

**ORIGINAL**Decision **84 01 042**

JAN 19 1984

## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of )  
SAN JOSE WATER COMPANY, a corporation )  
for an order authorizing it to )  
increase rates charged for water )  
service. )

Application 83-06-01  
(Filed June 1, 1983)

McCutchen, Doyle, Brown & Enerson, by  
A. Crawford Greene, Attorney at  
Law, for San Jose Water Company,  
applicant.  
Patricia A. Bennett, Attorney at Law,  
and Sung B. Han, for the Commission  
staff.

O P I N I O NStatement of Facts

San Jose Water Company (SJWC), a California corporation, formerly known as San Jose Water Works,<sup>1</sup> for the past 117 years has been providing public utility water service in portions of Santa Clara County. At present it serves approximately 134 square miles of the county, including areas of San Jose, Los Gatos, Monte Sereno, Saratoga, Campbell, Cupertino, and Santa Clara, delivering 42 million gallons of water annually to a population in excess of 650,000 persons through 128,000 domestic, commercial, and industrial services. The central portion of its service area is a relatively flat plain which on the southwest and northeast slopes upwards into the adjacent foothills and mountains. The major portion of its water is obtained from 150 wells located in the Santa Clara Valley.

<sup>1</sup> The name was changed at the shareholders' annual meeting on March 15, 1983.

although part is obtained by the diversion and storage of runoff from the watersheds of the Los Gatos, Saratoga, and Almaden Creeks, and the remainder is purchased under a 70-year contract from the Santa Clara Valley Water District. Mountain reservoirs are capable of storing 2½ billion gallons and the distribution system has facilities to store another 237 million gallons. Water is distributed through 2,179 miles of transmission and distribution mains to 40 different pressure zones. Within predetermined parameters of control, the system is operated automatically by means of a computer-controlled telemetry system. In 1982 SJWC's utility plant, valued at \$160 million, produced revenues of \$42 million.

By this application SJWC seeks authority to increase water rates by \$5,629,300 or 12.21% in 1984, and by additional amounts of \$2,024,300 or 3.75% and \$2,024,300 or 3.61% in 1985 and 1986, respectively. These rates are designed to produce a rate of return of 12.64% in 1984 and 12.92% in 1985 which in turn would provide a constant return on equity of 16.50% in each of the years the rates would be in effect. SJWC asserts that these returns on rate base are the minimum necessary to enable the utility to maintain its credit rating, attract new capital at a reasonable cost and provide a fair and reasonable return on equity. The utility told its customers that "the cost of providing water service has increased substantially," and that "the same inflationary factors that have affected the general economy have also affected San Jose Water Company for the services and commodities furnished to it." The company further contends that substantially increased financing costs for new capital requirements during the past ten years have resulted in overall increases in the utility's effective bond interest rate and cost of money, so that the requested rates are necessary to meet present financial costs.

Pursuant to the Regulatory Lag Plan for water utilities under which the application was filed, an informal public meeting was held on July 12, 1983 in San Jose at the Hyatt San Jose. Customers

had notice of this meeting from bill inserts and notices appearing in five local newspapers. Two customers attended. One expressed objection to excessive billings resulting from bimonthly meter reading; the second was concerned over water district plans to switch disinfection chemicals applied to imported water and consequent effects upon his fishery business. Five customers wrote opposing the proposed increases. Two of these noted that the rate of inflation has substantially lessened and that this should stabilize the utility's costs and charges.<sup>2</sup>

On October 3, 1983 and October 4, 1983 a duly noticed hearing was held in San Jose and San Francisco, respectively, before Administrative Law Judge (ALJ) John B. Weiss. One customer appeared to state that he considered the return on equity requested by SJWC to be excessive. Subsequently, on October 12, 1983 the Mayor of the Town of Los Gatos wrote to state that the proposed rate of return requested by the utility exceeded any forecast inflation rates projected for the coming three years. Consequently, he urged the Commission to reduce the proposal "to be more in line with projected economic forecasts in terms of cost of living over the next three years."

<sup>2</sup> Based upon utility handling of customer complaints, service is considered to be satisfactory by staff. High bill complaints constitute the largest single category. These center in the utility's practice of bimonthly meter readings with estimated billing in the intervening months. However, the bills average out. To add 15 meter readers needed for monthly readings would add \$400,000 annually to revenue requirements. Most complaints of each nature were resolved quickly and satisfactorily.

	<u>1980</u>	<u>1981</u>	<u>1982</u>
Water Quality	386	348	450
Pressure	858	815	763
Billing	4,365	6,112	6,720
Miscellaneous	<u>10,069</u>	<u>10,252</u>	<u>9,474</u>
Total	15,698	17,527	17,407

At the hearing SJWC called three witnesses. George Clements, controller and assistant treasurer, testified on results of operations and water conservation efforts, and presented an exhibit on the November 1, 1983 revisions to medical insurance costs applicable to the utility under its Blue Cross contract. Fred R. Meyer, chief financial officer and treasurer, testified on financial requirements, compared financial risks between water utilities and energy utilities, and introduced exhibits relating to the interest rate outlook and the percentage of error in forecasts from Data Resources, Inc. (DRI) and University of California at Los Angeles (UCLA) National Business Interest Rate Forecasts for 20-year U.S. Government Bonds. J. W. Weinhardt, chief executive officer, testified to clarify computerization and monitoring of the utility's wells for the staff.

For the Commission staff four witnesses appeared. Donald Yep, associate utilities engineer, testified on water consumption and operating revenues, operation and maintenance and administration and general expenses, and taxes. Arthur Gallegos, associate utilities engineer, testified on utility plant, depreciation, rate base, and customer service. Sung Han, senior utilities engineer and staff project manager for this case, presented evidence relative to the summary of earnings, rate design, and operational attrition. Christopher J. Blunt, financial examiner III, testified on cost of capital and rate of return, recommending a rate of return between 11.28 and 11.56%, 11.34 and 11.62%, and 11.38 and 11.66% for 1984, 1985, and 1986, respectively. These contain provision for the impact of financial attrition which will result from SJWC's retirement of its Series D, E, and F bonds during 1984, 1985, and 1986, respectively. The resulting rates of return on rate base would equate to an earnings allowance between 13.75 and 14.25% on common stock equity.

Initial differences on operational results included staff's estimate of higher revenues than those estimated by the utility.

While staff had accepted SJWC's average consumption estimates, staff projected approximately 400 more customers than did the company. This also resulted in higher power and pump tax projections from staff. Staff estimated ad valorem taxes differently than did the utility and arrived at a lower estimate for the test years. Payroll tax differences were due to the fact that the utility forecast a 7% wage increase for 1985 whereas staff used 4.6%. Payroll taxes consequently also differed. In spite of these differences, the utility's estimates of total operating expenses at present rates for 1984 and 1985 varied from staff's estimates by one-one hundredth of 1% or less. But the most significant difference was in the mathematical error staff discovered in the utility's rate base calculations; the utility had omitted \$600,000 of the end of year balance of utility plant under construction from the weighted average plant for both 1984 and 1985. After adjusting its figures to correct for this error, it was clear that the weighted average rate base variance between staff and the utility was less than one half of 1%. Consequently, in view of the insignificance of the differences involved, SJWC accepted staff's results of operations as being reasonable and accurate.

However, just prior to the hearing, SJWC received notice of a 162.4% increase to be effective November 1, 1983 in the cost of its experience-rated Blue Cross medical benefit coverage. SJWC's current contracts with the Operating Engineers Union and the Utility Workers Union of America do not expire until the end of 1984. These contracts require the utility to offer employees a choice between Blue Cross and Kaiser coverage on a noncontributory basis. Accordingly, it was apparent that the utility for the present and immediate future is locked into acceptance of these additional significant costs.<sup>3</sup>

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<sup>3</sup> Increasing expenses \$293,597 in 1984 and \$282,497 in 1985.

During the hearing, SJWC accepted staff's calculations of average capitalization ratios for years 1984, 1985, and 1986, and agreed to the use of staff's computed long-term debt and preferred stock cost factors in this rate proceeding. However, the utility vigorously disputed staff's general assertion that water utilities are less risky financially than energy utilities and consequently should be authorized a lower return on equity. Both parties presented conflicting evidence on the issue. The most significant disagreement between the parties on the rate of return issue related to staff's reliance upon interest forecasts from DRI and UCLA, and SJWC's contention that the methodological underpinnings of staff's risk premium and discounted cash flow analyses were flawed. SJWC asserted that, consistent with proper methodology, staff's risk premium analysis should have used current interest rates. SJWC also argued that staff's discounted cash flow analysis should have used the dividend expected in the forthcoming time period as well as a six-month average of market prices for applicant's common stock.

Finally, the utility contended that because it is efficient and well managed it should not be penalized by being given a lesser rate of return on equity (as staff recommends) than that given this year to other major California water utilities (14.50%). Upon submission of concurrent briefs on October 27, 1983, the matter was submitted for decision.

#### Discussion

Under § 728 of the Public Utilities Code, this Commission has authority to determine and fix, by order, "just, reasonable or sufficient" rates for public utilities within its jurisdiction. In Federal Power Com. v Hope Natural Gas Co. (1943) 320 US 591, the Supreme Court stated that "Under the statutory standard of 'just and

reasonable' it is the result reached not the method employed which is controlling." The court further stated that "the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests," and that "From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."

In this proceeding the principal contested issues relate to the appropriate return on equity. Staff's estimates of revenue based on present rates, expenses, and rate base for the test years were acknowledged as being reasonable and accurate by applicant at the hearing, and the utility stipulated to their use for this proceeding. In addition, our review of the individual item components, as discussed in the following paragraph, leads us to conclude that the utility's stipulation should be accepted. Analysis of staff's report indicates that staff made a thorough review of these items. We adopt staff's report with the following comment.

Staff's estimate of the average number of commercial metered services took into consideration five months of 1983 recorded data not available when the application was prepared. Therefore, staff's revenue estimates, based upon 400 additional services, are more current and reflect improving economic conditions. The methodology used is well tested. On the expense side, staff's estimates reflect the anticipated additional consumption which should result from additional services, as well as changes in the purchased water rate, pump tax rate, and purchased power rates which were effective July 1, 1983. Staff also accepted the 1983 and 1984 wage

increases provided in applicant's current two-year union contract up for renegotiation in late 1984, but used the 4.6% wage escalation factor (forecast by the Economics Section of our Revenue Requirements Division) for 1985. Payroll tax differences stem out of this difference. Other tax differences were primarily rooted in utility plant estimate determinations. Staff's use of normalized accelerated cost recovery systems and investment tax credit benefits in its depreciation treatment is in accord with provisions of Decision (D.) 93848 dated December 15, 1981 in Phase 1 of Order Instituting Investigation 24. Both staff and the utility used a State Corporate Franchise Tax Rate of 9.6%, and a Federal Corporate Tax Rate of 46%. Apart from correcting the utility's omission of \$600,000, affecting the estimates of weighted average plant in service, staff used inflation rates of 1.8% for 1983, 4.9% for 1984, and 5.7% for 1985, recommended by our Economics Section, rather than the utility's 9 to 25%, in preparing its utility plant in service estimates. This resulted in reducing the estimated cost of some items. Noting that the staff rates are not substantially out of line with those contained in the Control Scenario from the September UCLA Forecast, we accept them. Staff also deleted some pipe replacement duplications. We agree with staff's recommendation not to leave the dollar amounts of these duplications in as contingency funds, as the utility asked. The major difference between staff and SJWC relative to rate base was centered in the utility's mathematical error in its plant in service computations. The significant balance of the difference was in the allowance for working cash. Here the differences were in expense estimates and taxes from the use of disputed rates of return for 1984 and 1985, and an error staff found where the utility in its lead-lag study had used positive instead of negative lag days for its insurance expense components.

The adopted Results of Operations, using present rates for 1984 and 1985, is set forth below as Table 1:



Table 1

## SAN JOSE WATER COMPANY

Adopted Results of Operations at Present Rates  
 (Thousands of Dollars)

	<u>1984</u>	<u>1985</u>
Operating Revenues	\$47,863.0	\$48,267.9
<u>Operating Expenses</u>		
<u>Operation &amp; Maintenance</u>		
Payroll	4,707.0	4,923.5
Purchased Water	6,723.0	6,912.0
Purchased Power	4,093.9	4,128.4
Pump Tax	6,198.0	6,189.0
Transportation	500.0	516.0
Purchased Services	1,803.0	1,895.0
Chemicals & Filters	45.0	48.0
Postage	460.6	463.0
Other	116.0	125.0
<u>Administrative &amp; General</u>		
Payroll	972.0	1,016.7
Office Supplies	398.0	419.0
Property Insurance	26.6	29.2
Injuries & Damages	554.1	605.5
Employee Pensions & Benefits	1,558.3	1,604.6
Business Tax	28.1	28.1
Regulatory Comm. Expense	8.0	7.0
Outside Services	150.6	159.7
General Expenses	285.4	302.5
General Plant Misc.	39.0	42.0
Dues & Memberships	22.0	22.7
Rents	16.0	16.0
Admin. Expense Transfer	(342.7)	(362.3)
<u>Taxes Other</u>		
Ad Valorem	1,389.3	1,446.3
Payroll Tax	404.9	441.8
Subtotal	30,156.1	30,978.7
Depreciation	3,832.1	4,008.4
Uncollectibles	141.9	143.0
Franchise & User Tax	822.5	829.5
State Corp. Franchise Tax	779.5	722.6
Federal Income Tax	3,756.6	3,578.7
Total Operating Expense	39,488.7	40,260.9
Utility Operating Income	8,374.3	8,007.0
Rate Base	91,888.5	93,540.6
Rate of Return	9.11%	8.56%

We now turn to the rate of return issues. Rate of return is an expression of the capital costs of a utility: the cost of long-term debt, preferred stock, and common stock equity. Initially, SJWC had based its test period estimates using an average capital structure that varied for each of the test years while staff proposed an average capital structure to be applicable to the entire test period. Both used the average of the beginning and end of year debt costs. The difference between their capital structures was minimal. Although the utility will require \$30,154,000 during this period for utility plant, refunds of construction advances, sinking fund payments, retirement of first mortgage bonds aggregating \$3,750,000 and preferred stock aggregating \$1,416,000, and other corporate needs, all but 4.2% of this requirement will be provided from internal sources.<sup>4</sup> The 4.2% will come from sale of common stock through the company's dividend reinvestment plan. Applicant will require no other outside financing. Therefore, in approaching the cost of capital issues, SJWC decided it would take no issue with the average capitalization ratio, or with the cost of debt and preferred stock developed by staff. The issues remaining all lie within the rate of return to be authorized on common equity.

As stated in Hope, supra, the standard by which the return to the equity owner should be measured is the return on investments in other enterprises having corresponding risks (emphasis added).

In recent years in other California water utility rate cases we have adopted the view sponsored by staff that water utilities can generally be considered less risky than energy utilities. In Application (A.) 82-03-94, California Water Service

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<sup>4</sup> However, it should be noted that were it not for the provisions of the Economic Recovery Tax Act, making available funds in the form of deferred taxes, SJWC would be required to finance \$4 million of this requirement through outside financing.

(CWS) was the utility taking issue with this position. CWS presented considerable evidence which it contended tended to show that CWS was at least as risky a public utility enterprise as were energy utilities. We discussed these contentions in D.82-11-058 (Mimeo. p. 21) in that proceeding, concluding as follows:

"Little would be gained in going through the regulatory history which led to the reasons staff and we summarize as showing energy utilities to be generally more risky than water companies. The argument undoubtedly will persist whether this opinion be long or short. We concur with staff that known facts, rather than argument, are the best foundation for ratemaking decisions." (emphasis added.)

At the threshold of our consideration of the reasonable return on equity to be approved in the present proceeding, we are asked by applicant to reconsider our above opinion pertaining to relative risk. Contending that all known facts were not placed before the Commission at the time our 1982 opinion was formulated and that circumstances have since also drastically changed in several areas of consideration, applicant contends that it should be permitted opportunity to present contemporary facts and to air its position and views too. In that context it asserts that it presented Exhibit No. 4, entitled "Comparison of Financial Risk Between Water Utilities and Energy Utilities" (Exhibit No. 4, pursuant to the NOI time schedule, was distributed concurrently with staff's exhibits on September 23, 1983, 10 days before hearing began). Applicant has not in previous proceedings submitted any such exhibit, not having anticipated previously the need to address the issue. But in view of the Commission's 1982 opinion set forth above, applicant feels that it has since become obvious that unless it rights what it considers is an erroneous assumption, that assumption will now also be applied to it, and SJWC would be routinely granted inferior rates of return vis-a-vis electric utilities.

At the hearing, over vigorous objection by staff counsel,<sup>5</sup> applicant was permitted by the ALJ to present evidence supporting SJWC's contention that at the very least water utilities are as risky as the energy utilities and very likely more risky. We ratify the ALJ's ruling. He alone was in a position to determine whether, given the circumstances, time frame involved, and content of the presentation, the evidence offered would be relevant and material in this proceeding. When a hearing is conducted it must be a fair one which at least meets currently prevailing standards of impartiality. Opportunity must be given the parties not only to present evidence and support allegations by argument, however brief, but also to know the claims of the opposing party and to meet them. Anything less would violate elementary standards of due process. Applicant's evidence is not mere updated statistical data, rather it is evidence purporting to show change in contemporary facts which are materially relevant to the issue. The hearing process continually serves an educational purpose for the Commission, and should never be used to forestall introduction of evidence of changed circumstances, new facts or developments, or new or changed trends having a reasonable bearing on the issues present. The Commission is not bound by its past decisions. Otherwise, nothing could ever change nor could progress be achieved.

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<sup>5</sup> Staff counsel sought to exclude any evidence comparing risk on the grounds that it would be irrelevant; that the classes of utilities are inherently dissimilar having different capital requirements; that water utilities are less capital intensive, have short-term construction work-in-progress included in rate base, enjoy offset proceedings concurrent with general rate proceedings, and do not face drastically increasing fuel costs or the hazards of nuclear generation.

The most salient arguments put forward by the applicant and attendant facts, to which we have given careful consideration, include the following.

It is argued by applicant that while it is true that the capital requirements of the electric utilities on an overall basis dwarf those of the water utilities, on a plant investment per dollar of revenues basis the water utility is far more capital intensive. Applicant observes that electric utilities whose bonds are similarly rated with those of water utilities obtain lower interest rates on their bonds, which in applicant's view shows that the investing public considers the electrics to be less risky.

Applicant also asserts that while water utilities in effect get interest-free loans from advances for construction as staff contends, the resulting improvements do not enter rate base until refund is made. Under water utility 22% contracts, until refund only depreciation is recovered and water utilities, applicant notes, have longer depreciation lives than electrics with lesser annual depreciation amounts. Under the new 40-year contracts repayment will flow out ratably over the 40 years, but because that span is almost equal to the depreciable life, a water utility will not earn on the asset because advances are deducted from utility plant to arrive at rate base. Applicant points out that the above is not true for long-term debt as construction financed and completed with long-term debt goes into rate base immediately, and an electric utility earns on it in addition to depreciating it. Therefore, applicant believes, it can be said, at least for the immediate future, that the pluses and minuses of these construction advance monies, as contrasted to the bond funds required by the electrics, cancel each other out.

Another factor advanced for consideration by applicant is that while both classes of utilities can take advantage of procedures to offset cost increases incurred between general rate proceedings, the electrics are allowed interest on under-accruals in the balancing accounts, but there are no such allowances for the water utilities. ✓

Applicant also contends that changed circumstances for the present and immediate future serve to remove another distinction. Applicant disagrees with staff counsel's assertion that electric utilities presently face drastically increasing fuel costs. Applicant notes that at the recent annual meeting of the American Petroleum Institute, industry leaders pointed up the fact that upward pressures on oil prices generated out of the pickup of business activity and the continuing uncertainties about the Middle East are generally being offset by reduced demand because of energy conservation, with the result that crude oil prices are expected to remain near their current levels through 1984. Applicant contends that this serves to remove one big distinction in risk between water and electric utilities at the present. We must observe, however, that the escalating costs associated with nuclear generation plants more than replace the presently diminished fuel costs.

Applicant also would make much of the unique risks the water industry faces in its efforts to obtain expanded sources of satisfactory water supplies. Water, a finite natural resources, is increasingly difficult and costly to locate and develop, and applicant points out that the dollar cost involved to move good northern source water around the nominally tainted Delta to the Peninsula, central valley and south is so immense that only the State can provide the means. While for the 1980s electricians foresee slowing capital expenditures considering adequate energy supplies,<sup>6</sup> and have grounds for optimism in such developments as co-generation, wind, solar, etc. applicant states that no such alternatives are on the horizon for water utilities. Applicant also points up the increasing threat all water utilities face from growing pollution to existing supplies (examples being the industrial-agricultural

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<sup>6</sup> The Edison Electric Institute, an industry group, projects that construction spending will slow each year for several more years to reach a level in 1987 which would be 24% less than the 1983 level.

contamination problems being experienced in San Jose, Campbell, Palo Alto, Selma, etc. with attendant lawsuit exposures).<sup>7</sup>

Applicant asserts that water utilities are far more sensitive to changes in the weather than are electric utilities. In order to induce, maintain, and encourage conservation practices the Commission has weighted rate design components for water utilities to put heavy emphasis on consumption. But as the water utilities point out, with 22% of revenue coming from fixed service charges and 78% from consumption, given a drought, fixed service charges cannot cover fixed expenses, and the water utility faces financial problems. A 78-cent reduction in revenue results in only a 46-cent reduction in costs. A drought is a crisis for water utilities, applicant argues. During the 1976-1977 drought for example, SJWC's earnings dropped 23% according to applicant,<sup>8</sup> and drought year 1977 saw SJWC's earnings drop 35% in one year. But, according to applicant, during that same drought period the electric utilities enjoyed earnings increases.

After careful consideration of all the evidence submitted by both applicant and staff, and having again weighed the respective arguments introduced, we are still not convinced that our previously stated opinion of the relative risks involved is not fundamentally correct, at least at this time. Therefore, with an appreciation at mind of the difference in degree of the financial risk which at this time we find still exists between water and electric utilities, we will continue examining other factors, some tangible, some

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<sup>7</sup> Staff contends that SJWC, with deep wells and an automated system, faces no risk. It asserts that the utility can isolate any well if contamination should occur, thereby mitigating the situation and that it can rely upon legal remedies for third party contamination.

<sup>8</sup> The energy crisis-oil embargo years 1973-1974 saw Pacific Gas and Electric Company and Southern California Edison sales per customer drop about 9.5%, according to applicant.

intangible, which go into our consideration of the appropriate rate of return on common equity which should apply in this instance.

SJWC seeks a 16.50% return on common equity, 250 basis points above the midpoint of staff's recommendation. Staff recommends a range between 13.75 and 14.25%.

The rate of return on common equity, or the return on investment to investors, usually varies, in direct proportion to the risk of investing in the company, as this risk is perceived by investors. Both the utility and staff tested the overall reasonableness of their respective proposed rates of return on common equity in various analyses. As staff observed in its brief, this rate proceeding presents the unique situation of the Commission setting a rate of return for a water company that is financially quite soundly managed. Exhibits produced by staff showed that prudent management decisions have resulted in above average ratings in all financing categories when compared to other investor-owned water utilities in and outside California. Indeed, applicant's 12.91% five-year average earnings rate on average common equity was exceeded by only one of the California water utilities compared (Asuza Valley Water Company) and two of the outside of California water utilities. And applicant's 3.05 times interest earned rate was exceeded by only two of the California water utilities (Asuza Valley Water Company and San Gabriel Valley Water Company), and by none of the water utilities outside California. Staff contends that the financial risk in SJWC is less than that of most water utilities, noting the utility's stable financial history, its ability because of conservative and able management to generate much of its capital needs internally, making it more flexible in being able to avoid the capital market in times of high interest rates and to time plant additions. Because of this ability to internally generate funds it can retire maturing long-term debt, thus restructuring capital structure toward common equity and increasing after tax interest



coverage. The utility's past earnings performance and constant increase in annual dividends of approximately 10% since 1973 provide a basis for attractive future expectations. Staff's recommendations provide after tax interest coverage in 1984 of 3.42 x coverage, a significant improvement over 1982's 2.81 x coverage.

Applicant agrees that absent drought conditions it regularly has earned a higher proportion of its authorized rate of return than other water utilities and that it consistently has reinvested about 13% more of its earnings. But it notes that these are earned funds and that they did not just happen and provide no justification to give the utility a lower return on equity. While applicant concedes that it is impossible to measure precisely how much of this is attributable to good management, it does assert that good efficient management has played a vital role in the achievement. It is the relevance of this good management and good service to setting a return on common equity which splits the parties.

Applicant contends that staff now proposes to penalize the utility for its efficiency and good management by recommending a lower rate of return on equity than the Commission has recently granted to other major California water utilities which staff has classed as "enterprises with 'corresponding risks'."<sup>9</sup> These utilities were selected by staff because they assertedly are similar in total revenue, total plant, and are publicly held. If this is the fact, then why, SJWC asks, should it not receive at least the 14.50% being allowed these other similar water utilities with corresponding risks?

Staff responds by asserting that SJWC's investors have already reaped some of the rewards for outstanding financial

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<sup>9</sup> In staff's comparison: Asuza Valley Water Company, California American Water Company, California Water Service, Dominguez Water Corp., San Gabriel Valley Water Company, Southern California Water Company, and Southwest Water Company.

integrity in that their stock, thinly traded with dependable earnings, and reportedly being "high flying,"<sup>10</sup> is therefore more desirable and has an enhanced ability to attract capital. Accordingly, staff argues, since some of the rewards have already been reaped, a lesser return on equity is appropriate. Similarly, while agreeing that applicant provides quite satisfactory service, staff contends that service considerations, unless negative, should not enter the ratemaking procedure.

With these staff contentions we are not in full agreement. Success should not be penalized. Whatever the risks to be borne by a public utility, they have been concentrated in the common stock. And when management has done as good or a better job as other utility managements in its peer group in making and keeping its company an efficient, innovative, thoroughly modern, financially healthy operation while providing good service to its customers, its shareholders should not in turn be rewarded by being authorized a lesser return on equity than similar utilities with corresponding risks. Customers are indeed fortunate when they receive good service from an efficient up-to-date water utility competently run and financially sound. Therefore, in determining return on investment the Commission must take into consideration the quality of service being rendered, and preservation of that good service is a matter of fundamental concern in determining appropriate levels of return. What utility owners would be motivated to maintain quality service if the rewards for the considerable interest, skill, and effort required is to be merely a lower return?

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<sup>10</sup> Witness Meyer testified that the utility's thinly traded stock was high in May-June 1983 because of an article in Barrons derived from information Meyer characterized as being later confirmed as erroneous. The article linked SJWC as somewhat of a "high flyer."

In testing return on common equity recommendations against creditor and investor expectations both parties prepared various risk premium analyses. In its first analysis staff first obtained a historical average risk premium by comparing average earnings-price ratios of the common stocks of nine publicly traded water utilities for periods between 1974 and 1982 with the actual yields on 10- and 20-year Treasury Bonds over the same periods. To these historical risk premiums were added the 10- and 20-year Treasury Bond averages forecasted for 1984 and 1985 by DRI and UCLA. By this analysis staff obtained an expected return on common stock range between 13.34 and 14.83%. Staff's recommended range of return on common equity of 13.75 to 14.25% fits neatly into this.

But SJWC challenges the validity of staff's analysis, finding fault with staff's reliance on forecasts by DRI and UCLA, particularly in view of staff's poor record on forecasting in the past. SJWC argues that instead of such forecasts, staff should have used the applicable current Treasury Bond interest rates. SJWC points out that staff projections of interest rates applicable to Treasury Bonds which in the past have been based on DRI and UCLA forecasts consistently have been far below actual results.<sup>11</sup> In this instance the DRI and UCLA forecasts made earlier in 1983 for the third quarter of 1983, when averaged, projected the interest rates on Treasury Bonds to be 10.23%, whereas the actual rate for the third quarter of 1983 was 11.54%, a difference of 131 basis points or 12.8%! Applicant asserts that a variation of the magnitude of 131 basis points in forecasting less than six months into the future goes beyond the bounds of what might be called "an infirmity," and questions whether they show that degree of dependability which justifies the Commission relying on them for purposes of testing whether a recommended return on equity is, or is not, reasonable. Applicant observed that substituting DRI and UCLA forecasts for 10- and 20-year Treasury Bonds, subjected to a similar margin for error, either up or down, would produce a range from 12.03 to 16.4% instead of staff's 13.34 to 14.83%.

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<sup>11</sup> In A.82-03-94 staff conceded that DRI projections had proven substantially inaccurate in the past, but saw these as a useful guide to be considered with other data (see D.82-11-058 (11/17/82) p. 17). In A.59660 we also noted substantial divergences from the actual in DRI forecasts (see D.92604 (1/21/81) pp. 35-36).

Applicant deprecates staff's methodology in using such forecasted interest rates in risk premium analyses, pointing out that an investor, when determining between potential investments and applying risk premium analysis, makes his decision based on what his investment alternatives are at that time, and applies current interest rates to determine or test return from equity based on orthodox risk premium methodology. Had this been done here, the result would have been a range of expected return on common of from 14.12 to 15.50%, instead of staff's 13.75 to 14.25%. As used, the forecasts were self-serving according to applicant. Staff's answer is that current interest rates provide no trend; that using today's interest rates for 1984 to 1986 would be setting rates based on stale financial data.<sup>12</sup>

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<sup>12</sup> On cross-examination staff's witness categorized forecasting interest rates as a precise science, and stated that according to an article he recently had read, DRI and UCLA were proven to be two of the best forecasters; the standard of their reliability having been their degree of variance from actual. However, the witness could not recall the degree of variance other than to assert it was minimal. While recognizing the uncertainties inherent in the forecasting procedure, nonetheless, for purposes of developing a risk premium analysis, he prefers those uncertainties against use of the current rates because the resulting rates are being set for the future.

Staff's second risk premium analysis test took an average implied risk premium derived from the differences between the return authorized in each of the last three rate decisions applicable to SJWC (1975, 1978, and 1981), and the respective costs of embedded debt, and added to that average the indicated cost of embedded debt for each of the next three years, to obtain an anticipated return on common equity of 13.68, 13.83, and 13.94%, respectively, for 1984, 1985, and 1986. The purpose of this test was to show that staff's recommendation of a range from 13.75 to 14.25% was in line with past Commission decisions applicable to SJWC.

Staff further tested its recommended range by running a discounted cash flow test. Conceptually this test is based upon the assumption that the rate of return an investor can expect to earn on a particular stock would be that rate earned on stocks in comparable investments. This expectation, the investor's "discount rate," is derived from the dividend yield currently to be obtained plus the expected growth rate of future dividends. Applying this test, staff asserts that it determined that the investor's discount rate would indicate a return on common equity ranging from 13.60 to 14.37% for SJWC common stock.<sup>13</sup>

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<sup>13</sup> Staff observed that for the 10-year period 1973 through 1982, SJWC's common stock's book value increased more than 73%; that net income available for that stock increased 76% of \$37.2 million (of which \$19.4 million was paid out in dividends). Staff further concludes that the trend toward an increase in common equity (41.44% to 49.04%) over that 10-year period leads investors to consider investment in SJWC to be less risky than in a utility with a lower rate, thus tending to reduce future earnings expectations. Staff compared SJWC's rate of return expectancy to the 12.70 to 13.24% expectancy it ascribes to the average water utility.

Applicant again takes exception to staff's methodology, contending first that proper methodology would be to use the "dividend expected in the next time period," not the last dividend paid,<sup>14</sup> and second, that staff, in view of fluctuations in the market and the thinly traded nature of applicant's stock, instead of using the stock price at one point in time (and that outdated by three months), should have averaged the most recent six months' stock market price of the utility's stock to obtain an average yield. Applicant observes that if the expected dividend rate applicable to the August 1, 1983-July 31, 1984 period, averaged to \$2.50, were used, as well as a six-month average of common stock calculated at \$31.86, the result would be a yield of 7.83% and a return on equity of 14.35%.

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<sup>14</sup> Applicant insists that flaws in the staff procedure render the results of its analysis of questionable or little value. Applicant testified that the methodology calls for the yield using the "dividend expected in the next time period," and that supported by SJWC's past history the dividend should be increased 20 cents in January 1984, and that "expected dividend" should be used in the analysis.

The determination of a fair and reasonable return on equity is not one which can be made by the application of precise formulas or mathematical calculations. At best it is an imprecise art which relies upon the exercise of informed judgment; judgment derived from consideration of many factors and circumstances. It must result in rates which attain a viable balance between the interests of the investors and the consumers. We observe that the returns on equity that we have authorized since 1978 to water companies have trended steadily upward as inflation and interest rates have risen. While inflation at last appears to have been reduced to acceptable levels, interest rates continue high. We appreciate the difficulties of projecting future interest costs in these times. Until recently the major argument over interest rates was whether they would decline significantly or stay about where they were. But by and large the argument now is whether interest rates will remain stable or move higher again.<sup>15</sup>

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<sup>15</sup> See: Clark, "The Outlook, Will Interest Rates Stay High-or Rise?" The Wall Street Journal (Palo Alto), November 14, 1983, at 1, Col 5.



As noted earlier we have allowed a 14.50% return on equity in the four most recent major water utility rate proceedings.<sup>16</sup> These all involved utilities staff has included in its report in this proceeding as being enterprises with corresponding risks. We are also aware that returns averaging 16.00% have been allowed this year to electric utilities. Were we to allow SJWC the 16.50% it seeks, it would be granting SJWC more than the return allowed the electric and an increase of 200 basis points above the return allowed the water utilities. This we will not do. However, wish to affirm that just as we penalize inefficiency and incompetency which results in poor service, we intend to recognize efficiency and competency resulting in good service and stable financial condition. As staff recognized, we here deal with a water utility that is financially soundly managed and providing quite satisfactory service to its customers. After consideration of all the evidence and for the purposes of this proceeding we believe that a fair and reasonable return on equity to allow SJWC during the 1984-1986 period would be 14.50%. Table 2 which follows reflects the adopted rate of return:

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<sup>16</sup> San Gabriel Valley Water Co. D.83-10-002, October 5, 1983.  
So. Calif. Water (var. districts) D.83-03-063, April 1983.  
Calif. Water Service Co. (var. districts) D.83-12-037,  
December 1983.  
Calif.-American Water Co. (Monterey District) D.82-12-122,  
December 1982.

Table 2

SAN JOSE WATER COMPANY  
Adopted Rate of Return

<u>Component</u>	<u>Capitalization Ratio</u>	<u>Cost Factor</u>	<u>Weighted Cost</u>	<u>After Tax Interest Coverage</u>
<u>Average Year 1984</u>				
Long-term Debt	41.00%	8.14%	3.34%	3.50
Preferred Stock	3.00	8.08	.24	
Common Equity	<u>56.00</u>	14.50	<u>8.12</u>	
Total	100.00%		11.70%	
<u>Average Year 1985</u>				
Long-term Debt	41.00%	8.29%	3.40%	3.45
Preferred Stock	3.00	8.03	.24	
Common Equity	<u>56.00</u>	14.50	<u>8.12</u>	
Total	100.00%		11.76%	
<u>Average Year 1986</u>				
Long-term Debt	41.00%	8.40%	3.44%	3.43
Preferred Stock	3.00	8.00	.24	
Common Equity	<u>56.00</u>	14.50	<u>8.12</u>	
Total	100.00%		11.80%	

Note: To compensate for financial attrition, staff recommended increases in rate of return of 0.06% and 0.04%, respectively, for years 1985 and 1986 based on estimates of the increased cost of average embedded debt. SJWC's financial attrition will result from retirement of their Series D, E, and F bonds during 1984, 1985, and 1986, respectively, increasing the cost factor of long-term debt from 1984's 8.14% to 8.29% in 1985, and to 8.40% in 1986.

Table 3, our adopted Summary of Earnings, follows. It reflects the operating revenues which would be provided at present rates and those which will be required to produce the 14.50% return on common equity we are authorizing for the test years.

Table 3

SAN JOSE WATER COMPANY  
Adopted Summary of Earnings  
 (Thousands of Dollars)

	<u>Test Year 1984</u>	<u>Test Year 1985</u>
<u>At Present Rates</u>		
Operating Revenues	\$47,863.0	\$48,267.9
<u>Operating Expenses</u>		
Subtotal	30,156.1	30,978.7
Depreciation	3,832.1	4,008.4
Uncollectibles	141.9	143.0
Franchise & User Tax	822.5	829.5
State Corp. Franchise Tax	779.5	722.6
Federal Income Tax	<u>3,756.6</u>	<u>3,578.7</u>
Total Operating Expenses	39,488.7	40,260.9
Net Operating Revenue	8,374.3	8,007.0
Rate Base	91,888.5	93,540.6
Rate of Return	9.11%	8.56%
<u>At Rate Levels Adopted</u>		
Operating Revenues	52,831.7	54,526.0 ✓
<u>Operating Expenses</u>		
Subtotal	30,156.1	30,978.7
Depreciation	3,832.1	4,008.4
Uncollectibles	156.6	161.6
Franchise & User Tax	907.9	937.0
State Corp. Franchise Tax	1,246.9	1,311.3
Federal Income Tax	<u>5,781.1</u>	<u>6,128.6</u>
Total Operating Expenses	42,080.7	43,525.6
Net Operating Revenue	10,751.0	11,000.4
Rate Base	91,888.5	93,540.6
Rate of Return	11.70%	11.76%

Contrasting the Operating Revenues set forth in Table 3, it is apparent that the rates of return which we are authorizing SJWC will produce additional revenues of \$4,968,700 in 1984, an increase of 10.38% over the revenues which the existing rates would produce. In 1985 an additional \$1,247,400 will be produced, an increase of 2.34%. In conformity with our stated requirement that Class A water utilities not file general rate applications more frequently than once each three years, a third set of rates in the form of a step increase will be authorized for 1986 to allow for attrition, both operational and financial, after 1985. The operational component, as indicated by the decline in the rate of return at authorized rates, is 0.58%. The financial component is represented by the difference of 0.04 percentage points between the rates of return we adopted (see Table 2) for 1984 and 1985, respectively, (11.90% and 11.94%). To offset this combined 0.62% (0.58% + 0.04%) operational and financial attrition we will authorize a 1986 step rate increase of \$1,212,500.<sup>17</sup>

On or after November 15, in the years 1984 and 1985, SJWC will be authorized to file advice letters (with appropriate work papers) to justify implementation of the step rate increases herein postulated for each of years 1985 and 1986. These supplemental filings will permit review of achieved rates of return before each step rate is authorized.

Finally, turning to rate design, we note that SJWC proposed that the total rate increase be spread proportionately between General Metered Service and Resale Service. Staff posed no objections. We will adopt the proposal.

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<sup>17</sup> Using the formula: Rate Base x Rate of Combined Operational and Financial Attrition x Net-to-Gross Multiplier = Step Increase, we find:

$$\$93,540,600 \times 0.62\% \times 2.09074 = \underline{\$1,212,500.}$$

In this proceeding SJWC joined other water utilities which have in previous recent proceedings asked the Commission to address the problem of more realistic and appropriate distribution of rates between the service charge and the consumption charge. In this proceeding SJWC asked that service charges for General Metered Service be increased so as to provide 30% of the revenues rather than the present 21.8%. Staff opposes any change. SJWC illustrated how the present rate design concept during drought periods results in a financial crisis for the utility. This is a festering problem which keeps surfacing in rate proceedings. SJWC argues that staff has produced nothing to support the conclusion contained in its report that the utility's design proposal would in any way serve to lower consumption incentive. However, the utility also feels that the matter is of sufficiently broad interest and concern to merit a generic proceeding, and asks that the Commission soon address this problem. In that the subject continually surfaces and remains unresolved we will direct staff to prepare a report in 1984

addressing this issue and that this report will be submitted to the industry for comment before further proceeding. Meanwhile, we will in this instance spread the rate increases authorized to maintain the existing relationship between service and commodity charges. Rate design will also maintain the lifeline differential of 25% consistent with Commission policy in recent other water utility proceedings.

Appendix A to this decision sets forth the rate structure approved to be made effective for the year 1984. Appendix B contains the step increases authorized for 1985 and 1986. In that rates very likely will be revised through advice letter offsets in the period ahead, it is doubtful that schedules for 1985 and 1986 predicated upon rates authorized for 1984 would be the current rates at the time the step rate advice letter filings are to be made. Accordingly, the increases contained in Appendix B can be added to the rates that would otherwise be in effect on the date the particular step increase

is to go into effect in order to develop the appropriate rates for filing. The compilation of adopted quantities and the adopted tax calculation are contained in Appendix C to this decision.

The rates of return found reasonable in this application were determined and based upon the effect of the rate increase for the full year 1984. Anything else will serve only to distort results. Accordingly, in that the only active participants to the proceeding are applicant and the Commission staff, the resulting order should be effective the date of signature.

#### Findings of Fact

1. Applicant's service territory is efficiently served with satisfactory results and water quality with due concern for conservation.

2. Applicant requires additional revenues, but the rates it proposes would produce an unjustified rate of return.

3. The adopted Results of Operations (Table 1) for test years 1984 and 1985, setting forth operating revenues and expenses at present rates, and rate base reasonably indicates the results of SJWC's operations which can be expected for the two test years.

4. A rate of return on common equity of 14.50% at this time will provide revenues sufficient for operating expenses and a reasonable coverage for the costs of capital, while assuring confidence in the financial integrity of the enterprise, and providing a balance in the interests of the investor and the consumers.

5. It is reasonable in this proceeding to adopt staff's average capitalization ratios for years 1984, 1985, and 1986, and to use them in this proceeding to compute rates of return.

6. Rates of return of 11.70%, 11.76%, and 11.80%, respectively, on applicant's rate base for 1984, 1985, and 1986 are reasonable.

7. A decline of 0.58% at adopted rates for test years 1984 and 1985, and a decline of 0.04% on the basis of adopted rates from 1985, respectively, represent reasonable estimates of operational and financial attrition to be expected and are combined in developing the step rate increase to be applicable to 1986 rates.

8. The adopted rate of return will require an increase of \$4,966,700, or 10.38%, in annual revenue for 1984, an increase of \$1,247,400 or 2.34% in 1985, and a further increase of \$1,212,500 or 2.22% in 1986.

9. The adopted rate design is reasonable.

10. The increased rates and charges authorized herein are justified and reasonable; and the present rates and charges, insofar as they differ from those prescribed herein, are for the future unjust and unreasonable.

11. The further increases authorized in Appendix B should be appropriately modified in the event the rate of return on rate base, adjusted to reflect the rates then in effect together with normal ratemaking adjustments for the 12 months ended September 30, 1984 and/or September 30, 1985, exceeds 11.70% and 11.76%, respectively.

12. The calculation of adopted quantities and the adopted tax calculation are contained in Appendix C of this decision.

#### Conclusions of Law

1. The application should be granted to the extent provided by the following order, the adopted rates and charges being just, reasonable, and nondiscriminatory.

2. The effective date of the following order should be the date of signature since there is an immediate need for the rate increase.

O R D E R

## IT IS ORDERED that:

1. After the effective date of this order, applicant San Jose Water Company (SJWC) is authorized to file the revised rate schedules attached to this order as Appendix A. Such filing shall comply with General Order No. 96-A. The effective date of the revised schedules shall be four days after the date of filing. The revised schedules shall apply to service rendered on and after their effective date.

2. On or after November 15, 1984, SJWC is authorized to file an advice letter, with appropriate work papers, requesting the step rate increases attached to this order as Appendix B, or to file a lesser increase in the event that SJWC's rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments, for the 12 months ended September 30, 1984, exceeds 11.70%. Such filing shall comply with General Order No. 96-A. The requested step rates shall be reviewed and approved by the Commission prior to becoming effective. The effective date of the revised schedule shall be no earlier than January 1, 1985, or 30 days after the filing of the step rates, whichever is later. The revised schedules shall apply only to service rendered on and after the effective date thereof.

3. On and after November 15, 1985, SJWC is authorized to file an advice letter, with appropriate work papers, requesting the step rate increases attached to this order as Appendix B, or to file a lesser increase in the event that SJWC's rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ended September 30, 1985, exceeds 11.76%. Such filing shall comply with General Order No. 96-A. The requested step rates shall be reviewed and approved by the Commission prior to becoming effective. The effective date of the revised



schedules shall be no earlier than January 1, 1986, or 30 days after the filing of the step rates, whichever is later. The revised schedules shall apply only to service rendered on and after the effective date thereof.

This order is effective today.

Dated JAN 19 1984, at San Francisco, California.

LEONARD M. GRIMES, JR.  
President

VICTOR CALVO

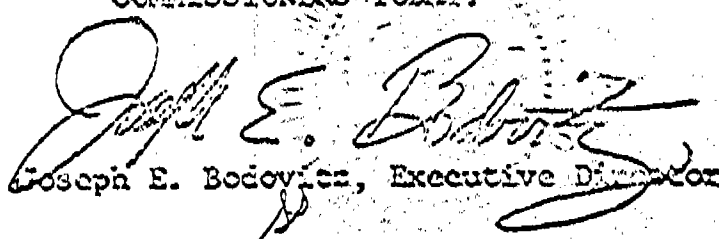
PRISCILLA C. GREW

DONALD VIAL

WILLIAM T. BAGLEY

Commissioners

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

  
Joseph E. Bodovitz, Executive Director

## APPENDIX A

Page 1

Schedule No. 1

GENERAL METERED SERVICEAPPLICABILITY

Applicable to general metered water service.

TERRITORY

Portions of Cupertino, San Jose and Santa Clara, and in Campbell, Los Gatos, Monte Sereno, and Saratoga and in contiguous territory in the County of Santa Clara.

RATES

## Service Charge:

For 5/8 x 3/4-inch meter . . . . .	\$ 4.15
For 3/4-inch meter . . . . .	5.20
For 1-inch meter . . . . .	6.90
For 1-1/2-inch meter . . . . .	9.40
For 2-inch meter . . . . .	12.00
For 3-inch meter . . . . .	24.00
For 4-inch meter . . . . .	32.00
For 6-inch meter . . . . .	50.00
For 8-inch meter . . . . .	76.00
For 10-inch meter . . . . .	102.00

(I)

The Service Charge is a readiness-to-serve charge, to which is to be added the monthly charge computed at the Quantity Rates.

## Quantity Rates:

First 300 cu. ft., per 100 cu. ft. . . . .	0.574
Over 300 cu. ft., per 100 cu. ft. . . . .	0.790

(I)

SPECIAL CONDITION

Customers who receive water deliveries for agricultural purposes under this schedule, and who present evidence to the utility that such deliveries qualify for the lower pump tax rates levied by the Santa Clara Valley Water District for agricultural water, shall receive a credit of 13.7 cents per 100 cubic feet on each water bill for the quantities of water used during the period covered by that bill.

## APPENDIX A

Page 2

Schedule No. 6

RESALE SERVICEAPPLICABILITY

Applicable to all water service furnished for resale purposes.

TERRITORY

Portions of Cupertino, San Jose and Santa Clara, and in Campbell, Los Gatos, Monte Sereno, and Saratoga and in contiguous territory in the County of Santa Clara.

RATES

Service Charge:		Per Meter Per Month
For 5/8 x 3/4-inch meter . . . . .		\$ 3.70
For 3/4-inch meter . . . . .		4.20
For 1-inch meter . . . . .		5.60
For 1-1/2-inch meter . . . . .		7.60
For 2-inch meter . . . . .		10.00
For 3-inch meter . . . . .		18.00
For 4-inch meter . . . . .		27.00
For 6-inch meter . . . . .		41.00
For 8-inch meter . . . . .		63.00
For 10-inch meter . . . . .		88.00

## Quantity Rates:

Per 100 cu. ft. . . . . 0.514

The Service Charge is a readiness-to-serve charge, to which is to be added the monthly charge computed at the Quantity Rates.

(END OF APPENDIX A)

## APPENDIX B

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

SCHEDULE #1

## Service Charges:

For 5/8 x 3/4-inch meter .....	\$ 0.10	\$ 0.10	✓
For 3/4-inch meter .....	0.20	0.10	
For 1-inch meter .....	0.20	0.20	
For 1 1/2-inch meter .....	0.30	0.30	
For 2-inch meter .....	0.50	0.00	✓
For 3-inch meter .....	1.00	0.00	✓
For 4-inch meter .....	1.00	1.00	
For 6-inch meter .....	2.00	1.00	
For 8-inch meter .....	3.00	2.00	
For 10-inch meter .....	4.00	2.00	

## Quantity Rates:

For the first 300 cu. ft., per 100 cu. ft. ....	0.011	0.010
For all over 300 cu. ft., per 100 cu. ft. ....	0.016	0.018

SCHEDULE #6

## Service Charges:

For 5/8 x 3/4-inch meter .....	0.10	0.05	
For 3/4-inch meter .....	0.10	0.10	
For 1-inch meter .....	0.10	0.20	
For 1 1/2-inch meter .....	0.20	0.20	
For 2-inch meter .....	0.00	0.50	
For 3-inch meter .....	0.00	1.00	
For 4-inch meter .....	1.00	0.00	✓
For 6-inch meter .....	1.00	1.00	
For 8-inch meter .....	2.00	1.00	
For 10-inch meter .....	2.00	2.00	

## Quantity Rate:

Per 100 cu. ft. ....	0.013	0.011
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(END OF APPENDIX B)

## APPENDIX C

Page 1

Adopted Quantities

Company: San Jose Water Co.

	1984	1985
1. <u>Water Production: CcF (1000)</u>	58,889	59,384
Wells:	33,750	33,698
Surface Supply:	5,615	5,615
Purchased Water:	19,524	20,071
2. <u>Purchased Water Expenses</u>		
Santa Clara Valley Water District (7-1-83)		
Purchased Water: AF	44,821	46,077
Unit Cost: S/AF	\$150	\$150
Cost	\$6,723,000	\$6,912,000
3. <u>Pump Tax</u>		
Santa Clara Valley Water District (7-1-83)		
Quantity: AF	77,479	77,360
Unit Cost: S/AF	\$80	\$80
Cost	\$6,198,000	\$6,189,000
4. <u>Purchased Power</u>		
Supplier: P.G.E. (7-1-83)		
Production: KCCF	58,889	59,384
Kwh per CcF	1.0273	1.0273
Kwhr	60,496,669	61,005,183
Unit Cost: S/Kwhr	\$0.067672	\$0.067672
Cost	\$4,093,900	\$4,128,400
5. <u>Ad Valorem Taxes</u>		
Tax Rate	\$1,389,300 1.1163%	\$1,446,300 1.1163%

## APPENDIX C

Page 2

6. Number of Services

	Schedule #1		Schedule #6	
	1984	1985	1984	1985
5/8 x 3/4	162,093	163,294	0	0
3/4	4,486	4,519	1	1
1	18,011	18,148	5	5
1 1/2	2,002	2,019	3	3
2	2903	2932	16	16
3	825	837	3	3
4	287	292	1	1
6	132	133	1	1
8	41	41	1	1
10	5	5	0	0
	<u>190,785</u>	<u>192,220</u>	<u>31</u>	<u>31</u>

7. Meter Sales (CCF)

0-3	6,598,000	6,647,000	0	0
Over 3	<u>46,772,000</u>	<u>47,174,000</u>	<u>235,000</u>	<u>235,000</u>
	53,370,000	53,821,000	235,000	235,000

## 8.

	No. of Service		Usage - KCCF		Avg. Usage CCF/Yr	
	1984	1985	1984	1985	1984	1985
Commercial	189,200	190,600	48511.	48,870.	256.4	256.4
Public Authority	1,244	1,274	3732.	3822.	3,000	3,000
Industrial	96	96	1050.	1050.	10,938	10,938
Other	245	250	77.	79.	—	—
Other Utilities	31	31	235.	235.	—	—
Subtotal	190,816	192,251	53605.	54,056		
Private Fire Prot.	1530	1595				
Total	<u>192,346</u>	<u>193,846</u>				
Water Loss: 8.97%			<u>5284</u>	<u>5328</u>		
Total Water Produced			58,889	59,384		

APPENDIX C  
Page 3

Income Tax Calculation

	<u>1984</u>	<u>1985</u>
	(Thousands of Dollars)	
Operating Revenue	52,831.7	54,526.0
Expenses		
Payroll	5679.0	5940.2
Purchased Power	4093.9	4128.4
Purchased Water	6723.0	6912.0
Pump Tax	6198.0	6189.0
Other O & M	2924.6	3047.0
Other A & E	2743.4	2874.0
Franchise (01.72362%)	907.9	937.0
Uncollectibles (0.29635%)	156.6	161.6
Taxes Other	1794.2	1888.1
Trans. Dep.	87.4	102.4
Soc. Sec. Taxes Cap.	74.5	83.0
Interest	3384.3	3303.8
Total Deduction	34,766.8	35,566.5
State Tax Depreciation	5076.5	5300.2
Net Taxable Income	12,987.9	13,659.3
State Corp. Franch. Tax 9.6%	1246.9	1311.3
Federal Tax Depreciation	4065.0	4140.8
State Income Tax	1246.9	1311.3
Prof. Stock Div. Credit	10.8	10.8
Net Taxable Income	12742.2	13,496.6
Fed. Income Tax 46%	5861.4	6208.4
Less Grad. Tax Adj.	20.2	20.2
Less ITC	60.1	59.6
Total Federal Income Tax	5781.1	6128.0

Net to Gross Multiplier: 2.09074

Book Depreciation: \$3,832,100 (1984), \$4,008,400 (1985)

(END OF APPENDIX C)

## APPENDIX D

## SAN JOSE WATER COMPANY

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1984.

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

Monthly Usage (Cubic Feet)	At Present Rates	At Authorized Rates	Percent Increase
300	\$ 5.31	\$ 5.87	10.58%
500	6.74	7.47	10.56
1,000	10.32	11.40	10.54
2,000	17.47	19.30	10.52
2,137 (Average)	18.44	20.38	10.52
3,000	24.62	27.20	10.51
5,000	38.92	43.00	10.50
10,000	74.66	82.50	10.50

(END OF APPENDIX D)



The most salient arguments put forward by the applicant and attendant facts, to which we have given careful consideration, include the following.

It is argued by applicant that while it is true that the capital requirements of the electric utilities on an overall basis dwarf those of the water utilities, on a plant investment per dollar of revenues basis the water utility is far more capital intensive. Applicant observes that electric utilities whose bonds are similarly rated with those of water utilities obtain lower interest rates on their bonds, which in applicant's view shows that the investing public considers the electrics to be less risky.

Applicant also asserts that while water utilities in effect get interest-free loans from advances for construction as staff contends, the resulting improvements do not enter rate base until refund is made. Under water utility 22% contracts, until refund only depreciation is recovered and water utilities, applicant notes, have longer depreciation lives than electrics with lesser annual depreciation amounts. Under the new 40-year contracts repayment will flow out ratably over the 40 years, but because that span is almost equal to the depreciable life, a water utility will not earn on the asset because advances are deducted from utility plant to arrive at rate base. Applicant points out that the above is not true for long-term debt as construction financed and completed with long-term debt goes into rate base immediately, and an electric utility earns on it in addition to depreciating it. Therefore, applicant believes, it can be said, at least for the immediate future, that the pluses and minuses of these construction advance monies, as contrasted to the bond funds required by the electrics, cancel each other out.

Another factor advanced for consideration by applicant is that while both classes of utilities can take advantage of procedures to offset cost increases incurred between general rate proceedings, the electrics are allowed interest on under-accruals in the balancing accounts, but there are no such allowances for the water utilities.

Table 3, our adopted Summary of Earnings, follows. It reflects the operating revenues which would be provided at present rates and those which will be required to produce the 14.50% return on common equity we are authorizing for the test years.

Table 3

SAN JOSE WATER COMPANY  
Adopted Summary of Earnings  
 (Thousands of Dollars)

	<u>Test Year 1984</u>	<u>Test Year 1985</u>
<u>At Present Rates</u>		
Operating Revenues	\$47,863.0	\$48,267.9
<u>Operating Expenses</u>		
Subtotal	30,156.1	30,978.7
Depreciation	3,832.1	4,008.4
Uncollectibles	141.9	143.0
Franchise & User Tax	822.5	829.5
State Corp. Franchise Tax	779.5	722.6
Federal Income Tax	<u>3,756.6</u>	<u>3,578.7</u>
Total Operating Expenses	39,488.7	40,250.9
Net Operating Revenue	8,374.3	8,007.0
Rate Base	91,888.5	93,540.6
Rate of Return	9.11%	8.56%
<u>At Rate Levels Adopted</u>		
Operating Revenues	52,831.7	53,555.4
<u>Operating Expenses</u>		
Subtotal	30,156.1	30,978.7
Depreciation	3,832.1	4,008.4
Uncollectibles	156.6	161.6
Franchise & User Tax	907.9	937.0
State Corp. Franchise Tax	1,246.9	1,311.3
Federal Income Tax	<u>5,781.1</u>	<u>6,128.6</u>
Total Operating Expenses	42,080.7	43,525.6
Net Operating Revenue	10,751.0	11,000.4
Rate Base	91,888.5	93,540.6
Rate of Return	11.70%	11.76%

## APPENDIX A

Page 1

Schedule No. 1

GENERAL METERED SERVICEAPPLICABILITY

Applicable to general metered water service.

TERRITORY

Portions of Cupertino, San Jose and Santa Clara, and in Campbell, Los Gatos, Monte Sereno, and Saratoga and in contiguous territory in the County of Santa Clara.

RATES

## Service Charge:

For 5/8 x 3/4-inch meter . . . . .	\$ 4.55
For 3/4-inch meter . . . . .	5.70
For 1-inch meter . . . . .	7.60
For 1-1/2-inch meter . . . . .	10.30
For 2-inch meter . . . . .	13.50
For 3-inch meter . . . . .	26.00
For 4-inch meter . . . . .	35.00
For 6-inch meter . . . . .	55.00
For 8-inch meter . . . . .	83.00
For 10-inch meter . . . . .	112.00

(I)

The Service Charge is a readiness-to-serve charge, to which is to be added the monthly charge computed at the Quantity Rates.

## Quantity Rates:

First 300 cu. ft., per 100 cu. ft. . . . .	0.529
Over 300 cu. ft., per 100 cu. ft. . . . .	0.773

(I)

SPECIAL CONDITION

Customers who receive water deliveries for agricultural purposes under this schedule, and who present evidence to the utility that such deliveries qualify for the lower pump tax rates levied by the Santa Clara Valley Water District for agricultural water, shall receive a credit of 13.7 cents per 100 cubic feet on each water bill for the quantities of water used during the period covered by that bill.

## APPENDIX B

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

SCHEDULE #1

## Service Charges:

For 5/8 x 3/4-inch meter	.....	\$ 0.15	\$ 0.10
For 3/4-inch meter	.....	0.20	0.10
For 1-inch meter	.....	0.20	0.20
For 1 1/2-inch meter	.....	0.30	0.30
For 2-inch meter	.....	0.50	0.50
For 3-inch meter	.....	1.00	1.00
For 4-inch meter	.....	1.00	1.00
For 6-inch meter	.....	2.00	1.00
For 8-inch meter	.....	3.00	2.00
For 10-inch meter	.....	4.00	2.00

## Quantity Rates:

For the first 300 cu. ft., per 100 cu. ft.	.....	0.011	0.010
For all over 300 cu. ft., per 100 cu. ft.	.....	0.016	0.018

SCHEDULE #6

## Service Charges:

For 5/8 x 3/4-inch meter	.....	0.10	0.05
For 3/4-inch meter	.....	0.10	0.10
For 1-inch meter	.....	0.10	0.20
For 1 1/2-inch meter	.....	0.20	0.20
For 2-inch meter	.....	0.00	0.50
For 3-inch meter	.....	0.00	1.00
For 4-inch meter	.....	1.00	1.00
For 6-inch meter	.....	1.00	1.00
For 8-inch meter	.....	2.00	1.00
For 10-inch meter	.....	2.00	2.00

## Quantity Rate:

Per 100 cu. ft.	.....	0.013	0.011
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(END OF APPENDIX B)

## APPENDIX D

## SAN JOSE WATER COMPANY

Comparison of typical bills for residential metered customers of various usage level and average level at present and authorized rates for the year 1984.

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

Monthly Usage (Cubic Feet)	At Present Rates	At Authorized Rates	Percent Increase
300	\$ 5.31	\$ 6.14	15.68
500	6.74	7.68	14.0
1,000	10.32	11.55	12.0
2,000	17.47	19.28	10.4
2,137 (Average)	18.44	20.33	10.3
3,000	24.62	27.01	9.7
5,000	38.92	42.47	9.1
10,000	74.66	81.12	8.6