

ORIGINAL

Decision No. 82361

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of JACKSON WATER WORKS, INC.,  
to increase its rates and charges for its  
water system serving the City of Jackson  
and adjacent territory in Amador County.

Application No. 53288  
(Filed April 25, 1972)

Weyman I. Lundquist, Attorney at Law,  
and Jack O. Sanders, for applicant.  
David H. Rule, Attorney at Law,  
Dennis M. King, and Bruce McKnight,  
for City of Jackson, protestant.  
Victor W. Evans, for himself,  
interested party.  
William C. Bricca, Attorney at Law, and  
John Reader, for the Commission staff.

O P I N I O N

By this application, Jackson Water Works, Inc., a wholly owned subsidiary of Citizens Utilities Company of Delaware<sup>1/</sup> (Citizens Delaware) requests an increase in rates for metered water service which is designed to increase annual revenues in the test year by \$42,300 over the rates now in effect.

Public hearing was held at Jackson on March 6 and 7, 1973. The matter was submitted on April 11, 1973 upon receipt of various late-filed exhibits. Copies of the application had been served and notice of hearing had been published, posted, and mailed in accordance with this Commission's Rules of Procedure.

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<sup>1/</sup> Citizens Delaware is a utility which provides gas, electric, telephone, and water services in over 550 communities in many states across the nation.

Oral and written testimony on behalf of applicant was presented by one of its assistant vice presidents, a controller for the California operations of Citizens Utilities Company, and by Citizens' Systems Engineer. The Commission staff presentation was made by a rate of return expert, an accountant, and three engineers. Thirty-four members of the public attended the hearing of whom seven testified regarding their view of applicant's operation. The record contains 236 pages of transcript and 10 exhibits.

#### Summary of Earnings

A summary of applicant's and staff's estimated year 1973 earnings as presented in Exhibits 1 and 4 is:

Item	Exhibit 1		Exhibit 4			
	Applicant		Staff		Applicant	
	Present	Proposed	Present	Proposed	Exceeds Staff	
	Rates	Rates	Rates	Rates	Present	Proposed
(Dollars in Thousands)						
Operating Revenues	\$ 86.2	\$130.7	\$ 89.6	\$135.2	\$ (3.4)	\$ (4.5)
<u>Operating Expenses</u>						
Oper. & Maint.	52.9	53.0	49.6	49.7	3.3	3.3
Admin. & Gen.	18.7	18.7	13.0	13.0	5.7	5.7
Depreciation	11.3	11.3	11.6	11.6	(.3)	(.3)
Taxes - Except Income	10.4	11.0	10.2	10.8	.2	.2
Income Taxes	-	1.0	(20.1)	3.6	20.1	(2.6)
Total Expenses	\$ 93.3	\$ 95.0	\$ 64.3	\$ 88.7	\$ 29.0	\$ 6.3
Net Operating Revenue	(7.1)	35.7	25.3	46.5	(32.4)	(10.8)
Average Rate Base	470.8	470.8	455.4	455.4	15.4	15.4
Rate of Return	-	7.58%	5.56%	10.21%	(5.56)%	(2.63)%

(Red Figure)

Operating Revenues

According to the staff, the operating revenues shown in the summary of earnings can be considered as comprising three categories: Commercial metered excluding large customers, large commercial metered customers, and others. Staff's and applicant's estimates for these three categories are compared in the following tabulation, where it is shown that differences occur in commercial metered excluding large customers. To a lesser extent differences also exist in large commercial metered customers.

Comparison of Estimated Revenues - 1973

Revenue Category	Applicant		Staff		Applicant Exceeds Staff	
	Present	Proposed	Present	Proposed	Present	Proposed
	Rates	Rates	Rates	Rates	Rates	Rates

(Dollars in Thousands)

Commercial Metered Excluding Large Customers	\$ -	\$116.8	\$78.9	\$120.5	\$ -	\$(3.7)
Large Commercial Metered	-	11.0	7.8	11.8	-	(0.8)
Total Metered	83.3	127.8	86.7	132.3	(3.4)	(4.5)
Other Fire Prot., etc.	2.9	2.9	2.9	2.9	-	-
Total Revenue	\$86.2	\$130.7	\$89.6	\$135.2	\$(3.4)	\$(4.5)

(Red Figure)

The difference shown in the tabulation for commercial metered excluding large customers is due to staff and applicant having used different methods of estimating water consumption. Applicant's method consisted essentially of examining five-year averages of recorded consumption figures, unadjusted for varying weather conditions, and arriving at a judgment figure of 164 ccf per customer for the test year 1973. The staff, on the other hand, estimated

consumption and trend in consumption by means of the so-called "Modified Bean" method of multiple correlation analysis which adjusts or normalizes recorded data for year-to-year changes in weather conditions. Applicant testified that a "correlation chart" which it had plotted showed insufficient correlation (between consumption and weather) for the use of the Modified Bean method. The staff believes that such a correlation chart is of no value in indicating sufficiency of correlation; and the staff maintains that sufficiency of correlation is manifested only by actually applying the Modified Bean method. The staff employed such method in this case, found a reasonable degree of correlation, and obtained its estimates of 167.8 and 170.0 ccf per customer for 1972 and 1973, respectively. Another point in favor of its consumption estimates according to the staff is that it was able to utilize eight months of additional consumption data in 1972 which were not available when applicant's estimates were made. The differences shown for large commercial metered customers are due almost entirely to the more recent recorded consumption data available to the staff.

The Modified Bean method, as exemplified by Standard Practice No. U-25,<sup>2/</sup> has been used by the staff for many years and has been adopted by the Commission in many decisions. Over the long run, this technique, when properly applied, has yielded reasonable results. From our analysis of the staff's testimony, it appears that the method has been properly applied to the appropriate data. Therefore, we will adopt the staff's revenue estimate as being reasonable.

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<sup>2/</sup> Standard Practice No. U-25. Guide For Adjusting And Estimating Operating Revenues of Water Utilities (first made public August 8, 1967).

Operation and Maintenance Expense

The summary of earnings shows differences in operation and maintenance expense estimates of \$3,300 for 1973. The differences are detailed in the following tabulation, which compares applicant's and staff's estimates for the various O & M categories:

O & M Category	Applicant	Staff	Applicant Exceeds Staff
(Dollars in Thousands)			
Salaries and Wages	\$30.1	\$27.7	\$2.4
Purchased Water	8.0	7.4	.6
Purchased Power	1.8	1.8	-
Matls., Servs., Misc.	9.8	9.6	.2
Transportation	2.5	2.4	.1
Telephone	.6	.6	-
Uncollectibles*	<u>.1</u>	<u>.1</u>	-
Total	\$52.9	\$49.6	\$3.3

\*Figures shown are for present rates. At proposed rates uncollectibles would be increased by \$100 for both staff and applicant.

The tabulation shows difference in salaries and wages of \$2,400. The difference is caused by: (1) The staff disallowed the wages of one laborer on the grounds that the size and complexity of the Jackson System does not warrant more than four full-time and two part-time employees, and (2) the staff based its estimate on the latest known (January 1, 1973) salary and wage levels. Applicant's estimate allows for a 5.5 percent increase over 1972.

The differences of \$600 shown for purchased water results chiefly from the staff's lower estimate of unaccounted for water.

The minor differences shown for materials, services, and miscellaneous and for transportation are a result of slight differences in interpreting and trending the recorded data.

At the hearing, applicant testified that with the signing of a new union contract in early 1973 it estimated that by applying the new signed contract wage level to the employees at Jackson the actual 1973 wages will be \$29,800 instead of the estimated \$30,100. The staff agreed that the latest known wage rates should be used. We will adopt the adjustments proposed by staff. Therefore, salaries and wages of \$29,800 are proper for the test year.

Administrative and General Expenses

A summary of administrative and general expenses is:

Item	Applicant	Staff Estimate	Applicant Exceeds Staff
General Office Expenses	\$ 6,600	\$ 4,000	\$ 2,600
Common Plant Expenses	700	2,000	(1,300)
Legal & Regulatory Comm. Exp.	4,600	1,800	2,800
Insurance	400	300	100
Injuries & Damages	2,000	1,100	900
Welfare & Pensions	2,200	2,000	200
Miscellaneous & Per Diem	1,200	800	400
Rents	<u>1,000</u>	<u>1,000</u>	<u>-</u>
Total	\$18,700	\$13,000	\$ 5,700

(Red Figure)

General office expenses are from two sources, Stamford, Connecticut and Redding, California. The 1972 Stamford administrative office expenses have been adjusted by the staff. The staff's estimated salaries are the annualized salaries at the June 1, 1972 level. Salary charged to direct is estimated by the staff based on the amounts recorded for the last three years. The staff has excluded such direct charges from the total salary to arrive at the amounts before allocation. Applicant made no such adjustment to its salaries. Accounting and Internal Audit and Tax Department salaries have been adjusted to allow only one-half of the chief accountant's salary and two and one-half

internal auditors and tax accountants, since Citizens has an accounting department in California. Secretary, filing, and other general office salary charges have been reduced in proportion to the accounting and internal audit and tax accounting salary adjustment. Other relatively minor adjustments are the result of using three-year averages or least square trending and a lower depreciation rate for office furniture. All contributions to charities and other community agencies have been eliminated. The staff estimated the amount charged to capital from Stamford using a four-year average ratio of the construction fee to the actual construction applied to an adjusted construction budget for 1972, which includes additional construction as shown in the four current applications. For accounting billed directly, the staff used 50 percent of the Accounting Department salaries and 5 percent of the Secretary and Filing Department salaries. The ratio of the directly billed salary to the total salary of these two departments was then applied to the other expense items that are related to these two departments. The staff reviewed applicant's calculations and has accepted the percentage allocations for Stamford administrative office expenses chargeable to California operations including the telephone operations. The allocated Stamford expenses are then combined with the Redding administrative office expenses before determining the amount of general office expense charged to each water district and to the Telephone Department.

The 1973 Stamford administrative office expenses are summarized in the following table. Applicant's estimate, in comparison to the 1972 estimate, includes a 5.5 percent salary increase, 2.5 percent more in other expenses and greater deductions in "charged to capital" and "billed directly". The staff's estimate is the same as its 1972 estimate except that the salaries are the annualized salaries at the October 1, 1972 level, and the payroll taxes are based on the current rates.

Item	Applicant	Staff	Applicant Exceeds Staff
Total Salaries	\$1,355,100	\$1,010,080	\$345,020
Total Other Expenses	593,600	490,010	103,590
Total Salaries & Exp.	\$1,948,600	\$1,500,090	\$448,610
Less:			
Charged to Capital	1,089,000	1,041,570	47,430
Accounting Billed Directly	122,000	-1/	122,000
Net Expense	\$ 737,700	\$ 458,520	\$279,180
Allocated to California			
Percent	29.50%	29.50%	-
Amount	\$ 217,600	\$ 135,260	\$ 82,340

1/ Included in staff's adjustments.

The staff's estimated Redding administrative office expenses salaries are the annualized amount at the September 1, 1972 level. Applicant includes in its estimate the salaries of both managers of the telephone and the water departments and their secretaries, their general expenses, benefits, and payroll taxes. According to the staff, the manager of the Water Department and his related expenses should be more directly charged to the Water Department. Therefore, the staff has included these expenses for allocation to the water systems only. While it is possible to charge the bulk of the Telephone Department manager's time directly to telephone operations, the staff believes it is reasonable to allocate 3 percent of his salary and related expenses to both departments for his supervision of other small departments which provide services to the water and telephone departments. The staff made its estimates of other general office expenses utilizing six months' recorded 1972 expenses. Insurance and audit expenses are based on a three-year average. The amount of unemployment and old age benefit tax is based on staff estimated salaries. The amount charged to capital is 1.5 percent of the adjusted



construction which reflects the additional construction shown in the four current applications. Applicant's four-factor allocations between the Water and Telephone Departments and to the four water districts presently under study have been reviewed and accepted by the staff.

The allocated Stamford and Redding administrative office expense for the Jackson Water Works, Inc. in 1972 is estimated at \$3,600 by the staff.

Applicant included in its 1973 Redding administrative office expenses, a 5.5 percent increase in salaries, a 2.5 percent increase in other expenses, and a 7.5 percent greater deductible "charged to capital" over the 1972 estimates. The staff's 1973 estimate is based on its 1972 estimate with two adjustments. Salaries are the annualized amount at the October 30, 1972 level for the supervisors and at the September 1, 1973 level for those employees covered by the agreement between Citizens Utilities Company of California and Local Union No. 1245. The other adjustment is made to payroll taxes using the current rates. The 1973 Redding administrative office expenses are summarized as follows:

Item	Applicant	Staff	Applicant Exceeds Staff
Total Salaries	\$211,000	\$148,600	\$ 62,400
Total Other Expenses	75,500	53,310	22,190
Subtotal	\$286,500	\$201,910	\$ 84,590
Stamford Admin. Office Expense			
Allocated to California	217,600	135,260	82,340
Total Redding Expenses	\$504,100	\$337,170	\$166,930
Less: Charged to Capital	91,900	86,870	5,030
Net Expense	\$412,200	\$250,300	\$161,900
Allocation to Jackson Water Works, Inc.			
Percent	1.60%	1.60%	-
Amount	\$ 6,600	\$ 4,400	\$ 2,600

The 1972 common plant expenses are the operation and maintenance expenses of the Sacramento general office including the manager and secretary of the Water Department. These expenses are applicable only to the Water Department of Citizens Utilities Company of California and affiliated water companies in California. Employee salaries and expenses other than for the manager and secretary are estimated based on recorded amounts during 1970 and 1971. The estimated salaries of the manager and the secretary are the annualized amount at the current level. Dues, contributions, and donations expense is an adjusted three-year average, excluding contributions and donations. The staff estimates the depreciation expense for the Sacramento office using a 2 percent rate for the building and 15 percent for office furniture and equipment. Of these charges 39 percent has been allocated to common plant and the balance to Sacramento County water systems. The staff's estimated property tax on the Sacramento office reflects the sale of a portion of the land. The common plant expense allocated to the Jackson Water Works, Inc. is \$1,900.

Applicant's 1973 common plant expense is \$16,600 which includes a 6 percent salary increase and a 2.5 percent increase in other expenses over the 1972 estimate. The staff's estimate of \$48,820 is similar to the 1972 estimate except that the salaries are at the October 30, 1972 level and the payroll taxes are on current rates. Both applicant and staff allocate this common plant expense on an estimated 4 percent to Jackson Water Works, Inc. in the amounts of \$700 and \$2,000 respectively.

Applicant included \$200 in the estimates of legal and regulatory Commission expense as charges subsequent to acquisition; staff does not include this expense. Applicant estimated the present rate case expense at \$13,800 which was based on, among other things, hiring a local attorney to handle the whole proceeding.

The staff's estimate of rate case expense includes the cost of preparing the application by the local attorney, and the travel and per diem expenses of applicant's Stamford lawyer who had been expected to try the case. The staff also allows travel and per diem of company people from Stamford, Connecticut, and from Redding and Sacramento, California. The total rate case expense estimated by the staff is \$5,430. Both applicant and staff prorate this expense over three years; the annual amounts are \$4,600 by applicant and \$1,800 by the staff.

In point of fact the local attorney handled the hearing instead of Stamford counsel. As to rate case expense, the savings in travel and per diem for Stamford counsel balance the added expense for local counsel. Applicant's estimate included excessive days for preparation and trial. The staff's estimate is more reasonable and we will adopt it.

The staff's estimates of the insurance injuries and damages cost, and miscellaneous and per diem expenses are based on the recorded amounts.

The staff bases its adjustment to welfare and pensions on its lower estimate of administrative salaries. Applicant allocates 95.97 percent of these charges to expense and 4.03 percent to capital which allocation has been accepted as reasonable by the staff.

Applicant's rebuttal testimony regarding the allocation of the functions of the two corporate vice presidents between the water and telephone departments is convincing. We will adjust the staff showing to recognize the actual operations of the Redding office. The testimony is likewise convincing regarding the Redding office expenses. Therefore, the staff's A&G estimate for these items will be reduced by \$800, reflecting an increased allocation to applicant's affiliated telephone operations.

A reasonable allowance for Administrative and General Expense is \$12,200.

Depreciation Expense and Reserve

Applicant and staff compute the depreciation expense by the straight-line remaining life method and apply depreciation rates by accounts as approved by the Commission on March 14, 1972. The next review of depreciation will be for the year 1974. Both applicant and the staff use the same method and apply these rates by accounts to the average of adjusted beginning- and end-of-year depreciable plant balances. The differences in depreciation expense are due to adjustments in the beginning-of-year balances in some plant accounts made by the staff's Finance and Accounts Division and the staff's estimate of the amortization of contributions.

Taxes Other Than Income

The differences in payroll taxes are due to the staff using its estimated salaries and the 1973 rate of 5.85 percent on tax base \$10,800 in computing the Federal Insurance Contribution Act tax. Applicant used 5.65 percent on \$10,000 in its calculation of F.I.C.A. tax.

Both applicant and staff computed the ad valorem taxes shown on Tables 4-A and 4-B in the same manner. A simple three-year average of the percent that past years' taxes were of the beginning-of-year plant was applied to the estimated 1972 and 1973 plant. The difference between staff and applicant is due to the years used. Applicant used 1969 through 1971; staff used 1970 through 1972.

Income Taxes

Staff income tax computations are detailed in Tables 5-A and 5-B. Applicant computed the income taxes at 7.6 percent for the state corporation franchise tax and 48 percent for the federal income tax. The staff used the 1973 tax rate of 9.0 percent for the state corporation franchise tax and 48 percent for the federal income tax. The differences in taxes are mainly due to the different estimates of operating income and deductions for income tax purposes. For the test year 1973 applicant computed depreciation for both state and federal

tax purposes on a straight-line basis.<sup>3/</sup> Its parent company, Citizens Utilities Company, applied liberalized depreciation with normalization to the 1971 plant additions in the 1971 consolidated income tax returns. The staff has computed depreciation on a straight-line basis for plant constructed before January 1, 1971, and uses liberalized depreciation for qualifying additions in and after 1971 on a flow-through basis. Asset depreciation range depreciation was reviewed and is not applicable to the qualified 1972 and 1973 additions. Applicant computed the investment tax credit on the 1971 and 1972 plant additions and deducted 3.5 percent (spread over 28 years) of this credit as an annual amount from the federal income tax. The staff computes the investment tax credit on a five-year average of the plant additions and deducts the entire amount from its federal income tax. This is the basis used by the Commission staff on all recent proceedings before this Commission. The staff includes negative income taxes because applicant's parent company, Citizens Utilities Company, files its federal income tax returns on a consolidated basis. The negative income tax figures for this corporation reduce the income taxes of the other corporations and departments. We find negative income taxes are proper in this proceeding.

For the purpose of this decision only, we will adopt the staff position on rate-making treatment of depreciation for income taxes. This is not a determination that flow-through is the proper tax treatment for applicant, but merely an expeditious method of bringing this long-protracted case to a conclusion. A decision on the merits of flow-through versus normalization in regard to applicant's treatment of income taxes is reserved for further hearings at which time evidence on all facets of the controversy can be placed before the Commission. This is the method utilized in Re Pacific Tel and Tel, Decision No. 80347 dated August 8, 1972 in Application No. 51774, p. 3.

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<sup>3/</sup> Applicant is presently computing depreciation for federal and state income tax purposes on the basis of liberalized depreciation with normalization.

Rate Base

A summary of applicant and staff rate base for estimated year 1973 is:

Item	Applicant	Staff	Applicant Exceeds Staff
Utility Plant in Service	\$ 717,500	\$ 712,900	\$ 4,600
Reserve for Depreciation	(166,400)	(169,000)	2,600
Net Plant in Service	\$ 551,100	\$ 543,900	\$ 7,200
Common Plant	2,400	2,200	200
Materials & Supplies	8,400	4,300	4,100
Working Cash	13,900	12,000	1,900
Minimum Bank Balances	5,300	1,900	3,400
Non-Interest Bearing CWIP	2,200	2,000	200
Advances for Construction	(14,800)	(16,400)	1,600
Contributions in Aid of Construction	(89,500)	(94,500)	5,000
Reserve for Deferred Income Taxes	(8,200)	1/	(8,200)
Subtotal	(80,300)	(89,500)	8,200
Average Rate Base	470,800	455,400	15,400

(Red Figure)

1/ Staff applies liberalized depreciation on a flow-through basis to the income taxes.

Both applicant and staff adjusted the beginning-of-year balances of the utility plant and depreciation reserve by rolling back nonrevenue producing plant additions and retirements before computing average figures for these two items. The average utility plant and depreciation reserve are the average of beginning- and end-of-year balances.

The difference in common plant is due to slightly different treatment by the staff of the sale of a portion of the land where the Sacramento office building is located.

The difference in the materials and supplies is due to the methods of estimating. The utility used an average of the last three recorded years. The staff used a five-year average of the percentage that materials and supplies was to the utility plant. The 1970 and 1971 materials and supplies were adjusted to exclude materials for new construction. The average percentage was applied to the average estimated 1972 and 1973 plant.

Applicant and staff compute the working cash by using the simplified basis prescribed by staff Standard Practice U-16. The difference is due to the different estimates of revenues and expenses.

An allowance for minimum bank balances has been included in the rate base to compensate for the non-interest bearing bank balances required in order to obtain short-term bank financing. The staff estimates the 1972 minimum bank balances for Citizens Utilities Company on a consolidated basis at 15 percent of the average of beginning- and end-of-year bank loans. The portion for the Jackson Water Works, Inc. is determined by the ratio of its plant construction to Citizens' total construction on a five-year average basis. Applicant computed the minimum bank balances by applying 7.6 percent of the average short-term debt ratio and 15 percent as the minimum bank balance to the rate base.

The difference in non-interest bearing construction work in progress in 1973 is due to the difference in staff and utility estimates of construction.

The difference in advances for construction is due to the staff including a \$500 advance from Safeway stores and including the total \$4,000 estimated for the Meadows Apartments.

A \$4,730 adjustment made by the Finance and Accounts Division is included in Contributions in Aid of Construction.

Applicant includes additions to deferred income taxes for 1971, 1972, and 1973 in the reserve for deferred income taxes. The staff has used liberalized depreciation on a flow-through basis in the computation of income taxes; thus, the staff's reserve for deferred income taxes is that prior to 1971, which is nothing.

Other items in the rate base prepared by applicant were reviewed and accepted by the staff.

At the hearing, the staff witness agreed that had he known of the requirement of the Department of Public Health that \$3,000 worth of additional facilities be installed at the new treatment plant, he would have included it in his rate base estimate.

We will add \$3,000 to the staff's rate base. We will add \$4,200 to rate base for the capitalized cost of the system map (see position of Mr. Evans, below). We will deduct \$100 depreciation reserve on the above added plant. Thus the adopted rate base is \$462,500.

Position of Mr. Evans

Mr. Evans testified that he was the former owner (1965 to 1970) and majority stockholder of Jackson Water Works, Inc. He sold his interest to Citizens Delaware.

Mr. Evans testified that while he still owned the system the Commission, by Decision No. 72199,<sup>4/</sup> ordered that a system map be prepared and kept current. Two people worked on the preparation of the map "a good part of a year".<sup>5/</sup> He capitalized the cost of preparing the map and would have expensed any work required to keep it current. When he took over the system, there were only "bits and pieces" of a map.

He testified that Citizens has withheld approximately \$4,200 from the purchase price as they wanted to see if it (the capitalized cost of the map) would stay in the rate base.

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<sup>4/</sup> Decision No. 72199 dated March 28, 1969 in Application No. 48732.

<sup>5/</sup> The decision ordered the filing of two copies of the map within ninety days after the effective date of the order.



According to the staff,

"The Commission in a prior proceeding (D.72199, A.48732) found that Applicant had not kept current the system map prescribed by paragraph I.10a, of General Order 103. It ordered Applicant to prepare and keep current the system map. Applicant in compliance with Commission's findings and order prepared the system map at a cost of \$4172. (\$2831 in 1969 and \$1341 in 1970). Applicant recorded the cost in Account 303, Other Intangible Plant.

"The staff in accordance with the uniform system of accounts, reclassified the cost of the map from the other intangibles account to Account 756, Miscellaneous Expenses.

"Applicant's classification of the cost of preparing the system map in the intangibles account results in the cost being included in rate base. The staff is of the opinion that Applicant should not be rewarded by allowing it to capitalize the cost incurred, because of its failure to maintain a proper map.

"It should also be noted that Citizens deducted the cost of the map from the purchase price paid to the former owner of Applicant. It is apparent that Citizens concluded that the cost of preparing the map ordered by the Commission was not includable in plant accounts."

Mr. Evans' position is valid. We have added \$4,200 to the staff's rate base.

#### Rate of Return

Applicant is constitutionally entitled to an opportunity to earn a reasonable return on its investment which is lawfully devoted to the public use. It is a percentage expression of the cost of capital utilized in providing service. Within this context, a fair and reasonable rate of return applied to an appropriately derived rate base quantifies the earnings opportunity available to the enterprise after recovery of reasonable operating expense, depreciation allowances, and taxes.

Ultimately, the rate of return determination in this proceeding must represent the exercise of informed and impartial judgment by the Commission, which must necessarily give equal weight to consumer and investor interests in deciding what constitutes a fair and reasonable rate of return. Such balancing of interests is directed toward providing applicant's water consumers with the lowest rates practicable, consistent with the protection of applicant's capacity to function and progress in furnishing the public with satisfactory, efficient service and to maintain its financial integrity, attract capital on reasonable terms, and compensate its stockholders appropriately for the use of their money.

Applicant contends that based on its study a reasonable rate of return would be no less than 9.75 percent. This results in a return on common equity in the range of 12 to 14 percent. However, according to applicant, if the Commission authorizes its requested rates, the actual rate of return realized, based on its estimated results of operation, would be but 7.58 percent.

The Commission staff's opinion is that 7.70 percent is the minimum rate of return required. This would result in a return on equity of 8.96 percent. The staff's rate of return recommendation does not give consideration to any service deficiencies nor does it consider attrition.

In arriving at the authorized rate of return of 7.70 percent, the Commission gave consideration to the fact that the company maintains a capital structure which includes approximately 58 percent common stock equity. Other water utilities operating in the State of California maintain a more highly leveraged capital structure with 40 percent to 45 percent common equity and therefore can expect to earn a return on equity capital consistent with the more risky capital structure.

In the instant proceeding if the capital structure were altered so as to reduce the common equity portion of the capital structure to about 45 percent, which is in excess of that carried by most of the larger water utilities in California, the resultant return on equity would be 9.70 percent. If consideration is also given to the fact that financing costs on debt in the form of interest is deductible for income tax purposes, a return on common equity of 10-1/2 percent to 11 percent could be realized by applicant with no additional financial burden being placed on applicant's consumers.

The staff's determination of a fair rate of return is reasonable and will be adopted because such a return meets the requirements set forth above.

Quality of Service

Eight witnesses testified regarding applicant's service. Seven complained of applicant's total disregard of any lack of response to written or telephoned complaints. Seven testified that applicant's system contained large amounts of tar in the water. Three protested the amount of the increase; one complained of high bills; one complained of turbidity; four complained of low pressure; and three complained of lack of notification that the water would be shut off.

The staff's testimony regarding service is:

"Service

"Field investigations of applicant's operations and facilities were made during November, 1972 and February, 1973. Except for the poor condition of some of the transmission and distribution mains, as evidenced [sic] by the many leaks recorded (discussed below), the facilities and equipment were in more or less satisfactory condition. The service being rendered at the time of the November investigation bordered on being unsatisfactory; however, at the time of the February investigation the service was very much improved, and the condition of the system appeared to be much better. Most of the customers interviewed stated that their hitherto poor service was now satisfactory.

"Applicant acquired the Jackson system in late 1970; and records of service complaints filed with the company prior to that time are not available. Applicant reports 32 complaints for 1971; a majority of these were for low pressure and most of these, in turn, were found to be related to customers' facilities.

"Because of the large number of complaints reported by applicant for 1972, the staff made a detailed study of applicant's complaint records for that year. The results are broken down in the following tabulation to show those complaints related to actual quality of service and those related to the general condition of the system. A further breakdown shows the approximate number of complaints which were not common to a single event or circumstance in the system but were generated at different times by different events.

1972 Complaints

Complaint	Total Number	Approximate Number Related to Different Events
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Complaints Related to Quality of Service

Tar in Water	127	1
No Water	118	28
Low Pressure	47	22
Mud, Sand, or Dirt	42	22
Bill Discrepancy	8	8
Miscellaneous	<u>15</u>	<u>13</u>
Total	357	94

Complaints Related to General Condition of System

Leaks	121	97
Meter not Working	9	9
Unfinished Streetwork	9	9
Miscellaneous	<u>10</u>	<u>10</u>
Total	149	122

"Complaints recorded in applicant's office for the period January 1 through February 20, 1973 total only six.

"Informal complaints registered with the Commission number as follows: one each for 1969, 1970, and 1971; and four for 1972."

Applicant's systems engineer testified that in 1972 applicant constructed a water treatment plant and a concrete lined and roofed reservoir, and interconnected these new facilities with the previously independent Jackson Gate System in order that old customers could receive filtered and treated water. Also in 1972, applicant replaced approximately 6,000 feet of small and deteriorated mains. These improvements cost \$256,893. It was his opinion that the work which had been done raised the pressure throughout the system to adequate levels and improved the overall quality of the water supplied to the customers.

Unfortunately, the old transmission main from the reservoir to the city lost some of its tar lining which caused considerable annoyance both to applicant and to its customers. The system was heavily flushed in hopes of removing as much tar as possible. At the present time, applicant is in the process of internally inspecting all of the mains in order to determine, if possible, the cause of the tar breaking away from the pipe.

The engineer also pointed out that in a system as old as Jackson's it takes time to entirely flush out the mains and also it would take time to determine the very delicate balance between the filtering process and the amount of turbidity in the raw water supply. It was his opinion, that given time, the customers would receive good water of adequate pressures.

As a result of the testimony regarding applicant's operations, the examiner ordered applicant to make studies of four of the conditions which were the subject of testimony from the public witnesses.

#### Adopted Results

A summary of the adopted test year 1973 earnings is:

Operating Revenues	\$112,800
<u>Operating Expenses</u>	
Oper. & Maint.	51,100
Admin. & Gen.	12,200
Depreciation	11,600
Taxes - Except Income	10,800
Income Taxes	<u>(8,550)</u>
Total Expenses	\$ 77,150
Net Operating Revenue	35,650
Average Rate Base	462,500
Rate of Return	7.7%

(Red Figure)

Findings

1. Applicant is in need of additional revenues, but the proposed rates set forth in the application are excessive.
2. The adopted estimates, previously discussed herein, of operating revenues, operating expenses, and rate base for the test year 1973 indicate that results of applicant's operation in the near future will produce a reasonable rate of return.
3. A rate of return of 7.70 percent on the adopted rate base and return on common equity of 8.96 percent for the future is reasonable.
4. The increases in rates and charges authorized herein totaling \$23,200 are justified, the rates and charges authorized herein are reasonable, and the present rates and charges, insofar as they differ from those prescribed herein, are for the future unjust and unreasonable.
5. Service meets the minimum pressure and quality requirements of General Order No. 103.

Conclusion

The application should be granted to the extent set forth in the order which follows.

O R D E R

IT IS ORDERED that:

1. Jackson Water Works, Inc. is authorized to file the revised schedules of general metered service attached to this order as Appendix A, and concurrently to cancel its present schedule for general metered service. Such filings shall comply with General Order No. 96-A. The effective date of the new and revised tariff sheets shall be four days after the date of filing. The new and revised schedule shall apply only to service rendered on and after the effective date thereof.

2. Further hearing for determining the proper method that applicant should use in computing depreciation for both state and federal income tax purposes shall be held at a time and place to be set.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 22nd  
day of JANUARY, 1974.

William L. Gussow, Jr. President  
[Signature]  
[Signature] Commissioners

I dissent  
Vernon L. Sturgeon

I dissent  
J. B. [Signature], Commissioner



## APPENDIX A

## Schedule No. 1

(T)

GENERAL METERED SERVICE

(T)

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Jackson and vicinity, Amador County.

RATES

## Quantity Rates:

Per Meter  
Per Month

First 500 cu.ft. or less .....	\$ 3.80	(I)
Next 1,500 cu.ft., per 100 cu.ft. ....	.44	
Next 8,000 cu.ft., per 100 cu.ft. ....	.25	
Over 10,000 cu.ft., per 100 cu.ft. ....	.19	

## Minimum Charge:

For 5/8 x 3/4-inch meter .....	3.80	
For 3/4-inch meter .....	5.30	
For 1-inch meter .....	8.80	
For 1 1/2-inch meter .....	15.00	
For 2-inch meter .....	21.00	
For 3-inch meter .....	31.00	
For 4-inch meter .....	56.00	(I)

The Minimum Charge will entitle the customer to the quantity of water which that minimum charge will purchase at the Quantity Rates.

(D)