

ORIGINAL

Decision 82 04 115

APR 28 1982

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, to Establish an)
 Annual Energy Rate and to Make)
 Certain Other Rate Changes in)
 Accordance with the Energy Cost)
 Adjustment Clause as Modified by)
 Decision 92496.)

Application 60865
 (Filed September 4, 1981;
 amended November 6, 1981)

(Appearances attached as Appendix A)

INTERIM OPINIONPROCEDURAL HISTORY

San Diego Gas & Electric Company (SDG&E) filed this application on September 4, 1981, seeking a rate decision by the November 1 revision date established for SDG&E. This application is SDG&E's first Energy Cost Adjustment Clause (ECAC) reasonableness review filing under the procedures established by Decision (D.) 92496 issued in Order Instituting Investigation (OII) 56. When it became apparent that hearings would not be held by the revision date, SDG&E filed an amended application on November 6, 1981, ten days in advance of the November 16, 1981 hearing date. As authority to file such an amendment, SDG&E cites D.93628 issued in Pacific Gas & Electric Company's (PG&E's) ECAC reasonableness application which encouraged PG&E and the other utilities to amend their applications if hearings would not be held by the revision date.

In the amended application, SDG&E asked the Commission to adopt a January 1, 1982 implementation date for the Annual Energy Rate (AER) and to determine that rate on a ten-month (January 1, 1982

through October 31, 1982) rather than an annual (November 1, 1981 through October 31, 1982) basis. At the November 16 hearing, the Commission staff (staff) disclosed that its review of the recently filed amendment would not be completed until the latter half of December 1981. Further hearings were held on December 22 and 23, 1981.

In January 1982 SDG&E petitioned to have further hearings set in this application for the purpose of establishing an attainable implementation date for the AER and allowing SDG&E to forgo its March 1, 1982 ECAC revision date filing. SDG&E proposed to consider the effect of the March filing in the further hearings by requesting the Commission to implement an AER without any increase in total electric rates. This petition was granted by the administrative law judge (ALJ) on January 24, 1982. On February 22, 1982 a further hearing was held in which both SDG&E and staff presented AER proposals based on the period April 1, 1982 through October 31, 1982. In addition, both SDG&E and staff proposed that ECAC rates be decreased so the AER could be implemented with no change in total electric rates.

The application was submitted on February 22, 1982, pending receipt of concurrent briefs on March 8, 1982. Briefs were filed by SDG&E, staff, and the City of San Diego (San Diego). We are now prepared to issue a decision.

INTRODUCTION

D.92496 declared the Commission's intention to review on an annual basis the reasonableness of each utility's fuel-related expenses booked in the ECAC balancing account. The record period for the annual ECAC balancing account reasonableness review is typically the 12 months ending as of the preceding revision date. Since SDG&E originally filed this application to meet its

November 1981 revision date, the record period for review would normally cover the 12 months ending June 30, 1981. However, this reasonableness review scrutinizes SDG&E's operations and expenses from January 1, 1980 through June 30, 1981. This unusual 18-month period was addressed to reflect the fact that the Commission had previously authorized SDG&E to delay filing of its report on the reasonableness of its fuel-related expenses for approximately six months so that it would coincide with the November ECAC reasonableness review filing.

D.92496 further stated: "We consider that an appropriate balance of risk and incentive is created by permitting the inclusion of 98% of otherwise recoverable fuel expenses in ECAC, with the remaining 2% of such expenses to be estimated on a forward looking basis once each year in the course of each utility's annual review of the reasonableness of fuel expenses..." The decision established the AER which incorporated the following elements:

1. 2% of fuel and purchased energy costs;
2. Gains or losses from sale of fuel oil underlift payments and facilities charges; and/or similar expenses;
3. Carrying costs of fuel oil in inventory.

By today's decision we will establish an AER for SDG&E to allow recovery of costs associated with the above-referenced elements.

SDG&E's current rates are as follows:

	Base Rate	ECAC Rate	Total Rate
Domestic Lifeline	4.980	4.000	8.980
Domestic NonLifeline	4.980	7.655	12.635
Nondomestic		6.304	

SDG&E seeks establishment of an AER of 0.453 cents per kilowatt hour (¢/kWh) which will cover seven months commencing

A. Undisputed Ratemaking Issues

The staff and SDG&E concurred on the following issues and recommendations:

1. The net-to-gross multiplier developed by the staff is appropriate.
2. Use of all energy costs in calculating the 2% of energy costs used in the AER rate, or SDG&E's expense of just fossil fuels and nuclear expense is appropriate.
3. Revision dates for SDG&E ECAC proceedings as set forth in D192496 will not be changed as a result of the April 1 revision date used for setting the AER in this case.
4. The differential in rates between lifeline and nonlifeline residential rates is to be maintained through ECAC rates only; base and AER rates will be unaffected.
5. The revenues collected under the AER will not be subject to the newly instituted Electric Revenues Adjustment Mechanism (ERAM).
6. SDG&E need not file an advice letter on January 1, 1983 to revise the AER as long as new AER rates are set on or about the November 1, 1982 revision date and provide for inclusion of the rate of return authorized for SDG&E in the 1983 attrition allowance.
7. The base rates reduction calculated by SDG&E is appropriate.
8. A recalculation of energy expenses made by SDG&E as a result of January Low Sulfur Fuel Oil (LSFO) costs being 62 cents lower than forecasted is appropriate.
9. Inclusion in the ECAC balancing account under the existing ECAC procedures of two losses on the sale of LSFO in January and February 1982 is appropriate.
10. SDG&E's proposal to calculate rates by setting ECAC rates at the difference between current total rates and the sum of the adopted AER rate and the base rate after reduction for fuel

Oil in inventory is appropriate. This results in no net change in total rates.

11. Calculation of the AER on the basis of a seven-month period is appropriate.

We will adopt all of the above-referenced stipulated recommendations, except 5. Revenues collected under the AER should be subject to the ERAM. Such action will not affect the incentive provided to SDG&E by the AER to conform actually incurred expenses to the amounts authorized for recovery by today's decision. Inclusion of AER borne revenues in the ERAM will merely ensure that SDG&E does not over- or undercollect authorized AER expenses due to fluctuations above or below the adopted sales estimator.

B. Positions of the Parties on Disputed Rate-making Issues

1. SDG&E

a. SDG&E's operations and expenses for the period January 1980 through June 30, 1981 were reasonable. SDG&E testified that its strategy for resource utilization is aimed at achieving the lowest cost fuel mix possible. In pursuing this strategy, SDG&E is seeking in a separate proceeding to include San Onofre Nuclear Generating Station Unit 2 in its resource mix. Nuclear energy represents the lowest cost energy available to SDG&E. SDG&E purchases economy energy if the cost of that energy is less than the incremental generating costs on its system. In addition, SDG&E constantly tries to contract for more firm purchased energy and to increase the amount of energy purchased under existing contracts.

SDG&E's stated policy is to make maximum possible use of natural gas, which has historically been less expensive than residual fuel oil. Although oil supply considerations caused SDG&E to reject certain proffered gas supplies during nonparity periods, it did not reject any natural gas while parity was in effect.

SDG&E maintains that the excellent power plant heat rate achieved by its own generating units is another indicator of the efficiency of its operations. SDG&E notes that the staff engineers agree that SDG&E's recorded energy costs have been reasonable. In fact, SDG&E's fuel oil prices have been shown to compare very favorably with the fuel oil prices of the other California utilities. SDG&E

concludes that the record is clear that its policies and actions, given system constraints, produced the lowest possible cost energy mix.

b. SDG&E's actions with respect to its fuel oil supply contracts have been reasonable.

SDG&E believes that review of its fuel supply contracts within the total historical perspective will show that the record period actions have been fully reasonable and appropriate.

SDG&E's fuel oil contracts with Hawaiian Independent Refinery Incorporated (HIRI) and Tesoro Alaska Petroleum Company (Tesoro) go back as far as 1974. These contracts were entered into at a time when the major concern of all California utilities was to obtain a reliable supply of fuel oil.

During the period 1977 through 1980 SDG&E's minimum fuel contract volumes were consistently less than the forecast oil burn. The staff engineer, who reviewed only from 1980 forward, reached the same conclusion. It is clear, therefore, that on a forward-looking basis, SDG&E's minimum contract volumes were not excessive. Only hindsight reveals that excesses did develop.

The excess fuel oil situation which occurred during the record period in this proceeding had several causes. Warmer than average weather has been a principal cause of the excess. The period from 1977 through 1981 has been warmer than average, and the winter of 1980-81 was the second warmest winter in history. If average weather had existed, causing high-priority customers to use more of the gas that eventually was consumed in the power plants, the excess very well may not have occurred. A second reason for increased gas supplies was the Natural Gas Policy Act of 1978 (NGPA). The improvements in supply resulting from the NGPA created a firm supply of gas by 1980 which substantially exceeded past forecasts. Finally, conservation and the effect of increasing prices operated to reduce the requirement for fuel oil. These and other factors led to the excess.

SDG&E's record shows that it acted reasonably in its fuel oil contracts. SDG&E's fuel oil contracts were entered into at a time when the major concern of all California utilities was to obtain a reliable supply of fuel oil.

SDG&E's responses to the above factors were made under its policy to use all alternatives available to reduce oil supply as long as an economic benefit to the electric ratepayer would result. The first of these responses was to negotiate contract reductions and underlifts with both suppliers. SDG&E's contract with HIRI as of January 1, 1980, called for a minimum volume of 14,000 barrels per day (bbl./day). SDG&E reduced this minimum daily take to 10,000 bbl./day by arranging an underlift of 4,000 bbl./day for the period September 1981 through December 1981. An additional underlift of 6,000 bbl./day, reducing minimum contract takes to 8,000 bbl./day, runs from January 1, 1982 through April 30, 1982. As of May 1, 1982, the minimum contract requirement from HIRI will remain at 8,000 bbl./day with no further underlift required. The sum of these contract reductions, from 14,000 bbl./day minimum to 8,000 bbl./day minimum, is a permanent contract reduction of 43%. This amount will be further reduced in 1986 when the HIRI contract minimum drops to 6,000 bbl./day. SDG&E submits that this is substantial evidence of aggressive actions to reduce contract quantities.

SDG&E's minimum contract supply from Tesoro stood at 16,000 bbl./day as of January 1, 1980. A contract reduction to 15,000 bbl./day occurred on January 1, 1981. In addition, several underlifts were made. Beginning January 1, 1981, an underlift of 3,000 bbl./day was negotiated through May of 1981 and later extended at the same level through September 1981. A reduction of 2,000 bbl./day was obtained for the period October through December 1981. The total underlifts achieved by SDG&E with both suppliers, some of which were made at no charge and others as a part of contract renegotiations, involved a total volume of approximately one and one-half million barrels at a cost of only about \$1.50 per barrel. When compared to the

\$6.00 per barrel underlift adopted for Southern California Edison Company (Edison) in D.93640 of October 20, 1981, covering substantially the same period, SDG&E sees its results as excellent. SDG&E has calculated that the supply reductions it obtained had a net benefit to its electric ratepayers of \$60.8 million in lower fuel costs. These reductions represent the maximum possible that its suppliers could achieve.

In addition to contract reductions and underlifts, SDG&E has pursued fuel oil sales to the fullest extent possible. During the record period, SDG&E sold 1,215,000 barrels of oil; and every transaction was made at a net benefit to the electric ratepayer. The total net benefit from SDG&E's fuel oil sales amounts to \$11,700,000.

Finally, in an effort to make maximum use of the additional volumes of natural gas which became available, SDG&E has held oil in its inventory above the amount allowed in rate base. This practice has no costs for the ratepayer, although the stockholder must bear the carrying costs of the additional stored oil. While the record contains references to other options which SDG&E explored to reduce fuel oil volume, these have been the options which produced the greatest results in SDG&E's opinion.

Looking to the future, SDG&E asserts that its renegotiation of the HIRI contract has produced an outstanding new contract. As previously mentioned, SDG&E was successful in obtaining a 43% reduction in the minimum contract supply for the near term. A further reduction to 6,000 bbl./day, or SDG&E's requirements level if it is lower, will begin in mid-1986. The new contract will include the flexibility to receive up to 14,000 bbl./day should conditions require it. Thus, SDG&E has ensured that it will not have an oil excess after 1983.

In addition to the reduced volumes under the new HIRI contract, a revised cost basis for the oil supplied has been negotiated. The contract now calls for a "deemed crude slate" to be used to

determine the base cost of the residual oil supplied to SDG&E. The immediate effect of this new cost basis for the oil has been a reduction of approximately \$2.50 per barrel. Thus, SDG&E's oil costs, which have been shown already to be clearly reasonable, are assuredly so for the future. SDG&E has calculated the benefit from the reduced volumes and revised cost basis to be \$80 million in lower fuel costs than would have resulted under the prior contract.

Finally, SDG&E calls attention to an element in its supply agreement which provides for the contract price of oil to be compared to SDG&E's cost of gas (Schedule G-61 from SoCal) after mid-1986. If the G-61 cost of gas is less than the contract formula price of oil, SDG&E will be required to take only minimum contract volumes from HIRI if they are offered at the lower gas price. If HIRI chooses not to offer oil at the lower gas price, SDG&E will be free to go to the spot market if oil can be obtained there for less than the contract price. Only if HIRI refuses to provide oil at the lower gas price and the spot market price is greater than the contract price, would SDG&E order its minimum volumes of oil at the contract rate. The record should be clear that the reduced volumes and lower price formula that have been negotiated into the new contract with HIRI are the minimum benefits which will accrue under that new contract. If, in the future, the G-61 rate to SDG&E is lower than the contract price, additional savings will accrue. SDG&E is also pursuing a renegotiation of the Tesoro contract. Current expectations are that the contract level will be negotiated downward from 15,000 bbl./day to 12,500 bbl./day - a reduction of 2,500 bbl./day - by rolling barrels into future years. This reduction will be at no cost to the ratepayer and will not cause future volumes of oil supply to exceed expected requirements. The benefit which will accrue to the ratepayer if this negotiation is successful amounts to \$19 million in lower fuel costs.

SDG&E maintains that it has responded aggressively to the changing circumstances, including weather and gas supply, by making significant reductions in its oil supply contracts at minimal cost to the ratepayers. SDG&E's actions to improve oil contract flexibility and price have assured that the threat of an excess oil supply situation after 1983 is negated. SDG&E submits that its actions with respect to its fuel oil contracts have produced excellent results.

c. SDG&E's estimates of underlift charges and oil sale losses for the forecast period are reasonable and should continue to be recovered through its ECAC

For the forecast period, SDG&E estimates its underlift charges to total \$2,035,000 and its losses on fuel oil sales to equal \$15,000,000. SDG&E maintains that the staff, after independent review, has adopted these costs. However, during the February 22, 1982 hearing, staff applied only 7/12ths of its previously adopted estimate on the basis that the AER is now proposed to cover a seven- rather than the originally contemplated 12-month period. SDG&E holds that this position is inappropriate. Fuel oil sales have always been estimated to occur in the latter portion of the AER period. The cost amount of oil to be sold has not decreased, and SDG&E projects that it will, in fact, have to sell more. The estimate of the loss per barrel that will be incurred from this sale has been confirmed by IRI consultants retained by SDG&E. SDG&E submits that its underlift charge and oil sale loss estimates are reasonable and should be adopted.

SDG&E has proposed to continue to recover oil sale loss and underlift expenses through the ECAC balancing account rather than

1/ \$15/bbl. x 1 million bbls. = \$15 million.

through the AER. These reasons revolve around the fact that the level of estimate of volumes to be sold can be significantly affected by such factors as weather, natural gas availability, and purchases power and availability. In addition, adoption of the specific amount for underlifts and sales losses could weaken SDG&E's negotiating position as it seeks to dispose of this oil. The annual review in the ECAC hold procedure ensures that only reasonable costs will be passed on to the ratepayer and that no party will receive a windfall. Treatment of oil sale losses and underlifts in the AER will be more appropriate once the current situation, in which SDG&E and the other utilities are finding themselves, has passed.

SDG&E's proposed fuel oil inventory levels are reasonable for the forecast period. SDG&E proposes to carry an inventory of 3,220,000 barrels during the forecast AER period. The level of inventory proposed by SDG&E fully recognizes the requirements of its system and the costs of disposing of excess fuel oil. While a strict requirements level of oil in inventory might be closer to 2,500,000 barrels, the analysis employed by SDG&E calls for an additional 720,000 barrels to be held in inventory in order to achieve the economic optimization of the fuel mix. Economic optimization refers to the decision to make full use of all lower cost sources of energy before using residual fuel to generate electricity. In addition, SDG&E's analysis considers the cost of disposing of excess volumes of oil. Storage costs are approximately \$8.00 per barrel, while the only other option still available to SDG&E is to sell oil at approximately \$45.00 a barrel loss. Given these choices, it is clearly reasonable to propose storage of excess volumes of oil to the extent possible.

In contrast to SDG&E's proposal, the staff has suggested that only 1,500,000 barrels of residual fuel oil need to be carried in inventory. SDG&E criticizes the staff proposal as based on the assertion that a proper

level of oil inventory for rate making purposes can be entirely different than a prudent operational level and that there is, therefore, no need to consider SDG&E's supply contracts. The Commission's preferred approach would consider such factors as abnormal weather, gas availability, and contract provisions, among other things. The staff proposal, which is based on recorded burn information and does not consider current operational realities, is, in SDG&E's eyes, clearly inadequate.

By contrast, SDG&E argues that its proposed inventory level considers the factors deemed important by the Commission. It estimates that abnormal weather conditions in the form of a cool or cold winter will, as they have in the past, occur approximately 20% of the time and will result in no P-5 gas being available to SDG&E's power plants. For reliability purposes, the level of inventory entering the winter should be 2.8 to 2.9 million barrels. With this level of oil in inventory at the beginning of the winter period, requirements in a cool or cold winter could reduce inventory to minimum levels by the end of February. SDG&E claims even the staff witness agreed that its proposed winter level of oil in inventory was appropriate. SDG&E maintains that it demonstrated that it was impossible to take this reliability requirement into account and still achieve staff's recommended inventory level without incurring an unreasonable level of expense.

2. Staff

a. SDG&E has not conducted its operations in an optimal manner during the past review period. Staff reviewed SDG&E's performance in managing its energy operations from January 1, 1980 to June 30, 1981. Based upon its own analysis, staff concludes that SDG&E has not conducted its operations in an optimal manner over the past review period. While staff is not recommending the disallowance of any specific sums entered in the ECAC account as a result of SDG&E's substandard performance, staff does

recommend that the Commission place SDG&E on notice that continued results similar to those of the past period will result in a penalty in the nature of a disallowance of a portion of the requested energy expense in the next Annual Review ECAC. The basis for this recommendation is the extremely wide variability between SDG&E's resource mix forecasts and fuel oil supply contracts and SDG&E's actual boiler requirements. The continuing large discrepancy imposes additional costs on the ratepayer and SDG&E as a whole. SDG&E should be strongly encouraged to improve its performance in this area for the benefit of SDG&E and its ratepayers. For which purpose, the proposed potential penalty is proposed.

Staff reiterates the well-known point that SDG&E is heavily dependent on residual fuel oil for electric generation, accounting for over 50% of its generation during the review period beginning January 1, 1980. Therefore, staff finds it doubly important that SDG&E take the opportunity to burn cheaper natural gas in place of fuel oil whenever possible. However, the record in this case demonstrates that SDG&E's oil supply contracts and its method of forecasting natural gas availability have operated to limit the use of natural gas by SDG&E and to prematurely increase ECAC rates. In support of its conclusion, staff presented a historical perspective of SDG&E's energy operations.

SDG&E purchases low sulfur residual fuel oil from two refineries, Tesoro in Alaska and HIRI in Hawaii. These purchases are made under long-term contracts which originated in the early 1970s. At that time, a fear of disruption of the world oil supply led many to conclude that long-term supply contracts were essential for utilities. SDG&E entered into the two supply contracts for large volumes of LSFO. However, in the intervening years, SDG&E has rarely required as much

of LSFO.

LSFO, as it has had to purchase under these contracts and it has never found itself in a position where it has had to sell fuel oil, often at a loss, or reject available natural gas in order to avoid over- flowing its storage capabilities. In point of fact, SDG&E sustained a just over seven million dollars in oil sale losses during the record period. SDG&E estimated that if it had not succeeded in negotiating its most recent contract reductions with its suppliers, it would have spent \$99 million more in 1982 and 1983 on fuel oil as a result of the long-term contract deliveries of oil. This provides some evidence of the magnitude of oversupply which was built into these long-term supply contracts. SDG&E began to negotiate contract volume reductions with HIR in 1976 and with Tesoro in 1979. Additional reductions are continually being discussed between SDG&E and its suppliers, and several have been implemented. However, these reductions have not been sufficient to eliminate the surplus of oil in SDG&E's tanks. SDG&E acknowledges that its oil supply situation is not optimal and that the large oil volumes under contract have prevented the burning of additional available natural gas. As natural gas is still significantly cheaper than LSFO, every barrel of oil burned in place of available gas means additional and unnecessary costs to the SDG&E ratepayers. In staff's view, the management of SDG&E's oil contracts vis-a-vis the available natural gas is the key issue in the reasonableness review of past energy operations. Furthermore, SDG&E's repeated underestimation of natural gas availability has served to exacerbate the consequences of an already troublesome oil oversupply situation. SDG&E claims that its policy is to reduce the percentage of residual oil in its fuel mix whenever possible, since LSFO is one of the most expensive fuels for electric generation.

However, staff finds that a pattern of fossil fuel use emerges from the record which indicates that SDG&E consistently underestimates the amount of natural gas available to it, with the result that SDG&E can include within its projected resource mix more of the "excess oil" which would otherwise have been displaced by natural gas if SDG&E were not bound by its long-term contracts. SDG&E concedes that its natural gas forecasts have been consistently low for the last four or five years. Part of this must be attributed to the fact that unexpectedly large volumes of natural gas have appeared on the market as gas decontrol begins to make itself felt. On the other hand, SDG&E indicates that it has not felt certain enough of the forecasts of additional natural gas to rely on them and has thus ended up with surplus LSFO when the forecasts turned out to be correct. Staff concludes that there is a serious problem in the reliability of SDG&E's gas availability forecasts.

It appears to staff that SDG&E manages its fuel mix to accommodate the excessive amounts of fuel oil under contract rather than to maximize the burn of cheaper gas, even when forecasts are not an issue and SDG&E knows more gas is available.

The winters of 1979-80 and 1980-81 are illuminating in this regard. While SDG&E's total generation of electricity was comparable in both these four-month winter periods (November to February), in 1980-81 there was approximately 500 gigawatt hours of additional purchased power available to SDG&E, which it accepted. However, to make room for this additional power, SDG&E did not reduce its LSFO generation in spite of the fact that oil is supposed to be the swing fuel. Instead, SDG&E rejected natural gas, and reduced its gas burn from the level of the previous winter, and actually burned more fuel oil than in the 1979-80 period. In effect, SDG&E rejected gas in order to burn more oil to avoid an overflow situation while it did not conclude a sale of excess oil during the winter.

even though oil prices were high at that point. Natural gas was used as the swing fuel to relieve SDG&E's excess fuel oil situation with a corresponding additional cost to the ratepayer.

More confounding to staff is SDG&E's claim that it has not rejected gas during the record period. Staff sees this as misleading. What SDG&E has done is to not reject gas offered by its supplier, Southern California Gas Company (SoCal) when parity is in effect. Parity is an allocation system for natural gas whereby each low priority customer is offered gas in accordance with previous levels of purchases. However, when gas is plentiful, parity is suspended and all customers may purchase as much or as little as they require. During times of plentiful gas, while parity has been suspended, SDG&E has taken far less gas than was available to it. From June through October 1980 and January through July 1981, nearly two-thirds of the entire record period, SDG&E took less natural gas than was available from SoCal. If one calculated the number of equivalent barrels of gas refused by SDG&E during 1980 and 1981 using information provided by SDG&E in its response to San Diego's data request and the information in the record, it becomes apparent that SDG&E refused 2,972,000 equivalent barrels with a resulting additional cost to the ratepayer of \$56,468,000.^{2/} Staff asserts that the oversupply of oil resulting from the oil contracts has seriously compromised SDG&E's ability to provide electricity at the lowest cost available.

The other corollary to SDG&E's use of natural gas as a swing fuel is SDG&E's consistent underforecasting of the available natural gas. Staff finds it difficult to discover the exact

^{2/} This figure of \$56,468,000 is derived by using the current \$19 (\$46-\$27) price differential between residual oil and natural gas as a rough approximation.

reason for SDG&E's gas forecasting errors. SDG&E asserted that the additional nonprice conservation was roughly four times as large a factor in forecast errors of sales as was weather, yet could not justify how the nonprice conservation savings figure was actually derived. In fact, weather is the variable most often blamed by SDG&E for forecast errors, as weather does indeed affect the amount of natural gas available for electric generation. SDG&E claims that to ensure sufficient resources to generate electricity it uses "average" weather to forecast both gas needs in its service territory and gas availability from other territories. SDG&E has recently switched from a 30-year average to a ten-year average, as the past 30 years have been much colder than recent experience. However, even with the most recent adoption of a ten-year cycle for the average, SDG&E could only point to one year's winter (78-79) when "average" weather was experienced out of the entire 74-81 period. Staff does not find it reassuring that SDG&E considers the 78-79 winter average when it is the coldest of eight consecutive winters. Weather forecasting cannot be the only villain, however, or sooner or later the forecasts would "average" out if SDG&E is using a true average of weather statistics. More disturbing is the fact that SDG&E has in the past relied on SoCal forecasts, which have been consistently low and that SDG&E did not feel confident in using forecasts of higher gas availability when they reached them independently.

The effect of the pattern of low gas forecasting is clear. SDG&E underestimates its gas use in the resource mix, and thus has to include other generation, almost always oil. To the extent that oil replaces gas, the energy costs of SDG&E and thus ECAC rates are inflated. And while the ECAC balancing account may return this excess to the ratepayers with interest if gas is actually used in place of oil, this artificial increase in the estimate of fuel costs prematurely raises rates. It goes without saying that the Commission should if

at all possible avoid raising already high utility rates any sooner than absolutely necessary. Accordingly, staff urges the Commission to try to break the pattern which has been established in SDG&E resource mix forecasts and to insist on improved accuracy. SDG&E claims to have made improvements to its gas availability forecast over a period of time from 1978 onward. However, this is less than reassuring when it is noted that even the most recent forecast suffers from the same chronic ailment of underestimated gas takes and overestimated oil needs. SDG&E forecast a sharp decrease in the ECAC balancing account overcollection as a result of fuel expense increases, primarily oil-related. However, the revised tables submitted with the most recent hearings indicate that the forecast was wrong once again, and that the balancing account overcollection was \$12,033,800 more than SDG&E predicted it would be at the end of December 1981. SDG&E confirmed that once again there has been more gas than was forecast to be available, as well as a milder winter and additional purchased power. Most disturbing to staff is the fact that SDG&E felt there were at least some indications of a milder than average winter but had not incorporated them into its forecasting. The other side of the coin in SDG&E's resource mix involves disposal of the oil provided under the long-term contracts in the event SDG&E attempts to use the available gas. This is, of course, aggravated when gas availability is underestimated; but even at SDG&E's forecast resource mix the problem is serious. SDG&E has implemented significant contract reductions with its suppliers but still finds itself in a position where it is contracted to accept 20,500 barrels of LSFO a day, and forecasts an average burn for the year of only 17,000 bbls./day. And as indicated, that forecast of oil needs may well be overstated. Pointing to the fact that

SDG&E's oil storage tanks are already close to the operating maximum as a result of past efforts to burn gas. Staff concludes that the oil disposal problem is still a major one.

SDG&E forecasts that after 1984 it will no longer be in an excess contract situation; that is, its required contractual takes will be below forecast oil needs for the first time in a decade. This is a key goal of SDG&E and should be pursued. However, the forecasting situation described indicates that 1984 may be a premature target for oil independence unless additional contract reductions or sales are made. SDG&E forecast a one million barrel excess for the 1982 ECAC review period, but has had to revise that estimate to two million barrels before the year is even half over.

Staff urges that the oil supply situation should be remedied by further contract reductions or other solutions which do not involve oil sales at a loss. SDG&E claims that the oil sale losses are a benefit to the ratepayer because they allow cheaper gas to be used for generation. They are in fact a means of mitigating a loss, not a means of providing a benefit. Each dollar of oil sale losses is a dollar of energy expense which would not have been expended at all if the oil contracts were not excessive and gas could be burned without displacing oil. More distressing is the possibility that if SDG&E cannot arrange a sufficient number of sales of oil or contract reductions or other oil disposal options, it will simply refuse gas and burn oil.

Therefore, staff recommends that the Commission should not penalize SDG&E at this time; but it should encourage SDG&E to continue its efforts to improve forecasting and reduce oil oversupply and indicate to SDG&E the seriousness of this problem by stating its willingness to impose a penalty in future annual review ECAC proceedings if SDG&E is unable to

solve the excess oil and gas refusal problems in the very near future. This situation has continued for years, now that SDG&E agrees that it has a need to reduce oil contract volumes and take all available gas, it should act to do so with all possible speed.

Staff's recommendation to include underlifts and oil sales losses in the AER is reasonable.

One of the essential issues in this case is whether or not the Commission will follow the direction of D.92496 and include in the AER all forecast underlifts and oil sale losses for the AER 1976 period, or accept SDG&E's suggestion to delay such treatment at this time. SDG&E has been unable to provide any justification to differentiate its position from that of the other electric and combined gas utilities which have already been required to adopt an AER structured as the Commission specified in D.92496. Staff submits that the real issue is, simply, does the Commission wish to apply the decision as issued, or does it wish to completely dilute its incentive effect on fuel management? It should be noted that SDG&E's underlifts are not of contract reductions negotiated far in advance and are known precisely. No unfairness can arise from the use of such a certain number. SDG&E complains that the uncertainties attendant to their large excess oil inventory make such treatment unfair. While admitting that the excess incentive of the AER rate will operate, SDG&E suggests that either a windfall profit or an unanticipated loss to SDG&E as a result of this provision is unfair. Staff submits that the issue was central to the OII-56 decision, and has already been decided by the Commission. If SDG&E is penalized by this provision, that would indicate that the disincentive of the AER procedure is working because SDG&E has been unable to keep its excess oil inventory from growing. If the Commission has indicated through D.92496 that an incentive penalty is required to put pressure on the utilities to manage their fuel inventories better, the AER must include underlifts and oil sale losses;

or else the AER is not an incentive.

and it should be implemented. It is the contention of staff that SDG&E and its fuel inventory management practices were just what the Commission had in mind when the AER incentives were developed, and they should be allowed to operate with the goal of forcing SDG&E toward less wasteful oil procurement and resource management.

For purposes of calculating SDG&E's AER, staff's proposed level of fuel oil allowed in inventory is reasonable.

A reasonable level of fuel in inventory must be based on SDG&E's requirements for that fuel, not upon an external parameter such as deliveries from a long-term contract supplier. For that reason, staff contends that SDG&E's proposed level of fuel in inventory for the AER is grossly excessive as it is based upon the presumption that all the oil that will be delivered under present contracts can reasonably be burned or stored, regardless of the requirements for such oil in light of the other components of the resource mix. SDG&E has admitted that it has not even calculated an inventory level based upon its forecast requirements for fuel oil. Its entire presentation on a reasonable level of fuel oil in inventory is based upon accommodating the level of oil supplies to be received in the coming year.

While this may be understandable from the point of view that SDG&E does not wish to carry the costs of storing excess oil itself, staff believes it is time to stop forcing the ratepayers to subsidize the storage of oil SDG&E does not need. SDG&E has requested approximately 2.5 million barrels of LSFO as an inventory for the year, which corresponds to 140 days' burn at the forecast rate of oil use, which, staff argues, is probably too high a burn estimate. SDG&E admits that if there were no constraints from its long-term contracts it would keep less oil on hand. However, SDG&E was unable to provide such a theoretical requirements level of inventory. It is scarcely believable that SDG&E would operate without even considering

the question -- an indication of how completely SDG&E's fuel management is dominated by oil supply contracts which are far in excess of its real needs.

SDG&E contends that it needs full tanks in the months before the winter heating season in case of a cold winter. However, SDG&E concedes that full tanks are not needed the rest of the year, and that for purposes of setting a volume of fuel oil in inventory the Commission need only consider an average volume, not a maximum.

Accordingly, staff performed the calculation that SDG&E omitted. The staff witness averaged SDG&E's actual fuel oil usage for the last four years to determine what reasonable average of fuel in inventory would be required to maintain the level of oil use. To be conservative, the staff witness adjusted the inventory level to take into account that three of the last four years have been warmer than "average" according to consensus. His resulting calculation produces an average inventory level of 1.5 million barrels for both residual and diesel fuel oil. This level of inventory translates to a 54-day burn at SDG&E's forecast rate of oil burn, and staff determined that SDG&E has not experienced a cold snap longer than that period of time since weather records have been kept. As a result, staff's recommended level of inventory should provide enough fuel to bridge SDG&E across any cold spell which would temporarily dry up supplies of natural gas for generation.

This is an important decision, because it will set a precedent for future SDG&E ECAC proceedings. If the Commission allows the oil contracts to dictate the "reasonable" level of oil in inventory, ratepayers will be paying for the storage of too much oil for years to come. Staff seeks to have the Commission confirm that it intended in OII-56 to permit a reasonable level of oil.

A.60865 ALJ/ec/iy

in inventory based upon the actual requirements of SDG&E for an inventory to ensure adequate service, not to soak up the results of past errors in oil procurement. In D-93640, the Edison reasonableness ECAC review, the Commission also grappled with the problem of an oil inventory even which was bloated by excess oil made available by natural gas increases. The Commission clearly indicated that with respect to the short-term costs associated with reducing oil inventory to accommodate lower cost resources, "CMA correctly perceives that we intend to share the costs between the utility and ratepayers." The Commission proceeded to set a level of inventory related to requirements and permitted Edison to treat oil in inventory in excess of that level during the first year of the AER as underlifted oil at \$6 per barrel. SDG&E is not forced to sell the oil in storage above the level recommended by staff. It could keep it, hold it temporarily while sales are investigated, or burn it for economy energy sales. The Commission is not forcing a sale of this oil. As carrying costs for oil in storage for SDG&E approximate \$8 per barrel, staff would suggest a sharing of the cost between the ratepayers and the shareholders, such as allowing \$4 per barrel for each barrel of excess oil over the allowed inventory, thereby placing half the burden on the shareholders and half on the ratepayers. This would be included in the AER calculation just as would the cost of additional underlifts. This one-time adjustment would not inflict upon the shareholders all the cost of the excess oil and would give SDG&E an additional period of time in which to bring the inventory under control. Staff submits it is an equitable procedure, bearing in mind that SDG&E has not made the transition to an AER in any previous proceeding.

Administrative and cost of the transition flow as per slide and has been determined as recommended and is included in the AER for 82

d. The staff's proposed amount of oil sale losses
recoverable through the AER is reasonable.

SDG&E's proposed level of sale losses, \$15,000,000 in just seven months, is, in staff's view, extraordinarily high and not supported adequately by SDG&E's witnesses or the facts in the record. As counsel for San Diego determined on cross-examination, SDG&E has never sustained such a large number of oil sale losses in a single year. Furthermore, SDG&E's method of calculating the amount of the losses is simplistic and speculative, hardly the rigorous examination the Commission should require before handing over \$15,000,000 which is not subject to recovery in a balancing account. SDG&E based its loss calculations on current prices on the East Coast, including the transportation differential. This was done on the assumption of that West Coast alternatives are foreclosed. However, the additional hearing days showed the fallacy of that assumption because SDG&E was able to arrange a West Coast sale at a loss of only \$8 a barrel. This directly contradicts the notion that sales should be predicated only on East Coast prices and should suggest a far lower estimate of the losses. If the AER is to act as a true incentive, SDG&E should not be guaranteed advance recovery of the worst of its losses on sales. The estimates of losses on sales must be set at \$8.00 per barrel, an attainable figure. There is simply no other estimate available in the record, unless the Commission wishes to make a blind compromise. At \$8.00 a barrel, and assuming that SDG&E's estimate of one million excess barrels is correct, \$8 million is a proper allowance. As counsel for San Diego pointed out SDG&E still stands to make a great deal of money from such a provision of sale losses in the AER if it can manage its fuel so as to burn the oil, without rejecting other cheaper fuels, of course.

The staff witness allowed \$8,750,000 for oil sale losses, and this sum, while not as well substantiated in fact as the straight \$8 per barrel loss, is available to the Commission as a compromise.

3. San Diego reviewed testimony and evidence

The Oil in Inventory Issue and so as to allow to

The Electric Branch of the staff believes that it was the Commission's intent to have an annual review of the reasonable test year level of oil in inventory and to then determine what carrying costs should be recovered. Staff takes this position because the Commission found in D.92496 in ORI-56 at page 44 that:

"The reasonable test year level of oil in storage should be examined as a matter of course in the evaluation of each utility's fuel procurement strategy and practices in the annual review."

Staff then evaluated what a reasonable average monthly level of fuel oil in inventory should be and reached the conclusion that 0.3 million barrels of distillate fuel and 1.2 million barrels of low sulfur residual fuel oil would provide for approximately a 50 days' burn and that this was a reasonable level of fuel in inventory for rate-making purposes. San Diego concurs with staff on the inventory issue.

SDG&E paid no attention to D.92496 and simply estimated what its actual monthly inventory might be for March through October 1982. In addition SDG&E used, in its computation, an April 1, 1982 moving average inventory price of \$46.38 that is subject to serious doubt. The use of proper numbers is important in computing the AER as revenues collected under the AER are not subject to refund.

b. The Estimated Fuel Oil Sale Loss Issue

SDG&E's primary proposal is to continue ECAC treatment of underlift payments and gains and losses on the sale of fuel oil until the next annual review is made in connection with SDG&E's scheduled November 1, 1982 revision date. Staff recommends that gains or losses from sales of fuel oil and underlift payments be forecast for the April 1, 1982 through October 31, 1982 period with these estimates used in determining the AER.

Apparently the Commission believes that the inclusion of gains or losses on the sale of fuel oil and underlift payments in the AER creates an incentive for proper fuels management.

The Commission said: "Our intention in D-92496 was to create incentives for proper fuels management by the introduction of the possibility of rewards and losses. We see no sufficient reason to change our decision at this time. Accordingly, these items will be included in the AER (which is an estimated forecast not subject to recovery in the ECAC balancing account)." D-93628, mimeo, p. 12.

It would appear that SDG&E's possibility of a reward occurs if the estimate of fuel oil sale losses and underlift charges, adopted by the Commission for the AER, turns out to be greater than the actual fuel oil sale losses and underlift charges. The possibility of a penalty occurs if the estimate of fuel oil sale losses and underlift charges, adopted by the Commission for the AER, turns out to be less than the actual fuel oil sale losses and underlift charges. The trouble, of course, with this scenario is that SDG&E has control over what its fuel oil sale losses will be. If the Commission were to adopt staff's estimate of \$8,750,000 for fuel oil sale losses for the forecast period, and losses of that magnitude occurred, by August 1982 SDG&E could then refuse natural gas and hydropower and burn oil for the remainder of the forecast period. It is difficult for San Diego to understand what "incentives for proper fuels management" are created when the "possibility of rewards and losses" are entirely within SDG&E's control.

If the Commission adopted staff's estimate of \$8,750,000 for fuel oil sale losses, and losses of that magnitude were booked by August 1982, is the Commission going to order SDG&E to continue selling fuel oil at a loss even though SDG&E will not be able to

recoup that additional loss? If so, is the Commission going to hold SDG&E harmless from the almost inevitable shareholders' actions? In view of this dilemma, San Diego asks the Commission to reconsider its treatment of fuel oil sale gains and losses.

C. Discussion

Though our action today will have no effect on the current electric rates which SDG&E charges its customers, our resolution of the outstanding issues in SDG&E's annual ECAC reasonableness review should have a significant impact on the future conduct of operations by SDG&E. The outstanding issues are as follows:

1. The reasonableness of SDG&E's operations and expenses from January 1, 1980, through June 30, 1981;
2. The appropriate estimated electric sales and resource mix for the AER forecast period of April 1, 1982, to October 1, 1982;
3. The appropriate level of estimated losses on fuel oil sales for the AER forecast period;
4. The appropriate level of fuel oil in inventory for the AER forecast period; and
5. The recommended AER.

Based upon our review we will not find that SDG&E's operations and expenses from January 1, 1980, through June 30, 1981, were unreasonable. Furthermore, we will adopt SDG&E's estimated electric sales and resource mix for the AER forecast period. However, we do find staff's presentation, both in general and with respect to the remaining issues, persuasive. It appears that SDG&E has been unimaginative as well as unrealistic in formulating and implementing its oil supply and gas forecasting policies.

- 3/ The adopted sales figure is the only relevant datum presented in the record. Based upon the record in A-59788, SDG&E's general rate case, we believe that the adopted sales estimate is significantly understated; yet it is the only usable information. To adjust for this deficiency in the record evidence, we will reject the applicant-staff stipulation and direct that revenues under the AER be collected subject to the ERAM.

While we will not disallow any fuel-related expenses incurred by SDG&E during the review period, we wish to state in the strongest terms that a "business as usual" approach by SDG&E to its chronic oil oversupply and gas forecasting problems is unacceptable. Improved performance in resolving the excess oil and gas rejection problems must be realized. The continuing and crushing burdens imposed upon ratepayers during this period of pervasive economic difficulty may well require radical departures from traditional utility management.

While contractual rights to millions of barrels of oil may provide SDG&E with the security of knowing that it can continue to provide service to its customers even in the event several highly improbable circumstances occur, the time may have come when ratepayers are unwilling or unable to pay for such high levels of security. The cost of ensuring that SDG&E will be able to continue providing service even in a worst-case scenario may have reached unacceptably high levels.

SDG&E requests 3.22 million barrels, including 2.5 million barrels of LSFO corresponding to 140 days' burn, as an inventory for the year. Staff counters that an inventory of 1.5 million barrels for both residual and diesel fuel oil, which equals a 54-day burn at SDG&E's forecast rate of oil burn, is more reasonable. We find staff's recommendation reasonable,

and we will adopt it. SDG&E provided insufficient evidence to support its requested inventory level. SDG&E merely asserts that abnormal weather conditions in the form of a cool or cold winter will occur approximately 20% of the time and will leave no gas available for power-plant use. No credible probability analysis was presented to support the claim that gas would be unavailable to SDG&E 20% of the time. Furthermore, even assuming gas unavailability, no probative evidence was presented to support SDG&E's proposition that it requires 140 days of oil burn to reliably carry it through such a period of gas unavailability.

Finally, there was little or no analysis of the reliability and probability of other options, such as purchased energy, in the event of a worst-case scenario in which no gas is available for five winter months.

We must agree that SDG&E's requested fuel oil inventory levels appear to be driven by its oil contract obligations rather than by reasonable projections of need and reliability. The other plausible explanation of SDG&E's request involves SDG&E's use of a deterministic rather than probabilistic analysis of its fuel oil requirements. Rather than analyzing the probabilities of various events occurring and weighing the cost of ensuring against their occurrence, SDG&E appears content to determine the worst case and to request Commission-authorized expenses to allow for such an eventuality - regardless of its likelihood of occurrence. There seems to be no other sound explanation for SDG&E's continuing inaccurate forecast of gas availability.

In adopting staff's recommended level of fuel oil in inventory, we will also accept staff's suggestion that the cost of each barrel of excess oil over the allowed inventory be shared between the ratepayers and the shareholders. We will allocate the excess oil burden equally between the ratepayers and the shareholders. And, since SDG&E's carrying costs for oil in storage are about \$8 per barrel, we will allow \$4 per barrel for each barrel of oil in excess of authorized inventory to be placed in the AER.

With respect to the treatment of fuel oil sale losses, we will accept SDG&E's recommendation and continue treatment of such expenses in the ECAC balancing account for now. This action is taken solely to reflect the uncertainty surrounding the issue of SDG&E's scheduled fuel oil deliveries and the prospect that SDG&E may accomplish certain reductions in its current fuel oil contracts. We note that D.82-04-073 issued April 12, 1982 directed SDG&E to show cause why the Commission should not require SDG&E to suspend or reduce deliveries of residual fuel oil scheduled under its existing contracts with HIRI and Tesoro.

By maintaining treatment of fuel oil sale losses in ECAC, we seek to avoid compromising or limiting SDG&E's negotiating posture with HIRI and Tesoro as well as to avoid prejudging the outcome of our order to show cause. While we authorize continued ECAC balancing account treatment of fuel oil sale losses, we will place SDG&E on notice that any request for allowance of such expenses in the November ECAC will be subjected to very rigorous Commission scrutiny. Our decision today should in no way be construed as carte blanche authority for SDG&E to sell fuel oil irrespective of the level of the loss, nor should it be construed as accepting SDG&E's estimate of a \$15/bbl loss on fuel oil sales as reasonable.

In sum, our calculation of SDG&E's AER for the seven-month period will include the following elements:

1. SDG&E's estimates of electric sales and its resource mix projections and estimated costs for the seven-month AER forecast period;
2. \$8,122,000 for the carrying costs of the authorized fuel oil in inventory of 1.5 million barrels;
3. An allowance of \$6,880,000 (\$4/bbl) for oil in inventory in excess of the adopted reasonable inventory volume of 1.5 million barrels; and
4. \$2,035,000 in underlift penalties stipulated to by staff and SDG&E.

Therefore, the AER adopted for SDG&E will be calculated as follows:

SDG&E's AER for the seven-month period will be calculated as follows: \$8,122,000 for the carrying costs of the authorized fuel oil in inventory of 1.5 million barrels; \$6,880,000 for oil in inventory in excess of the adopted reasonable inventory volume of 1.5 million barrels; and \$2,035,000 in underlift penalties stipulated to by staff and SDG&E.

A.60865 ALJ/ec/vdl/ks

and the fact that the proposed rate is not a true cost of service rate. The proposed rate is not a true cost of service rate because it does not reflect the actual costs of the utility. The proposed rate is not a true cost of service rate because it does not reflect the actual costs of the utility.

Item	Cost \$M
Fuel and Purchased Power Expense	
1. Nuclear	\$ 2,079,257.00
2. Natural Gas	162,548.18
3. Diesel Oil	337.40
4. Residual Oil	113,636.90
5. Purchased Power	69,874.20
6. NARCO Fuel Service Charge	907.00
7. Variable Wheeling Expense	503.40
8. Less Revenue from DWR	(735.10)
9. Total of Lines 1+2+3+4+5+6+7-8	349,865.30
10. 2x of Line 9	6,997.30
11. Carrying Cost of Fuel Inventory	8,122.00
12. Allowance for Oil in Inventory in Excess of Adopted Reasonable Inventory Volume	6,880.00
13. Underlift Penalties	2,035.00
14. Total of Lines 10+11+12+13	24,034.30
15. CPUC Jurisdictional Line 14 x 0.993491	23,877.90
16. Adjusted for Franchise Fees and Uncollectibles (1.0121)	24,166.80
17. Estimated seven-month sales	5,510.18 MMkWh
18. Annual Energy Rate (AER)	0.439¢/kWh

1/ 1,720,000 excess bbls. x \$4 = \$6,880,000

We will adopt an AER of 0.439¢/kWh for SDG&E.

The proposed rate is not a true cost of service rate because it does not reflect the actual costs of the utility. The proposed rate is not a true cost of service rate because it does not reflect the actual costs of the utility.

Since we are adopting the recommendation of both staff and SDG&E to decrease ECAC and base rates so that the AER can be implemented with no change in total electric rates, the adopted rates will be:

	Adopted AER Rate	Adopted Base Rate	Adopted ECAC Rate	Adopted Total Rate
Domestic Lifeline	0.439	4.677	3.864%	8.980
Domestic Nonlifeline	0.439	4.677	7.519%	12.635
Nondomestic	0.439		6.168%	

Since April 1, 1982 represents the beginning of the AER forecast period, and we are already three weeks beyond that date, the adopted rates should become effective immediately. We will so order.

Finally, we will reiterate our encouragement to SDG&E to diligently pursue efforts to improve its gas supply forecasting and to reduce its oil oversupply. While we will forgo imposition of a penalty at this time, the problem is of such a serious nature that SDG&E is placed on notice that we will consider a penalty in future ECAC annual reviews if SDG&E fails to relieve the excess oil and gas rejection problems in the reasonably near future to SDG&E's ratepayers will not be forced to continue to underwrite the status quo.

Findings of Fact

1. By Application (A.) 60865 SDG&E requests authority to make changes in its base rates and ECAC billing factors and to include an AER factor.

2. A.60865 requests authority to decrease ECAC rates so that the AER can be implemented with no change in total electric rates or total revenue requirement.

3. The AER typically includes:

- 2% of fuel and purchased energy costs;
- Gains or losses from sale of fuel oil, underlift payments, and facilities charges; and
- Carrying costs of fuel oil in inventory.

4. The AER forecast period for this application is the seven-month period from April 1, 1982 through October 31, 1982.

5. SDG&E's estimate of the electric sales during the forecast period for purposes of calculating the AER is based on the available information and is adopted.

6. SDG&E's estimate of the resource mix and its constituent costs during the forecast period for purposes of calculating the AER is based on the most recent, reliable information and is adopted.

7. 1.5 million barrels of fuel oil inventory is a reasonable level to be maintained for the seven-month forecast period.

8. Underlift payments of \$2,035,000 during the seven-month forecast period are reasonable.

9. Due to SDG&E's ongoing negotiations with oil suppliers, and given the pendency of our order to SDG&E to show cause why its fuel oil deliveries should not be suspended, losses on fuel oil sales should continue to be treated in ECAC for now.

10. \$6,880,000 is a reasonable amount to allow SDG&E for oil in inventory in excess of the adopted reasonable inventory volumes of 1.5 million barrels.

11. The adopted AER is 0.439¢/kWh and will generate annual revenues of \$24.2 million; decreases in ECAC and base rates will produce similar reduction in revenues.

12. SDG&E's operations and expenses for the period January 1, 1980 through June 30, 1981 were reasonable.

13. In view of the delay beyond the revision date, the effective date of this order should be today.

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

Conclusions of Law

1. SDG&E should be authorized to change its rates as set forth in the following order; those rates are just and reasonable.

2. Revenues collected under the AER should be subject to the ERAM.

3. Today's decision should be issued on an interim basis in view of the pending order to show cause in A. 60865.

INTERIM ORDER

IT IS ORDERED that:

1. On or after the effective date of this order, San Diego Gas & Electric Company (SDG&E) is authorized to file with this Commission, in conformity with the provisions of General Order 96-A, revised tariff schedules reflecting the following rates:

	AER Rate	Base Rate	ECAC Rate	Effective Rate
Domestic Lifeline	0.439	4.677	7.519	8.980
Domestic Nonlifeline	0.439	4.677	7.519	12.635
Nondomestic	0.439		6.168	

The revised tariff schedules shall be effective not less than five days after filing and shall apply only to service rendered on or after the effective date thereof.

2. Revision dates for SDG&E ECAC proceedings as set forth in D. 92496 shall remain unchanged.

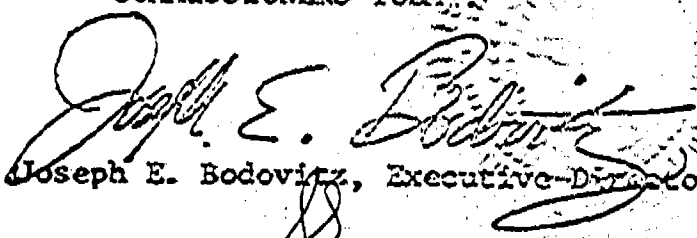
3. Revenues collected under the AER shall be subject to the ERAM.

This order is effective today.

Dated April 28, 1982, at San Francisco, California.

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

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


Joseph E. Bodovitz, Executive Director

APPENDIX A

List of Appearances

Applicant: William L. Reed, Jeffrey Lee Guttero, and Randall W. Childress, Attorneys at Law, for San Diego Gas & Electric Company.

Interested Parties: John W. Witt, City Attorney, by William S. Shaffran, Deputy City Attorney, for City of San Diego; Daniel E. Gibson and Bernard J. Della Santa, by Bernard J. Della Santa, Attorney at Law, and Richard L. Jensen, for Pacific Gas and Electric Company; Margaret E. Thomas, for Southern California Edison Company; Antone S. Bulich, Jr., Attorney at Law, for California Farm Bureau Federation; and Michel Peter Florio, Attorney at Law, for Toward Utility Rate Normalization.

Commission Staff: Michael B. Day, Attorney at Law.

We must agree that SDG&E's requested fuel oil inventory levels appear to be driven by its oil contract obligations rather than by reasonable projections of need and reliability. The other plausible explanation of SDG&E's request involves SDG&E's use of a deterministic rather than probabilistic analysis of its fuel oil requirements. Rather than analyzing the probabilities of various events occurring and weighing the cost of ensuring against their occurrence, SDG&E appears content to determine the worst case and to request Commission-authorized expenses to allow for such an eventuality - regardless of its likelihood of occurrence. There seems to be no other sound explanation for SDG&E's continuing inaccurate forecast of gas availability.

In adopting staff's recommended level of fuel oil in inventory we will also accept staff's suggestion that the cost of each barrel of excess oil over the allowed inventory be shared between the ratepayers and the shareholders. We will allocate the excess oil burden equally between the ratepayers and the shareholders. And, since SDG&E's carrying costs for oil in storage are about \$8 per barrel, we will allow \$4 per barrel for each barrel of oil in excess of authorized inventory to be placed in the AER.

With respect to the treatment of fuel oil sale losses, we will accept SDG&E's recommendation and continue treatment of such expenses in the ECAC balancing account for now. This action is taken solely to reflect the uncertainty surrounding the issue of SDG&E's scheduled fuel oil deliveries and the prospect that SDG&E may accomplish certain reductions in its current fuel oil contracts. We note that D.82-04-073 issued April 12, 1982 directed SDG&E to show cause why the Commission should not require SDG&E to suspend or reduce deliveries of residual fuel oil scheduled under its existing contracts with HIRI and Tesoro.

By maintaining treatment of fuel oil sale losses in ECAC, we seek to avoid compromising or limiting SDG&E's negotiating posture with HIRI and Tesoro as well as to avoid prejudging the outcome of our order to show cause. While we authorize continued ECAC balancing account treatment of fuel oil sale losses, we will place SDG&E on notice that any request for allowance of such expenses in the November ECAC will be subjected to very rigorous Commission scrutiny. Our decision today should in no way be construed as carte blanche authority for SDG&E to sell fuel oil irrespective of the level of the loss, nor should it be construed as accepting SDG&E's estimate of a \$15/bbl. loss on fuel oil sales as reasonable.

In sum, our calculation of SDG&E's AER for the seven-month period will include the following elements:

1. SDG&E's estimates of electric sales and its resource mix projections and estimated costs for the seven-month AER forecast period;
2. \$8,122,000 for the carrying costs of the authorized fuel oil in inventory of 1.5 million barrels;
3. An allowance of \$6,880,000 (\$4/bbl. x 1,720,000 bbls. excess oil) for oil in inventory in excess of the adopted reasonable inventory volume of 1.5 million barrels; and
4. \$2,035,000 in underlift penalties stipulated to by staff and SDG&E.

Therefore, the AER adopted for SDG&E will be calculated as follows:

<u>Item</u>	<u>Cost \$M</u>
Fuel and Purchased Power Expense	
1. Nuclear	\$ 2,792.7
2. Natural Gas	162,548.8
3. Diesel Oil	337.4
4. Residual Oil	113,636.9
5. Purchased Power	69,874.2
6. NARCO Fuel Service Charge	907.0
7. Variable Wheeling Expense	503.4
8. Less Revenue from DWR	(735.1)
9. Total of Lines 1+2+3+4+5+6+7-8	349,865.3
10. 2% of Line 9	6,997.3
11. Carrying Cost of Fuel Inventory	8,122.0
12. Allowance for Oil in Inventory in Excess Adopted Reasonable Inventory Volume ^{1/}	6,880.0
13. Underlift Penalties	2,035.0
14. Total of Lines 10+11+12+13	24,034.3
15. CPUC Jurisdictional Line 14 x 0.993491	23,877.9
16. Adjusted for Franchise Fees and Uncollectibles (1.0121)	24,166.8
17. Estimated seven-month sales	5,510.18 MMkWh
18. Annual Energy Rate (AER) Line 16 ÷ Line 17	0.439¢/kWh

1/ 1,720,000 excess bbls. x \$4 = \$6,880,000.

We will adopt an AER of 0.439¢/kWh for SDG&E.

Since we are adopting the recommendation of both staff and SDG&E to decrease ECAC and base rates so that the AER can be implemented with no change in total electric rates, the adopted rates will be:

	<u>Adopted AER Rate</u>	<u>c/kWh</u> <u>Adopted Base Rate</u>	<u>Adopted ECAC Rate</u>	<u>Adopted Total Rate</u>
Domestic Lifeline	0.439	4.677	3.864	8.980
Domestic Nonlifeline	0.439	4.677	7.519	12.635
Nondomestic	0.439		6.168	

Since April 1, 1982 represents the beginning of the AER forecast period, and we are already three weeks beyond that date, the adopted rates should become effective immediately. We will so order.

Finally, we will reiterate our encouragement to SDG&E to diligently pursue efforts to improve its gas supply forecasting and to reduce its oil oversupply. While we will forgo imposition of a penalty at this time, the problem is of such a serious nature that SDG&E is placed on notice that we will consider a penalty in future ECAC annual reviews if SDG&E fails to ^{reduce} ~~end~~ the excess oil and gas rejection problems in the reasonably near future. SDG&E's ratepayers will not be forced to continue to underwrite the status quo.

Findings of Fact

1. By Application (A.) 60865 SDG&E requests authority to make changes in its base rates and ECAC billing factors and to include an AER factor.

2. A.60865 requests authority to decrease ECAC rates so that the AER can be implemented with no change in total electric rates or total revenue requirement.

3. The AER typically includes:

- a. 2% of fuel and purchased energy costs;
- b. Gains or losses from sale of fuel oil, underlift payments, and facilities charges; and
- c. Carrying costs of fuel oil in inventory.

4. The AER forecast period for this application is the seven-month period from April 1, 1982 through October 31, 1982.

5. SDG&E's estimate of the electric sales during the forecast period for purposes of calculating the AER is based on the available information and is adopted.

6. SDG&E's estimate of the resource mix and its constituent costs during the forecast period for purposes of calculating the AER is based on the most recent, reliable information and is adopted.

7. 1.5 million barrels of fuel oil in inventory is a reasonable level to be maintained for the seven-month forecast period.

8. Underlift payments of \$2,035,000 during the seven-month forecast period are reasonable.

9. Due to SDG&E's ongoing negotiations with oil suppliers and given the pendency of our order to SDG&E to show cause why its fuel oil deliveries should not be suspended, losses on fuel oil sales should continue to be treated in ECAC for now.

10. \$6,880,000 is a reasonable amount to allow SDG&E for oil in inventory in excess of the adopted reasonable inventory volumes of 1.5 million barrels.

11. The adopted AER is 0.439¢/kWh and will generate annual revenues of \$24.2 million; decreases in ECAC and base rates will produce similar reduction in revenues.

12. SDG&E's operations and expenses for the period January 1980 through June 30, 1981 were reasonable.

13. In view of the delay beyond the revision date, the effective date of this order should be today.

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

Conclusions of Law

1. SDG&E should be authorized to change its rates as set forth in the following order; those rates are just and reasonable.
2. Revenues collected under the AER should be subject to the ERAM.
3. Today's decision should be issued on an interim basis in view of the pending order to show cause in A. 60865.

INTERIM ORDER

IT IS ORDERED that:

1. On or after the effective date of this order, San Diego Gas & Electric Company (SDG&E) is authorized to file with this Commission, in conformity with the provisions of General Order 96-A, revised tariff schedules reflecting the following rates:

	<u>c/kwh</u>			<u>Effective</u>
	<u>AER Rate</u>	<u>Base Rate</u>	<u>ECAC Rate</u>	<u>Rate</u>
Domestic Lifeline	0.439	4.677	3.864	8.980
Domestic Nonlifeline	0.439	4.677	7.519	12.635
Nondomestic	0.439		6.168	

The revised tariff schedules shall be effective not less than five days after filing and shall apply only to service rendered on or after the effective date thereof.

2. Revision dates for SDG&E ECAC proceedings as set forth in D. 92496 shall remain unchanged.