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Decision 82 12 047 December 8, 1982

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA GAS COMPANY and PACIFIC LIGHTING GAS SUPPLY COMPANY to Increase Revenues Under the Consolidated Adjustment Mechanism to Offset Changed Gas Costs Resulting From Increases in the Price of Natural Gas Purchased from EL PASO NATURAL GAS COMPANY, TRANSWESTERN PIPELINE COMPANY, PACIFIC INTERSTATE TRANSMISSION COMPANY, and California sources; and to Adjust Revenues to Recover the Undercollection in the CAM Balancing Account.

Application 82-09-12
(Filed September 8, 1982)

In the Matter of the Application of SAN DIEGO GAS & ELECTRIC COMPANY For Authority to Increase its Gas Rates and Charges Pursuant to its Filed Consolidated Adjustment Mechanism.

Application 82-09-21
(Filed September 15, 1982)

(See Decision 82-10-040 for appearances.)

(See Appendix A for additional appearances.)

SECOND INTERIM OPINION

In Application (A.) 82-09-12, Southern California Gas Company (SoCal) and Pacific Lighting Gas Supply Company (PLGS) seek authority to increase rates effective November 1, 1982 by $733,724,000 annually to offset the impact of further increases in the cost of gas purchased from their suppliers, and to recover the accumulated undercollection in the Consolidated Adjustment Mechanism (CAM) balancing account.

Evidence was concurrently received on SoCal's Pitas Point offshore gas supply project A.82-07-21 and on SoCal's annual review of the reasonableness of gas purchases. These matters will be addressed in separate decisions.

Since SoCal's general rate case decision in A.61081 will be issued concurrently with the decision in this proceeding, the rate design issues related to both proceedings were consolidated for hearing. The rate designs submitted in evidence did reflect this treatment.

Procedural Summary

Public hearing on Phase II was held in Los Angeles from October 4 through 7, 1982 and in San Francisco from October 12 through 22, 1982. Further hearing on Phase III was set commencing November 8, 1982.

Evidence was presented on behalf of SoCal, SDG&E, the Commission staff, Los Angeles Department of Water and Power (LADWP), Consumers for Utility Rate Equity (CURE), and Southern California Edison Company (Edison).

Oral argument was presented on behalf of SoCal, the Commission staff, SDG&E, TURN, Edison, Ammonia Producers, General Motors Corporation, Monsanto Corporation, Union Carbide Corporation (GMC), California Manufacturers Association (CMA), CURE, and the California Department of Consumers Affairs (Consumer Affairs).

A full day of public witness testimony was heard with approximately 100 people in attendance. A summary of the public witness testimony is set forth in SoCal's general rate case (A.61081) decision which is being issued concurrently.

CORRECTION

THIS DOCUMENT

HAS BEEN REPHOTOGRAPHED

TO ASSURE LEGIBILITY

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In A.82-09-21, San Diego Gas & Electric Company (SDG&E) seeks authority to offset SoCal's proposed net increased cost of gas supplied under SoCal's Schedule G-61 and to recover the accumulated undercollection in its CAM account.

The matters are consolidated for decision since they are interrelated.

In Phase I of this proceeding, Decision (D.) 82-10-040 dated October 8, 1982, we granted interim increases in rates to SoCal and SDG&E sufficient to offset increases in costs of gas purchased by SoCal and PLGS from El Paso Natural Gas Company (El Paso) and Transwestern Pipeline Company (Transwestern) effective October 1, 1982, or before. Those increases, plus associated franchise fees and uncollectibles, totaled $396.1 million to SoCal and the pass-through to SDG&E amounted to $39.0 million.

Following issuance of D.82-10-040 in Phase I of this proceeding, SoCal's suppliers El Paso and Transwestern filed revised tariffs with FERC which in effect reduced rates to SoCal's customers by $45.2 million (Exhibit 58). This decision reflects the above reduction, which will be passed through to SDG&E's customers.

Issues

The issues in Phase II which we will address in this opinion are:

1. Revenue requirement based on cost of gas for the forecast period October 1982-September 1983, and the estimated December 31, 1982 CAM balancing account undercollection.

2. Fuel Switching and Rate Design.

Evidence was concurrently received on SoCal's Pitas Point offshore gas supply project A.82-07-21 and on SoCal's annual review of the reasonableness of gas purchases. These matters will be addressed in separate decisions.

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A full day of public witness testimony was heard with approximately 100 people in attendance. A summary of the public witness testimony is set forth in SoCal's general rate case (A.61081) decision which is being issued concurrently.

Position of California Manufacturers Carpeting Association

Frank V. Celiberti, representing the Western Dyeing & Finishing Corporation and the California Manufacturers Carpeting Association, stated that because of the tremendous increase in gas rates during the last 18 months, several carpet dyeing companies were forced to close their doors or move out of California. As a result he estimated that 5,500 jobs were lost. He said that gas was used to boil water for dyeing carpets and his company had a gas bill of about $120,000 per month.

Celiberti urged the Commission not to pass on any more increases to the industrial customers. He noted that California was the sixth largest textile state in the country and was rapidly losing its position. He said that if the present rate of increases continued he would have no alternative but to close down his plants. He noted that there were 3,500 employees in his plants and estimated that plant closure could affect a total of 12,000 jobs.

We will consider Celiberti's concerns along with the concerns of SoCal's other customers.

Amortization of Balancing Account

The updated revenue requirement based on the final tariffs filed by El Paso and Transwestern under a Federal Energy Regulatory Commission Order (FERC) is set forth in Exhibit 58.

It will be noted from the following table that amortizing the CAM balancing account using a 6-month amortization rate results in an additional revenue requirement of approximately $99.0 million. Use of a 12-month amortization rate shows a revenue requirement reduction of $45.2 million for the period. The issue, therefore, is whether a 6-month amortization rate or a 12-month amortization rate should be used

SoCal requested a 6-month amortization rate. Staff recommended a 12-month amortization rate. Staff's recommendation was supported by TURN, CURE, GMC, and CMA.

REMAINING REVENUE REQUIREMENT OCTOBER 1982 CAM
REFLECTING REVISED EL PASO TARIFF
(Exhibit 58)

Item	With 12/31/82 CAM Balance Thousands of Dollars 6-Mo. Amort.*	12-Mo. Amort.**
Cost of Gas Purchased	4,023,584	4,023,584
Carrying Cost of Storage Inventory	2,241	2,241
CAM Balance	308,664	166,973
Subtotal	4,334,489	4,192,798
Franchise Fees & Uncollectible Expense	74,878	72,431
Gas Margin	752,188	752,188
Revenue Requirement	5,161,555	5,017,417
Revenue at Present Rates Including Exchange Revenue	5,062,589***	5,062,589***
Additional Revenues Required	98,966	(45,172)

(Red Figure)

* Revenue requirement based on the estimated December 31, 1982 CAM balancing account undercollection balance of $166,973,000 annualized to effect a six-month amortization of that balance.

** Revenue requirement based on a 12-month amortization of the estimated December 31, 1982 CAM balancing account balance.

*** Includes Exchange Revenue of $8,641,000, excludes Gas Exploration and Development Account (GEDA) revenue and CCA Revenue.

SoCal witness Jack M. Smith and staff witness Donald L. King agreed that a 6-month amortization rate is least costly to the ratepayer. They also agreed that in addition to increased cost, a 12-month amortization rate may result in future customers paying for gas consumed by existing customers.

However, King testified that there were extenuating circumstances which justified a 12-month amortization rate. He noted that recent rate increases have been very large and since we are entering the winter season, a 12-month amortization rate would ease the burden on the ratepayer. He further noted that the 12-month amortization rate would only remain in effect for three months until SoCal's next CAM proceeding in April 1983.

We agree with staff. Because of the special circumstances, we will adopt a 12-month amortization rate for this proceeding.

Balancing Account Adjustment

Exhibit 58, page 3, shows an estimated CAM balancing account for the end of December 1982 of approximately $167.0 million undercollection. Staff is generally in agreement with this estimate; however, there was a difference of opinion whether an adjustment should be made for the $14.9 million gas cost disallowance which had been stayed pending the rehearing ordered in D.82-09-109. SoCal argued that it is inappropriate to adjust the CAM account for the $14.9 million until the Commission issued a final order.

We see no reason why the revenue requirement considered in this proceeding should not be reduced by $14.9 million. However, the recorded figures on SoCal's books need not reflect this adjustment until the Commission does issue a final order.

Gas Supply and Underground Storage Plan

Because of price differences, the takes of gas from the various supply sources and the underground storage operation have a significant impact on the forecast period revenue requirement. SoCal witness Pocino testified that during the CAM forecast period the only discretionary gas SoCal expects to purchase will be Pitas Point and El Paso discretionary volumes. The forecast of Pan Alberta purchases is for the minimum annual contractual obligation.

Pocino's testimony also covered the company's revised storage operation plan. According to Pocino, a combination of factors, namely improved storage field deliverability, firmer gas supply availability and lower projected cold-year gas requirements, allows PLGS and SoCal to make significant cost-effective changes in planned storage operations.

The principal elements of SoCal's revised storage plan are: (1) greater withdrawals of gas from storage for the last three months of 1982, with commensurate reductions of purchased gas and (2) advancement of the storage injection period by one month in order to fill storage reservoirs prior to suppliers' October 1 Purchased Gas Adjustment (PGA) increases.

The new operating plan, Pocino noted, provides that all reservoirs will be full by early September 1982. Withdrawals beginning in October will reduce gas in storage to 85 Bcf by December 31, 1982, compared to the previous year-end target of 100 Bcf. Pan Alberta and Transwestern purchases will be minimized to the extent possible under existing contracts during October, November and December 1982 followed by cutbacks in El Paso purchases as necessary to maintain the withdrawal schedule. According to Pocino these changes in operating practices will benefit ratepayers by reducing the cost of gas purchased during the latter months of 1982 by approximately $40 million below the cost associated with the previous year-end storage objective.

Pocino further testified that during 1983 and for the next several years the storage injection period will be advanced by one month (April through September) to fill storage to a target level of 121.5 Bcf each year before El Paso and Transwestern PGA rate increases become effective on October 1 of each year. Since these operating changes influence the timing of gas purchases, Pocino anticipated that 1983 gas costs will be reduced by an estimated $17 million.

The staff and SoCal are generally in agreement on takes from the various supply sources. We will use the volumes listed in staff Exhibit 55, page 4.

Alternative Fuel Prices

Exhibit 11, sponsored by SoCal witness Lorenz sets forth alternative fuel prices in SoCal's area for August 1982 as follows:

	Approximate Prices (Cents Per Therm) Low	High
Propane	53.0	64.5
No. 2 Fuel Oil	67.5	71.5
No. 6 Residual Fuel Oil 0.25% Sulfur Maximum		
- Contract price	51.0	57.5
- Spot market price	50.0	55.0
No. 6 Residual Fuel Oil 0.5% Sulfur Maximum	46.0	54.0
No. 6 Fuel Oil High Sulfur Maximum		
- Outside South Coast Air Quality Management District (SCAQMD)	41.0	47.0

The above prices are based on the traditional sources which SoCal and staff used in the past. In addition, Lorenz considered reports from SoCal's customers on prices that were paid and offers received.

The prices Lorenz presented for alternative fuels did not include a 5% adjustment to reflect a higher combustion efficiency of oil relative to gas. The natural gas equivalent adjustment previously included by SoCal was dropped in order to simplify comparison between the utility and staff oil price data. However, SoCal continues to believe that many large gas customers and particularly utility electric generation customers take the 5% efficiency advantage of oil over gas into account when comparing alternative fuel prices.

The record is not adequate to determine how much weight the electric generation customers assign to the higher combustion efficiency of oil as compared to gas, when evaluating alternative fuel prices. We will expect Edison and LADWP to provide further testimony on this question in SoCal's April 1983 CAM proceeding.

In summary, the testimony of the other witnesses, including staff Exhibit 16, supported the range of prices presented by SoCal. We will consider these prices in setting rates.

Fuel Switching

On the subject of fuel switching, SoCal presented three witnesses: Roy M. Rawlings, John K. Peterson, and David E. Jones. The staff position was presented by Donald L. King.

Rawlings described the extent to which customers in SoCal's service territory have switched to the use of alternate fuels due to the May 4, 1982 increase in rates (Exhibit 9). According to Rawlings, fuel switching in SoCal's P-5 market has resulted in an annualized loss of 56.2 Bcf of natural gas, or 19.5% of that market. Fuel switching in the P-2B, P-3, and P-4 markets has resulted in the loss of 14.1 Bcf, or 7.3% of those markets. Total loss due to fuel switching (P-2B, P-3, P-4, and P-5) is 70.3 Bcf, or 14.6%. Rawlings testified that he believed further gas rate increases to these customers or alternate fuel price reductions could result in further switching.

In his testimony on the P-5 market, Rawlings stated that on May 4, 1982, when the GN-5 rate of 51.8¢/therm became effective, two of SoCal's utility electric generation customers began using fuel oil priced equivalent to a natural gas price of 47¢/therm. Both of these customers indicated they can continue to purchase oil at prices advantageous to their customers. Should this occur, SoCal could experience a loss of up to 56.2 Bcf per year. One of these customers is in the SCAQMD and must burn gas on stage one or worse Ozone Episode days. SoCal has four other retail P-5 customers. Thus far, these customers have not switched to fuel oil; however, Rawlings testified that these customers would switch in the event GN-5 rates exceed the prices at which these customers can purchase oil. If all six P-5 customers switched to fuel oil, the market loss to SoCal could amount to 189 Bcf annually or the equivalent of about 9 million barrels of oil.

We now turn to a discussion of fuel switching by SoCal's industrial customers.

Jones described the fuel switching model which Battelle Memorial Institute of Columbus, Ohio, developed for SoCal (Exhibits 21 and 22). The purpose of the model was to predict fuel switching, in the short term, by SoCal's industrial customers.

According to Jones, an industrial customer's decision whether or not to switch to an alternate fuel is comprised of two parts. The first decision is whether or not to install additional equipment (storage, burners, etc.) necessary to burn an alternate fuel. This decision is based primarily on a life cycle cost analysis. The second decision a customer must make is whether or not to switch to the alternate fuel once the capability exists. The second decision is modeled using an econometrically estimated equation which includes factors customers consider in their decision.

Jones noted that the conclusions drawn by Battelle as a result of their research were (1) there is the capability to produce No. 6 oil in sufficient quantities to meet an increased demand in the industrial sector, (2) there are no barriers to the rapid expansion of the distribution system to sell and deliver No. 6 residual fuel oil to industrial customers, and (3) most industrial customers who currently have the capability to burn residual fuel oil have the necessary permits to do so.

Peterson described how SoCal modified the Battelle model and the results obtained (Exhibits 23 and 24). The factors SoCal included in the model include, among other things, discount rates, inflation rates, interest rates, oil and gas prices, maintenance costs, and a premium for use of gas over oil.

Peterson noted that SoCal needed more time to fully evaluate the model. He thought that further refinement was required before the model could be validated for full use as a management decision tool.

For input to the model, SoCal used a gas rate of 52.750¢/therm and a mean of 50¢/therm for No. 6 (.5% sulfur) oil. On this basis, the Fuel Switching Model, as modified by SoCal, showed a total annual load loss of 23.6 Bcf when gas rates to GN-32/42 and GN 36/46 customers were increased by 5¢/therm to 57.75¢/therm and a total annual load loss of 33.8 Bcf when rates to these same classes of customers were increased by 10¢/therm to 62.75¢/therm. This compares to 14.2 Bcf shown by the model at the rate of 52.75¢/therm which was the rate in effect prior to being increased to 54.75¢/therm by D.82-10-040 dated October 8, 1982, the interim decision on Phase I of this proceeding.

Staff witness King concluded (Exhibit 55):

"1. In the short-term (prior to 1986) fuel switching causes the rejection of lower-cost supplies and the rejection of such supplies combined with the additional unit cost of recovering fixed costs results in an increase in average system rates. By 1986 the commodity cost of gas from various sources is estimated to be in approximate price parity and the adverse effect of fuel switching on average system gas rates is limited to the increase in unit costs to recover fixed costs.

"2. Throughout the forecast period fuel switching results in the use of higher cost LSFO while lower-cost gas is rejected.

"3. The aggregate Southern California consumer is poorer than he would be given ratemaking policies designed to retain the low-priority load. The greater the degree of fuel switching the poorer he becomes.

"4. The Priority 1 and 2 customer appears to be more or less neutral in the fuel switching process at the level of load loss included in Case A; Case A assumes a load loss of one-half of the Priority 5 gas/oil requirement and approximately one-half of the Priority 3 and 4 requirement. That is, the average rate to Priorities 1 and 2, including residential service, is not significantly different with fuel switching than it would be if rate design policy resulted in the retention of the present low priority demand."

We note the staff position in the above Case A indicates that a load loss of one half of the P-3, P-4, and P-5 requirements would not significantly impact the rates for P-1 and P-2 customers.

The positions of the other parties on the question of fuel switching are set forth in interim D.82-10-040 at page 16 and we need not repeat the discussion. However, it is worth noting that all parties generally recognize that the loss of more than 50% of SoCal's retail P-3, P-4, and P-5 market at this time would probably result in increased residential and P-1 and P-2 nonresidential rates. We note that the gas supply that would be cut back if there were a major market loss is El Paso gas at 37.6¢/therm (Exhibit 58). Therefore, there would be over a 16¢/therm loss in contribution to margin for each therm of market loss. Since the remaining customers on the system must make up the net loss in contribution to margin for each therm of market lost, we must conclude that higher rates for the remaining customers would result.

Unfortunately there yet is no precise answer to the question of how high the gas rates to the large industrial and electric generation customers can be raised before there is more fuel switching. Also, we have not had sufficient time to evaluate the effect of the last increase, effective October 13, 1982, which increased SoCal's GN-32/42 and GN-36/46 rates from 52.75¢/therm to 54.75¢/therm and GN-5 rates from 51.808¢/therm to 53.808¢/therm. We will consider all of the above in setting the adopted rates.

SCAQMD

Larry Bowen, Director of Rule Development for SCAQMD, stated that his staff has drafted a number of control measures which would be submitted to his board for consideration in case problems result from fuel switching. He briefly described the control measures his staff had prepared. He hoped that a general shift to fuel oil does not occur and that there will be no need to pursue such control measures.

Fuel Switching Damages

Norman Codd testified on behalf of a group called Consumers for Utility Rate Equity (CURE). CURE is an ad hoc group of approximately 20 individuals. Codd suggested that SoCal should pay damages which he claims has or will occur as a result of the GN-5 rate this Commission ordered SoCal to place in effect following D.82-04-116. Under Codd's proposal the amount of damages would "simply be the difference between the delivered cost of oil purchased to replace oil burned, and the associated cost of the gas not purchased" (Exhibit 42).

The fundamental flaw in Codd's recommendation is that it ignores the lawful role of this Commission in setting just and reasonable rates. It is the responsibility of this Commission to consider the evidence before it and to exercise its judgment in the establishing of rates for all of SoCal's customers. This process is not accomplished by considering of any one class of customers while ignoring all others. The exercise of judgment is an inevitable and unavoidable aspect of rate setting. Determining just and reasonable rates is the ultimate responsibility of this Commission. SoCal is not to be faulted for having followed the lawful orders of this Commission (Public Utilities (PU) Code § 702).

Rate Adjustments to Avoid Fuel Switching

To avoid any further price-induced fuel switching, Codd recommended that the Commission adopt a procedure by which the GN-5 rate would be reduced when it appears as though dropping oil prices will induce fuel switching and in every case where it is clear that fuel switching will take place if the GN-5 rate is not lowered immediately.

Codd would have the Commission act, if necessary in emergency session by telephone, to immediately reduce the GN-5 rate as necessary to avoid the fuel switch. Also, as a matter of policy for price-induced fuel switching, Codd recommended that the utilities be penalized an amount equal to the excess of the cost of Low Sulfur Fuel Oil (LSFO) burned by the electric utilities over the discretionary cost of gas not purchased by SoCal. According to Codd this amount is the damages, that is, the unnecessarily incurred fuel expenses, which would otherwise be passed on to the southern California electricity and gas consumers in total.

Codd would have this Commission make decisions affecting all of SoCal's ratepayers without a public hearing and without notice to the affected parties (PU Code § 306). Codd's proposal is unworkable and ignores the due process rights of the other customers on SoCal's system.

Date of CAM Balance to Be Used

In determining the CAM revenue requirement, Codd recommended that the Commission use only the recorded CAM balancing account balance as of the revision date instead of the estimated balance on the date closest to the date of Commission decision. Codd's recommendation will not be adopted primarily because it would serve to ensure that Commission decisions issued well after the revision date would ignore the effect such delays have on the revenue requirement. The Commission, in D.92496, recognized that "during a period of ongoing undercollection the balance is greater by the hearing date, revision date, and decision date than is shown in the application." The result is that the relief granted can be readily shown to be inadequate. Codd's recommendation, if adopted, would be adverse to the Commission's goal to minimize over- and undercollections and to keep the fuel cost balancing account balances close to zero. Therefore, we will not adopt Codd's recommendation with respect to using estimated CAM balances.

Revenue Deficiencies Due to Late Filings

Codd noted that SoCal's tariff specifies that revised CAM rates shall be filed with the Commission at least 30 days prior to each revision date. He testified that SoCal's failure to file its CAM applications 30 days prior to the October 1, 1981, April 1, 1982, and October 1, 1982 revision dates resulted in revenue deficiencies. According to Codd's calculations these deficiencies amount to $19.2 million, plus interest, and he recommended that SoCal's balancing account be reduced by this amount.

We note that the event which triggers SoCal's CAM application filings is the PGA filings of its out-of-state suppliers. Until those suppliers' PGA applications are filed, and SoCal has the opportunity to prepare the requisite CAM application, it cannot file its request with the Commission. In A.82-09-12 SoCal stated that El Paso and Transwestern filed their PGA applications with the FERC on August 31, 1982. To comply with the 30-day requirement in its tariff SoCal would have had to file its CAM application on September 1, 1982, the day following its suppliers filings. This would have been an extremely difficult, if not impossible, task.

The Commission, in OII 82-09-02, is considering a proposal by the staff to change SoCal's revision dates to May 1 and November 1 in recognition of the timing problems associated with the existing revision dates.

The filing by SoCal of its application beyond the time established in its tariff has no adverse effect on our decision. Also, the Commission has the authority to waive the 30-day requirement in PU Code § 491. Our concern is that the filing reflect the most up-to-date information. Codd's recommendation will not be adopted.

Rate Design

We will adopt the sales volumes, gas takes from the various sources, and the estimated December 31, 1982 CAM balance as set forth in late-filed Exhibit 58. As discussed previously, we will reduce the revenue requirement to reflect the $14.9 million ($15.4 million including interest through December 31, 1982) gas cost disallowance (which is subject to limited rehearing) and will use a 12-month amortization rate to amortize the CAM balancing account. These adjustments are reflected in the adopted revenue requirement set forth below:

ADOPTED REVENUE REQUIREMENT
OCTOBER 1982 CAM

	(Dollars in Thousands)
Cost of Gas Purchased	$4,023,584
Carrying Cost of Storage Inventory	2,241
CAM Balance	151,573
Subtotal	$4,177,398
Franchise Fees and Uncollectible Expense*	69,678
Gas Margin	752,188
Revenue Requirement	4,999,265
Revenue at Present Rates Including Exchange Revenue	5,062,626
Additional Revenues Required	(63,361)

*Franchise Fee and Uncollectible Expense at 1.668%.

(Red Figure)

To the $63,361,000 reduction we will add the revenue increase authorized in SoCal's general rate increase A.61081. This total revenue requirement will be reflected in the adopted rate design. The new gas margin for test year 1983 is $982,895,300 reflecting the revenue increase of $219,798,700 in A.61081.

D.82-04-116 dated April 28, 1982, sets forth the appropriate guidelines for SoCal. These guidelines are based on the premise that gas customers should pay as close to the utility's marginal supply costs as revenue requirement constraints and minimization of fuel switching allow.

The critical element is the establishment of a gas marginal rate. The marginal rate is not the same as marginal cost. In D.82-04-116 we adopted staff witness Cavagnaro's methodology for developing a marginal rate. This is set forth on page 24 of the decision:

> "Development of the marginal rate would be based upon consideration of the following elements: (1) a reasonable price for discretionary purchases, (2) the variable cost of the most expensive gas supply, and the price of 0.25% and 0.5% low sulfur fuel oil and the price of No. 2 distillate oil."

Then in footnote (1) on page 24, we noted:

> "(1) Such a rate would not be calculated with mathematical certainty, but rather judgment would be applied to various factors to develop a limited range for the marginal rate. For this proceeding only (D.82-04-116) the marginal rate was derived mathematically since fuel switching and economic studies necessary for its development were unavailable."

The staff witness developed a marginal rate using the above factors with a range of 54.884 to 55.971¢/therm. SoCal's marginal rate range was 53.8 to 54.750¢/therm. The difference is approximately one cent a therm. In this case we will use

SoCal's marginal rate to develop the rate design, and use the high end of the staff marginal rate as an upper limit for rates in the GN-3, GN-4, and GN-5 category. Because fuel prices are volatile, it is expected that a new marginal rate will be developed for each rate change application.

The adopted rate design set forth in Appendix B was developed in the following manner:

1. The wholesale commodity rate was set at the average cost of gas multiplied by the franchise fee factor (1.01443). GEDA was then added.

2. The ammonia producer commodity rate is set at 110% of the average cost of gas sold.

3. The marginal rate of 54.750¢/therm was used for all other classes, except lifeline which was set at 85% of system average, reduced by the customer charge rate of 6.8¢ to derive the commodity charge rate.

4. The resulting revenue undercollection was spread as follows:

   GN-3, GN-4, and GN-5 rates were increased 1.192¢/therm to 55.942, 55.942, and 55.000, respectively. The GN-3 and GN-4 rates reflect commodity plus GEDA and CCA rates. The GN-5 rate reflects commodity plus GEDA only. The remaining undercollection was spread in equal cents per therm to all residential, GN-1, and GN-2 rates.

5. The lifeline rate was then reduced by 2.386¢. To overcome the resulting undercollection, second and third tier residential rates were then increased to become 61.166¢ and 71.668¢, respectively. Finally, GN-1 and GN-2 were increased by .087¢ to match the 2nd tier residential rate.

We note that the above rate design is a modification of the guidelines set forth in D.82-04-116.

Residential and GN-1 and GN-2 rates were readjusted to avoid a sudden jolt in lifeline rates which would have experienced a more than 28% increase since the last CAM. Further, a strict application of the guidelines would produce rates in the GN-3 and GN-4 schedules of above 58¢/therm and above 57¢/therm in GN-5. We have testimony in this proceeding that as the natural gas commodity price approaches or exceeds low sulfur fuel oil prices in the Los Angeles Basin, fuel switching may occur. While we do not have solid estimates of the amount of fuel switching that will occur at various alternative gas prices, we are loath to set prices which would exceed the current price of fuel oil in SoCal's service area.

Staff witness Goalwin recommended that residential third tier rates be eliminated. She argued that there is no valid reason at the present time to have steeply inverted rates to the residential class on the SoCal gas system. She noted that at the present time, the incremental cost of gas (El Paso) is below the highest priced gas on the SoCal system. According to Goalwin, the implication of a marginal commodity cost below average cost would dictate a declining block rate design, since if more gas was used, a lower average cost would result. Therefore, she submits the inverted residential rate is not reasonable during periods when the above conditions prevail.

Even if we agreed that it was reasonable to eliminate the inverted residential rate design, staff's proposal does not accomplish that result. The elimination of the third tier would simply make the second tier inversion all the more steep. Further, we do not agree that the Commission should reverse its residential ratesetting policy in response to a short-term incremental cost situation resulting from contractual obligations. Therefore, we will not adopt the staff recommendation.

SDG&E

Both SDG&E and staff submitted recommended rate designs generally following the guidelines set forth in SDG&E's April 1982 CAM D.82-04-16. These guidelines were also used in the first interim D.82-10-040 dated October 8, 1982 in this proceeding. We will continue to use these guidelines in spreading the revenue requirement for this phase of the proceeding. The revenue requirement for SDG&E is set forth in the following table, however, the revenue spread among classes will be set forth in our decision in A.59788, SDG&E's pending request for a 1983 attrition allowance.

San Diego Gas & Electric Company
Revenue Requirement for Gas Department*
(Revenue Dollars in Thousands)

I. PGA Revenue Requirement	
A. Cost of Purchased Gas	
1. Capacity Charge	$ 21,776.0
2. Commodity Charge 954,662.0 Mth x $.42100/th	401,917.0
3. LNG Net	(800.0)
4. Total	422,893.0
B. Twice 8/31/82 PGA Bal. Acct. Amount	13,458.2
C. Net PGA Revenue Requirement (A + B)	436,351.2
D. Fran. Fees and Uncoll. on Retail Sales	3,963.2
E. PGA Revenue Requirement (C + D) (.46208 & .47163)	440,314.4
II. SAM Revenue Requirement	
A. SAM Margin	92,644.3
B. Twice 8/31/82 SAM Bal. Acct. Amount	3,205.5
C. Subtotal (A + B)	95,849.8
D. Less San Diego Franchise Fee Differential	375.8
E. SAM Revenue Requirement (C - D)	95,474.0
III. CPAC Revenue Requirement	1,826.6
IV. Total Revenue Requirement (IE + IIE + III)*	537,615.0

*Excludes revenues of $1,321,700 for San Diego franchise fee differential.

Findings of Fact

1. The revenue requirement adopted in D.82-10-040 dated October 8, 1982 needs to be reduced by $45,172,000 to reflect reductions by SoCal's gas suppliers, El Paso and Transwestern.

2. Mitigation of the impact of the rate increase on customers a justifies 12-month amortization rate for the CAM balancing account.

3. For purposes of calculating the revenue requirement for this proceeding, it is reasonable to reflect the $14.9 million gas cost disallowance which was stayed pending the rehearing ordered in D.82-09-109.

4. The evidence is inconclusive to determine the gas rate levels to industrial and steam-electric generation customers which will cause substantial fuel switching.

5. The gross revenue requirement authorized in SoCal's general rate case proceeding A.61081 should be included in the rates authorized in this decision.

6. The rate design proposals submitted in evidence did include an estimated revenue requirement to reflect SoCal's general rate case proceeding A.61081.

7. For SDG&E, it is reasonable to use the rate design guidelines set forth in D.82-04-16 to spread the resulting increase in revenue requirement. This spread will be accomplished in A.59788 which is pending.

Conclusions of Law

1. The rates adopted in this decision are just and reasonable for the period these rates will be in effect.

2. Because of the need for rate relief concurrently with that authorized in A.61081 this order should be effective on the date of signature.

SECOND INTERIM ORDER

IT IS ORDERED that:

1. The gross revenue requirement authorized in Southern California Gas Company's (SoCal) general rate case proceeding A.61081 shall be included in the rates authorized in this decision.

2. On or after the effective date of this order, SoCal is authorized to file revised tariff schedules reflecting rates attached to this order as Appendix B, to be effective no earlier than January 1, 1983. The revised schedules shall apply only to service rendered on or after their effective date.

This order is effective today.

Dated December 8, 1982, at San Francisco, California.

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

I dissent in part.
/s/ JOHN E. BRYSON
Commissioner

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

Joseph E. Bodovitz, Executive Director

APPENDIX A

Additional Appearances

Protestant: Herman Mulman, for Seniors for Political Action.

Interested Parties: Downey, Brand, Seymour & Rohwer, by Philip A. Stohr, Attorney at Law, for Monsanto Company and Union Carbide Corporation; Harry Phelan, for California Asphalt Pavement Association; Burt Wilson, and Jeff B. Cohen, Attorney at Law, for California Association for Utility Service Equality (CAUSE); James C. Dycus and Edward Duncan, for themselves; John Witt, City Attorney, by William Shaffran, Deputy City Attorney, for City of San Diego; Jules Kimmett, for Concerned Citizens of Burbank; Daniel E. Gibson and Michael C. Apra, Attorneys at Law, for Pacific Gas and Electric Company; Biddle & Hamilton, by Richard L. Hamilton, Attorney at Law, for Western Mobilehome Association; and Michael A. Nolan, for United Homeowners of Burbank.

Commission Staff: Richard Rosenberg.

(END OF APPENDIX A)

APPENDIX B

SOUTHERN CALIFORNIA GAS COMPANY

SUMMARY OF PRESENT AND PROPOSED RATES
JANUARY 1, 1983

Class of Service	Commodity Rates in ¢/Therm Present Rates D.82-10-040	Proposed Rates*	% Increase
Residential			
Lifeline	40.480	41.610	2.8
Tier II	57.318	61.417	7.1
Tier III	67.318	71.417	6.1
Commercial-Industrial			
GN-1	57.318	61.417	7.1
GN-2	57.318	61.417	7.1
G-COG	53.808	55.000	2.2
GN-32/42	54.750	56.037	2.3
GN-36/46	54.750	56.037	2.3
Ammonia Producers	46.958	45.494	(3.1)
Util. Elec. Gen.			
Scattergood Unit #3	53.808	55.000	2.2
GN-5	53.808	55.000	2.2
Wholesale			
G-60	43.494	42.100	(3.3)
G-61	43.494	42.100	(3.3)

*Residential Average Rate: 53.380 = 98% system average, 96% retail average.

Retail Average Rate: 55.821 = 2.8% above system average.

Total System Average Rate: 54.316 = includes wholesale.

The above averages include customer and capacity charges.

(Red Figure)

(END OF APPENDIX B)

D.82-12-047
A.82-09-12
A.82-09-21

COMMISSION PRESIDENT, JOHN E. BRYSON, dissenting in part.

The increased rates for industrial and electric utility customers adopted in this decision are likely to lead to additional fuel switching by those customers from natural gas to oil. This will have two undesirable and avoidable effects.

First, it will result in higher rates to those customers who continue to use gas, because SoCal's fixed costs will have to be borne by a smaller number of customers and spread over reduced gas sales. At current rates, when electric utilities and co-generators pay 53.8 cents per therm and incremental supplies of natural gas cost SoCal 37.5 cents per therm, each therm of gas not sold as a result of fuel switching will result in a lost contribution in excess of 16 cents to SoCal's fixed costs. This loss will have to be made up by customers who continue to use natural gas.

Second, further fuel switching will have an adverse impact on the entire southern California economy since the aggregate cost of fuel in southern California will be increased. This is true, as staff witness Don King's testimony sets out, because industrial and utility customers, to avoid the 56 and 55 cents per therm gas rate here adopted, will instead purchase oil at a cost in excess of 50 cents per therm. The net effect for each therm of fuel switch will be an increase in total oil and natural gas cost to southern California of at least 12 cents to 13 cents per therm equivalent, or approximately one-third the incremental natural gas cost.

In fact, this Commission has previously looked to effects on combined natural gas and oil costs for the regional economy as the basis for fuel cost rate decisions. As recently as April 28, 1982, in D.82-04-113, the Commission concluded that minimizing total fuel costs for southern California was sufficiently important that it could justify purchasing natural gas at prices higher than the rate at which that incremental gas could be sold, so long as those purchase prices were lower than the cost of oil.

It is true that we do not know exactly what degree of fuel switching will follow from any particular increase in low priority customers' rates. But where 14% of SoCal's load has already been lost, there is more than sufficient evidence that we have reached rate levels at which fuel switching will occur and that great caution should be exercised prior to further increases for industrial and electric customers.

It is very unfortunate that a decision not to raise industrial and utility rates would mean imposing the bulk of this increase on residential gas customers. In the present case that would mean a 7.9% increase in the average residential rate as opposed to the 3.95% adopted.

It is important, however, to recognize that residential gas ratepayers are not in any meaningful sense protected by decisions which hold down the residential gas rate at the expense of fuel switching. This is because residential gas customers are also residential electric customers and consumers of the whole range of products and services produced and provided in southern California. They are also employed by southern California businesses which bear the increased fuel costs to their competitive disadvantage. If we take into account the full range of impacts on their lives, residents of southern California can only be hurt by decisions which result in turning away from 37.5¢/therm natural gas in favor of 50¢/therm equivalent oil.

For this reason, I am particularly concerned about the line of reasoning advocated by some participants in this proceeding that the Commission should raise industrial and utility gas rates to allow fuel switching until residential gas rates are thereby increased. Equity requires taking account of the impacts of such a decision on the dwindling number of industrial and electric customers on the system who would by this approach be required to bear all the fixed costs presently borne by customers who switch. But, even if the focus were limited to residential customers, such a decision would in fact impose significant costs on all residents. This Commission should unequivocally reject such an approach.

San Francisco, California
December 8, 1982

JOHN E. BRYSON, President

We note that the above rate design is a modification of the guidelines set forth in D.82-04-116.

The reason for the deviation was that a strict application the guidelines would produce rates in the GN-3 and GN-4 schedules of above 58¢/therm and above 57¢/therm in GN-5. We have testimony in this proceeding that as the natural gas commodity price approaches or exceeds low sulfur fuel oil prices in the Los Angeles Basin, fuel switching may occur. While we do not have solid estimates of the amount of fuel switching that will occur at various alternative gas prices, we are loath to set prices which would exceed the current price of fuel oil in SoCal's service area.

~~Staff witness Goalwin recommended that residential third tier rates be eliminated. She argued that there is no valid reason at the present time to have steeply inverted rates to the residential class on the SoCal gas system. She noted that at the present time, the incremental cost of gas (El Paso) is below the highest priced gas on the SoCal system. According to Goalwin, the implication of a marginal commodity cost below average cost would dictate a declining block rate design, since if more gas was used, a lower average cost would result. Therefore, she submits the inverted residential rate is not reasonable during periods when the above conditions prevail.~~

We will adopt the staff recommendation.

SDG&E

Both SDG&E and staff submitted recommended rate designs generally following the guidelines set forth in SDG&E's April 1982 CAM D.82-04-16. These guidelines were also used in the first interim D.82-10-040 dated October 8, 1982 in this proceeding. We will continue to use these guidelines in spreading the revenue requirement for this phase of the proceeding. The revenue requirement ~~is set forth in the following table.~~ resulting from today's decision will be incorporated into SDG&E's 1983 attrition allowance adjustment.

55

San Diego Gas & Electric Company Derivation of Revenue Requirement.

(to be prepared by Utilities Division)

Findings of Fact

1. The revenue requirement adopted in D.82-10-040 dated October 8, 1982 needs to be reduced by $45,172,000 to reflect reductions by SoCal's gas suppliers, El Paso and Transwestern.

2. Mitigation of the impact of the rate increase on customers justifies a 12-month amortization rate for the CAM balancing account.

3. For purposes of calculating the revenue requirement for this proceeding, it is reasonable to reflect the $14.9 million gas cost disallowance which was stayed pending the rehearing ordered in D.82-09-109.

4. The evidence is inconclusive to determine the gas rate levels to industrial and steam-electric generation customers which will cause substantial fuel switching.

5. The gross revenue requirement authorized in SoCal's general rate case proceeding A.61081 should be included in the rates authorized in this decision.

6. The rate design proposals submitted in evidence did include an estimated revenue requirement to reflect SoCal's general rate case proceeding A.61081.

7. The rate design modification as set forth in this decision is a modification of the guidelines set forth in D.82-09-116 and is reasonable.

8. At this time it is reasonable to eliminate the third tier of the residential rate since the incremental cost of gas is below the highest priced gas in the SoCal system.

9. For SDG&E, it is reasonable to use the same rate design guidelines as set forth in D.82-04-16 to spread the resulting increase in revenue requirement.

Conclusions of Law

1. The rates adopted in this decision are just and reasonable for the period these rates will be in effect.

2. Because of the need for rate relief concurrently with that authorized in A.61081 this order should be effective on the date of signature.

However, King testified that there were extenuating circumstances which justified a 12-month amortization rate. He noted that recent rate increases have been very large and since we are entering the winter season, a 12-month amortization rate would ease the burden on the ratepayer. He further noted that the 12-month amortization rate would only remain in effect for three months until SoCal's next CAM proceeding in April 1983.

We agree with staff. Because of the special circumstances we will adopt a 12-month amortization rate for this proceeding.

Balancing Account Adjustment

Exhibit 58, page 3, shows an estimated CAM balancing account for the end of December 1982 of approximately $167.0 million undercollection. Staff is generally in agreement with this estimate; however, there was a difference of opinion whether an adjustment should be made for the $14.9 million gas cost disallowance which had been stayed pending the rehearing ordered in D.82-09-109. SoCal argued that it is inappropriate to adjust the CAM account for the $14.9 million until the Commission issued a final order.

We see no reason why the revenue requirement considered in this proceeding should not be reduced by $14.9 million. However, the recorded figures on SoCal's books need not reflect this adjustment until the Commission does issue a final order.

Gas Supply and Underground Storage Plan

Because of price differences, the takes of gas from the various supply sources and the underground storage operation have a significant impact on the forecast period revenue requirement. SoCal witness Pocino, testified that during the CAM forecast period the only discretionary gas SoCal expects to purchase will be Pitas Point and El Paso discretionary volumes. The forecast of Pan Alberta purchases is held to the minimum annual contractual obligation.

In his testimony on the P-5 market, Rawlings stated that on May 4, 1982, when the GN-5 rate of 51.8¢/therm became effective, two of SoCal's utility electric generation customers began using fuel oil priced equivalent to a natural gas price of 47¢/therm. Both of these customers indicated they can continue to purchase oil at prices advantageous to their customers. Should this occur, SoCal could experience a loss of up to 56.2 Bcf per year. One of these customers is in the SCAQMD and must burn gas on stage one or worse Ozone Episode days. SoCal has four other retail P-5 customers. Thus far, these customers have not switched to fuel oil; however, Rawlings testified that these customers would switch in the event GN-5 rates exceed the prices at which these customers can purchase oil. If all six P-5 customers switched to fuel oil, the market loss to SoCal could amount to 189 Bcf annually or the equivalent of about 9 million barrels of oil.

We now turn to a discussion of fuel switching by SoCal's industrial customers.

Jones described the fuel switching model which Battelle Memorial Institute of Columbus, Ohio, developed for SoCal (Exhibits 21 and 22). The purpose of the model was to predict fuel switching, in the short term, by SoCal's industrial customers.

According to Jones, an industrial customer's decision whether or not to switch to an alternate fuel is comprised of two parts. The first decision is whether or not to install additional equipment (storage, burners, etc.) necessary to burn an alternate fuel. This decision is based primarily on a life cycle cost analysis. The second decision a customer must make is the decision of whether or not to switch to the alternate fuel once the capability exists. The second decision is modeled using an econometrically estimated equation which includes factors customers consider in their decision.

The positions of the other parties on the question of fuel switching is set forth in interim D.82-10-040 at page 16 and we need not repeat the discussion. However, it is worth noting that all parties generally recognize that the loss of more than 50% of SoCal's retail P-3, P-4, and P-5 market at this time would probably result in increased residential and P-1 and P-2 nonresidential rates. We note that the gas supply that would be cut back if there were a major market loss is El Paso gas at 37.6¢/therm (Exhibit 58). Therefore, there would be over a 16¢/therm loss in contribution to margin for each therm of market loss. Since the remaining customers on the system must make up the net loss in contribution to margin for each therm of market lost, we must conclude that higher rates for the remaining customers would result.

Unfortunately there yet is no precise answer to the question of how high the gas rates to the large industrial and electric generation customers can be raised before there is more fuel switching. Also, we have not had sufficient time to evaluate the effect of the last increase, effective October 13, 1982, which increased SoCal's GN-32/42 and GN-36/46 rates from 52.75¢/therm to 54.75¢/therm and GN-5 rates from 51.808¢/therm to 53.808¢/therm. We will consider all of the above in setting the adopted rates.

SCAQMD

Larry Bowen, Director of Rule Development for SCAQMD, stated that his staff has drafted a number of control measures which would be submitted to his board for consideration in case problems result from fuel switching. He briefly described the control measures his staff had prepared. He hoped that a general shift to fuel oil does not occur and that there will be no need to pursue such control measures.

Rate Design

We will adopt the sales volumes, gas takes from the various sources, and the estimated December 31, 1982 CAM balance as set forth in late-filed Exhibit 58. As discussed previously, we will reduce the revenue requirement to reflect the $14.9 million gas cost disallowance and will use a 12-month amortization rate to amortize the CAM balancing account. These adjustments are reflected in the adopted revenue requirement set forth below:

ADOPTED REVENUE REQUIREMENT
OCTOBER 1982 CAM

	(Dollars in Thousands)
Cost of Gas Purchased	$4,023,584
Carrying Cost of Storage Inventory	2,241
CAM Balance	166,973
Gas Cost Adjustment	151,573
Subtotal	$4,177,298
Franchise Fees and Uncollectible Expense	72,165
Gas Margin	752,188
Revenue Requirement	5,001,751
Revenue at Present Rates Including Exchange Revenue	5,062,589
Additional Revenues Required (Red Figure)	(60,838)

To the $60,838,000 reduction we will add the revenue increase authorized in SoCal's general rate increase A.61081. This total revenue requirement will be reflected in the adopted rate design. Accordingly the figure for the gas margin shown above, will have to be increased to reflect the general rate increase authorized for test year 1983.

D.82-04-116 dated April 28, 1982, sets forth the appropriate guidelines for SoCal. These guidelines are based on the premise that gas customers should pay as close to the utility's marginal supply costs as revenue requirement constraints and minimization of fuel switching allow.

The critical element is the establishment of a gas marginal rate. The marginal rate is not the same as marginal cost. In D.82-04-116 we adopted staff witness Cavagnaro's methodology for developing a marginal rate. This is set forth on page 24 of the decision:

> "Development of the marginal rate would be based upon consideration of the following elements: (1) a reasonable price for discretionary purchases, (2) the variable cost of the most expensive gas supply, and the price of 0.25% and 0.5% low sulfur fuel oil and the price of $2 distillate oil."

Then in footnote (1) on page 24, we noted:

> "(1) Such a rate would not be calculated with mathematical certainty, but rather judgment would be applied to various factors to develop a limited range for marginal rate. For this proceeding only (D.82-04-116) the marginal rate was derived mathematically since fuel switching and economic studies necessary for its development were unavailable."

The staff witness developed a marginal rate using the above factors with a range of 54.884 to 55.971¢/therm. SoCal's marginal rate range was 53.8 to 54.750¢/therm. The difference is approximately one cent a therm. In this case we will use

SoCal's marginal rate to develop the rate design, and use the high end of the staff marginal rate as an upper limit for rates in the GN-3, GN-4, and GN-5 category. Because fuel prices are volatile, it is expected that a new marginal rate will be developed for each rate change application.

The adopted rate design set forth in Appendix B was developed in the following manner:

1. The wholesale commodity rate was set at the average cost of gas multiplied by the franchise fee factor (1.01546). GEDA was then added.

2. The ammonia producer commodity rate is set at 110% of the average cost of gas sold.

3. The marginal rate of 54.750¢/therm, was used for all other classes, except lifeline which was set at 85% of system average, reduced by the customer charge rate of 6.8¢ to derive the commodity charge rate.

4. The resulting revenue undercollection was spread as follows:

   GN-3, GN-4, and GN-5 rates were increased 1.192¢/therm to 55.942, 55.942, and 55.000 respectively. The GN-3 and GN-4 rates reflect commodity plus GEDA and CCA rates. The GN-5 rate reflects commodity plus GEDA only. The remaining undercollection was spread in equal cents per therm to all residential, GN-1 and GN-2 rates.

SoCal's marginal rate to develop the rate design, and use the high end of the staff marginal rate as an upper limit for rates in the GN-3, GN-4, and GN-5 category. Because fuel prices are volatile, it is expected that a new marginal rate will be develped for each rate change application.

The adopted rate design set forth in Appendix B was developed in the following manner:

1. The wholesale commodity rate was set at the average cost of gas multiplied by the franchise fee factor (1.01546) GEDA was then added.
2. The ammonia producer commodity rate is set at 110% of the average cost of gas sold.
3. The margin rate of 54.750¢/therm, was used for all other classes, except lifeline which was set at 85% of system average, reduced by the customer charge rate of 6.8¢ to derive the commodity charge rate.
4. The resulting revenue undercollection was spread as follows:

   GN-3, GN-4, and GN-5 rates were increased 1.192¢/therm to 55.942, 55.942, and 55.000 respectively. The GN-3 and GN-4 rates reflect commodity plus GEDA and CCA rates. The GN-5 rate reflects commodity plus GEDA only. The remaining undercollection was spread in equal cents per therm to all residential, GN-1 and GN-2 rates.

5. The lifeline rate was then reduced by 2.386¢. To overcome the resulting undercollection, second and third tier residential rates were then increased to become 61.166¢ and 71.668¢, respectively. Finally, GN-1 and GN-2 were increased by .087¢ to match the 2nd tier residential rate

We note that the above rate design is a modification of the guidelines set forth in D.82-04-116.

Residential and GN1/GN2 rates were readjusted to avoid a sudden jolt in lifeline rates which would have experienced a more than 28% increase since the last CAM. Further, a strict application of the guidelines would produce rates in the GN-3 and GN-4 schedules of above 58¢/therm and above 57¢/therm in GN-5. We have testimony in this proveeding that as the natural gas commodity price approaches or exceeds low sulfur fuel oil prices in the Los Angeles Basin, fuel switching may occur. While we do not have solid estimates of the amount of fuel switching that will occur at various alternative gas prices, we are loath to set prices which would exceed the current price of fuel oil in SoCal's service area.

Staff witness Goalwin recommended that residential third tier rates be eliminated. She argued that there is no valid reason at the present time to have steeply inverted rates to the residential class on the SoCal gas system. She noted that at the present time, the incremental cost of gas (El Paso) is below the highest priced gas on the SoCal system. According to Goalwin, the implication of a marginal commodity cost below average cost would dictate a declining block rate design, since if more gas was used, a lower average cost would result. Therefore, she submits the inverted residential rate is not reasonable during periods when the above conditions prevail.

Even if we agreed that it was reasonable to eliminate the inverted residential rate design, staff's proposal does not accomplish that result. The eliminate of the third tier would simply make the second tier inversion all the more steep. Further, we do not agree that the Commission should reverse its residential rate-setting policy in response to a short-term incremental cost situation resulting from contractual obligations. Therefore, we will not adopt the staff recommendation.

SOUTHERN CALIFORNIA GAS COMPANY
SUMMARY OF PRESENT AND PROPOSED RATES
JANUARY 1, 1983

Class of Service	Commodity Rates in ¢/Therm Present Rates D-82-10-040	Proposed Rates*	% Increase
Residential			
Lifeline	40.480	42.504	5.0
Tier II	57.318	61.166	6.7
Tier III	67.318	71.668	6.5
Commercial-Industrial			
GN-1	57.318	61.166	6.7
GN-2	57.318	61.166	6.7
G-COG	53.808	55.000	2.2
GN-32/42	54.750	57.488	5.0
GN-36/46	54.750	57.488	5.0
Ammonia Producers	46.958	45.497	(3.1)
Util. Elec. Gen.			
Scattergood Unit #3	53.808	55.000	2.2
GN-5	53.808	55.000	2.2
Wholesale			
G-60	43.494	42.144	(3.0)
G-61	43.494	42.144	(3.0)

(Red Figure)

* These rates are preliminary. They are based on an additional revenue requirement of $180 million. (General rate case $240 million less CAM reduction $60 million.)

Residential Average Rate	53.978	= 96% system average
Retail Average Rate	56.073	
Total System Average Rate	54.456	

The above averages include customer and capacity charges.

SECOND INTERIM ORDER

IT IS ORDERED that:

1. The gross revenue requirement authorized in Southern California Gas Company's (SoCal) general rate case proceeding A.61081 shall be included in the rates authorized in this decision.

2. On or after the effective date of this order, SoCal is authorized to file revised tariff schedules reflecting rates attached to this order as Appendix B, to be effective no earlier than January 1, 1983. The revised schedules shall apply only to service rendered on or after their effective date.

3. On or after the effective date of this order, San Diego Gas & Electric Company (SDG&E) is authorized to file revised tariff schedules reflecting rates attached to this order as Appendix C, to be effective no earlier than January 1, 1983. The revised schedules shall apply only to service rendered on or after their effective date.

This order is effective today.

Dated DEC 8 1982, at San Francisco, California.

I dissent in part.
/s/ JOHN E. BRYSON
Commissioner

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

APPENDIX B

SOUTHERN CALIFORNIA GAS COMPANY
SUMMARY OF PRESENT AND PROPOSED RATES
JANUARY 1, 1983

Class of Service	Commodity Rates in ¢/Therm: Present Rates D.82-10-040	Commodity Rates in ¢/Therm: Proposed Rates*	% Increase
Residential **			
Lifeline	40.480	44.890	10.8
Tier II	57.318	61.079	6.6
Tier III	67.318	61.079	(9.2)
Average Residential		54.548	6.3
Commercial-Industrial			
GN-1	57.318	61.079	6.6
GN-2	57.318	61.079	6.6
G-COG	53.808	55.000	2.2
GN-32/42	54.750	55.942	2.2
GN-36/46	54.750	55.942	2.2
Ammonia Producers	46.958	45.497	(3.1)
Util. Elec. Gen.			
Scattergood Unit #3	53.808	55.000	2.2
GN-5	53.808	55.000	2.2
Total Retail		56.093	4.3
Wholesale			
G-60	43.494	42.144	(3.0)
G-61	43.494	42.144	(3.0)
Total System		54.456	3.5

(Red Figure)

* These rates are preliminary. They are based on an additional revenue requirement of $180 million. (General rate case $240 million less CAM reduction $60 million.)

	¢/Therm
** Lifeline Average Rate:	44.890 = 82% System Average Rate.
Residential Average Rate:	54.548 = 100% System Average Rate.
Retail Average Rate:	56.073
Total System Average Rate:	54.456

The above averages include customer and capacity charges.

(END OF APPENDIX B)

(APPENDIX C TO BE DISTRIBUTED LATER)