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Decision No. 91108 DEC 19 1979

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company for authority to revise its gas rates and tariffs under the Gas Cost Adjustment Clause and the Supply Adjustment Mechanism and to change gas rate design. (Gas)	Application No. 58892 (Filed May 25, 1979)
Application of Pacific Gas and Electric Company for authority to revise its gas rates and tariffs under the Gas Cost Adjustment Clause to reflect the effect of an increase in the border export price of Canadian gas. (Gas)	Application No. 59045 (Filed August 6, 1979)

(Appearances are listed in Decision No. 90935.)

FINAL OPINION

In these proceedings Pacific Gas and Electric Company (PG&E) seeks to increase its gas rates pursuant to the Gas Cost Adjustment Clause (GCAC) and Supply Adjustment Mechanism (SAM) provisions of its gas tariff.

Background

Application No. 58892, filed May 25, 1979, requests authority under PG&E's GCAC and SAM to increase gas rates effective July 1, 1979 to recover purchased gas costs and the company's authorized gas margin. The increase requested would allow PG&E to recover increased purchased gas costs including the following major increases in gas prices paid to its interstate suppliers: (1) an increase from $2.16 (U.S.) to $2.30 (U.S.) per Mcf in the price of Canadian gas from Pacific Gas Transmission Company (PGT) that occurred May 1, 1979, and (2) increases in the price of gas from El Paso Natural Gas Company (El Paso) pursuant to El Paso's June 1, 1979 general rate increase and its April 1, 1979 Purchase Gas Cost Adjustment (PGA). The proposed July 1, 1979 GCAC rates also include the April 30, 1979 debit balance of $100.4 million in the Gas Cost Balance Account (GCBA). In addition, the proposed increase would enable PG&E to adjust its gas rates to reflect the balance in the Supply Adjustment Account and the difference between the gas margin authorized in PG&E's last general gas rate request Decision No. 89316 and the gas margin estimated to be produced by current rates in the test year beginning July 1, 1979.

On August 2, 1979, PG&E filed Advice Letter No. 1049-G requesting authority to increase its gas rates and charges to recover a higher cost of gas from PGT due to an increase in the border export price of Canadian gas from $2.30 to $2.80 (U.S.) per Mcf of 1,000 Btu gas effective August 11, 1979. The advice letter was submitted pursuant to paragraph 5 in PG&E's gas tariff, Preliminary Statement, Part B, which allowed PG&E to file a revised GCAC adjustment rate whenever a change in a gas supplier's price would change an adjustment rate by at least one cent per therm. The Commission did not authorize the filing of the revised tariff sheets accompanying Advice Letter No. 1049-G, but instead accepted PG&E's conversion of the advice letter into Application No. 59045 and consolidated the new application for hearing with Application No. 58892.

The interim relief requested by PG&E was granted in part by Decision No. 90935 dated October 23, 1979. For purposes of

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interim relief only, PG&E stipulated to the results of operations and adjustments advocated by the Commission staff witnesses (EXHIBIT 13, p. 1). The interim relief recommended by both PG&E and the staff as reflected in Exhibit 13 amounted to $415,721,000. Decision No. 90935 authorized interim relief of approximately $371,293,000.

Further Hearing

Further hearings in the final phase of the consolidated proceeding were held in San Francisco before Administrative Law Judge Mallory on September 27 and 28, and October 25 and 26, 1979. The matters were submitted subject to the receipt of concurrent briefs on November 9, 1979. Briefs were filed by PG&E, the Commission staff, California Manufacturers Association (CMA), Kerr-McGee Chemical Corporation (Kerr-McGee), General Motors Corporation (GMC), Southwestern Portland Cement Company (Southwestern), California Gas Producers Association (Producers), and Toward Utility Rate Normalization (TURN).

Issues

The issues remaining to be decided are the following:

I. Amount of increased revenue to be recovered in these proceedings:

(a) Whether PG&E's storage injection of 18,199 M decatherms is reasonable, or whether the staff proposal to disallow net injections in excess of storage withdrawals should be adopted.

(b) Whether PG&E's treatment of revenues associated with the recovery of carrying costs of gas in

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storage in excess of those reflected in current rates is reasonable, or whether such costs should be disallowed as recommended by the staff.

(c) Appropriate levels of gas sales and gas supply estimates for the test year involved herein (July 1, 1979 through June 30, 1980).

II. Whether PG&E should be directed to purchase more California gas and less Canadian gas, as urged by Producers and TURN.

III. The appropriate level of alternative fuel prices for customers having capability to use low sulphur No. 6 fuel oil, and by customers using No. 2 fuel oil.

IV. Whether the establishment of incentive rates for industrial cogenerators should be adopted herein.

Summary of Decision

Interim annual gas rate increases of $371,293,000 were authorized in Decision No. 90935 in these proceedings. This decision disposes of the additional annual increases of $92,493,000 sought in Applications Nos. 58892 and 59045. We determine that additional revenue of $67,887,000 is reasonable, and that the balance of the requested increase sought in these proceedings should not be granted.

Concurrently with the issuance of this decision, we have issued a final order in PG&E's current general rate increase proceedings (Application No. 58545 (electric) and Application No. 58546 (gas)). That decision determined that the record in the general increase proceedings was inadequate with respect to gas rate design issues involving alternative fuel pricing and that such rate design issues should be determined herein. The estimated increased annual gas revenue requirement for a 1980 test year of $115,087,000 resulting from the current general rate proceeding is also included in the gas rates authorized in this proceeding.

In this decision we have set rates for large industrial customers on the basis of the estimated costs of the alternative fuels that may be used by such customers (No. 6 low sulphur fuel oil and No. 2 fuel oil). The rates for other classes of customers are determined in accordance with the rate design principles found reasonable in the decision in Applications Nos. 58545 and 58546.

Storage Allowances

PG&E's results of operations provide for gas storage injection of 18,199 M decatherms. (Approximately 170.11 billion cubic feet.) The staff disagrees with PG&E's gas injection. The staff proposes to disallow net injections in excess of storage withdrawals unless the company demonstrates deviations due to temperature from average fuel storage operations in subsequent GAC cases. The staff's adjustment eliminates approximately 14,554 M decatherms of gas storage injections from staff's proposed results of the operation. This would reduce PG&E's revenue requirements by $5,416,000. Instead of treating that gas as shortage injection, the staff assumes that the gas will be sold to the steam electric plants. At the same time, the staff recommends that to the extent net storage injection exceeds withdrawal for normal year conditions, the cost of that volume of gas should be credited to the GCBA at the highest incremental cost of gas. If the storage injection is later allowed, the staff would restore to the GCBA the amounts so credited.

The staff recommendation would limit the carrying costs on storage gas in excess of the last authorized storage level. The staff maintains that allowance for storage gas carrying charges is only appropriate if the stored gas is within the amount judged appropriate for the operation of PG&E's system and is based upon a full showing. The staff asserts that Commission policy is that the determination of the amount of stored gas necessary for the system is to be made during a general rate proceeding and not in an offset case (Decision No. 90424 dated June 19, 1979).

The staff position on the treatment of PG&E's sales to Southern California Gas Company (SoCal) assertedly adheres to this policy. The staff argued that PG&E is essentially maintaining that its system could serve SoCal within the authorized storage level of 98 billion cubic feet (3,655 Mdth), and it should be given the benefit of the doubt and allowed to postulate that the source of all SoCal sales from storage is stored gas in excess of 98 billion cubic feet. The staff submits that until the need for excess storage is demonstrated by the applicant the benefit of the doubt should be in favor of the ratepayers and not the company.

PG&E urges that the staff's proposed storage injection adjustments are unreasonable on several grounds. PG&E asserts that the staff witness specifically recognized the need to have sufficient gas storage to meet abnormal peak day (APD) and winter heating requirements. If gas injection is necessary to meet those needs, the staff would allow that gas storage injection in its results of operations. The testimony of PG&E's witness is that storage injection of approximately 18,000 M decatherms is composed of approximately 13,000 M decatherms of storage injection for the McDonald Island Storage Field and approximately 5,000 M decatherms of injection for Los Medanos, a new storage field currently being filled. The 1978-1979 winter was a cold one. Due to that fact, PG&E drew down gas storage to meet its customers' gas requirements.1/ The witness further testified that in order to be prepared to meet the 1979-1980 APD and winter heating season requirements of its customers, PG&E has to refill its gas storage field at McDonald Island. PG&E asserts that the 13,000 M decatherms of gas storage injection at McDonald Island should be recognized and reflected in the results of operations as it would meet the staff's terms and conditions.

1/ Western LNG Terminal Associates, et al. (Decision No. 89177 dated July 31, 1975 in Application No. 57626, et al.), indicates that Priority 1 through Priority 4 customers are to be protected, presumably by storage gas. This interpretation is consistent with the Commission's assumption in the Commission's 1979 California Gas Report, p. 113, that storage gas will be used to meet P-1 - P-4 requirements.

The remaining 5,000 M decatherms of gas storage injection is going into Los Medanos to fill that storage field for the first time. The staff witness recommends disallowing this gas storage injection because cushion gas is a rate base item. The staff witness acknowledged that the Los Medanos storage field was built pursuant to a certificate of public convenience and necessity in which this proposed gas storage was investigated and found to be in the public interest. Once Los Medanos was built, the staff witness agrees that it was prudent and proper for PG&E to start filling the field. Regardless of that fact, the staff witness would eliminate the Los Medanos storage injection from the staff's results of operations and instead treat the gas as sold to steam electric plants. The staff witness suggests that PG&E wait for a general case or initiate a specific offset proceeding.

In PG&E's pending general rate proceeding, Application No. 58546, the parties have stipulated to underground gas storage of approximately 170 billion cubic feet. The decision in Application No. 58546, issued concurrently with this decision, finds that approximately 170 billion cubic feet of underground gas storage is a just and reasonable level for the 1980 test year. The reasons behind the need for increased gas storage are declining pipeline supplies and loss of interruptible load that have reduced gas supplies available to meet high priority requirements. The evidence in this proceeding shows that the factors supporting higher gas storage for the 1980 test year apply to the winter season 1979-1980.

We find that the level of gas storage found reasonable in PG&E's general rate proceeding for the 1980 test year of 170 billion cubic feet will also be reasonable for the July 1, 1979-June 30, 1980 test year used herein and will be adopted for the purpose of this proceeding.

The issue concerning the SAM balancing account treatment of gas sold by SoCal and of carrying costs of gas in storage becomes moot for the purposes of this proceeding with the adoption of level of gas in storage found reasonable as above. Our staff is currently auditing the SAM balancing account in connection with the most recent Gas Cost Adjustment (GCA) proceeding in Application No. 59249, which is scheduled for hearing on December 10 through 21, 1979. Adjustments to the SAM balancing account will be proposed by our staff in that proceeding.

We agree with our staff that the level of gas storage found reasonable in the last general rate case should be the basis for the level of gas storage in subsequent GCA proceedings in the period until the next general rate case is decided. This practice will be followed in subsequent PG&E GCA proceedings. We have followed that practice in this proceeding by adopting the gas in storage level set forth in the general rate proceeding issued concurrently with this decision.

The following tables set forth the revenue requirements, gas sales, and gas in storage which we find reasonable for the purposesof Applications Nos. 58892 and 59045.

TABLE 1

Pacific Gas and Electric Company
REVENUE REQUIREMENT PURCHASED GAS
12 Months Beginning July 1, 1979

Item	Volume (MDth)	Price $/Dth[a]	Cost (M$)	Franchise and Uncollectibles[b] (M$)	Revenue Requirement (M$)
Cost of Gas:					
California	108,231	$1.6863	$ 182,510	$	$
El Paso	311,796	1.7042	531,363		
PGT - Canadian	382,693	2.8707	1,098,597		
PGT - Rocky Mtn.	4,000	1.4142	5,657		
Injection	(18,199)	2.2537	(41,015)		
Withdrawal	1,749	1.8400	3,218		
Total	790,270	2.2528	1,780,330		
Less:					
Base Weighted Avg. Cost of Gas	762,021	1.7079	1,301,457		
GCAC Requirement			478,873	3,477	482,530
Gas Cost Balance Ac. at 4/30/79			100,386	729	101,115
Total GCAC			579,259	4,206	583,645

Adjustments for SoCal Sales

Cost of Gas

$482,530 ÷ 7,620,208 = $0.06332/th
295,650 x $0.06332 = $18.721
Cost of Gas = $482,530 - 18,721 = $463,809

Balancing Account

$101,115 ÷ 7,620,208 = $0.01327/th
295,650 x $0.01327 = 3,923
Balancing Account = $101,115 - 3923 = $97,192

(Red Figure)

a/ With 8-11-79 PGT increase.

b/ At 0.726%.

TABLE 2

Pacific Gas and Electric Company

REVENUE REQUIREMENT SUPPLY ADJUSTMENT

12 Months Beginning 7-1-79

Line No.	Item	Dollars in Thousands	
1	Base Cost Amount		$467,552
	<u>Current Supply Recovery Amount</u>		
2	Current Period Revenues at Base Rates 1/	$1,773,897	
3	Base Weighted Average Cost of Gas 2/	1,310,904	
4	Supply Recovery (L.2-L.3)		462,993
5	Difference (L.1-L.4)		4,559
6	Supply Adj. Acct. Balance 4/30/79		19,523
7	Revenue Requirement (L.5+L.6)		24,082

1/ Excluding Tax Cost Adjustment Clause Revenue and GEDA.

		Mth				
2/	Gross Sales	7,630,218				
	Less G-10	5,090				
	Less G.S.,GT	4,920				
	Net Sales	7,620,208	x	$0.17203	=	$1,310,904

GAC SUMMARY

Item	Current SAM	Other GAC: SAM	Gas Cost	Gas Cost Bal.	Total Other	Total GAC
	(Dollars in Thousands)					
Amount	$4,559	$19,523	$482,530	$101,115	$603,168	$607,727
SoCal Adj.	-	-	(18,721)	(3,923)	(22,644)	(22,644)
Total	4,559	19,523	463,809	97,192	580,524	585,083
Average ($/th.)	.00062				.07926	.07988

(Red Figure)

Purchase of California Gas

Producers and TURN request that PG&E should be directed to purchase more low cost California gas in preference to purchases of higher cost gas from PGT. Evidence in support of this request was presented by Producers. Producers evidence showed that the cost of California gas is substantially less than the cost of gas from PGT or El Paso sources and that substantial amounts of California gas are available for purchase by PG&E.

Prior decisions of this Commission have expressed concurrence in PG&E's gas purchasing practices.2/ The Commission staff submits that there is insufficient evidence available in this record to provide the Commission with a basis for establishing long-term gas supply policy. It states that a thorough analysis of the net benefit (if any) of purchasing additional California gas can only be made within the context of long-term supply/demand studies the staff is prepared to present in the current GCA proceeding (A.59249). Therefore, this issue will be deferred to Application No. 59249 or to Case No. 9642 - Investigation on the Commission's own Motion Into the Natural Gas Supply and Requirements of Gas Public Utilities in the State of California.

2/ For example, Decision No. 86381 (1976) 80 CPUC 487, 499-500 stated as follows:

> "As the probability of future shortages becomes more of a certainty, it is even more important today that we conserve as much of our California gas as we can for future use. The exact time when full deliveries of California gas will be required to serve high-priority uses is dependent on the amount of any curtailment of Canadian gas. Eventually, it will be required, and if taken today for low-priority uses, it will later not be available."

Rate Design Discussion

The contentions of CMA, Kerr-McGee, GMC, and other participants are fully discussed in interim Decision No. 90935 and in the decision issued concurrently in PG&E's general rate proceedings.

Decision No. 91107 dated today in Applications Nos. 58545 and 58546 (PG&E's current general rate proceeding) stated that it is the intention of the Commission that the rate design principles adopted in the general rate proceeding serve as a basis for rate design in this proceeding and in subsequent natural gas offset (GAC) proceedings until a decision is issued in a subsequent general rate increase proceeding. That decision also provided that specific gas rates should not be determined in that proceeding, but should be adopted herein for both the general rate proceeding and this GCAC/SAM proceeding.

The decision in Applications Nos. 58545 and 58546 found that the following general rate design methods are reasonable:

(a) The rate revision shall produce the total revenue requirements determined to be reasonable, based on the adopted level of sales. The increase in rates necessary to produce the total revenue requirements shall be spread in proportion to the following criteria. (The average system rate is total revenue requirement divided by the total sales.)

(b) No increase shall be made in customer (demand) charges. Increases shall be made only in the commodity rates.

(c) The average lifeline rate shall be 25 percent below the average system rate.

(d) Schedule G-2 rates shall be determined in reference to the average system rate (less lifeline sales and revenue).

(e) The Schedule G-50 rate shall be referenced to the estimated current price of No. 2 fuel oil (or at a premium above the Schedule G-52 rate).

(f) The Schedule G-52 rate shall be referenced to the estimated current price of No. 6 low sulphur fuel oil.

(g) The Schedule G-55 rate shall be referenced to the current price of No. 6 low sulphur fuel oil purchased by PG&E.

(h) The Schedule G-57 rate shall be referenced to the current price of No. 6 low sulphur fuel oil purchased by Southern California Edison Company (SCE).

(i) Resale rates to all resale customers (excluding SoCal Gas and Palo Alto) shall be referenced to the average system cost of gas, except that the quantities representing lifeline sales of each resale customer shall be 20 percent less than the nonlifeline rate.

(j) The residential blocks shall be on an inverted rate schedule, with the last block having the highest rate. The average rate paid by a residential customer using twice the lifeline quantity should approximate the G-2 rate. The average rate for residential customers using three times the lifeline quantity should approximate the G-50 rate.

The rate design principles adopted in the general rate decision are followed herein. The further discussion which follows describes how specific rate levels are arrived at using those principles, and comments on the evidence adduced herein.

- Rates for Low-Priority Customers

PG&E and staff rate witnesses used the data current at the time their proposals were made to arrive at the levels of rates proposed for P-3, P-4, and P-5 customers in Schedules G-50, G-52, G-55, and G-57. The Schedule G-55 (PG&E) rate reflects fuel oil prices paid by PG&E. Schedule G-57 rate (SCE) is the same as Schedule G-55 rate. In general, the proposed rate for Schedule G-52 reflects prices for No. 6 low sulphur fuel oil, and the rate for Schedule G-50 is based on No. 2 fuel oil. The Commission staff developed in Exhibit 37 more current price data for No. 6 low sulphur fuel oil and No. 2 fuel oil than was presented in the initial phase of this proceeding. According to the staff exhibit, average data for the months of September and October produce the following high and low prices in cents per therm:

No. 6 Low Sulphur Fuel Oil (G-52)		No. 2 Fuel Oil (G-50)	
High	Low	High	Low
41.00	39.71	58.04	51.61

Exhibit 37 also compares PG&E's most recent cost of boiler fuel oil with the prices paid by San Diego Gas & Electric Company (SDG&E) and SCE, as follows:

TABLE 3

Steam Electric Plant #6 Fuel Oil Cost
(Weighted Average Monthly Delivered Cost Including Sales Tax)*

Item	No. 6 Fuel Oil (Low Sulphur) SDG&E	PG&E	SCE
June			
$/Bbl	18.74	17.53	20.14
Therms/Bbl	61.60	61.71	61.14
¢/Therm	30.42	28.40	32.94
July			
$/Bbl	21.81	19.39	22.72
Therms/Bbl	61.60	61.63	61.24
¢/Therm	35.40	31.46	37.10
August			
$/Bbl	21.97	19.86	23.21
Therms/Bbl	61.60	61.63	60.91
¢/Therm	35.67	32.22	38.10

* Prices exclude deferral and deletion charges.

PG&E and the staff recommend the following rates for P-3, P-4, and P-5 customers:3/

TABLE 4

Proposed Rates (In Cents Per Therm) for P-3, P-4, and P-5 Customers Which Reflect Alternative Fuel Price Data

	PG&E		Staff	
Schedule	Rate	Percent Increase	Rate	Percent Increase
G-50	37.5	40.0	40.0	49.3
G-52	32.0	41.0	34.0	49.8
G-55 and G-57	30.0	24.6	30.0	24.6

Based on the fact that SCE pays higher prices for its fuel oil than PG&E, (Table 3), San Francisco recommends that Schedule G-57 rates be set on a level higher than Schedule G-55 rates. We concur in San Francisco's proposal. The price paid for boiler fuel gas by Edison should reflect the price of fuel oil paid by SCE which would substitute for the gas furnished to it by PG&E.

3/ As a comparison, Kerr-McGee presented a proposal that assumed that a rate of 31 cents per therm will be established under FERC interim regulations for nonexempt boiler fuel gas usages in the interruptible industrial class served under Schedules GO-50 and GO-52. Rates for other customers (except resale and lifeline) would be set on a cost-of-service reduced in proportion to the amount of revenue increase for nonexempt industrial customers under the Kerr-McGee proposal. The Kerr-McGee proposal reflects the use of the maximum provision of FERC's interim order based on estimated No. 6 high sulphur oil prices in PG&E's service area. We have explained herein our reasons for not adopting a maximum based on No. 6 high sulphur fuel. We have also explained in the concurrent decision issued on PG&E's general rate proceedings why we have not adopted Kerr-McGee and CMA proposals that cost-of-service be used as the principal criteria for the setting of gas rates.

We adopt for the purposes of this proceeding the gas rates for P-3, P-4, and P-5 recommended by the staff, as set forth in Table 4 except that Schedule G-57 rates should be based on SCE's fuel oil cost. Those rates give full effect to the fuel oil prices developed in the initial phase of this proceeding. The fuel oil costs which underlie the staff proposals are set forth in Tables 2, 3, and 4 of Decision No. 90935. The more current fuel oil prices set forth in Table 3 herein and in the text were developed from information set forth in PG&E's current GAC proceeding (Application No. 59249) and will be given consideration in that proceeding. It should be noted that fuel oil prices relied upon herein are for the same time frame as the changes in natural gas prices. Final increased rates to reflect those changed prices will become effective some six months after the GCAC period beginning date of July 1, 1979.

Proposed Revision to Schedule G-52

In Application No. 58892, PG&E proposes to restrict Schedule G-52 rates to P-4 customers using No. 5 or No. 6 fuel and to transfer P-3 sales to Schedule G-50. PG&E states that the purpose of this revision is to prevent higher priority loads being served at the lower Schedule G-52 rate when P-4 loads are being curtailed at the higher Schedule G-50 rate. PG&E urges that the Commission also consider either in this proceeding or in Case No. 9884 - Investigation of Gas Priorities and Curtailments, whether Rule 21 adopted therein should be amended to provide that P-4 usage under Schedule G-52 will be curtailed before P-4 usage under Schedule G-50.

The staff is opposed to the restriction of Schedule G-52 as proposed by PG&E. The staff asserts that P-3 customers would have economic reason to abandon PG&E's system when their cost of No. 6 fuel oil is less than the G-50 rate. The staff presented estimates of the reduction in revenues if P-3 sales are lost and the amount of gas not purchased by P-3 customers is purchased by P-5 customers. The staff estimated that based upon test-year 1980 sales reflected in Application No. 58546, P-3 customers will purchase 77,900 Mth. If that amount of gas is purchased under Schedule G-55 rate which is 4 cents per therm less than the Schedule G-52 rate, the estimated revenue loss would be $3,116,000, which would have to be made up by other customers.

No evidence was offered in this proceeding on the question of revising curtailments based on the gas rate schedule under which P-4 customers are served. That issue should be more fully developed in Case No. 9884.

We find that adoption of PG&E's proposal to transfer P-3 sales to Schedule G-50 would cause a revenue shift which could raise the rates of high-priority customers, and is not justified on this record. The proposal will not be adopted.

Cogeneration Rates

Kerr-McGee operates manufacturing plants at Trona, Westend and Searles Lake, which it has cogeneration facilities. The facility at Searles Lake is physically integrated in SCE's transmission system. The other plants are not so integrated. In this proceeding Kerr-McGee asks that lower natural gas rates be established for cogenerators than are applicable to other interruptible customers. To this end, Kerr-McGee proposed a "cogenerator efficiency" rate that is designed to recognize the asserted contribution to energy savings made by PG&E's cogeneration customers (this rate is determined based on an algebraic formula not set forth herein). In the event the Commission is unwilling to undertake the application of the formula rate at this time, Kerr-McGee asks that it and other NGPA exempt customers of PG&E receive a reduced rate, as more fully described in Kerr-McGee's Exhibit 30.

The Commission staff supports Kerr-McGee in principle, inasmuch as the staff has proposed lower natural gas rates for cogenerators in OII No. 26 - Investigation of Electric Resource Plan, etc. The staff believes that the rate formula submitted by Kerr-McGee is flawed as it incorporates the lifeline zero rate of return and other cost of service concepts in CMA's rate proposal.

We concur with the staff and Kerr-McGee that cogeneration should be encouraged and in OII No. 26 we have directed PG&E to file a proposed tariff which will provide a gas rate incentive for cogenerators.

Findings of Fact

1. The revised gas rate design adopted herein will provide PG&E's customers with an economic signal as to the continuing increasing cost of energy.

2. Lifeline rates maintained on the relationship set forth in Section 739 of the Public Utilities Code (25 percent below the average system rate in cents per therm) are reasonable in the furtherance of the purposes for which the Miller-Warren Lifeline Act was enacted.

3. An increase in the natural gas lifeline rate in excess of the relationship described in the prior finding could lessen the effectiveness of the conservation potential inherent in the rate relationship of lifeline to nonlifeline quantities for the residential class.

4. Increasing rates for lifeline quantities in an amount less than the average increase in rates will preserve the intended conservation-oriented benefits of lifeline rates and along with increasing by greater amounts the residential rates for the nonlifeline quantity which is subject to greater elasticity of demand.

5. An inverted rate design for residential rates in which the rate for the last block is the highest residential rate is reasonable because the highest residential usage is largely for luxurious or nonessential purposes, and is not for basic human needs. Such usage should be considered low priority usage and should be subject to a rate comparable to the rates for other low priority usage.

6. The following residential rate blocking will eliminate unnecessary rate blocks, will equalize the differences in rates between blocks, and will result in a more easily understood tariff schedule.

Tier I - Usage not in excess of lifeline quantities.
Tier II - Usage not in excess of twice lifeline quantities.
Tier III - Usage in excess of above.

Schedule G1-N: 0 - 300 therms at Tier II, and Excess at Tier III rates. Schedules GM/S/T - N at Tier II rates.

7. The relationships of Schedules GS, GT, and G-1 should be recomputed to preserve the dollar differential previously found reasonable in Decision 89907.

8. Service under Schedule G-2 (nonresidential) is primarily to small businesses. It will be reasonable to maintain Schedule G-2 rates at or near the average system rate in cents per therm (less the lifeline sales and revenues). The customers served under this schedule are high priority customers who do not have the capability to use alternate fuel and who are not accorded lifeline rates and allowances. The Schedule G-2 rates determined as described in this finding will approximate the associated estimated cost of service.

9. On September 28, 1979, the FERC adopted Order No. 51 in Docket No. RM 79-21 (18 CFR Part 282, Federal Register of October 5, 1979 at 57778). That rule became effective on December 1, 1979 and establishes the price of No. 6 high sulphur oil as the alternative fuel price ceiling from January 1, 1980 through October 31, 1980. Incremental pricing at that level for industrial boiler fuel is now mandated by federal rules.

10. FERC's Order No. 50 adopted concurrently with Order No. 51 (supra) provides for a permanent three-tier system for incremental pricing of industrial boiler fuel gas at the level of No. 2 fuel oil, No. 6 low sulphur fuel, and No. 6 high sulphur fuel oil.

11. The preponderance of PG&E's customers having the ability to burn both natural gas and fuel oil is precluded from burning high sulphur fuel oil because of air pollution restrictions. Moreover, the reasons advanced by FERC for the interim use of No. 6 high sulphur fuel oil for incremental pricing are not applicable to California.

12. The incremental pricing policies of NGPA are reflected in our previously adopted alternative fuel oil pricing methods.

13. Continued use of two-tier alternative fuel cost pricing method for low priority customers of PG&E based on the price of No. 2 fuel oil and No. 6 low sulphur fuel oil is not likely to cause a loss of load to PG&E.

14. The use of a two-tier alternative fuel pricing method for all low priority customers is not likely to induce substantial investment in No. 6 fuel oil capability.

15. Alternate fuel cost pricing retains benefits to California high priority customers that otherwise may be lost because of federal incremental pricing policies to be implemented under the NGPA.

16. Gas rates established close to the cost of alternate energy will provide an incentive for commercial and industrial customers to maximize efficiency and conservation in their use of energy.

17. It will be reasonable to maintain rates for PG&E's resale customers (except the City of Palo Alto) at the level of the average system cost of gas, except that portion of the

resale customer's purchases which is for lifeline service should be maintained at a level 20 percent below the nonlifeline rate.

18. Resales rates for the City of Palo Alto should be maintained on the basis found reasonable in Decisions Nos. 89315 and 89316 (supra).

19. The proposals of CMA to increase the residential customer charges would produce contrary results from the rate design found reasonable above. Any substantial increase in the residential customer charge would shift to the lifeline block percentagewise increases in rates several times the average increase in rates, and thus the relationship of lifeline rates to the average system rate determined to be reasonable above could not be maintained.

20. In view of the foregoing findings it would not be reasonable and consistent with statutory provisions to use average cost-of-service as the sole or controlling method in setting natural gas rates.

21. The following general rate design criteria as adopted in Decision No. 91107 are reasonable:

(a) The rate revision shall produce the total revenue requirements determined to be reasonable, based on the adopted level of sales. The increase in rates necessary to produce the total revenue requirement shall be spread in proportion to the following criteria. (The average system rate is total revenue requirement divided by the total sales.)

(b) No increase shall be made in customer (demand) charges. Increases shall be made only in the commodity rates.

(c) The average lifeline rate shall be 25 percent below the average system rate.

(d) Schedule G-2 rates shall be determined in reference to the average system rate (less lifeline sales and revenues).

(e) The Schedule G-50 rate shall be referenced to the estimated current price of No. 2 fuel oil (or at a premium above the Schedule G-52 rate).

(f) The Schedule G-52 rate shall be referenced to the estimated current price of No. 6 low sulphur fuel oil.

(g) The Schedule G-55 rate shall be referenced to the current price of No. 6 low sulphur fuel oil purchased by PG&E.

(h) The Schedule G-57 rate shall be referenced to the current price of No. 6 low sulphur fuel oil purchased by SCE.

(i) Resale rates to all resale customers (excluding SoCal and Palo Alto) shall be referenced to the average system cost of gas except that the quantities representing lifeline sales of each resale customer shall be 20 percent less than the nonlifeline rate.

(j) The residential blocks shall be on an inverted rate schedule, with the last block having the highest rate. The average rate paid by a residential customer using twice the lifeline quantity should approximate the G-2 rate. The average rate for residential customers using three times the lifeline quantity should approximate the G-50 rate.

22. In Applications Nos. 58892 and 59045 PG&E seeks a combined total increase in Gas Department revenues of $463,786,000 or 25.3 percent for the revenue forecast period of July 1, 1979 through December 31, 1979. Those requests reflect principally the increases in purchased gas obtained from PG&E's principal suppliers, El Paso and PGT (Canada).

23. Interim Decision No. 90935 dated October 23, 1979 granted interim relief designed to produce an annual revenue increase of $371,293,000 or 19.9 percent.

24. The annual sales estimate for the GCAC-SAM period beginning July 1, 1979 of the Commission staff is reasonable.

25. The increased cost of gas based on such sales is $482,530,000. The SAM/GCAC balancing account requirement in Applications Nos. 58892 and 59045 is $120,638,000 as more specifically set forth in Table 1.

26. Decision No. 91107 issued today in Applications Nos. 58545 and 58546 found that:

(a) The increased gas revenues found reasonable therein should be distributed in this proceeding.

(b) The rate design principles found reasonable therein should be adopted in PG&E's GCAC/SAM (GAC) proceedings decided on and after the date of that decision.

27. The total annual revenue requirement that is to be spread in this proceeding is $718.255.000, which includes, (a) the interim increase granted in interim Decisions Nos. 90424 and 90935, (b) a balance of $67,887,000 in excess of that granted in those decisions, and (c) $115,087,000 granted in Decision No. 91107.

28. The rate design principles established in the decision referred to above are followed in this proceeding.

29. The rate for service to SoCal should be increased by the average increase in the cost of gas.

30. The fuel oil price data submitted in this proceeding are reasonably accurate for the purpose of setting gas rates.

31. It will be reasonable to price natural gas for P-3, P-4, and P-5 users with reference to alternate fuel prices developed in this record using a two-tier system consisting of No. 6 low sulphur fuel oil for Schedules G-52, G-55, and G-57 and No. 2 fuel oil for Schedule G-50. The Schedules G-50 and G-52 rates should be referenced to fuel oil prices set forth in Tables 2 and 3 of Decision No. 90935. Schedule G-55 rates should be referenced to the price of No. 6 fuel oil purchased by PG&E, and Schedule G-57 rates should be referenced to the price of No. 6 fuel oil purchased by SCE as shown in Table 4 of Decision No. 90935. The staff proposed rates (except for Schedule G-57) are reasonable.

32. The determination whether an incentive gas rate should be established for cogenerators should be made in OII No. 26 or in a related investigation proceeding.

33. The request of PG&E to restrict Schedule G-52 rates to P-4 customers, using No. 5 or No. 6 fuel oil and to transfer P-3 sales to Schedule G-52 may cause a substantial number of P-3 customers to leave the PG&E system and thus cause higher priority customers to incur increased rates to offset the revenue loss. Such proposal is not reasonable and will not be adopted. The alternate proposal to change customer priorities should be deferred to a more appropriate proceeding.

34. The rate levels found reasonable based on the above findings are set forth in Appendix A.

35. Because there is an immediate need for the authorized rate relief, the following order should be made effective the date hereof.

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

Conclusion of Law

PG&E should be authorized to increase its gas rates as set forth in Appendix A.

FINAL ORDER

IT IS ORDERED that after the effective date of this order Pacific Gas and Electric Company is authorized to file the revised rate schedules attached to this order as Appendix A and concurrently to withdraw and cancel its presently effective schedules. The revised tariff schedules shall become effective five days after filing, but not earlier than January 1, 1980. The revised schedules shall apply only to service rendered on and after the effective date thereof.

The effective date of this order is the date hereof.

Dated DEC 19 1979, at San Francisco, California.

John E. Bryson
President

Vernon L. Sturgeon

Richard D. Gravelle

Claire T. Dedrick

Leonard M. Grimes
Commissioners

Pacific Gas and Electric Company

1. Statement of Commodity Rates (¢ per therm)

(a) Type of Service	Commodity Rates	GAC Current SAM	GAC Other	GEDA	Effective Commodity Rate
Residential					
Tier I	18.855	0	4.394	.062	23.311
Tier II	26.621	0	13.721	.062	40.404
Tier III	32.836	0	17.054	.062	49.952
Nonresidential					
G-2	26.621	0	8.108	.062	34.779
G-50	31.836	0	8.102	.062	40.000
G-52	25.836	0	8.102	.062	34.000
G-55	21.836	0	8.102	.062	30.000
G-57	27.868	0	~~8.102~~ 8.117	.062	~~36.032~~ 36.047
Resale					
G-60 LL	13.737	0	8.277	.062	22.076
G-60 NLL	19.212	0	8.320	.062	27.594
Other LL	13.865	0	8.102	.062	22.029
Other NLL	19.388	0	8.102	.062	27.552
SoCal Gas	22.900	-	7.659	-	30.559

(a) Schedule G1-N: First 300 therms at 40.404 Excess at 49.952
Schedules GM/S/T-N: All use at 40.404
Schedule G-30: Increase commensurately with Schedule G-2.

2. Customer charges are unchanged.

3. Resale lifeline allowances based on firm sales:
G-60 at 33.7%; G-61 at 53.9%; G-62 at 42.1%; G-63 at 46.8%.

4. Applicants tariff rates are changed to the level or extent shown above.

Pacific Gas and Electric Company

ADOPTED RATE DESIGN

Item	Sales	Base Rate Revenue	Authorized 2/ Rate	Authorized 2/ Revenue	Authorized 2/ Increase
	(Mth)	M$	$/th	(M$)	(%)
Residential 1/	(A)	(B)	(C)	(D)	(E)
Customer Months (1000's)	31473.4	37768	1.20	37768	
Tier I (LL)	1597789	263889	.23311	372461	41.1
Tier II (2 times LL)	535552)	192716	.40404	216384)	59.3
Tier III (Excess)	181428)		.49952	90627)	
Total Residential	2314769	494373	.30985	717240	45.1
Nonresidential					
G-2					
Customer Months (1000's)	2025.8	2431	1.20	2431	-
Commodity	1755540	448365	.34779	610559	-
Total G-2	1755540	450796	-	612990	36.0
G-50	902930	227538	.40000	361172	58.7
G-52	189980	43505	.34000	64593	48.5
G-55	1949100	446344	.30000	584730	31.0
G-57	110010	25192	.36047	39655	57.3
Total Nonresidential	4907560	1193375	-	1663140	39.4
Resale					
G-60 LL	15140	2332	.22076	3342	43.3
G-60 NLL	29780	5893	.27594	8217	37.4
G-61,-62,-63 LL	25072	3603	.22029	5523	53.3
G-61,-62,-63 NLL	32238	6617	.27552	8882	34.2
SoCal Gas	295650	67704	.30559	90348	33.4
Total Resale	397880	86149	-	116312	34.9
System Sales Including LL	7620209	1773897	.32764	2496692	40.7
System Sales Excluding LL	6022420	1510008	.34645	2086463	38.2

1/ Adjusted for G-10 and GT discounts of 10,001 Mth.

2/ Includes:

$ 115,087,000	-	A.58546, General
$ 603,168,000	-	A.58469, 58470, 58892, 59045 (Total Incr.)
$ 4,540,000	-	CEDA at $0.00062/th
$ 1,773,897,000	-	Basic Rates
$ 2,496,692,000	-	Authorized Revenue

Pacific Gas and Electric Company

Palo Alto (G-60) Rate Derivation 1/

Line No.	Item	% Total Sales (A)	Sales (Mth) (B)	Adopted PG&E Rate ($/th) (C)	Revenue (M$) (D)
	I. Sales				
1	Customer Months		267,095	$1.20	$ 320.5
	Residential				
2	Tier I	33.70	14,667	.23311	3,419.0
3	Tier II	14.36	6,250	.40404	2,525.3
4	Tier III	4.87	2,120	.49952	1,059.0
5	Non-residential	47.07	20,489	.34779	7,125.9
6	Total	100.00	43,526		14,449.7
7	20% of Total				2,889.9
8	Cost of Gas (16-17)				$11,559.8
	II. G-60 Rates				
9	Lifeline		15,140	$ .22076	$ 3,342.3
10	Nonlifeline		29,780	.27594	8,217.5
11	Total		44,920		11,559.8

12 GAC Differential = $\frac{\text{M\$2,889.9}}{\text{44,920 Mth}}$ = $0.06433 /therm

1/ (a) Lifeline sales at 33.7% of total sales.
(b) Lost and unaccounted for gas at 3.11% of purchases.
(c) Nonlifeline sales based on PG&E's profile of residential non-lifeline and G-2 sales.

Pacific Gas and Electric Company

Residential Bill Comparisons

Therms Billed	Present Rates	Adopted Rates	Increase Amount	Increase Percent
		Summer (All Areas)		
10	$ 3.45	$ 3.53	$ .08	2.3
26 1/	7.31	7.26	(.05)	(.7)
45 2/	13.57	14.94	1.37	10.1
100	34.09	41.74	7.65	22.4
200	76.03	91.69	15.66	20.6
300	117.97	141.65	23.68	20.1
		Winter (X Climatic Band) 3/		
50	$12.44	12.86	.42	3.4
95 2/	23.30	23.25	(.05)	(.2)
106 1/	25.96	25.91	(.05)	(.2)
150	40.68	43.69	3.01	7.4
200	57.95	63.89	5.94	10.3
300	92.50	112.70	20.2	21.8

(Negative)

1/ Lifeline.

2/ Average Use.

3/ Represents the majority of PG&E customers. Bills in other climatic zones would vary depending on lifeline allowances.