920%	0.920%
5. Uncollectible rate	0.005367	
6. Franchise tax rate	0.00	
7. California corporation franchise tax	9.30%	
8. Federal tax rate	34.12%	
9. Net to gross multiplier	1.68258	

APPENDIX C-3
Page 2

California Water Service Company
Oroville District

Adopted Quantities

10. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	2,070	2,074
1	184	184
1 1/2	42	42
2	80	80
3	13	13
4	8	8
6	4	4
8	1	1
10	1	1
	2,403	2,407

11. Metered Sales (KCcf)

	1990	1991
0 - 3 ccf	78.9	79.1
4 - 300 ccf	622.6	623.8
Over 300 ccf	338.1	338.8
Total	1,039.6	1,041.7

12. Number of Service and Usage

	No. of Service		Usage - Kccf		Ave Usage - ccf	
	1990	1991	1990	1991	1990	1991
Commercial	2,296	2,300	668.4	669.5	291.1	291.1
Public Authority	85	85	99.0	100.0	1164.7	1176.5
Industrial	14	14	286.4	286.4	20457.1	20457.1
Other	8	8	0.6	0.6	75.0	75.0
Subtotal	2,403	2,407	1,054.4*	1,056.5*		
Flat Rate resid	982	991	324.5	327.4		
Priv Fire Prot	57	58				
Public Fire Prot	7	7				
Total	3,449	3,463				
Raw water sales			816.0	816.0		
Water Loss	8.00%		119.9	120.3		
Total Water Produced			1,260.4	1,263.7		

* including irrigation

APPENDIX C-3
Page 3

California Water Service Company
Oroville District

Adopted Quantities

13. Number of flat rate services by lot size

	1990	1991
6,000 sq. ft., or less	465	470
6,001 to 10,000 sq.ft.	435	439
10,001 to 16,000 sq.ft.	65	65
16,001 to 25,000 sq.ft.	17	17
Subtotal	982	991
Additional unit	21	21
Limited Service	1	1

California Water Service Company
Oroville District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$1,720.5	$1,770.6
Expenses		
Purchased water	54.0	54.0
Purchased power	106.4	106.8
Groundwater charges	0.0	0.0
Payroll	357.8	376.4
Purchased chemicals	39.6	39.7
Other O & M	168.0	182.9
Other A & G	34.5	35.6
G.O. prorations	205.2	218.8
Business license	0.1	0.1
Taxes other than income	68.7	70.3
Uncollectibles	9.2	9.5
Franchise tax	0.0	0.0
Transportation depreciation	-16.2	-17.3
Interest expense	180.5	183.2
Total Deduction	1,207.9	1,260.0
State Tax Depreciation	176.0	178.2
Net Taxable Income	336.6	332.4
State Corp. Franch. Tax 9.3%	31.3	30.9
Federal Tax Depreciation	136.6	135.6
State Income Tax	31.3	30.9
Less Preferred Stock Dividend	1.1	1.1
Net Taxable Income	343.6	343.0
Fed. Income Tax 34.12%	117.2	117.0
Total Federal Income Tax	117.2	117.0
Total Income Tax	148.5	147.9

(END OF APPENDIX C-3)

APPENDIX D-3
Page 1

California Water Service Company
Oroville District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
300	$13.34	$13.82	3.58%
500	14.98	15.51	3.49
1000	19.10	19.73	3.33
2000	27.32	28.18	3.15
2430 (Average)	30.86	31.82	3.10
3000	35.55	36.63	3.05
5000	52.00	53.53	2.95
10000	93.12	95.78	2.85

(END OF APPENDIX D-3)

Schedule No. SC-1

San Carlos Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

San Carlos and vicinity, San Mateo County.

RATES

Service Charge:

	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$6.25	(I)
For 1-inch meter	13.90	|
For 1-1/2-inch meter	19.10	|
For 2-inch meter	24.20	|
For 3-inch meter	46.00	|
For 4-inch meter	62.00	|
For 6-inch meter	105.00	|
For 8-inch meter	153.00	|
For 10-inch meter	191.00	(I)

QUANTITY RATES:

For the first 300 cu.ft., per 100 cu.ft.	1.226	(I)
For the next 29,700 cu.ft., per 100 cu.ft.	1.226	|
For all over 30,000 cu.ft., per 100 cu.ft.	1.065	(I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.019 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

(END OF APPENDIX A-4)

APPENDIX B-4
Page 1

California Water Service Company
San Carlos District

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.

SCHEDULE NO. SC-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.00	$0.00
For 1-inch meter	0.00	0.00
For 1-1/2-inch meter	0.00	0.00
For 2-inch meter	0.00	0.00
For 3-inch meter	0.00	0.00
For 4-inch meter	0.00	0.00
For 6-inch meter	0.00	0.00
For 8-inch meter	0.00	0.00
For 10-inch meter	0.00	0.00

Quantity Rates:

For the first 300 cu.ft., per 100 cu.ft.	0.005	0.005
For the next 29,700 cu.ft., per 100 cu.ft.	0.005	0.005
For all over 30,000 cu.ft., per 100 cu.ft.	0.005	0.005

(END OF APPENDIX B-4)

California Water Service Company
San Carlos District

Adopted Quantities

(Dollars in thousands)

		1990	1991
1.	Water Production : KCcf (1000)		
	Wells	0	0
	Surface Supply	0	0
	Purchased Water	1944.3	2068.9
	Total	1944.3	2068.9
2.	Purchased Water Expenses		
	San Francisco Water Department (7-1-88)		
	Total water purchased (KCcf)	1944.3	2068.9
	Unit Cost ($/AF)	0.411	0.411
	Total commodity charges	$799.1	$850.3
	Service charges	$77.6	$77.6
	Total Cost	$876.7	$927.9
3.	Purchased Power		
	Supplier - PG&E (1-1-90)		
	Production (KCcf)	1944.3	2068.9
	Kwhr per KCcf	648.9	648.9
	Kwhr	1,261,688	1,342,530
	Unit Cost (cent/Kwhr)	10.571100	10.874900
	Total Cost	$133.4	$146.0
4.	Ad Valorem Taxes	$77.9	$81.8
	Tax Rate	0.917%	0.917%
5.	Uncollectible rate	0.001222	
6.	Franchise tax rate	0.015735	
7.	California corporation franchise tax	9.30%	
8.	Federal tax rate	34.12%	
9.	Net to gross multiplier	1.70239	

APPENDIX C-4
Page 2

California Water Service Company
San Carlos District

Adopted Quantities

10. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	7,844	7,912
1	1,814	1,830
1 1/2	93	94
2	159	160
3	16	16
4	4	4
6	3	3
8	0	0
10	0	0
	9,933	10,019

11. Metered Sales (KCcf)

	1990	1991
0 - 3 ccf	342.1	346.8
4 - 300 ccf	1321.5	1421.1
Over 300 ccf	143.5	154.8
Total	1807.1	1922.7

12. Number of Service and Usage

	No. of Service		Usage - Kccf		Ave Usage - ccf	
	1990	1991	1990	1991	1990	1991
Commercial	9,776	9,862	1624.8	1733.7	166.2	175.8
Public Authority	55	55	47.8	50.6	869.9	920.0
Industrial	94	94	116.8	119.7	1243.0	1273.2
Other	8	8	17.7	18.7	2208.0	2335.2
Subtotal	9,933	10,019	1807.1	1922.7		
Flat Rate resid	0	0	0.0	0.0		
Priv Fire Prot	168	172				
Public Fire Prot	5	5				
Total	10,106	10,196				
Water Loss	7.07%		137.2	146.3		
Total Water Produced			1944.3	2068.9		

California Water Service Company
San Carlos District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$3,210.6	$3,368.5
Expenses		
Purchased water	876.7	927.9
Purchased power	133.4	146.0
Pump tax	0.0	0.0
Payroll	311.6	328.3
Purchased chemicals	0.0	0.0
Other O & M	263.0	268.7
Other A & G	13.5	13.9
G.O. prorations	325.1	346.7
Business license	0.0	0.0
Taxes other than income	102.8	108.2
Uncollectibles	3.9	4.1
Franchise tax	50.5	53.0
Transportation depreciation	-5.8	-6.1
Interest expense	314.4	331.7
Total Deduction	2,389.1	2,522.4
State Tax Depreciation	366.1	376.9
Net Taxable Income	455.4	469.2
State Corp. Franch. Tax 9.3%	42.3	43.6
Federal Tax Depreciation	261.9	262.7
State Income Tax	42.3	43.6
Less Preferred Stock Dividend	1.8	1.8
Net Taxable Income	515.4	537.9
Fed. Income Tax 34.12%	175.9	183.5
Total Federal Income Tax	175.9	183.5
Total Income Tax	218.2	227.2

(END OF APPENDIX C-4)

APPENDIX D-4
Page 1

California Water Service Company
San Carlos District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
500	$11.31	$12.38	9.46%
1000	17.58	18.51	5.31
1380 (Average)	22.34	23.17	3.71
2000	30.11	30.77	2.19
3000	42.64	43.03	0.91
5000	67.71	67.55	-0.24
10000	130.38	128.85	-1.17

(END OF APPENDIX D-4)

Schedule No. SM-1

San Mateo Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

San Mateo and vicinity, San Mateo County.

RATES

Service Charge:	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$4.80	(I)
For 1-inch meter	7.90	|
For 1-1/2-inch meter	10.50	|
For 2-inch meter	14.80	|
For 3-inch meter	30.50	|
For 4-inch meter	38.90	|
For 6-inch meter	61.00	|
For 8-inch meter	88.00	|
For 10-inch meter	111.00	(I)

QUANTITY RATES:

Per 100 cu. ft. . . . . 1.1102 (I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.018 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

(END OF APPENDIX A-5)

APPENDIX B-5
Page 1

California Water Service Company
San Mateo District

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.

SCHEDULE NO. SM-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.20	$0.25
For 1-inch meter	0.10	0.05
For 1-1/2-inch meter	0.10	0.10
For 2-inch meter	0.20	0.20
For 3-inch meter	0.50	0.50
For 4-inch meter	0.60	0.60
For 6-inch meter	1.00	1.00
For 8-inch meter	1.00	1.00
For 10-inch meter	1.00	1.00

Quantity Rates:

Per 100 cu. ft.	0.0008	0.00

(END OF APPENDIX B-5)

California Water Service Company
San Mateo District

Adopted Quantities

(Dollars in thousands)

		1990	1991
1.	Water Production : KCcf (1000)		
	Wells	0	0
	Surface Supply	0	0
	Purchased Water	5929.6	6225.4
	Total	5929.6	6225.4
2.	Purchased Water Expenses		
	San Francisco Water District		
	Total water purchased (KCcf)	5929.6	6225.4
	Unit Cost ($/AF)	0.411	0.411
	Total commodity charges	$2,437.1	$2,558.7
	Service charges	$98.1	$98.1
	Total Cost	$2,535.2	$2,656.8
3.	Purchased Power		
	Supplier - PG&E (1-1-90)		
	Production (KCcf)	5929.6	6225.4
	Kwhr per KCcf	278.6	278.6
	Kwhr	1,651,987	1,734,405
	Unit Cost (cent/Kwhr)	10.4915	10.4862
	Total Cost	$173.3	$181.9
4.	Ad Valorem Taxes	$157.5	$164.7
	Tax Rate	0.894%	0.894%
5.	Uncollectible rate	0.001357	
6.	Franchise tax rate	0	
7.	California corporation franchise tax	9.30%	
8.	Federal tax rate	34.12%	
9.	Net to gross multiplier	1.67583	

APPENDIX C-5
Page 2

California Water Service Company
San Mateo District

Adopted Quantities

10. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	19,750	19,774
1	3,996	4,001
1 1/2	301	302
2	570	571
3	107	108
4	37	37
6	16	16
8	2	2
10	0	0
	24,779	24,811

11. Metered Sales (KCcf)

	1990	1991
All water	5320.6	5586.1

12. Number of Service and Usage

	No. of Service 1990	No. of Service 1991	Usage - Kccf 1990	Usage - Kccf 1991	Ave Usage - ccf 1990	Ave Usage - ccf 1991
Commercial	24,500	24,530	5007.8	5256.8	204.4	214.3
Public Authority	252	254	299.3	315.9	1187.7	1243.6
Industrial	11	11	6.2	5.7	559.8	515.7
Other	16	16	7.4	7.7	460.6	482.8
Subtotal	24,779	24,811	5320.6	5586.1		
Flat Rate resid	0	0	0.0	0.0		
Priv Fire Prot	237	245				
Public Fire Prot	8	8				
Total	25,024	25,064				
Water Loss	10.27%		609.0	639.4		
Total Water Produced			5929.6	6225.4		

California Water Service Company
San Mateo District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$7,689.8	$8,044.7
Expenses		
Purchased water	2,535.2	2,656.8
Purchased power	173.3	181.9
Pump tax	0.0	0.0
Payroll	660.6	696.0
Purchased chemicals	0.0	0.0
Other O & M	608.9	622.2
Other A & G	42.3	43.7
G.O. prorations	752.2	802.0
Business license	20.0	20.0
Taxes other than income	209.6	219.2
Uncollectibles	10.4	10.9
Franchise tax	0.0	0.0
Transportation depreciation	-31.1	-32.2
Interest expense	744.3	793.0
Total Deduction	5,725.7	6,013.4
State Tax Depreciation	828.4	869.3
Net Taxable Income	1,135.7	1,162.0
State Corp. Franch. Tax 9.3%	105.6	108.1
Federal Tax Depreciation	534.9	547.3
State Income Tax	105.6	108.1
Less Preferred Stock Dividend	4.4	4.4
Net Taxable Income	1,319.2	1,371.5
Fed. Income Tax 34.12%	450.1	468.0
Total Federal Income Tax	450.1	468.0
Total Income Tax	555.7	576.0

(END OF APPENDIX C-5)

APPENDIX D-5
Page 1

California Water Service Company
San Mateo District

Comparison of typical bills for residential metered customer of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
500	$9.62	$10.35	7.59%
1000	15.01	15.90	5.91
1700 (Average)	22.57	23.67	4.91
2000	25.80	27.00	4.66
3000	36.59	38.11	4.14
5000	58.17	60.31	3.69
10000	112.11	115.82	3.31

(END OF APPENDIX D-5)

Schedule No. ST-1

Stockton Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Stockton and vicinity, San Joaquin County.

RATES

Service Charge:

	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$7.45	(I)
For 1-inch meter	14.80	|
For 1-1/2-inch meter	20.20	|
For 2-inch meter	26.80	|
For 3-inch meter	50.00	|
For 4-inch meter	69.00	|
For 6-inch meter	114.00	|
For 8-inch meter	165.00	|
For 10-inch meter	203.00	(I)

QUANTITY RATES:

For the first 300 cu.ft., per 100 cu.ft.	0.324	(I)
For the next 29,700 cu.ft., per 100 cu.ft.	0.524	|
For all over 30,000 cu.ft., per 100 cu.ft.	0.403	(I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.023 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

(END OF APPENDIX A-6)

California Water Service Company
Stockton District

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.

SCHEDULE NO. ST-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.00	$0.00
For 1-inch meter	0.00	0.00
For 1-1/2-inch meter	0.00	0.00
For 2-inch meter	0.00	0.00
For 3-inch meter	0.00	0.00
For 4-inch meter	0.00	0.00
For 6-inch meter	0.00	0.00
For 8-inch meter	0.00	0.00
For 10-inch meter	0.00	0.00

Quantity Rates:		
For the first 300 cu.ft., per 100 cu.ft.	0.202	0.024
For the next 29,700 cu.ft., per 100 cu.ft.	0.002	0.024
For all over 30,000 cu.ft., per 100 cu.ft.	0.006	0.023

(END OF APPENDIX B-6)

California Water Service Company
Stockton District

Adopted Quantities

(Dollars in thousands)

		1990	1991
1.	Water Production : KCcf (1000)		
	Wells	9251.0	9191.2
	Surface Supply	0.0	0.0
	Purchased Water	6621.1	6751.8
	Total	15872.1	15943.0
2.	Purchased Water Expenses		
	Stockton East Water District (4-1-89)		
	Annual payment	$1,787.5	$1,787.5
3.	Purchased Power		
	Supplier - PG&E (1-1-90)		
	Production (KCcf)	9251.0	9191.2
	Kwhr per KCcf	1024.9350	1024.9350
	Kwhr	9,481,681	9,420,389
	Unit cost (cent/Kwhr)	11.194800	11.198800
	Total Cost	$1,061.5	$1,055.0
4.	Ad Valorem Taxes	$230.5	$240.7
	Tax Rate	0.936%	0.936%
5.	Uncollectible rate	0.003143	
6.	Franchise tax rate	0.004894	
7.	California corporation franchise tax	9.30%	
8.	Federal tax rate	34.12%	
9.	Net to gross multiplier	1.68708	

APPENDIX C-6
Page 2

California Water Service Company
Stockton District

Adopted Quantities

10. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	33,756	33,887
1	3,603	3,618
1 1/2	503	505
2	681	682
3	135	135
4	57	57
6	33	33
8	13	13
10	3	3
	38,784	38,933

11. Metered Sales (KCcf)

	1990	1991
0 - 3 ccf	1340.8	1345.2
4 - 300 ccf	8540.6	8567.1
Over 300 ccf	4566.3	4600.0
Total	14447.7	14512.3

12. Number of Service and Usage

	No. of Service		Usage - Kccf		Ave Usage - ccf	
	1990	1991	1990	1991	1990	1991
Commercial	38,392	38,542	10538.6	10574.2	274.5	274.5
Public Authority	283	282	1411.0	1408.0	4985.9	4992.9
Industrial	99	99	2483.0	2515.0	25080.8	25404.0
Other	10	10	15.1	15.1	1510.0	1510.0
Subtotal	38,784	38,933	14447.7	14512.3		
Flat Rate resid	0	0	0.0	0.0		
Priv Fire Prot	485	499				
Public Fire Prot	42	43				
Total	39,311	39,475				
Water Loss	8.97%		1424.4	1430.7		
Total Water Produced			15872.1	15943.0		

California Water Service Company
Stockton District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$11,101.3	$11,462.4
Expenses		
Purchased water	1,787.5	1,787.5
Purchased power	1,061.5	1,055.0
Groundwater charges	76.5	76.0
Payroll	1,677.4	1,766.7
Purchased chemicals	12.7	12.6
Other O & M	609.9	625.4
Other A & G	103.7	108.5
G.O. prorations	1,386.9	1,479.0
Business license	2.3	2.3
Taxes other than income	363.6	380.4
Uncollectibles	34.9	36.0
Franchise tax	54.3	56.1
Transportation depreciation	-41.5	-43.5
Interest expense	1024.7	1,086.1
Total Deduction	8,154.4	8,428.1
State Tax Depreciation	1,152.4	1,209.4
Net Taxable Income	1,794.5	1,824.9
State Corp. Franch. Tax 9.3%	166.9	169.7
Federal Tax Depreciation	787.0	811.3
State Income Tax	166.9	169.7
Less Preferred Stock Dividend	6.4	6.4
Net Taxable Income	1,986.6	2,046.9
Fed. Income Tax 34.12%	677.8	698.4
Less ITC	0.0	0.0
Add Unrecov tax	0.0	0.0
Total Federal Income Tax	677.8	698.4
Total Income Tax	844.7	868.1

(END OF APPENDIX C-6)

APPENDIX D-6
Page 1

California Water Service Company
Stockton District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
(Cubic Feet)			
300	$8.22	$8.42	2.51%
500	9.28	9.47	1.99
1000	11.96	12.09	1.11
2000	17.30	17.33	0.15
2290 (Average)	18.85	18.85	0.00
3000	22.65	22.57	-0.35
5000	33.34	33.05	-0.87
10000	60.07	59.25	-1.36

(END OF APPENDIX D-6)

Schedule No. VS-1

Visalia Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Visalia and vicinity, Tulare County.

RATES

Service Charge:	Per Meter Per Month*	
For 5/8 x 3/4-inch meter	$5.10	(I)
For 1-inch meter	9.40	|
For 1-1/2-inch meter	13.25	|
For 2-inch meter	17.10	|
For 3-inch meter	33.60	|
For 4-inch meter	43.00	|
For 6-inch meter	71.00	|
For 8-inch meter	107.00	|
For 10-inch meter	134.00	(I)

QUANTITY RATES:

Per 100 cu. ft.	0.319	(I)

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

SPECIAL CONDITION

1. Due to the undercollection in the Balancing Account, an amount of $0.014 per Ccf is to be added to the quantity rates as shown above for 12 months from the effective date of the tariff to amortize the undercollection. (N)

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

Schedule No. VS-2R

Visalia Tariff Area

RESIDENTIAL FLAT RATE SERVICE

APPLICABILITY

Applicable to all flat rate residential water service.

TERRITORY

Visalia and vicinity, Tulare County.

RATES

	Per Service Connection Per Month*	
For a single - family residential unit, including premises having the following areas:		
6,000 sq. ft., or less	$10.80	(I)
6,001 to 10,000 sq.ft.	14.50	|
10,001 to 16,000 sq.ft.	17.50	|
16,001 to 25,000 sq.ft.	22.10	(I)
For each additional single-family residential unit on the same premises and served from the same service connection	8.95	(I)

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

SPECIAL CONDITION

1. The above flat rates apply to service connections not larger than one inch in diameter.
2. All service not covered by the above classifications shall be furnished only on a metered basis.
3. For service covered by the above classifications, if the utility or the customer so elects, a meter shall be installed and service provided under Schedule No. VS-1, General Metered Service.
4. Due to the undercollection in the balancing account, increase in rates in the amounts shown below shall be applied to the monthly flat rates shown above for 12 months from the effective date of the tariff to amortize the undercollection: (N)

6,000 sq. ft., or less	$0.31	|
6,001 to 10,000 sq.ft.	0.42	|
10,001 to 16,000 sq.ft.	0.50	|
16,001 to 25,000 sq.ft.	0.63	(N)
Additional residential unit	0.24	

(END OF APPENDIX A-7)

APPENDIX B-7
Page 1

California Water Service Company
Visalia District

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.

SCHEDULE NO. VS-1

Service Charges:	1991	1992
For 5/8 x 3/4-inch meter	$0.25	$0.40
For 1-inch meter	0.40	0.50
For 1-1/2-inch meter	0.65	0.70
For 2-inch meter	0.90	0.90
For 3-inch meter	1.00	1.00
For 4-inch meter	2.00	2.00
For 6-inch meter	3.00	3.00
For 8-inch meter	5.00	5.00
For 10-inch meter	7.00	7.00
Quantity Rates:		
Per 100 cu. ft.	0.00	0.053

SCHEDULE NO. VS-2R

Rates	1991	1992
6,000 sq. ft., or less	0.50	0.50
6,001 to 10,000 sq.ft.	0.70	0.70
10,001 to 16,000 sq.ft.	0.75	0.75
16,001 to 25,000 sq.ft.	1.05	1.00
Additional unit	0.40	0.40

(END OF APPENDIX B-7)

APPENDIX C-7
Page 1

California Water Service Company
Visalia District

Adopted Quantities

(Dollars in thousands)

		1990	1991
1.	Water Production : KCcf (1000)		
	Wells	9464.1	9753.9
	Surface Supply	0	0
	Purchased Water	0	0
	Total	9464.1	9753.9
2.	Purchased Power		
	Supplier - Southern California Edison		
	Effective dates - 2/1/89 and 2/16/89		
	Production (KCcf)	9464.1	9753.9
	Kwhr per KCcf	762.97	762.97
	Kwhr	7,220,824	7,441,933
	Unit Cost (cent/Kwhr)	9.7071	9.7221
	Total Cost	$700.9	$723.5
3.	Ad Valorem Taxes	$119.0	$127.3
	Tax Rate	0.745%	0.745%

4. Number of Services by meter size

	1990	1991
5/8 x 3/4 inch	2,141	2,213
1	0	0
1 1/2	1,659	1,716
2	183	189
3	398	410
4	63	65
6	14	15
8	7	7
10	1	1
	2,325	2,403

5. Meter Sales (KCcf)

	1990	1991
All water	2926.4	3026.3

California Water Service Company
Visalia District

Adopted Quantities

6. Number of flat rate service by lot size

	1990	1991
6,000 sq.ft., or less	2459	2530
6,001 to 10,000 sq.ft.	11075	11395
10,001 to 16,000 sq.ft.	3199	3291
16,001 to 25,000 sq.ft.	600	617
Subtotal	17333	17833
Additional unit	105	105

7. Number of Service and Usage

	No. of Service		Usage - Kccf		Ave Usage - ccf	
	1990	1991	1990	1991	1990	1991
Commercial	4,234	4,382	2569.6	2659.4	606.9	606.9
Public Authority	207	209	281.0	290.0	1357.5	1387.6
Industrial	15	15	61.8	62.9	4120.0	4193.3
Other	10	10	14.0	14.0	1400.0	1400.0
Subtotal	4,466	4,616	2926.4	3026.3		
Residential	17,333	17,833	5780.6	5947.3	333.5	333.5
Priv Fire Prot	163	170				
Public Fire Prot	19	19				
Total	21,981	22,638				
Water Loss	8.0%		757.1	780.3		
Total Water Produced			9464.1	9753.9		

9. Uncollectible rate	0.002217
10. Franchise tax rate	0.00
11. California corporation franchise tax	9.3%
12. Federal tax rate	34.12%
13. Net to gross multiplier	1.67727

California Water Service Company
Visalia District

Income Tax Calculation

	1990	1991
	(Dollars in thousands)	
Operating Revenue (authorized rates)	$4,544.1	$4,855.4
Expenses		
Purchased water	0.0	0.0
Purchased power	700.9	723.5
Pump tax	0.0	0.0
Payroll	806.6	851.5
Purchased chemicals	0.1	0.1
Other O & M	454.6	487.5
Other A & G	44.2	46.0
G.O. prorations	629.8	671.4
Business License	1.0	1.0
Franchise Tax	0.0	0.0
Uncollectibles	9.8	10.8
Taxes Other than Income	182.9	194.2
Transportation depreciation	-31.7	-33.4
Interest Expense	456.3	508.3
Total Deduction	3,254.5	3,460.9
State Tax Depreciation	758.7	791.2
Net Taxable Income	530.9	603.3
State Corp. Franch. Tax 9.3%	49.4	56.1
Federal Tax Depreciation	463.9	468.8
State Income Tax	49.4	56.1
Preferred stock dividend credit	2.4	2.4
Net Taxable Income	773.9	867.2
Fed. Income Tax 34.12%	264.1	295.9
Total Federal Income Tax	264.1	295.9
Total Income Tax	313.4	352.0

(END OF APPENDIX C-7)

APPENDIX D-7
Page 1

California Water Service Company
Visalia District

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1990.

General Metered Service
(5/8 x 3/4-inch meters)

Monthly Usage (Cubic Feet)	At Present Rates	At Authorized Rates	Percent Increase
500	$6.34	$6.70	5.60%
1000	7.93	8.29	4.54
2000	11.11	11.48	3.33
3000	14.29	14.67	2.66
5000	20.65	21.05	1.94
5060 (Average)	20.84	21.24	1.92
10000	36.55	37.00	1.23

(END OF APPENDIX D-7)