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Decision No. 91106 DEC 19 1979

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SAN DIEGO GAS & ELECTRIC COMPANY for Authority to Increase its Electric Rates and Charges in Accordance with the Energy Cost Adjustment Clause in its Electric Tariff Schedules.

Application No. 59108
(Filed August 29, 1979)

Jeffrey Lee Guttero, Attorney at Law, for San Diego Gas & Electric Company, applicant.
John W. Witt, City Attorney, by William S. Shaffran, Deputy City Attorney, for City of San Diego; Glen J. Sullivan, Attorney at Law, for California Farm Bureau Federation; and Robert E. Burt, for California Manufacturers Association; interested parties.
Thomas F. Grant, Attorney at Law, and Julian Ajello, for the Commission staff.

O P I N I O N

Summary

The San Diego Gas & Electric Company (SDG&E) is authorized to increase electric rates by an estimated $41.5 million to recover increased energy-related expense necessary to serve its customers. By far the largest portion of this increase is caused by escalating fuel oil prices incurred by SDG&E; the increase is a direct cost offset and is not an increase to the utility's authorized rate of return.

All customer classes (e.g. residential, commercial, and industrial) receive about the same percent of rate increase. However, rates that recover energy-related expense are increased for residential customers in a manner that gives less increase to the conserving customer, which enhances and goes along with the existing conservation-oriented rate schedules adopted in prior proceedings. Those who use 240 kWh or less per month (the lifeline quantity for essential household use) will

experience a 6.5 percent increase, while a higher increase applies to residential use in excess of the lifeline quantity. The result is that a residential customer who uses 240 kWh will have a 77-cent increase and a relatively large user (in excess of 1,000 kWh) will pay an additional $4.66 or more. This method of allocating a portion of the $41.5 million rate increase among residential customers is a constructive means of passing on an unfortunate but largely unavoidable expense increase such that efficient energy consumers and conservers are rewarded. And to the extent customers who conserve are rewarded by paying less per kWh, it is deserved, for electric consumption per average SDG&E residential customer has risen about 5 percent over last year; if that trend is not changed, the result will be more dependence on foreign oil, higher electric rates to finance and build expensive new generating capacity, and ratepayers who are increasingly unhappy with the level of their monthly electric bills.

Background

As originally filed, the instant application requested that SDG&E be authorized to increase its Energy Cost Adjustment Clause (ECAC) billing factor to increase revenues by an estimated $43.1 million annually. Subsequent to the filing of the application the Commission issued Decision No. 90882 on October 10, 1979, in Application No. 58656 (SDG&E's prior ECAC rate adjustment application). The effect of that decision on this instant application is that SDG&E revised its requested increase downward to $41.6 annually.

Duly noticed public hearings were held on October 29 and 30, 1979 in San Diego before Administrative Law Judge Alderson, with Commissioner Leonard M. Grimes, the assigned Commissioner to this proceeding, in attendance on October 29. The matter was submitted upon receipt of late-filed Exhibit 11 and briefs due November 8, 1979.

The ECAC billing factor recovers expense a utility reasonably incurs for electrical energy or the fuel necessary to produce such energy, and as fuel and energy costs have escalated, the ECAC billing factor represents a very substantial portion of the customer's electric bill. The ECAC billing factor, and ECAC as a ratemaking mechanism, allows dollar-for-dollar recovery of energy-related expense for the utility, but despite the offset nature of ECAC, the utility has the burden of demonstrating the incurred energy-related expense to be recouped through ECAC is reasonable and prudent (which would justify the Commission's authorizing higher rates to recover the expense from customers). The total ECAC billing factor at any given time is comprised of two components: (1) the balancing rate component is designed to clear the accrued balance in the balancing account over a 12-month period (the balance can be positive or negative, depending on whether the existing billing factor recovered too little or too much with respect to incurred energy-related expense); and (2) the offset rate component recovers fuel-related expense based on a relatively recent 12-month recorded period. Obviously, if the offset rate component is based on recorded period conditions that vary from actual conditions while the revised offset rate is in effect, there will be a resulting over- or under-collection in the balancing account. In this proceeding, the record period with respect to the balancing account (or balancing rate) is the months from January 1, 1979 through July 31, 1979, and the 12-month recorded period for energy-related expense is based on the year ending June 30, 1979.

Public Participation

At the hearing on October 30 Gary Estes, an informed SDG&E customer who was involved in utility regulation in Virginia while employed by that State's Attorney General, made a statement concerning measures which he thought would significantly contribute to energy conservation. He believes that there is great conservation potential among business customers, citing examples of existing practices such as floodlighting trees and using outside lighting long after businesses are

closed and passing traffic has been reduced. SDG&E should, he believes, have teams of conservation experts that would go forth to do energy audits and educate the small businessman on available conservation measures. He noted that although the National Energy Act of 1978 requires concerted activity by utilities to effect residential energy conservation, it is silent with respect to aiming measures at the commercial customer, and he recommends that this Commission should specifically fill that void with a mandated program for SDG&E to apply to such customers. Other ideas presented by Mr. Estes were related to marginal cost pricing and modifications to ECAC procedures; it was suggested that he present his ideas in our pending investigation into ECAC procedures, OII No. 56, and the next SDG&E general rate proceeding.

Development of the Revised Offset Rate

SDG&E indicated that, based on energy-related expense (which the ECAC billing factor is to recover) for the 12 months ending June 30, 1979, it had incurred energy-related expense of $39.2 million in excess of revenue generated by current ECAC billing factors. No party took exception with SDG&E's development of the net amount of incremental energy-related expense to be recovered over the coming 12-month period through the offset rate; and if the incremental amount to be recovered ($39.2 million) varies with recorded experience, the difference will be reflected in the balancing account (with the recorded expenditures investigated for reasonableness in the next ECAC proceeding).

Development of the Revised Balancing Rate

The record period in this proceeding for review of the ECAC balancing account is January 1, 1979 through July 31, 1979. Following is the development of the ending balance as presented by SDG&E:

Summary of Energy Cost Adjustment Account Entries
January 1, 1979 through July 31, 1979
(Thousands of Dollars)

Month	Beginning Balance (a)	Allocated Energy Expense (b)	Offset Revenue 1/ (c)	Fuel-Related Revenue From Off-System Sales (d)	Oil Sale Loss-(Gain) (e)	Interest (f)	Ending Balance 3/ (g)
Jan 1979	15,481.0	26,386.5	26,444.5	-	-	90.2	15,513.2
Feb	15,513.2	22,965.1	24,782.2	-	23.9	85.2	13,805.2
Mar	13,805.2	23,054.7	23,937.3	-	11.4	78.7	13,012.7
Apr	13,012.7	21,793.5	22,795.8	-	-	73.0	12,083.4
May	12,083.4	22,692.2	22,413.3	-	(26.0)	71.1	12,407.4
June	12,407.4	25,887.9	23,823.5	845.2	(277.9)	75.2	13,423.9
July	13,423.9	27,785.0	25,134.2	365.8	86.7 2/	85.5	15,881.1
Total		170,564.9	169,330.8	1,211.0	(181.9) 4/	558.9	

1/ Includes applicable revenue from offset rates, balancing rates, DWR Sales, and Amortization pursuant to Decision No. 90404 commencing July 1979.

2/ Includes $35,100, actually booked in August, which relates to a June 1979 Union Oil transaction.

3/ Sum of Columns a + b - c - d + e + f.

4/ Net gain.

SDG&E indicates that the existing balancing rate component of the total ECAC billing factor will recover $15,819,800 over the forthcoming 12 months, leaving a balance to be recovered by adjusting the balancing rate of $61,300.

Two amounts included by SDG&E in the balancing account for the period considered herein received particular attention at the hearing. The Commission staff (staff) recommends that the Commission not allow SDG&E to recover $35,000 resulting from an oil sale loss occurring in February and March 1979; also the question of whether SDG&E's inclusion of $57,700 in the balancing account (resulting from the ECAC billing factor portion of refunds made to customers who had not received the proper lifeline allowance) was addressed. These two issues will be separately discussed in the following portions of this opinion.

The staff asks the Commission to allow it to present evidence in the next ECAC proceeding on the reasonableness of balancing account entries, other than fuel oil sales transactions, because "A comprehensive audit was not performed for this proceeding because of time restraints beyond the staff's control, and limited manpower available for participation." Athough we are desirous to adopt an ending balance for the particular balancing account record period in each ECAC proceeding, we are more concerned that entries in the balancing account be thoroughly investigated in order to insure ratepayers are assessed through electric rates for reasonable and prudently incurred utility expenditures. Accordingly, we will by our order accompanying this opinion allow further review of the balancing account record period from January 1 through July 31, 1979 in the next ECAC proceeding which, essentially, preserves any other issues that may arise given further staff review; however, since the staff has completed its review of fuel oil sales transactions, all questions surrounding those entries will be resolved by this opinion.

Reasonableness of the $35,000 Oil Sale Loss
Incurred in February and March of 1979

A substantial factor on whether or not SDG&E sells or exchanges fuel oil is the availability or projected availability of alternate fuel (gas). In years past SDG&E relied primarily on the gas availability forecasts made by its supplier, the Southern California Gas Company; however, for about the last year SDG&E has prepared its own forecasts. With respect to taking gas from its supplier, SDG&E's witness testified that although it may have rejected some gas in early 1978, SDG&E now takes all the gas allotted by its supplier as P-5 boiler fuel for electrical generation. The oil sale at issue involved diesel fuel supplied under contract from Hawaiian Independent Refinery. When SDG&E's management believes it is necessary to sell fuel oil, its fuel acquisition supervisor is the go-between who undertakes to obtain the best possible price. SDG&E's witness indicated he was sure the fuel acquisition supervisor routinely checked with other California utilities as to their fuel oil requirements and presumed he would check with possible nonutility purchasers before oil is sold.

In the record period before us SDG&E booked in the balancing account oil sale losses in February and March (which are at issue) and July, and gains in May and June, netting out to a gain of $181,900. The February and March losses relate to an agreement SDG&E entered into with Kern County Refining Company (Kern Refining) in November of 1978 for delivery of 25,000 barrels of diesel in early 1979. The diesel was delivered from the inventory of SDG&E's supplier Hawaiian Independent Refinery in Los Angeles.

SDG&E contends the transaction in question was reasonable and prudent and that the staff's recommendation to disallow the $35,000 loss is second-guessing a solid management decision based on all known circumstances at the time it was made. The utility, at the hearing, relied primarily on the testimony of Mr. Strachan who indicated the transaction was consummated in November 1978 because it appeared SDG&E would lack sufficient storage capacity for the 25,000 barrels of diesel. The response made by SDG&E to staff's initial inquiry regarding the basis for the transaction mentioned only that it was made to obtain Kern Refining's assistance in arranging other fuel oil exchanges in the fourth quarter of 1978 (RT 129). The following tabulation shows SDG&E's inventory capacity for diesel fuel and the recorded levels relevant to this discussion:

Maximum Usable Diesel Inventory Capacity (barrels)		732,727
Diesel Fuel Oil Ending Inventory For:		
November	1978	460,952
December	1978	269,685
January	1979	283,624
February	1979	327,277
March	1979	305,728
April	1979	321,409
May	1979	365,664
June	1979	381,511
July	1979	414,474

SDG&E's witness did not explain how its fuel supply forecast was prepared or otherwise demonstrate it was reasonable, under the circumstances, as a basis for entering this particular transaction because it anticipated inventory capacity problems. SDG&E implied that the staff should have reviewed its fuel forecast or other data management had available when the transaction was entered, and the staff's witness acknowledged "such information would have been helpful" (RT 122); but this point begs the fact that the utility has the affirmative duty to present evidence on reasonableness. The staff has no obligation to exhaustively investigate and develop the record for the utility on issues surrounding reasonableness.

In addition to alleging SDG&E had adequate storage capacity for the diesel in February and March of 1979, the staff contends the loss was not reasonable because:

1. The contract was entered with a fixed price for future delivery, on terms most favorable to the purchaser, while SDG&E's contracts with major suppliers allow for monthly escalations in prices; and that in late 1978 it was apparent oil prices were showing an upward trend.

2. SDG&E knew at the time it entered the contract in November 1978 that a loss would be incurred and had no reasonable basis or demonstrated benefit for the transaction.

Whether SDG&E should have included an escalator clause in its contract with Kern Refining was disputed. SDG&E contends, since it was a one-time "spot market" transaction, an escalator clause was unrealistic and contrary to usual oil sale business practice. Yet the record indicates that from August through December 1978 diesel prices were generally on the rise. Certainly given today's oil market conditions, the need for an escalator clause for oil to be delivered three to four months away would seem elemental. Whether the conditions under discussion warranted an escalator clause does not require resolution because our holding herein relies on other factors.

Aside from the anticipated storage capacity problem, SDG&E contends the loss in question was reasonable because it was building goodwill with Kern Refining. This rationale is highly questionable at the outset for a utility undertakes a very difficult burden when it attempts to substantiate that ratepayers benefit from losses incurred for goodwill. The staff's brief well summarizes our thinking with respect to this transaction and SDG&E's contention:

> "SDG&E's intention to enter into other oil transactions with Kern County in the future was a second reason to make this oil sale. Mr. Strachan testified that SDG&E decided to accept a loss on this particular oil sale so as to acquire the goodwill of Kern County. This goodwill presumably would produce financial benefit to SDG&E in the anticipated future oil transactions. (Tr. p. 42) Like the inventory problems discussed above, however, the need for the goodwill of Kern County has failed to materialize. SDG&E has not entered into any oil transactions with Kern County since the oil transfers of early 1979. Furthermore, Mr. Strachan testified that the utility has no established plans to deal with Kern County in the future. The record is thus clear that accepting a loss to acquire the goodwill of Kern County was imprudent and an entirely insufficient reason to make the sale of oil to Kern County." (Staff's brief, page 4.)

The city of San Diego (San Diego) supports the staff on this issue, pointing out "the ratepayer should not be burdened with the results of SDG&E's speculations" (San Diego's brief, page 3).

SDG&E asserts that a comparison of the benefits of burning gas rather than the diesel under discussion is relevant to determining whether the $35,000 oil sale loss should be disallowed; it bases its study, which concludes a net $53,000 was saved by burning gas, on gas and oil costs at the end of the record period (July 1979) rather than costs at the time the transaction was entered. The staff prepared a similar comparison, but used as the oil cost the price SDG&E paid for the 25,000 barrels in question, which is more logical since the diesel never entered SDG&E's inventory. Further, the diesel in question was not displaced by gas and, as mentioned above, it is SDG&E's policy to take all boiler gas available from its supplier, through its gas department. The benefit of burning gas in lieu of oil has been set off against gross oil sale losses in past decisions (Decisions Nos. 90404 and 90869)

when the gross losses were reasonably incurred; which brings us to the ultimate ratemaking question: Was the oil sale transaction prudent and reasonable (and should the loss be recovered from the ratepayers)?

SDG&E has not demonstrated before us that the sale of the 25,000 barrels of diesel to Kern Refining was reasonable. It alludes to factors that would be relevant to the issue (e.g. the fuel supply forecast) but failed to produce evidence to support its assertions. SDG&E's assertion that the sale transaction, entered knowing a loss would result, was reasonable as a means of establishing goodwill with Kern Refining to the ultimate benefit of its ratepayers was not demonstrated on the record. Given the state of the record, we have no option but to conclude the transaction was imprudent and it would be unreasonable to have SDG&E's electric ratepayers contribute to the recovery of the loss. Accordingly, we will direct that SDG&E's balancing account be credited in the amount of $35,000.

The Recovery of the ECAC Billing Factor Portion of Refunds Made to Electric Customers Who had not Received Proper Lifeline Allowances

SDG&E has included $57,700 as a debit to the balancing account to cover refunds made to customers who had not received the full lifeline allowances to which they were entitled (e.g. for electric and space heating). Resolution No. E-1833, attached as Appendix A, is relied on by SDG&E in proposing this ratemaking treatment of the ECAC portion of the refunds. The situation was summarized by SDG&E as follows (Exhibit 1, pages 6-7):

> "Early in 1979, it was brought to the Commission's and the Applicant's attention that approximately 4% of the applicant's electric customers might not be receiving lifeline allowances to which they were entitled. The affected customers were those with electric space heating and/or electric water heating who had not responded to lifeline questionnaires mailed in September 1976 and February 1977 and similar customers who had moved into existing residences prior to May 1978.
>
> "Pursuant to Commission Resolution E-1833, Applicant agreed to contact this group of customers. If an additional lifeline allowance was appropriate, Applicant would make a refund based on recalculating billing using the appropriate lifeline allowance

> for the period in question. Resolution E-1833 also provided that 'the amount of refunds made that are associated with ECAC charges will be debited to the ECAC balancing account and SDG&E's recovery of these amounts will be considered in hearings under the ECAC proceedings.'"

Applicant believes it is fair and not retroactive ratemaking to debit the ECAC portion of the refunds to the balancing account because:

> "... the Applicant received no benefit from the life-line allowances which were used. Insofar as ECAC-related amounts are concerned, the effect of using the lower lifeline allowances for billing was that the kilowatthours affected were billed using the non-lifeline ECAC rate instead of the lifeline ECAC rate. In other words, the ECAC revenue credited to the ECAC Balancing Account was overstated in prior periods. Therefore, debiting the ECAC-related portion of the refunds to the Balancing Account results in returning the Balancing Account to the correct total."

The total amount of refunds applicant expects to make is about $2 million, and it proposes similar treatment as the amounts are booked in subsequent record periods. With respect to the base rate portion of the refunds, SDG&E will propose a ratemaking treatment and recognition in its next general rate proceeding.

The staff position is as follows:

> "No staff witness testified directly on this issue. The rates the staff is proposing do, however, provide for recovery of this $57,700. The staff's financial analysis personnel have not audited any part of the total of approximately $2 million in refunds. Therefore, the Revenue Requirements Division at this time remains neutral on whether SDG&E should recover this $57,700. The staff does intend to make an audit of these lifeline refunds and will present its findings in a future proceeding. This is an explicit reason why this record should remain open as recommended above.
>
> "The staff's Utilities Division does recommend that SDG&E recover this $57,700 in the new ECAC rates. A caveat accompanies this recommendation, however. This issue of lifeline refunds exists

> not only for SDG&E. Other of California's large utilities under the Commission's jurisdiction are also making similar refunds. This particular $57,700 is a very small part of the total refunds to be made by all the utilities. The staff has not had an opportunity to thoroughly audit any part of what must be a very large sum of total refunds. If the Commission makes a definitive decision on this relatively small amount of money in this proceeding, it may be committing itself too strongly on the balance of the very large total lifeline refunds to be made by all the utilities.
>
> "The staff recommends that the Commission explicitly state that the treatment accorded the $57,700 in refunds applies only to this proceeding and should not be considered precedent for like treatment of lifeline refunds in future proceedings." (Staff's brief, page 13.)

San Diego is opposed to SDG&E's proposal to include the refunded amounts in the balancing account:

> "San Diego finds this a difficult issue to understand. SDG&E overcharges certain customers because their lifeline allowance is less than it should have been. SDG&E correctly refunds these overcharges to the customers. Now SDG&E wants to recover the refunds it has made from all of its customers, including those who got the refunds. It just doesn't make sense. If SDG&E overcharged certain customers and is now returning those overcharges the matter should be at an end. Everyone has been made whole. To allow SDG&E to recollect the overcharges it has refunded results in windfall profits to the Company. This the Commission cannot legally or morally do."

Lifeline quantities were established in July 1976 (80 CPUC 128) and electric utilities were required to ascertain through a declaration mailed to all customers whether quantities in addition to the basic lifeline quantities were applicable for each customer. SDG&E's Mr. Strachan testified that the utility undertook a study after mailing the declaration notice to customers in 1976 with respect to the return rate and concluded that the saturation and response rate was such that nearly all customers were receiving the proper allowances. He acknowledged

that it turned out the percentage derived from the control group sample was inaccurate, as a result about four percent of customers did not receive the proper allowances in 1976. The result of the utility's contacting customers in early 1979 who had not responded to the questionnaire mailed in September 1976 (about 25,000-30,000 customers) indicated that about half had a lower lifeline allowance than they were entitled to.

Problems with insuring customers receive the proper lifeline quantity were foreseen in our 1976 lifeline decision, wherein we stated in the body of the opinion (80 CPUC 128, page 211):

> "A gas space heating allowance will be provided to all gas customers pending the gathering of information on electric space heating eligibility. For this purpose the respondent electric utilities will provide information on electric space heating eligibility to the gas utilities providing service in common service areas. Gas utilities will therefore not be initially required to independently obtain information to establish eligibility for all customers. The necessary steps to obtain such data to improve administration should be undertaken including the filing of tariffs covering applications for service."

Logically, what should have occurred was for gas and electric utilities to have exchanged billing information of gas and electric customers within their various service territories to determine, for example, which residences were all electric and then check to see that the proper lifeline allowances were being applied. SDG&E is now undertaking such steps between its electric and gas departments, but was not able to secure the use of the Southern California Gas Company's (SoCal) billing data for the portion of Orange County where SoCal provides gas and SDG&E electric service (RT 64-65). We expect our staff to investigate this matter and determine whether the gas and electric utilities we regulate have undertaken to cross-check their billing records as a means of locating customers who are not receiving proper lifeline allowances.

The Revenue Requirements Division auditor who testified requested that we defer a decision on the reasonableness of SDG&E's proposed ratemaking treatment pending further investigation (RT 130). We note that this issue is potentially more complex that it may seem on the surface. For example, if electric customers had too low a lifeline quantity allowance, it is possible some of them may have simultaneously had an excessive gas lifeline allowance. We would like the benefit of our staff's analysis of this issue after investigation. However, we will allow SDG&E to recover the $57,700 in question through the balancing rate adopted herein, subject to adjusting the balance in the subsequent ECAC proceeding. SDG&E's reading of Resolution No. E-1833 is that we have already approved the ratemaking treatment it proposes. That is in error. The order portion of the resolution indicates "the question of rate recovery of the refunded amounts will be considered in appropriate future SDG&E proceedings." (Emphasis added.)

Rate Design

SDG&E and the staff were the only parties which made rate design proposals or commented on rate design in briefs.

Initially SDG&E proposed an ECAC billing factor* ¢/kWh increase as follows:

	Current Rate	Proposed Rate
Lifeline	2.090	2.504
Nonlifeline	3.322	3.733

The staff's initial proposed rate design was almost identical to SDG&E's.

The staff sponsored Exhibit 8 which sets forth the following alternative rate designs.

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* Combined balancing rate and offset rate.

Average Rates (AR) by Class	1 Present ¢/kWh	2 Uniform Increase Of 0.410 ¢/kWh	3 17% Lifelife:TASR Differential ¢/kWh	4 50% Domestic Nonlifeline:Lifeline Differential ¢/kWh
Domestic				
Lifeline AR (including monthly customer charge)	4.737	5.147	5.057	4.817
Nonlifeline AR	6.443	6.853	6.955	7.226
Total Domestic AR	5.396	5.806	5.806	5.806
Total Average System Rate (TASR)	5.683	6.093	6.093	6.093
Percent Lifeline below TASR	16.65%	15.53%	17.00%	20.94%
Percent Total Domestic below TASR	5.05%	4.71%	4.71%	4.71%
Lifeline Base Rate (including monthly customer charge)	2.647	2.647	2.647	2.647
Lifeline ECAC Rate	2.090	2.500	2.410	2.170
Nonlifeline Domestic ECAC Rate	-	-	3.834	4.105
Nonlifeline Nondomestic ECAC Rate	3.322	3.732	3.732	3.732

Staff recommended that the alternative expressed in Column 3 be adopted "primarily because the two-tier domestic rate would most likely promote conservation and reduce energy usage with the burden of ECAC increases principally on the nonlifeline domestic users as dictated by Decision No. 90967."

"Column 3 numbers are rates and percentages calculated with a 17% differential between lifeline and TASR with a uniform 0.410¢/kWh increase to all classes. The revenue deficiency is made up by increasing the non-lifeline domestic ECAC rate by 0.512¢/kWh. This 17% is an arbitrary percentage differential which is between PG&E's 16.68% (Decision No. 90869 p. 13) and Edison's 17.5% (Decision No. 90967 (CTD-Alt.-it p. 19). The two-tier domestic rate is justified by the following quotation from Decision No. 90967 (TD-Alt.-it p. 20a).

'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 borne by all classes of customers on a uniform ¢/kWh basis. Within the domestic class, the burden should be principally on non-lifeline rates.'" (Exhibit 8, page 1.)

Staff did not recommend the alternative which would establish the lifeline rate at 50 percent of the nonlifeline domestic rate because it "results in a lifeline average rate that is 20.94% below the average system rate and this is inconsistent with both Decisions Nos. 90869 and 90967 which use a range of 16% to 18%."

SDG&E indicated that it found the alternative preferred by the staff in Exhibit 8 acceptable. Its witness testified that conservation might ensue from the adoption of the staff's recommended rate design, and that to the degree it encouraged conservation the alternative with a 50 percent differential between domestic lifeline and nonlifeline would produce greater conservation results. SDG&E's witness indicated that the utility has undertaken no studies with respect to elasticity of demand as a variable with price with respect to the lifeline and nonlifeline domestic quantities, which highlights a problem related to that discussed in the staff's brief (pages 10-11):

"...the staff's proposed rate design is intended to produce reduced usage of electricity. There is, however, very little if any historical data available that would confirm that such a rate

design will result in conservation. It would, therefore, be highly desirable to study the conservation effect of the rate design adopted in this proceeding.

"Ideally, in order to compare the conservation effects of two alternative rate designs, data reflecting the customer usage under each design should be compiled. If control groups are chosen for each rate structure and the control groups are equal in all ways other than their electric rates, the energy use per customer should demonstrate which rate design is most conservation effective.

"Such an ideal scheme is unfortunately impractical if not impossible to achieve. Different domestic rate structures cannot be imposed on different domestic customers during the same period. It is likewise all but impossible to establish control groups with identical characteristics except for their domestic electric rates. Therefore, some other method for measuring the conservation effect of the adopted rates must be devised."

Staff recommends that SDG&E be required to apply accepted statistical methods and study the effect of its proposed rate design on customer usage. We believe the development of such data can be of great benefit and we will direct SDG&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 SDG&E and our staff; the results should be filed with subsequent ECAC applications (updated to reflect the impact of periodic rate modifications). The following 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. We recognize that SDG&E may incur some additional expense to develop the data ordered, but we believe that with the use of computer technology and accepted sampling techniques, the burden is not unreasonable. 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.

With respect to consumption per average customer by class (not seasonally adjusted), SDG&E prepared Exhibit 9, which indicates the change in average annual use between the 12 months ended September 1978 and 1979 is as follows:

Class of Service	Percent Increase Or Decrease
Residential	5.2
General Service	2.8
General Power	0.7
Industrial	9.7
Agricultural Power	(0.6)
Street Lighting	(5.0)
Total On-System	2.8

The apparent increase in use per domestic customer concerns us because such increasing usage, along with the demands of new customers, acclerates the need for new generating capacity. To the degree that constructing new capacity can be avoided or delayed, those in SDG&E's service territory benefit; new capacity will be incrementally the most expensive, given escalating construction costs (which directly equate to higher rates), and will have a definite toll on the environment.

At our direction SDG&E proposed time-of-use (TOU) ECAC rates for industrial customers (with monthly demand in excess of 4,500 kW) served under Schedule No. A-6.

At the outset of the public hearing it was announced by the ALJ, after consultation with the assigned Commissioner, that the subject of the TOU ECAC rates should be the subject of a separate proceeding. Potentially affected customers had not been provided direct notice of the TOU rate proposal. Further, since TOU base rates were only recently adopted for SDG&E in the last general rate increase decision, and are essentially experimental in nature, we believe it is premature to explore expanding TOU rates to include the variable energy cost component. Another important concern is that we do not wish to burden ECAC proceedings with relatively generic rate design issues, which can contribute to delay. The staff opposed TOU ECAC rates because:

> "A. The purpose of time-of-use rates is primarily to defer construction of new utility plant by reducing peak load and improving load factor. This is most effectively accomplished through on-peak demand charges which directly affect on-peak load. Demand charges appear only in base rates and would not be appropriate for ECAC rates.
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> "B. The marginal energy cost differential is less than 5 mills and has already been incorporated into the base rates." (Exhibit 8, page 3-2.)

Rate Design Discussion

The revenue effect of the three rate design proposals is set forth in Appendix B hereto; a comparison of average electric rates between SDG&E, the Pacific Gas and Electric Company, Southern California Edison Company, and the Sierra Pacific Power Company as of October 10, 1979 is attached in Appendix C; and the effect of the various rate designs on residential monthly bills is contained in Appendix D.

We will adopt the increase to the ECAC billing factor as recommended by the staff, establishing a separate billing factor for nonlifeline domestic sales and setting the lifeline rate 17 percent below the total average system rate. It is to be noted that the average rate for nonlifeline domestic sales (6.955¢/kWh is roughly 38 percent higher than that for lifeline sales (5.057¢/kWh). This variation closely resembles that which we are authorizing for Pacific Gas & Electric Company in D.91107, for which we have set the nonlifeline domestic rate approximately 36 percent above the lineline rate.

Establishing a new billing factor applicable to domestic nonlifeline sales enables flexibility in passing on ECAC increases in that a relatively equal portion of the overall revenue requirement increase can be borne by the domestic class while allowing a vehicle to spread the increase to that class in such a way as to provide an incentive for energy conservation. Whether this is characterized as sheltering some within the domestic class (the small users) from increases or rewarding those with more modest usage (who stay in or close to the lifeline quantity) may depend on the perspective of the observer. However, we intend it as an economic incentive to conserve. If customers avail themselves of the savings available by minimizing nonlifeline usage, the result is a reward; and it is a reward to which they are entitled, because reducing nonessential use of electricity has direct benefit for all ratepayers as a result of avoiding or slowing the need for new sources of generation.

In future ECAC proceedings, which will probably involve rate increases stemming from OPEC oil pricing, we may move toward increasing the percentage difference between the domestic nonlifeline and lifeline rate. The domestic customer use-tracking study initiated by the following order is intended as a helpful measure and tool to predict elasticity of demand as a variable with rates and may prove helpful as rate design is reviewed in future proceedings.

We will authorize the ECAC billing factor for lifeline sales to be increased from the present 2.090¢/kWh to 2.410¢/kWh, for other domestic sales it will be established at 3.834¢/kWh, and for all other sales it will be increased from 3.222¢/kWh to 3.732¢/kWh.

Findings of Fact

1. Based on energy-related expense incurred in the 12 months ending June 30, 1979, the application of the existing ECAC billing factor offset rate would result in recovering $39.2 million less than total energy-related expense.

2. The Commission staff has audited the balancing account balance for the record period January 1 through July 31, 1979 with respect to fuel oil sales only.

3. In November 1978 SDG&E arranged to sell 25,000 barrels of diesel (to be supplied by the Hawaiian Independent Refinery from a point in Los Angeles) to Kern Refining, with delivery in early 1979.

4. SDG&E knew it would incur a loss on the sale to Kern Refining when it entered the sales contract.

5. SDG&E had more than adequate storage capacity for the 25,000 barrels of diesel in November 1978 and in February and March 1979 when the oil was delivered.

6. SDG&E has not benefited from any goodwill resulting from the diesel sale transaction with Kern Refining since that purchaser has not played a part in any SDG&E oil sale transactions since November 1978.

7. SDG&E did not demonstrate why there was any anticipated lack of storage capacity for the 25,000 barrels of diesel when it entered the transaction in November 1978.

8. The oil sale loss of $35,000 from the sale of 25,000 barrels of diesel to Kern Refining was not reasonably incurred.

9. Resolution No. E-1833 is not dispositive on the ratemaking treatment to be afforded to refunds SDG&E makes to electric customers who did not receive proper lifeline allowance.

10. Revenue Requirements Division staff has not investigated the $57,700 credited to the ECAC balancing account for the ECAC portion of refunds to electric customers who did not receive proper lifeline quantities.

11. The total amount of refund SDG&E estimates it will make pursuant to Resolution No. E-1833 is $1.8 million (total of base rate and ECAC components).

12. SDG&E can be allowed to recover the $57,700 for the refunds through the balancing rate adopted in this proceeding, subject to debiting or otherwise adjusting the balance upon a final determination on the reasonableness of the ratemaking treatment SDG&E proposes.

13. 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.

14. Use of electricity by the average domestic customer increased 5.2 percent from the 12 months ended September 1978 to the same period in 1979.

15. Presently there is an ECAC billing factor for lifeline sales and another for all other sales. Establishing a new billing factor for domestic nonlifeline sales would provide a means of spreading an equal cent per kWh share of increase to the domestic class with a rate that has a sharper differential between lifeline and nonlifeline sales.

16. A domestic ECAC billing factor established for nonlifeline sales that exceeds the nondomestic billing factor may promote conservation within the domestic class because energy units consumed above the lifeline quantity would be priced more noticeably higher, and conservation within the nonlifeline quantity would return a greater economic reward.

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

Conclusions of Law

1. SDG&E should be directed to credit its ECAC balancing account by $35,000 because the Kern Refining oil sale transaction covered in the record period was imprudent and the loss incurred is not a reasonable expense for ratemaking purposes.

2. The entries to the ECAC balancing account covered by the record period under review herein should, with the exception of oil sale transactions, be subject to further review for reasonableness.

3. SDG&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 over-collection will be credited to the balancing account.

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

O R D E R

IT IS ORDERED that:

1. The San Diego Gas & Electric Company (SDG&E) shall credit its Energy Cost Adjustment Clause (ECAC) balancing account in the sum of $35,000 (plus any booked accrued interest on that amount), which was the diesel sale loss incurred in February and March 1979 and originally booked by SDG&E as a debit to the balancing account.

2. The following ECAC billing factor rates may be assessed by SDG&E upon filing revised tariffs with the Commission within five days after the effective date of this order. Such filing shall be in conformance with General Order No. 96-A:

Domestic lifeline	2.410¢/kWh
Domestic nonlifeline	3.834¢/kWh
All other schedules	3.732¢/kWh

3. SDG&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 SDG&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 similar to that contained in Exhibit 9, 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 D.

4. The reasonableness of entries to SDG&E's ECAC balancing account during the record period January 1 through July 31, 1979 is subject to further examination in the subsequent ECAC proceeding, with the exception of oil sale transactions which have been investigated and resolved by this opinion and order.

The effective date of this order is the date hereof.

Dated DEC 19 1979, at San Francisco, California.

President

Commissioners

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Copy for:
✓ Orig. and Copy
_____ to Executive Director
_____ Director
_____ Numerical File
_____ Alphabetical File
_____ Accounting Officer

RESOLUTION NO. E-1833

RESOLUTION

UTILITIES DIVISION
BRANCH/SECTION: Electric
DATE: April 24, 1979

SUBJECT: Order authorizing San Diego Gas and Electric Company to proceed with a plan to verify and correct lifeline allowances and provide refunds to customers who have been billed incorrectly.

WHEREAS: It has been brought to the attention of the Commission and San Diego Gas and Electric Company (SDG&E) through various customer inquiries that a significant number of its residential customers who may be entitled to additional electric lifeline allowances have not been receiving them.

SDG&E has agreed to take the following steps to correct this problem:

1. SDG&E will make a diligent effort to directly contact all current customers whose billing records indicate they may not be receiving the correct lifeline allowance in order to verify the accuracy of its billing records;

2. SDG&E will correct its records and the lifeline allowance for all future billings for those current customers which are determined to have been assigned an incorrect lifeline allowance;

3. SDG&E will make refunds to those current customers identified as having received an incorrect lifeline allowance. The refunds will be based upon the proper allowance covering the entire period of incorrect billing for that customer at that location;

4. To those individuals who received service after July 5, 1977 at an address where they no longer reside, SDG&E will make refunds, as justified, if requested. SDG&E will investigate lifeline billing and make refunds based upon the customer's appropriate lifeline allowances and period of service at the former address.

The Commission staff has no objection to treating the amounts involved in refunding in the following manner:

1. The amount of refunds made that are associated with ECAC charges will be debited to the ECAC balancing account and SDG&E's recovery of those amounts will be considered in hearings under the ECAC proceedings; and

2. The amount of refunds made that are associated with base rate charges and amounts associated with the ongoing effect of lifeline corrections of base rates, if any, together with related administrative costs, will be debited to a balance sheet account and SDG&E's recovery of those amounts will be considered in an appropriate future SDG&E proceeding.

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April 24, 1979
Conference
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3. Any recovery which may be authorized in either proceeding will be permitted only to the extent that SDG&E will not benefit from the lifeline allowance problem.

We find and conclude that the refund plan attached hereto is reasonable and should be adopted.

IT IS HEREBY ORDERED that:

1. SDG&E shall proceed with refunds in accordance with the refund plan attached hereto; and

2. The question of rate recovery of the refunded amounts will be considered in appropriate future SDG&E proceedings.

3. The effective date of this Resolution is the date hereof.

I hereby certify that the foregoing Resolution was duly introduced, passed and adopted at a regular conference of the Public Utilities Commission of the State of California, held on the 24th day of April, 1979, the following Commissioners voting favorably thereon:

JOHN E. BRYSON
President
VERNON L. STURGEON
RICHARD D. GRAVELLE
CLAIRE T. DEDRICK
LEONARD M. GRIMES, JR.
Commissioners

Frederick E. John
Executive Director

APPENDIX B

San Diego Gas & Electric Company

ENERGY COST ADJUSTMENT CLAUSE

A-59108

Revenue Effect of Rate Designs

Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
ECAC Rates ¢/kWh					Company Proposed						Staff 17% LL ; TASR			Decision No. 90967 50% LL ; TASR	
			Present	Rate	Increase	%	Rate	Uniform Increase	%	Rate	Increase	%	Rate	Increase	%
Lifeline			2.090	2.504	0.414	19.81	2.500	0.410	19.62	2.410	0.320	15.31	2.170	0.080	3.83
Non-Lifeline Domestic			3.322							3.834	0.512	15.41	4.105	0.783	23.57
Non-Lifeline			3.322	3.733	0.411	12.37	3.732	0.410	12.34	3.732	0.410	12.34	3.732	0.410	12.34

Class	Sales Estimate 9/79-8/80 M kWh	Total Revenue Base+ECAC 10/10/79 M$	Total ECAC Revenue Requirement M$	M$	Increase M$	%	M$	Increase M$	%	M$	Increase M$	%	M$	Increase M$	%
Domestic															
Lifeline	2,216.0	87,992.0	46,023.1	55,139.7	9,116.6	10.36	55,051.6	9,028.5	10.26	53,069.7	7,046.6	8.01	47,784.8	1,761.7	2.00
Non-Lifeline	1,963.3	145,249.6	65,589.0	73,703.8	8,114.8	5.59	73,684.0	8,095.0	5.57	75,697.9	10,108.9	6.96	81,048.5	15,459.5	10.64
Total	4,179.3	233,241.6	111,612.1	128,843.5	17,231.4	7.39	128,735.6	17,123.5	7.34	128,767.6	17,155.5	7.36	128,833.3	17,221.2	7.38
General - Regular	3,206.5	206,075.6	107,535.0	120,839.4	13,304.4	6.46	120,807.0	13,272.0	6.44	120,807.0	13,272.0	6.44	120,807.0	13,272.0	6.44
- Large	2,249.6	118,115.9	75,730.1	85,099.5	9,369.4	7.93	85,076.7	9,346.6	7.91	85,076.7	9,346.6	7.91	85,076.7	9,346.6	[illegible]
- Power	199.5	12,806.9	6,683.7	7,510.6	826.9	6.46	7,508.6	824.9	6.44	7,508.6	824.9	6.44	7,508.6	824.9	[illegible]
Agricultural - Power	147.3	8,845.9	4,901.5	5,507.9	606.4	6.86	5,506.5	605.0	6.84	5,506.5	605.0	6.84	5,506.5	605.0	[illegible]
Street Lighting	70.3	6,030.2	2,353.5	2,644.7	291.2	4.83	2,644.0	290.5	4.82	2,644.0	290.5	4.82	2,644.0	290.5	4.82
Total	10,052.5	585,116.1	308,815.9	350,445.6	41,629.7	7.11	350,278.4	41,462.5	7.09	350,310.4	41,494.5	7.09	350,376.1	41,560.2	7.10

APPENDIX C

San Diego Gas & Electric Company

ENERGY COST ADJUSTMENT CLAUSE

A-59108

Average Rates (AR) (October 10, 1979)

Class	PG&E	SCE	SDG&E Present	SDG&E Uniform	SDG&E 17% LL:TASR	SDG&E 50% LL:NLL	SPPC
	Cents/KWh						
Domestic Average Rates (DAR)							
Lifeline 1/ (LLDAR)	3.262	4.540	4.737	5.147	5.057	4.817	3.610
Non-Lifeline (NLLDAR)	4.198	5.775	6.443	6.853	6.955	7.226	5.752
Total (TDAR)	3.736	5.095	5.396	5.806	5.806	5.806	5.042
Small Light and Power	5.033	5.797	6.402	6.812	6.812	6.812	5.202
Medium Light and Power	4.208	4.790	5.351	5.761	5.761	5.761	4.232
Large Light and Power	3.405	4.449	4.966	5.376	5.376	5.376	4.072
Agricultural	3.945	5.273	6.014	6.424	6.424	6.424	6.002
Total Average System Rate (TASR)	3.905	5.322	5.683	6.093	6.093	6.093	4.914
	Percent						
Percent LLDAR Below TASR %	16.47	14.69	16.65	15.53	17.00	20.94	26.54
Percent TDAR Below TASR %	4.33	4.27	5.05	4.71	4.71	4.71	(2.60)
Percent LLDAR Below NLLDAR %	22.30	21.39	26.48	24.89	27.29	33.34	37.24

(Red Figure)

APPENDIX D

San Diego Gas & Electric Company

ENERGY COST ADJUSTMENT CLAUSE

A-59108

Effect of Rates on Monthly Bills

Schedule DR (Domestic)

Usage kWh	Present Bill	Company Proposed	Increase	% Increase	Uniform Increase	Increase	% Increase	17% LL:TASR Differential	Increase	% Increase	50% LL:NLL Differential	Increase	% Increase
240	$ 11.82	$ 12.82	$1.00	8.46%	$ 12.81	$0.99	8.38%	$ 12.59	$0.77	6.51%	$ 12.02	$ 0.20	1.69%
300	15.68	16.92	1.24	7.91	16.91	1.23	7.84	16.75	1.07	6.82	16.34	.66	4.21
500	28.53	30.59	2.06	7.22	30.58	2.05	7.19	30.63	2.10	7.36	30.76	2.23	7.82
600	34.95	37.43	2.48	7.10	37.41	2.46	7.04	37.57	2.62	7.50	37.96	3.01	8.61
700	41.38	44.26	2.88	6.96	44.25	2.87	6.94	44.50	3.12	7.54	45.17	3.79	9.16
800	47.80	51.10	3.30	6.90	51.08	3.28	6.86	51.44	3.64	7.62	52.38	4.58	9.58
1,000	60.65	64.77	4.12	6.79	64.75	4.10	6.76	65.31	4.66	7.68	66.80	6.15	10.14
1,200	73.50	78.44	4.94	6.72	78.42	4.92	6.69	79.19	5.69	7.74	81.21	7.71	10.49
1,500	92.78	98.95	6.17	6.65	98.93	6.15	6.63	100.00	7.22	7.78	102.84	10.06	10.84
2,000	124.90	133.13	8.23	6.59	133.10	8.20	6.57	134.68	9.78	7.83	138.88	13.98	11.19