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Decision 97-12-089 December 16, 1997

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

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, and (iii) establish its overall rate of return for Calendar Year 1998. (Electric and Gas) (U 39-M)	Application 97-05-016 (Filed May 8, 1997)

(See attached service list for appearances.)

OPINION

Summary

This decision establishes costs of capital for Pacific Gas and Electric Company (PG&E) for calendar year 1998 as follows:

Description	Capital Ratios	Cost	Weighted Cost
Long-Term Debt	46.20%	7.36%	3.40%
Preferred Stock	5.80%	6.65%	0.39%
Common Equity	48.00%	11.20%	5.38%
Total	100.00%		9.17%

The estimated revenue requirement impact of adopting a rate of return (ROR) of 9.17% for PG&E is a decrease of $41.3 million for the electric department and a decrease of $12.8 million for the gas department, for a total decrease of $54.1 million. Additionally, ROR workshops are ordered to commence prior to February 1998 on the topic of unbundled utility services.

Procedure

On May 8, 1997, PG&E filed this application to establish its annual cost of capital for calendar year 1998.

A prehearing conference was held on July 10, 1997, at which time the following 1997 hearing schedule was adopted.

ORA and Intervenor Testimony	August 15
Rebuttal Testimony	August 29
Hearings	September 10-12
Concurrent Opening Brief	September 24
Concurrent Reply Brief	October 1
DRI Update	October 10

The matter was submitted upon receipt of the DRI/McGraw-Hill (DRI) update on October 10, 1997.

Parties who actively participated in this case by providing testimony and filing briefs are: PG&E; Office of Ratepayer Advocates (ORA), the United States Department of the Navy and the Department of Defense (DOD), The Utility Reform Network (TURN), and Ron Knecht and Ray Czahar (KC).

Background

Each year, PG&E applies to the Commission for authority to establish its authorized rate of return on common equity (ROE), its authorized capital structure, and its overall ROR. The present application seeks Commission approval for calendar year 1998 of the following capital ratios and costs:

Description	Capital Ratios	Cost	Weighted Cost
Long-Term Debt	46.20%	7.37%	3.40%
Preferred Stock	5.80%	6.65%	0.39%
Common Equity	48.00%	12.25%	5.88%
Total	100.00%		9.67%

No party has challenged applicant's recommended cost of preferred stock and long-term debt, nor has any party challenged its recommended capital structure. These unopposed recommendations leave only the ROE in dispute.

The Commission determines ROE in an incremental manner. Each year the Commission considers many factors when determining the incremental change in ROE, including but not limited to the results from certain financial models, shifts in interest rates, changes in the economy and the credit risk of the applicant. The Commission relies on three bare-bones financial models for forecasting ROE. These are the discounted cash flow (DCF) model, the risk premium (RP) model, and the capital asset pricing model (CAPM). While the absolute values of outputs from these models do not set ROE, they do provide a valuable guide in our analysis, which is tempered with a great deal of judgment. (*See* Decision (D.) 96-11-060.)

Our approach is to begin with the last authorized ROE for applicant, then use the recognized models and other pertinent information to gain information about the direction and magnitude of ROE changes that are appropriate in light of the current conditions. The models produce a range of reasonable values, assisting in the determination of a fair and reasonable ROE. (*See* D.94-11-076, 57 CPUC2d 533, 542; D.92-11-047, 46 CPUC2d 319, 357.) In assessing modeling results, the Commission looks to consistency and an incremental approach. As even minor changes to a financial model's inputs can produce major changes in the output ROEs, we have stressed the need for consistent bare-bones models with inputs that do not change markedly from year to year. (*See* Decisions, *supra*.)

DOD, ORA, and PG&E have followed, to a greater or lesser degree, the incremental approach as established in our prior decisions, while TURN and KC have not. Succeeding sections set forth each party's ROE recommendation together with our discussion of that recommendation.

Pacific Gas and Electric Company

PG&E recommends a ROE of 12.25% or 65 basis points above the 1997 return. The revenue requirement impact of PG&E's request is an increase of $40.9 million for its electric department and an increase of $12.7 million for its gas department, for a total increase of $53.6 million.

PG&E relies upon the simple average of its model results, approximately 12.25%, giving equal weight to each model.

PG&E's qualitative analysis is summarized in the direct testimony, as follows:

> "PG&E has examined the risk profile of its traditional electric and gas utility operations, excluding Diablo Canyon, and the level of interest rates. Specifically, the risks, both competitive and regulatory, posed by the

> Policy Decision to restructure California's electric industry through implementing a wholesale power exchange and retail competition on balance are greater than the levels of risk facing the utilities in the comparable group;
>
> "California electric and gas utilities face increased risk due to unbundling;
>
> "competitive and regulatory risks in PG&E's gas business have not diminished over the last year, and they continue to present investors a highly asymmetrical return profile; and
>
> "long-term interest rates as of May 1997 have increased by about 60 basis points compared to levels at the time of Decision 96-11-060."

ORA, TURN and KC have uniformly criticized applicant's quantitative showing as being out of harmony with the Commission's incremental ROE policies.

TURN comments on the risk premium model results as follows:

> "...the worst of PG&E's financial model failings appear in use of the risk premium model. According to the model, the return required by investors equals a risk-free return plus a risk premium on common equity. Last year PG&E estimated future risk premiums using two methods: (1) market return calculated from 20 years of historical data, and (2) a 16-year historical DCF method, also calculated from 20 years of historical data. Last year's DCF results for these two methods produced ROE averages of 12.84% and 9.28%, respectively. Ex. 6, p. 16, footnote 27. This year PG&E has eliminated the method that produced the lower ROE, and has reduced the historical data set for the market return method from 20 years to 16 years. The precise effect on ROE of dropping the historical DCF method from the risk premium model is unknown for test year 1998, but if PG&E did the same thing last year its average ROE estimate based on the risk premium model would have increased 1.78%, or 178 basis points. Ex. 6, p. 16. The effect of reducing the data set from 20 years to 16 years is even worse. PG&E has eliminated utility return data for the years 1977 through 1980. Utility stock prices dropped significantly during that time, depressing ROE estimates derived from data series that include the years. For the 12 utilities that are common to PG&E's comparison group both last year and this year, the effect of dropping four years of data is to increase the resulting ROE by 3.25%, or 325 basis points."

Parties other than PG&E point out that applicant does not mention the enactment of Assembly Bill (AB) 1890 in its prepared testimony. This legislation was enacted after

August 27, 1996, and thus was an event deserving consideration in this year's ROE proceeding.

Merrill Lynch described PG&E's long-term outlook as "definitely enhanced" by the adoption of AB 1890.

Moody's recently upgraded PG&E's credit rating, stating:

> "The upgrades result primarily from expectations for improving financial performance of Pacific Gas and Electric Company (PG&E) the regulated electric utility operating subsidiary of PG&E Corporation, and the relative certainty of PG&E's financial performance over the foreseeable future."

Department of Defense

DOD recommends a ROE of 11.6% or no change from the 1997 return.

DOD's showing in this proceeding closely follows Commission precedent. Its testimony represents that the same procedures were used in its preparation as were used last year. No party disputes either the assertion of consistency or the accuracy of the results presented.

Terming its model results "inconclusive," DOD's witness compared current risk indicators for PG&E with the same indicators used in last year's testimony, showing that marginal changes in some indicators have been offset by changes in other indicators, as follows:

	1997	1996
Value Line:		
Beta	.70	.80
Safety Rank	3	3
Financial Strength	B++	A
Price Stability	90	95
Long-term Interest Coverage	3.4x	4.5x
Bond Ratings:		
Moody's	A1	A2
S&P	A+	A
S&P		
Beta	1.08	.63
Common Stock Rank	B	B
Fixed Charges Coverage	3.05x	4.19x

DOD's witness concludes:

"There is not a strong case that PG&E is riskier than it was at this time last year.

"It appears to me that the Company's case for an authorized return of 12.25% is based on its assertion that competitive risk will increase, and this increase in risk entitles investors to higher returns. Its quantitative support is that its requested 12.25% falls at the midpoint of its financial model results. Those results indicate a very broad range of estimates ranging from 7.3% to 16.1%. In my opinion, little confidence can be put in such a broad range of estimates, and little weight should be given to a simple average of these results. To be candid, the range of my results for the comparable electrics of 9.0% to 11.9% is greater than I would like it to be, but the top end of this range is still below the Company's requested return.

"Given the Commission's practice of applying incremental changes to the authorized return set in the prior year's proceeding, I recommend that the cost of equity for Pacific Gas & Electric be continued at its present level of 11.6%."

Office of Ratepayer Advocates

ORA recommends a ROE of 11.25% or no change from its initial 1997 recommendation.

ORA's return on equity recommendations are set forth in its direct testimony:

"The following are ORA's major conclusions based upon the foregoing analysis and the analysis of the financial models contained in Chapter 2:

> "Current interest rate levels are approximately equal to the rates in effect during August 1996, when a joint recommendation was formulated for the 1997 cost of capital.
>
> "The current interest rates and the interest rate forecast for 1998 are nearly equal indicating economic stability during the test year period.
>
> "Since last year's cost of capital proceeding the legislature has enacted AB 1890 which has resulted in a decline in business risk perception compared to last year.
>
> "There has been no change in Applicant's capital structure since last year, indicating no change in financial risk.
>
> "There has been no change in the results of the DCF and Risk Premium models since last year. The average of the range of the CAPM model has increased by 40 basis points to 10.60%.

"Based upon all of the above factors taken in combination, ORA concludes that there has been no material change in any of the key factors considered in formulating an ROE recommendation since the last cost of capital proceeding in 1996. Accordingly, ORA's recommended ROE for PG&E is 11.25% which is the same recommendation made in last year's proceeding."

D.96-11-060 shows that ORA's initial position in the 1996 ROE case was 11.25%, but was changed to 11.60% by reason of its joinder with all parties in the Joint Recommendation which was adopted by the Commission. ORA points out that last year's authorized ROE of 11.60% cannot be used as a benchmark in terms of ORA's models because the 11.60% ROE was the product of a negotiated settlement and is nonprecedential.

The Utility Reform Network

TURN recommends a ROE of 9.60%. If the Commission does not accept a record estimate of cost of capital differences between applicable and inapplicable assets, then TURN recommends a 10.40% ROE, with resulting returns on electric ratebase subject to redirection from operating costs to amortization of transition costs, with returns on gas ratebase subject to refund, and with PG&E tracking its 1998 returns on ratebase in memorandum accounts pending full litigation of unbundled costs of capital next year.

TURN did not participate in PG&E ROE proceedings in 1996. For this reason, TURN did not calculate incremental financial model results. The witness states:

"My recommended ROE is based on judgment guided by the results of financial model studies performed by others, and on studies to determine equity adjustments for California industry conditions and for risks associated with PG&E assets to which the adopted ROE will apply."

In other words, TURN offers a total ROE study rather than the single year incremental study instructed by our decisions and followed by PG&E, ORA, and DOD in this proceeding.

TURN believes that ROE for gas and electric distribution services should be less than the ROE for generation or transmission assets, but provides no quantitative evidence to support that belief.

PG&E, on the other hand, believes that the incremental approach understates the risks of distribution services, but provides no quantitative evidence to support that belief.

We find there is insufficient evidence on the record to support a finding of ROE different from that determined by using the incremental approach.

TURN's ideas may have merit and may be presented in next year's proceedings designed to establish cost of capital for utilities on an unbundled basis. We decline to address those ideas at this time.

Ron Knecht and Ray Czahar

KC recommend a ROE of 11.60%, or no change from the 1997 return.

KC's direct evidence, entitled "Expert Testimonies on Cost of Equity and Methodological Issues," present methodologies which are new and different from those we presently utilize. KC believe their sophisticated refinements will assist the Commission in more accurately determining the future cost of capital for PG&E and other utilities.

However, we will not entertain the KC methodology at this time as it lies beyond the scope of this proceeding. In D.92-11-047, 46 CPUC2d at 358, we said:

> "We are willing to fine tune our model analyses on the basis of evolving economic theory when pertinent. But this truncated annual proceeding is a cumbersome vehicle for such proper evaluation. Its short hearing time and compacted schedule under the modified Rate Case Plan are not conducive to extensive economic analysis."

Financial Model Results

The average results of parties' 1998 financial model forecasts are shown in Tables 1 and 2 below. Table 1 displays the average model results for ROE. Table 2 demonstrates the incremental change of the results for 1998 compared to 1997.

Table 1 Results of Financial Models (%)										
	Utility		ORA		DOD		TURN		KC	
	1998	1997	1998	1997	1998	1997	1998	1997	1998	1997
DCF	8.59	N/A	9.10	9.02	9.39	10.77	8.97	N/A	N/A	N/A
CAPM	12.42	N/A	10.60	10.20	12.08	11.52	10.63	N/A	N/A	N/A
RP	15.58	N/A	9.17	9.21	11.04	10.95	11.48	N/A	N/A	N/A

Note: Results for PG&E for 1997 can not be presented on a comparison basis because PG&E did not complete its analysis for 1998 in the same fashion as in the 1997 proceeding.

Table 2 Financial Models Incremental Change from 1997 in Basis Points					
	Utility	ORA	DOD	TURN	KC
DCF	N/A	8	-138	N/A	N/A
CAPM	N/A	40	56	N/A	N/A
RP	N/A	-4	9	N/A	N/A

Note: Results for PG&E for 1997 can not be presented on a comparison basis because PG&E did not complete its analysis for 1998 in the same fashion as in the 1997 proceeding.

Although we have repeatedly stressed the need to see the model results run on a consistent method from year to year (57 CPUC2d at 542, 46 CPUC2d at 358, and in D.96-11-060, p. 14), this year PG&E gave us incomparable results. For example, PG&E's data for comparable companies covered a 16-year period, rather than the 20 years that had been used last year to run the financial models. While PG&E claims this was the only data available, DOD explains how this change in the data provided to PG&E could have been overcome. PG&E acknowledges the impact of this change alone is approximately 131 basis points for its risk premium model.

We have previously stated, "The DCF, RPM and CAPM financial models are useful in establishing a range of required returns to consider in selecting the authorized return and in evaluating trends of investor expectations when consistent assumptions and data sets are used in the analysis." (33 CPUC2d 525, 574 (1989).) In 46 CPUC2d at 358, we require that requests to introduce new models or to make methodological adjustments in the bare-bones DCF, RP, and CAPM models be clearly segregated from the bare-bones computations. PG&E did not present the bare-bones models consistent with last year's model alongside the new models it wishes us to consider.

DRI Update

In accordance with the Commission's rate case plan, ORA filed the DRI Update on October 10, 1997. The DRI update was given exhibit number 28 and received in evidence.

DRI's Interest Rates Forecast is as follows:

	October 1997 Forecast for		April 1997 Forecast for
	4Q 1997	1998	1998
3-Month Prime Commercial Paper	5.69%	5.70%	6.07%
1-Year Treasury Bill	5.59%	5.69%	6.07%
30-Year Treasury Bond	6.39%	6.25%	6.71%
AA Utility Bond	7.31%	7.18%	7.66%
Bond Buyer Index of 20 G.O. Municipals	5.26%	5.19%	5.86%

There is marked difference in the DRI forecast for 1998 between that given in April 1997 and that given in October 1997. AA Utility Bond forecast was 7.66% in April and 7.18% in October, a decrease of 48 basis points or nearly one-half of one percent.

ORA addressed the topic of financial model updates in its direct testimony, stating:

> "In each year's cost of capital proceeding, the cost of debt and preferred stock estimates are updated to reflect DRI's October interest rates forecast. The financial models could also be revised to incorporate the latest information, but a complete rerun of all the models is not possible under the time and resource constraints of this proceeding.
>
> "In D.94-11-076, the Commission observed that the average model result has roughly one half to two third sensitivity to changes in DRI's 30-Year Treasury bond forecast. In ORA's testimony two years ago, ORA compared the change in model results from June 1994 to October 1994. ORA's analysis showed that the sensitivity of the average model result to the change in DRI's 30-year Treasury bond forecast was about four-fifths. ORA concluded that financial model updates given the compressed schedule imposed by the rate case plan governing the annual cost of capital proceeding would not be practical. The Commission should use

> the change in interest rates results from the DRI update as a guide to approximate the change in financial model results, and consider this information in arriving at its return on common equity authorization."

We approve of these observations. In D.94-11-076 we discussed the effect of interest rate changes between April and October on model results. We observed that, giving the DCF, CAPM, and RP models equal weight, the average ROE movement is approximately 50% sensitive to forecast changes (57 CPUC2d 533, 549.) Based on this year's DRI update, we can conclude that the bare-bones financial models would produce lower results if run today.

It should be noted that using the October DRI forecast for 1998 to update PG&E's Embedded Cost of Debt (7.36%) and Embedded Cost of Preferred Stock (6.65%), these costs remain closely coincident with PG&E's estimates as shown in its application.

Discussion

Each year the Commission convenes this proceeding to determine costs of capital of utilities in the short term. This year PG&E is the single applicant, and its capital ratios and cost of long-term debt and preferred stock are uncontested. The company, however, requests that its cost of common equity be increased from the 11.60% that has been authorized for the past two years to 12.25%, an increase of 65 basis points.

Having the object of making these proceedings manageable as well as informative, the Commission has implemented an incremental approach, starting with the Commission's most recent findings, and then using recognized financial models to indicate the direction and magnitude of changes. In assessing these changes, the Commission looks to consistency in the modeling and an incremental approach in setting ROE.

DOD and ORA have followed the incremental approach. TURN and KC have offered other evidence which we find to be beyond the scope of this proceeding. We believe these studies should first be examined in a workshop setting. Time constraints require such referral.

PG&E, having the burden of proving that an upward revision of its ROE is required, has not convinced us that the present ROE of 11.60% should be increased.

PG&E's quantitative case is shown to be seriously flawed, and its qualitative analysis is not supported by independent facts beyond its own opinion. We can give no weight to the financial model analysis of PG&E because we cannot use it in our incremental approach.

There is no supporting evidence that the assertions respecting increased risk because of the Commission's Policy Decision or its unbundling program are true. There is evidence that the enactment of AB 1890 "definitely enhanced" PG&E's long-term outlook. PG&E's reliance upon what it views as increasing long-term interest rates is misplaced as the opposite appears true.

The average of the five interest rate forecast decreases from April to October, supplied by DRI, is 47 basis points. The decrease in the AA Utility Bond from April, standing alone is 48 basis points. The decrease in the DRI interest rate forecasts for AA utilities from October 1996 to this October is 74 basis points. While the bare-bones financial model results were close to what they were last year, we find that with the updated DRI forecasts, these results would all decrease.

Finding as we do in this case that PG&E's business and financial risks tend to be the same or less than they were last year, we will apply an adjustment to PG&E's ROE to reflect all of the evidence we have before us. We exercise our judgment, based upon all of the evidence and determine that 40 basis points is an appropriate downward adjustment to PG&E's ROE for the coming year.

We consider the impact of interest rate changes from last year to this year. In particular we take into consideration nondiversifiable business risks, such as the state of the economy and general interest rates associated with individual utilities or utility industries. (D.95-011-062, mimeo. at 16, citing 57 CPUC2d at 549-550). Table 3 demonstrates yearly interest rate changes from October to October over the last eight years in comparison with our adopted ROE changes. Our consistent practice has been to moderate changes in ROE relative to changes in interest rates in order to increase the stability of ROE over time. (Id. at 17.) As shown in Table 3, we have moderated the change in the ROE that we adopt today consistent with such moderations in the past.

Table 3 Interest Rate 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	9.10	-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 - 12.10	100 to 120
1996	7.29	-108	11.60	-40 to -50
1997	7.92	63	11.60	0
1998	7.18	-74	11.40	-20

Notes:

* DRI interest rate forecasts for AA utilities, October 1997 report.

** ROE ranges for San Diego Gas & Electric Company, PG&E, Southern California Gas Company and Southern California Edison Company. ROE ranges do not include PG&E Pipeline.

It has also been our practice to consider the credit risk of the applicant. In setting ROE, we must be mindful of the impact of our adopted ROE and capital structure on the utility's times interest coverage. A significant impact may affect such utility's credit rating by the major credit rating agencies. Reduction of a utility's credit rating could impede borrowing potential or increase debt costs.

Table 4 sets forth the pre-tax interest coverage based on the ROR adopted today and the bond ratings from the major credit agencies. The guidelines in Table 4.1 are included to assess where PG&E falls within the rating system.

Table 4 Pretax Interest Coverage Without Short-term Debt			
Utility	*Interest Coverage (x's)*	*Bond Ratings*	
		S & P	*Moody's*
PG&E	3.91	A+ Average	A1

Note: Bond Ratings as of August, 1997.

Table 4.1 S & P Guidelines (x's)				
	Electric		*Gas*	
	AA	*A*	*AA*	*A*
Above Average	3.50	2.75	3.75	3.00
Average	4.00	3.50	4.25	3.75
Below Average	----	4.50	----	4.25

We recognize that PG&E's ratings are not set merely by capital structures and ROE considerations. However, we can conclude from Tables 4 and 4.1 that the ROE we adopt today will not negatively impact PG&E's current bond ratings.

Table 5 shows a comparison of the ROR we adopt today along with the estimated revenue requirement impacts of our decision.

Table 5 PG&E Adopted (%)				
	1997 Authorized	*1998 Requested*	*Adopted*	*Difference From 1997*
Debt	46.20	46.20	46.20	0.00
Debt Cost	7.52	7.37	7.36	(0.14)
Preferred	5.80	5.80	5.80	0.00
Preferred Cost	7.04	6.65	6.65	(0.39)
Equity	48.00	48.00	48.00	0.00
ROE	11.60	12.25	11.40	(0.20)
ROR	9.45	9.67	9.26	(0.19)
Estimated Revenue Requirement Change (Millions)			Electric	($25,700)
			Gas	($8,000)

Retroactive Adjustment

Both TURN and ORA propose that the Commission adopt a 1998 ROE for PG&E, but make it subject to adjustment based upon the outcome of next year's unbundled cost of capital proceeding.

PG&E's Opening Brief opposes this idea, stating:

> "The Commission has already rejected this proposal in D.97-08-056. In the proceeding leading up that decision, TURN argued that PG&E's unbundled cost of capital should be determined in a subsequent proceeding, and that the unbundled cost of capital thus determined should then be applied retroactively for 1998. (D.97-08-056, mimeo, p. 18.) The Commission adopted only part of TURN's proposal; it decided to determine an unbundled cost of capital for 1999. (D.97-08-056, mimeo, p. 19.) Ordering paragraph 8 explicitly states that next year's cost of capital proceeding will review PG&E's cost of capital for the 1999 test year. (D.97-08-056, mimeo p. 62.)"

D.97-08-056 expresses our intent to entertain cost of capital proceedings on an unbundled basis for calendar year 1999 rather than for 1998, and we continue to believe that intention to reflect the proper regulatory course.

As DOD observes with respect to the proposal for retroactive adjustment of costs of capital:

> "Certainly, it could be argued that such a treatment would cause uncertainty with regard to investors' expectations. DOD is of the opinion that the outcome of this proceeding should not create uncertainty that could be used as support for a higher return on common equity at a later date. The annual attrition review which takes place in California has the distinct advantage of reducing regulatory risk by providing the opportunity to revisit the cost of capital on a regular and relatively short-term basis rather than waiting for market conditions to trigger an initiative to bring a case to the Commission."

Workshops

ORA strongly recommends ROR workshops for PG&E, San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (Edison) in order to accomplish the Commission's goal of unbundling regulated and unregulated utility services in 1998. PG&E and KC also support the idea of prefiling workshops to be held in advance of next year's cost of capital proceeding in order to allow the parties to explore methodologies for unbundling the cost of capital.

Noting that the next cost of capital proceeding is scheduled to commence in May 1998, PG&E proposes that workshops be convened in January 1998.

For 1998, the utilities' filings for ROR and ROE will not utilize the incremental basis we apply in this decision, but will propose unbundling of long-term debt, preferred stock, and shareholders' equity to correspond to the business realities of 1998 when largely regulated distribution assets must be separated from largely deregulated generation assets. Thus, next year's cost of capital proceeding will be substantially different from those of recent years.

ORA's brief summarizes the issue:

> "The gist of the problem is that the old, fully regulated approach considers risks involving all of the different utility assets, while a different business environment will exist for California electric utilities in 1998. The challenge for this Commission will be to move to this new unbundled environment while still providing a reasonable and fair ROR and ROE for PG&E in 1998 commensurate with the actual investment risk as required by the law."

Our review of the record in this proceeding, including the testimony of TURN and KC, persuades us that an early start by way of workshops directed to the topic of developing methodologies to match ROR and ROE to regulated and nonregulated utility services is appropriate. We will set such proceedings in motion prior to February 1998.

PG&E, SDG&E and Edison will be asked to participate in the workshops together with ORA, TURN, DOD, and KC. Other utilities and entities may participate as well.

The workshop sessions will allow utilities and parties to share their progress in developing unbundling ROR and ROE methodologies. In the informal workshop setting, all parties can cooperatively forge the methodologies required for 1999 forward or, alternatively, develop individual positions which will be known to all parties prior to utility ROR and ROE filings in 1998. Thus, there will be a saving of time in the formal proceedings.

The Energy Division is directed to organize and moderate the workshop and to prepare a report on the results of the workshop. The Energy Division shall serve the report on all parties to this proceeding and on all electric utilities. The report may, if appropriate, serve as the basis for a future rulemaking or investigation on unbundling ROR and ROE, or it may be introduced as an exhibit in proceedings initiated by the utilities' May 1998 filings. The uses the report will be put to will depend on its content.

Comments

Pursuant to the Commission's Rules of Practice and Procedure, the proposed decision (PD) of the assigned Administrative Law Judge for this proceeding was filed on October 31, 1997. Comments and/or Reply Comments were filed by PG&E, ORA, DOD, TURN, and KC.

Our review of the comment filings persuades us that some nonsubstantive clarifications of the PD are in order.

PG&E has calculated that the PD's effect on revenue requirements will be an electric decrease of $25.7 million and a natural gas decrease of $8.0 million. We accept those estimates and change the PD accordingly.

Several parties suggest that the purpose of the ordered workshops should be clarified, and we do so.

The focus of the workshops ordered in this proceeding is to explore methodologies designed to unbundle the cost of equity/capital as opposed to addressing the methodologies advanced by KC in the context of the present proceeding.

We do not order workshops to explore KC methodology because we are persuaded that the unbundling process dictates that the better directional use of Commission resources is toward formulating new unbundling processes rather than refining existing bundled strategies.

TURN comments that the PD's treatment of its position in this case should be addressed by appropriate findings (Public Utilities Code Section 1705.) The TURN discussion is amended and findings of fact added to the PD.

ORA's comments include a request that the Commission order further funding for its participation in next year's cost of capital proceedings. PG&E opposes the request on the ground that the question of whether to use the utility companies as a supplemental source of budgeting was not mentioned on the record in this proceeding and should not be a matter decided without considering its significant policy implications. We agree with applicant.

Findings of Fact

1. Each year, PG&E applies to the Commission for authority to establish its authorized ROE, its authorized capital structure, and its overall ROR.

2. The present application seeks Commission approval for calendar year 1998 of the following capital ratios and costs:

Description	Capital Ratios	Cost	Weighted Cost
Long-Term Debt	46.20%	7.37%	3.40%
Preferred Stock	5.80%	6.65%	0.39%
Common Equity	48.00%	12.25%	5.88%
Total	100.00%		9.67%

3. No party challenged applicant's recommended cost of preferred stock and long-term debt, nor has any party challenged its recommended capital structure. These unopposed recommendations leave only the ROE in dispute.

4. The Commission determines ROE in an incremental manner. Each year the Commission considers many factors when determining the incremental change in ROE, including but not limited to, results from certain financial models, shifts in interest rates, changes in the economy, and the credit worthiness of the applicant.

5. The Commission relies on three financial models for forecasting ROE. These are the discounted cash flow (DCF) model, the risk premium (RP) model, and the capital asset pricing model (CAPM). While the absolute values of outputs from these models do not set ROE, they do provide a valuable guide in our analysis, which is tempered with a great deal of judgment.

6. DOD and ORA have followed the incremental approach as established in our prior decisions.

7. TURN and KC have submitted total, beginning to end, ROE studies which are beyond the scope of this proceeding.

8. The proposal by TURN and ORA that the ROE found reasonable in this proceeding be retroactively adjusted at a later time is contrary to D.97-08-056.

9. ROR workshops to commence prior to February 1998 on the topic of unbundled utility services are in the public interest.

10. PG&E's business and financial risks tend to be equal to or less in 1997 than they were in 1996.

11. PG&E has not proved that its ROE should be increased over the existing 11.60%.

12. DOD and ORA, along with the DRI October interest rate forecasts, have affirmatively demonstrated that PG&E's ROE should be decreased from last year's 11.60%.

13. The DRI Update shows interest rate forecasts for 1998 to be 47 or 48 basis points less in October 1997 than they were at the time the parties to this proceeding prepared their exhibits.

14. Exercising our judgment, based upon all the evidence before us, we find a 40 basis point downward adjustment to PG&E's ROE to be reasonable.

15. The following capital ratios and costs for PG&E for calendar year 1998 are reasonable:

Description	Capital Ratios	Cost	Weighted Cost
Long-Term Debt	46.20%	7.36%	3.40%
Preferred Stock	5.80%	6.65%	0.39%
Common Equity	48.00%	11.20%	5.38%
Total	100.00%		9.17%

16. There is insufficient evidence on the record to support a finding of ROE different from that determined by using the incremental approach.

Conclusions of Law

1. The capital ratios and costs set forth in Finding of Fact 15 should be adopted.

2. ROR Workshops set forth in Finding of Fact 9 should be ordered.

ORDER

IT IS ORDERED that:

1. Pacific Gas and Electric Company's costs of capital for calendar year 1998 are adopted, as follows:

Description	Capital Ratios	Cost	Weighted Cost
Long-Term Debt	46.20%	7.36%	3.40%
Preferred Stock	5.80%	6.65%	0.39%
Common Equity	48.00%	11.20%	5.38%
Total	100.00%		9.17%

2. The Commission's Energy Division will convene Rate of Return workshops to commence prior to February 1998 on the topic of developing methodologies to match rate of return and return on equity to regulated and nonregulated utility services. The Energy Division shall prepare a report on the results of the workshop and serve it on all parties to this proceeding and on all electric utilities.

3. This docket is closed.

This order is effective today.

Dated December 16, 1997, at San Francisco, California.

P. GREGORY CONLON
President
JESSIE J. KNIGHT, JR.
HENRY M. DUQUE
JOSIAH L. NEEPER
RICHARD A. BILAS
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