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**ORIGINAL**

Decision 95-11-062 November 21, 1995

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC )  
COMPANY, for authority to (i) Establish its )  
Authorized Rate of Return on Common Equity, )  
(ii) Establish its authorized Capital Structure, )  
(iii) Adjust its Cost Factors for Embedded Debt )  
and Preferred Stock, and (iv) Establish its )  
Overall Rate of Return for Calendar Year 1996. )

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Application 95-05-016  
(Filed May 8, 1995)

Application 95-05-017  
(Filed May 8, 1995)

Application 95-05-021  
(Filed May 8, 1995)

Application 95-05-022  
(Filed May 8, 1995)

Application 95-05-023  
(Filed May 8, 1995)

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## OPINION

### Summary

This decision establishes the costs of capital for calendar year 1996 for five California energy utilities: Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Sierra Pacific Power Company (Sierra) and Southern California Gas Company (SoCalGas). Both PacifiCorp and Southwest Gas have previously been excused from participating in this proceeding by commission order. The approved rates of return will be incorporated into rates in other proceedings.

We adopt capital structures jointly proposed by the Division of Ratepayer Advocates (DRA) and the utilities. We adopt the uncontested costs of debt and preferred stock recommended by DRA and the utilities. We find the Rate of Return on Equity (ROE) embodied in the joint recommendation to be reasonable. The joint proposal suggests a ROE of 11.6% which was supported by the applicant utilities, DRA, the Department of the Navy and Federal Executive Agencies (FEA), and Economic and Technology Analysis Group (ETAG). Finally, we will adopt a 50 basis point adder for PG&E's Pipeline Project.

The estimated overall results are summarized in the following table:

Summary Table			
Utility	Return on Equity	Return on Ratebase	Revenue Change (\$Millions)
PG&E	11.6%	9.49%	Elect (\$44.881)
			Gas (\$14.075)
SCE	11.6%	9.55%	(\$53.004)
SDG&E	11.6%	9.37%	Elect. (\$14.503)
			Gas (\$2.360)
Sierra Pacific	11.6%	9.59%	(\$1.187)
SoCalGas Gas	11.6%	9.42%	(\$12.641)

### Procedural History

The five energy utilities filed cost of capital applications on May 8, 1995 in accordance with the previously adopted Rate Case Processing Plan. The matters were assigned to Commissioner Henry M. Duque and Administrative Law Judge (ALJ) Kenneth Henderson. A Prehearing Conference was held on June 26, 1995. Opening statements on August 16 and closing statements on August 25, 1995 were heard by both the ALJ and the Assigned Commissioner. Evidentiary hearings were held for 7 days during the period August 16 through August 25, 1995. Opening and reply briefs were filed on September 5 and September 15, 1995 respectively. The matter was submitted on the receipt of closing briefs filed September 15, 1995 with a provision for late filed Exhibit 40, an update of interest rate forecasts.

Twelve parties filed opening and closing briefs : PG&E, SCE, SDG&E, Sierra Pacific, SoCal Gas, DRA, FEA, Toward Utility Rate Normalization (TURN), City of Los

Angeles, The Cities of Burbank, Glendale, and Pasadena (Cities), Energy Consulting Group (ECG), and ETAG.

Late filed Exhibit 40 was filed by DRA on October 10, 1995. This exhibit shows monthly interest rate forecasts made by DRI/McGraw-Hill (DRI) in October 1995. These forecasts are the basis for the costs of debt and preferred stock approved herein. Use of the October forecasts in the final decision is a long-standing practice which has not been contested by any of the parties.

TURN, ECG, and ETAG filed notices of intent to file requests for compensation for their participation in this proceeding. The ALJ discussed the issue of eligibility on the record but did not rule on the eligibility of any of the three parties. In addition, the ALJ invited ECG and ETAG to provide supplemental information to enhance their showing of eligibility. This issue will be resolved when and if the parties file for intervenor compensation in this proceeding.

A proposed decision in this matter was mailed on October 6, 1995 and a revised proposed decision was mailed on October 12, 1995. Comments and/or reply comments on the proposed decision were filed by ETAG, DRA, ECG, SoCalGas, PG&E, SCE, SDG&E, Sierra Pacific, Cities, and TURN.

In adopting this decision we have reviewed and considered the comments of the parties. Revisions and corrections are incorporated as necessary throughout the text.

### Introduction

The costs of capital for any regulated utility are made up of the following elements: cost of debt, cost of preferred stock, cost of equity and capital structure. The combination of all these elements results in a rate of return (ROR) on ratebase. The product of the ROR and the ratebase will produce a revenue requirement associated with the cost of capital.

It is typical in these proceedings that the least controversial items are the cost of debt and preferred stock. The most controversial items are normally the cost of equity, referred to as the ROE, and capital structure - the ratio of debt to equity.

This proceeding was typical in that the costs of debt and preferred stock were not contested. With an exception of the TURN-proposed adjustment, the capital structure of most of

the utilities was not a controversial item. DRA did contest the original requests for capital structure changes by SDG&E and SoCal Gas.

To the extent that there was an item of contention, it concerned the ROE. ECG proposed a new methodology for setting the ROE with the intent of reducing market-to-book ratios to one. The City of LA contested the ROE for SoCalGas. Another major issue of concern was the ROE for PG&E's pipeline expansion project. This item was contested by the Cities in addition to DRA.

These controversies were reduced considerably when most parties entered into a joint recommendation.

#### Applications

The applications can be summarized by the Table below which shows the authorized capital structures, ROE and ROR for 1995 and the requested amounts for 1996. The table also shows the approximate revenue change.

Application Summary				
	1995 %	1996 %	Difference %	Rev. Impacts (M\$)
<b>PG&amp;E</b>				
Debt	46.50	46.50	0	
Preferred	5.50	5.50	0	
Equity	48.00	48.00	0	
ROE	12.10	12.07	-0.03	
ROR	9.79	9.79	0	\$0
<b>SCE</b>				
Debt	46.25	47.00	0.75	
Preferred	6.00	5.00	-1.00	
Equity	47.75	48.00	0.25	
ROE	12.10	12.10	0	
ROR	9.80	9.83	0.03	\$-1.0
<b>SDG&amp;E</b>				
Debt	44.50	44.00	-0.50	
Preferred	6.00	6.00	0	
Equity	49.50	50.00	0.50	
ROE	12.05	12.25	0.20	
ROR	9.76	9.83	0.07	\$5.532
<b>SoCalGas</b>				
Debt	42.60	42.30	-0.30	
Preferred	10.40	9.70	-0.70	
Equity	47.00	48.00	1.00	
ROE	12.00	12.50	0.50	
ROR	9.67	9.90	0.23	\$13.928
<b>Sierra</b>				
Debt	43.90	44.12	0.22	
Preferred	8.16	8.84	0.68	
Equity	47.94	47.04	-0.90	
ROE	11.30	12.20	0.90	
ROR	9.42	9.92	0.50	\$5.562

As can be seen from the table, all utilities except for PG&E request a ROE that is the same as or greater than that authorized last year.

### Preliminary Discussion

At this point it would be helpful to outline some guidelines as to how the remainder of this decision will unfold. First, we will not depart substantially from the methods that we utilized in last year's proceeding. The factors that will bear substantially on our decision include the outputs of "barebone" model results for the three acknowledged models -- Capital Asset Pricing Model (CAPM), Risk Premium (RP), and Discounted Cash Flow (DCF). We will again use the incremental results of these models to provide input to our thinking on this matter. In addition, we will look at interest rate changes and "times-interest" coverages of the utilities as important factors. Finally, we will employ our judgment regarding any additional perceived risks (particularly non-diversifiable risks) faced by investors.

We note that in last year's decision there was an extended discussion of a risk premium associated with increased competition particularly as manifested in the OIR on the electric industry restructuring. In that decision we indicated that we would allow a premium of between 0 and 20 basis points. Thus, our incremental approach for the cost of capital for this year has a starting point that contains the additional premium. In our judgement, the joint agreement includes a fair risk premium for increased competition due to electric restructuring.

As we stated in last year's cost of capital decision:

"We must make our own assessment of the risks that deserve compensation from ratepayers, then authorize rates of return accordingly. In doing so, we must rely on our own judgment and our own findings on the risks that face investors."

"This result does not conflict with present legal standards. Past commission and court decisions refer in different places to typical, potential, and hypothetical investors. The courts insist that we put ourselves in the investor's shoes as we assess risk. This requires exercise of judgement, not scientific measurement of diverse investor opinions. Investor perceptions should and do inform our judgement, but the final evaluation of risks is the Commission's responsibility." (Sierra Pacific Power Company, D.94-11-076 at pp. 17-18 (A.94-05-009 et al.).)



This proceeding produced a joint recommendation of several parties. We will first describe this recommendation. Then we will look at the agreement in terms of our standards for settlements. The agreeing parties realized that the joint recommendation did not comply with our settlement rules. Their chosen procedural mechanism was to introduce their joint recommendation and their prefiled testimony but to not cross-examine each other. Also, they did not argue their litigation positions in their briefs. Therefore, our record in this proceeding consists primarily of the joint recommendation and the prepared testimony of the "settling" parties plus any additional cross-examination. Finally there was additional testimony on issues not covered by the recommendation and also testimony by "non-settling" parties.

After we have described the joint recommendation, we will turn to certain preliminary issues whose resolution will simplify our further discussion. Next, we will discuss certain issues common to all the applications -- financial models, interest rates, and credit risk. Then we will discuss each utility's application in terms of the joint recommendation and the rest of the record. Lastly we will consider the application of PG&E regarding the PG&E pipeline expansion project.

#### Joint Recommendation / Settlement

On the third day of hearings scheduled in this matter a group of parties entered into an agreement and submitted a joint recommendation. The agreement is styled as a settlement but since it did not completely comply with the Commission's settlement rules (Rules 51-51.10 of the Rules of Practice and Procedure), we will consider it as a joint recommendation. The joint recommendation was received into evidence as Exhibit 3. The recommendation was fully supported by SCE, PG&E, SDG&E, SoCalGas, Sierra, DRA, FEA and ETAG. The agreement was supported in part by TURN and ECG. DRA and SCE each presented a witness in support of the agreement. These witnesses were also available for cross-examination.

The table below illustrates the various positions of the parties on the issues covered in the joint recommendation.

Joint Recommendation Issues				
	11.6% ROE for All Applicants	DRA-Capital Structure for all Applicants	Workshops for Discount Rate	Postpone BTAG's methodological Issues
PG&E	X	X	X	X
SCE	X	X	X	X
SDG&E	X	X	X	X
SoCal	X	X	X	X
Sierra Pacific	X	X	X	X
DRA	X	X	X	X
FEA	X	X	X	X
City of LA				
Cities				
ETAG	X	X	X	X
TURN			X	X
ECG		X	X	X

It is important to note that the joint recommendation did not cover the issues of ROE and Capital Structure for PG&E's pipeline expansion project. Also, TURN did not take a position on the ROE's for the applicant utilities. City of LA did not enter the agreement, but contested only the issue of the ROE for SoCalGas. The Cities contest only the ROE for PG&E's pipeline expansion. Finally, ECG contests the ROE's for all applicant utilities.

**Summary of The Joint Recommendation**

The agreement provides for a ROE of 11.6% for each of the applicant utilities. Also the agreement recommends adoption of Capital Structures for each of the utilities as recommended by DRA and shown in the table below:

DRA Recommended Capital Structures			
	Debt%	Preferred%	Equity%
SCE	47.00	5.00	48.00
PG&E	46.50	5.50	48.00
SDG&E	44.50	5.75	49.75
Sierra Pacific	44.12	8.84	47.04
SoCalGas	42.90	9.70	47.40

In addition to these issues, the agreement recommends that the Commission consider the methodological issues raised by ETAG in next year's cost of capital proceeding. Finally, the signing parties agreed that the issue raised by ECG concerning the calculation of discount rates used in regulatory analysis be considered in workshops after which any resolution of the issue could be brought to the Commission in a more appropriate proceeding.

The agreement was supported by the testimony of SCE's witness Scilacci and DRA's witness Mowrey. Both testified that the agreement met the previously adopted standards for settlements. Their testimony is that the agreement is reasonable in light of the whole record in this proceeding, is consistent with the law, and is in the public interest. (See Rule 51.1(e).)

### **Reasonable in Light of the Whole Record**

The witnesses attested that the joint recommendation is well within the initial litigation positions of all parties except ECG. The 11.6% was lower than the initial positions of ETAG and FEA. Also, the recommended capital structure is DRA's litigation position.

### **Consistent with the Law**

The witnesses testified that the recommended ROE meets the tests for minimum returns in that it will enable the utilities to attract capital, is comparable to similar companies with similar risks, and is not confiscatory.

### **In the Public Interest**

It is the opinion of the joining parties that the joint recommendation is in the public interest because it preserves the financial integrity of the utilities which will allow continuing reliable service and at the same time results in a revenue requirement decrease for all but Sierra.

We have tested the agreement against the standards that we apply to settlements because the closer the agreement is to meeting our standards for settlements, the more weight we are willing to give it in our consideration of the issues. We find that the agreement meets our standards as outlined above. We can therefore give it great weight in our deliberations in this proceeding. We note that there was a major group that supported the agreement and that both DRA and FEA (government agencies) participated and supported the agreement.

### **Preliminary Issues**

Before beginning our consideration of the major issues in this case, it would be helpful to resolve certain other issues. This will simplify our discussion that follows this section.

### **ECG's Market-to-Book Methodology**

ECG claims that for the last several years the Commission-adopted ROE's for the utilities have been excessive. ECG proposes to set the ROE's this year at 10% in an effort to drive the utilities' market-to-book ratios to one. We have looked at this market-to-book approach in the past on more than one occasion and did not find it convincing; (D.92-11-047 at pp. 80-82 (A.92-05-009 et al.) and D.93-09-078 at pp. 29-30 (I.91-08-002).) In this proceeding ECG offers only the opinion of its principal, Mr. Ken Meyer. In light of the fact that we have

declined to adopt this approach in the past and the fact that ECG's recommendation is not bolstered by a substantial showing or by the support of other recognized academic or industry experts, we will not adopt the market-to-book approach in this proceeding nor give any weight to ECG's recommended 10% ROE for the applicant utilities.

#### **ECG's Discount Rate Proposal**

ECG also proposes that the Commission consider the proper calculation of the utilities' discount rate in this proceeding because it is a financial matter and most of the participants in the cost of capital proceeding are financial experts. The joint agreement between many of the parties recommends that the Commission direct its staff to conduct workshops on this subject and then to take any recommendations to the Commission in an appropriate proceeding.

We disagree. The calculation of the discount rate is not within the scope of this cost of capital proceeding. We will not direct staff to conduct workshops in this proceeding.

#### **TURN's Customer Deposit Adjustment**

TURN makes a showing in this proceeding concerning customer deposits. The argument turns on the fact that each of the five applicant utilities has customer deposit rules primarily for new customer service. The utilities collect a deposit from certain new customers. At a later date they repay the amounts back to those customers, with interest calculated at a 90-day commercial paper rate. There is a commission staff "standard practice" for the calculation of working cash written in 1969 that provides that noninterest-bearing deposits will be credited against working cash. Working cash is an element of ratebase.

TURN argues that this is a small but significant source of capital for the utilities for which there is no accounting. TURN shows if we adopted both its theory and its recommended adjustment of capital structure that the effects would be about 4 basis points for SCE, one basis point for PG&E, an about one half a basis point for SDG&E. The approximate revenue requirement figure would be about -\$4.4 million for SCE, -\$1.3 million for PG&E, and -\$0.142 million for SDG&E.

TURN proposes that this accounting anomaly can be corrected by one of two methods. The first is to make an adjustment to the capital structure of each utility based upon its

ongoing customer deposit balance. The second is to adjust the working cash allowance to recognize the existence of these deposits as a source of capital.

The utilities generally argue that TURN's proposal doesn't recognize that there could be similar accounting treatments for other items that go in the opposite direction. They further argue that even if we accept TURN's general proposition, we should not make an adjustment to capital structure as suggested by TURN.

We agree with the general concern of TURN but we feel that this issue is more akin to "working cash" than to a combination of debt and equity. In other words, we believe that TURN's suggested alternative resolution is probably the better solution. We will direct our staff to conduct workshops that should begin in the first quarter of 1996 that will reconsider the proper calculation of working cash, consistent with TURN's second proposal.

#### Financial Model Results

As we have pronounced in the last two decisions on the subject of the use of models used to compute ROE, we have two main concerns -- 1. consistency and 2. use of an incremental approach. Average results of 1996 forecasts submitted by the parties in prepared testimony are shown in the following two tables. The first will show the average model results for ROE for 1996. The second table will show the incremental change of the results for 1996 compared to 1995.

Results of Financial Models (%)								
	Utility		DRA		FEA		ETAG	
	1996	1995	1996	1995	1996	1995	1996	1995
<b>PG&amp;E</b>								
DCF	9.70	10.09	9.87	10.60	10.98	11.07	12.48	10.40
CAPM	12.38	12.08	10.50	10.65	11.20	11.55	12.16	11.10
RP	11.59	12.33	10.22	10.36	10.97	11.33	11.98	13.80
<b>SDG&amp;E</b>								
DCF	10.37	9.71	10.05	10.16	10.22	10.85	13.04	10.40
CAPM	11.94	11.63	10.25	10.10	10.80	10.90	11.66	11.10
RP	11.38	10.96	10.22	10.36	10.81	10.92	12.23	13.80
<b>Edison</b>								
DCF	10.33	11.16	9.87	10.82	9.95	10.18	10.89	9.70
CAPM	13.21	13.01	10.70	10.50	11.01	11.12	11.51	11.50
RP	11.82	11.72	10.22	10.36	11.15	11.65	10.81	13.50
<b>SoCalGas</b>								
DCF	10.31	10.40	9.71	11.01	10.04	10.35	13.04	11.00
CAPM	11.50	11.69	10.90	10.55	10.85	10.74	11.95	10.40
RP	11.25	11.56	10.99	11.00	10.81	11.53	10.48	13.80
<b>Sierra</b>								
DCF	12.04	N/A	9.81	N/A	N/A	N/A	10.51	N/A
CAPM	11.68	N/A	10.10	N/A	N/A	N/A	11.00	N/A
RP	11.58	N/A	9.54	N/A	N/A	N/A	9.85	N/A

Incremental Change from 1995 (%)				
	Utility	DRA	FEA	ETAG
<b>PG&amp;E</b>				
DCF	-0.39	-0.73	-0.09	2.08
CAPM	0.30	-0.15	-0.35	1.06
RP	-0.74	-0.14	-0.36	-1.82
<b>SDG&amp;E</b>				
DCF	0.66	-0.11	-0.63	2.64
CAPM	0.31	0.15	-0.10	0.56
RP	0.42	-0.14	-0.11	-1.57
<b>SCE</b>				
DCF	-0.83	-0.95	-0.23	1.19
CAPM	0.20	0.20	-0.11	0.01
RP	0.10	-0.14	-0.50	-2.69
<b>SoCalGas</b>				
DCF	-0.09	-1.30	-0.31	2.04
CAPM	-0.19	0.35	0.11	1.55
RP	-0.31	-0.01	-0.72	-3.32
<b>Sierra Pacific</b>				
DCF	n/a	n/a	n/a	n/a
CAPM	n/a	n/a	n/a	n/a
RP	n/a	n/a	n/a	n/a



From our consideration of the two above tables we conclude that we should give weight to a range from an increase of 10 basis points to a decrease of 70 basis points.

As can be seen in the above tables, the results of the same models run by different parties vary substantially. We would commend to the parties that the less diversity in results would influence us to give the model results greater weight.

Finally, ETAG presents various recommendations concerning financial models. Some of these suggestions may have merit. We will leave these suggestions for the parties' consideration. The joint recommendation would mandate that we consider these changes in next year's proceeding. We will not accept the compulsory nature of this recommendation. However, we will not preclude their presentation next year. We note that ETAG could have elected not to join the settling parties and continued to defend its showing in this year's proceeding. However, since its recommended methodological changes produced ROEs higher than the settling parties, it may have had a difficult burden of proof.

Most importantly, we are still interested in seeing the results of models run on a consistent method from year to year. We should add a word of caution. There may be a need periodically to reevaluate the cost of capital methodology.

#### Interest Rates

A subject matter that will bear on our deliberations of the proper ROE is the interest rate changes from last year to this year. As we noted last year, we give particular concern to nondiversifiable business risks such as the state of the economy and general interest rates.

"Yet the distinction between diversifiable and nondiversifiable risks seems fundamentally correct. In determination of risks that deserve compensation from ratepayers, we should give little or no weight to risks that are diversifiable. Therefore, general economic factors such as interest rate and financial market trends carry more weight than risks associated with individual utilities or utility industries." (Sierra Pacific Power Company, D.94-11-076 at pp. 31 (A.94-05-009 et al.).)

The following table shows the interest rate changes over the last few years compared to our adopted changes in ROEs. As the table shows, we have had a consistent practice of moderating changes in interest rates relative to changes in ROE. We will continue this practice in order to increase the stability of ROE over time. If interest rates were the only factor that we consider, we would give great weight to reducing the ROEs by a range of 40 to 80 basis points.

Interest Rates Changes compared to ROE Changes				
Year	Forecast Interest Rate (%)	Int. Rate Change (basis points)	Authorized ROE (%)	ROE Change (basis points)
1991	9.76	-	12.85 - 13.00	
1992	9.1	-66	12.65	-20 to -35
1993	8.32	-78	11.80 - 11.90	-75 to -85
1994	6.76	-156	10.85 - 11.00	-80 to -100
1995	8.37	161	12.00 - 12.1	100 to 120
1996	7.29	-108	11.6	-40 to -50

Notes:

\* DRI interest rate forecasts for AA utilities, October reports.

\*\* ROE ranges do not include Sierra Pacific.

### Credit Risk

Credit risk is another factor of overall concern for the Commission. We use this factor primarily as a check to see if our adopted results for ROE and capital structure have a significant impact on the utilities' times-interest coverage and therefore affect their credit rating by the major rating agencies. The following table indicates the current pre-tax interest coverage and bond ratings of the major agencies.

Pretax Interest Coverage			
Utility	Coverage w/o Short Term Debt	Bond Ratings	
		S & P	Moody's
PG&E	3.9	A low average	A2
SDG&E	4.3	A+ low average	A2
SCE	3.7	A+ average	A1
SoCalGas	4.1	AA- high average	A3
Sierra Pacific	4.0	A- low average	A2

## S &amp; P Guidelines

	Electric		Gas	
	AA	A	AA	A
Above Average	3.50x	2.75x	3.75x	3.00x
Average	4.00x	3.50x	4.25x	3.75x
Below Average	-----	4.50x	-----	4.25x

We realize that there are several factors that determine a rating of a utility's bonds, but we note that the ranges of percentages of equity and ROEs under discussion in this proceeding will produce results that should not negatively impact the current bond ratings of the applicant utilities.

Adopted Cost of Capital

We have described the joint settlement earlier in this opinion. We have also discussed certain factors that we consider applicable to each of the applicant utilities -- model

results, interest rates, and credit risk. We must now look at each utility in turn and compare the joint settlement with the litigation position of the applicants and other utilities to first determine if the joint settlement is reasonable and can be adopted or if some other results should found more reasonable.

#### PG&E

First, we will examine PG&E. The table below outlines the position of the parties.

PG&E Comparison (%)								
	1995 Authorized	1996 Requested	DRA	FEA	ETAG	City of LA	ECG	Joint Recommend ation
PG&E								
Debt	46.50	46.50	46.50	46.50				46.50
Preferred	5.50	5.50	5.50	5.50				5.50
Equity	48.00	48.00	48.00	48.00				48.00
ROE	12.10	12.07	11.15	11.85	11.90		10.0	11.60
ROR	9.79	9.79	9.35	9.69				9.49

We note that the 50 basis point reduction in ROE is within the range of reductions we previously discussed (+10 to -70) for model results and interest rates (-40 to -80). Also, PG&E's credit rating should not be threatened by our adopted result. Neither PG&E nor any other party recommended a change in its capital structure. Although DRA recommended a 11.15% ROE, we note that FEA and ETAG recommended a ROE of 11.85% and 11.90%, respectively.

We find the joint recommendation to be reasonable as to PG&E.

PG&E Adopted (%)				
	1995 Authorized	1996 Requested	Adopted	Difference from 1995
PG&E				
Debt	46.50	46.50	46.50	0
Preferred	5.50	5.50	5.50	0
Equity	48.00	48.00	48.00	0
ROE	12.10	12.07	11.60	-.50
ROR	9.79	9.79	9.49	-.30
Estimated Revenue Requirement Change (Millions)				Elec (\$44.88)
				Gas (\$14.08)

#### SCE

SCE Comparison (%)								
	1995 Authorized	1996 Requested	DRA	FEA	ETAG	City of LA	ECG	Joint Recommend ation
SCE								
Debt	46.25	47.00	47.00	47.00				47.00
Preferred	6.00	5.00	5.00	5.00				5.00
Equity	47.75	48.00	48.00	48.00				48.00
ROE	12.10	12.10	11.15	11.85	11.70		10.0	11.60
ROR	9.80	9.83	9.31	9.71				9.55

The results of our analysis for SCE are very similar to PG&E. The decrease in 50 basis points is within the range for both modeling results and interest rate reduction. DRA

again proposed a ROE of 11.15%. FEA's and ETAG's recommended ROEs were both substantially higher than DRA and above the joint recommendation.

DRA concurred with the SCE request because it can result in a gradual improvement in its capital structure in the eyes of the rating agencies. Also, with the decrease in preferred stock ratio and increase in the percentage of debt, there will be no revenue requirement increase associated with the change. FEA concurred with SCE's requested capital structure. The joint recommendation proposes the adoption of the SCE request.

The present credit rating will be strengthened by the increase in equity and not threatened by the recommended ROE of 11.6% because the times interest coverages will not be significantly affected. We will adopt the joint recommendation.

SCE Adopted (%)				
	1995 Authorized	1996 Requested	Adopted	Difference from 1995
SCE				
Debt	46.25	47.00	47.00	.75
Preferred	6.00	5.00	5.00	-1.00
Equity	47.75	48.00	48.00	.25
ROE	12.10	12.10	11.60	-.50
ROR	9.80	9.83	9.55	-.25
Estimated Revenue Requirement Change				(\$53.00m)

## SDG&amp;E

SDG&E Comparison (%)								
	1995 Authorized	1996 Requested	DRA	FEA	ETAG	City of LA	ECG	Joint Recommend ation
SDG&E								
Debt	44.50	44.00	44.50	44.50				44.50
Preferred	6.00	6.00	5.75	6.00				5.75
Equity	49.50	50.00	49.75	49.50				49.75
ROE	12.05	12.25	11.10	11.80	12.00		10.0	11.60
ROR	9.76	9.83	9.21	9.58				9.37

The starting point for our ROE consideration for SDG&E is slightly lower than for PG&E and SCE. However, the difference is so slight (5 basis points) as to not require our attention or discussion. The 45 basis point reduction from 12.05% to 11.6% (joint recommendation) is still within the range we consider reasonable from both an interest rate and financial model point of view. We note that both FEA and ETAG recommended a ROE substantially higher than the joint recommendation.

SDG&E requests an increase in its equity ratio by 50 basis points from 49.50% to 50.00%. SDG&E argues that it needs the increase to provide flexibility and financial strength to meet the opportunities and challenges of the restructuring of the electric industry. DRA's testimony shows that the percentage of preferred stock can be reduced by 25 basis points because a preferred stock offering is not necessary this year. Also, DRA shows that SDG&E has historically had a very high percentage of equity and that with an increase of 25 basis points from 49.50% to 49.75%, it will still have the highest percentage of equity of any of the applicants.

The joint recommendation concurs with the DRA recommended capital structure. We agree that the 25 basis point increase in equity with the 25 basis point decrease in the preferred stock ratio will produce a reasonable result.

SDG&E comments on the proposed decision that the overall ROR of 9.37% shown in our table entitled "SDG&E Adopted (%)" was calculated incorrectly and should be 9.38% instead. We have reviewed SDG&E's comments and conclude that the Proposed Decision is correct. The overall adopted ROR for SDG&E is 9.37%.

We will adopt the joint recommendation for both ROE and capital structure for SDG&E.

SDG&E Adopted (%)				
	1995 Authorized	1996 Requested	Adopted	Difference from 1995
SDG&E				
Debt	44.50	44.00	44.50	0
Preferred	6.00	6.00	5.75	-.25
Equity	49.50	50.00	49.75	.25
ROE	12.05	12.25	11.60	.45
ROR	9.76	9.83	9.37	-.39
Estimated Revenue Requirement Change (Millions)				Elec (\$14.50)
				Gas (\$2.36)



## SoCalGas

SoCalGas Comparison (%)								
	1995 Authorized	1996 Requested	DRA	FEA	ETAG	City of LA	ECG	Joint Recommen- dation
SoCalGas								
Debt	42.60	42.30	42.90	42.80				42.90
Preferred	10.40	9.70	9.70	9.70				9.70
Equity	47.00	48.00	47.40	47.50				47.40
ROE	12.00	12.50	11.05	11.6	11.70	11.00	10.00	11.60
ROR	9.67	9.90	9.19	9.45				9.42

As we discussed earlier, the City of LA did not join in the joint recommendation. Instead, it contested the showing of SoCalGas. Also, the City of LA presented substantial testimony of its own supporting its recommended ROE of 11.0%. The Cities did not participate in any cross-examination of any of the witnesses concerning the showing of SoCalGas, nor did they offer any testimony of their own regarding this issue. However, in their closing statement and again in their brief, the Cities support the City of LA's position that SoCalGas should be viewed as less risky than the electric utilities.

It is clear from our previous discussion that SoCalGas has over-reached in its request for an ROE of 12.50%. Its request for an increase of 50 basis points severely strains the credibility of its entire presentation. Consequently, we are forced to give greater weight to the presentations of FEA, ETAG, DRA and the City of LA.

SoCalGas performed an analysis of the three financial models. Its own results show that a significant decrease in the ROE is warranted. SoCalGas acknowledges that interest rates have had a precipitous drop but argues that they might increase in the future. SoCalGas also acknowledges that it has been upgraded to a AA- rating, but argues that it needs greater financial strength to maintain its high rating.

The City of LA shows that SoCalGas has consistently exceeded its authorized rate of return. Further the City of LA calculates that SoCalGas would meet the guidelines for its AA-rating at a ROE of less than 11.0%. Finally, the City of LA concludes that a ROE of 11.0% would be appropriate for 1996.

SoCalGas argues that there is still a variety of business risks that mandates a high ROE. Examples include restructuring the electric industry, municipalization, core aggregation, by-pass, etc. It fails to show that any of these risks have increased since our consideration of this subject in last year's proceeding.

However, in comparing the showings of the parties for SoCalGas measured against the joint recommendation, we find that the result of 11.6% ROE is a 40 basis point reduction which is reflective of the of our consideration of financial models and the decline in interest rates.

Regarding the capital structure, both DRA and FEA recommend modest increases in the percentage of equity (40 and 50 basis points) compared to the SoCalGas request of a 100 basis point increase. DRA notes that with SoCalGas' recent ratings increase it does not need the high equity ratio as compared to the electric utilities.

Taking both the agreement's ROE recommendation with the DRA-recommended capital structure, there will be a revenue requirement decrease. We find the joint recommendation reasonable.

SoCalGas Adopted (%)				
	1995 Authorized	1996 Requested	Adopted	Difference from 1995
SoCalGas				
Debt	42.60	42.30	42.90	.30
Preferred	10.40	9.70	9.70	-.70
Equity	47.00	48.00	47.40	.40
ROE	12.00	12.50	11.60	-.40
ROR	9.67	9.90	9.42	-.25
Estimated Revenue Requirement Change				(\$12.64m)

## Sierra

Sierra Comparison (%)								
	1995 Authorized	1996 Requested	DRA	FEA	ETAG	City of LA	ECG	Joint Recommend ation
Sierra								
Debt	43.90	44.12	44.12					44.12
Preferred	8.16	8.84	8.84					8.84
Equity	47.94	47.04	47.04					47.04
ROE	11.30	12.20	11.15		11.50			11.60
ROR	9.42	9.92	9.42					9.45

Our consideration of Sierra presents an interesting dilemma. We have very strongly insisted in a consistent use of financial models on an incremental basis. However, in last year's proceeding Sierra reached a settlement with DRA which we adopted; consequently we do not have a good baseline for Sierra. Furthermore, the ROE that we adopted for Sierra was substantially lower, 11.3%, than that we adopted for the other electric utilities--12.0% to 12.1%.

Consequently, the joint recommendation of 11.6% ROE for this year results in an increase for Sierra.

In this proceeding Sierra ran its financial models and is requesting a substantial ROE increase. DRA concludes that a minor reduction is warranted. Also, Sierra is requesting a decrease in its equity component with which DRA concurs. Sierra also shows that its bond ratings are at the low end of the single A range.

The Administrative Law Judge's proposed decision in this matter found that the methodology generally applied throughout this decision would not support an increase in the ROE for Sierra. We believe that the ALJ's result would create a disincentive for parties to enter into settlements and actually penalize Sierra for settling last year. We intend to maintain our policy of encouraging settlements whenever appropriate and will give great weight to settlements such as the one in this proceeding.

Furthermore, we note that increasing the ROE for Sierra from 11.3% to 11.6% will have a very small impact on the revenue requirement. In these circumstances, we find the joint recommendation to be reasonable as to Sierra and will adopt an ROE of 11.6%.

Sierra Adopted %				
	1995 Authorized	1996 Requested	Adopted	Difference from 1995
Sierra				
Debt	43.90	44.12	44.12	.22
Preferred	8.16	8.84	8.84	.68
Equity	47.94	47.04	47.04	-.90
ROE	11.30	12.20	11.60	.30
ROR	9.42	9.92	9.59	.173
Revenue Requirement Change				\$ .187

**PG&E Pipeline Expansion Project**

Expansion Project Comparison %					
	Current Authorized	1996 Requested	DRA	Cities	Adopted
PG&E Pipeline					
Debt	70	67	67	67	67
Preferred	n/a	n/a			
Equity	30	33	33	33	33
ROE	12.00	13	12.15	11.5	12.10%
ROR		9.41	9.35	8.91	9.03

PG&E requests authority for several things in this proceeding regarding its Pipeline Expansion Project. First it requests authority to change its capital structure from 70/30 to 67/33. Secondly it conditionally requests authority to file a cost of capital application for the pipeline project only once every three years. The condition is that we also grant its request in

another proceeding that it be allowed to file a pipeline general rate case once every three years. And lastly, PG&E requests that its ROE of 13.0 % for the pipeline project remain in place until the next cost of capital proceeding for the pipeline -- either 1996 or 1998.

In last year's Interim Rate Proceeding for the pipeline project, we found that the project warranted a ROE premium of 100 basis points over the ROE adopted for PG&E's non-Diablo operations. Thus there are two basic methodologies that we could employ in deciding the ROE for the project. First we could look at the pipeline as a separate utility and employ our standard analysis in arriving at a reasonable capital structure and cost of capital. Secondly we could analyze whether any ROE premium over the adopted ROE is required and, if so, what the size of the premium should be.

PG&E started off on the first course of looking at the project on a stand-alone basis. The Cities employed this same analysis with the results shown in the table below:

Model Results						
	CAPM- Range		DCF- Range		Risk Premium- Range	
PG&E	10.10%	17.40%	12.60%	18.60%	14.90%	15.10%
Cities		12.65%	9.25%	12.69%		

The Cities also did two other analyses. It shows that the Federal Energy Regulatory Commission (FERC) has chosen a range for ROE for the Pacific Gas Transmission Company of between 10.13% and 15.80%. FERC then chose 12.75% as appropriate for Pacific Gas Transmission Company.

The Cities also looked at a "comparable earnings" analysis and found that 11.7% would be reasonable for the pipeline project. A key point of the Cities' testimony is that they believe that the pipeline project needs to have the financial strength of only a BB/BBB rated company because the pipeline constitutes less than 4% of the total capitalization of PG&E. They admit that their recommendations are in line with such a rating. The Cities conclude that a ROE of 11.50% is appropriate.

On June 30, 1995, the assigned commissioner in this proceeding issued an Assigned Commissioner's Ruling which outlined the difficulties of determining an appropriate ROE for the pipeline project on a stand-alone basis in this fast-moving proceeding. The ruling indicates that analysis of the size of the ROE premium, if any, would be more useful in helping us reach a decision in this matter.

The Cities argue that there should be at most a 10 basis point adder. Furthermore they argue that the goal of PG&E for the pipeline project's capital structure is 48% equity. Therefore a movement of 3 percentage points in the equity ratio translates to a movement of 17% toward that goal. Also, the Cities point out that PG&E intends to reduce its debt ratio by 3% a year and that PG&E requests that the effects of this decision will remain in place for the next three years. Therefore, the Cities argue that any premium be reduced by like amounts at the same time. In other words, assuming, that a 100 basis point adder was appropriate for a 70/30 structure, a 83 basis point adder would be appropriate for a 67/33 structure. This would continue until there was no adder when the structure for the pipeline project is the same as for the company overall.

DRA makes a very interesting argument. In its testimony it acknowledged that a 100 basis point adder was reasonable and that the ROE should be 12.15%, which is equal to its ROE for PG&E of 11.15% plus a 100 basis point adder. However, in its brief it states that it really recommends that the ROE for the pipeline be 12.15% even though that it recommends 11.60% for PG&E overall.

PG&E argues that the 100 basis point adder is a conservative result. It shows that if the pipeline project were awarded a 11.6% ROE with the company's overall capital structure (Equity = 48%, Preferred = 5% and Debt = 47%) the resulting overall ROR would be would be greater than its current request of 12.6% ROE with a 67/33 structure.

The Commission has reviewed the evidence and the interpretation of that evidence which PG&E has submitted in support of a 100 basis point risk premium for its ROE for the pipeline project due to the 70/30 debt/equity capital structure. The Commission does not accept this supporting evidence and interpretation as sufficient to justify this 100 basis point risk premium. In the absence of adequate support, the Commission cannot accept this risk premium.

The Commission will lower the risk premium to 50 basis points for the coming year. The Commission will remove the risk premium entirely in its decision in the next cost of capital proceeding if PG&E cannot provide sufficient evidence and interpretation to support a risk premium for the pipeline's capital structure.

Findings of Fact

1. The costs of capital for the applicant utilities are made up of the following elements: cost of debt, cost of preferred stock, cost of equity, and capital structure.
2. The outputs of "barebone" model results for the three acknowledged models -- Capital Asset Pricing Model (CAPM), Risk Premium (RP), and Discounted Cash Flow (DCF) applied on an incremental basis are major influences of the Rate of Return on Equity.
3. A group of parties entered into an agreement and submitted a joint recommendation concerning the return on equity, capital structures for the applicant utilities, future methodologies for computing ROE and the discount rate for the utilities.
4. The recommendation was fully supported by SCE, PG&E, SDG&E, SoCalGas, Sierra, DRA, FEA, and ETAG.
5. The agreement was supported in part by TURN and ECG.
6. DRA and SCE each presented a witness in support of the agreement.
7. The joint recommendation did not cover the issues of ROE and Capital Structure for PG&E's pipeline expansion project.
8. The recommendation to mandate consideration of the methodological issues raised by ETAG in next year's cost of capital proceeding is not reasonable.
9. The element of the joint recommendation to have the Commission mandate that staff consider the discount rate calculation in workshops is not reasonable.
10. With certain exceptions discussed herein, the joint recommendation is reasonable in light of the whole record in this proceeding, is consistent with the law, and is in the public interest.



11. We have declined to adopt a market-to-book mechanism for determining ROE in the past.

12. ECG has not met its burden of proof concerning the adoption of the market-to-book approach in determining ROEs.

13. It is not reasonable to give any weight to ECG's recommended 10% ROE for the applicant utilities.

14. The calculation of the discount rate is not within the scope of this cost of capital proceeding.

15. The Commission staff produced a "standard practice" for the calculation of working cash written in 1969 that provides that noninterest-bearing deposits will be credited against working cash.

16. The staff's standard practice regarding working cash does not deal with interest-bearing customer deposits.

17. Working cash is an element of ratebase.

18. Interest-bearing customer deposits are analogous to short-term loans from the customers to the utility.

19. TURN shows that interest-bearing customer deposits are a small but significant source of capital for the utilities for which there is no adequate accounting.

20. Consistency in working cash calculations among the applicant utilities is desirable.

21. Interest-bearing customer deposits are more similar to "working cash" than to a combination of debt and equity.

22. Average results of financial models for 1996 forecasts submitted by the parties in prepared testimony are shown in the two tables entitled "Results of Financial Models" and "Incremental Change from 1995."

23. Based on the results of the financial models, it is reasonable to give great weight to a range from an increase of 10 basis points to a decrease of 70 basis points for adopted ROEs.

24. It is reasonable to give great weight to nondiversifiable business risks such as the state of the economy and general interest rates.

25. The table entitled "Interest Rate Changes compared to ROE Changes" shows the interest rate changes over the last few years compared to our adopted changes in ROEs.

26. Moderating changes in interest rates relative to changes in ROE will provide stability to rates and earnings of the applicant utilities.

27. It is reasonable to give great weight to reducing the ROEs by a range of 40 to 80 basis points based on the change in interest rates.

28. The table entitled Pretax Interest Coverages indicates the current pre-tax interest coverage and bond ratings of the major agencies.

29. The capital structures and ROEs that we adopt in this proceeding will produce results that should not negatively impact the utilities' current bond ratings.

30. We find the joint recommendation to be reasonable as to PG&E.

31. The bond rating for SCE should be strengthened by the adopted increase in equity.

32. The joint recommendation is reasonable concerning SCE.

33. The joint recommendation for both ROE and capital structure for SDG&E is reasonable.

34. We find the joint recommendation reasonable for SoCalGas.

35. The joint recommendation of 11.6% ROE for this year would result in a minor increase for Sierra.

36. The joint recommendation is reasonable for Sierra.

37. Adoption of the 11.6% ROE for Sierra contained in the joint agreement will maintain our policy of encouraging appropriate settlements.

38. An ROE for Sierra of 11.6% is reasonable.

39. An 11.60% ROE for Sierra will equalize the ROEs of Sierra and the other electric utilities.

40. PG&E has not met its burden of making an adequate showing of an ROE for the pipeline project on a stand-alone basis in this proceeding.

41. A 3 basis point increase in the equity ratio for the pipeline expansion project translates to a movement of 17% toward the goal of having an equity ratio equal to PG&E overall.

42. The 100 basis point premium for the ROE associated with the pipeline project was reasonable for a 70/30 capital structure.

43. A reasonable premium for the ROE for this year associated with the pipeline project will be 50 basis points or 12.10%.

Conclusions of Law

1. Southwest Gas and PacificCorp are exempt from the 1996 cost of capital proceeding.

2. Applicant utilities complied with the Commission's notice requirements for this proceeding.

3. The agreement containing certain recommendations submitted by the settling parties does not comply with our rules regarding settlements.
4. The agreement submitted by the settling parties should be construed as a joint recommendation.
5. The calculation of a discount rate for the utilities is beyond the scope of this proceeding.
6. A market-to-book approach to setting the ROEs for applicant utilities should not be adopted.
7. There should be an accurate and consistent accounting of interest-bearing customer deposits.
8. The capital structures, cost of debt, cost of equity, and total rates of return set forth in the discussion of adopted 1996 costs of capital herein should be adopted.
9. The adopted costs of capital become effective January 1, 1996.
10. This decision should become effective today, to allow incorporation of the adopted costs of capital into utility rates authorized in other proceedings.

**ORDER**

**IT IS ORDERED that:**

1. The cost of capital for Pacific Gas and Electric Company (PG&E) set forth below is adopted, effective January 1, 1996.

**Adopted Cost of Capital - PG&E**

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	46.50%	7.52%
Preferred Stock	5.50	7.79
Common Equity	48.00	11.60
Total Rate of Return	9.49	

2. The cost of capital for the Pacific Gas and Electric Company pipeline expansion project set forth below is adopted, effective January 1, 1996.

**Adopted Cost of Capital - Pipeline Expansion**

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	67%	7.52%
Common Equity	33	12.10
Total Rate of Return	9.03	

3. The cost of capital for Southern California Edison Company (SCE) set forth below is adopted, effective January 1, 1996.

Adopted Cost of Capital - SCE

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	47.00%	7.77%
Preferred Stock	5.00	6.69
Common Equity	48.00	11.60
Total Rate of Return	9.55	

4. The cost of capital for San Diego Gas & Electric Company (SDG&E) set forth below is adopted, effective January 1, 1996.

Adopted Cost of Capital - SDG&E

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	44.50%	7.21%
Preferred Stock	5.75	6.87
Common Equity	49.75	11.60
Total Rate of Return	9.37	

5. The cost of capital for Southern California Gas Company (SoCalGas) set forth below is adopted, effective January 1, 1996.

Adopted Cost of Capital - SoCalGas

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	42.90%	7.84%
Preferred Stock	9.70	5.76
Common Equity	47.40	11.60
Total Rate of Return	9.42	

6. The cost of capital for Sierra Pacific Power Company (Sierra) set forth below is adopted, effective January 1, 1996.

Adopted Cost of Capital - Sierra

<u>Component</u>	<u>Capital Ratio</u>	<u>Cost Factor</u>
Long-term Debt	44.12%	7.77%
Preferred Stock	8.84	8.00
Common Equity	47.04	11.60
Total Rate of Return	9.59	

7. Sierra, SoCalGas, PG&E, SCE, and SDG&E are authorized to incorporate the adopted costs of capital into rates approved in other Commission proceedings.

8. The Commission's Advisory and Compliance Division (CACD) shall convene workshops during the first quarter of 1996 to consider if and how interest-bearing customer deposits should be included in working cash on a uniform basis.

9. If, after the workshop discussed above, CACD concludes that its Standard Practice regarding the calculation of working cash should be revised, it shall serve the new guidelines on all parties to which it is applicable.

10. All outstanding motions in this proceeding which have not been ruled upon are denied.

This order is effective today.

Dated November 21, 1995, at San Francisco, California.

DANIEL Wm. FESSLER  
President  
P. GREGORY CONLON  
JESSIE J. KNIGHT, JR.  
HENRY M. DUQUE  
JOSIAH L. NEEPER  
Commissioners