

Decision No. 42536

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of)
 CALIFORNIA WATER SERVICE COMPANY,)
 a corporation,)
 for an order authorizing it to)
 increase rates charged for water)
 service in the City of Livermore)
 and vicinity.)

Application No. 29453

McCutchen, Thomas, Matthew, Griffiths & Greene, by Robert M. Brown, for applicant; R. M. Callaghan, City Attorney, for the City of Livermore.

O P I N I O N

California Water Service Company, in this proceeding, seeks authority to increase the rates charged for water service in the city of Livermore and vicinity in Alameda County.

A public hearing on this application was held in Livermore on December 8, 1948, before Examiner O'Brien, after due notice to the political subdivisions affected, as well as individual notice to each customer in the Livermore District. No one present at the hearing registered an objection to an increase of rates, but the Chamber of Commerce questioned the proposed spread of the increase among the various classes of customers.

The original Livermore water system, which utilized diversions from local streams, was taken over in 1896 by the Livermore Water and Power Company. In 1913, Pacific Gas and Electric Company acquired the properties, and disposed of them to California Water Service Company in 1927. Livermore is a community of about 5,600 people. In the area, applicant serves approximately 1,400 active service connections with water from six pumping stations supplied from

five wells. During 1947, 216 million gallons of water were produced. Aboveground storage is provided by four tanks, with a combined capacity of about 600,000 gallons, and water is distributed throughout the territory through more than 40,000 feet of pipe ranging in size from 3/4 inch to 12 inches. At the end of 1947, the number of service connections was 33% greater and the aggregate length of underground piping 12% more than the respective quantities were at the end of 1942. Water production in 1947 was 34% more than in 1942.

Applicant bases its justification for an increase in rates on the postwar rise in all expenses to which it is subjected. The record shows that operating expenses per customer have increased 36% since 1945 and wage rates have risen 138% since 1941. Using specific examples of cost increases of comparable facilities, costs of four-inch and six-inch pipes laid underground are, respectively, 73% and 75% higher than in 1941, and 3/4-inch service connections are up 77%. In general, construction costs have approximately doubled since the prewar years. Furthermore, the cost of developing adequate water supplies in Livermore greatly exceeds similar costs in other areas. As an example, a new well constructed in 1948 cost \$24,000 fully equipped. In Stockton a well installed at the same time, that produces three times as much water, cost only 73% as much.

Financing of Properties

Besides Livermore, applicant serves 28 other cities and towns. In meeting its capital requirements through the issue of securities, it seeks to provide funds for all its plants and not for one particular system or district. It has been its practice to meet such requirements, in part, with temporary loans which later are refunded through permanent financing. Generally speaking, it has financed its investment in plant through the issue of bonds, notes, preferred and common stock, and by the use of depreciation reserve

moneys and earned surplus. Its financial structure, considering the company as a whole, as of June 30, 1948, adjusted to reflect subsequent security issues and excluding its depreciation and amortization reserves which are stated at \$4,508,426, is shown as follows:

| | | | |
|--|------------------|-------------------|------------|
| Long-term debt - | | | |
| First mortgage 3% bonds, due 1975 | | | |
| 1945 issue | \$11,282,000 | | |
| 1947 issue | 1,500,000 | | |
| 1948 issue | <u>1,500,000</u> | \$14,282,000 | 53% |
| Serial notes | | <u>480,000</u> | 2 |
| Total long-term debt | | <u>14,762,000</u> | 55 |
| Preferred stock | | | |
| 1945 issue, 4.4% cumulative | | 3,475,000 | |
| 1948 issue, 5.3% cumulative, convertible | | <u>2,000,000</u> | |
| Total preferred stock | | <u>5,475,000</u> | 20 |
| Equity capital | | | |
| Common stock | | 5,250,000 | |
| Surplus | | <u>1,440,813</u> | |
| Total equity capital | | <u>6,690,813</u> | 25 |
| Total | | <u>26,927,813</u> | <u>100</u> |

A representative of the company estimated the average effective interest rate on moneys obtained through the issue of bonds, serial notes and preferred stock, and the investment of those reserves which are being accumulated on the sinking fund basis, at approximately 4%; while a member of the Commission's staff estimated such average effective rate as ranging from approximately 3.7% to approximately 4%, depending on whether or not there is considered in the calculation, charges pertaining to refunded issues. The record in this connection shows that from time to time applicant has availed itself of changes in prevailing interest rates to refund bonds and preferred stock with issues bearing lower interest and dividend rates.

As to outstanding common stock, the record shows that applicant has paid annual dividends of \$2 a share since 1942, being at the rate of 8% per annum on the par value. During the last five years, the average earnings per share from operations, excluding

surplus adjustments, have amounted to 10.74% of the par value of the common stock. Stating it another way, the common stock earned, on the average for the five-year period, approximately \$2.66 a share, and received as dividends \$2 a share, leaving an amount equivalent to approximately \$0.66 a share as an addition to surplus. The record contains testimony showing the terms under which the outstanding shares of common stock were sold and the market value of such shares, and of the bonds and preferred stock as well, over a period of time. On this latter point, it is noted that the market prices of the outstanding securities have been declining. For example, in November, 1948, applicant sold \$1,500,000 of bonds on a 3.54% basis, as compared with a 3.21% basis on the 1947 issue and a 2.86% basis on the 1945 issue. At or about the same time, it sold \$2,000,000 of cumulative convertible preferred stock on a 5.24% basis as compared with a 4.19% basis for the cumulative preferred issue in 1945.

The record in this and in other proceedings shows that applicant is faced with substantial construction expenditures which must be financed in part through the issue of additional bonds and/or stock. In passing on the present proceeding, the Commission must consider, among other things, not only the historical costs of capital but also the maintenance of applicant's earnings so that it will be able to raise needed additional capital. Reference is hereafter made to the return that applicant may realize under the rates proposed by it.

Rate Base

The base upon which applicant may be permitted to earn a return should appropriately reflect the plant, properties, and equipment required to render proper service to its customers. For many years this Commission has used a base predicated upon the reasonable historical cost of the properties used and useful in

rendering this service. Although considerable concern has been expressed over the effect of spiralling prices on future plant costs and the fact that present facilities could not be replaced for the historical book cost at present price levels, the use of an undepreciated historical cost base, which is the most readily obtainable and least speculative of any base which might be developed, will result in no injustice provided proper recognition is given to the utility's financial needs in the allowed return.

A summary of the estimated rate bases prepared by applicant and by the Commission's staff for the various periods involved is as follows:

| <u>For Year Ending</u> | <u>Rate Base</u> | |
|------------------------|------------------|-------------------|
| | <u>Applicant</u> | <u>CPUC Staff</u> |
| 12-31-47 | \$ | \$ 285,800 |
| 6-30-48 | 319,000 | 301,700 |
| 12-31-48 | 355,000 | |
| 6-30-49 | | 372,300 |
| 12-31-49 | 395,000 | |

Only two of the above estimates cover the same annual period. For that period, the staff estimate is \$17,300 less than applicant's. Of that amount, about \$13,800 represents the difference between working cash estimates. The staff estimate of working cash is developed from an analysis of the current volume of monthly expenditures, the time lag between payment of expense items and collection of metered revenues, advance collection of flat rate revenues, and accrual of taxes in advance of payment. The same method has been used by the staff many times in the past. Applicant estimated its working cash requirement by determining two months' operating expenses less taxes and depreciation. To that amount was added an average of three months' construction expenditures. This latter allowance approximated \$9,000. The testimony reveals that frequently these construction funds are obtained by temporary bank loans at an interest rate of about 2%. The temporary loans are

retired by funds secured from permanent financing at some later date. The utility is entitled to consideration for interest on reasonably necessary funds for construction purposes, but there is no justification for including construction funds in working capital. The balance of the rate base difference reflects a variance in the method of determining average fixed capital figures for the several periods. While the capital balances and net capital additions used by applicant and by the staff are identical in amount, the net additions have been accorded different weighting in the two studies. Applicant has apparently used an average of end-of-year balances. The staff, on the other hand, has used an average of monthly balances. Where expenditures predominate in the latter part of the year, the staff's method gives a somewhat lower result. Such a treatment, however, introduces no particular difficulty provided proper recognition is accorded in subsequent analysis.

Revenues

Applicant has submitted a revision of its rate schedules which will yield a gross annual income higher than will those presently in effect. The specific changes proposed will be discussed in somewhat greater detail later in this opinion.

Both the applicant and the Commission's staff have made estimates of the annual gross revenues which would be obtained by application of these alternative rates in a number of different annual periods. A comparative summary of these estimates follows:

| <u>For Year Ending</u> | <u>Gross Operating Revenues</u> | | | |
|------------------------|---------------------------------|-------------------|-----------------------|-------------------|
| | <u>Present Rates</u> | | <u>Proposed Rates</u> | |
| | <u>Applicant</u> | <u>CPUC Staff</u> | <u>Applicant</u> | <u>CPUC Staff</u> |
| 12-31-47 | \$43,947* | \$ | \$ | \$ |
| 6-30-48 | 42,621* | 42,621* | 53,753 | 53,767 |
| 12-31-48 | 44,075 | | 55,622 | |
| 6-30-49 | | 44,697 | | 56,394 |
| 12-31-49 | 46,025 | | 58,148 | |

* Actual

A study of this comparison indicates no marked difference in the estimates of revenue to be derived from a specific schedule of rates. Whether or not the rates proposed should be authorized depends upon the level of the net return which they will produce.

Expenses

Estimates of operating expenses for the several annual periods shown above have been made by applicant and by the Commission's staff. Such expenses include operating and maintenance costs, general administrative and miscellaneous charges, taxes, depreciation, and an amount to cover uncollectible bills. Comparisons of the total estimated expenses are shown on a summary similar to the tabulation of revenues:

| For Year Ending | Total Operating Expense | | | |
|-----------------|-------------------------|------------|----------------|------------|
| | Present Rates | | Proposed Rates | |
| | Applicant | CPUC Staff | Applicant | CPUC Staff |
| 12-31-47 | \$ | \$ 31,806* | \$ | \$ |
| 6-30-48. | 31,316 | 30,291/ | 35,546 | 34,761 |
| 12-31-48 | 33,270 | | | |
| 6-30-49 | | 32,349 | 37,659 | 37,040 |
| 12-31-49 | 34,766 | | 39,291 | |

* Recorded
/ Adjusted

A comparison of the estimates indicates that the company expects future expenses to occur at a somewhat higher scale than that foreseen by the staff. Applicant's estimated future expenses, being predicated upon trends of costs, reflect a probable increase in wage rates above those presently in effect. The Commission staff's estimate for the year ending June 30, 1949, on the other hand, is predicated upon the level of wages in effect in 1948. It is a matter of record that the wage rates paid by applicant are governed by agreements between a union representing the employees, and applicant's management. Notice of a desire to negotiate new wage agreements for 1949 has been received by applicant and negotiation sessions have been scheduled.

Net Revenues and Rate of Return

A comparative summary of the estimated net revenues resulting from the foregoing revenue and expense estimates is shown below:

| <u>For Year Ending</u> | <u>Net Revenues</u> | | | |
|------------------------|----------------------|---------------------|-----------------------|-------------------|
| | <u>Present Rates</u> | | <u>Proposed Rates</u> | |
| | <u>Applicant</u> | <u>CPUC Staff</u> | <u>Applicant</u> | <u>CPUC Staff</u> |
| 12-31-47 | \$ | \$ 12,141* | \$ | \$ |
| 6-30-48 | 11,305 | 12,330 ^f | 18,207 | 19,006 |
| 12-31-48 | 10,805 | | 17,963 | |
| 6-30-49 | | 12,348 | | 19,354 |
| 12-31-49 | 11,259 | | 18,657 | |

* Recorded
^f Adjusted

A review of this summarization indicates the effect on net revenues of the differences between the expense estimates prepared by applicant and those made by the Commission's staff. When the above net revenues are related to the respective rate bases prepared by the applicant and the Commission's staff, a tabulation of the estimated rates of return shows the following comparative relationships:

| <u>For Year Ending</u> | <u>Rate of Return</u> | | | |
|------------------------|-----------------------|-------------------|-----------------------|-------------------|
| | <u>Present Rates</u> | | <u>Proposed Rates</u> | |
| | <u>Applicant</u> | <u>CPUC Staff</u> | <u>Applicant</u> | <u>CPUC Staff</u> |
| 12-31-47 | % | 4.25% | % | % |
| 6-30-48 | 3.5 | 4.09 | 5.7 | 6.30 |
| 12-31-48 | 3.0 | | 5.1 | |
| 6-30-49 | | 3.32 | | 5.20 |
| 12-31-49 | 2.9 | | 4.8 | |

The above table reveals a number of significant factors. The rate of return developed from the staff's estimate is above that estimated by applicant for the period where directly comparable figures are available. This differential is traceable in large part to differences between the estimated rate bases and expenses heretofore discussed. The trend of the figures shows a steadily declining rate of return over the period of time shown, and it is doubtful whether applicant will earn more than 5% during the coming year on the rate base suggested by the staff of the Commission.

Rates, Present and Proposed

The present schedule of rates provides for substantially all of the service on a metered basis. The flat rates are applicable only to fire protection service. For the period ended June 30, 1948, 96% of the revenues were derived from meter rates and 4% from flat rates. Except for minor adjustments, there have been no basic changes in the rate schedules for 34 years, in spite of substantial changes in characteristics of the service area, in customer usage, and in construction costs.

The rates proposed by applicant, after a considerable study of present customer requirements and usage and an analysis of allocated costs of service, embrace the following principal changes: The schedule of meter rates would be adjusted, both as to level and blocking, to reflect more nearly an equitable spread of rates according to usage; the minimum charge for a 5/8-inch meter would be increased from \$0.75 to \$1.25 which would entitle the customer to 400 cubic feet of water; higher minimums would be established for larger size meters.

An estimate by the staff of the amount and percentage of increases which would result from applicant's proposed rates, by classes of service, based upon usage for the year ending June 30, 1949, follows:

| | Estimated | Revenue Increases | | | | |
|----------------|---------------|-------------------|---------------|-------------|---------------|-------------|
| | | Flat Rate | Metered Rate | Total | | |
| Present Rates: | Amount: | % | Amount: | % | Amount: | % |
| Residential | \$27,400 | | \$11,039 | 40.3% | \$11,039 | 40.3% |
| Business | 14,172 | | 424 | 3.0 | 424 | 3.0 |
| Industrial | 200 | | 44 | 22.0 | 44 | 22.0 |
| Municipal | 2,720 | | 146 | 13.3 | 146 | 5.4 |
| Miscellaneous | 200 | | 44 | 22.0 | 44 | 22.0 |
| Other | 5 | | | | | |
| Total | 44,697 | - | 11,697 | 27.2 | 11,697 | 26.2 |

Another method of comparing the proposed rates with the present rates is to show examples of bills based upon estimated typical usage. Such a comparison is shown below:

| <u>Metered Service</u> | <u>Monthly Bill</u> | | <u>Per Cent Increase</u> |
|------------------------|---------------------|----------------------|--------------------------|
| | <u>Present Rate</u> | <u>Proposed Rate</u> | |
| For monthly use of: | | | |
| 400 cubic feet | \$ 0.75 | \$ 1.25 | 66.7% |
| 500 cubic feet | .75 | 1.42 | 89.3 |
| 600 cubic feet | .90 | 1.59 | 76.7 |
| 800 cubic feet | 1.20 | 1.93 | 60.8 |
| 1,000 cubic feet | 1.50 | 2.27 | 51.3 |
| 5,000 cubic feet | 7.13 | 8.07 | 13.3 |
| 10,000 cubic feet | 12.75 | 14.07 | 10.4 |
| 50,000 cubic feet | 57.75 | 58.07 | 0.6 |
| 100,000 cubic feet | 114.00 | 108.07 | (5.2) |
| 500,000 cubic feet | 564.00 | 508.07 | (9.9) |
| | | | (Decrease) |

One other analysis which is of interest was introduced by applicant to show the propriety of the changes made in the spread of rates. This analysis was based on an allocated cost of service study. This exhibit showed the following average relationship between the estimated cost of service and the estimated revenue yield of present rates:

| <u>Per Average Customer</u> | <u>Revenue Present Rates</u> | <u>Estimated Allocated Cost</u> | <u>Revenue as Per Cent of Cost</u> |
|------------------------------|------------------------------|---------------------------------|------------------------------------|
| Residential | \$22.52 | \$32.07 | 70.2% |
| Commercial | 81.66 | 76.42 | 106.9 |
| Other | 67.43 | 94.78 | 71.1 |
| Total | 30.25 | 38.24 | 79.1 |
| <u>Per 100 c.f. of Water</u> | | | |
| Residential | .16 | .22 | 72.7 |
| Commercial | .12 | .11 | 109.1 |
| Other | .13 | .18 | 72.2 |
| Total | .14 | .18 | 77.8 |

The inference which can be drawn from the study is that, while total revenues must be increased, a proper adjustment would involve a substantial increase in rates for residential and other service and a decrease in rates for commercial service. Such an adjustment is proposed in the requested rates.

The rate schedule proposed by applicant would produce an over-all increase in revenues as heretofore shown of about 26%. From applicant's earning position it is apparent that such an increase is justified. The proposed schedule, however, would obtain that improvement by a large increase in the bills for small usage, as high as 89% for 500 cubic feet per month, and would in turn lower bills for the largest consumptions. This proposal was based on applicant's analysis of allocated costs of service. Such an analysis is most helpful in establishing appropriate rate differentials, and applicant should be commended for using it as a guide. The final rate selected, however, must be the result of the exercise of informed judgment. The reasonable rate applicable must be based not alone upon cost but upon all of the other economic factors involved. In this case it would appear to be more desirable to introduce less abrupt changes in the level of rates for various consumption levels. The rates established by the order herein, while designed to produce approximately the same total gross revenues sought by applicant, will lessen the increases placed upon the small residential consumer and will distribute part of the burden to the larger users in the business and municipal classifications. This is accomplished by increasing the minimum charge to \$1.00 instead of \$1.25 per month and by holding the maximum increase to 60%, instead of the 89% proposed by applicant, for consumptions of 500 cubic feet per month. For consumptions in excess of 500 cubic feet per month, the percentage increase will diminish as monthly uses increase, approximating 10% for monthly consumptions of 25,000 cubic feet and 1% for 300,000 cubic feet.

It is apparent from the evidence that the present rates will yield inadequate income from future service rendered in Livermore. The record likewise indicates that the net return which applicant will receive from its increased rates will not be unreasonable.

O R D E R

California Water Service Company having applied to this Commission for authority to increase the rates charged for water service in the city of Livermore and vicinity in Alameda County, a public hearing having been held, evidence having been introduced, the Commission being fully advised in the premises, and the matter having been submitted for decision,

IT IS HEREBY FOUND AS A FACT that the increases in rates authorized herein are justified; therefore,

IT IS HEREBY ORDERED that applicant is authorized to file in quadruplicate with this Commission after the effective date of this order, in conformity with the Commission's General Order No. 96, the schedule of rates shown in Exhibit A attached hereto, and, upon not less than five (5) days' notice to the Commission and the public, to make said rates effective for service rendered on and after the first day of April, 1949, more particularly as follows:

1. Schedule No. 1, General Metered Service, shall be made effective for water service rendered from and after the regular meter reading next succeeding April 1, 1949.

IT IS HEREBY FURTHER ORDERED that California Water Service Company is authorized and directed:

2. To withdraw and cancel existing rate schedules superseded by Schedule No. 1 concurrently with the filing hereinabove ordered.
3. To file with this Commission, within forty (40) days after the effective date of this order, four copies of a suitable map or sketch, drawn to an indicated scale upon a sheet 8 1/2 x 11 inches in size, delineating thereupon in distinctive markings the boundaries of its present service area in and around Livermore and the location thereof with reference to the immediate surrounding territory; provided, however, that such filing shall not be construed as a final or conclusive determination or establishment of the dedicated area of service or any portion thereof.
4. To file with this Commission, within fifty (50) days after the effective date of this order, four copies of a comprehensive map, drawn to an indicated scale of not

less than 600 feet to the inch, upon which shall be delineated by appropriate markings the territory presently served in and around Livermore. This map should be reasonably accurate, show the source and date thereof, and include sufficient data to determine clearly and definitely the location of the property comprising the entire utility area of service; provided, however, that such filing shall not be construed as a final or conclusive determination or establishment of the dedicated area of service or any portion thereof.

The effective date of this order shall be twenty (20) days after the date hereof.

Dated at San Francisco, California, this 23rd day of February, 1949.

R. E. Murray
Justus F. Calver
Wesley Powell
Harold Kalo
Samuel Patten
Commissioners.

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all water service furnished on a metered basis.

TERRITORY

In the city of Livermore, Alameda County, and in the vicinity thereof.

RATES

| Quantity Rates: | Per Meter Per Month |
|--|------------------------|
| For first 400 cubic feet or less. | \$ 1.00 |
| For next 2,600 cubic feet, per 100 cubic feet . . | .20 |
| For next 27,000 cubic feet, per 100 cubic feet . . | .12 |
| For over 30,000 cubic feet, per 100 cubic feet . . | .1125 |

Minimum Charge:

| | |
|-------------------------------|-------|
| For 5/8-inch meter. | 1.00 |
| For 3/4-inch meter. | 1.40 |
| For 1-inch meter. | 2.40 |
| For 1 1/2-inch meter. | 4.00 |
| For 2-inch meter. | 7.00 |
| For 3-inch meter. | 12.00 |
| For 4-inch meter. | 20.00 |
| For 6-inch meter. | 40.00 |

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