

Decision No. 85138

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Applications of
CALIFORNIA WATER SERVICE COMPANY, a
corporation, for an order authorizing
it to increase rates charged for
water service in the Stockton district
in order to offset certain charges
imposed by the Stockton-East Water
District.

Application No. 55686
(Filed May 12, 1975)

McCutchen, Doyle, Brown & Enersen, by A. Crawford
Greene, Jr., Attorney at Law, for applicant.
Neumiller and Beardslee, by Thomas J. Shephard,
Attorney at Law, for Stockton-East Water
District, interested party.
William J. Jennings, Attorney at Law, John J.
Gibbons, and Ernst G. Knolle, for the Commission
staff.

O P I N I O N

Preliminary

California Water Service Company (CWS) is seeking authority to increase its rates for general metered water service in its Stockton District by 46.2 percent, effective January 1, 1976. The increased rates would yield approximately \$1,855,000 in additional annual revenues. The rate increase is requested to offset monthly payments of \$153,850, which, under the monthly water service guarantee payment section of a water supply contract between CWS and the Stockton-East Water District (Stockton-East), will become effective with the beginning of the new year.

Pursuant to the provisions of Section 454(a) of the Public Utilities Code CWS notified its customers, by bill insert, of the filing of the application. Subsequently, after a date for hearing had been set, CWS notified its customers of the hearing by bill inserts, by posting of notices in bill collection stations, and by means of an advertisement in the Stockton Record. As a result of the notices, five letters of protest were received by the Commission.

Service Area and Water Supply

CWS' Stockton District includes most of the city of Stockton and some unincorporated contiguous territory in San Joaquin County. The terrain is flat, and elevations range from one foot to 30 feet above the USGS^{1/} Mean Sea Level Datum. As of December 31, 1974 there were 36,430 active service connections, all of which were metered, 302 private fire system connections, and 2278 public fire hydrants.

Water supply for the system is presently provided from 66 wells located throughout the service area. The wells vary in size from 12 to 16 inches in diameter and range in depth from 232 to 603 feet. In 1974 the wells produced approximately 33,000 acre-feet of water. The service area has developed to the point where the extraction of water has exceeded replenishment and a large cone of depression in the water table has been formed directly under the city of Stockton.

The area immediately to the west of Stockton is underlain by a large deposit of connate^{2/} salt water which extends out under the

^{1/} United States Geological Survey.

^{2/} Water trapped in sediments at the time of its deposition is called connate water.

delta islands. As fresh water is withdrawn from the water table under Stockton, salt water is drawn in from the west, and the Stockton ground water basin is in the process of being destroyed by a saline waterfront moving eastward at a rate of 150 feet a year.^{3/}

In order to alleviate the overdraft and resulting salt water intrusion, a master water plan for metropolitan Stockton and the area eastward to the Calaveras and Stanislaus County lines was prepared in 1971 by San Joaquin County, the city of Stockton, CWS, and the Stockton and East San Joaquin Water Conservation District. The water conservation district, originally formed in 1948, had secured the rights to 40,200 acre-feet of water per year from the United States Bureau of Reclamation's New Hogan project on the Calaveras River, 37 miles east of Stockton.

The plan recommended that a water treatment plant be built to provide a surface water supply from the Calaveras River for the Stockton metropolitan area. The plan also recommended that the water conservation district be expanded to include all of the Stockton metropolitan area. The district was so expanded in 1971 and renamed Stockton-East Water District.

Stockton-East Treated Water Contract

In March of 1974 voters of Stockton-East approved a \$19,800,000 revenue bond issue for the purpose of acquiring necessary land and building a water treatment plant at CWS' River Ranch site, east of Stockton, and also for building a 13-mile, 54-inch diameter reinforced concrete pipeline from the Bellota Weir on the Calaveras River to the River Ranch site. The treatment plant would have an initial capacity of 20 million gallons per day but the pipeline would

^{3/} The Department of Water Resources has explained the mechanics of this advancing front in its Bulletins 55 and 146.

be able to transmit 40 mgd should additional water become available in the future, possibly from the Bureau of Reclamation's Folsom South Canal.

On February 11, 1975 CWS, the city of Stockton, and the county of San Joaquin entered into a contract with Stockton-East, under which the city, county, and CWS would obtain a supplemental supply of treated water and Stockton-East would be assured of purchasers of such water. This contract would establish the credit necessary for Stockton-East to sell revenue bonds. Under the terms of the contract, CWS is entitled to 18,500 acre-feet of treated water per year, the city to 1,000 acre-feet, and the county to 500 acre-feet. The city and the county are to pay "wheeling charges" to CWS for conveying the water from the treatment plant to their systems.^{4/}

The contract took effect upon its signing on February 11, 1975 and runs for a period of 35 years following the initial water delivery date, provided that, at such time that the water treatment facilities bonds have been paid in full, the contract will terminate. For example, if the water treatment facilities bonds have been paid in full in the 30th year following the initial delivery date, the contract terminates in the 30th year.^{5/} The contract contains provisions for continued service after its expiration. The contract provides that, should it appear that there would be insufficient funds from the bond issue to meet the construction costs of the treatment plant, Stockton-East can establish a monthly water service guarantee payment which would be large enough, over the estimated number of

^{4/} There are presently emergency connections between the CWS system and the two city systems but none with the two county systems. The emergency systems are not suitable for regular water service.

^{5/} The last of the bonds is payable April 1, 2005.

months during which the guarantee payment would be in effect, to accumulate a fund which would be sufficient to construct, either prior to or immediately following the initial delivery of water, the items of plant which would otherwise not be able to be built because of insufficient funds. The first guarantee payment becomes due not later than 30 days following the effective date of an increase of CWS' Stockton District rates as authorized by this Commission, but not on a date subsequent to September 1 and prior to January 1. The payments are to continue until the initial delivery of water occurs or for 32 months after the sale of three-fourths of the bonds, whichever occurs earlier. Any funds remaining in the fund after the initial delivery of water are to be applied to CWS' base monthly payment for water.

Bids for construction of the treatment plant were opened on February 19, 1975, and bids for the sale of the revenue bonds were opened on March 18, 1975. It was found that the project would cost \$22,927,200 whereas the proceeds of the bond issue, together with interest earned on funds held by the fiscal agent during the construction period, would only amount to \$21,081,000, leaving additional funds required in an amount of \$1,846,200.

Stockton-East proceeded to award contracts for construction of the pipeline and treatment facilities proper but deferred awarding a contract for the finished water reservoir, which, according to the low bid, would have cost \$1,850,000.

To finance the finished water reservoir, the board of directors of Stockton-East, at a public hearing held on March 25, 1975, established a monthly water service guarantee payment in the amount of \$153,850, to commence January 1, 1976 and to run until the initial delivery of water, or if initial delivery of water fails to occur, until the payments are terminated according to the contract.

The project is scheduled to be completed and water deliveries to begin in January of 1977. Should the project be delayed, the guarantee payments would provide for the contingencies causing the delay.

After water deliveries begin, payments by CWS to Stockton-East are to be based on operation and maintenance costs of the project and on service of Stockton-East's debt. The board of Stockton-East has set the base monthly payment for treated water for the year of initial delivery at \$232,758 and for the first full year of service at \$226,660.

The funds that CWS would collect from its customers to pay the monthly guarantee payment would vary both seasonally and from year to year because of variations in water sales.^{6/} CWS, therefore, proposes to establish an account entitled "Reserve for Payments to Stockton-East Water District" in which CWS would enter the revenues obtained from rates authorized for the purpose of meeting the guarantee payments. Payments to Stockton-East would also be recorded, and should the account become significantly unbalanced because of abnormal weather conditions or some other reason, CWS would request an adjustment to its general metered service rate schedule to restore the balance.

In anticipation of receiving water from Stockton-East, as well as to transmit water from two utility-owned wells at the River Ranch property, CWS is in the final steps of constructing a transmission main from River Ranch to the center of the Stockton system. The main ranges from 42 inches down to 27 inches in diameter and has cost over \$3,000,000.

^{6/} CWS' peak summer demand is from two to five times the peak winter demand.

Public Hearings

Public hearings on Application No. 55686 were held in Stockton on September 3 and 4, 1975 before Examiner Boneysteele. Testimony and statements were taken from 11 witnesses and 26 exhibits were received. CWS presented three witnesses: President Ralph D. Lindberg, Vice President and Chief Engineer Jephtha A. Wade, and Vice President Ed F. Catey. Testimony for Stockton-East was given by Secretary-Manager Robert C. Sagehorn, and by William J. Bardin, Jr., a principal engineer with Stockton-East's consultants, James M. Montgomery Consulting Engineers, Inc. The staff showing was made by Principal Financial Examiner John J. Gibbons and Senior Utilities Engineer Ernst G. Knolle. Four public witnesses testified or made statements.

CWS and Stockton-East Showing

The foregoing description of the Stockton water supply situation and the Stockton-East treated water project was taken from testimony and exhibits presented by Mr. Sagehorn and Mr. Wade, a registered professional engineer.

In his opening statement, counsel for Stockton-East declared that the treatment plant project has been unanimously approved by the city council of Stockton, by the board of supervisors of San Joaquin County, and the board of directors of Stockton-East. The revenue bonds received a 77 percent yes vote and carried every precinct.

Mr. Sagehorn, under questioning by staff counsel, explained the alternatives that Stockton-East's board of directors considered when the shortfall of construction funds was discovered. Alternatives included deferring construction of the finished water reservoir and accumulating funds for its construction from sales of treated water, arranging for another bond election, or imposing the monthly water service guarantee payment. Deferring of the reservoir did not appear practical and another bond election would involve a significant delay

and also the loss of the opportunity to have facilities constructed coincidentally with the construction of the main treatment plant.

Mr. Sagehorn said that Stockton-East would lose the advantage of having the contractors working on the site bid at what, hopefully, would be a favorable price. He also said that the timing of the project would be disrupted to the point where the plant would not go on line in January of 1977 as contemplated.

Mr. Bardin, a registered professional engineer, testified that the plant could be operated without the finished water reservoir but that such operation would be difficult. The treatment plant has been designed to operate at a relatively constant rate, using the finished water reservoir to accumulate the output of the plant in hours of low demand and release it during hours of high demand. Significant changes in the rate of water through the plant require that chemical feeders be taken off of automatic control, adjusted manually for the new flow rate, and then checked. This operation takes about a half-hour to accomplish, and Mr. Bardin said it should not be attempted more than twice a day.

Some storage is available in the CWS system, two million gallons, as compared to the ten-million-gallon design capacity of the finished water reservoir. By making use of this existing storage and by meeting fluctuations in demand from wells, the plant could be operated at two flow rates, at about 30 percent of total average daily production (including that from wells) from 8:00 p.m. to 10:00 a.m. and at 110 percent from 10:00 a.m. to 8:00 p.m. Should peak demands not develop as anticipated, the system would be unable to accept the plant's output and it would be necessary to return the treated water back to the intake of the plant and to accept a loss of the cost of treatment.

Mr. Bardin presented a table in which he showed that, with the reservoir, the entire estimated demand of CWS could be met with treated water for 7 out of the 12 months. Without the reservoir, wells must be pumped for all twelve. The water delivery with the reservoir would be 27,000 acre-feet, without it 17,750.^{7/}

The finished water reservoir has a second, absolutely essential function, Mr. Bardin pointed out. About 125,000 gallons of treated water must be stored to backwash filters. Should the reservoir not be built, it would be necessary to install a steel tank for this purpose. The tank would cost about \$275,000, and should the reservoir later be constructed, salvage from the tank would be negligible.

Finally, Mr. Bardin pointed out, contractors are presently on the site building the treatment plant. These contractors, with forces and equipment presently assembled, are in a position to submit a favorable bid, and other contractors, knowing this, are apt to take this in consideration in preparing their bid.

Vice President Catey, a registered professional engineer, described the design of rates to recover the guarantee charge. He said that the project of preserving the underground water supply was for the benefit of all users. CWS considered it appropriate to apply a uniform percentage increase to both its service charge and its quantity rates. Mr. Catey demonstrated that the proposed increase in rates would merely offset the monthly water service guarantee payment, and on the basis of the results of operation for 1973, as adopted by the Commission in Decision No. S2906 dated November 7, 1973 in Application No. 53562, would not increase the rate of return of 7.85 percent found reasonable in that decision.

^{7/} Stockton-East has contracted to sell 20,000 of its 40,200 acre-foot New Hogan supply for domestic service in the Stockton metropolitan area, the remainder being allocated to irrigation in the rural areas of the district. Stockton-East has been able to buy the Calaveras County Water District's unused entitlement of New Hogan water and has 34,000 acre-feet presently available. Some of this surplus will be available to the treatment plant until demand develops in the Calaveras County Water District.

President Lindberg described the negotiation of the contract and of the monthly water service payment. He said that CWS agreed to the entire payment, even though it is guaranteed only 92.5 percent of the water, because CWS anticipates that the city and county systems will not take their share. CWS was faced with the alternative of paying the entire charge or else having no project. Mr. Lindberg testified that, should CWS raise the necessary funds and construct the treatment plant, cost to the customer would be higher.

Regarding financing, Mr. Lindberg said that supplemental water supply projects are also under way in CWS' Livermore and Los Altos districts. In both these situations there was an underground water problem that needed correction and in both the treatment facilities were being built by a public agency. He testified that the public agency approach was the most economical. Should CWS raise the necessary funds and include the investment in rate base, the revenue requirement would be higher.

Staff's Opinion

Both Mr. Gibbons, a certified public accountant, and Mr. Knolle, a registered professional engineer, recommended the increase be granted. Mr. Gibbons presented a study in which he demonstrated that the present worth at 8.5 percent of a revenue increase necessary to pay Stockton-East's monthly water service guarantee payment would be \$1,778,993 as of January 1, 1976. The corresponding present worth of the increase necessary to service CWS' financing of the reservoir, together with income taxes but neglecting ad valorem taxes (from both of which Stockton-East is exempt) would, assuming a 30-year life, be \$2,609,400.

Mr. Gibbons recommended that the rate increase be granted and CWS be directed to establish separate subsidiary records to account for all funds collected from customers to meet CWS' obligations under the contract with Stockton-East and to account for all funds disbursed to Stockton-East. Such subsidiary records should be maintained by CWS during the entire period of 30 years or more that the contract with Stockton-East is in effect.

Mr. Knolle testified that he was familiar with the problem of salt water intrusion in areas throughout the state and with Stockton's situation in particular. He was of the opinion that the benefits to be derived from the storage facility were sufficient to justify the assumption by CWS of the monthly water service guarantee payments. Looking forward to the time when water deliveries commence, Mr. Knolle recommended that CWS submit a study of the estimated operations of the Stockton District for the first 12 months after the start of deliveries of water by Stockton-East, showing the effect on revenue requirement of the reduction in pumping costs and the retirement of facilities that would no longer be used and useful.

Public Witnesses

Charles Dull, a civil engineer with James Allan & Sons, a meat packing firm, testified that the proposed increase would cost his company an additional one hundred dollars a day, which he felt was too great for a one-step raise. He also brought out that the city of Stockton levies a six percent utility tax and the tax would be applied to the 46.2 percent increase requested by CWS.

W. Earl Camp suggested that CWS should finance the project by debt and equity financing.

A third person, James Lynch, made a statement on the adverse effects of high water rates in general. The fourth witness, a candidate for the board of directors of Stockton-East, offered neither fact nor opinion concerning the project and CWS' request for higher rates.

Discussion

The evidence adduced is convincing of the need of the treatment plant project. The record demonstrates that the finished water reservoir is a required part of the project and deferral of its construction would not be a practical alternative. Our staff advises us, and we concur, that under the circumstances the imposition of the monthly water service guarantee charge is the most reasonable method available to complete financing the treatment plant project and the water reservoir.

Despite the large percentage increase requested, the project has substantial local support, as is evidenced by the fact that the mailing out, on two separate occasions, of 36,000 notices of the proposed increase elicited only five letters of protest and three protests at the hearing.

The city of Stockton would have its revenues increased by its six percent tax on utility billings. Should CWS' proposed increase result in excessive city revenues, the citizens of Stockton can take appropriate steps to secure a reduction in the amount of tax imposed.

Accordingly, we will authorize the increase requested and will direct CWS to account for the funds generated by the increase as recommended by the staff. We shall also direct CWS to prepare the study of the effect of the treatment plant on CWS' operations as recommended by our staff. The increased rates may remain in effect until water deliveries commence, but unless further authorization is received from this Commission, they shall not be effective after June 30, 1978.

It appears that when water deliveries are initiated by Stockton-East, a further rate adjustment will be necessary. Any funds in the subsidiary record will be available to offset increased charges for water, and we will be in a position to evaluate any offsetting savings in operating costs resulting from the new water supply.

Findings

1. In order to alleviate salt water intrusion into the water table under CWS' Stockton District's service area, a supply of treated surface water from Stockton-East's water treatment plant is required.
2. Stockton-East requires funds in an amount of \$1,846,200 to complete the water treatment plant, including a finished water reservoir, to supply treated-surface water to the Stockton metropolitan area, which area includes the Stockton District of CWS.
3. The finished water reservoir is required for efficient operation of the Stockton-East treatment plant.
4. The monthly water service guarantee payment of \$153,850 established by the board of directors of Stockton-East, to be paid by CWS, is the most reasonable method of financing completion of the required water treatment plant facilities, including the finished water reservoir.
5. The increased rates will merely offset the monthly water service guarantee payment established by Stockton-East and CWS' Stockton District's rate of return for the adjusted year 1973 and will not increase the 7.85 percent rate of return found reasonable in Decision No. 82906.

Conclusions

1. CWS should be authorized to increase its rates for general metered service by 46.2 percent, or \$1,846,200 a year, to offset the monthly water service guarantee payment of \$153,850, established by Stockton-East, net of franchise payments and uncollectibles.

2. The increase in rates granted herein should be separate from and additive to any rate increase granted to CWS pursuant to its Application No. 55561 for a companywide increase in rate to offset increased interest costs.

3. The increased rates herein granted should remain in effect until water deliveries from Stockton-East commence, but unless further authorization is received from this Commission, they should not be effective after June 30, 1978.

4. CWS should be directed to establish a separate fund and associated subsidiary records to account for all monies collected from customers to meet its obligations under the contract with Stockton-East and to account for all monies disbursed to Stockton-East. Such subsidiary records should be maintained by CWS during the entire period that the contract with Stockton-East is in effect. The annual reports to the Commission of the Stockton District's water system's operations should contain a summary, by months, of entries made in these records. Any monies remaining in the fund after the initial delivery of water should be applied to CWS' base monthly payment of water. Should water deliveries not commence prior to June 30, 1978, the remaining monies should be applied as the Commission may direct.

5. CWS should be ordered to file, on or before September 30, 1976, a study of the estimated operations of the Stockton District for the first 12 months after the start of deliveries of water by Stockton-East, showing the effect on revenue requirement of the reduction in pumping costs and the retirement of facilities that would no longer be used and useful.

O R D E R

IT IS ORDERED that:

1. After the effective date of this order, California Water Service Company (CWS) is authorized to file the revised rate schedule attached to this order as Appendix A. Such filing shall comply with General Order No. 96-A. The effective date of the revised rate schedule shall be January 1, 1976. The revised schedule shall apply only to service rendered on and after the effective date thereof.

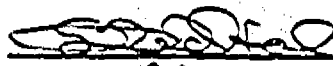
2. CWS shall establish a separate fund and associated subsidiary records to account for all monies collected from customers to meet its obligations under the contract with Stockton-East Water District and to account for all monies disbursed to the Stockton-East Water District. Such subsidiary records shall be maintained by applicant during the entire period that the contract with the Stockton-East Water District is in effect. The annual reports to the Commission of the Stockton District's water system's operations shall contain a summary, by months, of entries made in these records. Any monies remaining in the fund after the initial delivery of water shall be applied to CWS' base monthly payment of water. Should water deliveries not commence prior to June 30, 1978, the remaining monies shall be applied as the Commission may direct.

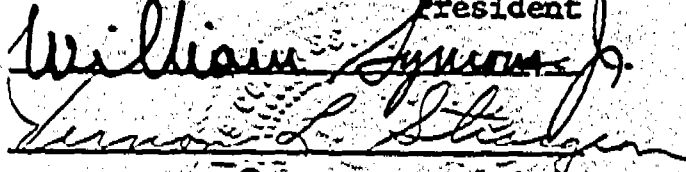
3. CWS shall file, on or before September 30, 1976, a study of the estimated operations of the Stockton District for the first 12


months after the start of deliveries of water by Stockton-East Water District, showing the effect on revenue requirement of the reduction in pumping costs and the retirement of facilities that would no longer be used and useful.

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

Dated at San Francisco, California, this 18th day of NOVEMBER, 1975.



President


Vernon L. Stanger


Commissioners

APPENDIX A
Page 1 of 2

Schedule No. ST-1

Stockton Tariff Area

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered service.

TERRITORY

Stockton and vicinity, San Joaquin County.

RATES

Service Charge:

		<u>Per Meter Per Month</u>		
		<u>Before</u>	<u>After</u>	
		<u>7/1/78</u>	<u>6/30/78</u>	
For	5/8 x 3/4-inch meter	\$ 4.93	\$ 3.37	(I)
For	3/4-inch meter	5.41	3.70	
For	1-inch meter	7.34	5.02	
For	1 1/2-inch meter	10.34	7.07	
For	2-inch meter	13.32	9.11	
For	3-inch meter	24.21	16.56	
For	4-inch meter	33.90	23.19	
For	6-inch meter	56.51	38.65	
For	8-inch meter	82.34	56.32	
For	10-inch meter	101.71	69.57	(I)

(Continued)

APPENDIX A
Page 2 of 2

Schedule No. ST-1

Stockton Tariff AreaGENERAL METERED SERVICE
(Continued)

Quantity Rates:

	<u>Per Meter Per Month</u>	
	<u>Before</u>	<u>After</u>
	<u>7/1/78</u>	<u>6/30/78</u>
For the first 30,000 cu.ft., per 100 cu.ft.	\$.284	\$.194 (I)
For all over 30,000 cu.ft., per 100 cu.ft.	.213	.146 (I)

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