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Decision 82 11 061 November 17, 1982

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of SOUTHWEST GAS CORPORATION for Authority to Increase Natural Gas Rates in San Bernardino County, California.

Application 82-07-05
(Filed July 2, 1982)

William Claerhout, Attorney at Law, for Southwest Gas Corporation, applicant.
Thomas P. Corr, Attorney at Law, and Jay B. Johnson, for the Commission staff.

OPINION

Summary of Decision

Southwest Gas Corporation (Southwest) has requested increases in its rates for the sale of natural gas in San Bernardino County of about $8.6 million during test year 1983, and another $1.6 million in attrition year 1984. The company originally requested a return on common equity of 19.0%, but stipulated at prehearing conference to the midpoint of the staff-recommended range, 16.75%. The decision authorizes a return on common equity of 16.0%, which equates to rates of return on rate base of 12.95% in 1983 and 13.13% in 1984.

The decision grants a total revenue increase of $5,837,800 or 17.10% for 1983 and an additional allowance for 1984. Included in the total revenue requirement is $488,000 which represents the effects of The Economic Recovery Tax Act and The Tax Equity and Fiscal Responsibility Act.

The decision also requires that Southwest observe a flow-through method of accounting in connection with depreciable property acquired prior to 1981: the company had requested that this property be accorded normalization treatment. The company's method would have increased 1983 expenses by about $440,000.

With respect to rate design Southwest requested that the monthly customer charge be increased from $3.50 to $4.25, and that the third tier rates be canceled. The decision adopts Southwest's recommendation, rather than the staff's counter proposal, consisting of a monthly minimum bill of $16.75. Staff had concurred with cancellation of the little-used third tier rate block.

The decision also adopts the staff's recommendation concerning funding for Southwest's 1983-1984 conservation programs; however, rather than ordering that the programs be terminated after 1984, the decision directs Southwest to examine ongoing programs when preparing its 1985 rate case and determine cost-effectiveness at that time.

General Information

Southwest is a natural gas company as defined in the federal Natural Gas Act, engaged in the transmission and sale of natural gas at wholesale rates. It is also a public utility engaged in the transmission, distribution, and sale of natural gas for domestic, commercial, agricultural, and industrial uses. As of December 31, 1981, Southwest served approximately 173,000 customers in Arizona, 121,000 in Nevada, and 52,500 in California.

Southwest is divided into two service areas within California. This application was filed in connection with Southwest's Southern California Division. This division is engaged in retail sales of natural gas in the general areas of Victorville, Barstow, and Big Bear Lake in San Bernardino County. Southwest currently serves approximately 45,250 customers in this division; it has projected an increase in customers to 50,140 for test year 1983.

Southwest has requested annual revenue increases of approximately 8.6 million dollars, providing a rate of return of 14.53%. Without rate relief in test year 1983, Southwest asserts it would earn a rate of return of 1.60% on its Southern California operations. Further, Southwest has requested about 1.6 million dollars in additional revenues during 1984 as an attrition allowance. This attrition has two elements--financial and operational. The financial attrition will be the result of changes in Southwest's embedded costs of debt and increases in the dividend rate for preferred stock. This occurs when debt and preferred stock are retired and rolled over with new issues at rates exceeding current costs. Southwest's operational attrition will occur because of changes in operating revenues due to additional cutomers, sales, operating expenses, depreciation expenses, rate base, etc.

Southwest's last general rate increase for this district was granted by Decision (D.) 92507, dated December 16, 1980 in Application (A.) 59359. By that decision Southwest was granted a rate of return of 11.72% and a return on equity of 14.30% for test year 1981. Southwest's request for approximately 8.6 million dollars in 1983 amounts to about 25.1% increase in rates. Its request for a 14.53% rate of return equates to a 19.0% return on common equity in the test year.

Notice of the application and hearings was published in five newspapers of general circulation in Southwest's Southern California service area, in accordance with the provisions of Rule 24 of the Commission's Rules of Practice and Procedure. Notice of the hearings was mailed to each customer in the district. A public witness testimony proceeding was conducted in Victorville during the afternoon and evening of August 19, 1982. About 50 people attended the afternoon session; 21 offered statements in opposition to the increases. About 20 people attended the evening session, and 7 presented statements opposing the application. A prehearing conference was held in San Francisco on August 23, 1982. Finally, the evidentiary portion of the matter was heard in San Francisco on August 30, 1982 before Administrative Law Judge (ALJ) John Lemke. The application was submitted subject to the receipt of late-filed Exhibits 18 and 19, and limited briefs by September 30.

The staff recommends an overall rate of return in the range of 13.15% to 13.36% for test year 1983. These rates of return equate to an earnings allowance of 16.50% to 17.00% on common stock equity. At the prehearing conference Southwest stipulated to the midpoint of the staff common equity recommendation--16.75%, and an overall return on rate base of 13.25%.

As a result of the prehearing conference, Southwest has, with a few exceptions, generally adopted the results of operations set forth in the staff report. Southwest is in agreement with all items included in the staff's summary of earnings except as follows:

1. The treatment of federal income tax. The difference is the result of Southwest's proposing a normalization method, as opposed to the staff's recommended continuation of flow-through accounting, in connection with pre-1981 depreciable property.
2. D.82-07-096 dated July 21, 1982 authorizing Southwest to establish a balancing account in which certain conservation expenses and revenues are to be recorded for future recovery from its customers. Southwest believes the decision to be unclear concerning the precise program costs to be included in the account.
3. While concurring in the main with the methodology set forth in the proposed staff rate design, Southwest does suggest minor modifications.

Rate of Return

There are between 15,000 and 20,000 shareholders in Southwest owning about 8,000,000 shares of common stock.

The staff's recommended capitalization ratios, costs, weighted costs, and midpoint of its recommended rate of return are shown in the following table:

Staff's Recommended Rate of Return

Component	Capitalization Ratios	Cost	Weighted Cost
	1983		
Long-term Debt	47.00%	10.64%	5.00%
Preferred Stock	12.50	11.77	1.47
Common Equity	40.50	16.75	6.78
	100.00		13.25%
	1984		
Long-term Debt	47.00%	10.98%	5.16%
Preferred Stock	12.50	11.88	1.49
Common Equity	40.50	16.75	6.78
	100.00%		13.43%

Terry Mowrey sponsored Exhibit 15, the staff report on cost of capital and rate of return. He testified essentially as follows in support of his recommendations.

Average year capital costs and an average test period capital structure, rather than year-end rates and year-end capital structures for each of the two years, have been used since this approach assures that ratepayers will not pay for inflationary cost increases before they occur. Both Mowrey and Southwest had projected financing rates for debt of 15% and 14% for 1983 and 1984, respectively. Mowrey stated that these projections of Southwest's financing plus expected increases in retained earnings should enable Southwest to achieve a capital structure approximating the one contemplated in his recommendation.

In arriving at his recommended range of 16.5% to 17.0% on common stock equity, Mowrey relied upon United States Supreme Court and Commission established standards. These standards require, basically:

a. That the return to equity holders be commensurate with returns on investments in other enterprises having similar risks;

b. That the return be sufficient to enable the utility to attract capital at reasonable rates while assuring confidence in the utility's financial integrity;

c. That the return balance the interests of investors and ratepayers.

Mowrey states that no precise methodology can guarantee a result with respect to a proper return on equity with pinpoint accuracy; for this reason he recommended a range. He further stated that in 1978 Southwest instituted a policy of increasing dividends annually in an attempt to buoy the market price of its common stock. But earnings have not been sufficient to support this policy and dividends have not been increased since the second quarter of 1980. Additional shares of common stock have been issued during this period in an effort to maintain a reasonable capital structure. Mowrey compared Southwest's recorded earnings with those of two groups of comparably sized energy utilities for the period 1977 to 1981. The list of companies studied consisted of 10 gas utilities and 10 combination electric and gas utilities. All 20 utilities are listed in Appendix A.

The following table shows the earnings rate on average total capital for Southwest, compared with the two groups of utilities, during the period 1977-1981.

Earnings Rate On Average Total Capital
Trend And 5-Year Averages
1977-1981

Year	Southwest Gas Corporation	Ten Gas Utilities	Ten Combination Utilities
1977	9.86%	8.97%	8.87%
1978	8.80	9.45	9.10
1979	11.39	10.58	9.36
1980	9.44	10.21	9.72
1981	10.73	11.11	10.32
5-Year Average	10.04%	10.06	9.47%

SOURCES: 5-Year Studies, Rate of Return Unit.
Moody's Public Utility Manual.
Annual Reports to Stockholders.
Annual Reports to California Public Utilities Commission.

Mowrey notes that both groups of utilities show increasing trends over the five-year period, while Southwest has experienced broad swings in its earnings rates.

The next table shows Southwest's average common equity ratio compared with the other two groups during the last five-year period.

Average Common Equity Ratio
Trend And 5-Year Averages
1977-1981

Year	Southwest Gas Corporation	Ten Gas Utilities	Ten Combination Utilities
1977	33.64%	34.15%	36.37%
1978	38.64	35.32	36.87
1979	40.56	36.86	36.51
1980	37.33	37.76	36.52
1981	32.75	38.63	37.07
5-Year Average	36.58%	36.54%	36.67%

SOURCES: 5-Year Studies, Rate of Return Unit.
Moody's Public Utility Manual.
Annual Reports of Stockholders.
Annual Reports to California Public Utilities Commission.

Mowrey believes the decline in Southwest's common equity ratio is partly attributable to its poor earnings performance over the last two years as well as its unusually high dividend payout ratio. He observed that Southwest has paid out in excess of 100% of the earnings available for common stockholders in three of the last four years and that the other groups of companies have averaged a 65% to 70% dividend payout ratio. Mowrey noted, with respect to the ratio of net operating income to average net plant investment for Southwest and other companies, that Southwest's return has decreased over the last five years while the other groups have recorded increases during this same period.

The witness also gave consideration to Southwest's interest coverage in arriving at his recommendation. This measurement indicates the company's ability to meet its interest payment obligations. He stated that Southwest's recorded after-tax interest coverage has been substantially below that of the other groups. The following table shows this information.

Times Interest Earned-After Income Taxes
Trend And 5-Year Averages
1977-1981

Year	Southwest Gas Corporation	Ten Gas Utilities	Ten Combination Utilities
1977	2.36	2.14	2.45
1978	2.24	2.21	2.50
1979	2.15	2.48	2.40
1980	1.76	2.23	2.35
1981	1.52	2.14	2.25
5-Year Average	2.01	2.24	2.39

SOURCES: 5-Year Studies, Rate of Return Unit.
Moody's Public Utility Manual.
Annual Reports to Stockholders.
Annual Reports to California Public Utilities Commission.

Mowrey testified that his rate of return recommendation of 13.25% will provide an after tax interest coverage of 2.65 times.

Mowrey stated that Southwest is currently rated BBB by Standard & Poor's and Baa[3] by Moody's Investor Service. He noted that these ratings are the minimum necessary to enable Southwest to be considered an investment grade company. He believes that these low ratings affect Southwest's ability to issue long-term securities and to meet capital obligations. He testified that his recommendation should ensure maintenance of current ratings and hopefully improve future Southwest bond ratings.

Mowrey testified that he performed a discounted cash flow (DCF) analysis in connection with his study. DCF measures total return, consisting of the dividend yield expected at the time of purchase of a stock plus the expected growth rate of dividends. The dividend yield can be directly observed at any given point in time. He stated that Southwest's average dividend yield from January to June, 1982 was 12.96%. He testified that one method traditionally employed in determining dividend growth rate is to use historical growth rates. The following table shows Southwest's compounded growth rates.

Compounded Growth Rates - Dividends, Earnings Per Share and Book Value Per Share

Year	Dividends	Earnings Per Share	Book Value Per Share
1971	$1.00	$1.30	$ 9.94
1972	1.00	1.24	10.23
1973	1.00	1.12	10.48
1974	1.00	1.34	10.82
1975	1.00	1.20	10.49
1976	1.00	.84	10.17
1977	1.00	1.47	10.73
1978	1.03	1.10	10.53
1979	1.085	1.57	11.12
1980	1.145	.91	10.67
1981	1.16	.92	10.37
5-Year Growth (1976-1981)	3.01%	1.84%	.39
10-Year Growth (1971-1981)	1.50	(3.40)	.42

Mowrey noted that Southwest's compounded growth rate during the above period ranges from a high of 3.01% for its 5-year dividend growth rate to a low of minus 3.40% for its 10-year earnings per share growth. He does not believe that any investor would be willing to invest capital when confronted with the expectation of negative growth, such as portrayed in connection with Southwest's 10-year earnings per share growth. He believes that the 10-year picture is heavily influenced by Southwest's poor earnings performance during 1980 and 1981; that these latter showings reflect investors' realizations, rather than expectations, and are therefore not appropriate for DCF analysis.

Mowrey stated that another method often used in lieu of historical growth rates is to estimate a utility's sustainable growth rate. He said this is accomplished by multiplying the expected realized rate of return on book equity times an expected retention ratio. The retention ratio is equal to one minus the dividend payout ratio; in other words, that portion of earnings which will be retained by the utility to produce additional earnings in subsequent periods. He expressed his opinion after reviewing the historical data, as well as Southwest's own projected return on equity, that a reasonable expected return on book equity is 12.5%. He reviewed Southwest's payout ratio for the last five years and concluded that a reasonable dividend payout ratio for Southwest was about 70%. (He believes that Southwest cannot continue paying in excess of 100% of earnings as it has during the last few years.) Multiplying the estimated return on equity of 12.5% times the retention ratio of 30% (1-.70) produces a reasonable expected dividend growth rate of 3.75%. Thus, Mowrey's DCF analysis indicates a reasonable investor expectation for Southwest is about 16.75%, determined by combining the investor's current yield of approximately 13% with his projection of Southwest's sustainable growth rate of 3.75%.

The witness tested the reasonableness of his projection. Eighteen of the 20 comparable companies he used in his analysis are published in Value Line Investment Survey (Value Line). Using the projections of retention ratio and return on equity shown in Value Line for these comparable companies, Mowrey performed a DCF analysis, combining each utility's estimated growth rate with its most recent 6-month dividend yield. His study indicates that investors require average returns on equity between 15.85% and 17.47% for these comparable companies. Mowrey concluded that his recommendation for Southwest reflects results consistent with investor expectations of utilities and therefore meets the legal requirements of the oft-cited U.S. Supreme Court Hope and Bluefield decisions. The results of this latter study are shown in the following table.

SOUTHWEST GAS CORPORATION

Comparable Companies-Sustainable Growth
Model Using Value Line Projections

Company	Value Line Report Dated	1/ Projected Dividends	1/ Projected Earnings/ Share	Dividend Payout Ratio	Retention Ratio	1/ Projected R.O.E.	Expected Growth Rate	2/ Dividend Yield	Investor Discount Rate
Gas Utilities									
Bay State Natural Gas	4-16-82	$3.30	$5.25	62.9%	37.1%	15.0%	5.57%	12.54%	18.11%
Cascade Natural Gas	4-16-82	1.50	2.40	62.5	37.5	15.0	5.63	12.79	18.42
Connecticut Natural Gas	4-16-82	2.35	3.10	75.8	24.2	15.0	3.63	13.03	16.66
Indiana Gas Co.	4-16-82	3.75	6.30	59.5	40.5	15.5	6.28	12.05	18.33
Laclede Gas Co.	4-16-82	2.95	5.50	53.6	46.4	14.5	6.73	12.23	18.96
Minnesota Gas Co.	4-16-82	2.75	6.30	43.7	56.3	16.0	9.01	11.08	20.09
Northwest Natural Gas	4-16-82	1.70	2.50	68.0	32.0	14.5	4.64	11.46	16.10
Piedmont Natural Gas	4-16-82	2.30	4.25	54.1	45.9	15.0	6.89	10.83	17.72
Washington Gas Light	4-16-82	3.85	5.50	70.0	30.0	11.0	3.30	9.59	12.89
Average				61.1%	38.9%	14.61%	5.74%	11.73%	17.47%
Combination Utilities									
Central Hudson G&E	7-02-82	$2.90	$4.20	69.1%	30.9%	14.5%	4.48%	13.22%	17.70%
Central Illinois Light	4-30-82	2.10	2.80	75.0	25.0	12.5	3.13	12.76	15.89
Interstate Power Co.	4-30-82	1.90	2.50	76.0	24.0	12.5	3.00	12.50	15.50
Iowa Southern Utilities	4-30-82	3.10	4.55	68.1	31.9	13.0	4.15	11.44	15.59
Missouri Public Service	4-30-82	1.24	3.05	40.7	59.3	15.0	8.90	8.77	17.67
Montana-Dakota Utilities	4-30-82	2.45	3.50	70.0	30.0	13.5	4.05	10.38	14.43
Sierra Pacific Power	6-11-82	1.90	2.30	82.6	17.4	14.0	2.44	13.16	15.60
Southern Indiana G&E	4-30-82	2.50	4.45	56.2	43.8	14.0	6.13	9.92	16.05
Wisconsin Public Service	4-30-82	2.50	3.60	69.4	30.6	14.0	4.28	9.92	14.20
Average				67.5%	32.5%	13.67%	4.51%	11.34%	15.85%

1/ Source-Value Line.

2/ Average Yield Jan-June 1982, Avg hi-low for months.

The following table combines Southwest's test period capital structure and embedded cost factors with various earnings rates on common equity ranging from 15.5% to 17.5%.

SOUTHWEST GAS CORPORATION

Determination of Rates of Return Required to Recover Embedded Cost of Debt and Preferred Stock at Various Assumed Rates Of Return on Common Equity - Average Year 1983

Component	Capital Ratios 1/	Cost 2/ Factors	Assumed Earnings Rates on Common Stock Equity 15.50%	15.75%	16.00%	16.25%	16.50%	16.75%	17.00%	17.25%	17.50%
			Weighted Cost - Totals								
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1983											
Long-Term Debt	47.00%	10.64%	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Preferred Stock	12.50	11.77	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
Common Equity	40.50		6.28	6.38	6.48	6.58	6.68	6.78	6.89	6.99	7.09
Total	100.00%		12.75%	12.85%	12.95%	13.05%	13.15%	13.25%	13.36%	13.46%	13.56%
After-Tax Coverage			2.55	2.57	2.59	2.61	2.63	2.65	2.67	2.69	2.71

1/ Capital Ratios estimated on an average-year Basis.

2/ As shown in Tables Nos. 6 and 8, Exhibit 15.

The above table shows that a change in the common equity return of 25 basis points results in a change in the overall rate of return of approximately 10 basis points.

Mowrey believes his recommendation will balance the interests of investors and customers, allow Southwest the opportunity to meet fixed charge requirements, pay a suitable dividend, provide moderate additions to retained earnings and restore Southwest to better financial health.

Southwest stipulated to the midpoint of the staff recommendation for return on common equity.[1] It did not cross-examine Mowrey. However, the ALJ inquired concerning the time at which Mowrey formulated his recommendation and whether any significant changes had occurred recently in the financial world which would cause him to alter his recommendation. Mowrey was also asked concerning his opinion about the risk premium attached to a pure gas company such as Southwest, compared with an electric utility or a combination gas and electric utility--especially an electric utility with nuclear generating plants.

He replied that if an investor were to compare Southwest with electric utilities, the nuclear issue could be a very strong consideration; that this issue has been a very real factor subsequent to the Three Mile Island accident. He stated that the nuclear factor, however, at least in California, is somewhat mitigated because Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SoCal) projects are coming to completion

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[1] We must point out that a stipulation between parties does not bind the Commission which must make its decision based on all the facts and circumstances before it.

and hopefully will be on line soon. He testified that electric utilities are still on the whole riskier than gas utilities, but that the gas utility risk has been increasing; that the yield required on gas utilities has been increasing and the gap closing between what investors will demand from a straight electric versus a gas utility. Asked whether some investors might view a pure gas company as virtually a "no-lose" investment in light of their ability to recover costs which had not been forecast through balancing accounts, Mowrey stated that while balancing accounts are currently in effect, this is not to say that they will remain so indefinitely. He also observed that there is the additional risk, as gas prices increase, that customers can be driven off-line to alternate sources.

After consideration, we believe that the midpoint of the staff recommendation (16.75%) on common equity would be an excessive allowance for us to authorize Southwest at this time. We believe that a return of 16.0% on common equity would accomplish the objectives set forth in the Hope and Bluefield decisions for the following reasons:

1. The prime rate is trending downward and is currently below 12.0%.
2. While the return on equity at the staff midpoint would result in a times interest coverage of 2.65, a return of 16.0% will still result in a respectable coverage of 2.59.
3. Rate of return is nothing else than the cost of capital. While we concur that Southwest did not experience good earnings during 1980 and 1981, we are concerned here with capital costs in future years. The equity allowance and resultant coverages will be reasonable in light of present and future circumstances surrounding this proceeding.

4. Sales adjustment, balancing account, and attrition mechanisms will help to ensure that Southwest has adequate opportunity to realize the authorized rate of return.

5. Risk-free issues (Treasury Bills) have been and are currently selling at rates less than 10%.

There was a considerable outpouring of sentiment expressed at the public witness hearings conducted in Victorville concerning the magnitude of the requested (about 30%) increase. The correspondence section of the formal file contains over 80 letters from ratepayers residing in this district who are concerned about the increases. We are mindful that it is the ratepayers who are compensating Southwest for its cost of capital, and of the severely ailing economy affecting many of those customers. However, in setting a reasonable rate of return for a utility we must also consider all the economic and financial circumstances prevailing in the marketplace in which the utility must compete for capital. We must balance these needs with the needs of the ratepayers in reaching our decision on rate of return.

We will therefore authorize a common equity return of 16.0% for 1983 and 1984. In view of the substantially lower prime and Treasury Bill rates now prevailing, as compared to those upon which the parties' testimony was based, and considering Southwest's BBB/Baa[3] bond ratings, we will project a 14% interest rate for Southwest's long-term debt financing in both 1983 and 1984. We will combine these adopted rates with the staff's capitalization ratios shown in the following table.

Component	Capitalization Ratios	Cost	Weighted Cost
	1983		
Long-Term Debt	47.00%	10.60%	4.98%
Preferred Stock	12.50	11.77	1.47
Common Equity	40.50	16.00	6.48
	100.00		12.93
	1984		
Long-Term Debt	47.00%	10.90%	5.12%
Preferred Stock	12.50	11.88	1.49
Common Equity	40.50	16.00	6.48
	100.00		13.09

We are interested in and appreciate the efforts of the staff in developing its recommendation, particularly the capital attraction (DCF) analyses performed in connection with Southwest's capital costs. However, we have never set return on equity by use of a formula or a single type of analysis and we decline to do so here. We must set return on equity on a case-by-case basis considering all the economic factors prevailing at the time of our decision.

Federal Income Taxes

At the close of the evidentiary hearings, the ALJ directed the staff and Southwest to submit late-filed exhibits demonstrating the effects of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The exhibits were filed on September 20, 1982. Concurrent briefs were also ordered by the ALJ for the single purpose of addressing proper ratemaking treatment to be accorded Southwest's tax expenses in light of the Economic Recovery Tax Act of 1981 (ERTA).

Under ERTA an Accelerated Cost Recovery System (ACRS) is permitted. Essentially, this system allows a rapid depreciation of assets for tax purposes. This, in turn, results in a deferral of tax liability. It is required under ERTA that benefits from ACRS be normalized. However, for plant-in-service prior to January 1, 1981, ordinary depreciation, permitting flow-through of benefits to ratepayers, is permissible. The staff, in its approach, has flowed these pre-1981 benefits through to the ratepayer. Southwest has normalized pre-1981 taxes as well as the post-1980 taxes calculated under ERTA.

Southwest notes that it is required to adopt normalization accounting in its proceedings before the Federal Energy Regulatory Commission (FERC); that it would be more convenient for Southwest if there were uniformity in ratemaking and accounting methods in each of the jurisdictions where it appears. Southwest also states that full normalization commencing in 1983 would be beneficial to future ratepayers. It based this argument upon the assumptions of static growth and no provisions for deferred taxes.

Southwest requests that we approve a full normalization method of accounting commencing with 1983 on all of its property, and the use of the "South Georgia" method of allocating reserve deficiencies on the pre-1981 depreciable property. The South Georgia method, adopted by the FERC in May 1978 recognizes that when a company goes from flow-through to normalized accounting, some additional amount of recovery must be calculated to make up for the deficiency in the tax reserve collections from the flow-through method. Thus, the South Georgia method would be applicable to pre-1981 property of Southwest, assuming full normalization; it would not be applicable at all under staff's proposal to accept only post-1980 property normalization under ERTA. Southwest's witness conceded that the short-range effect of using the South Georgia method would increase the revenue deficiency by about $440,000 in 1983. Southwest asserts that the "crossover" point, where Southwest's book depreciation will exceed tax depreciation on about 90% of its assets (distribution plant) will be 1984. It believes that unless the

Commission allows for the recovery of reserve deficiencies in this proceeding, the next general rate case for Southwest will indicate a need for a higher recovery of tax expense through rates than if normalization and use of the South Georgia method is allowed on pre-1984 property in this case.

The staff believes that while regulatory policy should not be shortsighted, neither should it sacrifice present tangible benefits for uncertain future ones.

Staff witness Nettie Fabian agreed that the point where Southwest's distribution plant book depreciation would exceed its tax depreciation is in 1984, and that about 90% of Southwest's total plant is distribution plant. She stated that after the crossover point has been reached, straight line depreciation methodology would be used over the remaining life of the plant; that this would be true whether Southwest were a flow-through or a normalized company.

We have traditionally authorized rate increases based upon accounting procedures which produce the lowest immediate costs for ratepayers. This should be especially true in the dynamic area of federal income taxation. The economic circumstances which prompted the passage by Congress of ERTA and TEFRA in 1981 and 1982 are still present and perhaps more compelling.

Since the evidence in this proceeding is uncontroverted that Southwest's ratepayers will benefit now and in the immediate future if the flow-through methodology is used for pre-1981 benefits the staff position has the greater merit and will be adopted for the purposes of this proceeding.

Conservation

At the time of hearing an issue existed due to uncertain language contained in D.82-07-096, dated July 21, 1982, in A.60555. The summary of the decision and findings of fact spoke in terms of a balancing account being established in order to record expenses of Southwest's Residential Conservation Service (RCS) as well as its 8% loan programs. However, Ordering Paragraph 6 of the decision addressed only the 8% loan programs. The decision has since been modified by D.82-10-048 (dated October 20, 1982) in response to a petition filed by Southwest. Therefore, our adopted summary of earnings will not include costs for these two programs, since they will be covered by the balancing account. Southwest concurs with this approach.

The staff's Energy Conservation Branch (ECB) presented an analysis of Southwest's proposed energy conservation activities for 1983 and 1984. Southwest had initially requested funding of its conservation programs in amounts of $577,500 for 1983 and $524,000 for 1984. ECB analyzed the proposals and met with Southwest to discuss modification of the programs in light of more recent experience and Commission policy. As a result Southwest revised its application and now requests funding of $474,500 for 1983 and $416,000 for 1984. ECB's analysis indicated that the programs proposed are cost-effective and appropriate. ECB recommends, therefore, that Southwest's proposed programs and expenditures, as revised, be adopted except that funding for Southwest's Big Six Program should be expanded to include the 8% loan program ordered by D.82-07-096.

Southwest's general conservation program includes the following activities: an energy conservation contest; customer conservation messages; its Big Six Program, intended to reduce natural gas consumption through installation of attic insulation and conservation devices such as weatherstripping, caulking, duct insulation, water heater insulation and low-flow showerheads; a new construction program, encouraging the use of energy-efficiency design standards exceeding local, state, and federal standards; an appliance conservation program, promoting the conversion of electric water heaters to new high-efficiency gas units; a conservation device program, involving installation of efficient thermostats, swimming pool covers, hot water pipe installation, faucet repair kits, etc.; a pilot turn-off relight program; a commercial energy audit program; and a low-income weatherization program under which Southwest will audit and install insulation, caulking, water heater blankets, and low-flow showerheads, in 500 low-income homes during 1983.

Both ECB and Southwest anticipate a surplus of unspent conservation funds remaining at the end of 1982 of about $144,200. ECB believes these unspent funds should be used to help fund the 1983 and 1984 programs. ECB further recommends that Southwest's present conservation activities, except a basic informational program, be discontinued on December 31, 1984. It suggests that after that date only cost-effective programs should be implemented for which a substantial market exists.

ECB believes Southwest's revised expenditures for 1983-1984 are reasonable; but that due to the large anticipated balance of unspent funds remaining at the end of 1982 the funding level allowed in rates must be reduced. Recommended funding levels contained in Exhibit 17 for 1983 and 1984 were calculated as follows:

1983 recommended expenditures	$497,600	
1984 recommended expenditures	442,400	
Subtotal	940,000	
Less Unspent Funds	144,200	
Total	795,800	÷ 2
Annual Funding Level for 1983 and 1984	$397,900	

Upon request, Southwest furnished ECB with information concerning remaining market potential for conservation. This information is set forth in the following Appendix D, reproduced from Exhibit 16.

Appendix D
Southwest Gas Corporation
Southern California

AN ESTIMATE OF CONSERVATION POTENTIAL

	Retrofit Insulation	Low Flow Showerheads	Water Heater Blanket	Swimming Pool Cover	Pilot	Low Temp. Thermostat	Set Back Thermostat	Audit
1983								
1. No. of Residential Customers	46,880	46,880	46,880	46,880 Pools (937)2%	46,880	46,880 Seasonal (5,902)	46,880	1) Customer Response around 4% for Audits
2. No. of Customers Presently Participating	1,150	11,168	9,751	403	44,067	742	6,622	
3. No. of Customers With Homes Built Prior to 1976 1/	20,200	------	------	------	------	------	------	2) 25% of these will decline actual audit.
4. Total Remaining Market	19,050	35,712	30,590	534	2,813	5,160	40,258	
5. Customers Who Will Not Participate	16,564	17,056	19,295	267	1,406	2,580	39,262	3) 3% split between SCE and SWG
6. Total Realistic Market	2,486	17,056	19,295	267	1,407	2,580	996	4) 1½% of completion 1½ X 45,489= 682 audits/ year.
1984								
1. No. of Residential Customers	48,341	48,341	48,341	48,341 Pools (966) 2%	48,341	48,341 Seasonal (6,085)	48,341	
2. No. of Customers Presently Participating	1,650	12,355	9,751	443	45,923	892	7,806	
3. No. of Customers with Homes Built Prior 1976 1/	20,200	------	------	------	------	------	------	
4. Total Remaining Market	18,550	35,986	38,590	523	2,418	5,193	40,532	
5. Customers Who Will Not Participate	16,564	17,993	19,295	261	1,209	2,596	39,495	
6. Total Realistic Market	1,986	17,993	19,295	261	1,209	2,597	1,037	

1/ Many homes built prior to 1976 were previously insulated or cannot be cost-effectively insulated.

Staff asserts that since 1974, Southwest's use per customer has been reduced by about 26% and that the remaining market for weatherization is declining. Furthermore, staff observes, as the price of natural gas is deregulated, average customer cost of gas will approach the avoided cost of gas.

Staff suggests that Southwest, in its 1985 rate case, provide evidence that an adequate market exists for any conservation activity proposed, except a basic informational program.

Staff suggests the following priorities for the recommended 1983-1984 programs:

Program Prioritization

Program	Priority *
General Conservation	3
New Construction	3
Appliance Conservation	3
Conservation Devices	2
Pilot Turn Off/On	1
Solar	3
Commercial Energy Audits	3
Low-Income Weatherization	1
Water Heater Replacement	2
RCS Energy Audits	M
8% loans	M

* Priority	Description
1	Relatively large energy savings directly attributable to program.
2	Relatively small energy savings directly attributable to program.
3	No energy savings directly attributable to program.
M	Mandated program.

The staff deems Southwest's conservation performance "quite good", noting that average residential gas use has been reduced on a par with that of PG&E and SoCal and at a much lower cost per customer: Southwest - $7.38; PG&E - $23.20; SoCal - $10.66. Furthermore, the staff evaluation of the programs proposed by Southwest is that they are "cost-effective, worthwhile and appropriate."

We believe it premature at this time to order termination of Southwest's conservation efforts at the end of 1984 based upon the evidence before us. The information which Southwest furnished the staff indicates only a limited realistic market potential in some categories for 1984. But other areas show continued promise, e.g. conservation devices such as showerheads and water heater blankets, pilot turn-off (even though some of these efforts will be made by informed customers regardless of Southwest's program). The possibility of further cost-effective conservation indicates that another examination should be made of the potential for energy ...ings when the company is assembling its 1985 rate case. The data available at that time will be closer to and much more meaningful regarding Southwest's post-1984 operations than that currently available. Furthermore, Southwest projects an increase of almost 5,000 customers for 1983 alone. We do not intend to burden ratepayers with higher rates due to questionably cost-effective programs. Those not shown to be clearly cost-justified will not be funded in the next general rate case.

We are troubled by one of Southwest's proposed conservation programs, the appliance conservation program, intended to promote conversion of electric water heaters to high-efficiency gas units. We perceive the primary effect of this program to be the promotion of increased use of natural gas, rather than its conservation. Ratepayers should not be required to fund programs which promote one utility's service over that of another. We will, therefore, disallow the $19,800 in expense projected for this program in 1983-84.

We will, otherwise, adopt the 1983-1984 funding recommendations contained in staff Exhibits 16 and 17. However, since RCS and the 8% loan programs are covered by a balancing account we will reduce the funding levels accordingly. Additionally, the $144,200 of unspent funds shall be applied to the balancing account for the RCS and the 8% weatherization programs. The adopted funding levels are:

1983 Recommended Expenditures	$264,500
1984 Recommended Expenditures	206,500
Subtotal	471,000
Less 1983/84 Appliance Conservation Program	- 19,800
	$451,200 ÷ 2
Adopted Annual Funding Level for 1983 and 1984	$225,600
Ac. 909 - Informational and Instructional Advertising Expenses	$13,600
Total Customer Service and Informational Expenses	$239,200

Summary of Earnings

The information shown in the following table reflects Southwest's adjusted estimates, the staff's estimates, the effect of disputed issues, ERTA, TEFRA, and adopted revenues and expenses for test year 1983.

Estimated and Adopted Summary of Earnings
Test Year 1983

Item	At Southwest Proposed Rates Staff	Utility	Adopted
	(Thousand of Dollars)		
Operating Revenues	$37,014.2	$36,981.4	$34,232.3
OPERATING EXPENSES			
Other Gas Supply Expenses	$20,308.4	20,311.1	20,308.4
Transmission Expenses	4.3	5.9	4.3
Distribution Expenses	2,293.4	2,447.4	2,293.4
Customer Accounts	1,867.5	2,080.9	1,835.8
Customer Service and Info.	297.0	644.8	239.2
Sales Expense	46.0	54.2	46.0
Administration and General	1,540.3	1,486.0	1,514.1
Subtotal	26,356.9	27,030.3	26,241.2
Depreciation & Amortization	1,592.3	1,695.3	1,592.3
Taxes Other Than Income	340.9	374.2	340.9
Calif. Franchise Tax	71.1	104.3	65.6
Federal Income Tax	2,981.0	2,648.9	1,757.0
Total Operating Expenses	31,342.2	31,853.0	29,997.0
Net Operating Revenues Adjustd.	5,672.0	5,129.4	4,235.3
Rate Base	32,749.5	35,302.5	32,756.3
Rate of Return	17.32%	14.53%	12.93%

Included in the summary is reflection of Southwest's sale and leaseback of its headquarters building in Las Vegas. This causes an increase in administrative expenses of about $189,000. The increase in expenses is more than offset by a corresponding reduction in allocated common plant and reserve. A net ratepayer savings of about $80,000 has been achieved through this transaction.

The adopted summary also reflects salary increases of 5% for 1983. Southwest has placed a freeze on the hiring of new employees.

Attrition

Southwest had originally requested about $1.6 million in additional revenue commencing in 1984 due to operational and financial attrition. Based on our adopted Summary of Earnings, the staff has determined that an additional $1,524,800 will provide adequate revenue for 1984 attrition. Staff's estimate contains the following elements:

Financial Attrition	$ 64,600
Operational Attrition	
Nonescalation Elements	953,000
Escalation Elements	
Labor @ 5%	202,400
Nonlabor @ 8.2%	295,600
Total	1,515,600

Staff's 8.2% escalation of nonlabor expense, based on the Modified Producer Price Index (MPPI), is calculated by weighting various elements of the Producer Price Index and the U.S. Consumer Price Index-Wage Earner (CPI-W) as follows:

Modified Producer Price Index		Bureau of Labor Statistics
Category	% Weight	Code
Producer Price Index		
Energy	7.52	057
Chemicals	9.34	06
Rubber & Plastics	4.78	07
Lumber & Wood	4.23	08
Paper & Pulp	6.22	09
Metals	23.00	10
Machinery & Equipment	19.65	11
Transportation Equipment	13.49	14
Other Industrial Commodities	6.77	INDO (DRI)
CPI-W	5.00	CPIW
	100.00	

Staff's financial attrition and the nonescalation portion of operational attrition is reasonable and will be adopted. Staff's method of determining nonlabor escalation (MPPI) will be adopted: however, the staff's determination of escalation rates is premature and will be postponed to a date closer to the attrition year 1984. With regard to labor escalation we will use the latest available indexes from the U.S. All-Urban CPI.

In order to reflect the latest available indexes, Southwest should file by October 15, 1983 an Advice Letter setting forth the appropriate escalation and nonescalation amounts.

Rate Design

Southwest's Southern California Division is engaged in the retail sale of natural gas generally in Victorville, Barstow, and Big Bear Lake, all situated in San Bernardino County. Southwest serves about 45,250 customers in this Division and projects an increase during 1983 to about 50,140.

Table 1 develops Southwest's gas margin for 1983 based upon our adopted results of operations. "Gas margin" is defined as test year operating revenue less the cost of purchased gas, including associated franchise fee and uncollectible costs. Table 2 develops Southwest's revenue requirements for rate design purposes.

TABLE 1

1983 Gas Margin Derivation

Line No.	Item			Amount (Thousands)
1	Gross Revenue			$34,242.3
	Less :			
2	Uncollectibles	352.9		
3	Franchise Fees	325.9		
4	Total F&U			678.4
5	Net Revenue			33,553.9
6	F&U Factor for Cost Item (L.4 ÷ L.5) x 100%		2.0217%	
	Cost of Gas			
7	Purchases	$20,305.00		
8	F&U @2.0217%	410.50		
9	PGA Cost (L.7 - L.8)			20,715.5
10	Revenue Requirement for 1983			34,232.3
11	Gross Gas Margin (L.10 - L.9)			13,516.8

TABLE 2

REVENUE REQUIREMENT
Based on the Adopted Margin and
May 4, 1982 Cost of Gas

Line No.	Item	Amount (Thousands)
	Cost of Gas @ 5-4-82 Rates	
1	Purchases (54,161,400 th @ $0.42068)	$22,784.6
2	PGA Balancing Account (Annualized)*	40.2
3	Subtotal	22,824.8
4	F&U @ 2.0217%	461.5
5	PGA Cost	23,286.5
6	Gas Margin	13,516.3
7	SAM Balancing Account (Annualized)*	3,255.4
8	Revenue Requirement (L.5 + L.6 + L.7)	40,058.3
9	Revenue at Present Rates	34,220.9**
10	Increase	5,837.6

* Balancing Account Revenues from Schedule 1 of Advice Letter 292 as authorized by Resolution G-2466 dated May 4, 1982.

** Table 3, Adopted Rate Design - Revenues at 5-4-82 Rates (p. 36)

Southwest's present rate design consists of three tiers plus a $3.50 customer charge. It originally proposed to eliminate the residential third tier and to increase the monthly customer charge to $5.50. It later amended its customer charge recommendation and now suggests that it be increased to $4.25, the same charge in effect in its Placer County service area. The staff concurs with Southwest's recommended elimination of the residential third tier and increasing the Schedule G-91 (special service) charges, but is opposed to increasing the monthly customer charge. Staff believes the increased customer charge, as recommended, while affecting all customers equally, would do little to those who have only minor use. It therefore proposes a minimum bill concept for residential customers.

Staff determined that a minimum bill of $16.75 per month would generate about $500,000 annually, the majority (about 81%) being collected in the summer months. Staff also determined that about 44% of the summer bills and 8% of the winter bills would be at the minimum, the crossover point for a regular bill being at 21 therms. It arbitrarily set its minimum charge to approximate 60% of the average monthly cost of service ($27.03) and to have a crossover point lower than the average residential summer use of 27.6 therms per month. The staff witness testified that the only residential groups with average summer use below 21 therms are the space heat only customers in the Barstow and Victorville areas at 9.1 therms, and the second-home customers in Victorville and Big Bear areas at 18.6 therms.

Staff notes that the current lifeline rate (Tier 1) is set to approximate 80% of the system average rate; it proposes retention of that relationship.

Southwest's current GN-3 (commercial-industrial) rate is referenced to 90% of the price of No. 2 fuel oil. The last reported price for No. 2 fuel oil was 71.14¢ per therm equivalent. Using the 90% reference, the GN-3 rate would be 64.03¢, which is below the lifeline rate. Staff recommends therefore that the GN-3 rate structure be modified as follows: the rate should be referenced to 92.5% of the No. 2 fuel oil price or the Tier 1 (lifeline) rate, whichever is greater; but in no case should the rate exceed 95% of the No. 2 fuel oil. Staff notes that referencing the GN-3 rate to a percentage of the No. 2 fuel oil price permits periodic fluctuations in the price of oil since gas rates are normally set for periods of at least six months. It recommends that the Tier 2 rate (applicable in connection with Schedules G-1, G-IN G-5, equivalent, G-7, GN-1, GN-2, GS, and GM) be set residually.

In summary, the staff's recommended rate design is as follows:

a. Establish a residential minimum bill of $16.75;

b. Tier 1 (lifeline) rate be set at 80% of the system average rate;

c. GN-3 rate be set at 92.5% of the No. 2 fuel oil price; and

d. Tier 2 rates to be set residually.

e. Tier 3 be abolished.

Staff believes that the Commission's conservation objectives will not be compromised by the elimination of the Tier 3 (residential) rate since present volume accounts for only 2.5% of residential sales (1.9% of total sales) and is used by only 2% of the residential customers in the district. Further, adoption of its differential of .22¢ between first and second tier rates will encourage conservation efforts.

The principal reason for the staff minimum bill recommendation is to generate more of Southwest's fixed costs from minimum use customers. The minimum bill of $16.75 would include the $3.50 customer charge. Since most of its revenue (81%) would be collected during the summer months, this approach would mitigate cash flow problems. Residential users with average summer use below the crossover point of 21 therms are the space heating only customers in Barstow and Victorville at 9.1 therms, and second homes in Victorville and Big Bear areas at 18.6 therms. The minimum bill will affect these people mainly during the summer months. Those in Victorville and Big Bear using 18.6 therms would be only slightly affected. Those customers in Big Bear who may be summer-only users and who might desire to avoid the minimum bill charge of $16.75 during the winter months, could elect to have their gas service shut off during the winter. Under Southwest's Schedule G-91, there would be a charge of $18.70 to reestablish service in the spring if same day service is requested. If the company is allowed to schedule the service on other than same day, no charge is assessed.

We concur with the staff recommendation concerning Southwest's commercial-industrial rate design. However, we have reservations with respect to the recommended minimum bill approach for the residential rates. Our chief concern is with the minimum bill level-$16.75. There is a substantial group of customers in the Barstow and Victorville areas who presently pay considerably less than that amount. Some pay only the customer charge of $3.50; and the average space heat only use in Barstow is about 6.6 therms, producing bills of about $7.80. We are concerned that doubling this charge would defeat conservation incentives. We believe the increases are better placed in the commodity portion of the rate structure. However, we recently adopted a customer charge of $4.25 in Southwest's Placer County service area. This is the company's suggestion for its Southern California Division.

Primarily in the interest of conservation and for consistency throughout the company, we will adopt the $4.25 customer charge here, combined with the two tier rate design. There will be a sufficient difference between first and second tier rates to encourage conservation, and such a two tier design will be more easily administered. Further, pilot light turn-off efforts will be more meaningful if we keep the minimum amount a customer must pay at a lower level. In effect while it may be desirable that minor use customers pay a larger portion of fixed expenses, conservation is a more important consideration at this time. We are increasingly concerned, as energy bills become a greater percentage of customer living expenses, that ratepayers get a tangible reward for their conservation efforts. There is little that an average ratepayer can do to avoid higher energy costs except conserve. Southwest's authorized increases for 1984 should be spread over the commodity rates, and not affect the customer charge.

The staff also recommended that the wording contained in Southwest's Schedule G-91, pertaining to Service Establishment Charge, is unclear at the present time. This tariff item contains rates for work performed during regular hours and after hours. But the work scheduled as "after hours" is often done during regular hours if a serviceman happens to be in the customer's neighborhood on another matter. Problems arise when the customer receives service during regular hours but is billed at the after-hours rate. Staff recommends that the "regular hours" designation be changed to "normal service", and that "after hours" be changed to "expedited service". The company agreed with the staff's recommendation. We concur with this proposed clarification and the proposed charges of $18.70 and $37.40, respectively, for normal and expedited service.

D.82-01-063 dated January 18, 1982 ordered Southwest to pay interest on all customer deposits at the rate of interest applied to the deferred cost of supply balancing account. The staff in its Exhibit 13 indicated that Southwest's Tariff Rule 5-C had not been revised to reflect this. A review of Commission records indicates that Rule 5-C still has not been revised. Our decision in this proceeding will iterate Ordering Paragraph 3 of D.82-01-063.

The rate design as discussed above is appropriate for the purposes of this proceeding and will be adopted. It is shown in the following Table 3. Rates include cost of purchased gas as of May 4, 1982. They do not give effect to any increases contemplated under current offset proceedings.

TA[illegible] 3

Adopted Rate Design

(Revenue Dollars in Thousands)

Schedule	Adopted Volume (1000s)	Rates Effective 5-4-82	Revenues at 5-4-82 Rates	Adopted Rates	Revenue at Adopted Rates	Increase Amount	Increase Percent
Residential (G-1, G-IN, GS, GM)							
Customer Months (559.5 M)		$3.50	$ 1,958.3	$4.25	$ 2,377.9	$ 419.6	21.48
Tier I 1/	25,785.1	.5302	13,671.3	.6156	15,873.3	2,202.0	16.1
Tier II	9,827.4	.6992	6,871.3)	.8355	8,941.3	1,323.0	17.4
Tier III	874.3	.8544	747.0)				
Total Residential	36,486.8	.6372	23,247.9	.7453	27,192.5	3,944.6	17.0
Commercial-Industrial							
Customer Months (37.7 M)		3.50	132.0	4.25	160.2	28.2	21.4
GN-1, GN-2, G-5, G-7 (Tier II)	12,075.6	.6992	8,443.3	.8355	10,089.2	1,645.9	19.5
GN-3 2/	3,498.5	.6276	2,195.7	.6580	2,302.0	106.3	4.8
Total Commercial-Industrial	15,574.1	-	10,771.0		12,551.4	1,780.4	16.5
Sales Revenue	52,060.9	-	34,018.9		39,743.9	5,725.0	16.8
Other Operating Revenues			202.0		314.8	112.8	55.8
Total	52,060.9	.6573	34,220.9	.7695	40,058.7	5,837.8	17.1
Over/(Under) Recovered					0.2		

1/ Adjusted by 134.5 Mth for GS discount.

2/ #2 fuel oil @ 71.14¢/th equivalent.

A.82-07-05 ALJ/jn/jt /vdl */jt*

Findings of Fact

1. Southwest requests increases in the rates applicable to service rendered in its Southern California Division during 1983 and 1984.

2. Southwest is in need of additional revenue; however, the increase proposed by the company is excessive.

3. A rate of return during 1983 of 12.93% on our adopted rate base is reasonable. This return will provide a return on common equity of 16.0% and a times interest coverage of 2.59. It is reasonable that Southwest be authorized the same 16.0% return on common equity during 1984.

4. The adopted Summary of Earnings shown in the decision reasonably estimates Southwest's 1983 operating revenues, expenses, and rate base.

5. An allowance for operational and financial attrition during 1984, as set forth in Ordering Paragraph 2 is necessary, and will be authorized, in order to afford Southwest opportunity to earn 16.0% on common equity during 1984.

6. The staff's method of calculating Southwest's 1983 federal income tax liability is more reasonable than the method used by the company, since the staff method results in a lesser present cost for ratepayers. The information shown in our adopted Summary of Earnings properly reflects the consequences of ERTA and TEFRA.

7. Southwest's recent conservation efforts have been good and have resulted in cost-effective energy savings. Its conservation programs proposed for 1983 and 1984 will be cost-effective. The conservation programs and funding recommendations shown in staff Exhibit 16 and 17 are reasonable, except for deletion of the Appliance Conservation Program, which would inappropriately apply ratepayer-provided funds to the promotion of increased gas usage.

8. Rather than terminating these programs with December 31, 1984, an analysis of the remaining market in 1984 will enable us to assess cost-effectiveness more accurately. Southwest should be

directed to furnish the Commission with a cost-effective evaluation of these same program elements in its 1985 rate case.

9. The company-recommended rate design, consisting in part of a customer charge of $4.25, will result in a greater collection of fixed costs from minimum use customers.

10. Cancellation of the third tier rates is reasonable because residential sales at present third tier rates account for only a negligible portion of total residential sales.

11. The 22-cent difference between first and second tier rates will encourage conservation.

12. The staff rate design for commercial-industrial users is reasonable. The customer charge should not be increased in 1984.

13. Increases in rates and charges authorized by this decision are justified and reasonable; present rates and charges, insofar as they differ from those prescribed by this decision, are for the future unjust and unreasonable.

Conclusions of Law

1. Revenue increases of $5,837,600 or 17.06% during 1983 (based over rates effective May 4, 1982) and an additional amount in 1984, as set forth in Ordering Paragraph 2, are reasonable based upon our adopted Summary of Earnings.

2. The rate design shown in Table 3 is reasonable and should be adopted.

3. Southwest should be authorized to place into effect the rate increases found to be reasonable for 1983 and 1984 in Conclusion of Law 1 effective January 1, 1983 and January 1, 1984.

4. Southwest should conduct the conservation programs recommended by and contained in staff Exhibit 16 except for the proposed Appliance Conservation Program. Southwest should furnish the Commission with a cost-effective evaluation of those same program

elements in its 1985 rate case. Those elements not shown to be cost-effective should not be included in Southwest's post-1984 conservation program.

O R D E R

IT IS ORDERED that:

1. Effective January 1, 1983 Southwest Gas Corporation (Southwest) is authorized to file the increases shown in Table 3.

2. On October 15, 1983, Southwest shall file an Advice Letter to implement 1984 attrition rates. The total 1984 attrition requirement at that time will be calculated as follows:

Financial Attrition	\$ 72,700
Operational Attrition	
Nonescalation Elements	954,100
Escalation Elements	
Labor	
$\frac{\$202.400}{.05}$ x (U.S. All-Urban CPI)	______
Nonlabor	
$\frac{\$295.600}{.082}$ x (MPPI*)	______
Total Increase for 1984 Attrition	______

*Modified Producer Price Index, Staff Method detailed on page 29 on this decision.

The rate design spreading this additional increase shall follow the general guidelines set forth in this decision except that the customer charge of \$4.25 shall not be increased.

3. Southwest shall conduct the conservation programs recommended by the staff in Exhibit 16. Southwest shall develop information concerning the cost-effectiveness and remaining market potential of these same program elements for presentation in its 1985 rate case.

4. Southwest shall pay interest on all customer deposits at the rate of interest applied to the deferred cost of supply balancing account, and shall amend Rule 5-C of its tariff in accordance with this directive immediately.

5. By February 15, 1983, Southwest shall mail to all its customers in its San Bernardino County service area a bill insert notice as shown in Appendix B describing the effects of ERTA and TEFRA on rate increases.

This order is effective today.

Dated NOV 17 1982, at San Francisco, California.

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

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

Joseph E. Bodovitz, Executive Director

APPENDIX A

Gas Utilities

Bay State Gas Company
Cascade Natural Gas Corporation
Connecticut Natural Gas Corporation
Indiana Gas Company, Inc.
Laclede Gas Company
Minnesota Gas Company
Northwest Natural Gas Company
Piedmont Natural Gas Company
Public Service Co. of North Carolina
Washington Gas Light Company

Combination Companies Electric and Gas

Central Hudson Gas and Electric Company
Central Illinois Light Company
Interstate Power Company
Iowa Southern Utilities Company
Madison Gas and Electric Company
Missouri Public Service Company
Montana - Dakota Utilities Company
Sierra Pacific Power Company
Southern Indiana Gas and Electric Company
Wisconsin Public Service Company

(END OF APPENDIX A)

APPENDIX B

Bill Insert for Southwest Customers
(Southern California Division)

Of the $5,837,600 annual rate increase recently granted to Southwest for its Southern California Division by the Public Utilities Commission, $488,000 was attributable to President Reagan's Economic Recovery Tax Act of 1981, and the Tax Equity and Fiscal Responsibility Act of 1982 which requires the Public Utilities Commission to charge ratepayers for the expense of taxes which are not now being paid to the Federal Government and which may never be paid. This expense may increase in the future.

(END OF APPENDIX B)

ALJ/jn *

ORIGINAL

Decision 82 11 061 NOV 17 1982

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of SOUTHWEST GAS CORPORATION for Authority to Increase Natural Gas Rates in San Bernardino County, California.	Application 82-07-05 (Filed July 2, 1982)

William Claerhout, Attorney at Law, for Southwest Gas Corporation, applicant.
Thomas P. Corr, Attorney at Law, and Jay B. Johnson, for the Commission staff.

O P I N I O N

Summary of Decision

Southwest Gas Corporation (Southwest) has requested increases in its rates for the sale of natural gas in San Bernardino County of about $8.6 million during test year 1983, and another $1.6 million in attrition year 1984. The company originally requested a return on common equity of 19.0%, but stipulated at prehearing conference to the midpoint of the staff-recommended range, 16.75%. The decision authorizes a return on common equity of 16.0%, which equates to rates of return on rate base of 12.95% in 1983 and 13.13% in 1984.

The decision grants a total revenue increase of $5,859,100 or 16.90% for 1983 and an additional allowance for 1984. Included in the total revenue requirement is $488,000 which represents the effects of Economic Recovery Tax Act and Tax Equity and Fiscal Responsibility Act.

The decision also requires that Southwest observe a flow-through method of accounting in connection with depreciable property acquired prior to 1981; the company had requested that this property be accorded normalization treatment. The company's method would have increased 1983 expenses by about $440,000.

With respect to rate design Southwest requested that the monthly customer charge be increased from $3.50 to $4.25, and that the third tier rates be canceled. The decision adopts Southwest's recommendation, rather than the staff's counter proposal, consisting of a monthly minimum bill of $16.75. Staff had concurred with cancellation of the little-used third tier rate block.

The decision also adopts the staff's recommendation concerning funding for Southwest's 1983-1984 conservation programs; however, rather than ordering that the programs be terminated after 1984, directs Southwest to examine ongoing programs when preparing its 1985 rate case and determine cost-effectiveness at that time.

General Information

Southwest is a natural gas company as defined in the Natural Gas Act, engaged in the transmission and sale of natural gas at wholesale rates. It is also a public utility engaged in the transmission, distribution, and sale of natural gas for domestic, commercial, agricultural, and industrial uses. As of December 31, 1981, Southwest served approximately 173,000 customers in Arizona, 121,000 in Nevada, and 52,500 in California.

Southwest is divided into two service areas within California. This application was filed in connection with Southwest's Southern California Division. This division is engaged in retail sales of natural gas in the general areas of Victorville, Barstow, and Big Bear Lake in San Bernardino County. Southwest currently serves approximately 45,250 customers in this division; it has projected an increase in customers to 50,140 for test year 1983.

Southwest has requested annual revenue increases of approximately 8.6 million dollars, providing a rate of return of 14.53%. Without rate relief in test year 1983, Southwest asserts it would earn a rate of return of 1.60% on its Southern California operations. Further, Southwest has requested about 1.6 million dollars in additional revenues during 1984 as an attrition allowance. This attrition has two elements--financial and operational. The financial attrition will be the result of changes in Southwest's embedded costs of debt and increases in the dividend rate for preferred stock. This occurs when debt and preferred stock are retired and rolled over with new issues at rates exceeding current costs. Southwest's operational attrition will occur because of changes in operating revenues due to additional cutomers, sales, operating expenses, depreciation expenses, rate base, etc.

Southwest's last general rate increase for this district was granted by Decision (D.) 92507, dated December 16, 1980 in Application (A.) 59359. By that decision Southwest was granted a rate of return of 11.72% and a return on equity of 14.30% for test year 1981. Southwest's request for approximately 8.6 million dollars in 1983 amounts to about a 30.5% increase in rates. Its request for a 14.53% rate of return equates to a 19.0% return on common equity in the test year.

Notice of the application and hearings was published in five newspapers of general circulation in Southwest's ~~Southwest's~~ Southern SS California service area, in accordance with the provisions of Rule 24 of the Commission's Rules of Practice and Procedure. Notice of the hearings was mailed to each customer in the district. A public witness testimony proceeding was conducted in Victorville during the afternoon and evening of August 19, 1982. About 50 people attended the afternoon session; 21 offered statements in opposition to the increases. About 20 people attended the evening session, and 7 presented statements opposing the application. A prehearing conference was held in San Francisco on August 23, 1982. Finally, the evidentiary portion of the matter was heard in San Francisco on August 30, 1982 before Administrative Law Judge (ALJ) John Lemke. The application was submitted subject to the receipt of late-filed Exhibits 18 and 19, and limited briefs by September 30.

a. That the return to equity holders be commensurate with returns on investments in other enterprises having similar risks;

b. That the return be sufficient to enable the utility to attract capital at reasonable rates while assuring confidence in the utility's financial integrity;

c. That the return balance the interests of investors and ratepayers.

Mowrey states that no precise methodology can guarantee a result with respect to a proper return on equity with pinpoint accuracy; for this reason he recommended a range. He further stated that in 1978 Southwest instituted a policy of increasing dividends annually in an attempt to buoy the market price of its common stock. But earnings have not been sufficient to support this policy and dividends have not been increased since the second quarter of 1980. Additional shares of common stock have been issued during this period in an effort to maintain a reasonable capital structure Mowrey compared Southwest's recorded earnings with those of two groups of energy utilities for the period 1977 to 1981. The list of companies studied consisted of 10 gas utilities and 10 combination electric and gas utilities. All 20 utilities are listed in Appendix A.

The following table shows the earnings rate on average total capital for Southwest, compared with the two groups of utilities, during the period 1977-1981.

The above table shows that a change in the common equity return of 25 basis points results in a change in the overall rate of return of approximately 10 basis points.

Mowrey believes his recommendation will balance the interests of investors and customers, allow Southwest the opportunity to meet fixed charge requirements, pay a suitable dividend, provide moderate additions to retained earnings and restore Southwest to better financial health.

Southwest stipulated to the midpoint of the staff recommendation for return on common equity.* It did not cross-examine Mowrey. However, the ALJ inquired concerning the time at which Mowrey formulated his recommendation and whether any significant changes had occurred recently in the financial world which would cause him to alter his recommendation. Mowrey was also asked concerning his opinion about the risk premium attached to a pure gas company such as Southwest, compared with an electric utility or a combination gas and electric utility--especially an electric utility with nuclear generating plants.

He replied that if an investor were to compare Southwest with electric utilities, the nuclear issue could be a very strong consideration; that this issue has been a very real factor subsequent to the Three Mile Island accident. He stated that the nuclear factor, however, at least in California, is somewhat mitigated because Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SoCal) projects are coming to completion and hopefully will be on line soon. He testified that electric utilities are still on the whole riskier than gas utilities, but that the gas utility risk has been increasing; that the yield required on gas utilities has been increasing and the gap closing between what investors will demand from a straight electric versus a gas utility.

* We must point out that the stipulation by the parties to the proceeding in no way binds the Commission which must make its decision on the entire record before it.

Asked whether some investors might view a pure gas company as virtually a "no-lose" investment in light of their ability to recover costs which had not been forecast through balancing accounts, Mowrey stated that while balancing accounts are currently in effect, this is not to say that they will remain so indefinitely. He also observed that there is the additional risk, as gas prices increase, that customers can be driven off-line to alternate sources.

After consideration, we believe that the midpoint of the staff recommendation (16.75%) on common equity would be an excessive allowance for us to authorize Southwest at this time. We believe that a return of 16.0% on common equity would accomplish the objectives set forth in the Hope and Bluefield decisions for the following reasons:

1. The prime rate is trending downward and is currently below 12.0%.
2. While the return on equity at the staff midpoint would result in a times interest coverage of 2.65, a return of 16.0% will still result in a respectable coverage of 2.59.
3. Rate of return is nothing else than the cost of capital. While we concur that Southwest did not experience good earnings during 1980 and 1981, we are concerned here with capital costs in future years. The equity allowance and resultant coverages will be reasonable in light of present and future circumstances surrounding this proceeding.

omit ~~4. We authorized Southwest a return on~~ equity of ~~15.5% for its~~ Placer County operations ~~during 1982~~ (D.82-01-63, dated January 19, 1982 in A.60714).

4. ~~5.~~ We authorized SoCal an equity allowance of 14.6% for test-year 1981 (D.92497, dated December 5, 1980, in A.59316.)

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omit ~~6. We awarded PG&E~~ an equity allowance of 16.0% ~~during test year 1982.~~ We deem PG&E's ~~risk~~ factor greater than Southwest's.

omit ~~7. Sales adjustment, balancing account,~~ and attrition ~~mechanisms will help~~ to ensure ~~that Southwest~~ has adequate opportunity to realize the authorized rate of return.

5. ~~8.~~ Risk-free issues (Treasury Bills) have been and are currently selling at amounts less than 10%.

Furthermore, we cannot be insensitive to the needs and circumstances of the ratepayers in Southwest's Southern California Division. There was a considerable outpouring of sentiment expressed at the public witness hearings conducted in Victorville concerning the magnitude of the requested (about 30%) increase. The correspondence section of the formal file contains over 80 letters from ratepayers residing in this district who are concerned about the increases. We are mindful that it is the ratepayers who are compensating Southwest for its cost of capital, and of the severely ailing economy affecting many of those customers.

We will therefore authorize a common equity return of 16.0% for 1983 and 1984, and combine it with the staff's capitalization ratios shown in the following table.

Component	Capitalization Ratios	Cost	Weighted Cost
	1983		
Long-Term Debt	47.00%	10.64%	5.00%
Preferred Stock	12.50	11.77	1.47
Common Equity	40.50	16.00	6.48
	100.00		12.95
	1984		
Long-Term Debt	47.00%	10.98%	5.16%
Preferred Stock	12.50	11.88	1.49
Common Equity	40.50	16.00	6.48
	100.00		13.13

We are interested in and appreciate the efforts of the staff in developing its recommendation, particularly the capital attraction (DCF) analyses performed in connection with Southwest's capital costs. However, we have never set return on equity by use of a formula or a single-type of analysis and we decline to do so here. We must set return on equity on a case-by-case basis considering all the economic factors prevailing at the time of our decision.

Federal Income Taxes

At the close of the evidentiary hearings, the ALJ directed the staff and Southwest to submit late-filed exhibits demonstrating the effects of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The exhibits were filed on September 20, 1982. Concurrent briefs were also ordered by the ALJ for the single purpose of addressing proper ratemaking treatment to be accorded Southwest's tax expenses in light of the Economic Recovery Tax Act of 1981 (ERTA).

Under ERTA an Accelerated Cost Recovery System (ACRS) is permitted. Essentially, this system allows a rapid depreciation of assets for tax purposes. This, in turn, results in a deferral of tax

The staff deems Southwest's conservation performance "quite good", noting that average residential gas use has been reduced on a par with that of PG&E and SoCal and at a much lower cost per customer: Southwest - $7.38; PG&E - $23.20; SoCal - $10.66. Furthermore, the staff evaluation of the programs proposed by Southwest is that they are "cost-effective, worthwhile and appropriate."

We believe it premature at this time to order termination of Southwest's conservation efforts at the end of 1984 based upon the evidence before us. The information which Southwest furnished the staff indicates only a limited realistic market potential in some categories for 1984. But other areas show continued promise, e.g. conservation devices such as showerheads and water heater blankets, pilot turn-off (even though some of these efforts will be made by informed customers regardless of Southwest's program). The possibility of further cost-effective conservation indicates that another examination should be made of the potential for energy savings when the company is assembling its 1985 rate case. The data available at that time will be closer to and much more meaningful regarding Southwest's post-1984 operations than that currently available. Furthermore, Southwest projects an increase of almost 5,000 customers for 1983 alone. We do not intend to burden ratepayers with higher rates due to questionable cost-effective programs. Those not shown to be clearly cost-justified will not be funded in the next general rate case.

We will, therefore, adopt the 1983-1984 funding recommendations contained in staff Exhibits 16 and 17. However, since RCS and the 8% loan programs are covered by a balancing account we will reduce the funding levels accordingly. Additionally, the $144,200 of unspent funds shall be applied to the balancing account for the RCS and the 8% weatherization programs. The adopted funding levels are:

1983 Recommended Expenditures	$264,500
1984 Recommended Expenditures	206,500
Subtotal	471,000 ÷ 2
Adopted Annual Funding Level for 1983 and 1984	$235,500
Ac. 909 - Informational and Instructional Advertising Expenses	$13,600
Total Customer Service and Informational Expenses	$249,100

Summary of Earnings

The information shown in the following table reflects Southwest's adjusted estimates, the staff's estimates, the effect of disputed issues, ERTA, TEFRA, and adopted revenues and expenses for test year 1983.

Estimated and Adopted Summary of Earnings
Test Year 1983

Item	Staff	Utility	Adopted
	At Southwest Proposed Rates (Thousand of Dollars)		
Operating Revenues	$37,014.2	$36,981.4	$34,254.2
OPERATING EXPENSES			
Other Gas Supply Expenses	$20,308.4	20,311.1	20,308.4
Transmission Expenses	4.3	5.9	4.3
Distribution Expenses	2,293.4	2,447.4	2,293.4
Customer Accounts	1,867.5	2,080.9	1,836.0
Customer Service and Info.	297.0	644.8	249.1
Sales Expense	46.0	54.2	46.0
Administration and General	1,540.3	1,486.0	1,514.3
Subtotal	26,356.9	27,030.3	26,251.5
Depr. & Amort. Exp.	1,592.3	1,695.3	1,592.3
Taxes Other Than Income	340.9	374.2	340.9
Calif. Franchise Tax	71.1	104.3	65.7
Federal Income Tax	2,981.0	2,648.9	1,762.3
Total Operating Expenses	31,342.2	31,853.0	30,012.7
Net Operating Revenues Adjustd.	5,672.0	5,129.4	4,241.5
Rate Base	32,749.5	35,302.5	32,756.3
Rate of Return	17.32%	14.53%	12.95%

Included in the summary is reflection of Southwest's sale and leaseback of its headquarters building in Las Vegas. This causes an increase in administrative expenses of about $189,000. The increase in expenses is more than offset by a corresponding reduction in allocated common plant and reserve. A net ratepayer savings of about $80,000 has been achieved through this transaction.

The adopted summary also reflects salary increases of 5% for 1983. Southwest has placed a freeze on the hiring of new employees.

<u>Attrition</u>

Southwest had originally requested about $1.6 million in additional revenue commencing in 1984 due to operational and financial attrition. Based on our adopted Summary of Earnings, the staff has determined that an additional $1,524,800 will provide adequate revenue for 1984 attrition. Staff's estimate contains the following elements:

Financial Attrition	$ 72,700
Operational Attrition	
Nonescalation Elements	954,100
Escalation Elements	
Labor @ 5%	202,400
Nonlabor @ 8.2%	295,600
Total	1,524,800

Staff's 8.2% escalation of nonlabor, based on the Modified Producer Price Index (MPPI), is calculated by weighting various elements of the Producer Price Index and the U.S. Consumer Price Index-Wage Earner (CPI-W) as follows:

TABLE 1

1983 Gas Margin Derivation

Line No.	Item			Amount (Thousands)
1	Gross Revenue			$34,254.2
	Less :			
2	Uncollectibles	352.9		
3	Franchise Fees	325.9		
4	Total F&U			678.8
5	Net Revenue			33,575.4
6	F&U Factor for Cost Item (L.4 ÷ L.5) x 100%		2.0217%	
	Cost of Gas			
7	Purchases	$20,305.00		
8	F&U @2.0217%	410.50		
9	PGA Cost (L.7 - L.8)			20,715.5
10	Revenue Requirement for 1983			34,254.2
11	Gross Gas Margin (L.10 - L.9)			13,538.7

TABLE 2

REVENUE REQUIREMENT
Based on the Adopted Margin and
May 4, 1982 Cost of Gas

Line No.	Item	Amount (Thousands)
	Cost of Gas @ 5-4-82 Rates	
1	Purchases (54,161,400 th @ $0.42068)	$22,784.6
2	PGA Balancing Account (Annualized)*	40.2
3	Subtotal	22,824.8
4	F&U @ 2.0217%	461.4
5	PGA Cost	23,286.2
6	Gas Margin	13,538.7
7	SAM Balancing Account (Annualized)*	3,255.4
8	Revenue Requirement (L.5 + L.6 + L.7)	40,080.3
9	Revenue at Present Rates	34,220.9**
10	Increase	5,859.4

* Balancing Account Revenues from Schedule 1 of Advice Letter 292 as authorized by Resolution G-2466 dated May 4, 1982.

** Table 3, Adopted Rate Design - Revenues at 5-4-82 Rates (p. 36)

Southwest's present rate design consists of three tiers plus a $3.50 customer charge. It originally proposed to eliminate the residential third tier and to increase the monthly customer charge to $5.50. It later amended its customer charge recommendation and now suggests that it be increased to $4.25, the same charge in effect in

TABLE 3

Adopted Rate Design

(Revenue Dollars in Thousands)

Schedule	Adopted Volume (1000s)	Rates Effective 5-4-82	Revenues at 5-4-82 Rates	Adopted Rates	Revenue at Adopted Rates	Increase Amount	Increase Percent
Residential (G-1, G-IN, GS, GM)							
Customer Months (559.5 M)		$3.50	$ 1,958.3	$4.25	$ 2,377.9	$ 419.6	21.43
Tier 1 1/	25,785.1	.5302	13,671.3	.6159	15,881.0	2,209.7	16.2
Tier 11	9,827.4	.6992	6,871.3)	.8361	8,947.7	1,329.4	17.5
Tier 111	874.3	.8544	747.0)				
Total Residential	36,486.8	.6372	23,247.9	.7442	27,206.6	3,958.7	17.0
Commercial-Industrial							
Customer Months (37.7 M)		3.50	132.0	4.25	160.2	28.2	21.4
GN-1, GN-2, G-5, G-7 (Tier 11)	12,075.6	.6992	8,443.3	.8361	10,096.4	1,653.1	19.6
GN-3 2/	3,498.5	.6276	2,195.7	.6580	2,302.0	106.3	4.8
Total Commercial-Industrial	15,574.1	-	10,771.0		12,558.6	1,787.6	16.6
Sales Revenue	52,060.9	-	34,018.9		39,765.2	5,746.3	16.9
Other Operating Revenues			202.0		314.8	112.8	55.8
Total	52,060.9	.6573	34,220.9	.7699	40,080.0	5,859.1	17.12
Over/(Under) Recovered					(0.3)		

(Red Figure)

1/ Adjusted by 134.5 Mth for GS discount.

2/ #2 fuel oil @ 71.14¢/th equivalent.

Findings of Fact

1. Southwest requests increases in the rates applicable to service rendered in its Southern California Division during 1983 and 1984.

2. Southwest is in need of additional revenue; however, the increase proposed by the company is excessive.

3. A rate of return during 1983 of 12.95% on our adopted rate base is reasonable. This return will provide a return on common equity of 16.0% and a times interest coverage of 2.59. It is reasonable that Southwest be authorized the same 16.0% return on common equity during 1984.

4. The adopted Summary of Earnings shown in the decision reasonably estimates Southwest's 1983 operating revenues, expenses, and rate base.

5. An allowance for operational and financial attrition during 1984, as set forth in Ordering Paragraph 2 is necessary, and will be authorized, in order to afford Southwest opportunity to earn 16.0% on common equity during 1984.

6. The staff's method of calculating Southwest's 1983 federal income tax liability is more reasonable than the method used by the company, since the staff method results in a lesser present cost for ratepayers. The information shown in our adopted Summary of Earnings properly reflects the consequences of ERTA and TEFRA.

7. Southwest's recent conservation efforts have been good and have resulted in cost-effective energy savings. Its conservation programs proposed for 1983 and 1984 will be cost-effective. The conservation programs and funding recommendations shown in staff Exhibit 16 and 17 are reasonable.

8. Rather than terminating these programs with December 31, 1984, an analysis of the remaining market in 1984 will enable us to assess cost-effectiveness more accurately. Southwest should be

directed to furnish the Commission with a cost-effective evaluation of these same program elements in its 1985 rate case.

9. The company-recommended rate design, consisting in part of a customer charge of $4.25, will result in a greater collection of fixed costs from minimum use customers.

10. Cancellation of the third tier rates is reasonable because residential sales at present third tier rates account for only a negligible portion of total residential sales.

11. The 22-cent difference between first and second tier rates will encourage conservation.

12. The staff rate design for commercial-industrial users is reasonable. The customer charge should not be increased in 1984.

13. Increases in rates and charges authorized by this decision are justified and reasonable; present rates and charges, insofar as they differ from those prescribed by this decision, are for the future unjust and unreasonable.

Conclusions of Law

1. Revenue increases of $5,859,400 or 17.12% during 1983 (based over rates effective May 4, 1982) and an additional amount in 1984, as set forth in Ordering Paragraph 2, are reasonable based upon our adopted Summary of Earnings.

2. The rate design shown in Table 3 is reasonable and should be adopted.

3. Southwest should be authorized to place into effect the rate increases found to be reasonable for 1983 and 1984 in Conclusion of Law 1 effective January 1, 1983 and January 1, 1984.

4. Southwest should conduct the conservation programs recommended by and contained in staff Exhibit 16. Southwest should furnish the Commission with a cost-effective evaluation of those same

program elements in its 1985 rate case. Those elements not shown to be cost-effective should not be included in Southwest's post-1984 conservation program.

O R D E R

IT IS ORDERED that:

1. Effective January 1, 1983 Southwest Gas Corporation (Southwest) is authorized to file the increases shown in Table 3.

2. On October 15, 1983, Southwest shall file an Advice Letter to implement 1984 attrition rates. The total 1984 attrition requirement at that time will be calculated as follows:

Financial Attrition	$ 72,700
Operational Attrition	
Nonescalation Elements	954,100
Escalation Elements	
Labor	
$\frac{\$202,400}{.05} \times$ (U.S. All-Urban CPI)	________
Nonlabor	
$\frac{\$295,600}{.082} \times$ (MPPI*)	________
Total Increase for 1984 Attrition	________

*Modified Producer Price Index, Staff Method detailed on page 29 on this decision.

The rate design spreading this additional increase shall follow the general guidelines set forth in this decision except that the customer charge of $4.25 shall not be increased.

3. Southwest shall conduct the conservation programs recommended by the staff in Exhibit 16. Southwest shall develop information concerning the cost-effectiveness and remaining market potential of these same program elements for presentation in its 1985 rate case.

APPENDIX B

Bill Insert for Southwest Customers
(Southern California Division)

Of the $5,859,400 annual rate increase recently granted to Southwest for its Southern California Division by the Public Utilities Commission, $488,000 was attributable to President Reagan's Economic Recovery Tax Act of 1981, and the Tax Equity and Fiscal Responsibility Act of 1982 which requires the Public Utilities Commission to charge ratepayers for the expense of taxes which are not now being paid to the Federal Government and which may never be paid. This expense may increase in the future.

(END OF APPENDIX B)