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Application No. 59788
Exhibit No. 13 16
Witness E. Quan
Commissioner L. Grimes
Adm. Law Judge B. Patrick

CALIFORNIA PUBLIC UTILITIES COMMISSION
Revenue Requirements Division
Rate of Return Section

STUDY OF

COST OF CAPITAL

AND

RATE OF RETURN

FOR

SAN DIEGO GAS & ELECTRIC COMPANY

Application No. 59788

San Francisco, California
September 8, 1980

8108110754

M E M O R A N D U M

This report was prepared by the staff of the Revenue Requirements Division, Rate of Return Section, in connection with Application No. 59788 of San Diego Gas & Electric Company for authorization to increase its gas and electric rates.

Edwin Quan, Financial Examiner III, was responsible for the preparation of the report, under the general supervision of Terry ...ey, Financial Examiner IV, and James D. Pretti, Principal Financial Examiner.

The rate of return recommended for the applicant is 11.22% which equates to an allowance of 14.50% on common stock equity.

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QUALIFICATIONS AND
PREPARED TESTIMONY OF EDWIN QUAN

Q.1 Please state your name and business address.

A.1 My name is Edwin Quan. My business address is 455 Golden Gate Avenue, San Francisco, California.

Q.2 By whom are you employed and in what capacity?

A.2 I am employed by the California Public Utilities Commission as a Financial Examiner in the Revenue Requirements Division.

Q.3 Please describe briefly your educational background and work experience.

A.3 I am a graduate of the University of California at Berkeley with a Bachelor of Science degree in Accounting. My employment with the Commission began in 1973, and during this period I have conducted financial examinations of various types of utilities. I have prepared exhibits and presented testimony before this Commission on accounting and financial matters in numerous formal proceedings.

Q.4 What are your responsibilities in this proceeding?

A.4 My responsibilities are to prepare a study of the cost of capital for San Diego Gas & Electric Company (SDG&E) and to recommend a fair and reasonable rate of return.

Q.5 What rate of return are you recommending for SDG&E in this proceeding?

A.5 In my opinion, a rate of return of 11.22% is fair and reasonable to both applicant and its ratepayers. This rate of return equates to an earnings allowance of 14.50% on common equity.

Q.6 Would you please compare your recommended rate of return with that requested by SDG&E?

A.6 The following tabulation compares SDG&E's estimated capital structure and requested rate of return with my estimated capital structure and recommendation and quantifies the resulting difference in gross operating revenues.

SDG&E's Requested Rate of Return

Component	Capitalization Ratios	Cost	Weighted Cost
Long-Term Debt	44.07%	9.55%	4.21%
Bankers' Acceptances	6.18	12.50	.77
Preferred Stock	12.88	8.67	1.12
Common Equity	<u>36.87</u>	14.50	<u>5.34</u>
Total	<u>100.00%</u>		<u>11.44%</u>

Staff's Recommended Rate of Return

Long-Term Debt	44.40%	9.43%	4.19%
Bankers' Acceptances	6.60	10.50	.69
Preferred Stock	12.75	8.44	1.08
Common Equity	<u>36.25</u>	14.50	<u>5.26</u>
Total	<u>100.00%</u>		<u>11.22%</u>
Difference			<u>.22%</u>

Effect on Revenue Requirements

Item	Rate of Return Difference	Staff's Estimated Rate Base	Net-to-Gross Multiplier	Revenue Requirement
(Dollars in Thousands)				
Long-Term Debt	0.02%	x \$1,215,609		= \$ 243
Bankers' Acceptances	.08	x 1,215,609		= 972
Preferred Stock	.04	x 1,215,609	x 2.10	= 1,021
Common Equity	<u>.08</u>	x 1,215,609	x 2.10	= <u>2,042</u>
Total	<u>.22%</u>			<u>\$ 4,278</u>

Q.7 Please explain the basis you used in arriving at the capital structure and related costs used in determining your rate of return recommendation.

A.7 My recommendation is based on my estimate of SDG&E's average of the beginning and end of year capital structure for test year 1981. The related cost rates for the respective components of the capital structure are based on an average of the estimated beginning and end of year rates.

Q.8 Why did you use an average year capital structure and related average year capital costs in determining your recommended rate of return?

A.8 In my opinion, the use of an average year capital structure and related average year capital costs provides a more accurate reflection of SDG&E's actual capital costs during the test year than does a year-end capital structure and related year-end capital costs. In this current proceeding, SDG&E is requesting rate relief only for 1981. However, it is SDG&E's plan to file a subsequent general rate relief request for the 1982-1983 period. Prior to the Commission's policy of setting rates for a definite period (one year in this application, and at least two years under the Regulatory Lag Plan), rate of return recommendations were based upon capital ratios and capital costs developed for the end of the test year. This approach was used in the recognition that rates would remain in effect for some period beyond the test year. Since SDG&E is requesting rate relief only for 1981 in this proceeding, the use of an average year capital structure and related average year capital costs, in my opinion, is the most accurate method to recognize the capital costs associated with the period rates are in effect.

Q.9 Would you please explain the differences between your projected capital structure and related costs to that of SDG&E's?

A.9 Differences in the estimated capital structure are minimal. My development of the test year capital structure considers recorded information as of June 30, 1980, and changes estimated to occur in the capital structure during 1980 and 1981. Also, I have developed an average year capital structure for 1981, whereas applicant has used a 1981 year-end capital structure. The differences in capital costs are accounted for as follows:

A. Long-Term Debt

My estimates for new issues of long-term debt for 1980 differ from SDG&E's estimates in that I have considered the actual costs associated with the actual principal amounts of the two series of long-term debt issued during the year. For example, SDG&E has projected its \$50 million Series "T" issue at 13.55%. I have considered the actual principal amount of the Series "T" issue, \$75 million, at the actual effective cost of 13.77%, for my calculation of the embedded cost of debt.

My projection of long-term debt financing for 1981 is the same as that estimated by SDG&E; however, I have projected a 12% rate associated with such financing, whereas SDG&E uses a 12.125% rate.

In addition, my projection of foreign term loans outstanding through the end of 1981 differs from SDG&E's estimate in that I have reduced the \$65 million estimated balance outstanding by \$19 million to reflect retirements that occurred during 1980. Also, I have projected interest rates at 12% for the foreign term loans as compared to the 14% rate used by the applicant.

B. Bankers' Acceptances

SDG&E finances 90% of its fuel oil inventory with bankers' acceptances and accordingly, this assumption was used in estimating the amount of bankers' acceptances outstanding for 1981. My estimate of \$117.8 million as the amount of bankers' acceptances included in the capital structure approximates the estimate of \$114.5 million used by SDG&E. I have based my estimate on the weighted average amount of bankers' acceptances outstanding for 1981, whereas SDG&E has based its estimate on the amount outstanding at year-end 1981. I have used a cost of 10.50% associated with the bankers' acceptances, whereas SDG&E has used a cost of 12.50%. The primary difference in the estimated costs of bankers' acceptances results from the timing of the estimates. My estimates were made with the most recent available forecasted data as of July 1980, whereas SDG&E's estimates were made with earlier forecasted data.

C. Preferred Stock

My projection of preferred stock financing through 1981 is the same as that estimated by SDG&E; however, I have projected slightly lower costs associated with such financing. I have estimated a 12.5% rate for 1981 preferred stock financing, whereas SDG&E projects a rate of 12.625%.

D. Common Stock

There is no difference in the return on equity which SDG&E is requesting and that which I am recommending. SDG&E's 14.50% return on common equity requested in this case is the same as that authorized in Decision No. 90405, dated June 5, 1979, its last general rate relief decision.

Q.10 Do you believe that the 14.50% return on equity requested by SDG&E and recommended by you in this proceeding is comparable to the 14.50% return on equity authorized SDG&E in its last general rate decision?

A.10 No. SDG&E's last authorized return on common equity of 14.50% was granted in June 1979, almost six months after the beginning of the test year. The rates set by that decision were intended to be in effect for a period of at least two years (1979 and 1980), and possibly an additional year (1981). It is highly improbable that SDG&E will earn a return on common equity of 14.50% over the 1979-1980 period because the spiraling level of inflation, which includes both operational and financial attrition, has resulted in costs reaching unprecedented levels.

In this proceeding, my recommendation of a 14.50% return on common equity is only for test year 1981. Later during this year, SDG&E plans to file for additional rate relief for test period 1982-1983. Considering the fact that the rates resulting from this proceeding are intended to be in effect for one year as opposed to the traditional two-year period under the Regulatory Lag Plan, SDG&E should have a reasonable opportunity to earn a 14.50% return on common equity for the period in which rates will be in effect.

Q.11 Does your rate of return recommendation consider financial attrition?

A.11 Yes. Financial attrition is a result of changes in a company's embedded cost of debt, and effective dividend rate on preferred stock due to the retirement and issuance of debt and preferred stock at rates exceeding its current embedded cost. I have considered the estimated retirements and issuances of debt and preferred stock through 1981, the period in which rates will be in effect.

Q.12 Would you briefly describe how you arrived at your recommended 14.50% return on common equity as being fair and reasonable for SDG&E?

A.12 The determination of a fair and reasonable rate of return results from the consideration of many factors both tangible and intangible. Reliance cannot be based solely on definitive formulas or precise mathematical calculations. It is of necessity a judgment determination which considers the requirements of the individual utility. The U.S. Supreme Court expressed this principle in Federal Power Commission vs. Hope Natural Gas (1943) 320 US 591, wherein it stated, "it is not theory but the impact of the rate order which counts". And "it is the result reached not the method employed which is controlling".

In arriving at my recommendation, I was guided by the standards set forth by U.S. Supreme Court decisions and prior decisions of this Commission. The primary guidelines are as follows:

1. The return to the equity holders should be commensurate with returns on investments in other 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 ratepayers.

Q.13 How did you evaluate the comparison of earnings and related data shown in your report for SDG&E and the selected groups of utilities?

A.13 The various comparisons shown in the tables for the years 1975 through 1979 served as additional guides in arriving at my recommendation. The data presented in the respective tables are based on recorded information and do not consider any adjustments which could be considered for rate-making purposes. Some of the companies within each group could possibly have

experienced earnings above or below a reasonable norm during the period. In addition, other differences exist between the companies with respect to such categories as income from other sources, source of supply, types of services provided, regulatory environment, and the economic conditions in their respective service areas.

Q.14 Why have you confined your study to the 20 utilities shown in the tables?

A.14 It is my opinion that the 20 utilities shown are regulated public utilities having business and financial risks similar to those of SDG&E and present a valid sampling for comparative purposes.

Q.15 What consideration did you give to interest coverage in determining your recommendation?

A.15 The interest coverage that a particular level of earnings provides is an important consideration in determining a fair and reasonable return; however, a reasonable rate of return is not solely determined by the interest coverage allegedly required to sustain or improve bond ratings. My recommended rate of return provides for an after-tax interest coverage of approximately 2.3 times which not only allows SDG&E to meet its current fixed charge requirements but also provides sufficient flexibility to attract future capital.

Q.16 What are some of the additional factors you considered?

A.16 Some of the additional factors which I considered in arriving at my recommendation are as follows:

- A. SDG&E is a regulated public utility engaged in a business which affects the public interest and it must provide its service at reasonable rates.

- B. Fair and reasonable rates must balance the interest of the ratepayers and investors.
- C. SDG&E's capital structure, capital costs and financial history.
- D. SDG&E's capital requirements.
- E. SDG&E's innovative financing resulting from the sale and leaseback of the Encina 5 power plant.
- F. Economic conditions - the effects of continued inflation and increases in embedded costs of capital.

Q.17 Do you have any further comments?

A.17 Yes. It is my opinion that the rate of return on common equity that I am recommending is both fair and reasonable and balances the interests of SDG&E's investors and ratepayers. I believe my recommendation gives adequate consideration for financial attrition in that I have considered the estimated retirements and issuances of debt and preferred stock through 1981, the period in which rates will be in effect. An equity allowance of 14.50% will allow the utility to service its fixed charges and provide the opportunity to pay a suitable dividend as well as provide moderate additions to retained earnings while maintaining adequate service to its customers.

Q.18 Does this conclude your testimony?

A.18 Yes, it does.

EXPLANATION OF TABLES

This study contains 23 tables developed in the course of arriving at the recommended 14.50% return on common equity and the corresponding rate of return of 11.22% for San Diego Gas & Electric Company (SDG&E). Some of the tables present trends and five-year averages for the years 1975 through 1979 in a form which compares SDG&E's operating results with averages for ten electric utilities and ten combination gas and electric utilities. Other tables set forth trends in interest rates, summaries of capitalization, common stock book value, dividends and earnings, and sources of financing.

Table No. 1 shows the fluctuations which have occurred in the bank prime interest rates and the Federal Reserve discount rates for the period January 1977 through July 1980. The prime rate, the rate charged by the nation's largest commercial banks to their most preferred borrowers, began a steady upward climb in 1977, reaching double digit levels towards the end of 1978. In October 1979, the Federal Reserve Board announced a major change in monetary policy which caused the prime rate to move from the 13% level to a record high of 20% in April 1980. Currently, the prime rate is at the 11½% level. The discount rate, the charge on loans to member banks by the Federal Reserve Bank, followed a similar trend as the prime interest rate and currently is at 10%.

Table No. 2 compares yields on newly issued public utility bonds with yields on seasoned issues, grouped in categories by Moody's Rating Service Aaa to Baa. This table shows that the yields in all categories generally followed the same trends as short-term rates, gradually increasing through September 1979, with sharply higher rates recorded for the remainder of 1979 through the first quarter of 1980.

Table No. 3 shows interest rate trends in bond and preferred stock yields and interest rate variations for prime commercial paper, government bills, and the federal funds rate on an average annual basis for the years 1975 through 1979. Monthly fluctuations for all categories are shown beginning in January 1978 through June 1980. The trends shown are generally consistent with the patterns exhibited in Tables Nos. 1 and 2.

Table No. 4 presents a ten-year summary of nominal interest rates developed for SDG&E and seven other large California utilities. Increases registered over the years reflect (a) periodic sales of new bonds at rates exceeding the average cost of debt outstanding; (b) refunding of low-coupon bonds at maturity; and (c) bond retirements in accordance with sinking fund requirements. SDG&E experienced an

increase over the ten-year period slightly greater than the average increases of the other seven utilities. Over the last five years, SDG&E's increase is below the average increases of the other utilities; however, its nominal interest rate over the last five years was the highest among the other utilities.

Table No. 5 shows the development of SDG&E's effective interest rate on long-term debt as of December 31, 1979, 1980, 1981 and for the average year 1981. Series "S" and "T", issued in 1980, are included at actual costs of 16.26% and 13.77%, respectively. The Series "U" issue scheduled for 1981, is included at the estimated cost of 12%. The average effective interest rate for test year 1981 is 9.43%.

Table No. 6 presents SDG&E's after-tax interest coverage for the period 1975 to 1979 compared with the other groups of selected companies. SDG&E's 1979 interest coverage of 2.11 times is below the coverages for the selected groups. Also, SDG&E's 2.10 times coverage over the five-year period is lower than the coverages for the selected groups. SDG&E's 1981 interest coverage would be about 2.3 times after income taxes based upon the staff's recommended rate of return.

Table No. 7 shows the development of SDG&E's effective dividend rate on preferred and preference stock for December 31, 1979, 1980, 1981 and for the average year 1981. There are no issues planned for 1980; however, for 1981, a \$25 million issue is scheduled and is included at an estimated cost of 12.50%. The average effective dividend rate on preferred and preference stock for test year 1981 is 8.44%.

Table No. 8 summarizes data related to SDG&E's common stock book value, dividends, and earnings for the years 1970 through 1979. During the period, book value increased approximately \$387.3 million. Earnings available for common totaled approximately \$308.8 million of which \$211.4 million was paid out in dividends. Earnings per share showed no definitive trend over the period; however, the annual dividend rate has shown a moderate increase from \$1.08 in 1970 to \$1.48 in 1979.

Table No. 9 presents SDG&E's average common equity ratio compared with the other selected companies. Starting in 1976, SDG&E's average common equity ratio has increased yearly and approximates 35% in 1979. Over the five-year period, SDG&E's average common equity ratio has been below the averages of the electric utility group and the combination utility group.

Table No. 10 shows SDG&E's earnings rate on average common equity for the five-year period. SDG&E's earnings rate for the five-year period was below the averages of the other groups of selected companies.

Table No. 11 presents the earnings rate on average total capital from 1975 through 1979. SDG&E's average return during this period compares with the average of the combination utility group and is slightly lower than the average of the electric utility group.

Table No. 12 compares SDG&E's dividend payout ratio with that of the groups of selected companies. Since 1977, SDG&E's payout ratio has increased steadily to over 80% in 1979. Over the five-year period, SDG&E's average payout ratio compares with those of the other groups of selected companies.

Table No. 13 presents a Statement of Changes in Financial Position for SDG&E for the years 1975 through 1979. The primary sources of funds generated during the period were net income, 21.15%; depreciation and amortization, 13.81%; sale of common stock, 16.96%; sale of preference stock, 6.38%; and sale of first mortgage bonds and other long-term debt, 24.30%.

SDG&E expended 69.95% for plant construction and returned 16.82% to investors in the form of dividends. Approximately 5% of the funds were used to retire long-term debt.

Table No. 14 presents a summary of SDG&E's capital structure for the years 1970 through 1979. SDG&E's common equity ratio averaged 33.64% over the ten-year period; however, during the past few years the equity ratio has steadily increased reaching approximately 37.00% in 1979.

Table No. 15 shows the average net plant investment of SDG&E and the selected utility groups for the years 1975 through 1979. Net plant investment consists of gross utility plant, less depreciation and amortization reserves, advances for construction and deferred income taxes. SDG&E's average net plant investment increased by 61% during the period compared to increments ranging from 57% to 62% for the other groups.

Table No. 16 shows that SDG&E's operating revenues have increased at a rate comparable with those of the selected utility groups. This growth rate, as with the other companies, has surpassed the growth trend experienced in its average net plant investment.

Table No. 17 shows SDG&E's operating expenses increasing at a rate over the five-year period comparable with its increases in operating revenues. The other selected utility groups have experienced operating expense increases comparable with operating revenue trends over the five-year period.

Table No. 18 shows that SDG&E's trend of net operating income over the five-year period was greater than those experienced by the other selected utility groups.

Table No. 19 brings together the results illustrated in Tables Nos. 16 and 17. This table shows that SDG&E's operating ratio and those of other selected utility groups remained fairly constant over the five-year period.

Table No. 20 compares ratios of operating revenues to average net plant investment for SDG&E and the other groups of selected companies. SDG&E's growth rate over the five-year period compares with that experienced by the electric utility group and exceeds that experienced by the combination utility group.

Table No. 21 presents the ratio of net operating income to average net plant investment and is basically the equivalent of rate of return on average recorded net plant investment. For the five-year period, SDG&E's rate is comparable to those of the selected utility groups. These rates are less than the earnings rates on total capital shown in Table No. 11 which includes earnings derived from other income, primarily allowances for funds used during construction.

Table No. 22 shows various earnings rates on common equity ranging from 13.00% to 15.00% and combines them with the embedded cost of SDG&E's debt and preferred and preference stock to produce various rates of return based upon the projected average capital structure for test year 1981. The resulting rates of return range from 10.67% to 11.40%.

Table No. 23 contains my rate of return recommendation for SDG&E in these proceedings of 14.50% on common equity which equates to a rate of return on rate base of 11.22% for test year 1981.

TABLE NO. 1

SAN DIEGO GAS & ELECTRIC COMPANY

Prime Rate - Discount Rate

Year	Month	Prime Rate	Discount Rate
	(a)	(b)	(c)
1977	January	6-1/4	% 5-1/4%
	February		
	March		
	April		
	May	6-1/2 - 6-3/4	
	June	6-3/4	
	July		
	August	6-3/4 - 7	
	September	7-1/4	5-3/4
	October	7-1/2 - 7-3/4	6
	November		
	December		
1978	January	7-3/4 - 8	6-1/2
	February		
	March		
	April		
	May	8-1/4 - 8-1/2	7
	June	8-3/4 - 9	
	July		7-1/4
	August		7-1/4 - 7-3/4
	September	9-1/4 - 9-1/2 - 9-3/4	7-3/4 - 8
	October	9-3/4 - 10 - 10-1/4	8-1/2
	November	10-1/2 - 10-3/4 - 11 - 11-1/2	9-1/2
	December	11-1/2 - 11-3/4	
1979	January	11-3/4	
	February		
	March		
	April		
	May		
	June	11-3/4 - 11-1/2	
	July	11-1/2 - 11-3/4	9-1/2 - 10
	August	11-3/4 - 12 - 12-1/4	10 - 10-1/2
	September	12-1/4 - 12-3/4 - 13 - 13-1/4 - 13-1/2	10-1/2 - 11
	October	13-1/2 - 14-1/2 - 15	11 - 12
	November	15-1/4 - 15-1/2 - 15-3/4	12
	December	15-1/2 - 15-1/4	
1980	January	15-1/4	
	February	15-1/4 - 16-3/4	12 - 13
	March	17-3/4 - 18-1/2 - 19-1/2	13
	April	20 - 19-3/4 - 19-1/2	
	May	18-1/2 - 17-1/2 - 16-1/2 - 14-1/2 - 14	12
	June	13 - 12	12 - 11
	July	11-1/2 - 11	11 - 10

SOURCE: Irving Trust Company Weekly Interest Rates Listings.

TABLE NO. 2

SAN DIEGO GAS & ELECTRIC COMPANY
Yields on Public Utility Bonds - Newly-Issued vs. Distributed

Month	As Securities			As Securities			As Securities			As Securities		
	Newly-Issued Millions	Yield	Distributed Yield	Newly-Issued Millions	Yield	Distributed Yield	Newly-Issued Millions	Yield	Distributed Yield	Newly-Issued Millions	Yield	Distributed Yield
1977												
July	\$ -	-	9.10%	\$ 24.25	8.29%	8.32%	\$ 75	8.60%	8.51%	24.5	8.25%	8.97%
August	-	-	8.13	75	8.17	8.36	-	-	8.49	65	8.59	8.91
September	315	8.04	8.07	365	8.24	8.32	75	8.60	8.51	24.5	8.25	8.97
October	-	-	8.18	85	8.25	8.44	330	8.52	8.61	325	8.98	9.01
November	400	8.27	8.23	280	8.50	8.48	137	8.56	8.64	26	9.15	9.06
December	-	-	8.34	100	8.57	8.55	110	8.64	8.64	115	9.08	9.08
1978												
January	-	-	8.52	315	8.97	8.76	125	8.90	8.92	150	9.35	9.27
February	-	-	8.57	35	8.80	8.79	30	8.90	8.97	100	9.45	9.29
March	225	8.72	8.57	45	8.75	8.79	255	9.02	8.98	138	9.53	9.37
April	-	-	8.69	175	9.04	8.86	365	9.08	9.09	25	9.42	9.54
May	-	-	8.83	145	9.01	9.02	170	9.35	9.22	220	9.69	9.70
June	250	8.90	8.92	275	9.41	9.19	195	9.42	9.40	70	10.00	9.78
July	10	9.10	9.02	300	9.57	9.26	375	9.53	9.51	300	9.88	9.73
August	450	8.75	8.86	300	8.86	9.11	60	8.90	9.32	-	-	9.53
September	150	8.625	8.84	245	8.95	9.09	205	9.04	9.28	-	-	9.47
October	525	9.12	9.06	275	9.55	9.28	15	9.50	9.46	235	9.75	9.69
November	100	9.16	9.19	400	9.54	9.46	20	9.625	9.68	-	-	9.99
December	150	9.27	9.34	110	9.31	9.56	10	9.32	9.70	-	-	10.08
1979												
January	150	9.37	9.48	30	9.85	9.70	50	9.95	9.90	60	10.15	10.29
February	425	9.59	9.51	-	-	9.74	400	9.95	9.84	100	10.50	10.27
March	450	9.65	9.61	100	9.87	9.89	-	-	10.04	40	10.47	10.53
April	300	9.58	9.61	-	-	9.92	375	10.27	10.10	255	10.70	10.56
May	-	-	9.71	25	9.82	10.19	300	10.34	10.30	75	10.65	10.70
June	50	9.37	9.48	275	10.01	9.95	500	9.90	10.14	-	-	10.56
July	-	-	9.42	150	9.73	9.72	-	-	9.98	-	-	10.48
August	300	9.53	9.46	100	9.67	9.75	40	9.88	10.14	-	-	10.90
September	275	10.00	9.69	-	-	9.94	85	10.36	10.36	-	-	10.78
October	345	10.73	10.38	200	11.85	10.85	720	12.04	11.40	205	10.99	11.89
November	500	10.93	10.99	125	12.00	11.57	545	12.49	11.89	-	-	12.48
December	-	-	10.96	290	11.54	11.47	25	12.25	11.79	105	13.08	12.48
1980												
January	450	11.47	11.33	460	12.56	11.95	160	12.51	12.27	-	-	12.92
February	175	12.70	12.75	25	13.63	13.19	325	15.15	13.55	-	-	14.42
March	75	14.20	13.33	450	14.99	14.09	260	15.04	14.65	175	15.56	15.26
April	325	12.15	12.27	50	12.70	13.49	180	14.54	13.87	100	14.67	14.35
May	500	11.79	11.23	100	12.00	11.99	210	11.77	12.53	-	-	12.93
June	100	11.45	10.88	490	11.18	11.39	930	11.51	11.89	175	12.24	12.71
July	450	11.76	11.48	-	-	11.96	250	12.59	12.26	50	13.625	12.75

SOURCE: Moody's Bond Survey.

SAN DIEGO GAS & ELECTRIC COMPANY

Trends in Interest Rates

	Bond Yields					Preferred Stock Yield	Prime Commercial Paper	U.S. Government 3 Months Bills	U.S. Government 3-5 Years Issues	Federal Funds
	U.S. Government Long-Term	State and Local	Industrial	Rails	Utilities					
	(a)	(b)	(c)	(d)	(e)					
1975 Average	6.98%	7.05%	9.25%	9.39%	9.88%	8.38%	6.33%	5.80%	7.55%	5.82%
1976 Average	6.78	6.64	8.84	8.85	9.17	7.97	5.35	4.98	6.94	5.05
1977 Average	7.06	5.68	8.28	8.13	8.58	7.60	5.60	5.27	6.85	5.54
1978 Average	7.89	6.03	8.90	8.64	9.22	8.25	7.99	7.19	8.30	7.94
1979 Average	8.74	6.52	9.84	9.55	10.39	9.07	10.91	10.07	9.58	11.20
1978 January	7.50	5.71	8.60	8.30	8.87	7.93	6.79	6.44	7.71	6.70
February	7.60	5.62	8.65	8.32	8.90	7.99	6.80	6.45	7.76	6.78
March	7.63	5.61	8.66	8.41	8.93	8.07	6.80	6.29	7.76	6.79
April	7.74	5.80	8.72	8.49	9.05	8.06	6.86	6.29	7.90	6.89
May	7.87	6.03	8.84	8.60	9.19	8.11	7.11	6.41	8.10	7.36
June	7.94	6.22	8.92	8.68	9.33	8.31	7.63	6.73	8.31	7.60
July	8.09	6.28	9.05	8.70	9.38	8.42	7.91	7.01	8.54	7.81
August	7.87	6.12	8.95	8.72	9.21	8.26	7.90	7.08	8.31	8.04
September	7.82	6.09	8.90	8.68	9.17	8.24	8.44	7.85	8.38	8.45
October	8.07	6.13	9.03	8.74	9.37	8.29	9.03	7.99	8.61	8.96
November	8.16	6.19	9.21	9.01	9.58	8.43	10.23	8.64	8.97	9.76
December	8.36	6.51	9.31	9.15	9.67	8.84	10.43	9.08	9.23	10.03
1979 January	8.43	6.47	9.44	9.21	9.85	8.79	10.32	9.35	9.36	10.07
February	8.43	6.31	9.42	9.22	9.84	8.77	10.01	9.32	9.16	10.06
March	8.45	6.33	9.50	9.30	10.02	8.77	9.96	9.48	9.25	10.09
April	8.44	6.29	9.57	9.38	10.05	8.29	10.39	9.46	9.32	10.01
May	8.55	6.25	9.69	9.48	10.23	8.82	9.98	9.61	9.30	10.24
June	8.32	6.13	9.57	9.44	10.04	8.87	9.71	9.06	8.89	10.29
July	8.35	6.13	9.47	9.45	9.90	8.93	8.82	9.24	8.88	10.47
August	8.42	6.20	9.52	9.48	9.97	9.02	10.39	9.52	9.08	10.94
September	8.68	6.52	9.66	9.50	10.19	9.16	11.60	10.26	9.56	11.43
October	9.44	7.08	10.28	9.89	11.13	9.46	13.23	11.70	10.75	13.47
November	9.80	7.30	11.00	10.35	11.73	9.95	13.26	11.79	10.98	13.18
December	9.59	7.22	11.02	10.44	11.68	10.06	12.80	12.04	10.45	13.78
1980 January	10.03	7.35	11.35	10.68	12.12	10.14	12.66	12.00	10.76	13.82
February	11.55	8.16	12.35	11.06	13.48	10.55	13.60	12.86	12.52	14.13
March	11.87	9.17	13.11	11.43	14.33	11.26	16.50	15.20	13.41	17.19
April	10.83	8.63	12.93	11.63	13.50	11.06	14.93	13.20	11.50	17.61
May	9.82	7.59	12.04	11.54	12.17	10.20	9.29	8.58	9.44	10.98
June	9.40	7.63	11.41	11.26	11.87	9.78	8.03	7.07	8.97	9.47

SOURCES: Federal Reserve Bulletins,
Monthly Bond Summary

TABLE NO. 4

SAN DIEGO GAS & ELECTRIC COMPANY

Nominal Interest Rates
Major California Utilities
1970 - 1979

Company	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Increase 70 - 79	Increase 74 - 79
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Pacific Gas and Electric	4.82%	5.16%	5.37%	5.43%	5.92%	6.47%	6.56%	6.91%	7.23%	7.55%	57%	28%
Southern California Edison	5.00	5.07	5.26	5.36	5.95	6.07	6.27	6.38	6.72	6.85	37	15
General Telephone	5.73	5.81	5.97	6.09	6.24	6.16	6.18	6.30	6.67	8.04	40	29
Pacific Telephone	5.40	5.93	5.95	6.10	6.59	6.62	6.67	6.77	7.36	8.33	54	26
Pacific Ltg. - Utility System	4.64	5.40	5.61	5.86	5.96	6.76	7.02	6.92	7.22	7.21	55	21
California Water Service	4.70	4.97	4.97	5.59	5.54	6.99	7.60	7.60	7.71	7.86	67	42
Southern California Water	4.90	4.96	4.97	5.28	5.26	5.35	6.18	6.29	7.09	7.66	56	46
San Diego Gas & Electric	5.28	5.28	5.86	6.60	7.09	7.01	7.04	7.52	8.27	8.36	58	18

Nominal rate developed by dividing interest charges for the year by the average of beginning and end-of-year long-term debt and short-term debt for capital purposes.

TABLE NO. 5

SAN DIEGO GAS & ELECTRIC COMPANY
Effective Interest Rate on Long-Term Debt
Test Year 1981

Item	Par Value	Net Proceeds	Annual Charge	Effective Rate
(Dollars in Thousands)				
Balance Outstanding, December 31, 1979	\$646,422	\$639,245	\$50,772	7.94%
<u>Issues for 1980</u>				
Series S, 16%, Due 2010	50,000	49,331	8,022	16.26
Series T, 13-5/8%, Due 2010	75,000	74,344	10,241	13.77
<u>Retirements</u>				
Sinking Fund Debentures	(775)	(762)	(36)	
Other Long-Term Debt	(21,283)	(21,231)	(2,493)	
Adjustment of Foreign Term Loans to 12%	-	-	2,373	
Balance Outstanding, December 31, 1980	\$749,364	\$740,927	\$68,879	9.30%
<u>Estimated Issue for 1981</u>				
Series U, 12%, Due 2011	75,000	75,000	9,000	12.00
<u>Retirements</u>				
Sinking Fund Debentures	(775)	(762)	(36)	
Other Long-Term Debt	(2,106)	(2,071)	(194)	
Balance Outstanding, December 31, 1981	\$821,483	\$813,094	\$77,649	9.55%
Average Year 1981	\$783,983	\$775,595	\$73,149	9.43%

173,264

TABLE 6

SAN DIEGO GAS & ELECTRIC COMPANY

TIMES LONG-TERM DEBT INTEREST EARNED*
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	1.76	2.26	2.34
1976	2.25	2.35	2.33
1977	2.22	2.33	2.34
1978	2.17	2.27	2.34
1979	2.11	2.16	2.27
5-YR AVERAGE	2.10	2.27	2.32
INDEX-1975	100	100	100
1976	128	104	100
1977	126	103	100
1978	123	100	100
1979	120	96	97
5-YR AVERAGE	119	101	99

* AFTER INCOME TAXES

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE NO. 7

SAN DIEGO GAS & ELECTRIC COMPANY

Effective Dividend Rate on Preferred and Preference Stock

Test Year 1981

Item	: Par : Value	: Net : Proceeds	: Annual : Charge	: Effective : Rate
	(Dollars in Thousands)			
Cumulative Preferred Stock	\$ 27,500	\$ 27,747	\$ 1,276	4.60%
Cumulative Preference Stock	186,000	187,307	16,367	8.74
Balance Outstanding, December 31, 1979	<u>\$213,500</u>	<u>\$215,054</u>	<u>\$17,643</u>	8.20%
Issue for 1980	-	-	-	
Balance Outstanding, December 31, 1980	<u>\$213,500</u>	<u>\$215,054</u>	<u>\$17,643</u>	8.20%
Estimated Issue for 1981 12.5% Series	<u>25,000</u>	<u>25,000</u>	<u>3,125</u>	12.50
Balance Outstanding, December 31, 1981	<u><u>\$238,500</u></u>	<u><u>\$240,054</u></u>	<u><u>\$20,768</u></u>	8.65%
 Average Year 1981	 <u><u>\$226,000</u></u>	 <u><u>\$227,554</u></u>	 <u><u>\$19,206</u></u>	 8.44%

TABLE NO. 8

SAN DIEGO GAS & ELECTRIC COMPANY
Common Stock Book Value, Dividends, Earnings
1970 - 1979

Year	Book Value December 31	Net Earnings After Preferred Dividends	Dividends on Common Stock	Earnings To Book Value Percent	Dividends to Book Value Percent	Dividend Payout Ratio	Shares Outstanding December 31	Book Value Per Share December 31	Earnings Per Share	Dividend Rate Per Share
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1970	\$153,959	\$18,206	\$10,800	11.83%	7.01%	59.32%	10,000	\$15.40	\$1.82	\$1.08
1971	161,774	18,938	10,800	11.71	6.68	57.03	10,000	16.18	1.89	1.08
1972	198,519	19,133	11,850	9.64	5.97	61.93	11,500	17.26	1.66	1.11
1973	230,236	20,700	14,400	8.99	6.25	69.57	13,500	17.05	1.53	1.20
1974	263,414	28,644	16,800	10.87	6.38	58.65	15,500	16.99	1.85	1.20
1975	274,821	15,969	19,950	5.81	7.26	124.93	17,000	16.17	.94	1.20
1976	322,466	38,594	21,799	11.97	6.76	56.48	19,281	16.72	2.00	1.20
1977	393,151	46,487	25,944	11.32	6.60	55.81	22,649	17.36	2.05	1.28
1978	480,454	49,572	35,457	10.32	7.38	71.53	27,593	17.41	1.80	1.40
1979	541,225	52,523	43,643	9.70	8.06	83.09	31,188	17.35	1.68	1.48

Columns a, b, c, and g are in thousands.

SOURCE: Annual Reports to Stockholders.

TABLE 9

SAN DIEGO GAS & ELECTRIC COMPANY

AVERAGE COMMON EQUITY RATIO
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	30.59%	31.77%	32.98%
1976	29.73	32.75	34.01
1977	30.33	34.05	34.51
1978	32.96	34.99	35.75
1979	34.93	35.39	35.94
5-YR AVERAGE	31.71	33.79	34.64
INDEX-1975	100	100	100
1976	97	103	103
1977	99	107	105
1978	108	110	108
1979	114	111	109
5-YR AVERAGE	104	106	105

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 10

 SAN DIEGO GAS & ELECTRIC COMPANY

EARNINGS RATE ON AVERAGE COMMON EQUITY
 TREND AND 5-YEAR AVERAGES
 1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	5.93%	12.73%	11.91%
1976	12.92	13.36	11.11
1977	12.96	12.41	11.47
1978	11.35	11.95	11.62
1979	10.28	11.02	11.45
5-YR AVERAGE	10.69	12.29	11.51
INDEX-1975	100	100	100
1976	218	105	93
1977	219	97	96
1978	191	94	98
1979	173	87	96
5-YR AVERAGE	180	97	97

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
 MOODY'S PUBLIC UTILITY MANUAL.
 ANNUAL REPORTS TO STOCKHOLDERS.
 ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 11

SAN DIEGO GAS & ELECTRIC COMPANY

EARNINGS RATE ON AVERAGE TOTAL CAPITAL
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	6.80%	8.73%	8.42%
1976	9.03	9.18	8.40
1977	9.30	9.04	8.65
1978	9.34	9.13	8.91
1979	9.13	9.09	9.08
5-YR AVERAGE	8.72	9.03	8.69
INDEX-1975	100	100	100
1976	133	105	100
1977	137	104	103
1978	137	105	106
1979	134	104	108
5-YR AVERAGE	128	103	103

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 12

 SAN DIEGO GAS & ELECTRIC COMPANY

DIVIDEND PAYOUT RATIO
 TREND AND 5-YEAR AVERAGES
 1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	124.93%	69.67%	69.95%
1976	56.48	68.74	75.54
1977	56.05	78.84	74.61
1978	71.53	81.62	74.73
1979	83.09	92.60	79.81
5-YR AVERAGE	78.42	78.29	74.93
INDEX-1975	100	100	100
1976	45	99	108
1977	45	113	107
1978	57	117	107
1979	67	133	114
5-YR AVERAGE	63	112	107

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
 MOODY'S PUBLIC UTILITY MANUAL.
 ANNUAL REPORTS TO STOCKHOLDERS.
 ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE NO. 13

SAN DIEGO GAS & ELECTRIC COMPANY
Statement of Changes in Financial Position
1975 - 1979

Item	1975	1976	1977	1978	1978	5-Year Total	Percent of Total
Sources of Funds							
(Dollars in Thousands)							
<u>From Operations</u>							
Net Income	\$ 25,700	\$ 50,500	\$ 60,200	\$ 66,800	\$ 70,200	\$ 273,400	21.15%
Depreciation and Amortization	28,900	30,300	33,700	38,000	47,600	178,500	13.81
Allowance for Funds Used During Construction	(8,200)	(13,700)	(20,600)	(21,800)	(25,300)	(89,600)	(6.93)
Regulatory Revenue Adjustments	-	7,900	(32,400)	(200)	(16,300)	(41,000)	(3.17)
Other-Net	2,000	8,200	(2,400)	2,200	(2,600)	7,400	.57
Total From Operations	48,400	83,300	38,500	85,000	73,600	328,700	25.43
<u>From Financing</u>							
Sale of Common Stock	15,400	29,600	5,500	71,800	51,900	219,200	16.96
Sale of Preference Stock	-	26,200	29,200	26,400	-	82,400	6.38
Sale of First Mortgage Bonds	39,300	44,400	48,800	49,400	-	181,900	14.08
Sale of Corporate Office Building	19,600	-	-	-	-	19,600	1.52
Sale of Encina 5	-	-	-	131,600	-	131,600	10.18
Other Long-Term Debt	2,900	9,700	45,200	4,700	69,600	132,100	10.22
Total From Financing	77,200	109,900	178,300	283,900	121,500	766,800	59.34
<u>Other Sources</u>							
Customer Advances For Construction	(100)	2,700	4,800	2,100	3,300	12,800	.99
Decrease in Working Capital	37,800	7,300	26,300	-	116,600	188,000	14.55
Advances to Subsidiaries	(10,100)	1,900	(3,300)	(3,100)	1,100	(13,500)	(1.04)
Other Sources (Uses)	(3,400)	9,000	1,200	400	2,300	9,500	.73
Total Other Sources	24,200	20,900	29,000	(600)	123,300	196,800	15.23
Total Source of Funds	\$149,800	\$214,000	\$241,800	\$368,300	\$318,400	\$1,292,300	100.00%
<u>Use of Funds</u>							
Additions to Utility Plant (Excl. AFUDC)	\$122,300	\$175,800	\$205,500	\$200,300	\$200,100	\$904,000	69.95%
Net Increase (Decrease) in Deferred Charges and Other Assets	(3,000)	3,600	(5,600)	44,100	4,000	43,100	3.34
Retirement of Long-Term Debt	800	900	2,000	13,000	53,000	69,700	5.39
Dividends on Preferred Stock	9,700	11,900	13,900	17,200	17,700	70,400	5.45
Dividends on Common Stock	20,000	21,800	26,000	35,500	43,600	146,900	11.37
Increase in Working Capital	-	-	-	58,200	-	58,200	4.50
Total Use of Funds	\$149,800	\$214,000	\$241,800	\$368,300	\$318,400	\$1,292,300	100.00%

SOURCE: Statistical Supplements to Annual Reports to Stockholders.

TABLE NO. 14
SAN DIEGO GAS & ELECTRIC COMPANY

Capital Structure
 1970 - 1979

Year	Long-Term Debt		Bankers' Acceptances		Preferred and Preference Stock		Common Equity		Total Capital	
	Amount (a)	Percent (b)	Amount (c)	Percent (d)	Amount (e)	Percent (f)	Amount (g)	Percent (h)	Amount (i)	Percent (j)
	(Dollars in Thousands)									
1970	\$230,684	53.88%	\$ -	- %	\$ 43,500	10.16%	\$153,959	35.96%	\$ 428,143	100.00%
1971	276,798	55.20	-	-	63,500	12.66	161,134	32.14	501,432	100.00
1972	331,023	54.44	-	-	78,500	12.91	198,519	32.65	608,042	100.00
1973	330,065	49.35	-	-	108,500	16.22	230,236	34.43	668,801	100.00
1974	401,161	50.27	-	-	133,500	16.73	263,414	33.00	798,075	100.00
1975	443,284	50.11	33,110	3.74	133,500	15.09	274,821	31.06	884,715	100.00
1976	494,148	49.14	30,550	3.04	158,500	15.76	322,466	32.06	1,005,664	100.00
1977	587,850	48.35	46,200	3.80	188,500	15.51	393,151	32.34	1,215,701	100.00
1978	629,510	46.73	23,600	1.75	213,500	15.85	480,454	35.67	1,347,064	100.00
1979	646,422	44.24	60,000	4.11	213,500	14.61	541,225	37.04	1,461,147	100.00
10-Year Average		50.17		1.64		14.55		33.64		100.00

SOURCE: Annual Reports to Stockholders.

TABLE 15

SAN DIEGO GAS & ELECTRIC COMPANY

AVERAGE NET PLANT INVESTMENT
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	810,601	696,055	849,777
1976	924,573	799,990	942,168
1977	1,081,594	907,106	1,058,582
1978	1,191,697	1,017,325	1,188,811
1979	1,304,316	1,128,421	1,333,968
5-YR AVERAGE	1,062,556	909,779	1,074,661
INDEX-1975	100	100	100
1976	114	119	111
1977	133	130	125
1978	147	126	140
1979	161	162	157
5-YR AVERAGE	131	131	126

DOLLARS IN THOUSANDS

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 16

SAN DIEGO GAS & ELECTRIC COMPANY

OPERATING REVENUES
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	374,252	220,919	352,272
1976	447,653	269,412	396,969
1977	508,039	323,845	470,724
1978	614,431	381,658	546,192
1979	745,232	427,761	616,569
5-YR AVERAGE	537,921	324,719	476,545
INDEX-1975	100	100	100
1976	120	122	113
1977	136	147	134
1978	164	173	155
1979	199	194	175
5-YR AVERAGE	144	147	135

DOLLARS IN THOUSANDS

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 17

 SAN DIEGO GAS & ELECTRIC COMPANY

OPERATING EXPENSES
 TREND AND 5-YEAR AVERAGES
 1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	326,990	171,146	288,615
1976	376,437	211,252	329,507
1977	424,966	259,633	394,623
1978	523,022	308,549	460,606
1979	647,999	355,551	525,484
5-YR AVERAGE	459,882	261,226	399,781
INDEX-1975	100	100	100
1976	115	123	114
1977	130	152	137
1978	160	180	160
1979	198	208	182
5-YR AVERAGE	141	153	138

DOLLARS IN THOUSANDS

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
 MOODY'S PUBLIC UTILITY MANUAL.
 ANNUAL REPORTS TO STOCKHOLDERS.
 ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 18

SAN DIEGO GAS & ELECTRIC COMPANY

NET OPERATING INCOME
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	47,262	49,773	63,587
1976	71,216	58,160	67,461
1977	83,073	64,211	76,101
1978	91,409	73,109	85,585
1979	97,233	72,209	91,085
5-YR AVERAGE	78,038	63,492	76,764
INDEX-1975	100	100	100
1976	151	117	106
1977	176	129	120
1978	193	147	135
1979	206	145	143
5-YR AVERAGE	165	128	121

DOLLARS IN THOUSANDS

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
HOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 19

SAN DIEGO GAS & ELECTRIC COMPANY

OPERATING RATIOS
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	87.37%	76.87%	81.98%
1976	84.09	77.39	83.03
1977	83.65	79.10	83.85
1978	85.12	80.10	84.15
1979	86.95	82.67	84.96
5-YR AVERAGE	85.44	79.23	83.60
INDEX-1975	100	100	100
1976	96	101	101
1977	96	103	102
1978	97	104	103
1979	100	108	104
5-YR AVERAGE	98	103	102

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 20

 SAN DIEGO GAS & ELECTRIC COMPANY

RATIO: OPERATING REVENUES TO AVERAGE NPI
 TREND AND 5-YEAR AVERAGES
 1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	46.17%	32.56%	41.88%
1976	48.42	34.82	42.64
1977	46.97	37.26	44.92
1978	51.56	39.83	46.65
1979	57.14	40.89	46.92
5-YR AVERAGE	50.05	37.07	44.60
INDEX-1975	100	100	100
1976	105	107	102
1977	102	114	107
1978	112	122	111
1979	124	126	112
5-YR AVERAGE	108	114	106

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
 MOODY'S PUBLIC UTILITY MANUAL.
 ANNUAL REPORTS TO STOCKHOLDERS.
 ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE 21

SAN DIEGO GAS & ELECTRIC COMPANY

RATIO: OF NET OPR. INCOME TO AVERAGE NPI
TREND AND 5-YEAR AVERAGES
1975 - 1979

YEAR	SAN DIEGO GAS & ELECTRIC	TEN ELECTRIC UTILITIES	TEN COMBINATION UTILITIES
1975	5.83%	7.29%	7.48%
1976	7.70	7.48	7.13
1977	7.68	7.33	7.12
1978	7.67	7.49	7.14
1979	7.45	6.73	6.80
5-YR AVERAGE	7.27	7.27	7.13
INDEX-1975	100	100	100
1976	132	103	95
1977	132	101	95
1978	132	103	95
1979	128	92	91
5-YR AVERAGE	125	100	95

SOURCES: 5-YEAR STUDIES, RATE OF RETURN UNIT.
MOODY'S PUBLIC UTILITY MANUAL.
ANNUAL REPORTS TO STOCKHOLDERS.
ANNUAL REPORTS TO CALIFORNIA PUBLIC UTILITIES COMMISSION.

TABLE NO. 22

SAN DIEGO GAS & ELECTRIC COMPANY

Determination of Rates of Return Required to Recover Imbedded
Costs of Debt and Preferred Stock at Various Assumed Rates
of Return on Common Equity - Average Year 1981

Component	Capital Ratios ^{1/}	Cost Factors ^{2/}	Assumed Earnings Rate on Common Stock Equity								
			13.00%	13.25%	13.50%	13.75%	14.00%	14.25%	14.50%	14.75%	15.00%
	(a)	(b)	Weighted Cost Totals								
	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)		
Long-Term Debt	44.40%	9.43%	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19
Bankers' Acceptances	6.60	10.50	.69	.69	.69	.69	.69	.69	.69	.69	.69
Preferred Stock	12.75	8.44	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Common Equity	<u>36.25</u>		<u>4.71</u>	<u>4.80</u>	<u>4.89</u>	<u>4.98</u>	<u>5.08</u>	<u>5.17</u>	<u>5.26</u>	<u>5.35</u>	<u>5.44</u>
Total	<u>100.00%</u>		<u>10.67%</u>	<u>10.76%</u>	<u>10.85%</u>	<u>10.94%</u>	<u>11.04%</u>	<u>11.13%</u>	<u>11.22%</u>	<u>11.31%</u>	<u>11.40%</u>

^{1/} Capital Ratios estimated on an average year basis.

^{2/} As shown in Tables Nos. 5 and 7.

TABLE NO. 23

SAN DIEGO GAS & ELECTRIC COMPANY

Recommended Rate of Return

Component	Capital : : Ratios	Cost : : Factors	Weighted : : Cost
Long-Term Debt	44.40%	9.43%	4.19%
Bankers' Acceptances	6.60	10.50	.69
Preferred Stock	12.75	8.44	1.08
Common Equity	<u>36.25</u>	14.50	<u>5.26</u>
Total	<u>100.00%</u>		<u>11.22%</u>

APPENDIX

SAN DIEGO GAS & ELECTRIC COMPANY

List of Companies Used in Study

Combination Utilities
Gas and Electric (10)

Arizona Public Service Company
Central Illinois Public Service Company
Cincinnati Gas and Electric Company
Dayton Power and Light Company
Delmarva Power and Light Company
Illinois Power Company
New York State Electric and Gas Company
Public Service Company of Colorado
Rochester Gas and Electric Company
South Carolina Electric and Gas Company

Electric Utilities (10)

Arkansas Power and Light Company
Columbus and Southern Ohio Electric Company
Indianapolis Power and Light Company
Kansas City Power and Light Company
Oklahoma Gas and Electric Company
Portland General Electric Company
Puget Sound Power and Light Company
Southwestern Public Service Company
Tampa Electric Company
Utah Power and Light Company