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Decision No. 82417

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. (Gas)	Application No. 53727 (Filed December 5, 1972; amended April 30, 1973 and July 2, 1973)

Leonard L. Snaider, Attorney at Law, for applicant.
Frank J. Dorsey, Attorney at Law, Office of the Staff Judge Advocate, for the Executive Agencies of the United States, interested party.
Janice E. Kerr, Attorney at Law, Edmund J. Texeira, and John J. Gibbons, for the Commission staff.

O P I N I O N

Southwest Gas Corporation (SW) seeks authority to increase gas rates in its San Bernardino County District (SBCD) to produce revenues sufficient to yield a rate of return for that district of 9.3 percent to allow it to earn sufficient revenues to attract capital on a satisfactory basis. SW estimates that its revenues at present rates for test year 1973 total $5,580,017 and that 1973 revenues would increase to $6,261,739 at proposed rates, an increase of $681,722 or 12.22 percent.

SW, a California corporation, distributes and sells natural gas in portions of San Bernardino County and Placer County as a public utility subject to this Commission's jurisdiction. It is also engaged in intrastate transmission, sale, and distribution of natural gas as a public utility in portions in the states of Nevada and Arizona, and is a natural gas company subject to the jurisdiction of Federal Power Commission with respect to interstate transmission facilities and sales of natural gas for resale on its northern Nevada system.

SW's principal office is in Las Vegas, Nevada where centralized administrative and office functions are performed.

The estimated average number of customers served in the SBCD is 25,863 (approximately 24 percent of SW's customers). SBCD includes service areas in and around the city of Barstow, the city of Victorville, and the community of Big Bear, all in San Bernardino County.

After notice, public hearings were held before Examiner Levander on June 11, 12, and 13, 1973 in Victorville; and on June 26, 1973 in Los Angeles. On the latter date SW presented an opening oral argument. The Commission staff and the executive agencies of the United States (US) then filed written statements of position. SW presented its closing oral argument in this proceeding on July 11, 1973, at the conclusion of the hearings on the rate increase application involving SW's North Lake Tahoe district, Application No. 53747, held in Tahoe City. The matter was submitted subject to the receipt of late-filed exhibits which have been received.

Testimony in behalf of SW was presented by its senior vice president and general counsel, its division manager, its rates administrator, and by two assistant controllers. The Commission staff presentation was made through two financial examiners and two engineers. Several members of the public advised the Commission of their opposition to the proposed increase.

The latest general rate increase for the SBCD was authorized in Decision No. 77448 dated June 30, 1970 in Application No. 51529. The authorized rates were designed to yield an 8.0 percent rate of return on rate base for test year 1970 and a return on common equity of approximately 12 percent. SW's rates have been subsequently changed to reflect changes in the cost of gas from its supplier, Pacific Gas and Electric Company (PG&E). Gas offset rate increases were authorized in Decision No. 82028 dated October 24, 1973 and Decision No. 82107 dated November 13, 1973 as alternate relief to that sought in the first and second amendments to the subject application. Therefore, there is no need to give further consideration to the relief sought in these amendments in this order.

Results of Operation

The tabulation on the following page compares the estimated summary of earnings for test year 1973 under the August 12, 1972[1/] rates and the proposed rates, and sets forth the adopted summary of earnings at the August 12, 1972 rates for test year 1973. The basis for the adopted results are discussed in the following paragraphs.

1/ The tabulation excludes effect of changes in rate schedules to track gas cost modifications after August 12, 1972.

Summary of Earnings
(Estimated Year 1973)

Item	Southwest Estimated: August 12, 1972 Rates	Southwest Estimated: Company Proposed Rates	Staff Estimated: August 12, 1972 Rates	Staff Estimated: Company Proposed Rates	Adopted Results2/
	(Dollars in Thousands)				
Operating Revenues	$ 5,580.0	$ 6,261.7	$ 5,723.5	$ 6,451.5	$ 5,678.1
Operating Expenses					
Oper. & Maint.	3,770.7a/	3,770.7a/	3,672.7a/	3,675.6a/	3,683.4a/
Adm. & Gen. & Misc.	299.2a/	299.2a/	291.7a/	291.7a/	309.9a/
Taxes Excl. Inc.	409.0b/	416.0b/	405.9b/	413.2b/	405.4b/
Income Taxes	-	303.9	93.2	470.3	56.6
Depreciation	420.3	420.3	408.2	408.2	404.5
Total Oper. Exp.	4,899.2	5,210.1	4,871.7	5,259.0	4,859.8
Net Revenues	680.8	1,051.6	851.8	1,192.5	818.3
Depreciated Rate Base	11,308.8	11,308.8	11,381.1	11,381.1	10,994.9
Rate of Return	6.02%	9.30%	7.48%	10.48%	7.44%

a/ Includes payroll taxes.
b/ Excludes payroll taxes.

Operating Revenues

The staff reviewed and adopted SW's estimated number of customers, served under nine classifications, in test year 1973. The differences in estimates for gas sales are due primarily to the period used in developing the average usage per customer. The staff used a five-year period, calendar years 1968-1972 inclusive. SW used a four-year period ending in July 1972. Both SW and staff made estimates for firm service, except for air conditioning and gas engines schedules, based on usage per customer, by district, under average temperature conditions. Recorded usage per customer was used to develop sales estimates for the gas engine and interruptible

2/ At August 12, 1972 rates.

schedules where temperature conditions would not significantly effect sales to these classes of service. SW and staff estimates of air conditioning sales, arrived at by different methods, are identical.

SW's rebuttal testimony on revenues trended usage per customer for four years on a calendar year adjusted basis, and on a 12-month weather adjusted moving total by months for 48 months ending December 1972. The latter method purportedly would trend a larger number of points and would result in a more accurate estimate[3/] and use of that method resulted in revenues approximately $14,000 above SW's original estimate as compared to the staff estimate which was approximately $141,000 above SW's original estimate. The staff contends that SW's multi-point method gives weight to approximately one-half the data for 1968 and 1972; that there was no evidence supporting a change in the trend of the basic data; and that absent such a change in trend the longer trending period should be used. We adopt the staff's estimated trended firm usage.

SW supplies gas to a Marine Corps station at Barstow on both firm and interruptible schedules. Prior to 1970 there was a substantial volume of gas used to supply firm requirements taken through the gas meter supplying the station's interruptible load and therefore the actual mix of firm and interruptible usage for this period can not be determined. SW's Exhibit 12 shows Barstow military sales of firm and interruptible gas sales volumes for the years 1970-1972, the three-year averages of 1,045,472 therms and 2,148,585 therms respectively, and adjusted three-year average sales. We see no rationale for SW's adjustment to the three-year average. The staff contends that offsetting upward adjustments in other classes of customers negate the downward adjustment for these military sales.

3/ SW's witness testified that this monthly point trend method could be used for partial years so as to include all available monthly usage data. However, SW was unable to prepare an exhibit on that basis (Late-filed Exhibit 19).

The abovementioned three-year average provides a reasonable basis for estimating 1973 Barstow military sales to the Marine station.

SW and the staff based their original estimates for military-firm usage in Victorville on inaccurate data. SW stipulated that the staff's revision of sales volumes from 5,380,400 therms to 4,674,796 therms and the related revenue reduction was reasonable. We adopt this revised estimate.

Other revenues are mainly those derived from the service establishment charge. At present rates the staff estimate, mainly derived by pricing out the number of service calls estimated by SW, exceeds SW's estimate by $2,000. At proposed rates SW did not include revenues for normal hours service establishment charges. We adopt the staff estimate for other revenues.

Operation and Maintenance Expenses

SW stipulated to the staff method in estimating purchased gas expenses (at the August 12, 1972 rates charged by PG&E). Adopted purchased gas expenses of $2,650,300 are based upon the staff's estimated sales with the modifications for military sales at Barstow and Victorville discussed above.

SW adjusted its recorded expenses for the 12 months ended July 31, 1972 by using then current wage levels to derive its estimates of the other operating and maintenance accounts for the year ended December 31, 1972. SW's 1973 test year estimates were derived by annualizing a 5.5 percent wage increase estimated to take effect on April 1, 1973, by revising pension, insurance, and payroll taxes, by adding new employees' wages, by including $8,880 (the SBCD allocation of $44,000 for contributions to the American Gas Association coal gasification project so as to provide a future gas supply), and by revising uncollectible expenses. The actual wage increase granted was 6.0 percent. The Cost of Living Council did not modify this increase.

The staff's corresponding estimates generally were based on recorded data from 1968 to 1972, segregated into labor expenses and other than labor expenses. The labor expenses were adjusted to end of 1972 wage levels, a five-year trend by accounts was projected into 1973, and increased by the annualized 5.5 percent wage increase. The staff used different periods and adjusted certain expenses where recorded expenses increased markedly. The staff characterized these increases as abnormal. A witness for the staff testified that in complying with the new standards in General Order No. 112-C additional work was needed to bring the system into compliance with the standards but that there had been and would continue to be a dropoff of these expenses in the future, and that SW was catching up with its meter testing programs through 1972 and it did not consider the reduction of approximately 700 meters to be tested in 1973 as compared to 1972. An additional wage adjustment to include the .5 percent increase over SW's estimate was included in the staff's estimate. The staff expenses other than labor were based on actual recorded data.

SW contends that the staff did not give adequate consideration to its employment of additional personnel to comply with General Order No. 112-C and to meet new occupational safety and health act standards.

The staff contends that there had been an abnormal increase and a subsequent decline in certain of these expenses and that SW's modifications based on the year ending July 31, 1972 are excessive.

SW's sales expenses include an incentive offered to only one builder of $50 per house and other promotional and institutional expenses (e.g. sponsoring builder parties to promote goodwill).

SW justified the builder subsidy to prevent him from going back to building all electric Medallion homes. SW is phasing out, but has included, expenses for promotional activity to builders taking gas for cooking, water heating, and heating. SW has phased out sponsorship of builder parties. SW contends that even though Medallion home incentives are no longer being offered it must counter the higher level of advertising of electric versus gas manufacturers. The staff's estimate adopted SW's expense estimates for service and conservation of energy expenses and eliminated half of the promotional and institutional expenditures which were not related to conservation of energy. SW's sales expenses per customer are higher than those allowed PG&E or other gas utility operations.

The US presented no evidence in this proceeding but it did assist in developing the record through cross-examination and it filed a statement of position.

The US opposed the annualization of wages and allowing increases in excess of the wage board guidelines of 5.5 percent because there were no supporting studies justifying such increases, and the annualized portion of the increase would be out of phase with the test year. This Commission's Rule 23.1 which incorporated the wage board guidelines by reference is no longer in effect.

The operations and maintenance expenses exclusive of the cost of gas as estimated by SW and the staff, and as adopted are as follows:

Item	SW	Staff	Adopted
Transmission Expenses	$ 2,876	$ 2,400	$ 2,400
Distribution Expenses	643,200	536,500	573,100
Customer Accounts Expenses	357,755	366,200	366,000
Sales Expenses	119,279	91,600	91,600
	$1,123,110	$996,700	$1,033,100

The adopted amounts total $90,010 less than SW's estimates and $36,400 more than the staff's estimate.

In general the staff's approach in estimating is superior to that used by SW. However, the staff has not given sufficient consideration to additional personnel and to increases in certain maintenance expenses to meet new requirements. In our adopted sales expense we are eliminating the promotional types of expenditures as recommended by the staff. At this time, considering the energy shortage, it is not appropriate to require the ratepayer to sponsor the installation of nonessential gas lighting, or to pay for promotional or institutional activities of SW not related to conservation. The adopted results give consideration to the annualization of wages at the 6 percent level. The annualization is appropriate when giving consideration to the time that the rates authorized in this order go into effect.

Administrative and General Expenses

SW stipulated to the staff's estimate of $291,700 for administrative and general expenses.

Both SW and the staff assumed that a new general office building under construction in Las Vegas and scheduled for completion in 1973 be included in rate base in the test year. Due to delays the building will not be completed until sometime in early 1974. In the interim the office building previously owned by SW is being rented for $9,355 per month. SW requests that if the Commission deletes the new office building from the allocated rate base the old office rental should be included in expenses. As the US points out because SW capitalizes interest during construction inclusion of this plant in rate base for the full test year results in a duplication of return to the company.

The adopted amount of administrative and general expenses is $309,900, comprised of the abovementioned $291,700 plus a four-factor method allocation to SBCD of 16.21 percent of the rental.

Rate Base

SW stipulated to the staff's estimated rate base which is based on more recent information than the company's estimate. Our adopted results reflect the exclusion of the new office building in Las Vegas and the furniture and equipment in that building because it will not be occupied in the test year. This exclusion reduces allocated plant and the reserve for depreciation.

SW's initial estimate of advances for construction was overstated because consideration was not given to 1973 refunds. The staff's estimate was based on a monthly trend of 1972 advances without ascertaining what new tracts or what new facilities would be required to determine costs. The level of advances should appropriately give consideration to known or anticipated subdivision activity and the location of new developments as related to SW's existing facilities. Where adequate current data does not exist to make estimates of advances it would be appropriate to consider longer trends of growth patterns in the service area. Our adopted rate base incorporates the average level of advances obtained from late-filed Exhibit 14 which is the best estimate of the appropriate level of advances for construction.

A staff witness testified that SW had generally overestimated plant costs in obtaining subdividers advances for construction; that these excess amounts were retained in Account No. 252 subject only to refund based on the free footage allowances set out in the gas main extension rule; that the failure to adjust differences between advances received and actual construction costs on main extension contracts is unfair to subdividers and is not consistent with the intent of the main extension rule; and that this continued practice would promote carelessness in estimating practices and would encourage the utility to estimate higher construction costs for main extension work orders. He recommended that the utility be directed to review Account No. 252 and to refund all amounts in excess of advances received over actual construction costs on completed work orders.

SW argues that some estimates were below cost; that the rule does not provide for advances based on actual cost; that the excess of estimates was approximately 10 percent of advances; and that actual construction conditions and requirements vary in different areas resulting in difficulties in making accurate estimates.

In some instances it would be possible for SW to require advancing of portions of the advances as construction proceeds and to modify costs based upon actual experience. SBCD's new engineer should assist in maintaining closer control of these estimates. We will require SW to submit semi-annual reports of estimated costs and advances for construction and the actual costs of the main extensions to serve subdivisions for calendar years 1974 and 1975. If our review indicates that the deviations in estimating are excessive we may require SW to file a new main extension rule to adjust advances from subdividers based on actual costs.

Our adopted estimate of working cash is based on the staff's working cash estimated method adjusted to reflect the adopted operating expenses previously discussed.

Other Income Deductions

The other adopted deductions from income are based upon the following modifications to staff estimates which were based on more up-to-date information than that used by SW:

(a) City and county franchise taxes have been adjusted to reflect the adopted revenues;

(b) Depreciation expense has been modified for the exclusion of the Las Vegas office, furniture, and equipment; and

(c) Income taxes have been based upon current tax rates, the adopted revenues, operating expenses, liberalized depreciation on a flow-through basis, an investment tax credit based on the average of 1971 to 1973 plant additions, and anticipated interest expense.

The US recommended the use of normalization of deferred income taxes. There is no evidence on this record to support any consideration being given to this kind of treatment.

Summary of Earnings

We have previously adopted operating revenues at August 12, 1972 rates, operating expenses, depreciation expense, taxes, net revenues, and a rate base for SW's SBCD for test year 1973. These net revenues yield a rate of return on rate base of 7.44 percent. The corresponding rate of return at proposed rates (exclusive of tracking changes subsequent to August 12, 1972) is 10.51 percent. The rates we will authorize will yield a rate of return on rate base of 8.75 percent which will result in an increase in revenues of approximately $310,000, a 5.46 percent increase.

Rate of Return

In determining the appropriate rate of return in this proceeding the Commission must weigh the evidence and balance the interest of SW's customers and investors. We strive to give the customer the lowest rates practicable and at the same time provide SW with the funds necessary to operate and maintain its system and to provide its customers with reasonable service.

SW is constitutionally entitled to an opportunity to recover its operating costs and to earn a reasonable return on that portion of its investment which is lawfully devoted to public use. The rate of return on rate base provides for the payment of interest on debt, dividends on preferred stock, and earnings on common equity. The company's earnings level should be sufficient to permit it to attract capital on reasonable terms and to adequately compensate its investors.

The prepared testimony and exhibits of applicant's rate of return and policy witness McCrea pointed out that SW serves 109,000 customers; that its gross annual revenues exceed $53,000,000; that its utility plant cost exceeds $111,000,000; that it is a small utility when compared to PG&E and Southern California Gas Company (SoCal); that the SBCD has experienced and is experiencing unusually high rates of economic and population growth; that this growth offers great economic opportunity to SW and also carries with it a need for substantial capital improvements to meet the needs of new customers; that the gas supply situation may limit this potential growth; that the stock of SW has experienced a decline in market value and a decline in earnings per share, (earnings from income dropped from $1.30 per share for the fiscal year ending September 30, 1971, to $1.10 for the fiscal year ending September 1972; to $1.04 for the year ending December 31, 1972); that SW has paid dividends of $1.00 per share for the last five years.

Witness McCrea testified that the Discounted Cash Flow Method, the Earnings Price Ratio Method, the Comparable Earnings Test, and the Earnings Price-Earnings Book approach should not be used to establish the rate of return for SW; that the Financial Integrity Doctrine would attract capital and preserve and maintain SW's financial integrity; that any sound utility should be able to sell its common stock at some price and thus attract capital but if the price was unduly low the financial integrity of the enterprise would not be preserved and the property of the existing stockholders might eventually be confiscated; that this is happening today in some gas companies and others are on the border line because of inadequate equity return; that SW is in the borderline category; that SW had to raise the new capital it needs to serve present and potential customers in competition with the capital requirements of other industries of all kinds. His criteria for maintaining financial integrity was a rate of return which would result in a selling price above book to avoid confiscation of existing shareholders equity because sales of new shares below book deprives existing stockholders of property without compensation, while the ability to sell above book is one of the principal factors in attracting capital to the enterprise. He said this criteria must be met to avoid a derating of SW's bonds; that it requires consistent earnings on common stock which will permit continuous common dividends at a rate which is suitably related to the per share equity which will permit the sale of common stock at a premium; that the interest of the consumer goes beyond their monthly bills, it includes their need to be provided with reliable service which requires a financially healthy company; that "In September 1972, Southwest issued at par $5 million principal amount of 8-1/4 percent twenty-year First Mortgage Bonds. Because of Southwest's relatively low equity ratio, an issue of common equity might have been suitable at that time. However, our common stock price and our very low price-earnings ratio led us to the conclusion that it was not in the best interest of the Company to issue common stock at that time..."; that lenders imposed restrictive conditions on its debt issues; that SW issued more shares of common stock in

April 1973 than anticipated due to the decline in market value of its shares; that a common stock equity issue was necessary because interest coverage was too low to permit issuance of additional debt in April of 1973; that additional refinancing of approximately $6,000,000 of short term debt will be needed by December 1973 divided equally between equity and debt; that the actual financing decision will depend on various factors which can only be known by late 1973;[4/] and that due to a deterioration in earnings since filing the application he would have recommended a 15 percent return on common equity with respect to SW's California operations, which was the rate sought in Nevada, Arizona,[5/] and for its interstate operations, rather than the 14 percent requested in the application.

His testimony under cross-examination was that a rights offering of its supplier PG&E was sold below book value and the stock of one of PG&E's gas suppliers, El Paso Natural Gas Company, was selling below book value; that SW's last stock issue was quickly sold out; that there was no direct relationship between the bond prices and the stock prices of a company; that he had made no study of the effect on earnings per share if the requested rate relief was granted; that high earnings in the past during periods of high growth were materially due to interest during construction; that he had no

4/ As of January 10, 1974 SW has not filed an application with this Commission for the issuance of any new debt or equity.

5/ Arizona granted what in effect was SW's total request.

expertise as a stock market analyst or as an economist; that quality of management and the company's capital structure affect its integrity; and that for a company with SW's high debt ratio its times interest coverage is relatively insensitive to any increase in rate of return.

Staff Exhibit 9 contains 19 tables and 3 charts related to interest rates, earnings, capital structure, data pertaining to growth in average net plant investment, operating revenues, operating expenses, and net operating income. Trends in five-year averages were shown for the years 1967 to 1971 (which was the latest data available). Many of the tables compare SW's operating results with various averages developed for 10 gas distribution companies and 10 combination gas and electric utilities. The staff presentation gave consideration to Rule 23.1 which was then in effect. It is still appropriate for us to attempt to minimize future inflationary effects in arriving at our decision.

The staff witness testified that at his 8.55 percent recommended rate of return the after tax coverage will be 2.03 times interest as compared to interest coverage of 2.21 at SW's requested return of 9.3 (this did not consider the actual bond indenture provisions (e.g. depreciation expense being calculated at a higher rate than book depreciation)); that higher earnings in the past were materially affected by capitalization of interest during construction; that his rate of return recommendation was based on judgment after evaluating several factors and that the comparative earnings comparison developed through these tables and charts was one of the elements considered; that the companies used as a basis for comparison were chosen primarily on their utility status; and that in choosing companies recognition was given to customer mix, types of service provided, growth prospects, service area, regulatory environment, and the localized economic conditions prevailing in their territories. He testified that the proportion of debt in SW's capital structure as well as the earnings rates on its common equity affect the coverage for payment of interest; that over a ten-year period the company's debt ratio remained relatively high, averaging 65 percent of total capital, while its earnings rate on common equity averaged about 14 percent; that SW followed a general industry trend of relying primarily on the sale of debt securities to finance its construction requirements because debt has been the cheapest form of financing; that for the last several years the combination of high debt ratio and high interest for additional borrowings have significantly eroded SW's earnings; particularly in 1972 when earnings on common equity was 9.50 percent and after tax interest coverage was 1.80 times; that SW's proposed financing would reduce the debt ratio to about 60 percent by the end of the year; that level of debt was a maximum level and the sale of additional common stock would alleviate the coverage problem only slightly; that the issuance of preferred stock as an alternative to debt would have a more favorable influence on the coverage factor; that the sale of more debt would increase imbedded costs and granting higher earnings when combined with other factors might result in a static level of interest coverage giving added incentive to still further increases on earnings on common equity; that the Commission cannot ignore the impact on customers of allowing the requested return on common equity; and that his recommended 12 percent return on equity would result in fair rates to the customer and provide a reasonable return to present and prospective investors in SW.

The US and the staff both point out SW's failure to make any objective comparison with other companies. The only comparison made by SW was that the rate of return granted PG&E, San Diego Gas and Electric Company, and SoCal in their 1972 proceedings was the same as was being recommended by the staff for SW; that due to its increased risks SW was entitled to a higher rate of earnings, namely 14 percent on common equity. SW stipulated to the staff's determination of capital ratios and the cost of various factors with the exception of the rate on common equity. SW argued that it could not be compared with these major companies with Aa debt ratings; that its stock was sold over-the-counter and its debt had a Ba rating.

The US supported the staff rate of return recommendation.

The staff's capital ratio and cost factors together with our adopted cost factors which contain a return on common stock equity of 12.57 percent is tabulated below:

Rate of Return on Rate Base

Capital Components	Staff & Adopted Capital Ratios	Cost Factors		Weighted Cost	
		Staff	Adopted	Staff	Adopted
Long Term Debt	59.69%	7.07%[a/]	7.09%[b/]	4.22	4.23
Preferred Stock	7.06	4.84	4.84	0.34	.34
Common Stock Equity	33.25	12.00	12.57	3.99	4.18
Total	100.00%			8.55	8.75

a/ Includes 3,000,000 new debt at 8.38%.
b/ Includes 3,000,000 new debt at 8.75%.

Rate Design

SW stipulated to the staff's methodology in spreading rates. The staff's recommended rate design gave primary emphasis to the present gas shortage situation and sought to promote conservation. The staff proposals would:

(a) Eliminate special summer rates in the tail block of Schedule Nos. G-1 and G-2 because there is no need to have special rates to encourage gas consumption in the summer months;

(b) Add an initial $0.0024 per therm to all rate blocks in interruptible schedules;

(c) Add a uniform increase of $0.0003 per therm to all firm schedules to compensate for PG&E's increased firm demand charge;

(d) Close Schedule G-15, street and outdoor lighting natural gas service;

(e) Provide for different service establishment changes for regular hours and for after hours service based upon average time and labor costs to perform the service; and

(f) Apply all remaining increases among all classes of service as a uniform percentage increase.

The staff also recommended that SW provide a bill frequency analysis prior to its next general rate proceeding to permit consideration of alternate rate blockings. When SW changed from cubic foot blockings to a therm basis the therm blockings were calculated by multiplying the numbers of cubic feet by the Btu value of the gas for each block. SW should give consideration to rounding and simplify its rate schedules in a future proceeding.

The US objected to the larger than average percentage increase for large users because there was no basis for determining that such an increase would conserve energy. The US stated that a cost of service study should be available as a foundation for the design of rates; that the Commission denied its request for a special military rate in Decision No. 77448 because of the lack of a cost of service study; that the Navy Department requested SW and the Commission staff to prepare a cost of service study for this proceeding and that no such study has been prepared. The US cited Decision No. 78802 and Application No. 53488 both involving Southern California Edison Company rate increases as to the need for a cost of service study. In Decision No. 81919 in Application No. 53488 we utilized cost of service studies in adopting the authorized rates. The ensuing result was a flatter rate design between large and small customer classes to hopefully discourage waste.

The Commission has heretofore taken testimony on cost of service involving gas utilities but has not adopted one of them as the key determinant in rate design. It would appear appropriate that the US contact SW and indicate the nature and the scope of the material the US would require for the preparation of a cost of service study. SW could then prepare such a study within the parameters set forth by the US or provide the data necessary for the US to make its own study. In either case the burden of proof in supporting the results of such a study as the basis for rate design would be with the US unless SW desired to sponsor it. If the parties are unable to come to an agreement as to the preparation of such an exhibit or as to the furnishing of necessary data the dispute could then be referred to us for resolution. SW is entitled to rate relief in this proceeding and we will not delay the granting of such relief for the preparation of a cost of the service study. However, we anticipate that producing a cost of service study will not be an issue in a future general rate proceeding.

We will adopt the basic approach of the staff in allocating cost between classes except that the residual increases have been concentrated in the minimum blocking within a class, rather than spread uniformly, in order to mitigate the effect of possible declines in sales volumes caused by compliance with requests by public officials to conserve energy in this time of shortage and to thus enable SW to recoup more of its fixed charges in the minimum blocks.

Other Matters

SW advised the Commission that it had not kept its customer complaint records in the detail required by General Order No. 58-A but that it would do so in the future.

SW had not yet made its election as to whether or not it would utilize the asset depreciation range (ADR) in the calculation of its 1973 income tax depreciation. The staff stated that whether or not ADR was used in 1973 the effect would be negligible, but requested that SW be given notice that ADR may be imputed in a future rate proceeding. Evidence and argument on the issue of whether or not to require the use of ADR has been presented in Application No. 53587 of The Pacific Telephone and Telegraph Company and in the Rehearing on Application No. 51904 of General Telephone Company of California. The decisions in those proceedings may provide guidance regarding the ADR issue.

SW has not kept any statistics as to density of customers expressed as meters per mile. Such statistics should be compiled so that in a future rate proceeding it would be possible to ascertain whether zone rates are appropriate.

Findings

1. A reasonable estimate of SW's SBCD results of operations for test year 1973, at August 12, 1972 rates, is:

ADOPTED 1973 SUMMARY OF
EARNINGS AT AUGUST 12, 1972 RATES

Item	San Bernardino County District
Operating Revenues	$ 5,678.1
Operating Expenses	
Operation & Maint.	3,683.4
Adm. & Gen. & Misc.	309.9
Taxes Excl. Income	405.4
Income Taxes	56.6
Depreciation	404.5
Total Operating Expenses	4,859.8
Net Revenues	818.3
Depreciated Rate Base	10,994.9
Rate of Return	7.44%

2. A rate of return of 8.75 percent for SW's SBCD is reasonable. The corresponding return on common equity under the adjusted capital structure adopted would be 12.57 percent. This rate of return would be achieved with operating revenues of approximately $5,988,000 which would be an increase of approximately $310,000 or 5.46 percent.

3. There is no cost of service study available to utilize as a tool for rate design in this proceeding.

4. The staff's methodology for apportioning the rate increase is reasonable except that the residual portion of the increase which the staff proposes to be spread on a uniform percentage basis in each class should be concentrated in the minimum blocking within a class, rather than spread uniformly, in order to mitigate the effect of possible declines in sales volumes caused by compliance with requested energy conservation requests. This rate design will enable SW to recoup more of its fixed charges in the minimum block. Schedule No. G-15 should be closed and the special summer rates eliminated in the interest of energy conservation.

5. SW was authorized to increase its rates to offset increases in the cost of its gas in Decision Nos. 82028 and 82107 as alternate relief to that sought in the first and second amendments of this application. There is no need to consider further relief relating to these amendments in this decision.

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

7. SW should report the results of its discussion with the US concerning the procedure agreed upon to prepare a cost of service study for use in a future general rate increase proceeding.

8. The ratepayers should not bear the burden of expenses incurred for the promotional activities of SW. Therefore, the adopted results reflect a reduction in sales expenses of $27,700 below SW's estimate for SBCD.

9. The errors in SW's estimates relating to advances for construction are excessive. SW should file semi-annual reports in 1974 and 1975 concerning construction advance estimates and costs for our review.

10. SW should prepare meter density statistics and bill frequency analysis studies as rate design tools for use in a future general rate increase proceeding.

The application should be granted to the extent set forth in the order which follows.

O R D E R

IT IS ORDERED that:

1. After the effective date of this order, applicant Southwest Gas Corporation is authorized to file the revised rate schedules attached to this order as Appendix A. Such filing shall

comply with General Order No. 96-A. The effective date of the revised schedules shall be one day after the date of filing. The revised schedules shall apply only to service rendered on and after the effective date of the revised schedules.

2. Within ninety days after the effective date of this order Southwest Gas Corporation shall file a report concerning the arrangements made with the Executive Agencies of the United States for the preparation of a cost of service study for use in a future general rate increase proceeding.

3. Southwest Gas Corporation shall file semi-annual reports of its estimated costs and advances for construction in California and the actual costs of main extensions in sufficient detail to enable us to review the reasonableness of the estimates. These reports shall be filed by July 31 and January 31 for 1974 and 1975 construction.

The effective date of this order shall be ten days after the date hereof.

Dated at San Diego, California, this 5th day of FEBRUARY, 1974.

Vernon L. Sturgeon
President
William Symons, Jr.
J. P. Vukasin Jr.
Thomas Moran
D. W. Holmes
Commissioners

APPENDIX A

Southwest Gas Corporation
Southern California Districts

Applicant's rates, charges, rules and conditions are changed to the level or extent set forth in this appendix.

Tariff schedules include tracking increases totaling $.01396 /therm from August 12, 1972 to December 21, 1973 as authorized by the Commission.

Description		Per Meter Per Month Rate A	Rate H
GENERAL NATURAL GAS SERVICE			
Rates		G-1	
First	2 therms or less		
	October-May, Inclusive	$3.628	$4.687
	June-September, Inclusive	3.628	1.063
Next	30 therms, per therm	.13597	.15932
Next	72 therms, per therm	.12518	.13732
Next	414 therms, per therm	.11645	.12291
Next	518 therms, per therm	.11214	.11418
Next	2,073 therms, per therm	.10533	.10851
Next	7,256 therms, per therm	.09740	.10363
Next	41,464 therms, per therm	.08945	.09229
Over	51,829 therms, per therm	.08412	.08673
Rates		G-2	
First	2 therms or less		
	October - May, Inclusive	$3.906	$5.077
	June-- September, Inclusive	3.906	1.119
Next	30 therms, per therm	.15104	.17747
Next	72 therms, per therm	.13879	.15252
Next	414 therms, per therm	.12893	.13619
Next	518 therms, per therm	.12405	.12643
Next	2,073 therms, per therm	.11634	.11996
Next	7,256 therms, per therm	.10738	.11441
Next	41,464 therms, per therm	.09841	.10159
Over	51,829 therms, per therm	.09240	.09535

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APPENDIX A

Description	Per Lamp Per Month

STREET AND OUTDOOR LIGHTING NATURAL GAS SERVICE

Rates	G-15
1.99 cu. ft./hr. or less	$1.51
2.00 - 2.49 cu. ft./hr.	2.03
2.50 - 2.99 cu. ft./hr.	2.25
3.00 - 3.99 cu. ft./hr.	2.66
4.00 - 4.99 cu. ft./hr.	3.01
5.00 - 7.49 cu. ft./hr.	4.02

This schedule is closed to new services as of (effective date of Schedule No. G-15).

GAS ENGINE NATURAL GAS SERVICE

Rates	Per Meter Per Month	
	G-45	G-46
First 1,037 therms, per therm	$.10055	$.11107
Next 3,110 therms, per therm	.09164	.10138
Over 4,147 therms, per therm	.08621	.09527

Minimum charge May - October $13.60/mo.
November - April $5.60/mo. @ cumulative rate of $115.20/yr.

INTERRUPTIBLE NATURAL GAS SERVICE

Rates	Per Meter Per Month	
	G-50	G-51
First 10,930 therms, per therm	$.08379	$.09137
Next 98,370 therms, per therm	.07694	.08430
Next 109,300 therms, per therm	.07491	.08192
Next 327,900 therms, per therm	.07174	.07830
Over 546,500 therms, per therm	.07015	.07649

Minimum charge $172.58/mo.

SERVICE ESTABLISHMENT CHARGE

Rates	G-91
Service Establishment Charge - Regular Hours	$ 6.00
Service Establishment Charge - After Hours	11.00