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ORIGINAL

Decision 84 11 115 NOV 21 1984

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SANTA PAULA WATER WORKS, LTD., a California Corporation, for Authority to Increase Rates Charged for Water Service as Authorized in NOI 111-W.	Application 83-12-60 (Filed December 28, 1983)

Chris S. Rellas, Attorney at Law, for applicant.
Javier Plasencia, Attorney at Law, for the Commission staff.

O P I N I O N

Summary

Applicant, Santa Paula Water Works, Ltd., requests authorization from this Commission to increase its rates in 1984, 1985, and 1986. Tabulated below are the revenue increases in thousands of dollars and in percent originally requested by applicant and the authorized increases.

Additional Revenues Requested*			Additional Revenues Authorized*		
	Dollars	Percent		Dollars	Percent
1984	$445.3	45.6%	1984	244.2	22.1%
1985	74.4	5.2	1985	72.6	5.3
1986	60.4	4.0	1986	26.4	1.8

* Excludes utility users fee.

The question of which multiple regression analysis to adopt and the associated impacts on revenues and expenses is the principal issue in this proceeding. Applicant's proposal to correlate sales volumes with temperature and rainfall deviations from normal climatic conditions for each billing period (monthly periods for applicant) provides more realistic estimates than the annual correlations embodied in Standard Practice U-25 (U-25) which was used by the Commission staff (staff). However, we are not adopting applicant's proposals to base the adopted quantities on three years of monthly data or to dispense with the precipitation adjustment for rainfall in excess of four inches per month described as the "Modified Bean Method" in U-25. We are following the "Committee Method" using the same average consumption for 1984, 1985, and 1986. The following tabulation shows the average per customer estimates of commercial sales, in hundred cubic feet (Ccf), (including domestic customers) of applicant and the staff and the adopted sales level:

Annual Commercial Sales in Ccf Per Customer

Year	Applicant	Staff	Adopted
1984	211	266	255
1985	198	264	255
1986	185	262	255

The adopted rates increase the proportion of revenues recovered in service charges from 24.4% to 32.3%; but the rates adopted are consistent with our existing water rate design policy which includes a requirement to maintain a minimum 25% differential between cumulative lifeline rates increases since

January 1, 1976 and the overall percentage increase in rates since that date. Applicant's proposed rate design, targeted at reducing the disparity between incremental revenues and incremental expenses caused by differences between actual sales volumes and adopted estimates, is inconsistent with our water rate design policy for maintaining the 25% lifeline rate differential. We have directed the staff to prepare a report to examine the problem of making more realistic and appropriate distributions of revenues between service charges and consumption charges and to submit the report to the water industry for comment before taking any further action (see mimeo. page 29 of Decision (D.) 84-01-042 dated January 19, 1984 in Application (A.) 83-06-01). We will not modify our existing rate design policy as requested by applicant before we act on other proposed changes to that policy.

Table 1 on the following pages shows the adopted summary of earnings at present rates, and at authorized rates for 1984 and 1985 and 1986. Those amounts are reasonable. Table 2 shows applicant's requested rates of return and the adopted rates of return for 1984, 1985, and 1986. Applicant stipulated to the staff recommendation for using the same capital structure and rates of return for the three years. The staff rate of return estimates are reasonable and are adopted. Since the same overall rate of return will be adopted for the three years, there is no financial attrition.

TABLE 1
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SANTA PAULA WATER WORKS

1984 SUMMARY OF EARNINGS

	1984 Present Rates	Adopted Rates
Operating Revenue	$ 1,106,720	$ 1,350,900
Operating Expenses:		
Operation & Maintenance without Uncollectibles	523,258	523,258
Uncollectibles	760	930
Admin. & General without Franchise	381,261	381,261
Franchise	-	-
Taxes Other Than Income	47,380	47,380
Depreciation	85,544	85,544
Income Tax	23	100,742
Total Deductions	1,038,226	1,139,115
Net Operating Revenue	68,494	211,785
Depreciated Rate Base	2,048,183	2,048,183
Rate of Return	3.34%	10.34%

TABLE 1
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SANTA PAULA WATER WORKS

1985 SUMMARY OF EARNINGS

	1985 Present Rates	Adopted Rates
Operating Revenue	$ 1,376,688	$ 1,449,300
Operating Expenses:		
Operation & Maintenance without Uncollectibles	542,968	542,968
Uncollectibles	950	1,000
Admin. & General without Franchise	404,701	404,701
Franchise	-	-
Taxes Other Than Income	52,540	52,540
Depreciation	112,443	112,443
Income Tax	76,230	113,370
Total Deductions	1,189,832	1,227,022
Net Operating Revenue	186,856	222,278
Depreciated Rate Base	2,150,196	2,150,196
Rate of Return	8.69%	10.34%

TABLE 1
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SANTA PAULA WATER WORKS

1986 SUMMARY OF EARNINGS

	1986 Present Rates	Adopted Rates
Operating Revenue	$ 1,475,605	$ 1,502,000
Operating Expenses:		
Operation & Maintenance without Uncollectibles	566,891	566,891
Uncollectibles	1,020	1,040
Admin. & General without Franchise	418,142	418,142
Franchise	-	-
Taxes Other Than Income	55,560	55,560
Depreciation	117,811	117,811
Income Tax	99,776	113,276
Total Deductions	1,259,200	1,272,720
Net Operating Revenue	216,405	229,280
Depreciated Rate Base	2,217,550	2,217,550
Rate of Return	9.76%	10.34%

(Negative Figure)

Table 2

SANTA PAULA WATER WORKS, LTD.
Rate of Return Comparison
(1984-1986)

	Applicant's Request			Staff Recommended and Adopted		
	Capital Ratios	Effective Rate	Rate of Return	Capital Ratios	Effective Rate	Rate of Return
1984						
Long-term Debt	37.64%	13.42%	5.05%	37.00%	12.06%	4.46%
Preferred Stock	33.92	5.00	1.70	35.00	5.00	1.75
Common Equity	28.44	15.00	4.27	28.00	14.75	4.13
Total	100.00%		11.01%	100.00%		10.34%
1985						
Long-term Debt	35.61%	13.42%	4.78%	37.00%	12.06%	4.46%
Preferred Stock	35.02	5.00	1.75	35.00	5.00	1.75
Common Equity	29.36	15.00	4.40	28.00	14.75	4.13
Total	100.00%		10.93%	100.00%		10.34%
1986						
Long-term Debt	38.83%	13.43%	5.21%	37.00%	12.06%	4.46%
Preferred Stock	33.29	5.00	1.66	35.00	5.00	1.75
Common Equity	27.88	15.00	4.18	28.00	14.75	4.13
Total	100.00%		11.06%	100.00%		10.34%

Applicant asserts that (a) its present rates do not permit recovery of a reasonable proportion of fixed charges in its service charges; (b) its earnings are subject to wide fluctuations; (c) sales deviations from the adopted volumes change its general metered revenues by $0.491 per Ccf versus incremental purchased power and replenishment expenses of about $0.11 per Ccf, or approximately a 4.5 : 1 ratio;[1/] (d) Commission authorization of its proposed rates would reasonably reduce those large fluctuations in earnings; and (e) its proposed rates are designed to recover two-thirds of its fixed expenses in service charges.

Hearings

After notice, public witness and evidentiary hearings were held in Los Angeles on April 24 and 25, 1984, before Administrative Law Judge (ALJ) Levander. Testimony was presented by Daniel M. Conway, Frank Brommenschenkel, and Randall J. White for applicant, and by Arthur B. Jarrett, Ishwar Garg, and Richard Finnstrom for the staff. A statement was made by James Carlisle Barringer, a member of the Santa Paula City (City) Council, representing that city. The matter was submitted subject to receipt of late-filed exhibits which have been received.

Under the Rate Case Processing Plan procedure, an informal public meeting was held in Santa Paula on March 7, 1984. Approximately 20 of about 6,000 of applicant's customers attended that meeting, including Barringer, then mayor of Santa Paula. Customers objected to the size of the increase and to allocations of Park Water Company's (Park) main office expense to applicant.

1/ This ratio is reduced by changes in income taxes, franchise taxes, and uncollectibles.

(Park purchased approximately 98% of applicant's common and preferred stock from applicant's shareholders under the authorization granted in D.90217 dated January 23, 1980.) At the hearing, Barringer raised the following objections to applicant's proposal:

a. A 46% increase would adversely impact applicant's customers, including persons with low incomes or those who are unemployed (there was a 9.8% unemployment rate in Santa Paula in November 1983).

b. There would be no incentive for residential customers to conserve water if fixed service charges constituted major portions of their bills.

c. Applicant's proposed 15% return on common equity was objectionable because applicant's stock is closely held.

d. Customers want to see economies in the utility's operations--perhaps through local control of its operations.

Correspondence concerning this proceeding received by the Commission (including correspondence mailed to Barringer, which he tendered to the Commission over applicant's objections) discussed the above-mentioned issues raised by Barringer. In addition, two customers complained of hardness in the water and one complained of excessive pressure requiring his installation of a pressure regulator.[2/] The City also suggested consideration of spreading the increases authorized over several years.

2/ His pressure of 125 pounds per square inch is at the upper end of the normal pressure range applicable to public utility water companies which we adopted in General Order 103.

RESULTS OF OPERATIONS

Average Use Per Customer

Applicant based its estimates of annual consumption and, in turn, operating revenues on monthly correlations of temperature and rainfall with consumption for the years 1980 to 1982. Applicant's witnesses testified that:

a. Using monthly data, there is no significant difference between estimates produced using its methodology which does not subtract rainfall in excess of four inches per month and the "Modified Bean Method" used by the staff which makes such adjustments;

b. The staff use of annual weather and consumption data for the years 1976 through 1983 (excluding 1977, a drought year) produces erroneous results because it practically eliminates significant temperature consumption correlations;

c. Use of a seven or more year base periods for making consumption-weather correlations, following the U-25 methodology, does not recognize significant recent declines in use per customer;

d. Applicant's use of three years of monthly data gives proper recognition to this decline in use;

e. The data in Exhibit 4 show a 1% variation between 1983 recorded commercial use per customer and a 1983 projection of its weather-adjusted estimate; and

f. The latter correlation demonstrates the validity of its approach.

One of applicant's witnesses also testified that there is no significant variation in using appropriately correlated Santa Paula weather station data with Oxnard weather station data in his studies. The Santa Paula weather station was established in 1954.

The ALJ directed applicant to prepare late-filed Exhibit 9 summarizing average commercial use projections for longer time periods using both its methodology and the staff methodology, modified to use monthly rather than annual weather and consumption data. Applicant selected nine intervals ranging from 1980 to 1983 to 1971 to 1983. No 1977 drought-year data were used in these studies. The tabular and graphical data in Exhibit 9 are reproduced as Attachment A of this decision.

Exhibit 9 demonstrates that large changes in use due to temperature variations were not reflected in the staff estimate (in Exhibit 5) using annual data. Improved computer equipment now available to the industry and to the staff should be used to obtain better estimates by correlating weather data with consumption by billing period rather than annually.

U-25 is the product of staff and water industry review of empirical data. We are aware that other factors, which have not been quantified, affect use patterns. U-25 reflects an analysis of past data to predict future use. It incorporates past conservation activities and past price elasticity effects, if any.

Further study is needed to determine if the maximum monthly 4-inch rainfall adjustment in U-25 should be modified. In Exhibit 9, applicant's methodology produces lower annual estimates than the staff estimates. These differences increase with use of shorter base periods. The reasons for these differences were not developed on this record. Absent a compelling rationale for adopting applicant's methodology we will not modify the standard practice which uses a maximum rainfall adjustment.

Exhibit 9 shows relatively small variations in estimates of 1984 annual use per customer between six projections using a base of seven or more years of recorded monthly use and weather data. The six estimates vary from 255.35 Ccf to 256.99 Ccf with rainfall adjusted to a maximum of four inches per month. The corresponding estimates, without the maximum rainfall adjustment, vary from 248.94 Ccf to 252.10 Ccf. The projected year-to-year changes vary from (a) an increase of 0.47 Ccf to a decline of 0.46 Ccf per year with the rainfall adjustment and (b) declines of between 0.60 Ccf and 2.38 Ccf without that adjustment.

Exhibit 9 projects annual declines in use of increasing magnitude as the base period is shortened. Tabulated below are the projected 1984 and calculated 1985 and 1986 estimates of use per customer based on three- to six-year base periods derived from Exhibit 9 and applicant's estimates contained in Exhibit 1.

Short Term
Average Annual Use Per Customer in Ccf

Year	Base Period 1978-1983	1979-1983	1980-1983	1980-1982
With Maximum Rainfall Adjustment				
1984	252.30	238.76	234.14	a/
1985 b/	250.74	232.52	225.82	a/
1986 b/	249.18	226.28	217.50	a/
Without Maximum Rainfall Adjustment				
1984	239.45	227.71	218.57	211 c/
1985 b/	234.43	218.21	204.75	198 c/
1986 b/	229.41	208.21	190.93	185 c/

a/ Not available.
b/ Calculated based on data in Exhibit 9.
c/ Applicant's rounded estimates.

The adopted use of 255 Ccf is a rounded estimate of the 1972 to 1983 (excluding 1977) projection. That projection has the best statistical correlation of the longer term projections.[3/] We have considered that the 1972-1983 curve is one of a closely bunched family of projections (see Attachment A).

Applicant is not persuasive in demonstrating that the average customer use will continue to decline by 13 Ccf per year based on three years of base data. The 13 Ccf represents a 5.5% decline in use from 1982 to 1983 and a 6.6% decline in use from 1985 to 1986. Applicant's estimate of the cumulative decline in use between 1982 to 1986 amounts to 52 Ccf, or about 22% of its 1982 estimate of 237 Ccf. Applicant was unaware of any major changes in land use, occupancy, or of any other factor to explain such large declines in estimated water use.

3/ Standard errors for some of the short-term projections are lower than the errors for the longer term projections (see Attachment A). The standard error for the maximum rainfall adjusted studies are consistently lower than for the unadjusted studies of equal duration.

We are unprepared to accept applicant's predictions of very large overall declines in use. The adopted amount of 255 Ccf for 1984, 1985, and 1986 is reasonable for estimating applicant's revenues and expenses; it is consistent with the six long-term maximum rainfall adjusted projections. It is reasonable to use the same average consumption for each of the three years.

Applicant's estimate of average public authority and irrigation customer sales, concurred in by staff, are adopted.

Numbers of Customers

Applicant's estimates of numbers of customers by class, concurred in by staff, are adopted.

Operating Revenues

Table 1 contains the adopted operating revenues based upon adopted sales volumes and numbers of customers by class.

Unaccounted-for Water

The staff contends that applicant's estimate of unaccounted-for water of 17.31% is excessive and that the 11.0% allowance for unaccounted-for water adopted in D.92516 dated March 21, 1980 is reasonable for this proceeding. Applicant concurs with the staff estimate for unaccounted-for pumped water. Applicant's explanation of the high percentage of unaccounted-for water recorded in operating its gravity irrigation system is as follows:

1. Water is diverted from the Santa Paula Creek into a gravity pipeline for deliveries (on a scheduled basis) to its irrigation customers.
2. In order to operate the gravity system, water must be maintained at a high level within its pipeline.
3. After completion of irrigation water deliveries, large quantities of water remaining in the pipeline are discharged into a lower section of Santa Paula Creek.
4. This return water is treated as unaccounted-for water, which results in an apparently excessive percentage of unaccounted-for water.

We accept applicant's explanation of the large amount of unaccounted for water in its irrigation service and adopt applicant's estimate.

Purchased Power, Chemical, and Water Replenishment Expenses

Applicant and the staff used the same methodology in computing these expenses. The differences in their estimates are primarily related to their respective estimates of pumped volumes of water, which in turn are related to pumped water sales volumes and unaccounted-for water. The staff purchased power expense estimate is based on electric rates of applicant's supplier, the Southern California Edison Company (SCE), in effect on January 1, 1984. Applicant used the August 22, 1983 SCE rates in effect when it prepared its study. The impact of changes in electric rates and of replenishment rates are subject to offset rate relief.

The adopted expenses shown in Table 1 reflect SCE's latest electric rates, adopted pumped water sales volumes, and an 11% allowance for unaccounted-for pumped water.[4/]

Payroll Expenses, Overheads, and Nonlabor Expenses

In deriving its payroll expense estimates, applicant increased its 1983 budgeted payroll expense by 8% per year through 1986. The staff estimates contain cumulative escalation factors above a 1983 base year of 3.95% for 1984, 4.88% for 1985, and 5.14% for 1986 based on recommendations of the staff economics section. Payroll taxes, pensions, and benefit estimates reflect the payroll levels used in the estimates.

Applicant used an annual 5% escalation factor for other nonlabor expenses for 1984, 1985, and 1986. The staff used factors of 3.8%, 5.8%, and 6.5% for those years.

Applicant stipulated to the staff estimates which use more recent data in estimating inflationary trends than applicant. The staff estimates are reasonable and are adopted.

Expense Allocations

Conway testified that:

1. Prior to Park's acquisition of applicant, Milton Teague was applicant's president and principal stockholder; Teague was also president and principal shareholder of the Limonera Corporation (Limonera) and of other corporations; applicant received management, financial, accounting, main office, and other functional services from Limonera in exchange for payment of a nominal $3,000 to $4,000 salary to Teague.

4/ When the Santa Paula Creek is low, applicant supplements supplies for its gravity irrigation customers with pumped water. Applicant's rates for gravity irrigation deliveries reflect its incremental power costs to supply pumped water to the gravity system.

2. These functions are now supplied to applicant by Park.
3. During the transition period following Park's acquisition of applicant, Park absorbed some of applicant's management and billing costs.
4. Based on a 1982 study Park developed allocation factors for assigning its main office expenses to its operating divisions and subsidiaries based on the Commission-adopted four-factor method. 5/
5. Park's expense allocations to applicant for these services are $126,186 for 1984, $135,698 for 1985, and $145,753 for 1986.

5/ Certain administrative and general expenses assignable to multidistrict and/or to several companies cannot be directly assigned to a particular operational unit (OU) (districts or independent companies). The four-factor method averages four ratios of numbers applicable to each OU by the total for all OUs. The four factors are:

1. Direct operating expenes, excluding uncollectibles, general expenses, depreciation, and taxes.
2. Gross plant.
3. Number of employees, excluding general office employees.
4. Number of customers.

This procedure is not followed where inappropriate; e.g., payroll taxes are assigned based on payroll expenses.

6. Due to Park's expertise, it is no longer necessary to engage outside consultants for preparing rate case applications. Consequently, applicant's rate case expenses are substantially reduced; e.g., from $63,000 amortized over five years to $3,000 amortized over three years.

7. Park's billing expense allocations to applicant are lower than today's costs for the outside billing service formerly used by applicant.

The staff allocated 0.75% of the Common Data Processing and billing expenses charged to applicant by Park to a mutual water company, which receives billing services from Park. Applicant's personnel operate three mutual water companies. Applicant charges the mutuals for labor and overheads incurred based on time-card records and charges the mutuals for nonlabor expenses. However, applicant neglected to allocate a portion of its overhead expenses to the mutuals; e.g., for insurance coverage. Applicant stipulated to those staff allocations. The staff estimates are adopted.

Originally, the staff allocated portions of Park's main office expense to the mutuals. Based on applicant's testimony that Park did not supply management services to the mutuals and that the mutuals contracted for such services elsewhere, the staff concurred with applicant's main office expense allocation method.

The expense allocations adopted in Table 1 are based on the stipulations described above which are reasonable.

Uncollectible Expenses

The methodology used by applicant and the staff is reasonable. The adopted amounts reflect adopted revenues.

Rate Base

Applicant stipulated to the staff rate base estimates. The modifications proposed by the staff reflect:

1. Staff use of later recorded utility plant data which in turn affect estimated reserves for depreciation. The staff concurred with applicant's new study of depreciation accruals based on a new straight-line remaining life study. That study provides a reasonable basis for determining depreciation expense for 1984, 1985, and 1986 and is adopted.
2. The staff corrected errors and omissions in applicant's estimates of advances for construction and contributions in aid of construction.
3. Staff use of later data in calculating deferred federal income taxes rate base adjustments.

The staff estimates, including a stipulation eliminating central office plant allocations to the mutuals, are reasonable and are adopted.

The adopted average rate bases are $2,048,183 for 1984, $2,150,196 for 1985, and $2,217,550 for 1986.

RATE OF RETURN

Table 2 shows the elements of rate of return requested by applicant and the adopted capital structure and cost factors recommended by the staff which were stipulated to by applicant.

Park owns 98% of applicant's common and preferred stock; it advances funds needed for applicant's plant construction. Park allocates a portion of its debt, associated with plant used in common by it and by its subsidiaries, to applicant. Applicant estimates the remainder of the debt in its capital structure as its rate base reduced by the book values of its common and preferred stock and the common plant debt allocation. Applicant is charged monthly interest on its advances from Park at the current "Baa" utility bond rate published by Moody's.

Applicant stipulated to the reasonableness of the lower staff estimates of the cost of debt, 12.06 versus 13.5% requested and to a lower return on equity, 14.75% versus a requested 15.0%. The imputation of long-term debt described above is reasonable. Applicant's customers benefit from the existence of 35% of applicant's capitalization in preferred stock with an effective rate of 5%. The 28% of common equity in applicant's capital structure is relatively low. The staff concludes that an overall rate of return of 10.34% for 1984, 1985, and 1986 is reasonable. We concur.

RATES

Applicant's general metered rate design was designed to recover two-thirds of the fixed expenses (derived from its cost-of-service study) in service charges. Alternatively, applicant sought to increase the portion of its total revenues derived from service charges in excess of the Commission's lifeline criteria. As noted above, adopted rates increase the percentage of applicant's revenues in service charges, but they stay within the lifeline criteria. Conway testified that at present rates low service charges for larger meter sizes do not provide a sufficient incentive for applicant's customers to size their meters in proportion to their usage; therefore, some customers obtain service through oversized meters with the capability of imposing excessive demands on applicant; pricing of water meter service charges should be demand-oriented, following the Commission's electrical pricing policies based on time-of-use. Applicant proposes to decrease tail block rates from $0.491 per Ccf to $0.40 per Ccf and to increase service charges. For a 5/8-x-3/4-inch meter, applicant proposes a service charge increase from $3.00 to $7.68 (an 156% increase). Applicant proposes larger increases with each increase in meter size; for an 8-inch meter, applicant proposes to increase the service charge from $51 to $502.21 (an 885% increase). The adopted rates are designed to partially correct service charge imbalances and more reasonably apportion the increase between customers. It would not be reasonable to correct such imbalances in one giant step, as proposed by applicant. Lifeline criteria should govern percentage increases at the lifeline quantity of

3 Ccf per month for 5/8-x-3/4-inch meters, not percentage increases at 3 Ccf for larger sized meters,[5/] which would maintain unreasonable disparities between meter sizes.

Applicant's use of cost-of-service criteria for establishment of a separate schedule for its resale customer is not persuasive and is not adopted. Applicant proposes a major shift in its resale billing from quantity rates to service charges[6/] and establishment of a single resale quantity rate.

Applicant's proposal to change measurement units from an obsolete miner's inch-day quantity measurement for its limited measured irrigation service to a Ccf measurement is reasonable. The adopted percentage increases for this schedule and for private fire sprinkler service are approximately equal to the percentage increases for general metered service. The increases in limited measured irrigation service rates include increases in both minimum charges and in quantity charges. Applicant did not propose any change in its existing $9.50 minimum charge for each irrigation delivery. Future pumped, irrigation quantity charges should track changes in electric and replenishment charges for pumped water delivered to the irrigation system.

5/ Applicant provides no service through 3/4-inch meters.

6/ Applicant proposes the same service charges for 4- and 6-inch meters for general metered service as for resale service.

Findings of Fact

1. Applicant's correlation of its sales volumes with temperature and rainfall deviations from normal climatic conditions for each billing period provides more realistic estimates than the annual correlations embodied in U-25, which was used by the staff.

2. Use of a monthly maximum rainfall adjustment of four inches in estimating sales volumes is reasonable.

3. Applicant's estimate of sharp annual declines in average use based on three years of data is unreasonable. The adopted annual average commercial sales per customer of 255 Ccf for 1984, 1985, and 1986 based on long-term correlations of weather conditions and use is reasonable.

4. Adopted revenues based on average commercial sales of 255 Ccf and on applicant's estimates of other sales volumes are reasonable.

5. Purchased power expenses should be based on SCE's latest rates, adopted sales volumes, and an 11% allowance for unaccounted-for pumped water. Replenishment expenses should be based on existing replenishment rates and adopted pumped water volumes.

6. The staff estimates of labor and nonlabor inflation factors are reasonable.

7. Management services provided to applicant by Teague and/or Limonera were not compensatory.

8. Park provides billing, financial, engineering, and administrative services to applicant. Park's method of allocating costs for those services to applicant based on the four-factor method is reasonable. Applicant omitted certain allocations of

cost to mutual water companies as described above. The staff's revised modifications to applicant's estimates for those allocations are reasonable.

9. Applicant relies on Park's ability to obtain funds to meet applicant's financial requirements. It is reasonable to allocate a portion of Park's 9.5% debt cost to applicant on common plant. It is reasonable to estimate applicant's overall cost of debt at Park's costs of 12.06%. A return on equity of 14.75% is reasonable. The capital ratios and capital costs contained in Table 2 are reasonable and are adopted. A 10.34% overall rate of return is reasonable.

10. The adopted estimates of operating revenues, operating expenses, rate base, and rate of return for test years 1984, 1985, and 1986, shown on Table 1, are reasonable.

11. The percentages of gross plant depreciation rates contained in Chapter 7 of Exhibit 1 are reasonable and should be adopted for calculation of annual book depreciation accruals from 1983 to 1986.

12. Applicant's earnings are subject to wide fluctuations because its incremental sales revenues are approximately 4½ times its variable power and replenishment expenses per Ccf. This ratio is reduced by income taxes and uncollectibles.

13. Applicant's proposed rates would constitute a massive one-step shift of revenues from quantity rates to service charges. Its rate proposals contravene our lifeline rate design policy.

14. Applicant's proposed rate shift is excessive. The adopted rates reasonably increase the proportion of revenues recovered in applicant's service charges.

15. The increases in rates and charges authorized in Appendix A and Appendix B are just and reasonable; and the present rates and charges, insofar as they differ from those prescribed, are for the future unjust and unreasonable.

Conclusions of Law

1. The percentage of increase in the monthly 3 Ccf lifeline quantity applies to water supplied through 5/8-x-3/4-inch meters. That percentage should not serve to limit reasonable differentials in service charges by meter sizes. Service charges for larger meters are unreasonably low. This imbalance should be eliminated in reasonable steps.

2. The application should be granted to the extent provided by the following order.

3. Because of the immediate need for rate relief the following order should be effective today.

O R D E R

IT IS ORDERED that:

1. Santa Paula Water Works, Ltd. (applicant) is authorized to file the revised schedules attached to this order as Appendix A and to concurrently cancel its present schedules for such service. This filing shall comply with General Order (GO) Series 96. The effective date of the revised schedules shall be 4 days after the date of filing. The revised schedules shall apply only to service rendered on and after their effective date.

2. On or after September 15, 1985 applicant is authorized to file an advice letter, with appropriate work papers, requesting the initial step rate increases attached to this order as Appendix B or to file a lesser increase which includes a uniform cents per hundred cubic feet of water adjustment from Appendix B

in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ended July 31, 1985, exceeds 10.34%. Such filing shall comply with GO Series 96. The requested step rates shall be reviewed by staff and shall go into effect upon staff's determination that they conform with this order. But staff shall inform the Commission if it finds that the proposed step rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedule shall be no earlier than November 1, 1985, or 30 days after the filing of the step rates, whichever is later.

3. On or after September 15, 1986 applicant is authorized to file an advice letter, with appropriate work papers, requesting the second step rate increase attached to this order as Appendix B or to file a lesser increase which includes a uniform cents per hundred cubic feet of water adjustment from Appendix B in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ended July 31, 1986, exceeds 10.34%. Such filing shall comply with GO Series 96. The requested step rates shall be revised by staff and shall go into effect upon staff's determination that they conform with this order. But staff shall inform the Commission if it finds that the proposed step rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedule shall be no earlier than November 1, 1986, or 30 days after the filing of the step rates, whichever is later.

4. Applicant's percentage of gross plant depreciation accrual rates contained in Chapter 7 of Exhibit 1 shall be used to calculate book depreciation accruals beginning on January 1, 1983.

5. The application is granted as set forth above. This order is effective today.

Dated NOV 21 1984, at San Francisco, California.

PRISCILLA C. GREW
DONALD VIAL
WILLIAM T. BAGLEY
Commissioners

Commissioner Victor Calvo, being necessarily absent, did not participate.

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

Joseph E. Bodovitz, Executive Director

SANTA PAULA WATER WORKS, LTD — LATE FILED EXHIBIT NO. 9, TABLE 1

COMPARISON OF MULTIPLE REGRESSION COEFFICIENTS AND STANDARD ERRORS OF ESTIMATE IN THE COMPUTATION OF AVERAGE WATER USAGE WITH RECORDED WEATHER FOR VARIOUS TIME PERIODS

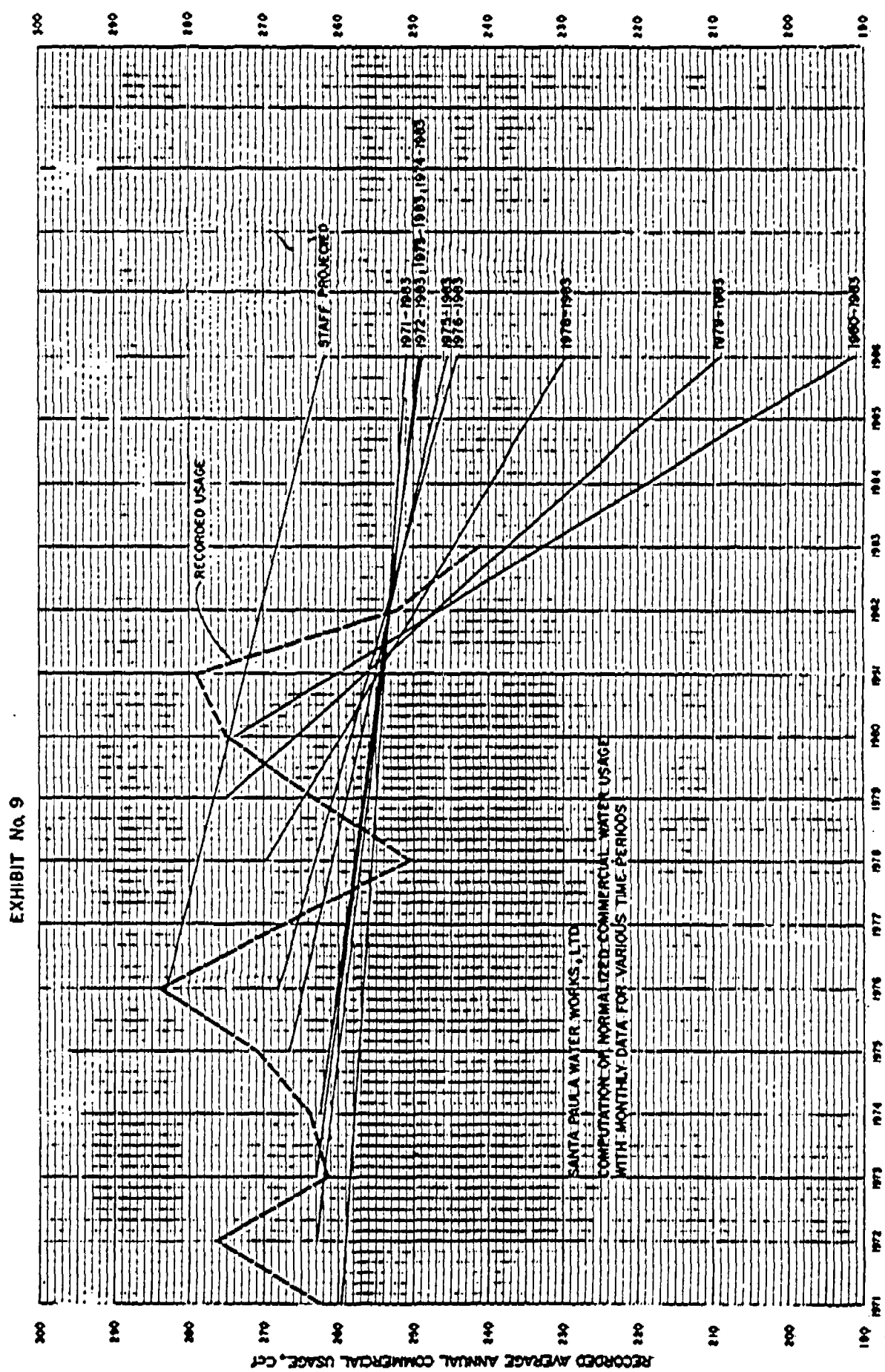
	Time Period								
Description	1971 to 1983	1972 to 1983	1973 to 1983	1974 to 1983	1975 to 1983	1976 to 1983	1978 to 1983	1979 to 1983	1980 to 1983
Recorded Weather Data with no Precipitation Adjustment									
Intercept	-23.6152	-21.76216	-21.02658	-20.41463	-18.35564	-15.5589	-19.59272	-21.41804	-22.8796
Temperature Coefficient	.7776	.75227	.73982	.72861	.70162	.65796	.72758	.76759	.79286
Precipitation Coefficient	-1.08473	-1.13033	-1.12128	-1.11573	-1.16752	-1.19182	-1.09497	-1.01516	-.99263
Time Trend Coefficient	-.00414	-.00691	-.0076	-.00781	-.01308	-.0165	-.03489	-.06596	-.09594
Standard Error of Estimate, Cof	9.28	8.99	9.36	9.82	9.58	10.05	9.59	6.23	4.27
Standard Error, Percent	3.50	3.39	3.54	3.71	3.62	3.81	3.69	2.38	1.63
Estimated 1984 Usage, Cof	252.10	251.05	250.90	251.04	249.46	248.94	239.45	227.71	218.57
Annual Time Trend Effect, Cof	-0.60	-1.00	-1.09	-1.12	-1.88	-2.38	-5.02	-9.50	-13.82
Recorded Weather Data with Precipitation Adjusted to Maximum of 4 inches/month									
Intercept	-15.46835	-12.34771	-10.8001	-10.0263	-7.49527	-4.87026	-6.63957	-10.50839	-12.08227
Temperature Coefficient	.64924	.60513	.58083	.56737	.53409	.49388	.52466	.59774	.62206
Precipitation Coefficient	-2.20334	-2.331	-2.34896	-2.3775	-2.46421	-2.52216	-2.42287	-2.10025	-2.09949
Time Trend Coefficient	.00328	.00119	.00109	.00248	-.00188	-.00321	-.01081	-.0433	-.05779
Standard Error of Estimate, Cof	7.76	7.11	7.36	7.63	7.12	7.48	7.99	3.84	3.87
Standard Error, Percent	2.93	2.68	2.79	2.88	2.69	2.84	3.07	1.47	1.48
Estimated 1984 Usage, Cof	255.74	255.35	255.85	256.99	255.81	256.18	252.30	238.76	234.14
Annual Time Trend Effect, Cof	0.47	0.17	0.16	0.36	-0.27	-0.46	-1.56	-6.24	-8.32

Note: 1977 data is excluded from all computations.

RESULTS OF ANALYSIS

1. Standard error of estimate decreases as most recent data is utilized indicating a significant change in the time

ATTACHMENT A
Page 2



ATTACHMENT A
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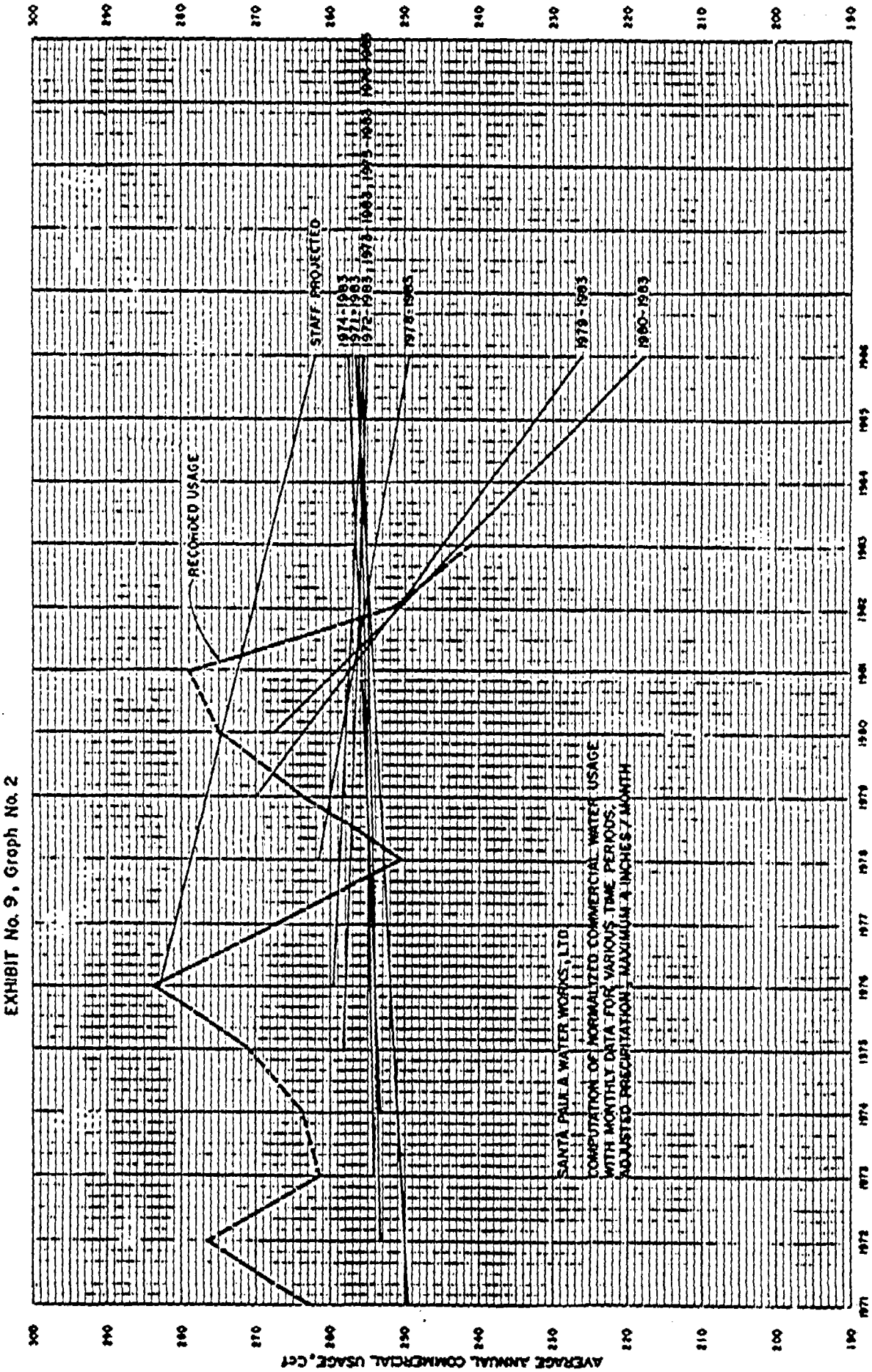

EXHIBIT No. 9, Graph No. 2

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all general metered water service.

TERRITORY

Santa Paula and vicinity, Ventura County.

RATES

Quantity Rates:

	Per Meter Per Month 1984		1985		1986	
First 300 cu.ft., per 100 cu.ft.	$ 0.400	(I)	$ 0.410	(I)	$ 0.413	(I)
Over 300 cu.ft., per 100 cu.ft.	0.542	(I)	0.571	(I)	0.582	(I)

Service Charge:

For 5/8 x 3/4-inch meter	4.70	(I)	4.95	(I)	5.00	(I)
For 3/4-inch meter	6.00	|	6.25	|	6.40	|
For 1-inch meter	7.75	|	8.25	|	8.50	|
For 1½-inch meter	11.00	|	11.50	|	12.00	|
For 2-inch meter	14.00	|	15.00	|	15.50	|
For 3-inch meter	26.00	|	28.00	|	29.00	|
For 4-inch meter	36.00	|	38.00	|	39.00	|
For 6-inch meter	60.00	|	63.00	|	64.00	|
For 8-inch meter	89.00	(I)	94.00	(I)	96.00	(I)

The Service Charge is a readiness-to-serve charge applicable to all metered service and to which is to be added the charge computed at the Quantity Rates, for water used during the month. (I)

APPENDIX A
Page 2
Schedule No. 3ML

LIMITED MEASURED IRRIGATION SERVICE

APPLICABILITY

Applicable to all measured irrigation service furnished on a limited basis.

TERRITORY

Santa Paula and vicinity, Ventura County.

RATES

	Per 100 cu. ft.		
Quantity Rates:	1984	1985	1986
For gravity flow prior to the commencement of pumping operations . . .	$ 0.081 (I)	0.085 (I)	0.089 (I)
When gravity flow is insufficient to supply all of the utility's irrigation customers and pumping operations of the utility are necessary	0.211 (I)	0.222 (I)	0.233 (I)

	Per 24-Hour Day or Any Portion Thereof		
Minimum Charge:	1984	1984	1986
For each irrigation water delivery . . .	$ 11.69 (I)	12.39 (I)	12.64 (I)

SPECIAL CONDITIONS

1. Service under this schedule is limited to the lands being rendered irrigation service as of February 15, 1954.

2. Requests for each irrigation water delivery shall be made to the utility not less than 48 hours in advance of the time said delivery is desired.

APPENDIX A
Page 3
Schedule No. 5

FIRE SPRINKLER SERVICE

APPLICABILITY

Applicable to all fire sprinkler service.

TERRITORY

Santa Paula and vicinity, Ventura County.

RATES

Size of Service	Per Service Per Month 1984	1985	1986
4-inch	$ 6.89 (C)(I)	$ 7.30 (C)(I)	$ 7.45 (C)(I)
6-inch	10.33 | |	10.95 | |	11.17 | |
8-inch	13.78 (C)(I)	14.61 (C)(I)	14.90 (C)(I)

SPECIAL CONDITIONS

1. The customer will pay, without refund, the entire cost of installing the fire sprinkler service.

2. The minimum diameter for fire sprinkler service will be 4 inches and the maximum diameter will be not more than the diameter of the main to which the service is connected.

3. The customer's installation must be such as to effectively separate the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check or other similar device acceptable to the Company which will indicate the use of water. Any unauthorized use will be charged for at the regular established rate for General Metered Service, and/or may be grounds for the Company's discontinuing the fire sprinkler service without liability to the Company.

4. There shall be no cross-connection between the fire sprinkler system supplied by water through the Company's fire sprinkler service to any other source of supply without the specific approval of the Company. The specific approval will require, at the customer's expense, a special double check valve installation or other device acceptable to the Company. Any unauthorized cross-connection may be the grounds for immediately discontinuing the sprinkler service without liability to the Company.

(End of Appendix A)

APPENDIX B
Page 1

ADOPTED QUANTITIES

Name of Company: Santa Paula Water Works
Net-to-Gross Multiplier - 2.050
Uncollectible Rate - 0.069%
Franchise Tax Rate - 0
Federal Tax Rate - 46%
State Tax Rate - 9.6%

1. Water Consumption

	1984	1985	1986
Water Consumption A.F.	4,756	4,831	4,904
Surface Supply A.F.	966	966	966
Balance A.F.	3,790	3,865	3,938
Unaccounted Water A.F.	468	478	487
Pumped Water A.F.	4,258	4,343	4,425
Replenishment Cost $	13,300	13,500	13,800

2. Purchased Power

Quantity Pumped A.F.	4,258	4,343	4,425
Pumping Cost $	208,500	214,600	221,400
kWh	2,601,200	2,693,100	2,796,300
Effective Date		August 13, 1984	

3. Water Consumption/Cust. By Class

Commercial	-	255 Ccf
Public Authority	-	1,023 Ccf
Irrigation	-	18,273 Ccf
Resale	-	8,946 Ccf

APPENDIX B
Page 2

ADOPTED QUANTITIES

4. Adopted Commercial Service by Block Size

Range	Ccf	1984	1985	1986
Block 1	0 - 3	207,806	211,558	215,217
Block 2	Over 3	1,443,622	1,472,510	1,500,726

5. Adopted Service By Meter Size

5/8" x 3/4"	5,114	5,224	5,334
3/4"	-	-	-
1"	703	707	712
1½"	179	191	196
2"	115	117	122
3"	18	18	18
4"	15	15	15
6"	2	2	2
Commercial Metered	6,146	6,274	6,399
Irrigation	23	23	23
Private Fire	22	22	22
	6,191	6,319	6,444

(END OF APPENDIX B)

APPENDIX C

SANTA PAULA WATER WORKS
COMPARISON OF MONTHLY CUSTOMER BILLS
AT PRESENT AND ADOPTED GENERAL
METERED RATES FOR A 5/8 X 3/4 INCH METER

1984

Usage Ccf	Present Rates	Adopted Rates	Amount Increase	Percent Increase
0	$ 3.00	$ 4.70	$ 0.70	57
3	4.18	5.90	1.72	41
10	7.62	9.69	2.07	27
20	12.53	15.11	2.58	21
30	17.44	20.53	3.09	18
50	27.26	31.37	4.11	15
100	51.81	58.47	6.66	13

1985

0	4.70	4.95	0.25	5
3	5.90	6.18	0.28	5
10	9.69	10.18	0.49	5
20	15.11	15.89	0.78	5
30	20.53	21.60	1.07	5
50	31.37	33.02	1.65	5
100	58.47	61.57	3.10	5

1986

0	4.95	5.00	0.05	1
3	6.18	6.24	0.06	1
10	10.18	10.31	0.13	1
20	15.89	16.13	0.24	2
30	21.60	21.95	0.35	2
50	33.02	33.59	0.57	2
100	61.57	62.69	1.12	2

(END OF APPENDIX C)

APPENDIX D

SANTA PAULA WATER WORKS

Income Tax Calculations on Consolidated Basis
at Authorized Rates for Test Years
1984, 1985 and 1986

Operating Revenues	$ 1,350,900	$ 1,449,300	$ 1,502,000
Deductions:			
O&M Expenses	524,188	543,968	567,931
A&G Expenses	381,261	404,701	418,142
Taxes Other than Income	47,380	52,540	55,560
Interest	87,503	91,887	94,757
Subtotal	1,040,332	1,093,096	1,136,390
State Taxable Income Before Deprec.	310,568	356,204	365,610
State Tax Depreciation	97,795	116,041	122,991
State Taxable Income	212,773	240,163	242,619
State Tax @ 9.6%	20,426	23,056	23,291
Federal Tax Depreciation	97,278	115,255	122,363
Federal Taxable Income	192,864	217,893	219,956
Tax on Consolidated Basis			
First $11,480	2,957	2,957	2,957
Excess	83,437	94,950	95,899
Consolidated FIT	86,394	97,907	98,856
Investment Tax Credit	6,078	7,593	8,871
Total Federal Tax	80,316	90,314	89,985
Total Taxes on Income	100,742	113,370	113,276

(END OF APPENDIX D)

The adopted use of 255 Ccf is a rounded estimate of the 1972 to 1983 (excluding 1977) projection. That projection has the best statistical correlation of the longer term projections.[3/] We have considered that the 1972-1983 curve is one of a closely bunched family of projections (see Attachment A).

Applicant is not persuasive in demonstrating that the average customer use will continue to decline by 13 Ccf per year based on three years of base data. The 13 Ccf represents a 5.5% decline in use from 1982 to 1983 and a 6.6% decline in use from 1985 to 1986. Applicant's estimate of the cumulative decline in use between 1982 to 1986 amounts to 52 Ccf, or about 22% of its 1982 estimate of 237 Ccf. Applicant was unaware of any major changes in land use, occupancy, or of any other factor to explain such large declines in estimated water use.

Furthermore, in A.83-11-32 filed by another Park subsidiary, Uehling Water Company, Conway presented a study designed to demonstrate price-elasticity induced declines in use per customer. That study reflected the impact on domestic consumption which followed a 122% increase in Park's Vandenberg Division revenues. That study showed no change in average household uses. Conway testified that the entire decline represented reductions in irrigation uses. Assuming that

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3/ Standard errors for some of the short-term projections are lower than the errors for the longer term projections (see Attachment A). The standard error for the maximum rainfall adjusted studies are consistently lower than for the unadjusted studies of equal duration.

applicant's estimates were realistic and there was no change in the average household use of applicant's customers, its estimate of a 22% decline in total commercial use over four years exceeds Conway's estimate of a 21% decline in Vandenberg's domestic irrigation use.

We are unprepared to accept applicant's predictions of very large overall declines in use. The adopted amount of 255 Ccf for 1984, 1985, and 1986 is reasonable for estimating applicant's revenues and expenses; it is consistent with the six long-term maximum rainfall adjusted projections. It is reasonable to use the same average consumption for each of the three years.

Applicant's estimate of average public authority and irrigation customer sales, concurred in by staff, are adopted.

Numbers of Customers

Applicant's estimates of numbers of customers by class, concurred in by staff, are adopted.

Operating Revenues

Table 1 contains the adopted operating revenues based upon adopted sales volumes and numbers of customers by class.

Unaccounted-for Water

The staff contends that applicant's estimate of unaccounted-for water of 17.31% is excessive and that the 11.0% allowance for unaccounted-for water adopted in D.92516 dated March 21, 1980 is reasonable for this proceeding. Applicant concurs with the staff estimate for unaccounted-for pumped water. Applicant's explanation of the high percentage of unaccounted-for water recorded in operating its gravity irrigation system is as follows:

RATE OF RETURN

Table 2 shows the elements of rate of return requested by applicant and the adopted capital structure and cost factors recommended by the staff which were stipulated to by applicant.

Park owns 98% of applicant's common and preferred stock; it advances funds needed for applicant's plant construction. Park allocates a portion of its debt, associated with plant used in common by it and by its subsidiaries, to applicant. Applicant estimates the remainder of the debt in its capital structure as its rate base reduced by the book values of its common and preferred stock and the common plant debt allocation. Applicant is charged monthly interest on its advances from Park at the current "Baa" utility bond rate published by Moody's.

Applicant stipulated to the reasonableness of the lower staff estimates of the cost of debt, 12.06 versus 13.5% requested and to a lower return on equity, 14.75% versus a requested 15.0%. The imputation of long-term debt described above is reasonable. Applicant's customers benefit from the existence of 35% of applicant's capitalization in 5% ~~common~~ preferred stock. The 28% of common equity in applicant's capital structure is relatively low. The staff concludes that an overall rate of return of 10.34% for 1984, 1985, and 1986 is reasonable. We concur. WB

3 Ccf per month for 5/8-x-3/4-inch meters, not percentage increases at 3 Ccf for larger sized meters,[5] which would maintain unreasonable disparities between meter sizes.

Applicant's use of cost-of-service criteria for establishment of a separate schedule for its resale customer is not persuasive and is not adopted. Applicant proposes a major shift in its resale billing from quantity rates to service charges[6] and establishment of a single resale quantity rate.

Applicant's proposal to change measurement units from an obsolete miner's inch/day quantity measurement for its limited measured irrigation service to a Ccf measurement is reasonable. The adopted percentage increases for this schedule and for private fire sprinkler service are approximately equal to the percentage increases for general metered service. The increases in limited measured irrigation service rates include increases in both minimum charges and in quantity charges. Applicant did not propose any change in its existing $9.50 minimum charge for each irrigation delivery. Future pumped, irrigation quantity charges should track changes in electric and replenishment charges for pumped water delivered to the irrigation system.

5/ Applicant provides no service through 3/4-inch meters.

6/ Applicant proposes the same service charges for 4- and 6-inch meters for general metered service as for resale service.