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ORIGINAL

Decision No. 91335 FEB 13 1980

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY for Authority to Increase its Electric Rates and Charges effective January 1, 1980 in Accordance with the Energy Cost Adjustment Clause Included in its Electric Tariff.

(Electric)

Application No. 59248
(Filed October 31, 1979)

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Graham & James, by Boris H. Lakusta, David J. Marchant, and Thomas J. MacBride, Jr., Attorneys at Law, for Western Mobilehome Association and California Hotel and Motel Association; Leonard L. Snaider, Deputy City Attorney, and Robert Laughead, for City and County of San Francisco; Robert E. Burt, for California Manufacturers Association; Downey, Brand, Seymour & Rohwer, by Philip A. Stohr and Richard R. Gray, Attorneys at Law, for General Motors Corporation, Otis M. Smith, General Counsel, and Julius Jay Holis, Attorney at Law; Michel P. Florio and Edward M. Goebel, Attorneys at Law, for Toward Utility Rate Normalization; Harry K. Winters, for University of California; Allen R. Crown and Glen J. Sullivan, Attorneys at Law, for California Farm Bureau Federation; and Melvin E. Mezek, for Utility Research; interested parties.
Thomas F. Grant, Attorney at Law, and Ray Charvez, for the Commission staff.

O P I N I O N

Summary

Pacific Gas and Electric Company (PG&E) is authorized to increase electric rates by an estimated $440.0 million to recover increased energy-related expenses required to serve its customers. The largest single portion of this increase is caused by the impact of escalating fuel oil prices incurred by PG&E. The increase reflects a direct energy cost offset and not an upward adjustment in the utility's authorized rate of return.

All of PG&E's customer classes (residential, commercial and industrial) receive about the same overall percent rate of increase. However, the level of rates designed to recover energy-related expenses is increased less for the conservation-oriented residential customer who holds his consumption to the designated lifeline quantity essential for household basic requirements. For example, domestic customers using 240 kWh or less per month will experience an increase of $1.55 (18.7%) in monthly billings; whereas a domestic customer whose monthly usage is relatively large (in excess of 1000 kWh) will experience a monthly increase of $8.40 (19.7%) or more. This method of allocating a portion of the $440.0 million rate increase among domestic customers reflects a constructive effort to encourage continued conservation efforts by the efficient energy consumer, while at the same time discourage the trend of annual increased electric consumption by the average PG&E domestic customer.

Introduction

In Application No. 59248, PG&E requests authority to increase, effective January 1, 1980, the Energy Cost Adjustment Clause (ECAC) billing factors as set forth in its electric tariff. The rate proposal would increase PG&E's electric revenues about 21.7 percent or by an estimated $484.7 million annually. The sought increase is designed to (1) directly offset the utility's current energy costs as calculated under established ECAC procedures, and

(2) amortize the accrued energy cost balance reflected in the balance account for the 12 months ending September 30, 1979.

This matter was assigned to Commissioner Grimes and referred to Administrative Law Judge Gagnon for hearing. Duly noticed public hearings were held on January 2, 3, and 4, 1980. On the latter date the proceeding was submitted upon receipt of late-filed staff Exhibit No. 8, due on or before January 11, 1980. Only PG&E and the Commission staff presented direct evidence relative to the utility's sought ECAC tariff adjustment. Statements in opposition to the sought rate increase were presented by four public witnesses.

<u>ECAC Billing Factor</u>

The ECAC billing factor recovers expenses (not otherwise reflected in base rates) a utility reasonably incurs for electrical energy or the fuel required to produce such energy. With the fuel and energy costs escalating, due to the economic impact of inflationary trends, the ECAC billing factor now represents a very substantial portion of the customer's electric bills. While ECAC as a ratemaking mechanism provides a basis for a dollar-for-dollar cost offset recovery of energy-related expense, the utility has the burden of demonstrating the incurred energy-related expense to be recouped through ECAC is both reasonable and prudent, thereby justifying the Commission's authorization for higher rates to recover the expense from the utility's customers.

The ECAC billing factors which PG&E now proposes to increase are comprised of two components: (1) The offset rate recovers fuel-related expense based on a recent 12-month recorded period. Since the offset rate is based on a historical recorded level of fuel-related expense, which may not coincide with the level of such expense actually incurred while the revised offset rate is in effect, the utility may experience either an over- or undercollection of its fuel-related expense as reflected in a balancing account. (2) A balancing rate component is provided to clear out any accrued balance in the balancing account over a 12-month period. The accrued balance can be either positive or negative, depending on whether the existing billing factor was over or under collecting incurred energy-related expense. In this proceeding, the record period for the energy-related expense (offset rate component) is based on the 12-month period ending September 30, 1979. The record period with respect to the balancing rate is the months from March 31, 1979 through September 30, 1979.

PG&E's ECAC Rate Proposal

Of the total sought estimated annual revenue increase of $484.7 million, PG&E states that the proposed upward adjustments in its ECAC billing factor offset and balancing rate components account for $331.3 million and $153.4 million, respectively. In order to generate the requested energy-related cost offset revenue requirements, PG&E seeks authority to increase its present billing factors by the following amounts:

Class of Service	Proposed Increase(1)
Residential:	(¢/kWh)
Lifeline	0.708
Nonlifeline	0.985
Nonresidential	0.849

(1) Adjusted for franchise taxes and uncollectibles.

PG&E proposes to increase its total adjusted ECAC billing factors for each class of customer (except the residential lifeline class) by a uniform amount of 0.849¢/kWh. For the lifeline customer an increase of 0.708¢/kWh is recommended and is intended to maintain the averate lifeline rate level at a 16.47 percent differential below the total average system rate established in PG&E's last ECAC Decision No. 90869, dated October 10, 1979 in Application No. 58891. The increase of 0.985¢/kWh proposed for nonlifeline service reflects the full burden of the lower lifeline rate, thereby requiring the total residential class to bear its proportionate share of the sought uniform increase. The impact of the sought increase upon PG&E's several classes of service follows:

TABLE 1

Class of Service	Increase In Revenues (12 months ending 12-31-80) ($ 000)	
Residential:		
Lifeline	$ 62,431	21.7%
Nonlifeline	106,075	23.5
Residential subtotal	168,506	22.8
Small Light and Power	39,546	16.9
Medium Light and Power	110,676	20.2
Large Light and Power	122,842	24.9
Public Authority	5,043	18.5
Agricultural	31,583	21.5
Street Lighting	3,464	12.8
Railway	1,834	28.1
Interdepartmental	1,248	20.0
Total Jurisdictional	484,742	21.7

PG&E's Revised Offset Rate

PG&E's proposed offset rates reflect the increased use of fossil fuels during the current record period commencing March 31, 1979 through September 30, 1979 and the increases in the costs of fossil fuels and purchased power experienced during the same period. The utility's witness explained that hydroelectric production declined from about 13 percent above normal in the prior record period (ending March 31, 1979) to about 4 percent above normal in the current record period. Power available for purchase also declined while sales to customers increased. This necessitated an increase in steam electric fuel use of 15.3 percent which when combined with an increase in gas and oil prices of 20.4 percent resulted in an increase of 38.9 percent in the cost of steam electric fuel. Overall, the current cost of fuel and purchased energy has increased by 35.3 percent during the current record period.

In PG&E's Exhibit No. 2 the net current cost for fuel and purchased power for the record period amounts to $1,340,511,000, based on 55,393 millions of kWh sales subject to the offset rate. This, in turn, results in a rate per kWh of system sales of 2.420¢/kWh. Under present offset rates, effective October 11, 1979, total system revenues of $1,022,305,000 are generated. PG&E seeks, therefore, a system offset revenue rate increase of $318,206,000 ($1,340,511,000 minus $1,022,305,000) which results in a system offset rate increase of 0.580¢/kWh.1/

PG&E Revised Balancing Rate

PG&E's proposed balancing rates include the recovery of the undercollected balance remaining in its ECAC balancing account which as of September 30, 1979 amounted to $129.4 million. From this undercollected balance $2.2 million in energy fuel losses associated with sales to the California Department of Water Resources (DWR) in excess of purchases from DWR during the record period was excluded2/. This results in a net adjusted undercollection of $127.2 million remaining in the ECAC balancing account as of September 30, 1979. To offset this amount, PG&E indicates it requires a balancing rate of 0.230¢/kWh based on applicable system sales of 55,393 millions of kWh sales. Under PG&E's present balancing rates, effective October 11, 1979, an overcollection of approximately $20.0 million occurred during the record period. PG&E, therefore, states that a new offset revenue rate increase of $147.2 million (excluding franchise tax and uncollectibles) or a balancing rate increase of 0.266¢/kWh is required to fully amortize the $127.2 million undercollection status of its ECAC balancing account as of September 30, 1979.

Staff Audit and Recommendations

The Commission staff introduced evidence demonstrating the results of a staff audit of PG&E's accounting and financial records employed in the calculations of the utility's proposed billing

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1/ The proposed offset revenue rate increase of $318.2 million is exclusive of adjustments for franchise tax and uncollectibles.

2/ Decision No. 85731, dated April 27, 1976 in Case No. 9886; Decision No. 90869, dated October 10, 1979, in Applications Nos. 58891 and 58468.

factors. The staff accountant's examination covered the 6-month period April 1 through September 30, 1979. It is the staff accountant's opinion that, subject to certain exceptions, PG&E's ECAC balancing account is maintained in accordance with the utility's filed tariff and in conformance with generally accepted accounting and ratemaking principles.

<u>Staff's Revised Offset Rate</u>. The staff's proposed increase in the energy-related offset rate component (0.580¢/kWh) for the 12 months ending September 30, 1979 coincides with PG&E's like rate proposal. (Exhibit No. 6, Table 3-A.)

<u>Staff's Revised Balancing Rate</u>. Pursuant to the aforementioned staff audit it is recommended that PG&E's proposed undercollected ECAC account balance of $129.4 million for the 12-month record period ending September 30, 1979 be made subject to the following disallowances:

TABLE 2

PG&E's Energy Cost Adjustment Clause
Balancing Account

Item	Dollars in Thousands	
Undercollected Balance as of September 30, 1979		$129,434
Staff Adjustment		
a. DWR Sales in Excess of Purchases	$9,013	
Related Interest - April Through September 1979	382	(9,395)
b. Wheeling Charges	960	
Related Interest - November 1976 Through September 1979	139	(1,099)
c. Claim Against SMUD		(35,000)
Adjusted Undercollected Balance as of September 30, 1979		$83,940

The disallowances recommended by the staff, as noted in Table 2 above, result in a $45.5 million reduction in the amount of undercollection recorded in PG&E's ECAC balancing account as of September 30, 1979. Under the staff's recommended disallowances, PG&E's adjusted ECAC undercollection balance of $127.2 million would be reduced to $83.9 million for the 12-month record period ending September 30, 1979. To offset this adjusted undercollection the staff indicates an increase of 0.190¢/kWh would be required in PG&E's system ECAC balancing rate.

The DWR Staff Adjustments. PG&E's adjusted ECAC undercollection balance of $127.2 million reflects an exclusion of approximately $2.2 million for energy fuel losses associated with sales to DWR in excess of purchases from DWR. The staff contends that the methodology employed by PG&E to determine the DWR adjustment misinterprets the generic ECAC Decision No. 85731, dated April 27, 1976, in Case No. 9886 (79 CPUC 758, 768) where the issue of matching revenues and expenses was discussed:

> "C. How are we going to match revenues and expenses more closely?
>
> "This can be accomplished by the introduction of what has been called a balancing account (or deferred energy accounting system), on the books of the utility. Each month the utility will record the required data pertaining to energy revenue and expense to determine what its increased cost was for the month on a recorded 12-month rolling average basis. If the amount of cost exceeds the amount of revenue generated in that month by the clause (or, prior to the first adjustment factor, adopted base rates), a debit should be entered into the balancing account, indicating the utility has funds coming to it at the time of the implementation of the next adjustment factor. If the revenue has exceeded the cost of energy, on the same basis, for that month, then an entry on the credit side of the account should be entered to indicate the utility has collected excess revenue over energy cost, which will be accounted for at the time of the implementation of the next change. In the last day of the third month preceding the date for implementation, the account should be balanced out to implement the next filing."

From the above statement of the Commission, the staff concludes that a 12-month recorded period is the proper method for establishing an ECAC rate. In addition, the staff notes that PG&E was allowed $9.2 million for energy fuel losses associated with sales to DWR in excess of purchases for test year 1978 (Decision No. 89316, dated September 11, 1978 in Application No. 57284) and $4 million for the test year 1980 (Decision No. 91107, dated December 19, 1979 in Application No. 58545). The staff maintains that the undercollection of $129.4 million recorded in PG&E's ECAC balance account as of September 30, 1979 should be reduced by $9.4 million, in lieu of the $2.2 million proposed by PG&E, as an appropriate adjustment for DWR sales in excess of purchases. (See Table 2.)

PG&E's DWR ECAC adjustment is calculated on a net basis (sales v. purchases) and reflects a monthly pro rata allocation encompassing the period from January, 1978 through September, 1979. (Exhibit No. 3) The utility's DWR adjustments accepted by the staff and ultimately adopted by the Commission in PG&E's last ECAC Decision No. 90869, supra, was calculated using the same method employed by the utility in this proceeding. The staff, however, contends (Tr 166) that its acceptance of PG&E's DWR adjustment in Decision No. 90869 was due to a lack of sufficient time to analyze the methodology employed by PG&E.

The staff's DWR ECAC adjustment was calculated on a gross excess sales basis for the 12 months ending September, 1979. This same method was employed in the San Diego Gas & Electric (SDG&E) ECAC Decision No. 90404, dated June 5, 1979, in Application No. 57780 and in the Southern California Edison (SCE) ECAC Decision No. 90488, dated July 3, 1979 in Application No. 58393. The 12-month DWR method employed by the staff has been shown to be consistent with the ECAC rate procedure adopted in Decision No. 85731, supra, for matching revenues and expenses. No good reason has been offered in this proceeding why we should deviate from the historical guidelines established in Decision No. 85731, especially when such deviation in Decision No. 90869 was due to staff oversight. Moreover, we are not convinced that the PG&E suggested method does not, in fact, result in an overcollection of revenues by grossly understating the net energy-related losses associated with DWR sales in excess of purchases. The ECAC balancing account should be reduced by $9.4 million, including interest, as proposed by the staff.

Staff Adjustment for Wheeling Charges. The staff's audit of PG&E's purchased power costs, charged to Account No. 555-Purchased Power and recorded in PG&E's ECAC balancing account, revealed that the utility had included wheeling charges in ECAC since April, 1976 through September, 1979. These wheeling charges amount to $1.1 million. A similar request in PG&E's prior ECAC Application No. 58891 was denied by Decision No. 90869, supra, which sustained the Commission's position that wheeling charges should continue to be considered in general rate proceedings and not in ECAC.

The staff explains that in PG&E's last general rate case the utility included a provision for wheeling expenses similar to those included in ECAC over the past 3-1/2 years. These expenses were included in the adopted 1980 test year estimates in Decision No. 91107, supra. The staff accountant states there is no justification for allowing PG&E to recover through ECAC wheeling charges which have been specifically excluded from ECAC by the Commission in generic ECAC Decision No. 85731, supra, and reaffirmed by Decision No. 90404 dated June 5, 1979 in Application No. 57780.

PG&E's inclusion of certain wheeling charges in the ECAC balancing account is in accordance with the utility's understanding of the charges to be recorded in Account No. 565 v. Account No. 555. It was, however, clearly demonstrated that the specific charges to be included in these two accounts were ambiguous with respect to appropriate accounting for wheeling charges. This ambiguity should be clarified. In the interim, the staff maintains that the Commission's historical policy guidelines relative to the exclusion of wheeling charges from ECAC should not be frustrated by an accounting ambiguity. We agree. The staff's recommendation that $1.1 million (Table 2) relating to wheeling charges and related interest be excluded from PG&E's September 30, 1979 ECAC balancing account is proper and will be adopted.

The Staff Sacramento Municipal Utilities District (SMUD) Claim Adjustment. In PG&E Decision No. 86826, dated January 5, 1977, in Application No. 56810, wherein authority was sought to increase electric rates under established ECAC procedures, the Commission stated:

> "The staff noted that purchased power costs reflect capacity charges paid to the Sacramento Municipal Utilities District (SMUD) in accordance with PGandE's contract with SMUD, although no capacity was received as a consequence of frequent Rancho Seco No. 1 nuclear plant shutdowns. About $7,000,000 of that capacity expense, incurred between April 1, 1976 and September 30, 1976, is reflected in the Energy Cost Adjustment Account Balance. PGandE has filed a multi-million dollar damage claim against SMUD,15/ attempting recovery of all or part of that expense. We will expect PGandE to diligently pursue this claim and if and when the recovery matter is settled, we will expect that a consonant proper adjustment be made in the Energy Coast Adjustment Account Balance. In summary, the staff investigation satisfies us that the power purchased was in accord with PGandE's contracts, and that the energy obtained was economical and resulted in overall lower energy costs to the utility and its ratepayers".
>
> "15/ Although SMUD advised PGandE that Rancho Seco was in commercial operation status it developed that the nuclear plant actually was out of service for about 11 or 12 months".

PG&E's claim for $35 million filed against SMUD has apparently been in various stages of dispute since 1975. Staff investigation, however, indicates that PG&E waited until August 31, 1979 to actually file a claim against SMUD before a board of arbitration for resolution[3]. It now appears that any settlement of this outstanding claim may not reasonably be expected until sometime late in 1981 or possibly as late as mid-1982. In the interim, PG&E's ratepayers have borne the full burden of SMUD's capacity charges (Exhibit No. 8) as reflected in the utility's outstanding claim against SMUD. The staff contends that this protracted delay constitutes prima facie evidence that PG&E has not acted expeditiously nor has it diligently pursued the matter to conclusion with SMUD.

For approximately three years now the Commission has effectively allowed PG&E's ratepayers to absorb SMUD's capacity charges covering a period of 11-12 months in 1975-1976 during which Rancho Seco was, in fact, not commercially operative and for which PG&E now has a $35 million claim outstanding. The staff's position that PG&E's ratepayers have been called upon to bear the cost of this pending matter too long already and should not now be called upon to continue to bear such costs for a future one or one and one-half years is persuasive. It is the staff's view that PG&E's stockholders should now come forward and share in this burden pending final disposition of the utility's claim against SMUD. We agree. Therefore, in our determination of PG&E's ECAC billing factors for the immediate future we shall exclude any consideration of the pending $35 million claim against SMUD as proposed by the staff in its Exhibits Nos. 6 and 8. Such action should

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3/ Article No. 6 of the contract between SMUD and PG&E dealing with unscheduled outages states:

> "That unscheduled outages, scheduled outages extending beyond the scheduled period or delays in completion of Sacramento Resources and other Sacramento facilities cause Pacific to incur additional costs to obtain capacity from outside the Area to maintain adequate and reliable service within the Area. Sacramento shall pay Pacific the amount of such costs".

spur PG&E on with added incentive to reach an equitable settlement of this claim in the immediate future. Upon reaching a satisfactory resolution of this matter we would expect PG&E to come forward with whatever adjustments to its ECAC balancing account it deems appropriate in the circumstances at the next ECAC proceeding.

TURN's Fuel Cost Adjustment

Toward Utility Rate Normalization (TURN), through cross-examination of PG&E's witness, endeavored to obtain the basis for certain specified unscheduled outages that occurred at several of PG&E's power plants during the 12-month record period ending September 30, 1979. TURN also sought the net cost of any replacement power required with respect to each outage. The stated reasons for TURN's request was to first determine whether the outages were caused by any unreasonable and/or imprudent act of PG&E. Secondly, if it were shown that any of the outages were the direct result of unreasonable and/or imprudent actions by PG&E, and the cost of replacement power involved was higher than would otherwise be incurred, TURN would move for the exclusion of the resulting higher energy-related fuel costs from PG&E's proposed ECAC offset rate adjustment. The staff supports TURN's position in this matter.

In order not to unduly delay submission of the subject ECAC proceeding, TURN, PG&E, and the staff all agreed that:

1. PG&E and the staff would initiate a coordinated study as to the underlying causes for the outages that occurred at the following power plant sites of PG&E during the 12-month period ending September 30, 1979:

	Plant Site	Outages
a.	Humboldt Bay Nuclear Unit	Record Period
b.	Contra Costa Unit No. 1	4-21-79 - 7-18-79
c.	Potrero Unit No. 3	Various
d.	Moss Landing Unit No. 2	11-8-78 - 5-31-79
e.	Moss Landing Unit No. 4	9-18-78 - 2-9-79
f.	Morro Bay Unit No. 1	7-20-79 - 9-30-79

2. PG&E and staff shall inform TURN of the results of their joint investigation:

   a. To the extent that the parties all agree that the cause of the outages was not due to any unreasonable/imprudent act by PG&E, no further action is necessary or required.

   b. PG&E and staff will determine the net cost of any replacement power required for each respective outage.

3. Any sought exclusion of energy-related fuel cost deemed appropriate in the circumstances will be considered in the ensuing PG&E ECAC proceeding.

PG&E's Rate Design

In PG&E's last ECAC Decision No. 90869, supra, the Commission found:

> "8. It is reasonable to establish a differential of 16.47 percent for PG&E in this proceeding between the average system rate and the lifeline rate."

In Decision No. 90869 the Commission was endeavoring to achieve some degree of consistency in the relationship between lifeline rates and the rates for all other classes of service as established by the several California utilities pending further study of the matter. The Commission's action was also designed to expand the differential between lifeline and nonlifeline residential rates as a means of promoting energy conservation. Since it is no longer deemed appropriate to impose upon nonresidential customers the burden created by our decision to limit the amount of increase allocated to lifeline residential rates to less than the otherwise uniform increase imposed upon all other classes of service, such burden was imputed to the nonlifeline domestic customer. In doing so, we found in Decision No. 90869 that:

> "11. The above-described rate design will require lifeline customers and the residential customer class as a whole to bear a reasonable proportion of PG&E's additional revenue requirements, will recognize the relative inelasticity of lifeline usage and sales, and will emphasize differences in residential rates above the lifeline level that will promote conservation."

PG&E now recommends a rate design to recover its sought energy-related cost offset revenue increase of $484.7 million which the utility believes comports with the criteria established in Decision No. 90869, supra. (The ECAC rate proposals of PG&E and the staff were developed prior to the ECAC guidelines recently established by the Commission in Decision No. 91107, supra.)

The rate design advanced by PG&E would increase the utility's totally adjusted ECAC billing factors as follows:

Class of Service	Present	Proposed
Residential	(¢/kWh)	
Lifeline	1.035	1.743
Nonlifeline	2.130	3.115
All other classes	1.954	2.803

Under PG&E's rate proposal it would increase the lifeline ECAC billing factor by 0.708¢/kWh and the nonlifeline rate factor by 0.985¢/kWh, which the utility explains would retain the lifeline rate differential of 16.47 percent below the total system average rate previously established by Decision No. 90869, supra. The total adjusted ECAC billing factor for all other classes of service reflects an overall uniform increase of 0.849¢/kWh.

PG&E also directs attention to its related Application No. 59249, now pending before the Commission, wherein an increase is sought in the utility's gas rate Schedule G-55. PG&E's electric department purchases gas for boiler fuel from the utility's gas department at the G-55 gas rate level. Should an increase in the G-55 gas rate be subsequently authorized, pursuant to Application No. 59249, PG&E states that the resulting interdepartmental increase in fuel costs should be reflected in the energy-related expenses of the utility's Electric Department. Failure to do so would, of course, effectively nullify any authority granted PG&E to increase it G-55 gas rates were it not for the resulting undercollection being reflected in the utility's ECAC balancing account. In view of the overall impact of the potential increase in PG&E's G-55 gas rates, it was agreed that no corresponding adjustment in electric rates could be considered in this ECAC proceeding. Should undercollections actually occur, they will accumulate in the ECAC balacing account for resolution in PG&E's next ECAC proceeding.

Staff's Rate Design

As a basis for its ECAC rate design proposal the staff also gave consideration to the various objectives of the Commission. In Decision No. 90869, supra, we held that lifeline allowances were intended to supply minimum essential needs and, therefore, the elasticity of demand within the lifeline block would be less than that for nonlifeline sales. This implies that a rate increase will cause a greater reduction in consumption when applied to nonlifeline sales than when applied to lifeline sales. In the interest of encouraging conservation, the Commission decided to apply a greater portion of the increase to nonlifeline sales. In order to minimize the rate increase to lifeline, thus maximizing the increase to nonlifeline service, the Commission set the lifeline rate 16.47 percent below the average system rate.

Since the total average residential rate was considerably below the total average system rate, in Decision No. 90869, supra, we allocated the increase among classes of customers (except lifeline customers) on a uniform ¢/kWh basis. This resulted in the establishment of a third ECAC billing factor applicable only to nonlifeline domestic sales that was higher than the billing factor rate applicable to lifeline domestic sales or for all other nonresidential sales.

In Southern California Edison Company ECAC Decision No. 90967, dated October 23, 1979, the Commission adopted the following rate design:

> "For purposes of this proceeding and pending a more complete review of the rate relationships between and within classes of service in a general rate proceeding, we will establish domestic rates which will result in an average domestic rate equal to the average system rate. Within the domestic class we will adopt the staff's recommendation for a substantial increase in the nonlifeline rate and, for the present, utilize a nonlifeline rate 50 percent above average lifeline."

The decision went on to state Commission policy for future ECAC rate designs as follows:

> "Since the new total rate for the domestic class will be the same as the average system rate, we will adopt the policy that the burden of future ECAC rate increases be born by all classes of customers on a uniform ¢/kWh basis. Within the domestic class, the burden should be principally on nonlifeline rates."

The staff's proposed rate design conforms with the aforementioned Commission guidelines, except that the total average residential rate is not set equal to the total system average rate and the differential between lifeline and nonlifeline rates is less than 50 percent. The staff proposal is, however, in basic agreement with the following latest Commission rate design policy to be observed in future ECAC proceedings, as enunciated in the recent PG&E general rate Decision No. 91107, supra, as subsequently modified by Decision No. 91316 issued January 29, 1980:

> "Future ECAC Proceedings
>
> In line with its position advanced in Decision No. 90869, supra, the Commission now wishes to establish as future policy that electric rate restructuring between classes of service be accomplished only in general rate proceedings. Absent a convincing showing that such a result would be inequitable, we plan to process subsequent increases or decreases in the ECAC billing factor according to the standards set forth herein. Hereafter, PG&E ECAC rates should be set so that the nonlifeline residential total average rate is 35 to 50 percent above the lifeline total average rate. The lifeline and nonlifeline residential ECAC rates should be calculated in relation to a single ECAC rate for nonresidential customers, so as to assign an equal cents per kWh increase, on the average, to each customer class (including the residential class as a whole). This approach will maintain current differentials in the rate per kWh for each customer class. The nonlifeline residential rate will remain the highest rate on the system."

The staff recommends adoption of the following adjusted ECAC billing factors for PG&E:

	Residential		
	Lifeline	Nonlifeline	Nonresidential
		(¢/kWh)	
Present	1.035	2.130	1.954
Increase	0.646	0.910	0.770
Proposed Rates	1.681	3.040	2.724

Except for the level of the sought increase, the rate design and resulting ECAC billing factors proposed by PG&E and the staff are in substantial agreement.

The staff's proposed ECAC billing factors are premised upon a recommended rate design that would maintain the same general differential between lifeline and nonlifeline residential rates and the existing percentage relationship between lifeline and the total average system rates (TASR) recently established by Decision No. 91107, supra. To accomplish this objective the staff suggests setting the domestic lifeline rate at 17.26 percent below the TASR, with a uniform increase of 0.770¢/kWh being applied to all classes of service except lifeline (0.646¢/kWh). The resulting revenue deficiency generated by the proposed lifeline rate is compensated for by raising the nonlifeline residential rate by 0.910¢/kWh, in lieu of the aforementioned uniform increase of 0.770¢/kWh. On this basis, the nonlifeline residential rate would be set at 38.0 percent above the lifeline rate. This latter percentage relationship comes within the 35 to 50 percent range established as Commission policy for future ECAC proceedings in Decision No. 91107, supra. It should also be noted that the 17.26 percent variation between lifeline and the TASR closely approximates the 16.47 percent differential set in PG&E's last ECAC Decision No. 90869, supra.

A comparison of the total average rates resulting under the rate design proposals of PG&E and the staff with the like total average rates resulting under the present ECAC rate designs of several other California utilities is summarized in the following Table 3:

TABLE 3

Pacific Gas and Electric Company

ENERGY COST ADJUSTMENT CLAUSE

Comparison of Average Rates

Class	SPPC	SDG&E	SCE	PG&E (1) Present	Company	Staff
			(¢/kWh)			
Domestic						
Lifeline	3.723	5.057	4.220	3.309	4.017	3.955
Nonlifeline	5.865	6.955	6.329	4.548	5.533	5.458
Total	5.155	5.806	5.112	3.890	4.739	4.660
Small Light and Power	5.315	6.812	N/A	5.135	5.984	5.905
Medium Light and Power	4.345	5.761	5.426	4.211	5.060	4.981
Large Light and Power	4.185	5.376	4.730	3.532	4.381	4.302
Agricultural	6.115	6.424	5.497	4.075	4.924	4.845
Total Average System Rate (TASR)	5.027	6.093	5.112	4.010	4.859	4.780
% Lifeline Below TASR	25.94	17.00	17.45	17.48	17.33	17.26
% Nonlifeline Above Lifeline	57.53	37.53	49.98	37.44	37.74	38.00
% Increase Over 1/1/76	36.60	65.57	44.82	54.89	87.68	84.63

N/A = Not Available

(1) Based on the total average rates set forth in Table 9-7A, Chapter 9, of Decision No. 91107, dated December 19, 1979.

In view of the magnitude of PG&E's sought ECAC adjustment ($484.7 million) and its impact upon domestic bills, the staff does not recommend that the average residential rate now be set equal to the average system rate. In order to promote energy conservation, however, it is suggested that the average residential rate be gradually adjusted upward to the system average in future rate cases. The staff is also opposed to establishing at this time a 50 percent differential between lifeline and nonlifeline residential rates. While lifeline rates are intended to meet only the minimal needs of customers, it is recognized that some degree of energy conservation is attainable by customers whose consumption never exceeds the lifeline allowance. Accordingly, the staff would set lifeline rates at a level which would give appropriate price signals to lifeline customers. To this end, the staff believes establishing a 50 percent differential between lifeline and nonlifeline rates would be counterproductive at this particular time.

Without first analyzing the effects of present rate design on customer usage patterns, the staff submits that the impact of any new rate design cannot be predicted and, in fact, may run the risk of producing results opposite to those originally desired. In the most recent SDG&E ECAC Decision No. 91106, dated December 19, 1979, in Application No. 59108 the Commission ordered the utility to conduct a study that would measure elasticities of demand for lifeline and nonlifeline sales. The staff recommends that the electric rate design adopted in PG&E's recent general rate Decision No. 91107, issued December 19, 1979 in Application No. 58545 be continued and that PG&E be required to conduct a study that would determine relative elasticities of demand between lifeline and nonlifeline sales. When the results of this study are available further revisions in PG&E's electric rate design may then be considered as deemed appropriate in the circumstances.

The development of elasticity of demand data, as proposed by the staff, would be of great assistance in any future rate design evaluation or analysis. We will direct PG&E to undertake such a study for the domestic class, selecting a random sample of such customers and comparing seasonally adjusted, lifeline and nonlifeline, usage before and after the rates authorized herein. Details of the study should be worked out between PG&E and our staff; the results should be filed with subsequent ECAC applications (updated to reflect the impact of periodic rate modifications). The ensuing order will direct the routine development and presentation of this and other customer usage data in subsequent proceedings, and illustrates our determination to make maximum use of rate design as a tool to promote conservation. It is, for example, conceivable that we might find it necessary to establish an ECAC billing factor and/or a base domestic tailblock rate at some usage point that provides a still higher unit price to the domestic user who consumes at levels far in excess of essential household needs; such customers may be abusive users who should pay accordingly as their high use likely contributes to peak-period generation demands. Given escalating energy rates and the need to encourage conservation, development of this and similar data on a routine basis is essential for enlightened utility management and the presentation of constructive rate design proposals.

<u>Adopted Rate Design</u>

The comparative revenue effect of the rate design proposals is set forth in Appendix A attached hereto. The effect of the proposed rate designs on monthly billings is set forth in attached Appendix B.

The staff conducted an extensive audit and investigation into PG&E's accounting and financial records used in the calculation of the utility's proposed ECAC billing factors and found the energy-related offset rate increase proposal to be acceptable. We have also determined that the staff's recommended reductions in PG&E's undercollections as set forth in its ECAC balancing account to be totally proper and acceptable.

We shall adopt the increase in PG&E's billing factors as recommended by the staff. In doing so, we recognize (Table 3) that the domestic lifeline rate will be established approximately 17.3 percent below the TASR. We also note that the average rate for nonlifeline domestic sales (5.458¢/kWh) is set at 38.0 percent above that set for lifeline sales (3.955¢/kWh) which is within the framework of the ECAC rate design policy established in Decision No. 91107, supra.

In light of the contemplated elasticity of demand study to be conducted by PG&E pursuant to the ensuing order, we may find it necessary in future ECAC proceedings to further adjust the relationship between residential lifeline and nonlifeline sales in order to advance and accelerate our energy conservation objectives. Pending completion of such study, PG&E will be authorized to increase its present ECAC billing factor for lifeline sales from 1.035¢/kWh to 1.681¢/kWh, and for nonlifeline sales the billing factor will be set at 3.040¢/kWh. For all other classes of service the billing factor will be increased from 1.954¢/kWh to 2.724¢/kWh.

<u>Findings of Fact</u>

1. PG&E requests authority for an energy cost offset increase in its present ECAC billing factors. The rate proposal would increase PG&E's electric revenues by an estimated $484.7 million (21.7 percent) annually.

2. Based on energy-related expenses incurred during the 12-month record period ending September 30, 1979, application of PG&E's current ECAC billing factor offset rates would result in recovering $318.2 million less than total energy-related expenses, excluding the usual adjustments for franchise tax requirements and uncollectible accounts.

3. The staff's audit of PG&E's ECAC balancing account covered the record period April 1, 1978 through September 30, 1979, with

primary emphasis on the utility's recorded gas, oil, geothermal, and purchased power costs, quantities of energy consumed, and revenues relating to sales of energy.

4. The staff's audit confirms PG&E's proposal to increase its present ECAC billing factor offset rates by a uniform 0.580¢/kWh for all classes, except the offset rate components applicable to lifeline and nonlifeline residential sales would be adjusted upward by 0.484¢/kWh and 0.674¢/kWh, respectively.

5. The staff audit and investigation shows that PG&E's proposed ECAC balancing account undercollection of $129.4 million for the record 12-month period ending September 30, 1979 should be reduced by $45.5 million to reflect the staff exceptions shown to be fully justified and reasonable.

6. The 12-month record period methodology employed by the staff to calculate the amount of excess DWR sales to be excluded from PG&E's ECAC balancing account is in conformity with the guidelines established in the generic ECAC Decision No. 85731, dated April 27, 1976, in Case No. 9886 (78 CPUC 758,768). Accordingly, PG&E's proposed exclusion of $2,162,269 in excess DWR sales should be increased to $9,395,000.

7. The staff's proposed disallowance of wheeling charges, in the amount of $1,099,000, from the outstanding undercollection recorded in PG&E's ECAC balancing account is in compliance with the guidelines specified in the generic ECAC Decision No. 85731, supra, and reaffirmed by Decision No. 90404, dated June 5, 1979, in Application No. 57780.

8. PG&E's purchased power expense reflects capacity charges paid to SMUD in accordance with a contractual agreement. PG&E has paid capacity charges to SMUD for capacity not available during 1975-1976 when the Rancho Seco No. 1 nuclear power plant was commercially inoperative, or otherwise out of service. In connection with unscheduled outages, Article 6 of the PG&E-SMUD contract provides:

"That unscheduled outages, scheduled outages extending beyond the scheduled period or delays in completion of Sacramento Resources and other Sacramento facilities cause Pacific to incur additional costs to obtain capacity from outside the Area to maintain adequate and reliable service within the Area. Sacramento shall pay Pacific the amount of such costs."

9. PG&E waited until August 31, 1979 to file a claim in the amount of $35 million against SMUD for resolution before a board of arbitration. The total amount of the claim represents capacity charges, including interest, paid to SMUD between April, 1975 and October, 1976 when no capacity was, in fact, available. Settlement of this claim is not expected until late 1981 or mid-1982. In the interim PG&E's ratepayers have borne the full burden of SMUD's capacity charges plus the cost of any replacement power required due to the commercially inoperative status of the Rancho Seco No. 1 nuclear power plant.

10. As an added incentive to litigate this claim more diligently and to eliminate the potential for future overcollection by PG&E to the extent possible, the staff's contention that PG&E's claim against SMUD for $35 million should be excluded from the utility's ECAC balancing account prior to establishing any projected future ECAC billing factor rate in this proceeding is most persuasive and will be adopted.

11. Adoption of the staff's proposed exclusions from PG&E undercollections, as recorded in its ECAC balancing account for the 12-month period ending September 30, 1979, reduces the sought estimated relief to approximately $440.0 million.

12. PG&E and the staff should initiate a coordinated study to determine the underlying causes for the unscheduled outages specified in the Opinion hereof, including the net cost of any replacement power required by each outage, and thereafter inform TURN as to the results of such investigation for whatever action is deemed appropriate in the circumstances.

13. PG&E's total average system rate currently in effect is now more than 25 percent above the total average system rate in effect as of January 1, 1976. The utility's residential lifeline rates may now be increased pursuant to Section 739(c) of the Public Utilities Code.

14. Except for the level of the proposed increase, the rate designs recommended by PG&E and the staff are in basic agreement. However, the staff's suggested rate design, as subsequently modified, is more closely in line with implementation of the ECAC rate design policy as enunciated in Decision No. 91107, supra. We shall, therefore, adopt the staff's recommended ECAC rate design for the 12-month record period ending September 30, 1979.

15. In adopting the staff's rate design proposals, PG&E's nonlifeline residential total average rate will be set at 38.0 percent above the lifeline total average rate. A 17.3 percent differential between lifeline total average rate and the total system average rate is also established.

16. Adoption of the staff's rate design proposal will increase PG&E's ECAC lifeline billing factor by 0.646¢/kWh, the ECAC non-lifeline billing factor is increased by 0.910¢/kWh, and the billing factor for nonresidential classes will be adjusted upward by 0.770¢/kWh.

17. The increase in PG&E ECAC billing factors have been shown to be just, reasonable and nondiscriminatory.

18. The rate increase authorized herein is consistent with the President's Voluntary Wage and Price Guidelines.

19. There are no ongoing studies designed to analyze the impact of a rate design adopted herein on domestic customer use. Such a study may determine the effect of price on elasticity of demand for both customers who usually exceed the lifeline quantity and those who are usually within it.

20. Information compiled on the effect of electric rates on consumption would be most helpful in future proceedings to assess and project cause and effect as conservation-oriented rate structures are evolved.

Conclusions of Law

1. PG&E should be authorized to establish the revised ECAC billing factors set forth in the following order; such rates are fair, just, and reasonable, and to the extent subsequent review of balancing account entries results in changes to the balancing rate, any overcollection will be credited to the balancing account.

2. The following order should be effective the date of signature because PG&E is incurring the increased energy-related expense the revised rates are to recover.

ORDER

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) is authorized to establish and file with this Commission within five days after the effective date of this order, in conformity with the provisions of General Order No. 96-A, revised tariff schedules of ECAC billing factors, as follows:

Residential lifeline	1.681¢/kWh
Residential nonlifeline	3.040¢/kWh
All others schedules	2.724¢/kWh.

2. PG&E shall: (a) Expeditiously undertake to apply accepted statistical methodology and study the consumption patterns of its domestic electric customers before and after this and subsequent rate increases. A random sample of customers who usually exceed the lifeline quantity and one of those who usually stay within that quantity should be studied to determine the effect of price on

elasticity of demand for both categories of customer. Details of this study shall be coordinated by PG&E with the Commission's Electric and Energy Conservation Branches. The results shall be presented in subsequent ECAC and general rate increase proceedings.
(b) Prepare for presentation in subsequent ECAC and general rate proceedings information, on a seasonally adjusted basis, that illustrates consumption per average customer by customer class.
(c) Prepare for presentation in subsequent ECAC and general rate increase proceedings information on what percent of domestic customers' usage falls within the kWh usage categories as set forth in Appendix B.

3. PG&E shall conduct a coordinated study with the Commission's staff to determine the underlying causes for the six outages as specified in the Opinion hereof, including the net cost of the replacement power required by each outage, and thereafter inform TURN and the Commission as to the results of such investigation for whatever future action is deemed appropriate in the circumstances.

The effective date of this order is the date hereof.

Dated FEB 13 1980, at San Francisco, California.

President

Commissioners

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APPENDIX A
PACIFIC GAS AND ELECTRIC COMPANY
PAGE OF
ENERGY COST ADJUSTMENT CLAUSE
A-59248

REVENUE EFFECT OF RATE DESIGNS

LINE NO.	ITEM			PRESENT	COMPANY PROPOSAL			ADOPTED		
					RATE	INCREMENT	%	RATE	INCREMENT	%
		A	B	C	D	E	F	G	H	I
	ECAC RATES (CENTS/KWH)									
1	LIFELINE			1.035	1.743	0.708	68.4	1.681	0.646	62.4
2	NON-LIFELINE DOMESTIC			2.130	3.115	0.985	46.2	3.040	0.910	42.7
3	NON-LIFELINE			1.954	2.803	0.849	43.4	2.724	0.770	39.4
4	DWR			0.300	0.300	0.000	00.0	0.300	0.000	00.0

LINE NO.	CLASS	SALES ESTIMATE 01/80-12/80 GWH	TOTAL REVENUE BASE + ECAC 01/01/80 M$	TOTAL ECAC REVENUE REQUIREMENT						
				M$	M$	INCREASE M$	%	M$	INCREASE M$	%
	DOMESTIC									
5	LIFELINE	10,280.0	339,101.0	106,398.0	179,180.4	72,782.4	21.4	172,806.8	66,408.8	19.5
6	NON-LIFELINE	9,072.0	412,035.0	193,233.6	282,592.8	89,359.2	21.6	275,788.8	82,555.2	20.0
7	SUBTOTAL	19,352.0	751,136.0	299,631.6	461,773.2	162,141.6	21.6	448,595.6	148,964.0	19.8
8	SMALL LIGHT & POWER	4,587.0	235,531.0	89,629.9	128,573.6	38,943.7	16.5	124,949.9	35,320.0	14.9
9	MEDIUM LIGHT & POWER	13,195.0	555,672.0	257,830.3	369,855.9	112,025.6	20.1	359,431.8	101,601.5	18.2
10	LARGE LIGHT & POWER	14,700.0	519,267.0	287,238.0	412,041.0	124,803.0	24.0	400,428.0	113,190.0	21.7
11	PUBLIC AUTHORITY	605.0	16,368.0	11,821.7	16,958.2	5,136.5	31.3	16,480.2	4,658.5	28.4
12	AGRICULTURE	3,893.0	158,629.0	76,069.2	109,120.8	33,051.6	20.8	106,045.3	29,976.1	18.8
13	STREETLIGHTS	415.0	32,147.0	8,109.1	11,632.5	3,523.4	10.9	11,304.6	3,195.5	09.9
14	STATE PUMPS (DWR)	1,965.0	5,895.0	5,895.0	5,895.0	0.0	00.0	5,895.0	0.0	00.0
15	INTERDEPARTMENTAL	143.0	6,362.0	2,794.2	4,008.3	1,214.1	19.0	3,895.3	1,101.1	17.3
16	RAILWAY	260.0	8,470.0	5,080.4	7,287.8	2,207.4	26.0	7,082.4	2,002.0	23.6
17	TOTAL	59,115.0	2,289,477.0	1,044,099.4	1,527,146.3	483,046.9	21.1	1,484,108.1	440,008.7	19.2

APPENDIX B
PACIFIC GAS AND ELECTRIC COMPANY

ENERGY COST ADJUSTMENT CLAUSE
A-59248

EFFECT OF RATES ON MONTHLY BILLS
SCHEDULE D-1

		COMPANY PROPOSAL			ADOPTED		
USAGE KWH	PRESENT BILL	$ BILL	$ INCREASE	% INCREASE	$ BILL	$ INCREASE	% INCREASE
240	$ 8.31	$ 10.01	$ 1.70	20.5	$ 9.86	$ 1.55	18.7
300	11.05	13.34	2.29	20.7	13.15	2.10	19.0
400	15.62	18.89	3.27	20.9	18.62	3.00	19.2
500	20.19	24.45	4.26	21.1	24.10	3.91	19.4
600	24.75	30.00	5.25	21.2	29.58	4.83	19.5
700	29.32	35.55	6.23	21.2	35.06	5.74	19.6
800	33.89	41.11	7.22	21.3	40.54	6.65	19.6
900	38.46	46.66	8.20	21.3	46.01	7.55	19.6
1000	43.03	52.21	9.18	21.3	51.49	8.46	19.7
1100	47.59	57.77	10.18	21.4	56.97	9.38	19.7
1200	52.16	63.32	11.16	21.4	62.45	10.29	19.7
1300	56.73	68.87	12.14	21.4	67.93	11.20	19.7
1400	61.30	74.42	13.12	21.4	73.40	12.10	19.7
1500	65.87	79.98	14.11	21.4	78.88	13.01	19.8
1600	70.43	85.53	15.10	21.4	84.36	13.93	19.8
1700	75.00	91.08	16.08	21.4	89.84	14.84	19.8
1800	79.57	96.64	17.07	21.5	95.32	15.75	19.8
1900	84.14	102.19	18.05	21.5	100.79	16.65	19.8
2000	88.71	107.74	19.03	21.5	106.27	17.56	19.8
2100	93.27	113.30	20.03	21.5	111.75	18.48	19.8
2200	97.84	118.85	21.01	21.5	117.23	19.39	19.8
2300	102.41	124.40	21.99	21.5	122.71	20.30	19.8
2400	106.98	129.95	22.97	21.5	128.18	21.20	19.8
2500	111.55	135.51	23.96	21.5	133.66	22.11	19.8

TOTAL EFFECTIVE RATES (BASED ON 240 KWH LIFELINE ALLOWANCE)

	PRESENT	COMPANY PROPOSAL	ADOPTED
($/MONTH)			
CUSTOMER CHARGE	$1.75	$1.75	$1.75
($/KWH)			
LIFELINE	0.02734	0.03442	0.03380
NON-LIFELINE	0.04568	0.05553	0.05478

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