

On 6-6-79, Mr. Alderson Came to the process office and told Marie that the alternate pages (CTD) that were incorporated into the original when signed were not to be used. The alternate ALJ pages were to be used instead. That is the way the order stands now.

*McInerney*

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Alt.-ALJ-EA/ks/dz

Decision No. 90404

JUN 5 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 ("ECAC") in its )  
electric tariff schedules and for )  
authority to revise the ECAC )  
tariff to provide for inclusion )  
of certain wheeling charges. )

Application No. 57780  
(Filed December 30, 1977)

In the matter of the application )  
of SAN DIEGO GAS & ELECTRIC )  
COMPANY for authority to decrease )  
its electric rates and charges in )  
accordance with the energy cost )  
adjustment clause in its electric )  
tariff schedules and for authority )  
to revise the ECAC tariff (a) to )  
provide for inclusion of certain )  
wheeling charges; (b) to reflect )  
franchise fees and uncollectibles )  
accounts related to all ECAC )  
revenues; (c) to allow for recovery )  
of all costs associated with energy )  
sales to and purchases from the )  
California Department of Water )  
Resources; and (d) to provide for )  
the recovery of the cost of fuel )  
oil additives used by applicant )  
for environmental purposes pursuant )  
to directions from appropriate )  
governmental authorities. )

Application No. 58263  
(Filed August 1, 1978)

(See Decision No. 89630 for appearances.)

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FINAL OPINION

Proceeding

Pursuant to the generic Energy Cost Adjustment Clause (ECAC) decision, Decision No. 85731 dated April 27, 1976 in Case No. 9886 (79 CPUC 758), San Diego Gas & Electric Company (SDG&E) and other electric utilities regulated by the Commission file applications for rate adjustments every six months based on their actual cost of producing electricity for a recent past period, designated the record period.

For the record period 12 months ending November 30, 1977 SDG&E filed Application No. 57780 on December 30, 1977, requesting authority to increase, effective March 1, 1978, its electric rates and charges under the ECAC and authority to revise the ECAC tariff. The rate request was for a uniform increase in ECAC rates to nonlifeline sales of 0.512 cents per kWh, thereby increasing the ECAC rate, if authorized, to 3.428 cents per kWh for nonlifeline sales. The Commission staff took exception to certain elements of SDG&E's request. The exception could amount to .060 cents of the 0.512 cents increase in the nonlifeline ECAC billing factor. By interim Decision No. 88698 dated April 11, 1978, the Commission granted SDG&E partial ECAC rate relief by increasing the nonlifeline ECAC billing factor to 3.368 cents per kWh. This interim increase was shown by the record to be reasonable, was uncontested, and was made effective without delay.

For the record period 12 months ending June 30, 1978 SDG&E filed Application No. 58263 on August 1, 1978, requesting authority to decrease, effective September 1, 1978, its electric rates and charges. SDG&E also requested authority to revise the ECAC procedure which appears in Section 9 of the preliminary

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statement to its Electric Department tariffs in four separate respects. First, SDG&E renewed its request, previously made in Application No. 57780, for authority to provide for the inclusion of certain wheeling charges in the calculation of the ECAC adjustment rate. Second, SDG&E requested authority to alter the ECAC to more accurately reflect the franchise fees and uncollectibles associated with all ECAC revenues. Third, SDG&E requested authority to revise the ECAC to allow for the recovery of all costs associated with energy sales to and purchases from the California Department of Water Resources (DWR). Fourth, SDG&E requested authority to alter the ECAC to provide for recovery of the cost of fuel oil additives used for environmental purposes pursuant to directives from appropriate governmental authorities.

By Decision No. 89630 dated November 9, 1978 in Application No. 58263 the Commission granted SDG&E an interim ECAC adjustment, uniformly applied to nonlifeline service, which decreased the ECAC adjustment rate from 3.368 cents per kWh to 3.310 cents per kWh for nonlifeline sales. The development of this interim ECAC adjustment included the effect of two of the changes in the ECAC tariff that SDG&E requested. Both of the requested changes were uncontroverted. They were SDG&E's proposal to recover the actual franchise fees and uncollectibles expense associated with ECAC revenues and its proposal to recover the cost of fuel oil additives through ECAC.<sup>1/</sup>

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<sup>1/</sup> These are two of four categories of expenses included by SDG&E both in this proceeding and in its pending general rate proceeding (Application No. 58067). The other two categories are variable wheeling charges and costs of certain energy sales to the DWR. SDG&E contends that these four expense categories are appropriate for recovery through ECAC.

Franchise Fees and Uncollectibles

In the generic ECAC decision (Decision No. 85731, supra) the factor for determining local franchise fees and uncollectibles expense to be recovered through ECAC was fixed at one percent of ECAC revenues. The evidence in this proceeding has demonstrated that a fixed charge of one percent does not accurately reflect the franchise fees and uncollectibles expense experienced by SDG&E with respect to ECAC billings. Because of this inaccuracy, the staff recommended that, henceforth, the factor used should be set at whatever rate was authorized for the recovery of these expenses in the SDG&E general rate decision which was the most recent at the time of each ECAC filing. SDG&E concurred in this approach. Consistent therewith, a 1.17 percent factor was included in the development of interim ECAC adjustment authorized by Decision No. 89630, supra.

Fuel Oil Additives

Fuel oil additives are used in power plants for environmental purposes pursuant to directives from appropriate governmental authorities. The evidence in this proceeding has demonstrated that SDG&E is required by the San Diego Air Pollution Control District to burn certain fuel oil additives in its Encina and South Bay generating stations for environmental purposes. The quantity of these additives used is directly related to the quantity of fuel oil burned at these plants. Their cost is, therefore, appropriate for recovery through ECAC under the guidelines stated in the generic decision (Decision No. 85731, supra). Interim Decision No. 89630, supra, allowed for such recovery.

Contested Issues

The issues, which were not dealt with in the interim decisions, were extensively contested, have a \$3.9 million half-year revenue effect, and can be identified as follows:

1. Should the ECAC tariff be revised to allow for recovery of all costs associated with energy sales to and purchases from DWR?
2. Should the ECAC tariff be revised to allow for recovery of variable wheeling charges paid by SDG&E?
3. Should revenues derived from sales of energy to Pacific Gas and Electric Company (PG&E) be included in ECAC?
4. Should the November 1977 through June 1978 fuel oil sale losses be included in ECAC?
5. What income tax treatment should be accorded the 1976 and 1977 fuel oil sale losses when compared with the tax treatment of earlier fuel oil sale gains?
6. Should time-of-use (TOU) ECAC rates be established for schedules having TOU base rates?

Sales to DWR

The primary points at issue are whether SDG&E should be allowed to recover the cost of fuel and other production expenses for sales to DWR in excess of SDG&E's purchases from DWR and, if so, whether the recovery should be through ECAC or a general rate proceeding. SDG&E is currently requesting recovery of these expenses both in this proceeding and in its general rate proceeding, Application No. 58067.<sup>2/</sup> In the general rate proceeding the staff pointed to the ECAC mechanism as the

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<sup>2/</sup> If the Commission decides that these expenses are to be included in ECAC, SDG&E requests, of course, their removal from Application No. 58067, its general rate case. (Also, see footnote 1 on page 3.)

proper vehicle through which to consider the recovery of these expenses. In this proceeding, however, the staff disagrees, contending that the general rate case is the proper forum for such consideration.

The latter staff contention was arrived at through an assessment of three Commission decisions: the generic ECAC decision, supra; Decision No. 86794 dated December 21, 1976 in Application No. 54946--a Southern California Edison Company (Edison) general rate proceeding; and Decision No. 89316 dated September 6, 1978 in Application No. 57284--a PG&E general rate proceeding. In the generic decision (79 CPUC 758 at 771) the need for utilities to deduct DWR sales from total kWh sales in computing an ECAC adjustment factor "to the extent that such sales do not exceed purchases from the state water projects and others" was recognized. Without that recognition, there would have been a commensurate shortfall in the recovery of ECAC energy costs (i.e., a shortfall in the recovery of energy costs in the same percentage as the percentage DWR sales is to total sales). Indeed, the controversy arose because the deduction sanctioned by the generic decision applies only up to the point where DWR sales do not exceed purchases.<sup>3/</sup>

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3/ "PG&E, Edison, and SDG&E have contracts with the State Department of Water Resources (DWR) and others dating from the mid-1960's, some of which cannot be renegotiated until the mid-1980's. The prices for sale and purchase are thus fixed. In computing previous fca's, these sales were included in the utilities' sales forecasts, having the effect of computing the fca rate as though it applied to these sales, while the savings due to the purchases from DWR and others are not accounted for. The three affected utilities maintain this is unfair, and is becoming an increasingly more serious problem as the cost of generating power keeps increasing. We agree with the utilities and will allow them to deduct these sales from total KWH sales in computing the new adjustment factor, to the extent that such sales do not exceed purchases from the state water projects and others. To the extent that prices for purchases from DWR and others are less than prices for sales to DWR and others, there will still remain a net saving to the ratepayers if such sales and purchases are equal, while allowing the energy cost adjustment revenues to match energy expenses more accurately." (79 CPUC 758 at 770, 771.)



In the Edison decision (Decision No. 86794, supra) that limitation was overlooked. The staff contends the result was an erroneous conclusion that the generic decision had determined that ECAC was the indicated mechanism for the recovery of the expenses associated with sales to DWR in excess of purchases from DWR. In the PG&E decision (Decision No. 89316, supra) the production expenses adopted by the Commission for the test year included, according to the staff, the utility's estimate of \$9,216,000 for expenses related to the sales to DWR in excess of purchases for the test year 1978. Because the staff had concurred in that estimate and had included it in its own estimate of production expenses, the treatment of sales to DWR presumably was not an issue in that proceeding.

The staff further contends here that the issue of whether recovery should be through ECAC belongs in either a new or reopened generic ECAC proceeding and not in an individual utility's ECAC proceeding. Moreover, to challenge the reasonableness of recovery through ECAC or otherwise, the staff Utilities Division witness expressed her belief that when the Commission issued the generic ECAC decision, it "was aware of the future situation where sales to DWR could exceed the purchases and did not want the ratepayer to be burdened with added expenses. In other words, the utility during the negotiation of the original contract with DWR did not foresee

this present situation and did not cover themselves adequately." (Exhibit 6, page 2-4.)<sup>4/</sup> This belief held by the staff witness led to the city of San Diego's (City) position which, according to its brief, is that these expenses should not be recovered in either an ECAC or a general rate proceeding, as it contends the losses being incurred are due to an imprudent contract entered into by SDG&E's management.

SDG&E apparently regarded this position of the staff witness as an assertion that it was the Commission's intention, based upon its failure to provide in the ECAC generic decision for recovery of these revenue deficiencies, to punish the utilities for failing in the early 1960's to foresee an unprecedented increase in the cost of generation. It is SDG&E's position that this contract must be assessed in light of the circumstances that existed at the time of its execution and that it must be viewed as a part of an overall contractual arrangement designed to implement the Pacific Northwest-Southwest Intertie. SDG&E's rebuttal witness testified to these circumstances as follows:

"The key to the Northwest Intertie was federal funding of part of both the AC and the DC line.

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<sup>4/</sup> The belief held by the staff witness that the generic decision intended for the utility to absorb the costs in excess of revenues for sales to DWR in excess of purchases from DWR carries with it a further implication: Because the generic decision requires that the revenues from DWR sales up to at least the point where the sales exceed the purchases be deducted in their entirety from the energy cost adjustment account, the utility must forego any of the benefits from the price for purchases from DWR being less than the price for sales to DWR while absorbing the costs in excess of revenues for sales to DWR in excess of purchases from DWR.

"This federal funding required an Act of Congress.

"As a matter of practical politics, it seems apparent that such an act would not pass Congress until all the public agencies involved, including the U. S. Bureau of Reclamation, Sacramento Municipal Utility District, Los Angeles Department of Water and Power, Bonneville Power Authority and the California Department of Water Resources accepted the overall contractual arrangement designed to implement the Pacific Northwest-Southwest Intertie.

"As I said earlier, this disagreement (sic) with the DWR was part of this overall arrangement.

"As a practical matter, therefore, SDG&E ratepayers would probably not be receiving the benefits of Pacific Northwest energy unless the DWR contract had been signed and was in effect."

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"At the time the agreement was signed in 1966, San Diego's average generation costs were about 3-1/2 mills. And with the advent of nuclear power, they were expected to decline further.

"That this was not an unreasonable expectation of San Diego Gas & Electric was borne out by the fact that there was an FPC report on the electrical industry which came out in the 1960's called The National Energy Report; and that report by the Federal Power Commission forecast declining electric rates for the next decade."

More important background concerning the contracts is available in the Edison decision (Decision No. 86794, supra). The staff cited that decision to point out that the generic ECAC decision had been misconstrued but otherwise appears to have ignored it. The following is taken from the Edison decision:

"Testimony and exhibits were presented by Edison, the Los Angeles Department of Water and Power (LADWP), and the California Division of Water Resources (DWR) relative to the following agreements: the supplier's contract between PG&E, SDG&E, Edison, LADWP, the State of California, and DWR; the purchase contract between PG&E, SDG&E, Edison, and DWR; and the EHV contract between Edison, PG&E, SDG&E, and DWR.

"The supplier's contract provides for supplying capacity and energy to DWR for the operation of its pumping plants on the aqueduct system of the State Water Project at 3.0 mills per kilowatt-hour and 20,000 kilowatts of on-peak capacity at \$17 per kilowatt-year. The purchase agreement provides for the purchase of the output of DWR's Hyatt (Oroville)-Thermalito hydroelectric power plants at approximately 2.59 mills per kilowatt-hour for energy and \$12 per kilowatt-year for capacity. The EHV contract provides, among other things, for the sale to Edison of substantial portions of the DWR entitlement to Canadian entitlement power at 2.6 mills per kilowatt-hour for energy and \$6.60 per kilowatt-year for capacity.

"It is Edison's position that the revenue received under the supplier's contract is not adequate to cover the cost of generating such energy and that the purchase cost of energy bought under the purchase and EHV contracts is well below current and future costs of providing such power under alternative arrangements. Edison argues that under such present arrangements it is the shareholders who bear the burden of the

revenue deficiency and the ratepayers derive the benefit of the cost-of-service reduction. Edison proposes that the benefits and burdens be equalized by either (1) reflecting only the actual revenues received when computing revenue requirements; or (2) by imposing a fuel cost adjustment on sales to DWR. Alternative (1) is recommended by Edison because of the possibility of DWR withdrawing the Oroville-Thermalito power for its own use with a resultant need by Edison of obtaining substitute power.

"LADWP favors alternative (2) on the basis that a fuel cost adjustment would cause the price paid for energy by DWR to more closely reflect the actual cost of such energy and DWR favors alternative (1) on the basis that all three contracts should be considered as a whole with both the benefits and burdens accruing to the ratepayer.

"According to testimony of Edison's witness, alternative (1) could be implemented by the simple expedient of proper application of the cost allocation procedure. Equating the purchased power expense to the revenues received from the sales, however, only accommodates a portion of the alleged revenue deficiency burden being applied to the stockholder. The major portion of the revenue deficiency burden would have to be shifted from the shareholder to the ratepayer by a slight modification of the method of computing the fuel cost adjustment billing factor. Decision No. 85731 provides that the revenue deficiency for sales to DWR be included in the ECAC revenues to be recovered from the balance of the ratepayers, thereby adopting, in effect, alternative (1). Consequently, no further consideration of this item is necessary in this proceeding." (Decision No. 86794, mimeo. pages 99 and 100.)

In the above-quoted rebuttal testimony, SDG&E's witness characterized the DWR contracts as an essential ingredient in the Pacific Northwest-Pacific Southwest Intertie and portrayed the outlook for future generating costs at the time the contracts were negotiated. In the above-quoted portion of Decision No. 86794 the interrelationship of the supplier's contract, the purchase contract, and the EHV contract is made evident. From Decision No. 86794 it was also evident that none of the parties to that Edison general rate proceeding contended that the pertinent costs were being imprudently incurred. ✓

We are not persuaded that a sound basis has been provided by any party to this proceeding for holding that either SDG&E or the other two affected utilities under our jurisdiction were imprudent in negotiating, along with the LADWP, the supplier's contract with DWR.

The question remaining for our determination is thus narrowed to whether SDG&E should be allowed to recover such expenses (the expense for producing energy for DWR sales in excess of DWR's purchases) through ECAC or in a general rate proceeding. At the outset in approaching this determination it should be acknowledged that the fuel costs related to sales to DWR less than or equal to purchases from DWR are now included in ECAC.

The staff contends in its brief at page 15:

"Applicant has asked that its ECAC tariff be revised to include all sales to the Department of Water Resources. Applicant admits that sales in excess of purchases are presently excluded from ECAC and that no circumstance has changed that would require a change in the Commission policy. (Tr. Vol. 4, p. 351.) Rather, applicant points to a staff position in the concurrent general rate case and pleads for the opportunity to recover these expenses in one or the other proceeding. Staff here contends that the general rate case treatment is more appropriate and that the Commission should not casually modify a decision that was reached in a generic proceeding following extensive hearings and participation by all interested parties. As recently as September 6, 1978, in D. 89316 in A. 57284/5, the Commission adopted the general rate case treatment for DWR sales. This precedent should be conclusive."

We believe net losses resulting from utilities servicing DWR contracts should not be recovered through ECAC.

Until the DWR contracts are renegotiated in the mid-1980's SDG&E will realize a net loss with respect to providing DWR service. The amount of the loss can fluctuate based on the quantities of DWR sales. If we allowed DWR net losses to be recovered through ECAC, it might tend to give utility management less incentive to at least minimize losses when it periodically renegotiates the contracts, since a dollar-for-dollar pass-through of losses might be allowed. Also, considering DWR contract net losses or profits, and the resultant staff investigation necessary to review the reasonableness of the situation, will tend to further complicate the semiannual ECAC proceedings. We have limited staff to review ECAC filings which are filed frequently by major utilities. Whereas, in a general rate case more complete effort to review reasonableness of energy-related costs can

be applied. Accordingly, we will not consider DWR contract net losses or profits, and the reasonableness of the amounts, in ECAC proceedings. The resolution of this issue is the same we reached in generic ECAC proceeding Decision No. 85731, Case No. 9886 (p. 18, mimeo) dated April 27, 1976. ECAC proceedings can be expedited if relitigation of this issue ceases.

Finally, we note that the net results of DWR sales can be projected and estimated for a normal year of sales. Accordingly, this issue lends itself to test year ratemaking, and the expense in question will, if reasonably incurred, be recognized when setting base rates.

Accordingly, SDG&E will not be allowed to revise its electric tariffs to provide for recovering through ECAC the difference between revenues and costs for sales to DWR in excess of purchases.

#### Wheeling Charges

Wheeling charges are levied for the transmission of energy over a system or facilities not owned by either the energy purchaser or the energy supplier. SDG&E seeks to include certain wheeling charges as part of purchased energy expense to be recovered under ECAC provisions. For this purpose "actual" purchased energy expense, as specified in SDG&E's ECAC tariff, is to include "those transmission service charges as recorded in CPUC Account 565 that are directly attributable on a dollar per kilowatt-hour basis to specific energy purchases included in CPUC Account 555."

Wheeling costs are presently provided for in base rates through Account 565, Transmission of Electricity by Others. The wheeling costs in this account are of two basic types: fixed charges (i.e., charges which are not a direct function of kWh of energy transmitted) such as those paid to



PG&E for SDG&E's share of the operation of the Pacific Intertie, which is by far the major portion of the wheeling costs; and variable charges incurred for specific energy purchases outside the Pacific Intertie, which is the type of wheeling charges SDG&E seeks to recover through ECAC.

It is SDG&E's position that the variable wheeling charges, recorded as a transmission expense, are really a component of purchased power cost and recoverable under ECAC. The staff and City oppose this, contending that wheeling expense was excluded in the generic ECAC decision and that, in general, modifications to ECAC that have statewide implications ought to be made in a generic proceeding.

We determined in the generic ECAC investigation that wheeling charges should not be included in ECAC (Decision No. 85731<sup>5/</sup>). No evidence or reason to change that policy has been presented in this proceeding. Wheeling charges are an expense that can be estimated on a normal year of operation basis and, as such, are most suitable for consideration in a general rate proceeding test year (where such costs are now recovered). Including these charges in ECAC burdens the proceedings and may tend to inhibit expedited consideration of semi-annual ECAC filings (which, preferably, for the benefit of all parties, should not be lengthy proceedings). We shall follow this policy until it is changed in a general ECAC proceeding.

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<sup>5/</sup> "Thus, we shall exclude fixed charges, costs not directly attributable to energy sources, and costs primarily accounted for in general rate proceedings. This excludes all costs relating to company, affiliate or subsidiary owned transportation (including pipeline) and storage facilities, unloading charges from transportation facilities, tankers under hire or contract which are not actually used, all handlings by company, affiliate, or subsidiary employees, transportation beyond the unloading point, operation and maintenance charges related to purchased power, and all costs included in base rates." (P. 19, mimeo.) (Emphasis added.)

Economy Energy

The staff Finance Division witness recommends a \$572,600 reduction in the ECAC account balance as of June 30, 1978 for Economy and Associated Energy Sales made during the second half of 1977. The \$572,600 figure includes \$31,100 of interest for the period July 1977 through June 1978. Exclusive of interest, the adjustment is purported to represent the difference between the gross receipts for economy and associated energy sales and the incremental cost of generating this energy. This difference, we gather, may also represent the zero fuel based revenue from these sales.

Presently, economy and associated energy sales are excluded from the ECAC calculation by eliminating the incremental fuel cost of generating that energy and the related megawatt-hour sales. Thus, the effect of the staff recommendation is to expand the ECAC deduction so that it includes the full amount of the economy and associated energy sales gross revenues. This recommended change can be implemented directly by crediting Account 555, Purchased Power, with the gross economy and associated energy sales revenues and by debiting the appropriate expense accounts.

The staff Finance Division witness defined economy energy sales as sales of energy made by a supplier using power sources which at the time of delivery are not being fully utilized, such energy being used by the receiver to reduce generation by more expensive units, or to avoid curtailing deliveries to secondary or interruptible services. He did not define associated energy sales.

This witness testified that SDG&E made substantial sales to PG&E during the period June 1977 through December 1977, as the result of adverse hydro conditions for PG&E brought on by the drought in California; that the contractual agreement between SDG&E and PG&E provides for SDG&E to recover its incremental energy cost plus 10 percent for economy and 15 percent for associated energy; and that the effect of his recommended accounting treatment is to reduce the purchased power expense by the gross receipts from such economy and

associated energy sales, which passes the benefit to the ratepayers in the form of reduced energy costs rather than passing the benefit to SDG&E's stockholders as is the present situation.

In the latter regard he contended that "these sales are a form of mutual assistance between the utilities made in conjunction with the interconnection agreements and are not separate and distinct sales" and that "the ratepayers are called upon to bear their portion of the cost of the facilities used to generate this economy energy and it is only appropriate that the ratepayer should receive the benefit of the sales."

SDG&E took the position that it would not oppose deducting from the ECAC balancing account the gross revenues from future SDG&E sales of energy to PG&E if (1) the zero fuel based revenues from the PG&E sales, which are presently included in the test year 1979 estimates in SDG&E's general rate case (Application No. 58067) are removed; and (2) the wheeling charges, which are related to purchase energy transactions, are included for recovery through ECAC. In regard to the past sales to PG&E, SDG&E's witness testified that the base rates in effect for 1977 were based on a 1976 test year which included an amount of \$1,650,000 for sales for resale (i.e., predominantly sales to PG&E).

It was brought out by the staff in conjunction with the issue concerning wheeling charges, as was the above testimony by SDG&E's witness, that the 1976 test year level of sales for resale fell far short of what was experienced in 1977. In that regard, the staff Utilities Division witness included in Exhibit 6 in the proceeding on the first of the two SDG&E ECAC applications (i.e., the Application No. 57780 proceeding during early 1978) the following:

"...it should be noted that SDG&E would like to include wheeling expenses related to purchased power while the profit gained from sale of such power is not included into ECAC. For example, during March, 1977 to December, 1977, SDG&E sold 182.072 M<sup>2</sup>kw/hr to PG&E at a cost of \$6,039,794 which included SDG&E's incremental fuel cost of \$5,055,922 plus overhead, other operation and maintenance costs, and a large sum of profit. In the balancing account, appropriate adjustments were made for incremental fuel costs but no adjustments were made for the profit derived through sale of energy. The staff believes that such profits provide SDG&E along with other utilities to use their resources to the fullest extent possible and provide incentives to offset other expenses and to raise their earnings on their investments whenever possible. . . ."

The record, we note, is silent on how large that profit margin ascribed to the 1977 transactions was, if indeed it was large, and on the breakdown of the sales between economy energy service, economy capacity service, and short-term firm service. The energy component of the latter two services is termed Associated Energy (i.e., Capacity Associated Energy) and all three services are made available pursuant to the California Power Pool Agreement.

Let us examine several facets of the jurisdictional matter so raised and do so in conjunction with potential rate-making treatments. It is axiomatic, of course, that costs attributable to a jurisdictional service are allocable to that jurisdiction. In general rate proceedings on electric utilities under our jurisdiction, moreover, the results of operation presentations contain mandated jurisdictional allocations between sales made under this Commission's jurisdiction and those made under FERC's jurisdiction. The jurisdictional mandate is set forth in Federal Power Commission v Southern California Edison (1964) 376 US 205, 11 L ed 2d 538, 84 Sup Ct 644.

When adopting a test year results of operation for an energy utility, as any utility, it is recognized that actual experience or results may vary over or under a particular estimated results of operation component depending on conditions. But over a period of time the variations should balance out.

In SDG&E's current general rate proceeding (Application No. 58067), as well as in its preceding one, both SDG&E and the staff included an estimate of FERC jurisdictional sales (sales for resale) in their respective studies of the operating results for the test year.

Since wheeling charges and other purchased power-related expenses are included in base rates and now considered in test year ratemaking, it is appropriate to also consider economy energy revenues in general rate proceedings rather than in ECAC. SDG&E has included an estimate of such sales in its pending general rate proceeding. These sales, along with their corollary expenses, can be estimated on a normal test year basis. We note again that we are concerned about burdening ECAC proceedings, which would be the result if SDG&E's proposal were adopted.

Oil Sale Losses

Summary

During the period July 1, 1977-June 30, 1978 SDG&E sold 1,294,160 bbl. of residual fuel oil in seven basic transactions (designated as Moore-McCormack; Amorient #1, Amorient #2; Coal Fuel; Tesoro (Sta. Clara); Japan (Via Hiri); and Kaiser (Alum. Exch.)) at an aggregate loss of \$5,018,847. SDG&E has recorded that loss in the EC&C balancing account.

The staff Utilities Division witness recommended that the entire \$5,018,847 be disallowed. The staff Finance Division witness recommended that the \$5,018,847 be reduced by \$1,178,265 to allow for the reduction in costs for burning gas rather than oil and the resultant \$3,840,582 be disallowed. Both staff witnesses contended that SDG&E's fuel procurement policies and practices have been imprudent. City supported this contention of the staff witnesses.

During the period July 1, 1977-June 30, 1978 substantially more natural gas became available for power plants than was anticipated. Such additional gas displaced fuel oil from SDG&E's generation mix. The large increases in gas supplies not only were a direct cause of forced oil sales by SDG&E but led to excess interdepartmental profits. In Exhibit 23 the excess revenues generated during that period under SDG&E Schedule G-54<sup>6/</sup> for interdepartmental power plant gas were computed. After deducting the commodity charge under Southern California Gas Company (SoCal) Schedule G-61, excess revenues from the increase in gas supplies amounted to \$19.3 million.

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<sup>6/</sup> Now designated Schedule GN-5.

Pursuant to SDG&E's compliance with our order, Gilbert Associates, Inc./Robert Brown Associates, as independent consultants, made jointly a comprehensive study of SDG&E's fuel procurement policies and practices. That study, together with other evidence, convinced us that those policies and practices, in the aggregate, have not been imprudent. It would be neither fair nor reasonable, however, to allow for the recovery in electric rates of the \$3,840,582 of oil sale losses remaining after deducting \$1,178,265 to allow for the reduction in costs for burning gas rather than oil. From the standpoint of SDG&E's Electric Department and its ratepayers, the economics simply favored to that extent burning oil, rather than selling it at a loss, and concomitantly rejecting gas. From the SDG&E total company standpoint, oil sale losses in that adjusted amount have been amply offset already through excess revenues generated by interdepartmental sales.

Accordingly, we hold that oil sale losses in the amount of \$3,840,582, together with related interest, should not be recovered, and that oil sale losses in the amount of \$1,178,265, together with related interest, should be recovered through ECAC. To mitigate the immediate impact on SDG&E's financial position of this disallowance, a Residual Oil Sales Adjustment (ROSA) should be used to amortize the \$3,840,582 loss over a 36-month period. Under this procedure the ECAC billing factor does not change (i.e., it continues to reflect the ECAC balancing account without adjustment for disallowed part of the oil sale losses) and a separate ROSA factor is used to reduce billings to the ratepayers.

Background

a - Earlier Oil Sale Losses Preceded  
Requiring Independent Appraisal

In 1975, 1976, and continuing into 1977 the quantity of natural gas and purchased power available for SDG&E's power plants was significantly larger than the amount forecast to be available at the beginning of each year. Although it had already contracted for sufficient fuel oil to meet its generating requirements, SDG&E chose to use all of the lower cost natural gas and purchased power available. Through mid-1977 this choice invariably reduced the cost of electric power to SDG&E's customers.

For the oil made excess, as a result of this choice, there were, in SDG&E's judgement, two alternatives available for its disposition: (1) store the oil for later use; or (2) sell it to avoid storage costs and ad valorem taxes. SDG&E selected the latter because its studies showed that the expected losses from the sale would be less than the costs of storing the oil and paying ad valorem taxes. In Application No. 57497 SDG&E sought recovery through ECAC of the losses that resulted. In Table 1 of Decision No. 88225 issued December 13, 1977 in that application those losses on fuel oil sales were listed as follows:



FUEL OIL SALES  
July 1, 1976 - June 30, 1977

	<u>Date</u>	<u>Company</u>	<u>Quantity (bbl.)</u>	<u>Profit/(Loss)</u>	
Residual Fuel Oil	7/76	LSFO Company	50,329	\$ (36,846)	
	9/76	Tesoro	442,667	(900,804)	
	10/76	Tampimex #1	328,321	(921,709)	
	10/76	Tampimex #2	256,457	(703,239)	
	11/76	Holland Oil	230,026	(597,725)	
	12/76	Standard Oil of California	750,000	(51,887)	
	1/77	Moore-McCormack Energy #1	301,034	(706,637)	
	1/77	Moore-McCormack Energy #2	209,539	(427,213)	
	1/77	Moore-McCormack Energy #3	184,675	(364,625)	
	2/77	Moore-McCormack Energy #4	233,517	(584,829)	
	2/77	Exxon, USA	175,048	67,924	
	2/77	Amorient Petroleum	110,000	(22,080)	
			<u>Subtotal Residual</u>	<u>3,271,613</u>	<u>\$(5,249,670)</u>
	Diesel Fuel Oil	7/76	Moore-McCormack Energy	103,927	(5,894)
12/76		Waterfront Services, Inc.	2,003	204	
12/76		Waterfront Services, Inc.	2,992	299	
1/77		Moore-McCormack Energy #1	398,279	297,467	
2/77		Moore-McCormack Energy #2	149,486	132,396	
2/77		Moore-McCormack Energy	74,900	91,548	
			<u>Subtotal Diesel</u>	<u>731,587</u>	<u>516,020</u>
		<u>Total</u>	<u>4,003,200</u>	<u>\$(4,733,650)</u>	

In Decision No. 88225 we found the above-tabulated losses to be prudently incurred and allowed for their recovery; however, SDG&E was ordered to seek an independent appraisal of its fuel management programs:

"Within 30 days after the effective date of this order SDG&E shall file its plan for an independent appraisal of its fuel procurement policies and practices. This independent appraisal, including recommendations for improved policies and practices, shall be presented to the Commission and examined in subsequent ECAC proceedings. SDG&E shall, in the next and future ECAC proceedings, develop an extensive record on fuel procurement policies and practices which shall reflect improvements already initiated as well as plans for further improvement."

b - Historical Perspective

Until 1971, the SDG&E fuel oil requirements were relatively small because fuel oil was used only during the winter months when gas peak demands made it necessary to interrupt gas supply to steam electric power plants. After 1970, the supply of gas dropped off with the emergence of a national gas supply shortage which, although more severe in other parts of the country, was having a significant impact in southern California.

By 1971 the Federal Government had begun to consider a prohibition against burning natural gas in power plants. While the ban was never implemented, its thrust was embodied in the Federal Power Commission's Curtailment Program, which went into effect around 1973. This program provided a mechanism for allocating gas for interstate transmission to utilities in such a way that gas would be provided to meet all other customer demands before it would be available to power plants. At about the same time, the Canadian National Energy Board also began to threaten curtailment of gas exports. Following these developments, this Commission in 1976 put into effect for California a priority program for allocation of natural gas that reinforced the concept that power plant use was the lowest priority.

The public policy message carried by these programs was clear. However, they were predicated on the critical assumption that action was required to forestall serious depletion of natural gas reserves, an assumption made with a timing that may have been thrown off by recent projections of new gas reserves and shifts to alternative fuels by large users.

In the early 1970's there was also great concern over the reliability of future fuel oil supplies. Initially, this concern was caused by a shift from abundant high-sulfur oil to scarce low-sulfur oil due to air quality considerations. This concern was later intensified by the October 1973 Arab Oil Embargo and the continuing threat of another such embargo. The 1973-1974 embargo hit as gas-burning utilities were preparing to shift to even greater dependency on fuel oil. In the years following that embargo, these utilities intensified their efforts to secure long-term supply commitments to meet the projected growth in fuel oil requirements. From the perspective of the utilities, these actions were encouraged by this Commission which had emphasized the need to protect continuity of power supply. Moreover, the federal oil allocation program in effect during the embargo had used the relative magnitude of contracted supply as a basis for allocating available oil.

c - Fuel Oil Contracts

SDG&E's low-sulfur fuel oil is purchased under long-term, take-or-pay contracts. Its present long-term contracts started in 1974. Spot purchases may also be used, as well as oil from inventory, to meet burn requirements.

Prior to 1975 adverse weather conditions were used as the basis for setting long-term contract demands. However, this produced excessive inventories. In 1975, to correct this situation, SDG&E changed from adverse weather to average weather as the basis for setting its contract demands.

In the aftermath of the Arab Oil Embargo SDG&E viewed long-term contracts as an excellent way to avoid shortages and achieve reasonable and stable prices. Its rationale was that long-term contracts furnish an incentive for suppliers to provide a reliable source of fuel oil and give the purchaser additional leverage to negotiate reasonable prices; that this is because an assured market for a product reduces risk to the supplier, usually making the supplier more willing to accept a lower sales price; and that to rely on the spot market adds to the utility's risk of short-term shortages and higher prices in a seller's market, although the latter also provides the utility with opportunity to purchase oil at a lesser price in a buyer's market.

As would be expected, in years when the spot market has been tight (i.e., 1974 and 1975) SDG&E's contract prices have been below the spot price. In years when the spot market has been soft (i.e., 1976 and 1977) SDG&E's contract prices have been above the spot price. It seems fair to say that a policy determination fixing the extent of reliance, where fuel oil is the swing fuel, on long-term contracts for fuel oil requirements can depend predominantly on when that determination is made and on the long-term market outlook for fuel oil as perceived at that time.

#### d - Oil Sales Gains and Losses

In 1974 SDG&E made a net gain before taxes of \$9.4 million on sales of excess residual fuel oil. In Decision No. 84618 dated July 1, 1975 in Application No. 55506 (78 CPUC 485) we applied that gain after an allowance for taxes to reduce SDG&E's fuel costs, commenting in pertinent part as follows:

"There is no substantial dispute regarding the events of 1974 which resulted in the profitable fuel oil sales by SDG&E. By virtue of prudent management policy, the utility had adequate supplies of fuel oil for expected 1974 conditions. However, 1974 was an abnormal year. Substantial conservation by customers and warm weather reduced expected requirements. Moreover, SDG&E had abnormally large amounts of lower-cost purchased power and natural gas available in 1974. Not only did SDG&E have excess fuel oil supplies available, market conditions enabled SDG&E to sell fuel oil at a profit.

"We further conclude that the gain before tax from fuel oil sales in 1974 was \$9.4 million, as set forth in staff Exhibit 8A, Schedule A. The net revenue gain by SDG&E in 1974 is estimated as approximately \$6.7 million after taxes. For the purpose of calculating the FCA as of April 1, 1975 we will accept the applicant's claim that it will have no federal income tax on the FCA revenue. Accordingly, we will include \$6.7 million as the gain from fuel oil sales in calculation of the FCA."

On page 26 of this decision we reproduced Table 1 of Decision No. 88225 showing losses of \$5,249,670 on 3,271,613 bbl. of residual fuel oil sales during fiscal year 1976/1977. Those were losses that were found to have been prudently incurred and amounted on the average to \$1.605/bbl. A review of the economic determinants at the time of those oil sales reveals that the cost of natural gas to SDG&E's power plants was lower than the cost of fuel oil minus the losses (i.e., the Schedule G-54 gas rate was less than SDG&E's fuel oil inventory unit cost reduced by the fuel oil sale unit loss). A more economical burn thus resulted upon displacing fuel oil with natural gas. So much so, as it turned out, approximately one dollar of loss was made up

for by two dollars of gain (i.e., the residual fuel oil sales losses were \$5,249,670, whereas the fuel oil inventory unit cost less the average cost of natural gas per bbl. equivalent to SDG&E's power plants for the 3,271,613 bbl. of fuel oil sold was about \$10.6 million).<sup>7</sup>

<sup>7</sup>/ Re: Displacing fuel oil sold during July 1, 1976-June 30, 1977 period with natural gas in generation mix.

Residual Fuel Oil Sales		Gas	Residual	Difference		
Date:	Company	Quantity Sold (Bbl.)	Cost/Bbl. to Elec. Dept.	F. O. Inv. Cost/Bbl.	Per Bbl.	Total
(1)	(2)	(3)	(4)	(5)	(6)=(5)-(4)	(7)=(3)x(6)
7/76	LSFO Company	50,329	\$ 9.23	\$14.40	\$5.17	\$ 260,201
9/76	Tesoro	442,667	9.42	14.37	4.95	2,191,015
10/76	Tampinex #1 & 2	584,778	10.47	14.35	3.88	2,268,939
11/76	Holland Oil	230,026	10.62	14.43	3.81	876,399
12/76	Standard Oil of California	750,000	11.62	14.39	2.77	2,077,500
1/77	M-McC'k Energy #1, 2 & 3	695,248	11.80	14.22	2.42	1,682,500
2/77	M-McC'k 4, Exx., Amor.	518,565	11.82	14.31	2.49	1,291,227
	Total	3,271,613				\$10,647,967

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In this proceeding the oil sale losses at issue are those tabulated below.

Losses on Fuel Oil Sales  
July 1, 1977-June 30, 1978

: :Date:	Purchaser	: Quantity : (Bbl.)	: Profit/(Loss) :
11/77	Moore-McCormack	229,055.00	\$ (914,023.00)
1/78	Cool Fuel, Inc.	9,907.55	(8,782.46)
1/78	Waterfront Services, Inc.	1,793.00	(6,683.16)
2/78	Kanematsu - Goshu, Kobe, Japan	260,047.87	(650,000.00)
3/78	(Adjustment in estimated loss from Feb. to reflect actual invoice)		196,242.47
3/78	Amorient Petroleum, Inc.	106,925.09	(652,388.51)
3/78	Waterfront Services, Inc.	4,378.00	(16,792.07)
3/78	Kaiser Aluminum	273,509.35	(1,022,776.00)
4/78	Amorient Petroleum, Inc.	1,112.51	(10,151.57)
4/78	Amorient Petroleum, Inc.	196,883.62	(1,179,332.55)
4/78	Kanematsu - Goshu, Kobe, Japan		(13,002.39)
		79,446.09	
4/78	Kaiser Aluminum		(264,930.00)
5/78	Amorient Petroleum, Inc.		(5,401.88)
		55,554.69	
5/78	Kaiser Aluminum		(208,610.00)
6/78	Amorient Petroleum	(Storage Adjust-	1,177.39
	Amorient Petroleum	ment Only)	6,352.20
6/78	Cool Fuel, Inc.	23,038.00	(104,999.04)
6/78	Kanematsu - Goshu - Kobe, Japan	(Adjustment of March Trans- action)	(7,751.63)
6/78	Kaiser Aluminum	1,490.32	17,305.68
	Tesoro - Alaska	51,019.00	(175,337.99)
	Undistributed Expense		(1,037.27)
	Totals	<u>1,294,160.00</u>	<u>\$5,018,847.00</u>

On these fuel oil sale losses at issue, the loss per bbl. averaged \$3.878, up from the \$1.605/bbl. incurred in the previous period. SDG&E's fuel oil inventory unit cost at the time of Moore-McCormack transaction (November 1977) was \$15.814/bbl. and by then the difference between that cost of fuel oil in inventory and the price of power plant gas had narrowed to \$0.429/bbl.,<sup>8/</sup> primarily because the Schedule G-54 gas rate had increased from the \$1.50 to \$1.92/M<sup>2</sup>Btu range to \$2.50/M<sup>2</sup>Btu. SDG&E's composite fuel oil inventory unit cost applicable at the times of the remaining fuel oil sales was \$16.394/bbl., and the difference between that cost and the price of power plant gas had reached \$1.014/bbl.<sup>9/</sup>

8/ Sale of Residual Fuel Oil in November 1977

G-54 Rate of \$2.50/M <sup>2</sup> Btu =	\$ 15.385/barrel*
Fuel Oil Inventory Unit Cost	<u>15.814</u>
Difference	\$ .429
Quantity Sold	229,055 barrels
Fuel Cost Reduction by Burning Gas	\$ 98,265
Loss on Sale of Fuel Oil	<u>914,023</u>
Loss Charged to Electric Ratepayers	<u>\$815,758</u>

\* M<sup>2</sup>Btu per barrel conversion based on record period ended November 30, 1977 for residual oil =

$$\frac{72,802,400 \text{ M}^2\text{Btu}}{11,860,001 \text{ barrels}} = 6.154 \text{ M}^2\text{Btu/bbl.}$$

9/ Sale of Residual Fuel Oil From January Through June 1978

G-54 Rate of \$2.50/M <sup>2</sup> Btu =	\$ 15.380/barrel*
Fuel Oil Inventory Unit Cost	<u>16.394</u>
Difference	\$ 1.014
Quantity Sold (In Thousands)	1,065.1 barrels
Fuel Cost Reduction by Burning Gas	\$1,080.0
Loss on Sale of Fuel Oil	<u>4,104.8</u>
Loss Charged to Electric Ratepayers	<u>\$3,024.8</u>

\* M<sup>2</sup>Btu per barrel conversion based on record period ended June 30, 1978 for residual oil =

$$\frac{61,804,770 \text{ M}^2\text{Btu}}{10,045,909 \text{ barrels}} = 6.152 \text{ M}^2\text{Btu/bbl.}$$



Thus, it can be seen that the losses incurred on forced oil sales during the July 1, 1977-June 30, 1978 period exceeded the savings (to the SDG&E Electric Department and its ratepayers) made through burning natural gas instead of fuel oil (i.e., losses of \$5,018,800 versus fuel cost reduction by burning gas of \$1,178,300--see footnotes 7 and 8). It is similarly made evident that forced oil sales and the use of natural gas in place of the fuel oil sold have benefited the electric ratepayers only as long as the Schedule G-54 gas rate taken together with the loss on the sales of excess oil was less than the cost of fuel oil.

Beyond that point, SDG&E, as a combination gas and electric utility, continued to realize a substantial profit margin on Schedule G-54 revenues. The profit margin is the difference between the Schedule G-54 rate the Gas Department charges the Electric Department and the commodity rate of SoCal's Schedule G-61 under which SDG&E's Gas Department purchases its gas supplies. In Exhibit 23 it was determined, using that profit margin and the gas volumes in excess of those reflected in the development of Schedule G-54 revenues in rate matters before the Commission, that excess G-54 revenues for the July 1, 1977-June 30, 1978 period were \$19.3 million.

e - Variability of Fuel Oil Requirements

Because it has been the most expensive and least environmentally acceptable major source of power, fuel oil has been given the lowest priority in SDG&E's hierarchy of sources available to meet projected energy needs. The relative importance of each major source for SDG&E is shown below, based on recorded results for 1977.

	<u>Percent of Total</u>
Residual Fuel Oil	69.3%
Natural Gas	14.2
Distillate Fuel Oil	4.1
Nuclear Fuel	<u>4.6</u>
Total Generation	92.2%
Purchased Energy	<u>7.8</u>
	100.0%

Because of its lowest priority in SDG&E's generation mix, fuel oil is affected by the numerous forces external to SDG&E that impact each of the energy sources. Among these are weather, conservation, economic growth, demographic changes, prices, and developments in the domestic and world energy picture. Its variability in the short term is illustrated by comparing inputs as of October 1976 in SDG&E's forecast of 1977 fuel oil requirements with what transpired during that year.

This forecast assumed that in 1977 there would only be enough natural gas for power plants to meet the burner ignition requirements of approximately 54,000 bbl. equivalent and that 1,848,000 bbl. equivalent of purchased energy would be available. As it turned out, 2,596,000 bbl. equivalent of natural gas and 1,307,000 bbl. equivalent of purchased power were received by year end 1977. From the original projections, these figures represent a variance of 2,542,000 bbl. equivalent more gas than anticipated and 496,000 bbl. equivalent less purchased power than anticipated. While these departures from the forecast somewhat offset each other, the net effect was still substantial, representing a displacement of 2,046,000 bbl. equivalent of burn

requirements. Relative to total energy, both purchased and generated, and to residual fuel oil burned in 1977, that displacement amounted to 11.8 percent and 17.1 percent, respectively.

Consultants Report

Gilbert Associates, Inc. and Robert Brown Associates conducted the independent appraisal of SDG&E's fuel procurement policies and practices called for in Decision No. 88225, supra. They used a project team of six specialists. Their 78-page final report (consultants report) dated July 1978, together with the prepared testimony of the principal consulting engineer of Gilbert Associates, Inc., who sponsored the report, comprised Exhibit 2 in this proceeding.

We have reproduced the 7-page executive summary of the consultants report in its entirety in Appendix A to this decision. Below the reproduction is limited to the findings in that section:

\*FINDINGS

\*SDG&E's responsibility for determining fuel oil requirements originates with the Operations Group, and the planning and procurement aspects are executed by its Fuel Resources Department. This department, which presently has a professional staff of ten people, coordinates and develops Company data, market information, and West Coast energy factors which ultimately determine fuel oil requirements. Their charter is similar to groups in other electric utilities, but the lack of clear energy policies by State and Federal Agencies with regard to fuel oil and natural gas pricing and end use has further complicated an already intricate process of planning for sources of low cost and reliable power plant fuels. Unfortunately, this planning process in today's energy markets does not allow for decision making without risk.

"SDG&E's fuel oil requirements are currently provided by two suppliers: Hawaiian Independent Refinery, Inc., and Tesoro-Alaskan Petroleum Corporation. Both contracts stipulate the quantities of oil to be supplied to the Company. The quantities in the original contracts were determined on the basis of 100% conversion of existing power plants to fuel oil from natural gas, and on the assumption of adverse hydro-power conditions. Since 1975, contract quantities have been determined by average hydro conditions. The availability of large volumes of natural gas has resulted in contract oil volumes in excess of actual requirements, and several contract amendments have been negotiated to reduce the quantity from that stipulated in the original contracts.

"Presently, SDG&E's planning process for fuel oil is prepared on the basis of projected electrical load and the availabilities of natural gas, nuclear power and purchased energy. After energy requirements are projected, a portion of the requirements are allocated to nuclear power, a portion to purchased power, and the rest allocated to various fossil fuel generating units in the same fashion as they would be by the load dispatcher. The methods used by the company to forecast system fuel oil requirements were evaluated on the basis of:

- "1. Adequate 'links' between projected electric loads, economic dispatch, fuel oil requirements, and inventory considerations;
- "2. Adequacy of company demand/energy forecast, and natural gas and purchased power availability forecasts; and
- "3. Adequacy of the SDG&E staffing and organizational placement of its fuel activities.

"Our appraisal was made in the context of events that have recently placed the Company's fuel activities in a position of critical importance when measured by the dollar level of direct expenditure and by the increased impact of fuel strategy on Company operations. A procurement policy set in 1972-1974 during the Oil Embargo, a current soft spot market for oil on the West Coast, and the availability of large volumes of interruptible power plant gas (P-5) together have created difficulties in fuel planning and have forced sales of excess fuel oil. If it were not for a soft spot market for residual oil, the argument of the day would be the division and sharing of profits as it was in 1974, not the cause and allocation of oil sale losses.

"Major findings of our study are:

"1. Long term fuel oil commitments consummated during the Oil Embargo and a period of unreliable supplies have governed past SDG&E fuel oil programs. A recent softening in the West Coast fuel oil spot market and the availability of significant quantities of P-5 natural gas, have created the need to sell excess long-term contract residual oil, thereby generating significant dollar losses. It was not possible to foresee or plan for the large quantities of interruptible P-5 gas becoming available that forced oil sales based on available information and historic state and nationwide trends.

"2. The forecast of gas requirements required to satisfy customer load within each priority classification has been the area which has caused variations in P-5 gas supply. Aside from total system gas supply, the primary uncontrollable factor affecting requirements in each priority class is variation in weather. The recent availability to P-5 gas has been caused by fluctuations in customer gas usage in the high priority classes due to mild weather

and conservation, Canadian gas supply, and Pacific Gas & Electric's denial of P-5 gas for its own power plant use. Variations from average weather to milder weather conditions can cause a 1:1 slippage of available gas from high to lower priority levels.

- "3. Past efforts of the SDG&E Fuel Resources Department have been concentrated on managing the excess residual oil through outright sales, exchanges, reduction in refinery production and rescheduling of tanker and storage arrangements. During the last 10-12 months, SDG&E has added personnel staff, and initiated changes in department functions and priorities to eliminate the need for sales and is considering changes in contracting policies to be in a position of participating in a current favorable spot market for residual oil.
- "4. The Fuel Resources Department of SDG&E is evolving into a strong new corporate function as is the case with most utilities in similar positions. The department is well organized, staffed with skilled individuals and now has sufficient data resources and tools to formulate programs and evaluate alternatives. The decision-making process for fuel resource problems and opportunities is appropriate and the creation of a Fuel Oil Inventory Strategy Team to provide for a free and comprehensive exchange of company data is commendable.
- "5. SDG&E management action on company oil sales, procurement, inventory, and contract amendments has been reasonable and prudent in the past, but documentation and alternative studies to support such decisions were deficient. Future changes in contract volumes and fuel oil exchanges will require more structured analysis and studies to provide support for such actions.

"6. Finally, SDG&E's fuels activities are carried on in an exceedingly complex framework of:

"a. Geographical isolation that limits the number of buyer options either to buy, sell or hold fuel.

"b. Changing sulfur specifications for fuel oil that are difficult to satisfy using limited supplies of low sulfur crude oil and environmental restrictions that limit the options for producing compliance fuels from new refinery technologies and create uncertainties on the supply side.

"c. Weather sensitive usage of natural gas and a low probability of accurate supply and usage data.

"d. A need to balance long-term reliable supplies and costs.

"Future fuel policies will have to balance reliability and cost as they have in the past and a rigid, 'exact' formula for such programs may not be available. All policies may be costly at the margin to maintain adequate supplies to ensure reliability and avoid disruption or curtailments of service that were much discussed and experienced in 1974-1975.

"In the past, SDG&E fuel procurement practices have been reactive, but reasonable to the gas and oil situations, given the constraints. We foresee no major problems for the future with their planned programs, but we caution against over-reliance on the spot market and seeking answers through elaborate pricing and market models. Judgment and experience will be necessary to temper attempts to rigorous mathematical quantifying strategies for oil procurement. Policies to manage the last 5-15% of fuel needs will have to balance reliability, risk, and cost. Purchasing the last increment of fuel to top off the barrel is analogous to the mix of generation used by

utilities to satisfy system needs. Peaking Kwh are more costly than base generation and likewise the purchase (or sale) of the last barrel of fuel may bring a premium (or loss), depending upon market conditions."

SDG&E Evidence

SDG&E's affirmative showing addressed many of the subjects covered in the consultants report. It included testimony by the Fuel Resources Department manager addressing (1) low-sulfur fuel oil requirements forecasting, (2) long-term contracts for the procurement of SDG&E's low-sulfur fuel oil, (3) SDG&E's low-sulfur fuel oil storage capacity, and (4) SDG&E's low-sulfur fuel oil inventory levels. In addition, SDG&E's supervisor-Fuel Acquisition, testified in detail on the oil sale loss transactions and in support of allowing recovery of the losses through ECAC. There was extensive cross-examination of both witnesses, but especially of the manager, and a comprehensive record developed. Their testimony on some of these matters will be brought out as points are addressed which the staff and City contend support their conclusion that the forced oil sales were the result of imprudent fuel oil procurement policies and practices on the part of SDG&E.

Staff Evidence

In her report (i.e., in the portion of Chapter 2 of Exhibit 6 devoted to fuel oil sale losses) the staff Utilities Division witness at the outset stressed that:

"The quantities in the original contracts were determined on the basis of 100% conversion of existing power plants to fuel oil from natural gas and on the assumption of adverse hydro-power conditions. Since 1975, contract quantities have been determined by average hydro conditions."



She stated that "the gas supply available for power plant use was always in excess of that estimated according to SDG&E's historical data and continued to be plentiful." To indicate that SDG&E "did not appear to be justified in increasing the contractual amount of oil" through the early 1976 amendments to the Tesoro and Hiri contracts, she made the following presentation:

"The original maximum quantities in 1974 to be delivered by TESORO and HIRI were 9.7 Mbbbl/day and 12 Mbbbl/day, respectively, based also on adverse hydro conditions. When the average hydro conditions became the criteria, the amendments to these contracts in January of 1976 increased their maximum quantities to 18 Mbbbl/day and 21 Mbbbl/day or 86% and 75%, respectively. The growth level increase in sales of electricity from 1974 to 1975 was only 0.17%. Such a negligible increase in sales would make no indication to increase their contractual amounts of oil.

"SDG&E stated that they took the advantage of the low sulfur fuel oil available to them at a reasonable cost without any increase in price. At this point it is very difficult to justify the prudence of the entire transaction. First of all, the average year fuel oil need without any gas accepted should have been much less to adverse year need without gas, even considering the 1975 to 1976 system growth of 4%. Secondly, the gas supply available for power plant use was always in excess of that estimated according to SDG&E's historical data and continued to be plentiful. If this was considered in evaluating the fuel oil need this should have resulted in a lower need for fuel oil. During the same period SDG&E storage capacity remained constant until it was increased by 500 Mbbbl in August of 1976. Considering the above facts, the utility did not appear to be justified in increasing the contractual amount of oil."

In addition, (a) she attempted, without having an adequate understanding of the contracts, to show that SDG&E was purchasing more fuel oil than required under its minimum contractual obligation during 1976 and 1977; (b) she asserted that, according to the consultants report, SDG&E could have sold approximately 500,000 to 1,000,000 bbl. equivalent of oil in the form of power and reduced its fuel oil sales on the spot market; (c) she stated that "SDG&E had not made any efforts to alleviate their oil loss situation"; and (d) she reached the conclusion that "a adequate amount of time has passed, since those events that lead up to the allowable oil sale losses, for SDG&E to have devoted more efforts in foreseeing future gas availability and update their procurement policies that were based on 1974 oil embargo days. Fuel sale losses of November to the present are unfounded. . . ."

In his report (i.e., in Chapter 4 of Exhibit 6) the staff Finance Division witness asserted the consultants report failed to reach a "definite conclusion as to whether such procurement policies were prudent." He cited this failure as one of the two reasons for reaching his conclusion that the oil sale losses in controversy were imprudently incurred. The other reason he gave was that the "level of fuel oil inventory maintained by the Company over recent years has been excessive relative to its needs." He also proffered the following excerpts from the consultants report as support for the staff position:

"a. Past inventory policy has been largely a reaction to long-term contract volumes exceeding planned residual oil requirements due to unexpected interruptible gas supplies. Inventories have been at higher levels than desirable to mitigate against the disposal of excess oil. SDG&E has recently implemented

a weekly inventory report that monitors daily storage volumes, system burn requirements, tanker and barge deliveries, and ullage position. This report should adequately provide information to SDG&E on a timely basis to optimize inventory levels.

"b. It would appear that not all possible alternatives for the disposal of excess oil in 1977 were considered by SDG&E. Firm, short-term sales of power to neighboring utilities (PGandE) under drought conditions (above those accomplished) may have minimized the 'loss' on the sale of excess residual oil. A vehicle for such sales existed under the economy sales arrangement with PGandE. In particular, the drought situation may have provided SDG&E the opportunity to export 500,000 - 1,000,000 barrels equivalent of oil in the form of power and reduce spot market sales. Storing energy in BPA facilities is another alternative for the possibility of minimizing losses associated with the disposal of fuel oil. Also, it appears that the fuel oil suppliers were not approached to discuss the possibility of temporary reduction in the quantity of oil delivered to SDG&E with some agreed upon penalties on SDG&E. The formation of FOIST should ensure that such alternatives will be considered in more depth in the future.

"c. The November sale of residual oil resulted primarily from a company decision to utilize unexpected large quantities of natural gas in utility boilers. While this was a prudent decision from a corporate standpoint, based on economic and regulatory considerations, the electric ratepayer experienced increased fuel costs due to the higher cost of natural gas at the G-54 rate.

It is understood that SDG&E is encouraged by the CPUC and other state agencies to burn gas when available for the following reasons:

- "a. minimize air pollution
- "b. maintain gas volumes for State (parity of supply)
- "c. gas is considered to be a 'premium' boiler fuel

"These additional factors certainly had an impact on this action.

"d. Amendment No. 3 to the Tesoro contract in the spring of 1977 allowed for an increase in contract volumes. While SDG&E was encouraged by the ERCDC and PGandE to be in a position to assist PGandE during last year's drought conditions, this increase in contract volumes worked to the detriment of SDG&E, especially when unscheduled supplies of P-5 gas become available and forced excess oil sales. Furthermore, sufficient documentation was not evident to verify the need for the contract amendment. There is merit to San Diego's efforts to secure additional high quality Tesoro residual oil in the face of the projected drought last spring and with respect to the PGandE situation. However, sufficient alternatives may not have been studied that would have confirmed that this choice was the minimum cost route for San Diego ratepayers.

"e. Since the initial fixed quantity contracts in 1974, there have been several contract amendments that have resulted in changes on the basis of product pricing and annual contract volumes. The direction of these amendments was to effectively maintain or increase supplies of high quality residual fuel oil products. Both contracts are comparable and similar to other industry contracts for fuel oil supplies and do not provide flexibility except through amendments. The contract with HIRI is an

acceptable one and amendments to that contract have been reasonable and prudent given the changing business conditions in the last several years. The Tesoro contract has two features which may work to the advantage of Tesoro. One is that contract volumes are specified over a range, deliveries of which are Tesoro's option. The second is the use of published BLS indices to adjust refinery process margins. Neither contract reflects changes in crude quality and its effect on residual oil pricing."

Discussion

In these times it has not been just SDG&E that has found it costly to manage the last 5-15 percent of fuel needs. Indeed, both Edison and PG&E have incurred, and are continuing to incur, substantial penalties for underlifting residual fuel oil from their major suppliers (i.e., penalties for not accepting minimum contractual quantities of fuel oil).

The fuel oil procurement policies and practices of these utilities are the result of a complex set of circumstances with far-reaching effects. Precisely because of that, we required SDG&E to retain an independent consulting firm with sufficient expertise to make an intelligent and objective evaluation of the interaction of these complex factors in the context of SDG&E's policies and practices.

Despite the staff contention to the contrary, the consultants team of specialists arrived at a definitive determination that overall "SDG&E management action on company oil sales, procurement, inventory, and contract amendments has been reasonable and prudent in the past. . . ." The team was able to make this determination even though "documentation and alternative studies to support such decisions were deficient," by virtue, we presume, of its members' expertise and the comprehensive study it made.

In assessing the soundness of decisions made by SDG&E in the early and mid-1970's in procuring fuel oil under long-term contracts, care should be taken to guard against drawing on the benefits of hindsight and thus taken to look only to conditions and events as they existed in the time frame of the decisions. Cross-examination of the staff witnesses brought out a failure on their part to do either that or to consider the myriad of factors that affect the aspects of fuel procurement on which they reached conclusions. In the latter regard the conclusion that the time interval since Decision No. 88225, supra, was issued on December 13, 1977 was sufficient to accommodate a fundamental altering of the effects of long-term fuel oil procurement commitments was unrealistic.

Pursuant to a SDG&E fuel oil procurement policy developed in a 1972-1974 time frame, the original long-term fuel oil contract quantities were determined on the basis of 100 percent conversion of existing power plants to fuel oil from natural gas and on the assumption of adverse hydro-power conditions. Thus, an overriding emphasis was placed on fuel supply security at that time. Since 1975, the contract quantities have been determined by using average hydro conditions. After that, the procurement policy followed in setting contract quantities further evolved into using, as part of its basis, whatever gas availability for power plants was forecasted by its gas supplier, SoCal.

The earlier policy was formulated at a time when there was great concern over the reliability of future oil supplies because of the Arab Oil Embargo and a prevailing outlook for natural gas becoming unavailable for power plant use. In order to illustrate the oil situation as it existed at the time, SDG&E brought to the staff Utilities Division witness' attention Decision No. 81931 dated September 15, 1973 in Case No. 9581. Finding 7 of that decision stated:

"7. Attempts by California electric utilities to obtain commitments for deliveries of low sulfur fuel oil from domestic or foreign suppliers have not been sufficiently successful to secure all the low sulfur fuel oil deemed required to meet foreseeable electric generating requirements through 1976."

Conclusion 4 of that decision stated:

"4. Every effort should be made by the Commission to assist the electric utilities in California to obtain the needed amounts of fuel oil..."

In the order to that decision California utilities were required to:

- "(a) Pursue all appropriate federal regulatory proceedings to increase natural gas and fuel oil supplies...
- "(b) Seek federal legislative action to increase fuel oil supplies."
- \* \* \*
- "(d) Take all other appropriate actions to contract for additional natural gas, fuel oil, and other appropriate fuels."

An ultra-conservative fuel procurement policy thus would hardly seem out-of-keeping with those times. Furthermore, just such an approach to fuel procurement by SDG&E was construed in Decision No. 84618, supra, to have formed a part of prudent management policy, which led, as we have previously indicated, to a \$9.3 million profit before taxes on sales of excess residual fuel oil.

Although it was becoming less so, SDG&E's fuel procurement policy was still very conservative when it was once again one of the factors in bringing about SDG&E's having excess fuel oil supplies. This time, however, it was during a soft spot market for fuel oil. As a result, oil sales by SDG&E during the July 1, 1976-June 30, 1977 period were made at a loss. In Decision No. 88225, supra, we held (Finding 5) that those fuel oil sale loss transactions were "not due to managerial imprudence." Our holding was consistent with the staff's position in that proceeding. For the staff now to argue, as it has, that the residual effects of that same procurement policy should form part of a basis for holding that the next series of oil sale loss transactions (i.e., those in the July 1, 1977-June 30, 1977 period) was due to managerial imprudence is generally unpersuasive, but also singularly so in light of the short time span since that decision. More fundamentally, however, the argument fails because any residual effects from the earlier procurement criteria ended in February 1977 when SDG&E's fuel oil inventory was brought down to the minimum level of 1.2 million bbl., which represents a 30-day burn in winter.



The staff also argued that it was imprudent of SDG&E's management to continue until 1978 to place virtually full reliance on the forecasts of power plant gas availability prepared by its gas supplier, when those forecasts with regularity were underestimating what actually became available. Although a number of forecasting improvements by both SDG&E and SoCal were indicated in the consultants report, the basic assessment was that "[1]t was not possible to foresee or plan for the large quantities of interruptible P-5 gas becoming available that forced oil sales based on available information and historic state and nationwide trends." In light of that finding, and in light of Edison's and PG&E's also having overestimated fuel oil requirements, it is unlikely that an effort more independent of SoCal by SDG&E would have yielded a much different result. Moreover, if it did, SDG&E would have had to accept not only exposure to the risks and criticisms of second guessing its supplier but to departing from "available information and historic state and nationwide trends."

In early 1977 SDG&E had to decide whether to accept or reject an additional 2,000 bbl./month of very low sulfur content (.25 percent by weight) residual fuel oil under its right of first refusal under the Tesoro contract. SDG&E decided it would be prudent not to let this high-quality product get away and entered into Amendment No. 3 to the Tesoro contract, which became effective April 1, 1977. The consultant concluded that SDG&E's action was reasonable and prudent only because at the time of the decision a stiffening of the sulfur content limitation by air pollution control authorities appeared probable and the availability of this

very low sulfur content residual fuel oil is very limited.<sup>10/</sup>  
The staff and City are contending that this was an imprudent decision on the part of SDG&E.

At the time of the decision the circumstances were:

- (1) little availability of power plant gas and purchased power for SDG&E was forecast;
- (2) SDG&E's fuel oil inventory had been brought down to near minimum levels through forced oil sales;
- (3) there was an outlook in the short term for substantial energy sales to PG&E by SDG&E should the drought persist; but
- (4) SDG&E had sufficient oil under contract to meet its forecasted requirement.

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<sup>10/</sup> The permissible fuel sulfur level is one of the variables that is of continuing concern in setting fuel procurement policies, as made evident by the following excerpt from the consultants report:

"Fuel Sulfur Level - The California low sulfur fuel oil situation is changeable within the over-all framework of the PAD-V fuel oil situation. All air pollution control districts' regulations meet or exceed current EPA requirements. The Bay Area APCD requires 0.5 wt. % sulfur fuel oil be burned in steam electric plants. Kern County presently requires 0.9 wt. % sulfur fuel. San Diego APCD requires 0.5 wt. % sulfur fuel. San Diego Gas & Electric is currently burning between 0.3 and 0.5 wt. % sulfur fuel. The regulations in the South Coast Quality Management District requires 0.25 wt. % sulfur residual fuel. There have been hearings regarding sulfur levels as low as .03 to .05, with the majority of the people believing that the 0.1 wt. % level will eventually be chosen. If 0.1 wt. % is chosen for the Los Angeles Basin, it is assumed that this will be the measure for all other basins in the state. This would throw the supply picture into a complete turmoil."

At that time, there also appeared to be at least a distinct possibility that the permissible sulfur content of residual fuel oil would be lowered. As indicated by Exhibits 8, 9, 10, 15, and 16, attention was being focused during 1976 and early 1977 upon the adverse impact on air quality of more residual fuel oil being burned and natural gas supplies still being perceived to be on the decline. What came out of that attention was the Air Resources Board lowered the permissible sulfur content from 0.5 percent to 0.25 percent, effective March 1, 1977, for power plant liquid fuel in the South Coast Air Basin.

SDG&E's power plants are not located in the South Coast Air Basin. They are in the San Diego Air Basin. However, what has happened in the way of air quality management rules in the South Coast Air Basin has often been the forerunner of what happens in the San Diego Air Basin. In this instance, however, it did not turn out that way; the permissible sulfur content level remained at 0.5 percent.

Moreover, substantially more purchased power and natural gas became available than forecast as the drought affecting Pacific Northwest power ended and the extraordinarily mild weather experienced in 1976 continued through 1977 and into 1978 (30-year average annual degree day deficiencies (DDD) = 1259; calendar year 1977 DDD = 747; 12-months ended July 1978 DDD = 429). SDG&E found itself in the position under these circumstances by September 1977 of being committed to purchasing more oil than it could handle. It, thereupon, managed to negotiate reductions from both of its suppliers. Tesoro agreed to reduce the Amendment No. 3 increase from 2,000 bbl./day to 1,000 bbl./day for 1977 only. Hiri agreed to a reduction of

2,200 bbl./day commencing in April 1978. In 1976 SDG&E's annual Tesoro contractual obligation, based on 18,000 bbl./day being offered, was 6.57 million bbl. In 1977 its purchases from Tesoro were 6.61 million or at virtually the level Tesoro could have required without Amendment No. 3. SDG&E contended on that basis the amendment had a negligible impact on actual deliveries in 1977.

As subsequent events proved that this additional supply of high-quality residual fuel oil was not needed, we thus see that SDG&E promptly took remedial actions. Although it was probably not one of SDG&E's better decisions, we do not see on balance a sufficient basis to hold that SDG&E was imprudent in entering into Amendment No. 3 to Tesoro contract.

To minimize the losses associated with the disposal of an excess inventory of fuel oil, viable alternative means of accomplishing that disposal should be assessed. In the consultants report it was brought out that the potential for sales at a discount (i.e., pricing below the California Power Pool Agreement levels) to PG&E had not been adequately explored. In particular, it was pointed out that, on the basis of a preliminary assessment,

the drought situation may have provided SDG&E the opportunity in 1977 to export 500,000 to 1,000,000 bbl. equivalent of oil in the form of power and reduce oil sales on the spot market.<sup>11/</sup>

As conditions developed in 1977 this was probably not, according to SDG&E's Fuel Resources Department manager, a realistic alternative or partial alternative to selling oil at a loss. He testified that any opportunity for such sales existed only between March and December 1977, while SDG&E was continuously selling power to PG&E during the drought under the California Power Pool Agreement; that SDG&E did not plan to sell fuel oil between February 1977 and November 1977; and that the spot market price for fuel oil during the latter period was close to SDG&E's breakeven point, making power sales at a loss a less economical alternative than selling oil.

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11/ In Exhibit 19 the witness for the consultants explained the basis for this preliminary assessment as follows:

"The magnitude of oil utilization via sales of energy to PG&E under drought conditions were estimated to be 500,000 - 1,000,000 barrels equivalent based on the Company energy capability (13%) stated in SDG&E's response in EA-77-1. A final and more appropriate determination of ultimate sales potential would of course include an assessment of SDG&E's:

1. Capacity capabilities
2. Interchange agreements, capacity ties
3. PG&E's needs on a daily, weekly or seasonal basis
4. The competitiveness of the pricing of energy supplied by SDG&E
5. Agreement among California Pool members

"Such a detailed analysis was not accomplished by the study team."

It seems plausible to us that the circumstances in 1977 were such that any need for considering sales to PG&E at a price discounted below the incremental pricing of the California Power Pool Agreement--assuming such discount to be permissible from the standpoints of both that agreement and the FERC jurisdiction over resale sales--did not arise in time to be acted upon to produce a significant benefit. This is not to say, however, that had SDG&E adequately explored the resale alternative at a discounted price sufficiently in advance of the prior oil sale losses (i.e., in the July 1, 1976-June 30, 1977 period) which were treated in Decision No. 88225, supra, that there may not have been benefits realizable in the earlier period.

Another point of contention is whether there should be recovery through electric rates of the cost of off-system storage of fuel oil. Included as part of the losses on fuel oil sales to Amorient Petroleum in early 1978 was \$560,000 in off-system storage costs paid by SDG&E to Edison. SDG&E's Rates and Valuation Department director testified that such off-system storage costs belong in the Energy Cost Adjustment Account because costs incurred up to the point of first unloading into SDG&E's facilities are part of the purchased cost of fuel oil and would be properly includable in Account 151, Fuel Oil Stock, if and when the product is taken into inventory. He further testified that Section 9(h)3 of the Preliminary Statement of SDG&E's tariffs provides that ". . . An appropriate adjustment shall be made to reflect any sale of fuel."

Staff counsel and City opposed including the off-site storage costs in the ECAC, arguing that the generic ECAC decision is silent on the matter. The staff's position is as follows:

"Included in the amount sought to be recovered by applicant as part of the losses is \$560,000 which was paid by applicant to Edison for storage of oil. Applicant did not disclose, in either the application or the exhibits, that such recovery was sought, in spite of Mr. Nesbitt's testimony early in this proceeding.

'The handling of outside storage costs, to my knowledge, has never been a question in an ECAC proceeding.' (Tr. Vol. 3, p. 187.)

'I am not aware of any outside storage costs that are presently included in ECAC.' (Tr. Vol. 3, p. 188.)

Instead, applicant silently included these expenses. Staff is gravely troubled that a matter of this magnitude, known to be controversial, was concealed in such a fashion.

"Applicant supports the recovery of these expenses with a reference to the generic ECAC decision, which is admittedly silent. (Tr. Vol. 8, p. 798.) But no reason is suggested why the Commission should provide for the recovery of such storage expense, when no provision is made for recovery of expenses associated with storage from the point allowed in general rates to the point where storage is exhausted. Here, where the need for storage arose from the applicant's imprudent procurement practices and failure to act responsibly in disposing of excess oil, it would be the height of irony to allow the recovery of such expense." (Page 11 of staff's brief.)

We have allowed reasonably incurred off-system storage expense to be recovered in ECAC when the oil stored is used for the utility's generation. However, since SDG&E did not use this oil for system generation (as discussed below) and we do not allow those losses as recoverable ECAC expense, we should also not allow recovery of associated, off-system storage expense for the oil in question. Accordingly, we will disallow the \$560,000 storage expense from the ECAC balancing account, and the account will be credited by that amount plus interest. ✓

From our assessments made thus far it should be clear that the evidence of probative value and the expertise brought to bear on SDG&E's fuel procurement policies and practices were provided by the consultants and by SDG&E. The consultants' report clearly demonstrated that SDG&E's fuel procurement had taken place in an exceedingly complex framework and that within that framework there was room for improvement. In the latter regard the consultants' project team cited opportunities for a number of improvements in several areas, many of which extended back to past periods. It found SDG&E's fuel procurement practices in the past to "have been reactive, but reasonable to the gas and oil situations, given the constraints." It stated that SDG&E



was improving its performance within that exceedingly complex framework and considered SDG&E to now be ahead of most utilities in the country in such matters. It emphasized that for the future, as in the past, it should be recognized that all policies may be costly at the margin (i.e., for the last 5-15 percent of fuel needs) to maintain adequate supplies to ensure reliability and avoid disruptions or curtailments of service. It foresaw no major problems for the future for SDG&E's planned programs of balancing cost and risk but cautioned against over reliance on the spot market.

After careful consideration of the consultants report and the other evidence concerning SDG&E's fuel procurement policies and practices, we conclude that such policies and practices, in the aggregate, have not been imprudent. However, it would be neither fair nor reasonable to allow for the recovery in electric rates of the adjusted oil sale losses of \$3,840,582 plus related interest (i.e., total oil sale losses of \$5,018,847 reduced by \$1,178,265 to allow for the reduction in costs for burning gas rather than oil) since the economics from the standpoint of the SDG&E's Electric Department and its ratepayers favored burning oil and rejecting gas rather than selling oil at a loss. Furthermore, from the SDG&E total company standpoint, the adjusted oil sale losses have been amply offset through excess revenues generated by interdepartmental gas sales, as shown in Exhibit 23, supra.

Accordingly, we hold that oil sale losses in the amount of \$3,840,582, plus related interest, should not be recovered and that oil sale losses in the amount of \$1,178,265, with related interest, should be recovered through ECAC. To mitigate the immediate impact on SDG&E's financial position of this disallowance,

an interest-bearing procedure should be used to amortize the \$3,840,582 loss plus related storage expense and interest over a 36-month period. Under this procedure a separate memorandum account will be established to credit the balancing account over a 36-month period. Accordingly, the ECAC billing factor continues to reflect the ECAC balancing account without adjustment.

Tax Treatment

In Decision No. 88225, supra, the Commission, after pointing out that the proper tax treatment of oil sale gains and losses was still under study by the staff, found it "reasonable to resolve the tax implications of fuel oil losses in the next ECAC proceeding." At that time an apparent inconsistency in tax treatments concerned the staff.

In Decision No. 84618 dated July 1, 1975 in Application No. 55506 (78 CPUC 485), supra, the Commission adopted a net-of-tax gain of \$6.7 million from fuel oil sales for the fuel cost adjustment (FCA) instead of the before-tax gain of \$9.4 million recommended by the staff. In Application No. 57497, on which we issued the above decision deferring resolution of the tax treatment on fuel oil sale losses, SDG&E included a before-tax loss of \$4,733,500 from fuel oil sales in its ECAC balancing account.

In this present ECAC proceeding the staff and SDG&E have agreed that gains or losses from fuel oil sales should be recorded before taxes (gross method) instead of after taxes (net method) for ECAC purposes. Only in this fashion, they have concluded, can fuel costs be matched with revenues on a dollar-for-dollar basis.

If the gross method was the right method all along, and the staff believes it was, the staff then contends there has been an overcollection from the ratepayers of \$2.7 million plus interest, attributable to the tax component of the gain, and recommends a downward adjustment (or credit) to the ECAC balancing account in that amount.

The staff's brief well addresses SDG&E's contention that we are precluded from adopting pretax treatment of the oil sale gains in question:

"Applicant and staff agree that the appropriate basis for treating gains or losses is before taxes; that is, on a gross basis. By D.84618, dated July 1, 1975, in A.55506, the Commission adopted an after-tax or net basis for treating the fuel oil sale profits. Staff now seeks to standardize these treatments.

"This issue has been perceived as presenting to the Commission a problem of retroactive rate-making. Were it not for certain Commission actions preserving this issue, staff would concur that any adjustment would be barred. But the retroactivity issue is disposed of by the Commission's language in D.85731, dated April 27, 1976, in C.9886 (the generic ECAC decision) to the effect that, in computing overcollection under the Fuel Clause Adjustment Procedure. 'SDG&E's Fuel Collection Balance should also be adjusted consistent with prior decisions regarding gains from the sale of fuel.' 79 Cal PUC, 758, 772-73.

"The effect of the Commission's action in D.84618 was to leave intact part of the then existing overcollection which represents the difference between the amount of the gain and the amount of the adjustment. By D.85731 the Commission instructed the staff to include the remainder of the gain in calculating the original ECAC balance. This is entirely consistent with the earlier action and the transition

from the forward looking procedure, where taxes are reasonably estimated, to a recorded basis where taxes are known. Staff's calculation recognizes the FCA origin of this adjustment by applying interest only from April 1, 1976, the date of D.85731. This is consistent with the Commission action in D.85731 ordering interest as of April 1, 1976, on the 'Fuel Collection Balance.' 79 Cal PUC at 773. Thus the staff recommendation on this point merely conforms with well established Commission practice and conforms to the Commission's instructions.

"Subsequent Commission decisions have preserved this issue. In D.87639, in A.55627, 28, and 29, the Commission stated:

'Since the staff has not verified the company's reported cost and sale data underlying the ECAC rate, we will incorporate any change that might result after the staff investigation in our next filing.' (Mimeo. at p. 47.)

"In D.88225, dated December 13, 1977, in A.57497, the Commission expressly put over to this proceeding the matter of the proper tax treatment. (Mimeo. p. 9.) Thus the issue has been reserved in a lawful fashion.

"To the extent that there was a retroactive rate-making issue involved, this question has been answered by the action of the California Supreme Court in the matter of Southern California Edison Co. v. PUC, 20 Cal 3d 813 (1978) in which the Court upheld the lawfulness of the Commission's order requiring the refund of FCA overcollections, over Edison's objection that the order amounted to unlawful retroactive ratemaking. There is no basis whatsoever for denying that the staff recommendation related directly to the amount of the fuel clause overcollection. The underlying legal issue is interesting. And it is settled. The staff recommendation is lawful." (Staff brief pp. 12-13.)

We agree with the staff's assessment and finally dispose of this preserved issue with respect to the tax treatment of the oil sale gains. Accordingly, we will direct the inclusion of the \$3,043,000 (which provides pretax treatment of the gains) plus interest in the separate memorandum account to credit the balancing account monthly over a 36-month period.

Gains and losses from oil sales should both be treated on a pretax basis in the ECAC balancing account because it is a dollar-for-dollar pass-through ratemaking vehicle. The \$3.8 million oil sale losses and storage expense disallowed herein are treated on a pretax basis as proposed by SDG&E and the staff.

TOU ECAC Rates

The staff recommended time variable ECAC rates for Schedule A-6 electric customers. In making this recommendation the staff relied on the order in Decision No. 89318 dated September 6, 1978, in PG&E's ECAC Application No. 58033, directing PG&E to present in its next ECAC proceeding TOU ECAC rates.

Reproduced below in pertinent part is staff Exhibit 6:

"29. In the present SDG&E's general rate case, Application No. 58067, the Marginal Cost Unit of the Commission's Utilities Division has shown that there exists a differential in the marginal running costs between the various time periods for the primary level customers. This differential in cost of energy should be recognized in the ECAC rates.

"30. The following tabulation expresses a suggested differential in the charges for A-6 TOU customers. The revenue generated from these TOU rates is the same as that which would be generated if charged on a uniform ¢/kWh basis. The time periods reflect those as specified in the present A-6 tariff sheet, and the sales are those based on the 12 months ending June 30, 1978.

"ECAC Energy Rates for A-6

	<u>Per Month (c/kWh)</u>
On-Peak	3.475
Semi-Peak	3.275
Off-Peak	3.075"

Under this staff proposal there is a 4-mill differential in energy charges between on-peak and off-peak usage. The present differential in energy charges between on-peak and off-peak usage in the Schedule A-6 base rates is 6 mills. The two differentials would have a cumulative effect of 10 mills.

The staff witness conceded that a differential of 10 mills is in excess of the marginal running costs shown by either the staff or SDG&E in Application No. 58067, supra. In addition, an examination of PG&E's Schedule A-23 has disclosed that the present differential in energy charge between on-peak and off-peak usage is 4 mills in contrast to the 6 mills cited above for SDG&E's Schedule A-6.

It is SDG&E's position that a 10-mill differential is excessive, but if the Commission decides it has to be used it should be reflected in base rates, not ECAC rates. In the event the Commission were to order a time variable ECAC rate for Schedule A-6 in this proceeding, SDG&E contends the Commission should develop in the Application No. 58067 proceeding a non-time variable, zero fuel-based energy rate for Schedule A-6.

In our view, this matter appears to require more study by both the staff and SDG&E, and SDG&E should have an opportunity to review and propose TOU rates in its next ECAC proceeding, as was done in the case of PG&E. We will direct SDG&E to present TOU ECAC rates in its forthcoming ECAC proceeding.

Findings of Fact

1. A factor fixed at one percent of revenues, pursuant to the generic ECAC decision, does not accurately reflect the franchise fees and uncollectibles expense experienced by SDG&E with respect to ECAC billings. Henceforth, the factor should be set at whatever rate was authorized for the recovery of these expenses in the most recent SDG&E general rate decision at the time of each ECAC filing.

2. Fuel oil additives used in SDG&E's power plants for environmental purposes, pursuant to directives from appropriate governmental authorities, are recoverable operating costs. Because the quantity of these additives used is directly related to the quantity of fuel oil burned at these plants, their cost is appropriate for recovery through ECAC under the guidelines stated in the generic ECAC decision.

3. Sales to and purchases from DWR are an integral part of a contractual scheme for the procurement and exchange of electrical energy and generating capacity.

4. A determination on the reasonableness of DWR contract net losses or level of profit requires an investigation into the prudence of the contracts.

5. Utility management will have greater incentive to negotiate contracts that provide for the best obtainable price (with, for example, escalation clauses) if ratemaking treatment for the result of the contracts is not afforded in a dollar-for-dollar cost offset proceeding such as ECAC.

6. The Commission is not staffed to review the reasonableness of DWR sales contracts in ECAC proceedings, whereas the contracts can receive more detailed review in general rate proceedings.

7. DWR sales is an item that can be estimated on an average-year basis and included in a test year.

8. Wheeling charges are capable of being estimated on a normal test year basis and can, accordingly, continue to be recovered in base rates established in general rate proceedings.

9. In SDG&E's current general rate proceeding (Application No. 58067), as well as in its preceding one, both SDG&E and the staff included an estimate of FERC jurisdictional sales (virtually all such sales are to PG&E for resale).

10. It should be recognized that all fuel procurement policies may be costly at the margin (i.e., for the last 5-15 percent of fuel needs) to maintain adequate supplies to ensure reliability and avoid disruptions or curtailments of service.

11. SDG&E's fuel procurement has taken place in an exceedingly complex framework. There have been both strengths and weaknesses in that fuel procurement. In the aggregate, SDG&E's fuel procurement policies and practices have not been imprudent.

12. Losses of \$3,840,582 from fuel oil sales lack economic justification from the standpoint of SDG&E's Electric Department and its ratepayers.

13. Losses of \$3,840,582 and such related storage expense for such oil were not reasonably incurred by the Electric Department.

14. To mitigate the immediate impact on SDG&E's earnings amounts disallowed herein can be credited to the ECAC balancing account monthly over a 36-month period by the establishment of a separate memorandum account.



15. Losses of \$1,178,265, together with related interest, from fuel oil sales were reasonably incurred and should be recovered through ECAC.

16. In 1974 SDG&E experienced a before-tax gain of \$9.4 million on fuel oil sales. In the 1976-1978 period SDG&E experienced before-tax losses of \$9.8 million on fuel oil sales.

17. In Decision No. 84618, supra, the Commission adopted an after-tax gain of \$6.7 million from the 1974 fuel oil sales for the FCA instead of the before-tax gain of \$9.4 million recommended by the staff, but the tax treatment question for the oil sale gains under the FCA was not preserved by the Commission.

18. Since ECAC is a dollar-for-dollar pass-through ratemaking vehicle a consistent tax treatment of oil sale gains and losses is necessary.

19. The pretax or gross treatment of dollar-for-dollar recovery and adjustments to ECAC was agreed by all parties to be reasonable.

20. Henceforth, both gains and losses from fuel oil sales should be recorded on a before-tax basis.

21.a. Under the staff's recommendation to establish TOU ECAC rates for Schedule A-6, a cumulative differential of 10 mills per kWh between energy charges for on-peak and off-peak usage would result. That 10-mill differential is in excess of SDG&E's marginal running costs.

b. This matter appears to require more study by both the staff and SDG&E.

c. SDG&E should be required to present a TOU ECAC rate design in its next ECAC proceeding.

Conclusions of Law

1. SDG&E should be directed to establish a separate memorandum account to amortize the credits to the ECAC balancing account directed herein monthly over a 36-month period beginning July 1, 1979. The amount to be amortized is set forth in Appendix B attached hereto. The credits to be amortized should include the oil losses not reasonably incurred, along with associated, off-system storage expense and the amount which affords pretax treatment on oil sale gains (including applicable interest).

2. SDG&E should be directed to propose TOU ECAC rates for its Schedule A-6 in the next ECAC application it files with the Commission (not in the pending application awaiting this opinion for processing).

3. The ECAC rates established by Decision No. 89630 should continue in effect.

4. The following order should be effective the date of signature in order to allow SDG&E to expeditiously establish its separate memorandum account to amortize the credits to the ECAC balancing account found reasonable herein.

FINAL ORDER

IT IS ORDERED that:

1. Within ten days from the effective date of this order San Diego Gas & Electric Company (SDG&E) shall establish a separate memorandum account to amortize \$10,048,200 as a credit to the Energy Cost Adjustment Clause (ECAC) balancing account monthly over a 36-month period as set forth in Appendix B attached to this order. The amortization shall commence July 1, 1979.

2. The ECAC Billing Factor rate of 3.310 cents per kWh for nonlifeline electric usage established by interim Decision No. 89630 shall continue in effect.

3. SDG&E shall design time-of-use ECAC rates for Schedule A-6 and present that design in its next ECAC proceeding.

The effective date of this order is the date hereof.

Dated at San Francisco, California, this 5<sup>th</sup> day of JUNE 4, 1979.

John E. Burns  
President  
Deborah L. Spang  
Richard C. Vixell  
William J. Smith  
Edward W. King  
Commissioners

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EXECUTIVE SUMMARY

BACKGROUND

The need to dispose of excess Company residual oil, originally procured for power plant use, at prices below original purchases has raised questions concerning the reasonableness of San Diego Gas & Electric's oil procurement policies. In Application No. 57497 which sought to increase rates under the Energy Cost Adjustment Clause (ECAC), SDG&E was extensively examined concerning fuel oil procurement practices and policies. In December, 1977 the California Public Utilities Commission ordered SDG&E to "file its plan for an independent appraisal of its fuel procurement policies and practices . . .". In March, 1978 Gilbert Management Consultants and Robert Brown Associates were retained to prepare an independent appraisal. This report represents the Consultants' response to the Commission order and SDG&E's request for services.

FINDINGS

SDG&E's responsibility for determining fuel oil requirements originates with the Operations Group, and the planning and procurement aspects are executed by its Fuel Resources Department. This department, which presently has a professional staff of ten people, coordinates and develops Company data, market information, and West Coast energy factors which ultimately determine fuel oil requirements. Their charter is similar to groups in other electric utilities, but the lack of clear energy policies by State and Federal Agencies with regard to fuel oil and natural gas pricing and end use has further complicated an already intricate process of planning for sources of low cost and reliable power plant fuels. Unfortunately, this planning process in today's energy markets does not allow for decision making without risk.

SDG&E's fuel oil requirements are currently provided by two suppliers: Hawaiian Independent Refinery, Inc., and Tesoro-Alaskan Petroleum Corporation. Both contracts stipulate the quantities of oil to be supplied to the Company. The quantities in the original contracts were determined on the basis of 100% conversion of existing power plants to fuel oil from natural gas, and on the assumption of adverse hydro-power conditions. Since 1975, contract quantities have been determined by average hydro conditions. The availability of large volumes of natural gas has resulted in contract oil volumes in excess of actual requirements, and several contract amendments have been negotiated to reduce the quantity from that stipulated in the original contracts.

Presently, SDG&E's planning process for fuel oil is prepared on the basis of projected electrical load and the availabilities of natural gas, nuclear power and purchased energy. After energy requirements are projected, a portion of the requirements are allocated to nuclear power, a portion to purchased power, and the rest allocated to various fossil fuel generating units in the same fashion as they would be by the load dispatcher. The methods used by the company to forecast system fuel oil requirements were evaluated on the basis of:

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1. Adequate "links" between projected electric loads, economic dispatch, fuel oil requirements, and inventory considerations;
2. Adequacy of company demand/energy forecast, and natural gas and purchased power availability forecasts; and
3. Adequacy of the SDG&E staffing and organizational placement of its fuel activities.

Our appraisal was made in the context of events that have recently placed the Company's fuel activities in a position of critical importance when measured by the dollar level of direct expenditure and by the increased impact of fuel strategy on Company operations. A procurement policy set in 1972-1974 during the Oil Embargo, a current soft spot market for oil on the West Coast, and the availability of large volumes of interruptible power plant gas (P-5) together have created difficulties in fuel planning and have forced sales of excess fuel oil. If it were not for a soft spot market for residual oil, the argument of the day would be the division and sharing of profits as it was in 1974, not the cause and allocation of oil sale losses.

Major findings of our study are:

1. Long term fuel oil commitments consumated during the Oil Embargo and a period of unreliable supplies have governed past SDG&E fuel oil programs. A recent softening in the West Coast fuel oil spot market and the availability of significant quantities of P-5 natural gas, have created the need to sell excess long-term contract residual oil, thereby generating significant dollar losses. It was not possible to foresee or plan for the large quantities of interruptible P-5 gas becoming available that forced oil sales based on available information and historic state and nationwide trends.
2. The forecast of gas requirements required to satisfy customer load within each priority classification has been the area which has caused variations in P-5 gas supply. Aside from total system gas supply, the primary uncontrollable factor affecting requirements in each priority class is variation in weather. The recent availability of P-5 gas has been caused by fluctuations in customer gas usage in the high priority classes due to mild weather and conservation, Canadian gas supply, and Pacific Gas & Electric's denial of P-5 gas for its own power plant use. Variations from average weather to milder weather conditions can cause a 1:1 slippage of available gas from high to lower priority levels.
3. Past efforts of the SDG&E Fuel Resources Department have been concentrated on managing the excess residual oil through outright sales, exchanges, reduction in refinery production and rescheduling of tanker and storage arrangements. During the last 10-12 months, SDG&E has added personnel staff, and initiated changes in department functions and priorities to eliminate the need for sales and is considering changes in contracting policies to be in a position of participating in a current favorable spot market for residual oil.

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4. The Fuel Resources Department of SDG&E is evolving into a strong new corporate function as is the case with most utilities in similar positions. The department is well organized, staffed with skilled individuals and now has sufficient data resources and tools to formulate programs and evaluate alternatives. The decision-making process for fuel resource problems and opportunities is appropriate under the existing organizational structure. Responsibility assignments of the three department sections are appropriate and the creation of a Fuel Oil Inventory Strategy Team to provide for a free and comprehensive exchange of company data is commendable.
5. SDG&E management action on company oil sales, procurement, inventory, and contract amendments has been reasonable and prudent in the past, but documentation and alternative studies to support such decisions were deficient. Future changes in contract volumes and fuel oil exchanges will require more structured analysis and studies to provide support for such actions.
6. Finally, SDG&E's fuels activities are carried on in an exceedingly complex framework of:
  - a. Geographical isolation that limits the number of buyer options either to buy, sell or hold fuel.
  - b. Changing sulfur specifications for fuel oil that are difficult to satisfy using limited supplies of low sulfur crude oil and environmental restrictions that limit the options for producing compliance fuels from new refinery technologies and create uncertainties on the supply side.
  - c. Weather sensitive usage of natural gas and a low probability of accurate supply and usage data.
  - d. A need to balance long-term reliable supplies and costs.

Future fuel policies will have to balance reliability and cost as they have in the past and a rigid, "exact" formula for such programs may not be available. All policies may be costly at the margin to maintain adequate supplies to ensure reliability and avoid disruption or curtailments of service that were much discussed and experienced in 1974-1975.

In the past, SDG&E fuel procurement practices have been reactive, but reasonable to the gas and oil situations, given the constraints. We foresee no major problems for the future with their planned programs, but we caution against over-reliance on the spot market and seeking answers through elaborate pricing and market models. Judgment and experience will be necessary to temper attempts to rigorous mathematical quantifying strategies for oil procurement. Policies to manage the last 5-15% of fuel needs will have to balance reliability, risk, and cost. Purchasing the last increment of fuel to top off the barrel is analogous to the mix of generation used by utilities to satisfy system needs. Peaking Kwh are more costly than base generation and likewise the purchase (or sale) of the last barrel of fuel may bring a premium (or loss), depending upon market conditions.

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RECOMMENDATIONS

- o Greater efforts should be devoted to forecasting most likely total gas supply. This can be accomplished by doing the following:
  - SoCal could devote more effort in analyzing its suppliers' estimates; and
  - SDG&E could expand its staff and more independently develop its own forecast of new gas supplies in greater detail. Additional input would be needed and consideration should be given to additional personnel to stay on top of industry proceedings. It is likely that the latter course of action would be more beneficial to SDG&E.
- o With respect to the P-5 gas forecast now being supplied quarterly by SoCal to SDG&E, it is suggested that SoCal attempt to develop a reasonable 24-month forecast for the operating and short-term planning purposes of SDG&E. The forecast should take into account the most recent experienced conservation and usage levels. Efforts on the part of SDG&E in making SoCal aware of the operating impact of short-term P-5 gas supply on its electric operations should be continued. Once proper ground rules are agreed upon, and the intended use of the P-5 forecasts made known, SoCal should be in a position to meet the planning requirements of one of its largest customers.
- o SoCal should prepare a revised load forecast which takes into account the most recent customer usage data available, particularly with respect to the effects of conservation. Although it may be believed that conservation is a temporary phenomenon, of importance to SDG&E and other SoCal customers is the short-term effects of P-5 gas supply on planning and operations. The quarterly meetings between SDG&E and SoCal should be expanded to include both gas supply and requirements.
- o SDG&E's gas load model should be revised to include weather data as a variable, thereby providing a better planning tool for fuel oil procurement.
- o SDG&E should explore the possibility of using SoCal's gas balance program for its own planning purposes. This can be done either by SDG&E acquiring the model for its own system or having SoCal run various cases for SDG&E on its in-house model. Early discussions with SoCal seem to indicate a positive reaction to this idea.
- o Current long-term contracts for residual oil expire in 1981 and 1984. While negotiations to extend these contracts should continue, we recommend that SDG&E inquire whether other qualified West Coast firms have an interest in supplying residual oil. This will ensure that SDG&E fuel oil purchases benefit from competitive market factors.
- o Fuel oil contract provisions are of extreme importance. All contract changes, adjustments and verbal agreements should be documented and confirmed by studies and correspondence for future reference and audit purposes. The size of such changes in dollar value and regulatory impact require such documentation.

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- o Clear levels of authority for purchases and negotiation of contract changes, exchanges, and sales have not been delineated. Levels of responsibility for contract amendments, fuel oil exchanges, and sales should be established based on dollar value and reporting requirements. The corporate purchasing policy should be revised to include fuel purchases.
- o We recommend studies to verify whether the use of BLS indices and the 3.5% fuel allowance in respective fuel oil contracts are reasonable in relation to the total operating costs (\$/bbl.) or margins in the contracts.
- o We recommend that an audit of crude purchases and billings by Tesoro and HIRI be conducted for 1976-1977 as specified in the respective contracts. SDG&E should not rely on outside agencies such as DOE for an audit function.
- o Future amendments to the Tesoro contract should specify a contract quantity volume with a tolerance of  $\pm 5\%$ , not a range as currently shown.
- o We recommend that SDG&E develop further expertise in petroleum refining technology and economics to assist their staff in planning and contract negotiations. The development of a West Coast refining and marketing model may be a consideration. Additional pricing flexibility should be built into contract revisions. This flexibility through pricing clauses should reflect crude slate changes and refining technology.
- o We recommend studies to determine the overall effect on residual fuel oil price with changes in refinery crude slate. Formulas that recognize the value of lighter products and are equitable should be evaluated.
- o SDG&E presently has extensive floating roof storage tanks that can store crude oil. We recommend SDG&E investigate the feasibility of burning crude to mitigate fuel expense increases. Crude burning requires extensive refitting of burners and piping due to its hazardous nature, but an economic study should be developed to determine if any benefits could be obtained.
- o We recommend a review of the organizational placement of the Fuel Resources Department in six months. The Executive Vice President and Chief Operating Officer is new to San Diego Gas & Electric. Within a six month period his knowledge of the Company will be such that a determination can be made as to the continuation of the current reporting relationship of the fuels activities or whether a change is necessary to suit his particular information needs. The main concern is the continuing requirement to develop corporate strategy in regard to fuels at an executive level where all relevant alternatives can be examined. Easy access to the policy level is the essential point.



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- o SDG&E should broaden the scope of the Fuel Oil Inventory Strategy Team (FOIST) and have the Fuel Resources Department Manager be chairman. FOIST is now primarily addressing specific tactical matters to make better short-term fuels decisions. As such, the Chairman is currently the Fuel Acquisitions Supervisor. Although recently formed, it is not too early to involve this group in longer range issues to gain the benefit of their experience and organizational perspectives. The recommendations obtained from the interactions of this group can be highly beneficial to top management. The Team itself was created through the efforts of the Fuel Resources Department Manager. Because of his varied corporate experience and current responsibilities, he is the logical person to be the chairman and to carry the Team's efforts to broader issues. The time spent in fully utilizing this group should be beneficial for each of the functions represented as well as the Company as a whole.
- o SDG&E should add additional staff capability to handle regulatory requirements. The regulatory involvement in all aspects of energy supply is extensive. It would be prudent to relieve the Department Manager of some of the burden of preparing for hearings and maintaining liaison with the CPUC. A position reporting to the Department Manager could be used for this specific purpose plus be an ideal position for the rotation of staff members through the Department to gain varied experience. A suggested title might be "Regulatory Affairs Coordinator." From a practical standpoint, the individual for this job should have the basic background required to move into other positions in the Department. A close working relationship with the Rates and Valuation Division would be necessary and could be the initial source for a person for the position. Adding this additional staff member would, in turn, give more time to the rest of the staff for their more operationally oriented responsibilities.
- o The Company should annually prepare a formal fuel procurement plan covering three years in detail and a ten year generalized plan. The plans should specify and support a procurement goal, mix of spot and long-term purchases, inventory policy, methods of procurement to be used (spot market, purchase order, long-term bid solicitations) and procedures for evaluating potential vendors.
- o The fuel planning process should be expanded to formally examine and forecast future market conditions and trends with respect to fuel oil prices and availability. This information should be explicitly used in decisions concerning inventory levels and amounts of oil to be procured under long-term contracts. The expanded

1 Added September 12, 1978

REVISED

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planning process is necessary to integrate fuel market conditions into the Company's fuel needs, which procedure improves the Company's ability to reduce fuel costs in today's complex fuel market environment.<sup>1</sup>

- 0 The Company should engage a consultant to provide expertise on the Federal Government's entitlements program. This assistance would explain the program's objectives, implementation and allow SDG&E to assess if they receive the full benefits of the program. Additionally, through the proposed regulatory affairs coordinator, SDG&E could monitor proposed changes to these entitlements program and respond if desired.

<sup>1</sup>Added September 12, 1978

APPENDIX B  
(Dollars in Thousands)

a.	Income tax adjustment on 1974 sale of fuel oil as of 11-30-77	\$ 3,043.2
	Interest December 1977 through June 1978	126.5
b.	November 1977 loss on sale of fuel oil	815.8
	Interest December 1977 through June 1978	33.9
c.	Storage cost related to oil sale loss	560.0
	Interest April to June 1978 (2 months)	6.6
d.	Loss on sale of fuel oil January through June 1978	3,024.8
	Interest January through June 1978	<u>53.5</u>
e.	Subtotal	\$ 7,664.3
f.	Interest June 30, 1978 to July 1, 1979	<u>554.1</u>
g.	Subtotal	\$ 8,218.4
h.	Interest on unamortized amount	916.9
i.	Interest related to offset the disallowed expenses included in ECAC Balancing Account	<u>916.9</u>
j.	Total	<u><u>\$10,048.2</u></u>
k.	Amount to be amortized per month for 36 months	<u><u>\$ 279.1</u></u>