5.C.

APPLICATION NO. ____________________

EXHIBIT NO. (SDG&E - 1)

SDGE

San Diego Gas & Electric

1981 TEST YEAR

COST OF CAPITAL AND RATE OF RETURN

INCLUDING PREPARED TESTIMONY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

JULY 1980

EXHIBIT (SDG&E-1)
COST OF CAPITAL AND RATE OF RETURN
PREPARED DIRECT TESTIMONY OF PAUL A. WILLIAMS II

1. Q. Mr. Williams, what is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to demonstrate the increased cost of capital in 1981 and to substantiate the need for an increase in the authorized rate of return from the level adopted in the Company's last General Rate Case Decision 90405 of June 5, 1979.

2. Q. Please explain how the cost of capital for Test Year 1981 was calculated.

A. The cost of capital for Test Year 1981 was calculated using the same methodology as adopted in Decision 90405. For this filing, the cost of long-term debt and preferred stock was updated; bankers' acceptances were included in the capital structure; and, the return on common equity was kept frozen at 14.5 percent.

3. Q. Why are you leaving the return on equity at the same level as authorized in Decision 90405?

A. An increase in the return on equity is not being requested in this proceeding in keeping with the expedited nature of this case. An increase in the return on equity will certainly be requested in 1982 Test Year case.

SDG&E is fully aware of the sacrifice it is making in this case regarding the return on common equity. An increase is definitely in order in light of the 13.9 percent return on common equity authorized for PGandE for 1980 and the continued erosion of earnings due to persistently high inflation. However, the Company believes that expeditious treatment of its request is tantamount to the financial well-being of SDG&E. Substantial rate relief must be received by January 1, 1981, in order to reverse the steep decline in financial condition projected for the latter half of 1980, and calendar year 1981.

4. Q. Would you please elaborate on the projected decline in financial condition for 1980 and 1981.

A. Yes. Financial results for the calendar year 1980 are projected to tail-off after the full impact of the 1979 General Rate Case is realized in mid-year. The rate of return (shown on Table E) is estimated to be only 8.03 percent, which is over 250 basis points lower than authorized in mid-1979. The return on equity is projected to be only 5.32 percent compared to the 14.5 percent authorized in Decision 90405. Interest coverage, using the matrix method, is expected to decline to 1.59 times, well below the 2.7 times authorized for the 1979 Test Year. Internal generation of cash is projected to be only 3 percent compared to the BBB rated mean of 22 percent. Consequently, SDG&E <u>must</u> receive significant rate relief by

January 1, 1981, to stem the projected decline in its financial condition.

As far as 1981 is concerned, financial results, without rate relief, would be a disaster. The rate of return would decline to 3.46 percent, and the return on equity would disintegrate to a negative 9.18 percent. Interest coverage would decline to 0.65 times, using the matrix method, and internal generation of cash would be a negative 29 percent. Clearly, it is essential that substantial rate relief be received by January 1, 1981, to avert the projected financial decline.

5. Q. Mr. Williams, will you please provide a general explanation of this exhibit?

A. Yes. Table A, 1981 Test Year Rate Request Summary, presents key ratemaking results assuming receipt of the requested $144.8 million in additional revenues (line 1). Realization of this requested rate relief in an expedited manner is an essential first step toward attainment of the Company's primary financial objective of regaining its Single A bond rating.

The following tables set forth the cost of capital for SDG&E for the 1981 Test Year. Information is provided on the capital structure and the costs of the capital elements as recorded in 1979 and projected for 1980 as expected and 1981 Test Year.

Historical data on the costs of capital are provided as background information for cost estimates through 1981. In addition, comparisons with the utility industry by credit rating groups are included to substantiate the need for continued improvement in the Company's financial condition. A composite cost of capital is established in the exhibit.

6. Q. What must SDG&E do to regain its Single A bond rating?

A. The primary goal of achieving a Single A bond rating must be earned through a history of financial improvement, combined with the valid prospect of continued financial well-being. Prospective energy sources, regulatory climate and management are all considered; but, the key elements are financial results and whether the rating agencies feel that the Company's interest and principal payment obligations will be met.

There are three primary financial objectives which are necessary to achieve this goal. They are to:

(1) Improve interest coverage to a level of 3.0 times;

(2) Increase internal generation of cash to greater than 40 percent; and

(3) Limit cash construction expenditures to 10 percent or less of capitalization.

The magnitude of the difficulties in achieving these objectives is demonstrated clearly in Tables B through J.

7. Q. Would authorization of the requested rate relief in this proceeding raise your bond rating to Single A?

A. No. The financial results produced by the requested rate relief in this proceeding are only a first step in the process of regaining SDG&E's Single A bond rating. However, it is important to realize that this first step is absolutely critical. If substantial and timely rate relief is granted in both the 1981 and 1982 Test Year, SDG&E should be well on its way to achieving its goal.

8. Q. Would you explain how you determined the embedded cost of preferred stock?

A. Yes. Table B lists the costs of preferred stock for recorded 1979 and projected 1980 and 1981. The embedded cost of preferred stock for 1979 was 8.20 percent, as shown on line 15, column E. This is very close to the 8.21 percent adopted in Decision 90405. No preferred stock is planned to be issued in 1980. In 1981 the Company tentatively plans to issue $25 million of 12.625 percent Series preference stock. The issuance of this series raises the projected embedded cost of preferred capital stock from the 1979 and 1980 level of 8.20 percent to 8.67 percent (line 19, column E). There is no change in methodology in these calculations from previous General Rate Cases.

9. Q. Mr. Williams, would you please explain how you arrived at the embedded cost of long-term debt?

A. Table C lists the embedded cost of long-term debt recorded for December 31, 1979. There is no change in methodology in these calculations from previous General Rate Cases. The embedded cost of long-term debt for 1979 was 8.49 percent, as shown on line 29, column E. This is substantially above the 8.10 percent cost adopted in Decision 90405.

The primary reason for the increase was the 14.85 percent rate incurred on the foreign term loans which were issued in 1979.

As far as the projected embedded cost of long-term debt for 1980 is concerned (Table D), SDG&E sold $50 million of first mortgage bonds in March at 16 percent and the financing plan has assumed issuance in 1980 of Series T in the amount of $50 million. The cost of the second issue is assumed to be 13.5 percent. The embedded cost of long-term debt projected for year-end 1980 is 9.27 percent, as shown on line 12, column E.

In 1981, assuming receipt of the rate increase requested, SDG&E anticipates one $75 million sale of bonds. The rate of this Series U is assumed to be 12.125 percent. The projected embedded cost of debt for year-end 1981 is projected to be 9.55 percent (line 20, column E). This represents an increase of over 100 basis points from the recorded 1979 level.

10. Q. How does the actual rate of return for 1979 compare to what was authorized in Decision 90405?

A. As shown on Table E, the authorized rate of return in Decision 90405 was 10.59 percent (line 5, column C). Actual 1979 results reveal a shortfall of over one whole percent, 105 basis points, to 9.54 percent. Without rate relief in 1980, attrition will take the earned rate of return down another 151 basis points to 8.03 percent (line 15, column C).

Of particular concern is the downward pressure on the common equity capitalization ratio. Despite the fact that <u>all</u> sales of common stock have been below book value in the last five years, SDG&E must continue to issue substantial amounts of common equity. These issues are necessary to finance the Company's ongoing construction program which is comprised of essentially four elements:

(1) San Onofre Units 2 and 3;

(2) connection of new gas and electric customers;

(3) improvements in system reliability; and

(4) the transmission line to the East.

New issues must occur in spite of the dilution of book value that SDG&E's current shareholders suffer, which effectively constitutes confiscation of their capital. The Company must, at the same time, however, continue to expand its system to provide service to its customers regardless of these circumstances.

In 1979 the Company sold 3 million shares of common stock to the public. In 1980 another 4.5 million shares are planned to be sold. And, in 1981 SDG&E plans to sell publicly 3 million shares of common stock. These sales represent a 38 percent dilution of the total shares outstanding as of year-end 1978. Dividend increases will, of course, have to continue to support this tremendous level of dilution, as well as offset, at least in part, the ravages of inflation.

The common equity ratio for 1979 recorded, shown in Table E, is 37.20 percent (line 6, column A), compared to the 38.09 percent adopted in Decision 90405 (line 1, column A). The major reason for this shortfall is the fact that the final decision came in the middle of 1979, causing a significant loss in the retained earnings component of common equity for that year. Furthermore, the full impact of the increase in rates authorized will not be experienced until mid-1980.

Substantial increases in the cost of money and the cost of fuel oil and suppressed sales due to warm weather and price elasticity have eroded, and are projected to even further erode this ratio. Consequently, the common equity ratio calculated for the 1981 Test Year is actually below that adopted for 1979 (see Table F, line 6, column A). The Company's objective is to raise its common equity ratio to more than 40 percent, inclusive of leases.

11. Q. Mr. Williams, will you please explain how you derived the capitalization ratios for preferred stock, long-term debt, and bankers' acceptances.

A. Yes. The ratio of preferred stock in the capital structure is projected to decline through 1981. SDG&E believes that the ratio of preferred stock should be in the 10 to 15 percent range and is, therefore, managing to that level. The major reason for this policy is to reduce the amount of risk inherent in the capital structure. SDG&E will, though, avail itself of preferred stock as economically justified in the near-term.

As Table E demonstrates, at line 8, column A, the ratio of long-term debt for 1979 recorded was 44.00 percent. This is compared to the 44.99 percent level adopted in Decision 90405 (line 3). The major reason for the decline is the fact that $150 million in debt projected to be sold was cut back to $65 million due to insufficient debenture indenture coverage in the latter half of 1979. By the end of 1981 the debt ratio is projected to be

44.07 percent, as shown on Table F, line 8, column A. As in the case of common equity, this ratio is lower than adopted in Decision 90405 because of the tremendous increase in the proportion of bankers' acceptances in the capital structure.

In Decision 90405, the Commission adopted a 10 percent cost of bankers' acceptances and a 2.76 percent proportion in the capital structure (Table E, line 4, columns A and B). The impact of higher than anticipated costs of fuel not only causes cash flow problems, but also skews the cost of capital and the rate of return. Therefore, the percentage of bankers' acceptances in the 1981 capital structure is 6.18 percent (Table F, line 9, column A) and the cost of those acceptances is assumed to be 12.50 percent (Table F, line 9, column B). The resulting weighted cost is nearly three times greater than the level adopted in Decision 90405, barely one year ago.

12. Q. Mr. Williams, what will be the impact of the requested rate increase?

A. The primary financial objective of SDG&E is to regain its Single A bond rating. In order to do so, certain criteria must be met as espoused by both Moody's and Standard & Poors, the two most prominent bond rating agencies. Two major criteria are to maintain interest coverage at a level of 3.0 times and to generate more than 40 percent of cash requirements internally. The other, as I mentioned, is to limit construction expenditures.

SDG&E is very aware that a bond upgrading must be accomplished in stages. The Company views the Commission's action in this case as a major step in this process. Table G shows before tax interest coverages on a historical and projected basis for Moody's, the First Mortgage Indenture, and the Debenture Indenture. The trend of Moody's before tax coverage (column A) has declined since 1976 (lines 2 through 5). This critical indicator will continue to decline in 1980 and 1981, as shown on lines 6 and 7, unless substantial rate relief is granted in an expedited manner in this case. Moody's before tax coverage at proposed rates on line 8 is projected to be 2.65 times, and the after tax coverage is estimated at 2.24 times, which is below the 2.7 times coverage found reasonable in Decision 90405.

13. Q. Mr. Williams, how does SDG&E compare with other utilities as far as interest coverage is concerned?

A. Table H shows pretax interest coverages classified by bond rating groups as of December 31, 1979. The median of the "Straight A/A" companies on line 9 was 2.7 times. This is very close to SDG&E's proposed rate level of 2.65 times. Once again, the requested level of rate relief must be granted by January 1, 1981, in order to achieve this result.

14. Q. Will you also elaborate on internal generation of cash which you also mentioned as important in obtaining a Single A rating?

A. Yes. Internal generation of cash is a parameter that the rating agencies consider crucial. The more cash generated internally, the less pressure there is on outside financing. Lower outside financing requirements, in turn, lessen the need for constant rate increases to compensate for the increased cost of capital.

Table I shows historical and projected capital expenditures and external and internal sources of funds. Since 1975 SDG&E has averaged only a little more than 15 percent internal generation. This distinct lack of cash flow has placed considerable pressure on financing the Company's cash construction program shown in column C. Without the requested rate relief, internal generation for the 1981 Test Year (line 8, column F) is projected to be a <u>negative 29 percent</u>. At proposed rates, the requested rate increase is expected to provide internal generation of cash of 27 percent as shown on line 9, column F.

Table J lists internal generation of cash by bond rating groups for calendar 1979. The mean for the Single A companies on line 2 is over

40 percent, compared to SDG&E's projection for the Test Year at proposed rates of 27 percent.

This amount is obviously insufficient in terms of the 40 percent internal generation accepted as the benchmark for Single A rated companies. This is again indicative of not only the need to expedite this proceeding, but also of the need to maintain the return on common equity at the minimum level of 14.5 percent.

Again, timely authorization of the rate increase requested would go a long way toward achieving the Company's objective and positioning SDG&E for a bond upgrading in the future.

15. Q. Mr. Williams, would you comment further on the need for maintaining the return on equity at 14.5 percent?

A. Yes. As I have discussed previously, the Company won't be able to achieve its financial goals even with the rate relief requested for 1981. Further, the Company won't even be able to maintain the financial results adopted in Decision 90405 for 1979. The Company actually should have a return on equity higher than 14.5 percent due to the increased costs of preferred stock and long-term debt.

Of course, there is an even more critical aspect to this question. SDG&E is a higher risk to investors compared to the larger utilities because of its current financial condition and because it is growing at a faster rate. For SDG&E, capital expenditures for distribution, transmission and production facilities are greater in proportion to its capital structure compared to the other larger, California utilities. Thus, it would be quite justified for SDG&E to be authorized a return on equity higher than other California utilities, such as the 13.9 percent allowed for PGandE in its 1980 Test Year rate case. At a <u>minimum</u>, SDG&E's return should be set in this case at the previously authorized level of 14.5 percent.

16. Q. Mr. Williams, does that conclude your Prepared Direct Testimony on this exhibit?

A. Yes.

COST OF CAPITAL AND
RATE OF RETURN

INTRODUCTION

The following tables set forth the cost of capital for San Diego Gas & Electric for the 1981 Test Year. Information is provided on the capital structure and the costs of the capital elements as recorded in 1979 and projected for 1980 As Expected and 1981 Test Year.

Historical data on the costs of capital are provided as background information for the cost estimates through 1981. In addition, comparisons with the utility industry by credit rating groups are included to substantiate the need for continued improvement in the Company's financial condition.

A composite cost of capital is established in the exhibit. Realization of the requested rate relief of $144.81 million in an expedited manner is essential to attainment of the Company's primary financial objective of regaining its Single A bond rating.

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TABLE A

1981 TEST YEAR RATE REQUEST SUMMARY
(Millions of Dollars)

LINE NO.	TITLE	
1.	Total Increase	$ 144.81
2.	Electric	$ 126.63
3.	Gas	$ 18.18
4.	Composite Rate of Return	11.44%
5.	Return on Equity	14.50%
6.	Weighted Average Rate Base	$ 1,287.4
7.	Electric	$ 1,129.3
8.	Gas	$ 158.1
	EMBEDDED COSTS	
9.	Long-Term Debt	9.55%
10.	Preferred Stock	8.67%
	CAPITALIZATION RATIOS	
11.	Common Equity	36.87%
12.	Preferred Stock	12.88%
13.	Long-Term Debt	44.07%
14.	Bankers' Acceptances	6.18%
15.	Total	100.00%

TABLE B

EMBEDDED COST OF PREFERRED CAPITAL STOCK
RECORDED 1979 AND PROJECTED 1980-1981

(Thousands of Dollars)

LINE NO.	TITLE	(A) AMOUNT	(B) NET COST OF ISSUE	(C) PROCEEDS OF SALE (Cols. A-B)	(D) ANNUAL DIVIDEND	(E) EFFECTIVE COST (%) (Cols. D/C)
	Cumulative Preferred Stock					
1.	5.00% Series	$ 7,500.0	$(196.2)	$ 7,696.2	$ 375.0	4.87%
2.	4.50% Series	6,000.0	-	6,000.0	270.0	4.50
3.	4.40% Series	6,500.0	(103.5)	6,603.5	286.0	4.33
4.	4.60% Series	7,500.0	53.3	7,446.7	345.0	4.63
5.	Total Preferred Stock	27,500.0	(246.4)	27,746.4	1,276.0	4.60
	Preference Stock (Cumulative)					
6.	$9.84 Series	16,000.0	314.6	15,685.4	1,574.4	10.04
7.	$7.80 Series	20,000.0	321.7	19,678.3	1,560.0	7.93
8.	$7.20 Series	15,000.0	222.6	14,777.4	1,080.0	7.31
9.	$7.325 Series	30,000.0	116.6	29,883.4	2,197.5	7.35
10.	$8.25 Series	25,000.0	100.6	24,899.4	2,062.5	8.28
11.	$2.68 Series	25,000.0	(1,215.9)	26,215.9	2,680.0	10.22
12.	$9.125 Series	30,000.0	191.7	29,808.3	2,737.5	9.18
13.	$2.475 Series	25,000.0	(1,359.2)	26,359.2	2,475.0	9.39
14.	Total Preference Stock	186,000.0	(1,307.3)	187,307.3	16,366.9	8.74
15.	Total 12/31/79	213,500.0	(1,553.7)	215,053.7	17,642.9	8.20
	PROJECTED CHANGES DURING 1980-1981: (1)					
16.	No Issues in 1980	-	-	-	-	-
17.	Projected 12/31/80	213,500.0	(1,553.7)	215,053.7	17,642.9	8.20
18.	$12.625 Series	25,000.0	187.5	24,812.5	3,156.3	12.72
19.	Projected 12/31/81	$238,500.0	$(1,366.2)	$239,866.2	$20,799.2	8.67%

(1) Projected changes are issues of preference stock (cumulative).

TABLE C

EMBEDDED COST OF LONG-TERM DEBT
RECORDED DECEMBER 31, 1979

(Thousands of Dollars)

LINE NO. (A)	TITLE (B)	PRINCIPAL AMOUNT (C)	ANNUAL INTEREST PAYMENT (D)	AMORT. OF PREM., DISC. & EXPENSE (E)	TOTAL ANNUAL EXPENSE (Cols. D &E) (F)	EFFECTIVE COST (%) (Cols. F/C) (G)
	FIRST MORTGAGE BONDS					
1.	3¼% Series "D", Due 4/1/82	$ 12,000.0	$ 390.0	$ (2.8)	$ 387.2	3.23%
2.	2-7/8% Series "E", Due 4/1/84	17,000.[illegible]	488.8	11.7	500.5	2.94
3.	3¼% Series "F", Due 10/1/85	18,0[illegible].0	585.0	8.1	593.1	3.30
4.	4-7/8% Series "G", Due 10/1/87	12,000.0	585.0	3.5	588.5	4.90
5.	4-5/8% Series "H", Due 10/1/90	30,000.0	1,387.5	10.1	1,397.6	4.66
6.	5½% Series "I", Due 3/1/97	25,000.0	1,375.0	(4.5)	1,370.5	5.48
7.	7% Series "J", Due 12/1/98	35,000.0	2,450.0	12.0	2,462.9	7.04
8.	8-3/4% Series "K", Due 2/1/00	40,000.0	3,500.0	5.0	3,505.0	8.76
9.	8% Series "L", Due 9/1/01	45,000.0	3,600.0	12.6	3,612.6	8.03
10.	8-3/8% Series "M", Due 1/1/04	75,000.0	6,281.2	30.0	6,312.1	8.42
11.	10.7% Series "O", Due 5/1/82	40,000.0	4,280.0	85.1	4,365.1	10.91
12.	10% Series "P", Due 7/15/06	45,000.0	4,500.0	20.1	4,520.1	10.04
13.	8-3/4% Series "Q", Due 3/15/07	50,000.0	4,375.0	38.1	4,413.1	8.83
..	9-3/4% Series "R", Due 5/1/08	50,000.0	4,875.0	21.0	4,896.0	9.79
	Total First Mortgage Bonds	494,000.0	38,672.5	250.0	38,922.5	7.88
	SINKING FUND DEBENTURES					
16.	4-5/8%, Due 1/15/84	9,000.0	416.3	5.8	422.1	4.69
17.	4½%, Due 9/1/94	15,600.0	702.0	7.1	709.1	4.55
18.	Total Sinking Fund Debentures	24,600.0	1,118.3	12.9	1,131.2	4.60
	OTHER LONG-TERM DEBT					
19.	Foreign Term Loans (Variable)	65,000.0	9,644.8	8.5	9,653.3	14.85
20.	Pollution Control Bonds (6-3/8%)	9,575.0	610.4	11.0	621.4	6.49
21.	Pollution Control Bonds (7.2%)	5,700.0	410.4	8.3	418.7	7.35
22.	Term Loan (8-3/4%)	40,000.0	3,500.0	16.0	3,516.0	8.79
23.	Sundesert Properties (7.85%)	4,876.9	382.6	-	382.6	7.85
24.	N. M. Rothchild & Sons, Ltd., Promissory Notes (5.5%)	3,142.3	290.5 (1)	11.3	301.8	9.60
25.	General Electric (½ of Prime)	152.0	11.6	-	11.6	7.63
26.	W. D. Cannon (7.49%)	239.1	17.9	-	17.9	7.50
27.	Other (7.72%) (2)	145.1	11.2	-	10.7	7.37
28.	Total Other Long-Term Debt	128,830.4	14,879.4	55.1	14,934.5	11.59
29.	**TOTAL LONG-TERM DEBT**	$647,430.4	$54,670.2	$318.0	$54,988.2	8.49%

Outstanding amount in pounds x 5.5% x Dec. 31, 1979 exchange rate (2.232).
(2) Various amounts at various interest rates and maturities.

TABLE D

PROJECTED EMBEDDED COST OF LONG-TERM DEBT
1980 and 1981

(Thousands of Dollars)

LINE NO.	TITLE	(A) PRINCIPAL AMOUNT	(B) ANNUAL INTEREST PAYMENT	(C) AMORT. OF PREM., DISC. & EXPENSE	(D) TOTAL ANNUAL EXPENSE (Cols. B+C)	(E) EFFECTIVE COST (%) (Cols. D/A)
1.	EFFECTIVE DECEMBER 31, 1979	$647,430.4	$54,670.2	$318.0	$54,988.2	8.49%
	PROJECTED CHANGES DURING 1980:					
	First Mortgage Bonds:					
2.	16% Series "S", Due 3/10	50,000.0	8,000.0	22.3	8,022.3	16.05
3.	13 1/2% Series "T", Due 8/10	50,000.0	6,750.0	24.0	6,774.0	13.55
	Sinking Fund Debentures:					
4.	4 5/8% Retired	(375.0)	(17.3)	(0.2)	(17.5)	(4.67)
5.	4 1/2% Retired	(400.0)	(18.0)	(0.2)	(18.2)	(4.55)
	Other Long-Term Debt:					
6.	Sundesert Properties	(1,206.5)	(92.5)	-	(92.5)	(7.67)
7.	N.M. Rothchild & Sons, Ltd., Prom. Notes	(812.4)	(72.6)	-	(72.6)	(8.94)
8.	Foreign Term Loan (Variable)[1]	-	(544.7)	-	(544.7)	-
9.	General Electric	(152.0)	(11.6)	-	(11.6)	(7.63)
10.	W.D. Cannon	(63.8)	(4.8)	-	(4.8)	(7.52)
11.	Other	(48.5)	(3.9)	-	(3.9)	(8.04)
12.	Projected December 31, 1980	744,372.2	68,654.8	363.9	69,018.7	9.27
	PROJECTED CHANGES DURING 1981:					
	First Mortgage Bonds:					
13.	12 1/8% Series "U", Due 10/11	75,000.0	9,093.8	36.0	9,129.8	12.17
	Sinking Fund Debentures:					
14.	4 5/8% Retired	(375.0)	(17.3)	(0.2)	(17.5)	(4.67)
15.	4 1/2% Retired	(400.0)	(18.0)	(0.2)	(18.2)	(4.55)
	Other Long-Term Debt:					
16.	Sundesert Properties	(1,206.5)	(92.5)	-	(92.5)	(7.67)
17.	N.M. Rothchild & Sons, Ltd., Prom. Notes	(786.8)	(72.6)	-	(72.6)	(9.23)
18.	W.D. Cannon	(63.8)	(4.8)	-	(4.8)	(7.52)
19.	Other	(48.5)	(3.9)	-	(3.9)	(8.04)
20.	Projected December 31, 1981	$816,491.6	$77,539.5	$399.5	$77,939.0	9.55%

(1) Adjustment intended to reflect a projected decrease in the foreign term loan's variable interest rate from 14.838 to 14.0 percent.

D

TABLE E

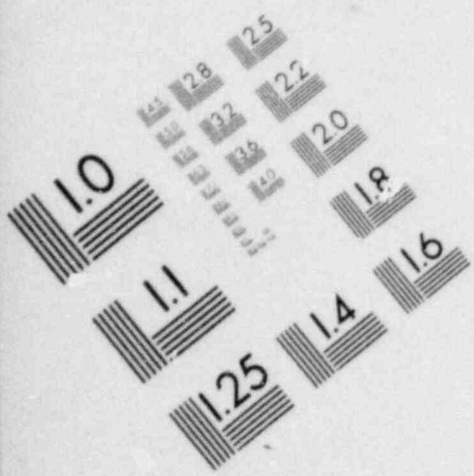
1979 AUTHORIZED RATE OF RETURN VS. 1979 RECORDED AND 1980 AS EXPECTED

LINE NO.	TITLE	(A) CAPITAL RATIOS	(B) COST FACTORS	(C) WEIGHTED COST
	1979 AUTHORIZED[1]			
1.	Common Equity	38.09%	14.50%	5.52%
2.	Preferred Stock	14.16	8.21	1.16
3.	Long-Term Debt	44.99	8.10	3.64
4.	Bankers' Acceptances	2.76	10.00	0.27
5.	Total	100.00%		10.59%
	1979 RECORDED			
6.	Common Equity	37.20%	10.97%	4.08%
7.	Preferred Stock	14.68	8.20	1.21
8.	Long-Term Debt	44.00	8.49	3.74
9.	Bankers' Acceptances	4.12	12.45	0.51
10.	Total	100.00%		9.54%
	1980 AS EXPECTED			
11.	Common Equity	35.89%	5.32%	1.91%
12.	Preferred Stock	12.90	8.20	1.06
13.	Long-Term Debt	44.98	9.27	4.17
14.	Bankers' Acceptances	6.23	14.25	0.89
15.	Total	100.00%		8.03%

(1) Per Decision 90405.

IMAGE EVALUATION
TEST TARGET (MT-3)

6″



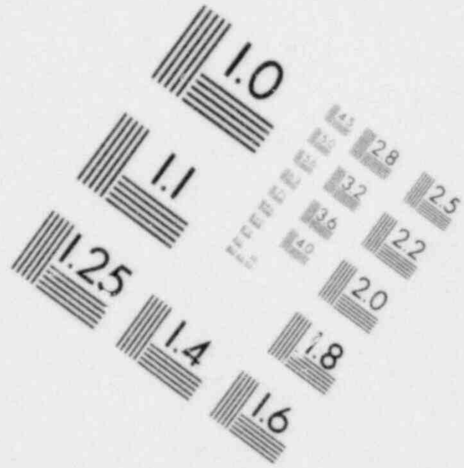
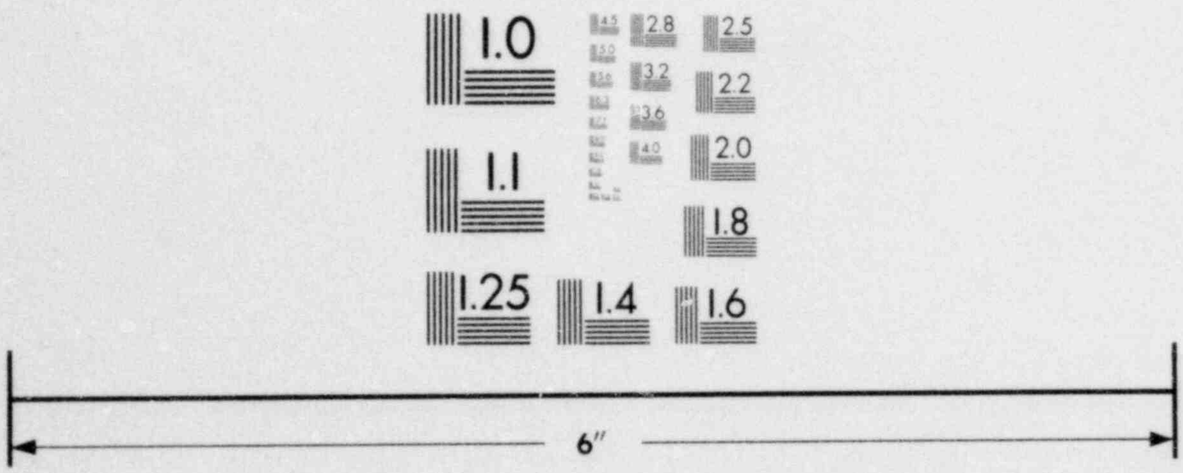
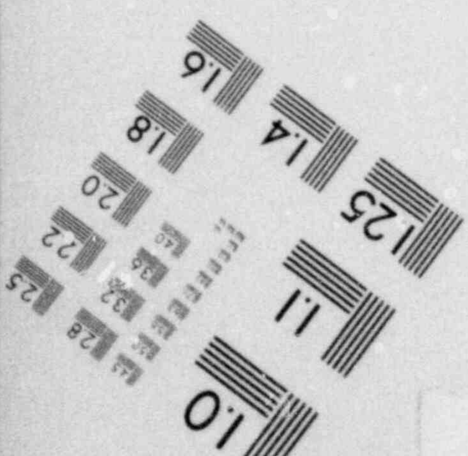


IMAGE EVALUATION TEST TARGET (MT-3)





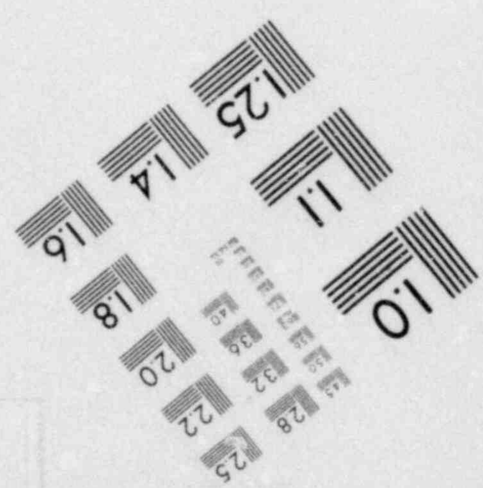


TABLE F

RATES OF RETURN - 1981 TEST YEAR

LINE NO.	TITLE	(A) CAPITAL RATIOS	(B) COST FACTORS	(C) WEIGHTED COST
	1981 TEST YEAR AT PRESENT RATES			
1.	Common Equity	32.91%	(9.18%)	(3.02%)
2.	Preferred Stock	13.68	8.67	1.19
3.	Long-Term Debt	46.84	9.55	4.47
4.	Bankers' Acceptances	6.57	12.50	0.82
5.	TOTAL	100.00%		3.46%
	1981 TEST YEAR AT PROPOSED RATES			
6.	Common Equity	36.87%	14.50%	5.34%
7.	Preferred Stock	12.88	8.67	1.12
8.	Long-Term Debt	44.07	9.55	4.21
9.	Bankers' Acceptances	6.18	12.50	0.77
10.	TOTAL	100.00%		11.44%

TABLE C

HISTORICAL AND PROJECTED INTEREST COVERAGE RATIOS

LINE NO.	RECORDED	(A) MOODY'S TIMES INTEREST EARNED BEFORE TAX	(B) AFTER TAX	(C) CONTRACTUAL REQUIREMENT 1ST MORT. INDENTURE (2.5 Min)	(D) DEBENTURE INDENTURE (2.0 Min
1.	1975	1.66X	1.76X	2.33X	1.66X
2.	1976	2.38X	2.25X	2.98X	2.53X
3.	1977	2.20X	2.22X	2.83X	2.20X
4.	1978	2.25X	2.17X	3.79X	2.42X
5.	1979	2.18X	2.11X	4.66X	2.37X
	PROJECTED PERIOD WITHOUT RATE RELIEF				
	1980(1)	1.66X	1.66X	3.43X	1.84X
7.	1981(2)	1.11X	1.11X	2.17X	0.98X
	TEST YEAR AT PROPOSED RATES				
8.	1981	2.65X	2.24X	4.83X	3.01X
9.	Rating Agency Guideline	3.00X	-	-	-

(1) As Expected.

(2) Test Year at Present Rates.

TABLE H

ELECTRIC UTILITY INTEREST COVERAGE RATIOS[1]
CLASSIFIED BY BOND RATING GROUPS
TWELVE MONTHS ENDED DECEMBER 31, 1979

LINE NO.	TITLE		
1.	Straight Aa/AA	High	5.6
2.		Low	2.5
3.		Median	3.4
4.	Split Aa/A or AA/A	High	3.8
5.		Low	2.4
6.		Median	2.8
7.	Straight A/A	High	4.4
8.		Low	1.9
9.		Median	2.7
10.	Split A/BBB or A/Baa	High	2.9
11.		Low	1.9
12.		Median	2.4
13.	Straight BBB/Baa	High	3.6
14.		Low	1.7
15.		Median	2.2
	SAN DIEGO GAS & ELECTRIC (12/31)		
16.	Actual	1979	2.2
17.	As Expected	1980	1.7
18.	Test Year at Present Rates	1981	1.1
19.	Test Year at Proposed Rates	1981	2.7

(1) Pre-tax Times Interest Charges for 12 months ended
Total AFDC Included in Calculations.
Source: Salomon Brothers Stock Research Dept.

TABLE I
CAPITAL EXPENDITURES & SOURCES OF FUNDS
1975-1979 HISTORICAL & 1980-1981 PROJECTED

LINE NO.	(A) YEAR	(B) CAPITAL EXPENDITURES (Millions of Dollars) REFUNDINGS	(C) CONSTRUCTION EXPENDITURES (1)	(D) TOTAL	(E) SOURCES OF FUNDS PERCENT EXTERNAL	(F) PERCENT INTERNAL
	RECORDED PERIOD					
1.	1975	1	128	129	89	11
2.	1976	1	170	171	79	21
3.	1977	2	199	201	83	17
4.	1978	13	207	220	84	16
5.	1979	53	205	258	87	13
6.	Average	14	182	196	84	16
	PROJECTED AT PRESENT RATES					
7.	1980 As Expected	3	174	177	97	3
8	1981 Test Year	3	203	206	129	(29)
	TEST YEAR AT PROPOSED RATES					
9.	1981	3	203	206	73	27
10.	Rating Agency Guideline - Single A				60	40

(1) Exclusive of AFDC.

TABLE J

ELECTRIC UTILITY INTERNAL GENERATION OF CASH(1)
CLASSIFIED BY BOND RATING GROUPS
TWELVE MONTHS ENDED DECEMBER 31, 1979

LINE NO.	TITLE		
1.	Straight A/A	Low	3%
2.		Mean	43
3.		High	109
4.	Split BBB/A or Baa/A	Low	2
5.		Mean	36
6.		High	107
7.	Straight BBB or Baa	Low	(5)
8.		Mean	22
9.		High	48
	SAN DIEGO GAS & ELECTRIC		
10.	1980 As Expected		3
11.	1981 Test Year at Present Rates		(29)
12.	1981 Test Year at Proposed Rates		27

(1) Based on analysts method which ignores changes in Regulatory Balancing Accounts and changes in working capital.

Source: Standard & Poor's Compustat Services, Inc., Utility Compustat II.