ORIGINAL

Decision 82 12 066 December 15, 1982

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the matter of the Application of LAGUNA HILLS SANITATION, INC. for an order authorizing an increase in rates.	Application 82-02-15 (Filed February 8, 1982)

Graham & James, by Thomas J. MacBride, Jr., Attorney at Law, for applicant.
Martin E. Whelan, Jr., Inc., by Martin E. Whelan, Jr., Attorney at Law, for Professional Community Management, Inc. and for Mutual Housing Corporations Inside Leisure World, protestants.
Robert Cagen, Attorney at Law, for the Commission staff.

INTERIM OPINION

I. SUMMARY

Rates for sewer service are increased by $354,500 of which $65,200 is subject to refund. The rate for unrestricted residential service is increased from $9.25 to $10.39 per dwelling unit and for restricted residential service from $8.01 to $9.00 per dwelling unit. The percentage differential in these rates established in prior decisions is retained.

The portion of the revenue increase subject to possible refund represents the effects of The Economic Recovery Tax Act. It is to be collected subject to refund pending a determination of the manner, if any, in which revisions to the surcharge method

II. INTRODUCTION

Laguna Hills Sanitation, Inc. (LHSI) seeks authority to increase its rates for sewer service. The rate increases proposed by LHSI are in steps designed to increase annual revenues for test year 1982 by $713,600, or 26.4%, over the revenues produced by rates in effect at January 1, 1982; for test year 1983 by $261,700, or 7.5%, over revenues from rates proposed for 1982; and for test year 1984 by $270,200, or 7.1%, over revenues from rates proposed for 1983.

LHSI provides sewer service to certain portions of Laguna Hills, El Toro, and Mission Viejo in south Orange County. It maintains a network of more than 100 miles of collection mains and transmission and trunk lines serving approximately 24,000 service connections. Its sewer system connects to an ocean outfall pipeline.

As of December 31, 1981 LHSI's net utility plant was $13,624,830 and its contributions in aid of construction were $10,858,068, or 80% of net utility plant. This is an extraordinary relationship. It is the result of developers being required, as a condition of service, to contribute in-tract facilities and to pay connection charges (CIA-BP) to finance backbone plant.

LHSI and Laguna Hills Water Company (LHWC) are wholly owned subsidiaries of Laguna Hills Utility Company (LHUC), a publicly held company. LHSI uses the employees of LHWC to perform the required operation, maintenance, and construction work. As of December 1, 1981, there were 48 employees of LHWC available to LHSI, each of whom charges LHSI on a time card basis for work actually performed.

CORRECTION

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The portion of the revenue increase subject to possible refund represents the effects of The Economic Recovery Tax Act. It is to be collected subject to refund pending a determination of the manner, if any, in which revisions to the surcharge method of financing certain of Laguna Hills Sanitation, Inc.'s (LHSI) facilities or elimination of the surcharge altogether could reduce LHSI's revenue requirement and yet retain The Economic Recovery Tax Act compliance as established by this decision. Because of that pending determination this will be an interim decision.

A return on common equity of 14.75% which equates to a 12.02% rate of return on rate base, is authorized. Although no allowance for operational attrition was found necessary for 1984, there is exposure to substantial financial attrition in late 1984 because of debt rollover. An advice letter filing responsive to this situation is authorized.

The request to have interest included in the Effluent Disposal Cost Adjustment account is denied at this time.

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An informal public meeting held during the evening on May 21, 1982 in Laguna Hills preceded the hearing on this matter. The meeting was sponsored by LHSI and the Commission staff to provide an informal setting in which customers could express their views and applicant could explain its asserted need for a general rate increase and respond to questions or complaints. Only 10 customers attended the meeting.

After due notice, public hearing on this application was held before Administrative Law Judge Main in Los Angeles on September 20, 21, 22, and 23, 1982. LHSI presented testimony and exhibits through its vice president-general manager and through a rate of return specialist. The staff studies were presented by a project manager, a financial analyst, and two utilities engineers. Professional Community Management and Mutual Housing Corporations Inside Leisure World, protestants collectively referred to as PCM, sponsored a consulting engineer who testified on cost allocation and rate structure.

At the conclusion of the evidentiary hearings, LHSI requested that, in addition to concurrent briefs prescribed under the Regulatory Lag (now Rate Case Processing Plan), provision be made for reply briefs. The request was granted and this matter was submitted upon the October 29, 1982 mailing of reply briefs.

On November 22, 1982 LHSI filed its petition to set aside submission to receive late-filed Exhibit 19 setting forth operating results revised to show additional impacts of the Economic Recovery Tax Act of 1981 (ERTA). ERTA constrains a utility's ability to pass on to the ratepayers the tax benefits which accrue from post-1980 plant additions. In LHSI's case, those benefits accrue primarily from the improvement project financed through bonds issued by the California Pollution Control Financing Authority (CPCFA).

The enactment of ERTA was unforeseen at the time we issued Decision (D.) 91339 dated February 13, 1980 in Application (A.) 59033. By D.91339 LHSI was required to pass on all the tax benefits of the CPCFA-financed project to the ratepayer and was authorized to levy a surcharge on its rates to service the bond indebtedness. On November 22, 1982 LHSI also filed A.82-11-40 for modification of D.91339 to have it conform to ERTA requirements.

III. RATE OF RETURN

Complete rate of return showings were made by LHSI and the staff. PCM did not put on a direct case on this issue, but participated in the cross-examination of LHSI's witness.

During the hearing, LHSI and the staff agreed upon capitalization ratios and cost of long-term debt. They also agreed upon an advice letter procedure proposed by LHSI to recognize the actual cost of its refinancing in 1984. LHSI's first mortgage bonds, Series A, 6%, amounting to $1,226,500 as of December 31, 1982, are due October 1, 1984.

To ensure a fair result to both the ratepayer and the utility in light of the improbability of accurately estimating the applicable interest rate, LHSI seeks authority to file, at the time of refinancing, an advice letter reflecting the increase in LHSI's embedded cost of long-term debt that will then occur. In the absence of rate relief reflecting that increase, LHSI would suffer substantial financial attrition during the fourth quarter of 1984.

The return on equity and consequently the overall rate of return remain in dispute. LHSI's revised requested rate of return and the staff's recommended rate of return are summarized as follows:

Test Period - 1982, 1983, and 1984

Component	Capitalization Ratios	Cost	Weighted Cost LHSI	Weighted Cost Staff
Long-term Debt	40.00%	6.38%	2.55%	2.55%
Common Equity	60.00	18.20*/14.75**	10.92	8.85
Total	100.00%		13.47%	11.40%

* Midpoint of 16.90 to 19.50 range.
** Midpoint of 14.50 to 15.00 range.

At the hearing, PCM supported the staff recommendation. It now feels that recommendation may be too high.

Applicant's Witness

Dennis E. Peseau, senior vice president and senior economist of Zinder Companies, Inc., used principally the Capital Asset Pricing Model (CAPM) and Discounted Cash Flow (DCF) approach to estimating the cost of equity capital. Peseau has employed these techniques in more than 15 rate cases. He is certain that the cost of equity, which modern financial principles break into three components, must be market-determined. The three components are: a return necessary to compensate for general inflation (a "risk-free" return), a real return for postponing current consumption, and a return associated with the specific risk of the company's common stock.

Peseau stresses that the Commission has indicated concern over the adequacy of rate of return determinations made under rapidly changing economic and interest rate conditions. In that regard, he referred frequently to the March 1982 study made for the Commission by Charles River Associates entitled, "Methods Used to Estimate the Cost of Equity Capital in Public Utility Rate Cases: A Guide To Theory and Practice" (CRA Report).[1/] He also referred to Commissioner Bryson's concurrence appended to D.93887 dated December 30, 1981 in A.60153 et al.

In Peseau's view, market methods for determining return on equity yield far more accurate answers than traditional comparable earnings tests. Those tests in their traditional form cannot respond to changes in financial markets, interest rates, economic conditions, and inflation and monetary policy.

1/ The CRA Report represents the views of its authors and not necessarily those of the Commission.

In his view, it is unsound to conclude that water companies or sewer companies are lower risk companies than other types of utilities on the basis of one or two of the many factors which affect risk. Through the CAPM and DCF methods he contends he has demonstrated that water and sewer companies are only slightly different than the broad basic utilities.

Conversely, he points out that the size of the contributed portion of LHSI's utility plant is virtually a unique characteristic affecting risk. Because such an influence on risk is atypical of other companies, he believes it warrants being given a separate or incremental-type consideration.

LHSI's effective equity ratio after consideration of contributions is less than 12%, thereby increasing common equity risk to a level above the risk of typical utilities without increasing earnings potential. To compensate for this additional risk facing LHSI, Peseau originally had placed the cost of equity capital for LHSI at least one-half percent above the top of the range of 18.1% to 19.0% he found for the Standard & Poor's 22 utility companies. However, because of an outlook for more stable economic conditions since making his study, he has tended to back away from this upward adjustment to 19.5%. Ultimately his position was that his equity cost range for water companies of 16.9%-17.6% using the CAPM and an 18.2% cost using a DCF model properly accounted for changing economic conditions and interest rates and, therefore, should not be changed. While no longer urging 19.5%, he continues to believe some increment should be added to any point falling within this 16.9% to 18.2% range to reflect the additional risk imposed by the inordinately large share of LHSI's utility plant financed by contributions.

Peseau testified that much of the required cost of equity for most companies today, including utilities, is dominated by a "risk-free" component. His estimate of this component for test years 1982, 1983, and 1984 is 11.5% to 12.0%. This range is based upon his review of August/September 1982 long-term and intermediate-term U.S. Treasury rates plus forecasts of such rates and the then current market forecasts of short-term rates implied by T-Bill futures, shown as follows in Exhibit 10:

Past and Forecasted Treasury Rates:
Background for Determination of Risk-Free Rate

Average for	Short-term T-Bill	Intermediate-Term T-Bond	Long-term T-Bond
1926-1980 a/	3.0%	3.9%	4.1%
1979 a/	10.1	9.5	9.3
1980 a/	11.4	11.5	11.3
1981 a/	14.0	14.2	13.4
August 30, 1982 b/	8.7	12.4	12.4
December 1982 b/	11.2 (Futures)		
March 1983 b/	11.9 (Futures)		
March 1983 c/	10.5-11.5	12.5-13.5	12.5-13.25

Sources: a/ Fisher and Lorie, A Half Century of Returns on Stocks and Bonds (Chicago, 1977) and Federal Reserve Bulletins.

b/ Wall Street Journal.

c/ Merrill-Lynch, Monthly Research Review (June 1982).

Peseau arrived at the CAPM equity cost estimate of 16.9% to 17.6% for typical water companies using a beta of .64, market risk premium ranging from 8.4% to 8.8%, and the risk-free rates of 11.5% to 12.0% as follows:

Bottom: 11.5% + (.64 x 8.4%) = 16.9%

Top: 12.0% + (.64 x 8.8%) = 17.6%

The issue of greatest concern with regard to risk-free rate was whether the range should be based upon a review of long-term, intermediate-term, and short-term treasury rates and forecasts of such rates, as recommended by Peseau, or made solely with reference to 90-day (short-term) treasury rates. Consideration of the latter was suggested by staff witness Blunt in establishing the low range of his CAPM analysis and suggested by counsel for PCM.

Peseau submits that the rate to be employed as the risk-free rate for purposes of determining a return on equity should have four characteristics:

1. The rate should be a market-determined rate.
2. The instrument upon which the rate is earned should possess little risk of default.
3. The instrument should have a maturity short enough to minimize the risk of price changes of concern to investors.
4. The rate adopted should be conceptually consistent with a future period at least as long as the period one would expect new tariffs to be in effect.

He contends that the intermediate rate should be employed to determine the risk-free rate for a number of reasons among which are:

1. Employment of a short-term (90-day) rate is inappropriate, since those rates have been very volatile recently, ranging from less than 9% to more than 15%. LHSI is not permitted to apply for rate relief every 90 days as that rate changes. If the Commission employs the current 90-day rate for purposes of developing a return on equity for LHSI and that rate fluctuates upward to levels in existence a very short time ago, LHSI will find itself earning a return on equity almost on a par with or possibly lower than the risk-free rate.

2. Theoretical consistency demands that the risk-free rate employed for test years 1983 and 1984 be consistent with that rate earned on a risk-free instrument with a maturity approximating that time. A 90-day rate provides one with a risk-free rate for 90 days. However, there are eight such 90-day periods in two test years.

3. Empirical tests show that short-term rates, while risk-free, carry a liquidity premium which renders them inappropriate for employment in CAPM. This existence of a liquidity premium renders them inappropriate for determining a return on equity to remain in effect for a number of years.

Staff Witness

Christopher J. Blunt, a financial examiner with the Revenue Requirements Division of the Commission, testified on rate of return for the staff. Blunt based his return on equity recommendations on an analysis of many factors both tangible and intangible which he claims affect the cost of equity capital to LHSI. Blunt testified that one cannot base estimates solely on definitive formulas or precise mathematical calculations, that, of necessity, determination of return on equity capital is a judgment determination. In arriving at his recommendation he was guided by the standards set forth by the U.S. Supreme Court decisions and prior decisions of this Commission. They are as follows:

1. The return to the equity holder should be commensurate with the returns on investments in enterprises having similar risks.
2. The return should be sufficient to enable the utility to attract capital at reasonable rates and to assure confidence in the utility's financial integrity.
3. The return should balance the interests of both the investors and the customers of the utility.

Blunt believes that his recommended return on common equity of 14.5% to 15.0% will provide an adequate risk premium over long-term debt during the period the sewer rates will be in effect. He did not quantify the risk premium, but indicated that (1) during periods of high interest rates and uncertainty regarding inflation, the risk premium could be expected to fluctuate; and (2) high equity ratio companies, such as LHSI, and sewer utilities by being less risky, in his view, require a smaller risk premium.

As a confirmation of his judgment recommendation, Blunt compared the results obtained through CAPM and DCF models used by the staff on a water company. He listed the following factors which he contends make a sewer utility less risky than other utilities:

1. Sewer utilities are not as capital intensive. Construction programs are much smaller and are financed to a large degree by contributions in aid of construction.
2. Nearly all external financing undertaken by sewer utilities is accomplished through private placement with insurance companies resulting in relatively lower interest rates.
3. Sewer utility service areas are well-defined and are not subject to the same degree of risks as other utilities such as fuel costs, source of supply, nuclear generation, and competition.

Some of the additional factors which Blunt considered in arriving at his recommendation were:

1. LHSI is a regulated public utility engaged in a business which affects the public interest.
2. LHSI's capital structure, capital costs, and financial history.
3. LHSI's capital requirements.
4. The lack of competition.
5. Economic conditions - effects of continued inflation.

Blunt believes his recommendation of 14.5% to 15% on equity strikes a balance between the interests of LHSI's customers and its stockholders. Customers want good service at the lowest possible rates, and the stockholders want a reasonable return on their investment. Blunt states his recommended return will allow LHSI to service its fixed charges and provide moderate additions to retained earnings while maintaining adequate service to its customers.

Discussion

The improvement in the financial markets underway in recent weeks has been noted at the hearing and in briefs by all parties to the proceeding.

Staff witness Blunt stated he reached his recommended range for return on equity primarily through informed judgment. He found only one comparable sanitation company in the United States, a small company in Atlantic City, New Jersey, and felt one sewer company was not enough to make a study. He therefore relied on water company data. He offered Exhibit 11 (setting forth authorized returns on equity for California Class A Water Utilities) in support of his recommendation for LHSI's return on equity. Exhibit 11 shows that the 14.5% return on equity granted Southern California Water Company and California Water Service Company in 1982 decisions is lower than the midpoint of staff's recommendation for LHSI. Blunt felt investing in a sewer utility was less risky when compared to other utilities for the reasons listed earlier.

Blunt stated he did not include a DCF or CAPM analysis of water companies in Exhibit 12 (Study of Cost of Capital and Rate of Return) because he felt water companies' historical data were not appropriate for a financial model to arrive at a recommended return on equity for a sewer company.

Staff witness Blunt's DCF and CAPM studies, based on water companies, provide a backup and check for his recommendation for LHSI. The results Blunt obtained differ from those reached by Peseau principally in the earnings per share growth rate for the DCF formula and in the risk-free interest rate for the CAPM formula.

Blunt developed his DCF growth rates by employing retention ratios based on average returns and dividend payouts over a 5-year period. Peseau developed his DCF growth rates using Value-Line and Merrill-Lynch estimates of earnings per share growth for the Standard & Poor's 22 utilities and using primarily the growth in earnings per share over the last five years reported by Public Utilities Fortnightly for water company calculations. Peseau developed an average growth rate of 6.55% for the Standard & Poor's 22 utilities and 6.67% for nine water companies in contrast to the 3.36% developed by Blunt.

In his CAPM analysis, Blunt employed a risk-free rate ranging from 9% for short-term instruments to 11.5% for intermediate-term instruments. Peseau, for the reasons summarized earlier in this decision, employs an 11.5%-12.0% range reflective of intermediate-term instruments.

As stated earlier with reference to LHSI's petition to reopen and late-filed Exhibit 19, the enactment of ERTA constrains LHSI's ability to pass on to the ratepayer the tax benefits which accrue from the improvement project financed through bonds issued by CPCFA. This constraint affects LHSI's capital ratios and debt costs. It also provides a source of increased internal fund financing.

As developed in Appendix D of this decision, the capital ratios change from the 40% debt/60% equity developed by the staff and stipulated to by LHSI to 60% debt/40% equity and the cost of debt increases from 6.38% to 10.20%. According to the work papers for late-filed Exhibit 19, the retention of tax benefits by LHSI will result in over $300,000 of cumulative cash flow by mid-1984. These additional internally generated funds presumably will reduce the amount of external financing required to replace LHSI Series A bonds becoming due October 1, 1984.

LHSI's extremely high level of contributed plant has, while holding down its rates for sewer service, rendered its earnings extremely susceptible to operational attrition. Because operations and, therefore, expenses are a function not of the earnings base (rate base) but of total physical plant, a missed forecast on expenses will cause earnings volatility. An attrition allowance will moderate this extraordinary risk facing LHSI to some extent. However, LHSI's exposure remains much greater than other utilities under our jurisdiction when attrition forecasts miss the mark.

It is revealing to compare the burden on the ratepayer for return and related taxes on income, using a zero contributed plant ratio (Company A) and LHSI's approximately 80% contributed plant ratio (Company B). Otherwise companies A and B are identical. In addition, for purposes of the comparison only, contributed plant necessarily becomes part of rate base.

Comparative Customer Burden

Item	Company A Capital Proportions	Company A Cost Factor	Company A Allowance	Company B Capital Proportions	Company B Cost Factor	Company B Allowance
Contributions	0%	-	-	80%	0%	0%
Long-term Debt	60	8.00%	4.80	12	8.00	0.96
Common Equity	40	15.00	6.00	8	15.00	1.20
Total Return			10.80			2.16
Required Related Taxes*			6.00			1.20
Cost for Return and Related Taxes			16.80			3.36

* Assumes effective tax rate of 50%. Comparison ignores greater tax benefits available to Company A and Company A's depreciation expense for ratemaking purposes being four times Company B's.

An examination of the relationships depicted in this tabulation indicates that the computed earnings allowance on common equity for Company B would have to be 99% for the 16.80% cost of return and related taxes of Company A to be reached. The dissimilarity of the consumer burden in the two cases serves to corroborate that LHSI's capital structure is unique. In addition to the earnings volatility risk, an inherent characteristic of a contributed plant-laden capital structure is an increased need to attract capital for replacement from time to time of contributed plant on which depreciation cannot be taken for either ratemaking or tax purposes.

In our judgment, based on the comprehensive record developed on the rate of return issue, a 14.75% return on common equity is reasonable for LHSI. It strikes balances between LHSI's earnings volatility and reduced revenue requirements attributable to contributed plant and between the consumer's short-term concern to obtain the lowest possible rates and the need to maintain good sewer service over the long run. The resultant overall rate of return is 12.52% determined as follows:

Test Period - 1983 and 1984

Component	Capitalization Ratios	Cost	Weighted Cost
Long-term Debt	60.00%	10.20%	6.12%
Common Equity	40.00	14.75	5.90
Total	100.00%		12.02%

IV. RESULTS OF OPERATIONS

Part I - Table 1

To evaluate the need for rate relief, witnesses for LHSI and the Commission staff have analyzed and estimated for test years 1982 and 1983 LHSI's operating revenues, operating expenses, and rate base. Staff's report of operating results (Exhibit 7) was based, in part, on later information than that available in December 1981 when LHSI prepared its report.

(Exhibit 1). In Exhibit 17 LHSI and staff recast their respective estimates of operating results for test year 1983 to reflect the revised positions they took during the course of the hearing. Staff accepted LHSI's estimate of operating revenues. LHSI elected not to contest most of staff's estimates of operating expenses and did not contest staff's estimate of rate base. In Table 1, which follows, the results for test year 1983, as shown in Exhibit 17, are set forth.

In Table 1 the differences remaining between the estimates of LHSI and staff were entered in column (3). We will now address these differences.

A. Regulatory Commission Expense

LHSI's estimate of $28,500 exceeds the staff estimate of $7,600 by $20,900. This difference is accounted for as follows:

	LHSI	Staff	Difference
	(Dollars in Thousands)		
Rate Case	$12.9	$7.6	$ 5.3
Regional Water Quality Control Board	7.3	0	7.3
Flow Study (Rate Design)	8.3	0	8.3
Totals	28.5	7.6	20.9

<u>Rate Case Expense</u>

LHSI's revised estimate, as shown in Exhibit 4, is $38,800 spread over a 3-year period or $12,900 as shown above. Its original estimate of this expense was $17,500 per year and its latest estimate (late-filed Exhibit 16) is $49,900, yielding $16,600 spread over a 3-year period.

TABLE 1

LAGUNA HILLS SANITATION, INC.

Estimated Results of Operations[a/]
Test Year 1983

Item	LHSI (1)	Staff (2)	Difference (3)=(1)-(2)
	(Dollars in Thousands)		
Operating Revenues	$2,761.5	$2,761.5	
Operating Expenses:			
Effluent Disposal Balancing Account	817.5	817.5	
Purchased Power	393.1	393.1	
Other O & M	1,000.0	1,000.0	
Payroll Taxes	41.7	41.7	
Property Taxes	30.2	30.2	
A & G Expenses	150.1	150.1	
Regulatory Commission Exp.	28.5	7.6	20.9
Rent	33.8	23.0	10.8
Depreciation	122.8	122.8	
Income Taxes	(34.8)	(18.6)	(16.2)
Total Operating Exp.	2,582.9	2,567.4	15.5
Net Operating Revenues	178.6	194.1	(15.5)
Rate Base	2,626.5	2,626.5	
Rate of Return	6.80%	7.39%	

(Red Figure)

a/ These operating results exclude both the revenues from the CPCFA surcharge and the plant and expenses which determine that surcharge. In our adopted summary of earnings (see Table 2) we have included the CPCFA surcharge and related items.

The $7,600 per year staff figure results from selected adjustments to an LHSI work paper rather than from a comprehensive evaluation of this expense category. As a consequence of this cursory approach, the cost of preparatory work done between the end of March and the first day of hearing (September 20, 1982) was not picked up, even though the staff did not dispute the time spent on this rate case prior to hearing. Exclusive of its September component, the rate case expense for that period was $14,647 according to Exhibits 4 and 16.

For four days of hearing and for briefs (opening and reply) the staff allowed, exclusive of travel expenses, $8,000 for the services of both the attorney and the expert on rate of return retained by LHSI. According to late-filed Exhibit 16, those services plus services rendered during the portion of September preceding the hearing were estimated to cost LHSI $23,284.

LHSI's estimate of $38,800 spread over a 3-year period, as reflected in the comparison exhibit, is more reasonable than the staff's estimate and will be included in our adopted operating results.

Regional Water Quality Control Board

LHSI originally estimated $15,000 for test year 1983 for preparation of reports to the Regional Water Quality Control Board (Regional Board). This figure was based upon 1981 recorded data. The staff assumed that completion of the 1981 report to the Regional Board relieved LHSI of any further reporting requirements and, therefore, recommended no allowance in subsequent years for such reporting. At the hearing, LHSI reduced its original estimate of $15,000 to $7,300. Despite the staff's assumption that the 1981 report would be the final report, LHSI expended $4,500 during the first eight months of 1982 preparing additional reports for the Regional Board. According to LHSI, discussions with the Regional Board and PRC Toups indicated that PRC Toups' effort would not have to be as extensive in future years as it was during the late '70s. The $7,300 figure offered by LHSI for test year 1983 was derived by annualizing the $4,500 expended during 1982 and multiplying the result by the staff's inflation factor of 8.6%.

There is a continuing requirement to file reports with the Regional Board. LHSI's estimate of $7,300, as reflected in the comparison exhibit, appears reasonable and will be included in our adopted operating results.

Flow Study

LHSI's original estimate of regulatory Commission expense did not include the cost of a flow study.

After this application was filed, LHSI and PCM entered into an arrangement under which PRC Toups would conduct a flow study to determine the differences in flow, if any, between restricted and unrestricted units. PCM agreed to pay for the costs of the study up to a predetermined maximum amount and LHSI agreed to reimburse PCM in the event LHSI was able to recover the costs of the study as a regulatory expense. The study ultimately cost $25,000, which LHSI has spread over a 3-year period in arriving at the $8,300 figure included in its revised estimate of regulatory Commission expense (Exhibit 4). The staff estimate excludes the flow study.

Both LHSI and PCM contend that the flow study was essential to a proper resolution of the basic rate design issue. The flow study was, nonetheless, an integral part of the presentation made by PCM's witness. As such, it was and should remain a part of PCM's costs. Accordingly, the cost of the flow study will be excluded from our adopted operating results.

B. Rent

In June 1982 LHSI consolidated its customer service and administrative offices. The combined available space for both the administrative and customer service offices is now 6,800 square feet. This compares with the previous 3,500 square feet for administration and 1,200 square feet for the customer service. The two offices were 1-1/2 miles apart with the customer service office serving as the base for six representatives as well as housing a computer. As a result of this move and space expansion, LHSI now has all accounting, customer service, and administrative personnel in one location.

The move was not reflected in LHSI's estimated operating results prepared in late 1981 (Exhibit 1), which showed a rental expense of $22,000. The updated rental expense of $33,800 was furnished with other data requested by the staff about four months before the hearing.

This office space is rented from Rossmoor Corporation. The principal officer and stockholder of LHSI's parent, LHUC, is also the principal officer and stockholder of Rossmoor Corporation. The rental rate is 80¢ per square foot which, according to LHSI's vice president and general manager, is "cheap at twice the price in Laguna Hills".

The staff contentions that this later information on rental expense constitutes bulk updating and could require the application to be amended are without merit. The record is clear that LHSI's rental expense estimate of $33,800 is reasonable.

C. Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)

Under TEFRA, LHSI's tax expense would be slightly increased. However, to expedite completion of this rate proceeding LHSI requested that this decision exclude the effects of TEFRA. Accordingly, Table 1 has not been adjusted for those effects nor have those effects been included in the operating attrition allowance for 1984 addressed further on in this decision.

Part II - Table 2

As noted in Table 1, the operating results excluded both the revenues from the CPCFA surcharge and the plant and expenses which determine that surcharge. At the time Exhibit 17, the basis for Table 1, was received in evidence LHSI and the staff believed that their respective calculations of federal income tax met the requirements of ERTA. In early November 1982 LHSI was advised by its accountant, Price Waterhouse, that

> "[U]nless the Staff Report dated September, 1982 (Application No. 82-02-15) and the California Public Utilities Commission's Decision No. 91339 are amended to comply with the normalization requirements of Sections 46 and 168 of the Internal Revenue Code (as amended by the Economic Recovery Tax Act), LHSI would not be entitled to the benefits of investment tax credits (ITC) and accelerated cost recovery system (ACRS) deductions for its post-1980

> asset additions. The transitional rules for normalization provide that a utility will not be deemed in violation of IRC Section 168 and 46 (i.e., using a normalization method of accounting) if it uses a normalization method of accounting by the terms of its 'first rate order' which becomes effective after August 13, 1981 (and on or before January 1, 1983) and as long as current normalization methods under its pre-August 13, 1981 rate order are in compliance with the requirements of existing Section 167 and 46."

This advice led to LHSI's petition to set aside submission to receive late-filed Exhibit 19 and to its A.82-11-40 for modification of D.91339 which was issued prior to the enactment of ERTA. According to revised late-filed Exhibit 19 and related work papers, the test year 1983 increments to the Table 1 estimates (also Exhibit 17 estimates) for inclusion of the CPCFA plant are:

1. Increase operating revenues by $203,100 which represents the surcharge revenue determined on a customer base consistent with Table 1 nonsurcharge revenues.
2. Increase the franchise fees and uncollectibles by $600 in response to the inclusion of the surcharge revenues.
3. Increase depreciation expense by $58,000 (CPCFA plant $1,449,800 with 25-year service life).
4. Increase rate base by $1,014,800 (restore the rate base deduction for the CPCFA plant of $1,394,700 (Table 6-E, Exhibit 7), but deduct $263,900 for deferred tax and investment tax credit adjustment).

Our adopted operating results include the CPCFA plant, comply with ERTA requirements for the Accelerated Cost Recovery System (ACRS) and the Investment Tax Credit (ITC), and reflect the resolution we have made of the differences that remained between the staff and LHSI in Table 1. These results are set forth in Table 2, which follows.

The CPCFA facilities, which are now included in rate base, were placed into service in 1981. The surcharge method of financing was required by D.91339 because (1) conventional financing was unavailable to LHSI because of its poor financial condition and (2) surcharge financing was thought to result in the lowest cost to LHSI's ratepayers. The latter reason was largely dependent on LHSI's ability to pass on tax benefits resulting from the construction of the facilities to its ratepayers.

In light of the enactment of ERTA, not only does separate ratemaking treatment of the CPCFA plant no longer appear advisable but, by our order in this decision, we are directing that D.91339 be deemed modified to the extent necessary to conform to ERTA and that steps be taken by LHSI to have restored to it ITC benefits previously paid to the trustee in compliance with D.91339.

Our determination that D.91339 be deemed modified to the extent necessary to comply with ERTA is final. The following determinations, as reflected in Table 2, are also final:

1. Depreciation expense for ratemaking purposes include straight-line depreciation on the CPCFA facilities. Consistent with this requirement, the cost of the facilities are included in rate base.

TABLE 2

LAGUNA HILLS SANITATION, INC.

Adopted Summary of Earnings
Test Year 1983

	Present Rates	Authorized Rates
	(Dollars in Thousands)	
Operating Revenues	$2,964.6	$3,305.1
Operating Expenses:		
Effluent Disposal Balancing Account	817.5	817.5
Purchased Power	393.1	393.1
Other O & M	1,000.2	1,000.5
Payroll Taxes	41.7	41.7
Property Taxes	30.2	30.2
A & G Expenses	150.0	150.7
Regulatory Commission Exp.	20.2	20.2
Rent	33.8	33.8
Depreciation	180.8	180.8
Income Taxes	25.9	198.9
Total Operating Expenses	2,693.4	2,867.4
Net Operating Revenues	271.2	437.7
Rate Base:		
Utility Plant-in-Service	17,274.5	17,274.5
Working Capital	788.4	788.4
Subtotal	18,062.9	18,062.9
Customer Advances and Contrib.	11,095.3	11,095.3
Def. Federal Tax Reserve	146.6	146.6
Unamortized ITC Reserve	148.9	148.9
Depreciation Reserve	3,030.8	3,030.8
Subtotal Deductions	14,421.6	14,421.6
Avg. Depreciation Rate Base	3,641.3	3,641.3
Rate of Return	7.45%	12.02%

2. The calculation of federal income tax expense for ratemaking purposes embraces straight-line depreciation on the facilities employing the same life as that in No. 1 above.

3. Any tax deferral resulting from a difference between the method of computing depreciation expense for actual federal income tax purposes and the method of computing depreciation expense for ratemaking purposes is recorded in a reserve for deferred taxes.

4. LHSI's rate base is reduced by ITC on the facilities. This reduction is to be restored ratably over the useful life used in computing depreciation expense.

However, the increase in LHSI's revenues resulting from ERTA compliance will be collected subject to refund pending a determination of the manner, if any, in which revisions to the surcharge method of financing the CPCFA facilities or elimination of the surcharge altogether could reduce LHSI's revenue requirement and yet retain ERTA compliance. Because of that pending determination this will be an interim decision.

For test year 1983 the added revenue requirement imposed by ERTA is $65,200. We will require LHSI to provide its customers with a notice, Appendix C, explaining the impact of ERTA on the rates authorized by this decision.

V. AUTHORIZED REVENUE INCREASES

By comparing the entries for operating revenues in Table 2, it can be seen that the rates to be authorized for test year 1983 yield additional gross revenues of $340,500 which represents a 11.43% increase over revenues at present rates. In addition, we should determine whether a second set of rates should be authorized to allow for attrition in rate of return after test year 1983.

Employing the rate of return of 12.02% authorized by this decision and the method of calculating operational attrition used by the staff in Exhibit 7, we show in the following tabulation a summation of the components of operational attrition totaling $58,700 for 1984:

Attrition for 1984
(Dollars in Thousands)

Component	
Operating Expense:	
O & M and A & G	$110.1
Ad Valorem and Payroll Tax	3.1
Depreciation	8.0
Rate Base Effect	(13.9)
Income Tax Impact	(48.6)
Total Operational Attrition	$ 58.7

(Red Figure)

However, upon further examination we find that the additional customers projected for 1984 plus the full year effect of those projected to be added in 1983 would generate $61,800 of revenue at the 1983 authorized rates in 1984. This amount exceeds the additional revenue requirement for 1984 of $58,700 conclusively indicating that LHSI will not experience operational attrition in rate of return in 1984 on the basis of the projections used.

Because the fair rate of return of 12.02% determined in this decision is based on a stable capital structure (i.e. constant capital ratios and cost factors), no allowance for financial attrition is indicated. Thus, there should be no attrition allowance for LHSI. In view of the foregoing, the only supplemental rate filing to be authorized is the advice letter which, as discussed earlier in this decision, is contemplated in response to the rollover of the Series A first mortgage bonds in October 1984.

VI. RATE DESIGN

The issue on rate design is whether a differential in rates between unrestricted dwelling units and restricted dwelling units should be retained. LHSI and PCM support the retention of a differential, while the staff advocates its elimination.

A. Background

Since its inception in 1963, the utility has had this type of rate differential in its rate structure. By D.84040 dated February 4, 1975 in its first rate proceeding after coming under Commission jurisdiction, LHSI, then Rossmoor Sanitation, Inc. (RSI), was ordered to "prepare a study and recommend revised rates and rules for classification of residential customers". In its next rate proceeding (A.56296) RSI placed in evidence a copy of that study and proposed a percentage differential between the unrestricted and restricted classifications consistent with the study results. D.88079 dated November 8, 1977 in the

A.56296 proceeding included the following finding of fact:

> "7. A rate structure for 'General Residential Service', as described in Schedule No. 1 of Rossmoor's tariff schedules, which will provide rates for Unrestricted Family Residences of not lower than 115 or greater than 117 percent of the rates for Restricted Family Residences will result in a just, reasonable, and nondescriminatory rate structure."

In LHSI's last general rate decision, D.91182 dated January 8, 1980 in A.58275, a rate spread consistent with the above-quoted finding was adopted. After that, however, the Commission by D.82-03-12 dated March 2, 1982 in A.59571 eliminated the much larger differential (2 to 1) in CIA-BP's (connection fees) between unrestricted dwelling developments and restricted dwelling developments. In that decision it was noted that:

1. The CIA-BP is a one-time charge for constructing backbone plant adequate to serve the ultimate service area flows.
2. There were not expected to be more than one or two more restricted developments, including at least one which would have up to three-bedroom units.
3. The record did not contain clear facts dealing with usage patterns, per capita sewage flow, and population per development to support a differential between restricted and unrestricted developments.

At present there are approximately 15,300 dwelling units in the restricted classification, mostly within the Leisure World area, and 7,900 dwelling units in the unrestricted classification.

B. The Evidence

PRC Toups has been extensively involved in the engineering for the entire LHSI system. This firm of consulting engineers conducted a flow study to determine the differences in flow, if any, between restricted and unrestricted units in LHSI's service area (Exhibit 9).

In that study sewage flows were measured in certain areas inside the Leisure World (restricted) areas. Flows were also measured in the single-family residential area. The flow measuring was conducted for two 7-day periods. The first period was in November 1981 and the second period was in December 1981. Water meters were read during the period that sewage flows were measured to determine the amount of return to the sewer. The basic findings are summarized in Table 1-1 of that study and reproduced below:

Average Sewage Flow Rates for Four Study Areas of LHSI

Study Area	Gallons per Dwelling Unit per Day	Gallons per Capita per Day	Percent of Water Consumption Entering Sewer: Temp. in Mid-80s	Percent of Water Consumption Entering Sewer: Temp. in Mid-60s
Via Mariposa	116	80	77	83
Avenida Sosiega	199	122	83	85
Pacifica Avenue	202	62	47	64
Georgia Sue Drive	200	64	47	67

Two study areas were selected to represent typical cross-sections of residential communities inside and outside the Leisure World area. In each community, one study area represented an older, long-established residential area and the other, a more recent and expensive residential area developed and occupied within the last 10 years.

Each study area was chosen through a screening procedure under the following criteria:

1. The area should contain between 100 and 200 typical single-family residences to assure that projected flows would be in a suitable range for the flow meters and would provide statistical reliability. Furthermore, this number of names would enable the water meter reader to complete readings in one day, so readings would coincide with the beginning and ending of sewage flow measurements.
2. All the flow from the selected area must pass through one sewer, with an accessible manhole to be used for metering sewage from the area. The manhole where the meter is set must have a straight run with no incoming laterals.
3. The connecting sewer above the measuring device must have a mild slope to assure that approach velocities are reasonably low.

Only four areas in the service area adequately complied with criterion No. 3. Within the Leisure World area, due to the hilly terrain, a mild sewer slope was the most restricting criterion for service area selection. The features of each study were described as follows:

1. Via Mariposa is in the restricted customer classification and represents one of the older segments of the Leisure World development. It consists of duplex and condominium-type residences with water meters serving more than one dwelling unit and several water meters serving 24 units. This study area has 411 dwelling units. Although having more units than set forth in the criteria, it also has more units per number of water meters readable in one day. The area should represent a population with an established and habitual pattern of sewer use.

2. Avenida Sosiega is in the restricted customer classification and represents a more recently developed part of Leisure World containing large dwelling units, each with surrounding yards that may not be fully irrigated by separate water meters. This study area contains 159 dwelling units and was selected because of its potential for less conservative water and sewer use.

3. Pacifica Avenue is in the unrestricted customer classification and is one of the older urban areas adjacent to Leisure World. It contains 159 dwelling units and was selected because it represented an established neighborhood and less expensive housing. The living pattern in this community was expected to have more children and mothers at home. Thus due to less vacancy of the household during weekday business hours, the area was expected to exhibit a higher prevailing midday sewer use.

4. Georgia Sue Drive is in the unrestricted customer classification and is one of the more recently developed urban residential areas. It contains 121 dwelling units. Due to the inflated price of housing, it would represent a more expensive housing area, where a greater portion of both adult members could work during the weekday. This would provide greater weekday vacancy and lower per capital sewer use than the Pacifica Avenue area. It was assumed that Georgia Sue Drive would contrast well to Pacifica Avenue with respect to sewer use and represent the recently developed and occupied portion of the service area.

The restricted area studied contained 559 dwelling units or about 3.7% of the total number of restricted customers. The unrestricted area studied contained 280 dwelling units or about 4.5% of the total number of unrestricted dwelling units.

Because of the relatively high sewage flow in the Avenida Sosiega area, a study was undertaken to determine how many of these types of units existed within the restricted customer class. The study consisted of reviewing water use in various mutuals. Mutual Nos. 49, 51, 60, 61, 63, and 70 were found to have higher than normal water use and are therefore considered to contribute 200 gallons per day (gpd) per dwelling into the system. There are 720 dwelling units contained in the aforementioned mutuals. In addition, mutuals Nos. 68, 69, and 78, containing about 194 dwelling units, may become high sewage producing units when they become occupied.

Willem Van Lier, staff project engineer, recommended the existing rate differential of 15% between the restricted and unrestricted customer groups be eliminated. He believes that the current rate differential runs contrary to common public views. He contends that many customers within the unrestricted group, consisting of single persons, couples, and families contributing less than average sewage, are indiscriminately penalized.

Witness Van Lier further testified that:

1. The PRC Toups study assumes that the results of the isolated studies of sewage flow of four small customer groups are representative for all the customers within LHSI's service area.
2. The four study groups represent cluster tests which diminish their value further.
3. Witness Howard's water use study is out of time-phase with the PRC Toups study.

C. Resolution

The staff criticisms on the size and location of the study groups have some merit. However, not only would the cost of a larger sampling be prohibitive because of the sewer system layout, but the results of the PRC Toups study received some corroboration. They were supported by (1) the calculation of the average daily volume entering the sewage treatment plant based upon the four sample areas extended to the total population and with the fairly known factors relative to commercial and other miscellaneous uses and (2) the water use study made by witness Howard.

Sewage unit flows determined for the study areas were applied to the entire service area population to determine if the rates compared to total service area flow metered at the plant. In the following tabulation the unit flows for the areas were applied to the service area population and then added to commercial area flows used by LHSI.

Calculated Daily Inflow
To the LHSI Treatment Plant

Source	Population	Sewage Flow Rate Gallons Per Capita Per Day (GPCD)	Volume Gallons
Leisure World	21,396	82 a/	1,754,700
Willows	255	80	20,400
Multifamily	4,692	63	295,600
Mobile Parks	1,689	63	106,400
Condominiums	3,042	63	191,600
Single Family	16,131	63	1,016,300
Subtotal	47,205		3,385,000
Commercial	Factored Minimums	518 Ccf	
	Factored Other	22,084 Ccf	
	Flat Rate Minimums	518 Ccf	
	Total 23,120 Ccf x $\frac{750}{30}$ =		578,000
Estimated Flat Rate	109 customers x 1,785 gallons/day/customer =		194,600
Subtotal			772,600
Total Estimated Inflow =			4,157,600

a/ Based upon the assumption that Avenida Sosiega represents 5% of the Leisure World's dwelling units (i.e. the sewer flow rate is estimated at 95% of population contributing 80 gpcd and 5% at 122 gpcd).

The above computation showed that service area flow calculated with the metered average unit flow closely correlates to the average metered plant flow of 4.2 millions of gallons per day (mgd). However, this method of checking the monitoring results is not precise, since plant flows vary seasonally and in response to changing socioeconomic and environmental condition patterns. The method is informative in that monitored values are relatively close to the average value of flow discharged to the plant. If the actual unit flow values differed by more than 10% for the entire population, the plant flow would differ by 0.3 mgd.

Donald R. Howard, supervising engineer and project manager at Stetson Engineers, Inc., was retained by PCM to prepare a cost-of-service study on LHSI (Exhibit 8B). In preparing his report witness Howard relied in part on the PRC Toups study. He also conducted a study for the rainy months of 1980 to determine the amount of water used by each customer class. He selected wet months because that should be when the largest percent of water delivered to the customer is returned as sewage. The results of this study are shown in Table 2 of Exhibit 8B. His comparison of the results of his study and the PRC Toups study are as follows:

> The PRC Toups study showed that for the unrestricted customer class the return flow varied from 77% to 85%. Since the unrestricted customer class uses its water for both irrigation outside the home and for in-home uses, it can be expected that a smaller percentage of water returns as sewage even though the actual volume of sewage is larger.

> If the 80% shown in the PRC Toups study were applied to the finding in his water use study for the restricted customer class of 151 gpd per dwelling unit, it could be estimated that 121 gpd would enter the sewage system. The PRC Toups study indicated 116 gpd. Thus, it would seem that the PRC Toups study and the water use are within reasonable accuracy. The PRC Toups study indicates that the sewage flow is about 200 gpd per dwelling unit within the single-family dwelling units. The water use study indicated that 271.7 gpd per dwelling unit entered the single-family residence. This is a reasonable ratio in view of the amount of rain that fell during the water use study.
>
> The PRC Toups study indicates water use of 445 gpd per dwelling unit during November and 309 gpd per dwelling unit during December at Pacifica Avenue. Similar figures of 400 gpd and 319 gpd were found for Georgia Sue Drive. This is somewhat higher than in his water use study; however, no rain fell during the PRC Toups study period so that a higher water consumption should be expected. Thus, the 200 gpd per dwelling unit appears reasonable.

Witness Howard's cost-of-service study applied the PRC Toups study data to develop the volume factor. This factor is used to allocate a major part of LHSI's total cost of service among customer classes. The cost allocation procedures followed by Howard were straightforward and reflective of the basic data input. The end result of his study is that the cost to serve an average unrestricted dwelling is 40% greater than the cost to serve an average restricted dwelling unit.

The preponderance of the evidence favors retention, rather than elimination, of a rate differential. Nonetheless, the limitations placed upon the basic PRC Toups study because of the sewer system layout, the indicated higher sewage rate per capita in the Leisure World area, rate history, and perhaps other ratemaking factors militate against increasing the present rate differential. We will therefore retain the present approximately 15% rate differential between the unrestricted and restricted customer classifications.

D. Rate Spread and Possible Refunds

The design of LHSI's authorized rates reflects (1) holding the surcharge constant, (2) applying virtually the same percentage increase to each class of service, and (3) retaining the range of from 1.15 to 1.17 found reasonable in D.88079/D.91182, supra, for the ratio of the rates for unrestricted family residences to the rates for restricted family residences.

Of the $340,500 increase, 19.1% or $65,200 results from ERTA compliance. As previously stated, this portion of the increase will be collected subject to refund pending a determination of the manner, if any, in which revisions to the surcharge method of financing the CPCFA facilities or elimination of the surcharge altogether could reduce LHSI's revenue requirement and yet retain ERTA compliance.

VII. REQUEST FOR INTEREST ON EFFLUENT DISPOSAL BALANCING ACCOUNT

LHSI's balancing account was established by D.91182, supra, with no provision for interest. In this application LHSI seeks authority to modify the Effluent Disposal Cost adjustment clause of its tariffs by providing that interest is to be added to overcollections or undercollections in the Effluent Disposal Cost Adjustment Account. The interest rate sought to be employed is the Federal Reserve Board Commercial Paper Rate, 3-month Prime, published monthly in Federal Reserve Board Statistical Release G-13 with monthly compounding.

The staff recommends that LHSI's request to include interest be denied at this time. The staff points out that (1) balancing account procedures for water companies do not include an interest provision; (2) it is reviewing those procedures and putting together its draft study and recommendations; and (3) its draft study and recommendations when ready will be made available to the California Water Association for review and comment.

Apparently, it is the staff's position that LHSI should be accorded the same treatment, in regard to the inclusion of interest in balancing accounts, as water companies. Since sewer utility matters are assigned to the staff which works primarily on water utilities, such uniform treatment should be less burdensome for our limited staff. We will reject LHSI's proposal at this time.

VIII. FINDINGS AND CONCLUSIONS

Findings of Fact

1. LHSI is in need of additional revenues, but the rates it has proposed would produce an excessive rate of return.

2. The adopted estimates in Table 2 of operating revenues, operating expenses, and rate base reasonably indicate the results of LHSI's operations for test year 1983. Because of the small rate base for a system of this size, LHSI's operating results in the near future are more susceptible to substantial departures from projected levels than other utilities.

3. The adopted estimates in Table 2 fully comply with ERTA.

a. Depreciation expense for ratemaking purposes include straight-line depreciation on the CPCFA facilities. Consistent with this requirement, the cost of the facilities are included in rate base.

b. The calculation of federal income tax expense for ratemaking purposes embraces straight-line depreciation on the facilities employing the same life as that in item a. above.

c. Any tax deferral resulting from a difference between the method of computing depreciation expense for actual federal income tax purposes and the method of computing depreciation expense for ratemaking purposes is recorded in a reserve for deferred taxes.

d. LHSI's rate base is reduced by ITC on the facilities. This reduction is to be restored ratably over the useful life used in computing depreciation expense.

4. The increase in LHSI's revenues resulting from ERTA compliance is $65,200. It should be collected subject to refund pending a determination of the manner, if any, in which revisions to the surcharge method of financing the CPCFA facilities or elimination of the surcharge altogether could reduce LHSI's revenue requirement and yet retain ERTA compliance.

5. The compilation of adopted quantities and the adopted tax calculation are contained in Appendix B to the decision.

6. A rate of return of 12.02% on LHSI's rate base for 1983 and 1984 is reasonable. The related return on common equity is 14.75%. This will require an increase of $340,500, or 11.49%, in annual revenues.

7. The adopted rate spread, including the retention of the range of from 1.15 to 1.17 for the ratio of the rates for unrestricted family residences to the rates for restricted family residences, is reasonable.

8. LHSI should be accorded the same treatment as water companies under our jurisdiction in regard to the inclusion of interest in balancing accounts.

9. LHSI's Series A first mortgage bonds become due October 1, 1984. The rollover of this debt will affect the cost of LHSI's capital used in the fair rate of return determination.

10. The enactment of ERTA was unforeseen at the time D.91339, supra, was issued.

11. By D.91339 LHSI was required to pass on all the tax benefits of the CPCFA-financed project to the ratepayer.

12. It is in the best interests of both the ratepayer and LHSI for LHSI to qualify for the ACRS and ITC on its post-1980 plant.

13. The interim increases in rates and charges as authorized subject to refund by this decision are reasonable.

Conclusions of Law

1. The adopted rates are in part subject to refund, are reasonable on that basis and nondiscriminatory, and because of possible refund and reduction should be authorized on an interim basis. However, this is a final order with respect to the determinations made in Finding 3 above and our other determinations to achieve full ERTA compliance.

2. D.91339, supra, should now be deemed modified to the extent necessary to conform to ERTA. The specific modifications accomplishing that end will be forthcoming in a further Commission order.

3. LHSI should take steps to have restored to it ITC benefits previously paid to the trustee in compliance with D.91339.

4. LHSI should be authorized to file an advice letter requesting an increase in rates to offset the impact of the rollover of its Series A first mortgage bonds due October 1, 1984 on the authorized rate of return.

5. LHSI's request to have interest added to overcollections or undercollections in the Effluent Disposal Cost Adjustment account should be denied at this time.

6. Because of the immediate need for additional revenue and for compliance with ERTA, the following order should be effective today.

INTERIM ORDER

IT IS ORDERED that:

1. Laguna Hills Sanitation, Inc. (LHSI) is authorized to file, effective today, the revised rate schedules in Appendix A. The filing shall comply with General Order 96. The effective date of the revised schedules shall be the date of filing. The revised schedules shall apply only to service rendered on and after their effective date. Once the revised schedules become effective, LHSI shall be bound by the refund requirement prescribed in Finding 4 above.

2. LHSI is authorized to file an advice letter, with appropriate work papers, requesting an increase in rates to offset the impact of the rollover of its Series A first mortgage bonds due October 1, 1984. The requested increase shall be reviewed by the staff to assure the requested increase offsets financial attrition only and will not result in LHSI's exceeding its authorized rate of return adjusted for such attrition.

3. D.91339 dated February 13, 1980 in A.59033 is deemed modified to the extent necessary to conform to the Economic Recovery Tax Act.

4. LHSI shall take steps to have restored to LHSI the investment tax credit benefits previously paid to the trustee in compliance with D.91339.

5. LHSI shall notify its customers of the effect of ERTA as set forth in Appendix C. This notification shall be completed within 60 days of the effective date of this order.

6. LHSI's request to have interest added to overcollections or undercollections in the Effluent Disposal Cost Adjustment account is denied.

This order is effective today.

Dated December 15, 1982, at San Francisco, California.

JOHN E. BRYSON
President
RICHARD D. GRAVELLE
LEONARD M. GRIMES, JR.
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

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

Joseph E. Bodovitz, Executive Director

APPENDIX A

LAGUNA HILLS SANITATION, INC.

Applicability

Applicable to General Residential Sewer Service.

Territory

El Toro, Laguna Hills, Rossmoor Leisure World and vicinity, Orange County.

Rates for Sewer Service

SCHEDULE NO. 1

GENERAL RESIDENTIAL SERVICE

Unrestricted Family Residences(U) . . . . $10.39 per month, per residential dwelling Unit (I)

Restricted Family Residences (R) . . . . $ 9.00 per month, per residential dwelling Unit (I)

SCHEDULE NO. 2

COMMERCIAL AND INDUSTRIAL SERVICE

The basic service charge:

Per 1,000 gallons of sewage discharged . . . . $1.290 (I)

Per Ccf of sewage discharged . . . . $0.965 (I)

SCHEDULE NO. 3

SALE OF RECLAIMED WATER

Reclaimed water . . . . $95.95 per acre-foot (I)

(END OF APPENDIX A)

APPENDIX B

LAGUNA HILLS SANITATION, INC.

COMPARISON OF RATES

The following table is a comparison of the rates effective on 1/11/82 and those proposed for 1983 and 1984.

Item	Current Rates 1982	Proposed Rates 1983	Proposed Rates 1984	Adopted Rates 1983	Adopted Rates 1984
	1/1/82				
Schedule No. 1					
Unrestricted	$ 9.25	$ 12.58	$ 13.47	$10.39	$10.39
Restricted	8.01	10.88	11.66	9.00	9.00
Schedule No. 2					
Minimum	$ 9.25	$ 12.58	$ 13.47	$10.39	10.39
Per 1,000 gallons	1.15	1.56	1.67	1.290	1.290
Per Ccf		1.17	1.25	0.965	0.965
Schedule No. 3					
Reclaimed water					
Per acre-foot	$85.42	$116.00	$124.25	$95.95	$95.95

Rates shown do not include California Pollution Control Financing Authority surcharge which is adjusted annually on April 1.

APPENDIX B

LAGUNA HILLS SANITATION, INC.

ADOPTED QUANTITIES

Number of Services and Water-Use Reference
For Rate Design

	1983	1984
Schedule No. 1		
Unrestricted	7,965	8,184
Restricted	15,341	15,494
Total	23,306	23,678
Schedule No. 2		
Minimum Bill	250	271
Large Flat Rate Bills	120	127
Average 1,000 Gallons 1/	622	622
Large Factored Bills	205	212
Average 1,000 Gallons 1/	1,100	1,100
Total	575	610
Schedule No. 3		
Customer	1	1
Effluent Sales-Acre-Feet 1/	350	350
Total	1	1
Grand Total	23,882	24,289

1/ Average Annual Water Usage

LAGUNA HILLS SANITATION, INC.

ADOPTED QUANTITIES

Net-to-Gross 2.055

Federal Tax Rate 46%

State Tax Rate 9.6% (for both test years)

Uncollectibles Rate 0.1%

SCHEDULE	DEMAND per MONTH kW	DEMAND per MONTH hp	COMMODITY kWh	ANNUAL COST Demand	ANNUAL COST Commodity	ANNUAL COST Total
A-7	300		2100000	15480.00	119931.00	135411.00
GS-1			10800	162.00	1009.04	1171.04
GS-2	20		40000	912.00	2389.20	3301.20
PA-1		604.5	915600	7254.00	60685.97	67939.97
PA-2	418		2925000	18810.00	166461.75	185271.75
TOTALS FOR 1983			5991400			393094.96
A-7	300		2150000	15480.00	122786.50	138266.50
GS-1			10800	162.00	1009.04	1171.04
GS-2	20		40000	912.00	2389.20	3301.20
PA-1		604.5	955600	7254.00	63337.17	70591.17
PA-2	418		2975000	18810.00	169307.25	188117.25
TOTALS FOR 1984			6131400			401447.16

SUMMARY OF EDISON RATES & CHARGES APPLICABLE TO LHSI

EFFECTIVE DATE		1/5/82	5/3/82
TOTAL BILLING FACTORS	$	.05866	.04546
SCHEDULE A-7			
DEMAND (PER kW)	$	4.30	4.30
GENERAL RATE (PER kWh)	$	.01165	.01165
SCHEDULE GS-1			
MONTHLY CHARGE	$	4.50	4.50
GENERAL RATE (PER kWh)	$	.04797	.04797
SCHEDULE GS-2			
DEMAND (PER kW)	$	3.80	3.80
GENERAL RATE (PER kWh)	$	.01427	.01427
SCHEDULE PA-1			
LOAD (PER Hp)	$	1.00	1.00
GENERAL RATE (PER kWh)	$	.02082	.02082
SCHEDULE PA-2			
DEMAND (PER kW)	$	3.75	3.75
GENERAL RATE (PER kWh)	$	.01145	.01145

ADOPTED TAX CALCULATION

LAGUNA HILLS SANITATION, INC.

Item	Test Year - 1983	
	CCFT	FIT
(Dollars in Thousands)		
Operating Revenue	$3,305.1	$3,305.1
Expenses		
Operation & Maintenance	2,211.1	2,211.1
Administrative & General	204.8	204.8
Taxes Other Than Income	71.9	71.9
CCFT	0	37.6
Subtotal	2,487.8	2,525.4
Deductions from Taxable Income		
Tax Depreciation	179.3	138.2
Interest Expense	246.9	246.9
Subtotal Deduction	426.2	385.1
Net Taxable Income (CCFT)	391.1	
CCFT @ 9.6%	37.6	
Net Taxable Income (FIT)		394.6
FIT @ 46%		181.6
Graduated Tax Adjustment		-20.3
ITC		0
Total FIT		161.3

(END OF APPENDIX B)

APPENDIX C

Bill Insert for Laguna Hills Sanitation, Inc.

\$65,200 of the recent rate increase granted to Laguna Hills Sanitation, Inc. for 1983 was made necessary by changes in tax laws proposed by the President and passed by Congress. This was the Economic Recovery Tax Act of 1981. Among its provisions was a requirement that utility ratepayers be charged for certain corporate taxes even though the utility does not have to pay them. This results from the way utilities may treat tax savings from depreciation on their plant and equipment. The savings can no longer be credited to the ratepayer but must be left with the company and its shareholders.

For a more detailed explanation of this tax change, send a stamped self-addressed envelope to:

Consumer Affairs Branch
Public Utilities Commission
350 McAllister Street
San Francisco, CA 94102

(END OF APPENDIX C)

APPENDIX D
Page 1

LAGUNA HILLS SANITATION, INC.

Development of Revised Capital Ratios and Debt Cost Factor

Data Used:

1. 40% debt/60% equity from Exhibit 12, Table 5.
2. $1,151,333 Average Balance Series A Bonds with 6.38% cost factor for year 1983 from Exhibit 12, Table 3.
3. CPCFA Bonds 11% due May 15, 2000; Balance as of December 31, 1981 $1,885,000; Sinking Fund Requirements for Years 1982, 1983, and 1984 $35,000, $35,000, and $40,000; Debt Service Reserve $244,450; $1,832,500 average balance and $1,588,050 average balance net of debt service for year 1983.
4. $220,787 unamortized CPCFA bond expense as of December 31, 1980.

(Items 3 and 4 above derived from LHSI's 1979, 1980, and 1981 annual reports filed with the Commission.)

Computation:

1. Equity = $\frac{.6}{.4}$ x debt = $\frac{.6}{.4}$ x \$1,151,333 = \$1,727,000
2. Revised debt = $1,151,333 + $1,588,050 = $2,739,383
3. Revised capital ratios:

$$\text{Equity } \frac{\$1,727,000}{\$1,727,000 + \$2,739,383} = 38.67\% \quad \text{Use: } \underline{40\%}$$

$$\text{Debt } \frac{\$2,739,383}{\$4,466,383} = 61.33\% \quad \text{Use: } \underline{60\%}$$

APPENDIX D
Page 2

LAGUNA HILLS SANITATION, INC.

Development of Revised Capital
Ratios and Debt Cost Factor

4. Cost Factor for CPCFA Bonds:

$$\frac{\$1{,}832{,}500 \times 0.11 \ + \ \$220{,}787 \div 20 \text{ years}}{\$1{,}832{,}500 - \$220{,}787 \left(\frac{17.5}{20}\right)} \times 100\% = 12.97\%$$

5. Revised Debt Cost Factor:

$$\frac{\$1{,}151{,}333 \times .0638 + \$1{,}588{,}050 \times .1297}{\$2{,}739{,}383} \times 100\% = \underline{10.20\%}$$

(END OF APPENDIX D)

APPENDIX C

Bill Insert for Laguna Hills Sanitation, Inc.

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