

Decision No. 55500

**ORIGINAL**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of  
PACIFIC WATER CO., a California corpo-  
ration, to extend its certificated  
area under Section 1001 of the Public  
Utilities Code to land adjacent to its  
Victorville No. 6 Water System.

Application No. 38440

Moss, Lyon and Dunn, by George C. Lyon, for applicant.

James G. Shields, for the Commission staff.

O P I N I O N

Pacific Water Co., a California corporation, by the above-entitled application filed on September 21, 1956, and amended by amendments filed on December 3, 1956, and May 8 and June 11, 1957, seeks (1) authority to construct and operate a public utility domestic water system in Tract No. 5259, as an extension of and to be connected to its Victorville No. 6 system in Lucerne Valley, San Bernardino County, California, (2) authority to establish rates for water service therein, and (3) to secure Commission approval of a contract for the acquisition of an existing water system therein.

Public hearings on the application were held in Los Angeles before Examiner Kent C. Rogers on May 14, June 17 and 28, 1957. Prior to the first day of hearing notice thereof was published as required by this Commission. There were no protests.

General Information

Pacific Water Co. furnishes domestic water service in approximately 60 systems in 21 groups which it designates as districts. Four of these districts are in San Bernardino County, two are in Kern County, five are in Los Angeles County, and ten are in Orange County. Its Victorville District in San Bernardino County consists of five widely separated systems designated as its Victorville Systems Nos. 1, 3, 4, 5, and 6 (Exhibit B on the application). Its main office is located at 5724 Venice Boulevard, Los Angeles; it maintains construction and operating headquarters in Santa Ana; and it has a serviceman, available by telephone, living in Apple Valley approximately ten miles from the proposed service area.

Description of the Area

Applicant's Victorville No. 6 system, hereinafter referred to as Victorville, is located approximately 10 to 12 miles southeast of Apple Valley. The area to which applicant proposes to extend service, as an extension of its Victorville system, is Tract No. 5259 located approximately one-half mile east thereof. Tract No. 5259 contains approximately 425 acres of land divided into 370 lots (Exhibit A on the application), and is owned by the Coallen Land Development Company, hereinafter referred to as Coallen, which will improve the lots. Twenty houses have been completed and are ready for occupancy. The area generally slopes upward from an elevation of 3,250 feet in the north to an elevation of approximately 3,550 feet in the southern edge. There is, however, along the northwest edge of the tract a rocky formation known as Pitzer Buttes which attains an elevation of approximately 3,700 to 3,750 feet (Map No. 2 of Exhibit No. 5).

The Water Supply and System

Coallen has constructed a water supply and distribution system in said Tract No. 5259 which is to be acquired by the applicant.

The well therein was drilled in 1948, is 10 inches in diameter, and is 480 feet deep. It is equipped with a pump activated by a 10-hp electric motor which was tested in May 1956, and produced 76 gallons of water per minute (Exhibit No. 6). According to applicant's engineering witness, under present conditions it will produce only 63 gallons of water per minute. The staff engineering witness stated that the temperature of the water being discharged from the well has increased from approximately 70° F. in July 1956, to 82° F. in January 1957, which, combined with the small diameter of the well and its low productive capacity, makes it of questionable reliability as the sole source of supply.

Victorville has two producing wells available. Well No. 2 was drilled in June 1950 to a depth of 384 feet, has a 12-inch diameter casing and was tested to produce 255 gallons per minute with a 33-foot drawdown. This well is capped and is not connected to the system. Well No. 1 was drilled in June 1952 to a depth of 403 feet, has a 12-inch diameter casing, is equipped with a 30-hp deep well turbine pump producing 135 gallons of water per minute, and discharges into a 2000-gallon pressure tank. At present there are only four customers in Victorville.

The well in Tract No. 5259 discharges into a 50,000-gallon corrugated steel storage tank which is connected to a 40-hp booster pump designed for a capacity of 200 gallons per minute operating against a 400-foot head. The booster pump discharges into the system through a 2,000-gallon pressure tank designed for a pressure of 200 pounds to the square inch. This well, storage

tank, booster pump and pressure tank are located in the lower part of Tract No. 5259 at an elevation of approximately 3,300 feet.

The pipe in place in Tract No. 5259 is shown on Exhibit A on the application. The distribution mains are 8-, 5 $\frac{1}{2}$ -, and 4-inch steel pipe dipped and wrapped. Fire hydrants have been installed in accordance with the requirements of the San Bernardino County Planning Commission. A representative of the San Bernardino County Health Department stated that the system was approved on November 23, 1956, but that the department had since considered withdrawing the permit because of the water shortage. A staff engineer testified that as presently designed, the maximum pressure in the distribution mains adjacent to the booster plant will exceed 150 pounds per square inch which is in excess of that permitted by the Commission's General Order No. 103. The applicant's engineer witness stated that at the high points in the system the pressure is close to zero pounds.

In order to provide an adequate water supply and proper pressure in Tract No. 5259, applicant proposes several modifications. It proposes to interconnect the system in Tract No. 5259 with its present system and supply in Victorville. This will be done by installing a 42,000-gallon storage tank at an elevation of 3,650 feet at the northwestern corner of Tract No. 5259 and installing a 20-hp booster pump to boost the water from Victorville into the said storage tank. There will be a 6-inch dipped and wrapped pipe from Victorville to the storage tank and a 6-inch similar pipe from the said storage tank to the system in Tract No. 5259. Due to the wide range of elevations in Tract No. 5259,

applicant will install individual pressure-regulating valves at each service where pressure in the main exceeds 125 pounds per square inch. Water from Victorville and from the well in Tract No. 5259 will all be forced into the proposed tank and fed into the system. It is estimated that the minimum pressure in Tract No. 5259 will then be 33 pounds per square inch.

Rates

The applicant requests the authorization of rates in Tract No. 5259 at a level higher than those in Victorville of which said tract will become a part.

The Victorville rates are as follows:

<u>Rates</u>	<u>Per Meter Per Month</u>
<u>Quantity Rates:</u>	
First 1,000 cu. ft.; per 100 cu. ft. ....	\$ 0.25
Next 3,000 cu. ft., per 100 cu. ft. ....	.20
Over 4,000 cu. ft., per 100 cu. ft. ....	.15
<u>Minimum Charge:</u>	
For 5/8 x 3/4-inch meter .....	\$ 3.00
For 1-inch meter .....	4.00
For 1 1/2-inch meter .....	7.50
For 2-inch meter .....	10.00
For 4-inch meter .....	30.00
For 6-inch meter .....	40.00

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

The rates proposed for Tract No. 5259 only are as follows:

General Metered Service

Applicability

Applicable to all water service.

Territory

The unincorporated territory in Tract No. 5259 near Victorville, San Bernardino County.

Rates

		<u>Per Meter</u> <u>Per Month</u>
Quantity Rates:		
First	500 cu. ft., or less .....	\$3.50
Next	1,500 cu. ft., per 100 cu. ft. ....	.55
Next	3,000 cu. ft., per 100 cu. ft. ....	.45
Over	5,000 cu. ft., per 100 cu. ft. ....	.35

Minimum Charge:

For 5/8 x 3/4-inch meter ..... \$3.50

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

Both the applicant's witness and the staff witness estimated that the average number of consumers in Tract No. 5259 will be 20 in 1957, 40 in 1958, and 60 in 1959. The estimated results of operation differ greatly, however, (page 4 of Exhibit No. 9, applicant; page 12, Exhibit No. 10, staff). A major cause of the wide divergences between the estimates of the results of operations was that the staff witness used an estimated average consumption of 800 cubic feet per month, basing his figure on the average consumption in Victorville. The applicant's witness, on the other hand, used the average consumption per consumer in all of the systems comprising its Victorville District which was stated by him to be 1,800 cubic feet per month, reduced this figure to 1,500 cubic feet, and based his earning calculation on that figure. If the applicant's figures are used, its rate of return will be 9.3 per cent in 1958, which is considered excessive.

The estimates of the staff witness show the following results:

<u>Item</u>	<u>1952</u>	<u>Estimated Year</u>	
		<u>1958</u>	<u>1959</u>
Operating Revenues	\$1,236	\$2,472	\$3,708
Operating Expenses	2,713	2,888	3,029
Net Revenue	( <u>1,477</u> )	( <u>416</u> )	679
Depreciated Rate Base	4,320	6,270	9,100
Rate of Return	( <u>Red Figure</u> )	-	7.5%

Using the staff's figures, the estimated earnings are not excessive and applicant will be permitted to charge such rates in Tract No. 5259 until further study shows a need for modification.

#### Financing the Improvements

Applicant and the subdivider of Tract No. 5259, Coallen, have entered into a main extension agreement whereby Coallen agreed to advance to applicant the sum of \$66,000 for installing the water system in said tract, and applicant agreed to repay Coallen on the basis of 22 percent of the annual revenue per year for a period of not to exceed 20 years. Of the \$66,000 to be refunded, \$56,000 is to be in exchange for portions of the system presently installed, and \$10,000 will be for cash advanced by Coallen to Pacific. The cash is to be used by Pacific to improve and connect the Tract No. 5259 system to Victorville (Exhibit B of Exhibit C(1) on the Second Amendment to Application No. 38440).

The invoices Coallen has for the existing system in Tract No. 5259 reflect expenditures totaling \$57,366.35 (Exhibit No. 4). The cost of the well and the land on which it is situated are not included and said items will be donated by Coallen to applicant. To render the system usable and to fully meet the requirements of General Order No. 103, it will be necessary to install a 42,000-gallon storage tank, approximately 2,640 feet of

6-inch pipe, a 20-hp booster pump, and a 4-inch pressure regulating valve at a total installed estimated cost of \$12,212 (Exhibit 5, Page 8). In addition to the foregoing items it will be necessary to install 23 or 24 pressure regulating valves at individual connections in the lowest part of the service area. These valves, including installation, will cost between \$30.80 and \$35.80 each.

The cost of necessary improvements and facilities, over and above the donated well and land, the existing water system in Tract No. 5259, and the sum of \$10,000 cash advanced by Coallen, will be paid by applicant.

The staff's findings and recommendations

The staff engineers examined the system and made several findings on which they made certain recommendations.

First, as heretofore commented on, they found that the well in Tract No. 5259 was too small in diameter and the water temperature had increased approximately 12°F in a period of 6 months. These facts, they said, make the well of questionable reliability as the sole source of supply for Tract No. 5259. This objection will be overcome by connecting the well in Victorville to the system in Tract No. 5259.

Second, they found that the intake pipe from the existing storage tank to the booster pump is only 2 inches in diameter and restricts the flow to the booster so that cavitation is present when the booster is in operation. The staff recommended that this 2-inch line, 15 feet in length, be replaced with a 4-inch line.

Third, the staff found that the booster pump and pressure tank are situated at a low level of the distribution system and



that all water must be delivered against maximum pressure from this installation. As presently designed the maximum pressure on the distribution main adjacent to the booster plant will exceed 150 pounds per square inch, which is in excess of that permitted by the Commission's General Order No. 103 and is not in accordance with good water system design. The applicant, however, was cognizant of the defects in the system in Tract No. 5259 and outlined a plan to bring the system into conformance with the requirements of said general order.

Fourth, the staff found that rocks having a diameter as large as 12 inches had been used in back filling the pipe trenches; that this type of backfill will present many difficulties in maintenance of the mains; and that indentations in the pipe were found which would indicate that it had been subject to restrictions which may reduce the flow in portions of the system. The staff recommended that flow tests be made at the higher elevations in the service area, and when less than a 50-gallon per-minute flow is available at any fire hydrant the restrictions be removed from the distribution main.

Fifth, the staff suggested that a contour line on Pitzer Buttes be established above which water could not be furnished. The staff suggested 3,450 feet as the maximum elevation. It is difficult, however, to see how such contour line could be established inasmuch as approximately one-third of the proposed service area is above the 3,450-foot level.

#### Findings and Conclusions

After consideration of the record herein, the Commission is of the opinion and finds that public convenience and necessity

require the granting of the certificate to applicant as requested, which will be issued subject to the following provision of law, and to the restrictions and conditions set forth in the order herein:

The Commission shall have no power to authorize the capitalization of this certificate of public convenience and necessity, or the right to own, operate or enjoy such certificate of public convenience and necessity in excess of the amount (exclusive of any tax or annual charge) actually paid to the State as the consideration for the issuance of such certificate of public convenience and necessity or right.

The order which follows will provide for the filing of the schedule of rates submitted by Pacific Water Co. as set forth on Exhibit D(1), attached to the third amendment to the application.

The Commission is also of the opinion and finds that 2,640 feet of 6-inch OD-10-gauge pipe, a 42,000-gallon storage tank, a 20-hp booster pump, a 4-inch pressure regulating valve, and approximately 24 1/2-inch individual pressure regulating valves are required specifically to provide adequate storage and suitable operating pressures for the service area requested, and that \$10,000 of the cost of such facilities may be advanced by Coallen and refunded by applicant out of the revenues from Tract No. 5259 pursuant to paragraph C2b of applicant's filed main extension rule.

Because of the questionable reliability of the existing well in Tract No. 5259, the limitations of the quantity of water which can be provided for said tract from the well supply in Victorville through the facilities proposed and required to be installed for that purpose, the limited capacity of the water supply facilities now installed in said tract and the potential number of customers which will be dependent upon this water system, the Commission is of the opinion and finds that the public interest

requires that applicant should not, without further order of the Commission, extend its water system beyond the boundaries of Tract No. 5259, which tract is hereinafter certificated to it by the order which follows.

O R D E R

An application having been filed by Pacific Water Co., a corporation, a public hearing having been held thereon, the matter having been submitted for decision, and the Commission having made the foregoing findings and based upon said findings,

IT IS ORDERED AS FOLLOWS:

1.. That Pacific Water Co., a corporation, be, and it is, granted a certificate of public convenience and necessity to acquire, construct and operate a public utility water system in the area described hereinabove.

2.a. That Pacific Water Co. be, and it is, authorized to file, after the effective date of this order, the rates set forth in Appendix A attached to this order to be effective on or before the date service is first rendered to the public and, concurrently with such filing, to revise such of its presently effective tariff schedules as are necessary to provide for the application of its rules in the area being certificated herein, together with a tariff service area map of such newly certificated area, all in accordance with the procedure prescribed by General Order No. 96. Such rates, revised tariff sheets and tariff service area map shall become effective upon five days' notice to the Commission and to the public after filing as hereinabove provided.

b. That Pacific Water Co. shall notify this Commission, in writing, of the date service is first rendered to the public under the rates and rules authorized herein, within ten days thereafter.

c. That Pacific Water Co. shall file within sixty days after the system is first placed in operation under the rates and rules authorized herein four copies of a comprehensive map drawn to an indicated scale not smaller than 800 feet to the inch delineating by appropriate markings the various tracts of land and territory served; the principal water production, storage and distribution facilities; and the location of the various water system properties of applicant pertaining to its Victorville No. 6 tariff area, including Tract No. 5259.

3. That within six months after the effective date of this order Pacific Water Co. shall complete and place in operation improvements to the system in Tract No. 5259, and connect said system to the Victorville No. 6 system, as proposed in Exhibit No. 5 herein, including, but not limited to, a 6-inch main between Victorville No. 6 and Tract No. 5259, a 42,000-gallon storage tank, a 20-hp booster pump and a 4-inch pressure regulating valve. Such installations shall in all instances fully meet the requirements of General Order No. 103. Applicant shall notify the Commission, in writing, within ten days after said improvements have been placed in operation.

4. That within thirty days after the effective date hereof, Pacific Water Co. shall replace with a 4-inch line the 2-inch intake pipe from the existing storage tank in Tract No. 5259 to the booster pump. Applicant shall notify the Commission, in writing, within ten days after such replacement has been completed and placed in operation.

5. That within sixty days after the effective date of this order, Pacific Water Co. shall install individual pressure regulating valves on all existing service connections where the normal operating pressure exceeds 125 pounds per square inch and shall notify the Commission, in writing, within ten days after the completion of such installations. Pacific Water Co. shall install such valves for all future service connections where pressures exceed those permitted by the Commission's General Order No. 103.

6. That within six months after the effective date of this order, Pacific Water Co. shall test for obstructions in its mains, and if restrictions are found which reduce the flow at any fire hydrant to less than 50 gallons of water per minute, shall remove such restrictions. Applicant shall report to the Commission, in writing, the results of such tests, the location of obstructions, if any, and the action taken to remove such restrictions, within ten days thereafter.

7. That Pacific Water Co. is authorized to carry out the terms and conditions of the amended main extension agreement dated May 8, 1957, and as modified by Exhibit B attached thereto, all as set forth in Exhibit C(1) attached to the second amendment to the application herein. Within ten days after the effective date of this order, applicant shall file with the Commission two certified copies of the agreement as executed, together with a statement of the date on which the agreement is deemed to have become effective.

8. That Pacific Water Co. shall review annually the accruals to depreciation reserve which shall be determined for each primary plant account by dividing the original cost of plant less estimated

future net salvage less depreciation reserve by the estimated remaining life of the surviving plant of the account; and the results of the reviews shall be submitted annually to the Commission.

9. That Pacific Water Co. shall not extend its water system outside of the boundaries of the tract herein certificated without further order of the Commission.

The authority herein granted will expire if not exercised within one year from the effective date of this order.

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

Dated at San Francisco, California, this 3rd day of September, 1957.

[Signature]  
President  
[Signature]  
[Signature]  
[Signature]  
Commissioners

Commissioner Matthew J. Deoley, being necessarily absent, did not participate in the disposition of this proceeding.

APPENDIX A

Schedule No. VCU-1  
Victorville No. 1,3,4&6 Tariff Area  
Upper Zone

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The unincorporated territory known as Tract No. 5259, southeasterly of San Bernardino County.

RATES

Quantity Rates:	<u>Per Meter per Month</u>
First 500 cu.ft. or less .....	\$3.50
Next 1,500 cu.ft., per 100 cu.ft. ....	.55
Next 3,000 cu.ft., per 100 cu.ft. ....	.45
Over 5,000 cu.ft., per 100 cu.ft. ....	.35
Minimum Charge:	
For 5/8 x 3/4-inch meter .....	\$3.50

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