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Decision No. 84512

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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| In the Matter of the Application of SOUTHERN CALIFORNIA GAS COMPANY for (a) A General Increase in Its Gas Rates, and (b) For Authority to Include a Purchased Gas Adjustment Provision in Its Tariffs. | Application No. 53797 (Filed January 19, 1973) |

(List of Appearances in Appendix A.)

## INTERIM OPINION ON PHASE II

On September 28, 1973, during the course of the hearings on Southern California Gas Company's (SoCal) request for a general rate increase of $53,151,000,[1/] Southern California Edison Company (Edison) filed a motion requesting the Commission to consider evidence relating to reallocating the deliveries of gas by SoCal to its retail steam electric (C-58) customers (of which Edison is the largest), to San Diego Gas & Electric Company (SDG&E), its G-61 customer, for use in SDG&E's steam plants, and to applicant's regular interruptible A-block customers (G-53-T). The city of San Diego (San Diego) filed a motion to require an Environmental Impact Report (EIR) on the gas reallocation issue, pursuant to the California Environmental Quality Act (CEQA) and Rule 17.1 of the Commission's Rules of Procedure.

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1/ Decision No. 83160 dated July 16, 1974 authorized a rate increase of $33,693,000. Decision No. 83443 dated September 11, 1974 contains modifications of Decision No. 83160, but does not affect the rate relief granted.

SoCal, fearing delay and loss of earnings, moved that the Commission issue a rate order prior to determining the reallocation issue, and that the reallocation issue be handled in a separate set of hearings (known as Phase II). Decision No. 82414 dated January 29, 1974 granted the request for separate Phase II hearings and held that an EIR was not needed to determine the reallocation issue because that issue is part of a rate case and an EIR is not required in a rate case.

Decision No. 82414 describes the drastic decline in gas supplies available to SoCal, most of which was absorbed by increased steam electric curtailments, between test year 1972, reflected in Decision No. 80430 dated August 29, 1972 in Application No. 52696, and SoCal's estimated test year 1974.

Decision No. 80430 evaluated the requirements of the various utility electric generating customers served by SoCal and the requirements of SDG&E for utility electric generation. The decision established Daily Contract Quantities (DCQ) to be used for purposes of curtailment classification of utility electric generation service on a parity basis, which includes a DCQ of 157.1 $M^2$cfd for SDG&E, and also established the floor concept of minimum annual[2/] deliveries to SDG&E. Parity was designed to achieve a level of service - the ratio of deliveries destined for steam plant use[3/] to potential requirements on SoCal's system - to SDG&E approximately equal to the level of service to Edison and to the Los Angeles Department of Water

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2/ 221 $M^2$cfd times 365 or 366 days.

3/ SDG&E supplies gas to its firm and interruptible classes of customers and to its own electric generating plants, the latter under Schedule G-54.

and Power (DWP). SoCal's 1973 deliveries to its G-58 and G-61 customers for steam plant use were based upon their respective DCQ's. In connection with the DCQ's we stated:

> "The establishment of the above DCQ's is consistent with their application in arriving at our adopted operational results for test year 1972 and provides a fair basis from which to determine henceforth curtailment classification for utility electric generation service. In addition, such establishment of DCQ's makes it neither necessary nor constructive, so long as there is minimal or no 'S-2' gas availability, to settle the controversy which developed during the course of the proceeding as to whether or not the gas requirements input for such curtailment classification should be based on annual forecasts of such requirements or on the most recent annual requirements actually experienced, problem areas being involved with either basis. Commission approval must be sought to change these daily contract quantities."

Utility electric requirements on SoCal's system of G-58 or G-61 customers are the sum of potential deliveries under three curtailment priorities, S-2, S-1, and A. The A-block limit for utility steam electric generation service, including wholesale steam electric requirements, is 21 percent of the then effective maximum contracted for daily demand contained in the service agreements of SoCal and its affiliate for the purchase of out-of-state gas. SoCal's G-53-T customers also obtain gas deliveries under the A-block priority. The DCQ for a utility electric customer consists of the sum of its potential daily S-1 and A-block entitlements. SoCal endeavors to equalize the curtailments for each priority block.

The estimated potential requirements on SoCal's system for a utility electric generation customer is derived by estimating its total electric energy requirements and subtracting therefrom estimated outside sources of energy which may include nuclear, coal fired and hydroelectric generation, purchased electricity, energy exchanges, and gas/oil generating requirements proposed to be met by other suppliers. The estimated amount of gas needed to meet the remaining generating requirements of the electric utility is its potential requirement on SoCal's system. Most of this potential requirement[4/] is met by burning fuel oil because of gas delivery curtailments made by SoCal. In Phase I, SoCal's rate design witness and the staff's rate design witness did not recommend modification of the G-58 DCQ's when considering the then known changes in potential requirements of G-58 customers on SoCal.

Arguments arising out of the Edison motion and of motions made in response to that motion consumed several days of hearing time in Phase I of this proceeding. Decision No. 82414, which set a prehearing conference date for Phase II, was served on the customers of SoCal whose gas deliveries could be affected by revised allocation procedures discussed in the order. After 42 days of public hearings, held in Los Angeles and in San Diego, from May 16, 1974 to December 13, 1974, before Commissioners Symons, Sturgeon, and McDavid, and Examiner Levander, and after the completion of two days of oral argument before the Commission en banc, Phase II was submitted on an interim basis subject to the receipt of late-filed Reference Item CC which has been received.

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4/ Diesel fuel is used in some generating units.

In Decision No. 82414 we directed the production of certain evidence and set parameters for the evidentiary presentation in Phase II, as follows:

(a) There would be no evidence taken on the question of indemnification or reparation.5/

(b) There would be no evidence taken on the inclusion of G-53-T, A-block, customers' requirements in a common pool with (A plus S-1) retail or wholesale steam requirements.6/

(c) A shift in A-block priorities from a price volume priority relationship to an end use priority should be brought up on a statewide basis rather than on a single company basis if desired by the Commission.

(d) Evidence would be taken on the question of the floor versus parity as between the G-53 customers and the SoCal deliveries to SDG&E used for steam electric generation.

(e) In addition to evidence on the Edison motion, environmental effects, and further modification of rates would also be considered.

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5/ Edison had suggested that the nonprevailing party or parties would pay indemnification to the prevailing party for costs incurred substituting fuel oil for any excess of gas deliveries to it based upon current priority arrangements as opposed to delivery made under the authorized basis in the Phase II decision.

6/ We take official notice of Federal Power Commission Opinion No. 697-A in Docket No. RP 72-6 dated December 19, 1974 which appears to have eliminated the possibility that changes in delivery priorities based upon a common pool or end use could result in further curtailments of out-of-state gas deliveries.

(f) Evidence would be taken showing the effect of limiting parity treatment so that gas deliveries to A-block regular interruptible customers would not be modified.7/

(g) Evidence would be taken evaluating if there should be a freeze of the G-53-T A-block priorities at 1974 levels.

(h) Evidence would be taken evaluating whether or not the ratio of G-53-T deliveries, as compared to steam plants under situation (f) above, should be frozen at 1974 levels.

A witness for the California Gas Producers Association (Producers) raised the issue of the underutilization of California gas supplies by Pacific Gas & Electric Company (PG&E) due to warm weather, to the availability of additional hydroelectric energy, and to PG&E's contractural obligations to purchase fuel oil. He stated PG&E cut back purchases of gas from northern California by 47.3 percent. He recommended that statewide parity between northern and southern California gas utilities be implemented; that SoCal or its electric utility customers be encouraged to secure additional gas from northern California, including gas which PG&E is not now utilizing; and that utilities provide incentives to small gas producers to increase their drilling for gas supplies. We concur in the examiner's ruling that these matters should appropriately be dealt with in our investigation into the natural gas supply requirements of gas public utilities in the State of California, Case No. 9642. In Decision No. 83819 dated December 10, 1974 in Case No. 9642, and related matters, we agreed with the staff's position that wheeling8/ by utilities

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7/ This would mean that the A-block pool would be broken into two pools, one for regular interruptible G-53-T customers, and the other based on the present G-58 and G-61 A-block priorities.

8/ Utility company transportation or displacement of gas, privately owned by a consumer, from the point of production to the point of consumption.

would provide undue competition for California gas and would tend to circumvent the utilities' curtailment programs approved by the Commission. Implementation of Producers' recommendations would encourage such wheeling.

Decision No. 83819 also sets out provisions of Senate Bill 1476 (Chapter 1319, Statutes of 1974) which was signed by the Governor and made effective on September 26, 1974. This bill adds Chapter 4.5 to Part 2 of Division 1 of the Public Utilities Code (Sections 2771-2776).

Section 2771 provides as follows:

> "Section 2771. The commission shall establish priorities among the types of categories of customers of every electrical corporation and every gas corporation, and among the users of electricity and gas by such customers. The commission shall determine which of such customers and users provide the most important public benefits and serve the greatest public need and shall categorize all other customers and uses in order of descending priority based upon these standards. The commission shall establish no such priority after the effective date of this chapter which would cause any reduction in the transmission of gas to California pursuant to any federal rule, order, or regulation."

The legislative mandate to establish gas priorities is being implemented in Case No. 9642. Among other things, Decision No. 83819 provides for the filing of end use data and related rate spreads by PG&E, SDG&E, and SoCal.

This proceeding need not be reopened for end use allocations. Case No. 9642, which deals with the issue on a statewide basis is the appropriate forum. The common pool concept combining G-53-T, G-58, and G-61 A-block priorities is moot[9/] in light of the passage of Sections 2771-2776 of the Public Utilities Code. It is still appropriate to go forward with the issue of whether or not the floor, parity, or modified parity should govern deliveries to the affected customers.

DWP opted to purchase power at costs higher than the cost of burning gas in its generating stations and lower than the cost of fuel oil burned in its generating stations to meet a portion of its total system requirements. DWP contends that use of current requirements estimates would penalize it due to its more effective energy curtailment program vis-a-vis other utilities and that the above-mentioned amounts of purchased power not be deducted from its estimated total requirements on SoCal's system in determining levels of gas service. The following criteria, used in Decision No. 82414 to evaluate an information request motion of SDG&E regarding Edison's outside sources of gas, applies to the DWP purchased power request:

> "In Phase II our area of concern relating to SDG&E's motion goes the reasonableness of SoCal's levels of deliveries to G-58 steam plants and SDG&E's steam plants not to alternate supplies (or costs) used by SoCal's customers for electric generation."

Decision No. 82657 dated March 26, 1974 granted a stay of the effective date of Decision No. 82414.

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9/ Approximately 36 percent of G-53-T requirements and all of the G-58 and SDG&E's G-54 requirements fall in the lowest FPC end use priority classification.

We amplified our response to SDG&E's argument concerning the equitable reallocation of natural gas in Decision No. 32745 dated April 16, 1974 as follows:

"As indicated in Decision No. 32414 the purpose of the Phase II proceedings is to determine whether discrimination exists in SoCal's service to electric generation utilities. If undue discrimination is found to exist the Commission is legally bound to eliminate it. To the resolution of this matter we have no discretion.

"SDG&E's argument, on the other hand, seems to concern the different and distinct question of whether the Commission should consider the equitable reallocation of a scarce source of energy - i.e., natural gas. It is thereafter urged that if this question is to be evaluated, the Commission must have a full record upon which to justify both the need for a reallocation and the particular reallocation to be required.

"The issue, as raised by SDG&E, involves the exercise of our powers in a discretionary manner. Thus, instead of focusing upon SoCal and its allegedly discriminatory conduct, SDG&E chooses to look at the involved customers of SoCal and the resulting overall impact any allocation of SoCal gas will have upon them. This difference in emphasis converts an otherwise mandatory proceeding to eliminate discrimination into a discretionary action to reallocate gas.

"In opting not to exercise our discretionary powers at this time and thereby declining to broaden the scope of the Phase II proceedings, we are guided by the following considerations: (1) the effect of such regulatory action on the incentives of the utilities to prudently procure fuel supplies would likely be undesirable; (2) such action would represent a fundamental change in the very nature of utility regulation in California and

should not be entertained lightly; (3) a 'reallocation proceeding' cannot be logically limited to gas but should, instead, include consideration of all fuel supplies; (4) such a broad proceeding, if feasible at all, would require an extremely long period of time to hear and decide; and (5) such a proceeding may, as a legal matter, be beyond the scope of our existing powers.

"We therefore reaffirm the determination made in Decision No. 82414 not to consider the "broader" scope of reallocation. Rather, the limited questions to be decided in Phase II are (1) whether discrimination by SoCal exists and (2) whether a particular reallocation designed to take the place thereof, if necessary, is nondiscriminatory."

In Decision No. 82745 SoCal's G-58 and G-61 customers were ordered to be prepared to explain the basis of their respective estimated requirements and ordered the city of Long Beach (Long Beach), SoCal's G-60 customer, to be prepared to explain the basis of its gas deliveries to Edison, rehearing of Decision No. 82414 was granted, limited to the issue of whether an EIR is required for the Phase II proceedings, and the stay granted in Decision No. 82657 was terminated.

After reexamination of the environmental issue, Decision No. 83573, dated October 8, 1974, was issued wherein, among other things, we found that:

"2. The CEQA proceedings are appropriate to Phase II of this proceeding and an EDS should be prepared.

"3. Edison is the proponent and should prepare the EDS.

"4. SDG&E's motion for an interim order directing the preparation of an EIR should be denied because it was premature. Under Rule 17.1 motions are permitted after the preparation of an EDS and the presiding officer may issue rulings on such motions.

"5. The CEQA procedures do not apply in a normal rate case where the sole impact includes determination of a total revenue requirement and the apportionment of a change in revenue requirements to different classes of customers. The Commission will consider potential environmental impacts in normal rate cases. When environmental issues are brought to light by our staff or other parties, appropriate findings will be made thereon.

"6. The expeditious resolution of our constitutional and statutory obligations to fix just and reasonable rates, with no unreasonable discrimination, requires the issuance of an interim order in applicant's Phase II rate increase application, upon completion of an adequate record."

Decision No. 82810, dated December 10, 1974, denied the petitions of SoCal and Edison for rehearing of Decision No. 83573 and denied Edison's request for a stay of that order.

Decision No. 83867, dated December 17, 1974, corrected certain references in Decision No. 83810.

Resolution No. DE-122 ordered Edison to transmit one-third of the $53,500 deposit to pay estimated Commission expenditures in connection with Edison's gas reallocation project. Edison complied with this order.

Estimated Requirements on SoCal's System and Levels of Service

The issue of the apportionment of interruptible gas supplies from SoCal and its affiliates to utility electric generation customers and large A-block customers has been before the Commission at various times for approximately 18 years. During this period of time the level of service has been set to yield higher levels of service, lower levels of service, and parity of service for SDG&E steam plants vis-a-vis SoCal's retail electric customers. Air pollution standards and relative fuel costs were also issues in prior proceedings before this Commission. Levels of service were significantly higher in prior years.

Decision No. 54831 dated April 10, 1957 in Application No. 38527 authorized the filing of new G-54 rate schedules by SoCal and by its affiliate Southern Counties Gas Company of California (Southern Counties)[10/] for utility steam electric generating plants and cement plant customers. We stated therein "After considering the record in this matter, the Commission concludes that the proposed schedule G-54 should warrant the applicants in anticipating firm needs further in the future in procuring more gas than without schedule G-54; that it would provide for a more equitable distribution of gas between the various steam electric plants and cement plants than under present schedules; ..."

"While San Diego may receive a lesser quantity of steam plant gas under present schedules, it does not appear that the lessened quantity will upset the economic position of San Diego in the gas business, and that at worst its load factor of operation would still be 72 percent which is considerably higher than

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10/ Southern Counties has merged with SoCal.

the load factor of operation of applicants of 58 percent. Furthermore, San Diego's present contract with Southern Counties provides that the availability of gas for use in San Diego steam electric plants at deliveries above the level of 95,000 Mcf per day shall be subject to apportionment under the operation of any uniform rate schedule for steam electric plant use by all customers of the applicants. Since schedule G-54 will be such a uniform schedule, we find the applicants' position to be fair and reasonable."

Exhibit 71 shows the following levels of service for 1967: Edison 81.9 percent; DWP 81.2 percent; SDG&E 88.8 percent; Burbank 89.6 percent; Glendale 91.1 percent; Pasadena 90.6 percent; and the average for all of the electric generating customers supplied by SoCal (including SDG&E) 82.8 percent. For the years 1968-1972 the following tabulation shows the average levels of service to all of these electric generating customers, the levels of service supplied to the three largest electric customers, Edison, DWP, and SDG&E, and the percentage differential by which the average for the steam plants exceeds or is less than the level of service for SDG&E.

| | | Level of Service | | | | |
|---|---|---|---|---|---|---|
| | | Year | | | | |
| | Customer | 1968 | 1969 | 1970 | 1971 | 1972 |
| A | Avg. Utility Electric Plants (incl. SDG&E) | 84.4% | 80.2% | 75.9% | 60.0% | 58.0% |
| B | Edison | 84.9 | 80.5 | 75.2 | 58.0 | 56.7 |
| C | DWP | 84.7 | 81.0 | 79.0 | 63.1 | 63.3 |
| D | SDG&E | 83.1 | 78.4 | 73.9 | 66.2 | 57.1 |
| E= $\frac{A-D}{A}$ X 100 | Avg. exceeds SDG&E | 1.5 | 2.2 | 2.6 | (10.3) | 1.6 |

SoCal has been periodically provided with estimates of potential requirements on its system by its G-58 customers and by SDG&E for its G-54, steam plant customer. Electric utility estimates utilized by SoCal in Phase I of this application for test year 1974 were furnished in 1972. Edison, the largest of these customers, supplied its 1972 load estimate based upon a February 1971 study.

During the course of the Phase II proceedings evidence was taken on past levels of service,[11/] upon 1974 estimates of gas deliveries and requirements for electric generating customers based upon SoCal's test year estimate, upon updated estimates including the adopted test year contained in Decision No. 83160, upon estimated electric demands with various levels of curtailment, and upon a composite of recorded 1974 data and best estimates of the several utilities of their electrical loads and of anticipated energy resources available to meet these loads for the remainder of 1974.

SoCal's G-58 and G-61 customers prepared their earlier estimates of gas requirements for electrical generation for 1974 based upon their ongoing projections of growth of energy demands on their systems and of the expected availability of energy sources to meet these demands, exclusive of those which could be imposed on the SoCal system. Actual 1974 electric system demands were depressed by conservation measures taken to meet the energy crisis, by above normal temperatures, by depressed economic conditions

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11/ SoCal's estimates for SDG&E previously reflected capacity limitations on SoCal's system which produced levels of service above those derived from potential requirements on SoCal's system.

causing cutbacks in industrial demands, by our orders directing reductions in usage, and by ordinances providing for billing penalties if mandated reductions in energy consumption were not made. During the early portion of the year, some of the G-58 customers were faced with the possibility that they would lack sufficient low sulfur fuel oil to meet their generating requirements. Conservation measures include reduction of heating and cooling requirements by lowering heating temperature settings and increasing cooling temperature settings, cutting heat losses through the use of better insulation, restricting use of equipment, elimination of nonessential uses, and restricting hours for certain uses. Demands may have been affected by price elasticity, and by deviations in customer growth rates from projected estimates. The electric utilities' earlier energy supply estimates for 1974 did not anticipate the abnormally high availability of hydroelectric power due to above normal rainfall conditions in the Pacific northwest.

The following tabulation shows estimates of levels of service for Edison, DWP, SDG&E, and for total steam plant for average year 1974 under floor deliveries based upon SoCal's Phase I estimates of supply and requirements in Application No. 53797, adjustments to show the effects of parity or modified parity, and upon the gas balance underlying adopted test year 1974 utilized in Decision No. 83160 for deliveries based upon the floor.

| Customer | Level of Service in Percent: SoCal Estimate Exhibit 57 | Level of Service in Percent: D. 83160 Basis |
|---|---|---|
| **Floor** | | |
| Edison | 10.8 | 9.8 |
| DWP | 11.1 | 10.8 |
| SDG&E | 24.1 | 22.6 |
| Total Steam Plant (incl. SDG&E) | 12.7[a/] | 11.9 |
| **Parity** | | |
| Edison | 11.9 | |
| DWP | 12.2 | |
| SDG&E | 12.4 | |
| Total Steam Plant (incl. SDG&E) | 12.1[a/] | |
| **Modified Parity** | | |
| Edison | 12.5 | |
| DWP | 12.9 | |
| SDG&E | 13.1 | |
| Total Steam Plant (incl. SDG&E) | 12.7[a/] | |

a/ SoCal excluded G-58 deliveries to and requirements of Imperial Irrigation District (IID). Inclusion of these amounts would not change these totals.

A cursory review of the energy supply situation in the last year and a half shows that the availability and cost of natural gas and/or fuel oil is subject to significant and rapid changes. This country is seeking ways to cut growth in energy demands in meeting individual, commercial, governmental, and industrial requirements. Estimates based upon relatively ample supplies of low cost fuels to meet relatively unrestricted growth in electric demands are not adequate to determine current requirements on SoCal's system. The latest estimates made in this proceeding of electric utility requirements on SoCal which are based upon partially recorded and best estimates for the balance of the 1974 estimated year, are the appropriate ones to use, with a modification related to the treatment of Edison's deliveries from the city of Long Beach (Long Beach), in determining the reasonableness of the levels of service provided SoCal's G-58 customers and SDG&E's generating plants.

The Long Beach Gas Department system is supplied from Long Beach's own gas supplies and from wholesale purchases made under Schedule G-60 from SoCal. SoCal's G-60 tariff and service agreement provides for an annual contract quantity, a daily contract demand, and an additional peaking demand. The G-60 tariff provides for monthly demand charges based upon the daily contract demand quantity and an annual charge for additional peaking demand. The commodity rate charged for G-60 gas increases as additional deliveries are made on a daily basis to meet seasonal volumetric requirements and peaking requirements.

SoCal provides the gas necessary to meet that portion of Long Beach's requirements which are greater than can be met from Long Beach's own supply. Long Beach's interruptible customers are curtailed in parallel with SoCal's interruptible customers. Long Beach is able to provide retail service to Edison under a provision of the G-60 gas service agreement which gives Long Beach a DCQ of 40 $M^2$cfd, 16 $M^2$cfd of which falls under the A-block priority and 24 $M^2$cfd under the S-1 priority.

Long Beach's tidelands gas supplies are delivered at pressures of 30-35 psi. Long Beach cannot deliver tidelands gas to Edison's Alamitos or Huntington Beach plants unless its compressor stations increase pressures to 95-100 psi. The recent usage of these compressors was nominal. Most of Long Beach's recent deliveries to Edison involved transmission of gas received from SoCal at sufficient pressures to supply Edison.

Long Beach contends that SoCal's gas should be used first in meeting Long Beach's firm and interruptible gas deliveries; that Long Beach's own supplies should be utilized for supplying any remaining firm and regular interruptible deliveries; and that any excess thereof should be sold to Edison. Long Beach desires to receive the annual contract quantity of gas from SoCal so as to realize profits arising from its sales to Edison. Long Beach contends that if it cannot obtain the annual contract quantity that there should be an adjustment of its demand charges and indicated that this point would be raised in their contract negotiations with SoCal. If Long Beach desires to make an evidentiary showing on this matter it may do so in Application No. 55345, SoCal's pending general rate increase application.

The Long Beach deliveries to Edison are dependent upon the availability of the SoCal supply. To the extent these supplies are available they are furnished to Edison and have not been treated as a SoCal supply or as a potential SoCal requirement. On the other hand, deliveries to SDG&E's G-54 customer above those governed by its DCQ (parity) to maintain the annual floor of deliveries are included in determinations of SDG&E's level of service. There should be a greater degree of consistency in the treatment of SoCal's G-60 and G-61 wholesale deliveries for electric generation in determining levels of

service based on requirements on SoCal. In our determination of the requirements of Edison on SoCal we are including the deliveries which Edison receives from Long Beach.

The following tabulation sets forth the adopted 1974 potential requirements on SoCal's system by its G-58 customers and by SDG&E's G-54 customer.

| Customer | 1974 Potential Requirements on SoCal $M^2cf$ | Percent of Total |
|---|---|---|
| Edison | 291,089[a/] | 60.82 |
| DWP | 99,025 | 20.69 |
| Glendale | 4,866 | 1.02 |
| Burbank | 5,354 | 1.12 |
| Pasadena | 5,566 | 1.16 |
| IID | 329 | 0.07 |
| SDG&E | 72,388 | 15.12 |
| Total 1974 Potential Requirements | 478,617 | 100.00 |

a/ Includes 2,483 $M^2cf$ now supplied by Long Beach

The following tabulation shows levels of service derived from the adopted requirements tabulated above and the deliveries underlying Decision No. 83160, which were utilized in deriving the rates and revenues in Phase I of this proceeding.

| Customer | Requirements in M²cf | Deliveries D-83160 Basis M²cf | Level of Service % |
|---|---|---|---|
| Edison | 291,089 | 39,263[a/] | 13.49 |
| DWP | 99,025 | 17,803 | 17.98 |
| Glendale | 4,866 | 1,054 | 21.66 |
| Burbank | 5,354 | 839 | 15.67 |
| Pasadena | 5,566 | 999 | 17.95 |
| IID | 329 | 119 | 36.17 |
| Subtotal G-58 | 406,229 | 60,077[a/] | 14.79 |
| SDG&E | 72,388 | 20,809 | 28.75 |
| Total | 478,617 | 80,886[a/] | 16.90 |

a/ Excludes deliveries from Long Beach.

Long Beach estimated that it would be able to provide Edison with 4,783 M²cf if SoCal delivered the annual contract quantity of 15,513 M²cf (42,500 Mcf per day X 365 days). For the year ending June 30, 1974 SoCal delivered 13,056 M²cf to Long Beach and Long Beach provided Edison with 3,459 M²cf. Edison's estimates of receipts from Long Beach for 1974 varied from 2,301[12/] M²cf to 4,423[12/] M²cf. Edison's best estimate of 1974 receipts from

12/ Based upon conversion factor of 1.06 billion Btu per M²cf of gas.

Long Beach, which includes seven months of recorded data, is 2,483 $M^2$cf. SoCal's estimate of A-priority deliveries to Long Beach, destined for Edison, is 2,420 $M^2$cf. A modification of the level of service tabulation, supra, adding the highest estimate of Long Beach deliveries (4,783 $M^2$cf) to Edison's deliveries and requirements would increase Edison's level of service to 14.89 percent, the overall level of service to G-58 customers to 15.78 percent, and the total steam plants (including SDG&E) to 17.72 percent.

The levels of service available to SoCal's G-58 customers as compared to SDG&E's G-54 customer differ to an excessive degree[13/].

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13/ In its closing argument SDG&E contends that actual 1974 G-58 deliveries will be 50 percent above SoCal's Phase I estimate and that Edison's estimate of levels of service was deceptive. However, SDG&E admitted that its corresponding G-54 deliveries were 40 percent above the earlier estimate operating under the floor. SDG&E's increased G-54 deliveries were stated to be due to firm customer conservation, extra hydropower, and warmer temperatures not due to an increase in gas supplies from SoCal. The updated estimates do not support SDG&E's argument. G-58 deliveries of 92,049 $M^2$cf and SDG&E G-54 deliveries of 29,488 $M^2$cf (50 and 40 percent over SoCal's Exhibit 57 estimates) would result in levels of service on SoCal's basis of 16.39 percent for G-58 and 33.73 percent for SDG&E's G-54 deliveries. SoCal's updated estimates (Ref. Item, CC) are G-58 - 102,167 $M^2$cf (11 months recorded, 1 month estimated), SDG&E - 28,524 $M^2$cf (10 months recorded, 2 months estimated). The levels of service using these latest delivery estimates plus the latest estimate of Long Beach deliveries to Edison, 2,483 $M^2$cf, applied to our adopted requirements result in levels of service of 25.76 percent for G-58 customers and 39.40 percent for SDG&E's G-54 deliveries.

SoCal estimates that under the floor its deliveries to G-58 customers will be 42,479 $M^2$cf in 1975 and deliveries for SDG&E's G-54 service will be 19,390 $M^2$cf and that SDG&E's G-54 supply would be reduced to 7,796 $M^2$cf on a parity basis. (See reference item CC.) If Long Beach supplied 2,483 $M^2$cf to Edison in 1975 and 1975 requirements on SoCal did not vary from adopted 1974 requirements floor levels of service would be 11.07 percent for G-58 customers and 26.79 percent for SDG&E's G-54 customers.

The ratio of each of the G-58 customers A-block entitlement to its total requirements varies widely. The record shows that this results in excessive variations of levels of service for the six G-58 customers.

Additional reasons for our threshold determination that a continuation of deliveries based upon present delivery priorities governed by the floor would result in unreasonable discrimination as to future deliveries by SoCal to its G-58 customers and by SoCal to SDG&E for its G-54 deliveries are contained in the balance of this opinion. There should be an equitable sharing of the burden caused by present and continuing reductions in that portion of SoCal's available gas supply used for electric generation by its G-58 customers and by SDG&E. Therefore, we find it just and reasonable to establish a new system of delivery priorities under which SoCal's G-58 customers and SDG&E's G-54 customer will obtain comparable levels of service.

Long Beach's sales to Edison should be considered as a portion of Edison's supply from SoCal and as a requirement on the SoCal system. Outside gas supplies should not normally be considered in determining levels of service from SoCal. SDG&E points out that in determining levels of service it could be prejudiced by one of the following conditions:

(a) Any diversion of gas which would normally be delivered to SoCal's system which is delivered to an out-of-state generating plant owned by a SoCal G-58 customer.

(b) Any arrangement where gas from a nonregulated supplier presently utilized for generation in California by a SoCal customer is transferred, substituted, or exchanged for deliveries to out-of-state generating plants.

These types of diversions benefiting one or more of the affected electric utilities would otherwise work to the detriment of the other utilities in allocating SoCal's gas supply.

The initial pro rata allocation of gas available for electric generation by SoCal's G-58 customer and by SDG&E's G-54 customers should be based upon the percentages of gas requirements on SoCal's system, set forth in the tabulation on page 19 herein, multiplied by the total gas supply available for such generation. The decline in gas supplies available for electric generation is continuing. SDG&E anticipates no gas will be available for electric generation in 1976. The percentage of deliveries to each of the G-58 and G-61 customers should be updated on a monthly basis to equitably apportion the remaining gas supplies. Each utility should be required to report its recorded system load on a calendar month basis together with the resources used to meet this monthly load and its net potential requirement on SoCal's system in a manner consistent with our derivation of such requirements herein. The reports should be furnished to the Commission, to SoCal, and to the other affected electric utilities seven days after the end of a month. Based on these reports, SoCal should revise the allocation

percentages tabulated on page 19 herein and file, by advice letter, revised allocation percentages for electric generation. The revised allocation percentages should be used for deliveries commencing on the 15th day after the end of a month. Deliveries should be promptly adjusted[14/] to reflect any quantitative difference between the actual and calculated deliveries for the prior month. Edison's requirements should consist of two parts, 40 $M^2$cfd relating to the Long Beach deliveries and the balance of its requirements directly from SoCal. This would increase SoCal's G-60 deliveries.

We turn now to the issue of whether to reallocate the gas supplies on a parity or on a modified parity relationship. SoCal's witness favors parity over modified parity because parity would be a continuation of priority arrangements developed over the years prior to the institution of deliveries based upon the floor, because electric utilities can obtain alternate fuels more easily than G-53-T customers, and because of a possible drop in deliveries to SoCal from its out-of-state suppliers due to the operation of the FPC's interim curtailment plan (see footnote 5 herein). He testified that freezing the ratio of non-steam plant deliveries to steam plant deliveries in future years or of freezing G-53-T A-block priorities would result in greater curtailment of non-steam plant A-block customers than under parity and that such freezes would preserve some of the features he objected to regarding modified parity.

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14/ The adjusting deliveries should not be included in the determination of levels of service for the period in which they were supplied.

In Decision No. 82414 we noted the greater relative decline in levels of service for the electric generating customers compared to G-53-T customers[15] and decided not to shift A-block priorities from a price volume relationship to an end use priority in this proceeding. Approximately sixty-four percent of the G-53-T A-block requirements are in higher FPC curtailment priority categories than the boiler fuel category applicable to electric power plants. Adoption of a modified parity approach would tend to reverse the differential decline levels of service. It appears that adopting a modified parity approach would be at variance with the intent if not with the letter of the law contained in recently enacted Sections 2771-2776 of the Public Utilities Code (supra). We will adopt a parity approach in reallocating between SoCal's G-53-T,[16] G-58, G-60, and G-61 customers. Our adopted rate design herein will give recognition to the relatively higher levels of service the G-53-T customers will receive.

The total A-priority requirements for all of the G-58 customers and for SDG&E should be 541 $M^2$cfd, which is the sum of the present 525 $M^2$cfd contained in SoCal's Rule 23 and of Long Beach's 16 $M^2$cfd. The 21 percent out-of-state requirement limitation which is contained in Rule 23 should be increased to 21.64 percent to incorporate Long Beach's A-priority gas. Each of the G-58 customers and SDG&E should be entitled to A-block deliveries based on the pro rata proportion of their total requirements on SoCal, as described above.

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15/ Most of the gas supplied to IID by SoCal is delivered under Schedule G-53-T.

16/ SoCal's affiliate transports gas for producers for fees. Some of this gas is transported subject to curtailment when A-block gas is curtailed. SoCal purchases the volumes not delivered. Revenues and expenses relating to these interruptible exchange deliveries are affected by SoCals's curtailments.

Rate Changes

SoCal's rate witness, who testified about the reasonableness of SoCal's proposed Phase I rates, evaluated further rate design changes if parity or modified parity were adopted, based upon applicant's proposed rates in Phase I of this proceeding. He testified that under modified parity there will essentially be no change in revenues to SoCal because gas volumes shifted from SDG&E to the G-58 customers would be sold at the same commodity rate; that if parity were established SDG&E's steam plants would lose approximately 10,206 $M^2$cf of gas, 6,069 $M^2$cf of which would go to retail steam plants and the balance to the G-53-T regular interruptible customers and for additional exchange A-block deliveries; that Edison would receive approximately 3,974 $M^2$cf (38.94 percent of the total reallocated from SDG&E); that under parity that portion of the gas shifted from SDG&E to G-53-T customers and to additional exchange A-block deliveries would increase SoCal's net revenues by $206,000 (a revision incorporating different gas balance data increased the differential to $209,000) because SoCal's proposed regular interruptible rates per therm were higher than the G-61 commodity rate. (See footnote 6 herein.) He stated that the percentage increase to SDG&E at proposed rates under parity conditions is very close to the system average increase initially proposed and that since allocated costs to SDG&E under parity continues to exceed revenues no change in rates is warranted. He considered that the additional revenue which would be generated was not sufficient to recommend any rate modification.

Edison's rate witness testified that Decision No. 80430 confirmed his view that when rates are fixed to cover the payment of full demand costs they should entitle a customer to full demand rights and that, conversely, if a customer is not entitled to demand rights he should not be assessed any demand costs; that Decision No. 81802 confirmed the inability of SoCal to increase contract

daily demand commitments to SDG&E and confirmed the reasonableness of SoCal providing load equation service to SDG&E from commitments already made; that for average year 1973 Edison's level of service was approximately 27.9 percent, SDG&E's level of service was approximately 28.4 percent, and the other steam plants' level of service was approximately 25.8 percent, and that parity was operative in 1973; that SDG&E's level of steam plant service in 1974 would be approximately 24 percent and the level of service to Edison would be about 11 percent and that these percentages would be changed to about 12 percent for both SDG&E and Edison on a parity basis. He pointed out that in about 1958 the Commission indicated that steam electric generating stations in Southern California served by SoCal and by SDG&E should share in excess gas on a parity basis; that since then because of supply limitations the then excess supply of steam plant gas has become a deficiency; and that the current problem becomes one of sharing the deficiency. He stated that at current fuel prices this volume of gas would represent an increase of fuel expense to SDG&E of approximately $21.5 million under parity as opposed to the floor and a difference of $20.3 million comparing modified parity to the floor assuming a cost of fuel oil of $2 per $M^2$ btu and 1,052 btu per cubic foot of gas and a corresponding reduction of fuel costs to other SoCal customers of about the same amount; that there would be a difference of approximately 10,206 $M^2$cf between deliveries to SDG&E under parity vs. the floor and a difference of 9,633 $M^2$cf under modified parity vs. the floor.

He testified that rate determinations of other rate fixing jurisdictions affect our rate design since there is a comparison of the rates under review with the rates being charged by other utilities for similar competing forms of service; that these impacts are indirect and difficult to quantify; that in this case the impact which must be considered results from actions of the FPC which first brought to an end the pattern of annual increments in growth of supply and subsequently the necessity to restrict deliveries under outstanding commitments; that the imposition of delivery limitations and the classifications of priorities for wholesale deliveries raise a number of new questions not heretofore present but which nonetheless present real modifications in ratemaking factors which must be reflected in the determination of just and reasonable rates; that in the past the separation of large steam plant users between A-block use and S-1 use has been a matter of operating convenience and customer treatment; that a number of years ago the present assignment of a small portion of A-block to large steam plant schedules arose as a result of Edison's complaint that the continued use of gas by the smaller generating utilities when Edison was required to use fuel oil gave rise to public criticism of Edison which in its opinion was undeserved; and that under present circumstances it may well be that any distinction between A-block and S-1 for fuel use in furnaces ought to be removed. Edison's witness' recommended that, assuming parity, i.e., the same relative level of

gas service to SDG&E's steam plants as to Schedule G-53 steam plants, there should be a reexamination of the number, size, rate level, and customer criteria for priority blocks of interruptible rates; a review of cost of service evidence and reduction in the commodity rate for steam plants of between 5 and 7 cents per Mcf based upon such review; that the revenue lost through such reduction in commodity rates be recouped through changing demand rates to reflect any changes in demand rights occasioned by the need to adapt to the current supply deficiencies; and that deliveries of available interruptible supplies within the priority blocks on a daily entitlement basis should be based on requirements and limited by ability to use.

He concluded that the Commission, in fixing the rates resulting from the additional considerations present in this proceeding, must make a finding that the rates under the applicable conditions of service are just and reasonable and that such rates cannot be found to be just and reasonable if they may inherently contain elements of undue discrimination; that in his view parity in deliveries of gas for steam plant fuel is the only equitable solution between customers of electric utilities under the current curtailment priority decisions of the FPC because of inordinate differences in fuel costs. He would make tariff changes to accomplish this

sharing of scarce and highly sought-after and relatively inexpensive fuel by including in Schedule G-61 a provision controlling deliveries of gas for steam electric generation to a pro rata share, based upon their ability to use such gas, of all gas delivered directly or indirectly by SoCal for such purposes, or to revise SDG&E's contract with SoCal to reduce the contract demand to a lower level to result in deliveries by SDG&E for steam electric plant use at the same proportionate level of service as SoCal provided to its G-58 customers; that in either case SDG&E's demand charge would be reduced from present levels; and that he preferred the latter alternative.

SDG&E points out that Edison's proposed reduction of its daily contract demand would result in the shifting of much of its present daily contract demand which is utilized for meeting its firm loads into the more expensive peaking gas category; and that this would result in large increases in peaking demand charges and peaking commodity charges. SDG&E states that it would lose approximately one-eighth of its gas supply and wind up paying higher charges for the gas it receives.

Decision No. 83160 did not adopt any cost allocation procedure for rate design nor did it adopt Edison's proposal for a reduction of its commodity charge. This record does not convince us to reverse that decision.

SDG&E presented evidence concerning the evolution of its service agreement with SoCal. The basic agreement between Southern Counties and SDG&E was entered into in 1963. SDG&E assisted SoCal in contracting for new increments of out-of-state gas by signing a long term contract and agreeing to buy additional quantities of gas as SDG&E's loads increased. SDG&E witnesses contend that SDG&E is a firm wholesale gas company with demand rights; that the G-58 customers do not have demand rights; that SDG&E has paid demand charges of $76,534,000 from 1963 to April 30, 1974 to preserve its demand rights; that SDG&E's contract permits it to demand up to 21 M cfd per day from SoCal; that SDG&E's system contains liquefaction facilities for meeting its peaking demands and which lessen the peaking requirements on SoCal's system; that SDG&E is entitled to a continuation of deliveries on the contracted for basis; that SDG&E has an integrated system which provides retail firm service and regular interruptible service, and interdepartmental G-54 service for electrical generation; that reallocation on a parity basis would cost San Diego's customers $33.43 per year, per electric customer, and $1.94 per year, per gas customer; and that under parity increased costs per customer in the San Diego area would be several times greater than the reduction in costs per electric customer of the G-58 utilities served by

SoCal because SDG&E has fewer customers than the G-58 utilities.[17] These amounts include revenues from large commercial, industrial, and institutional customers. SDG&E states the impact for the average residential electrical customer with a 1973 demand of 5,822 kwh would be $12.17 per year,[18] the impact per average residential gas customer with a 1973 consumption of 837 therms would be $1.32 per year on the basis of increased fuel (the differential between the cost of fuel oil at $2.2581 per $M^2$Btu and gas at $0.48691 per $M^2$Btu), transportation, and storage costs of approximately $19,827,000.

SDG&E requests a demand charge adjustment of approximately $5,194,000 and elimination of its $1,170,000 facility charge ($97,500 per month) by rolling the facility charge into its basic commodity charge in the event that gas reallocation on a parity basis is ordered.

SoCal's cost of service study assigned a $7,195,000 investment cost and annual charges, excluding local franchise fees, of $871,000 to exclusive use facilities for its G-58 customers.

SDG&E objects to being the only customer of SoCal required to pay a facility charge. SDG&E showed that if the fixed charges it pays for gas remained unchanged the unit price

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17/ Edison presents the other side of the coin, that if present priority arrangements unfairly discriminate against the G-58 customers of SoCal, the G-58 utilities and ultimately their customers are bearing the burden of subsidizing SDG&E's customers.

18/ This would increase to $18.75 per year on an incremental cost basis if replacement fuel oil cost $20 per barrel.

would increase due to the reduction of gas volumes delivered under parity. SDG&E proposes that SoCal obtain rate relief of approximately $5,194,000 from SoCal's other customers to make up the revenue requirement deficiency relating to its proposal.

SoCal has not been willing to increase SDG&E's daily contract quantity in recent years. The increases in SoCal's deliveries to SDG&E required for meeting SDG&E's seasonal and peaking requirements are being met by increasing the peaking gas volumes on a daily and seasonal basis.

Most of the SoCal's deliveries to SDG&E are physically delivered from a transmission line connecting an out-of-state supplier's facilities to SoCal's load center. The transmission line deliveries to SDG&E provide operating convenience for SoCal but nevertheless SoCal must inject sufficient quantities of gas underground to meet the seasonal and peaking load requirements on its system of its retail and wholesale customers.

SDG&E contends that the Commission found just and reasonable rates in Decision No. 83160; that the Commission could not do so if such rates were unreasonably discriminatory; and that the Commission could not now modify such rates in the same proceeding. This issue was discussed in Decision No. 82414 (see Findings 5 and 6 therein).

SDG&E contends that SoCal attempted to modify the make-up gas provisions in its present contract to achieve parity in Application No. 52696 and that the Commission rejected that approach in Decision No. 80430.

Decision No. 80430 reduced the level of service for SDG&E's G-54 service vis-a-vis the G-58 customers and with our concurrence established a parity relationship, with an override provision, without modifying the G-61 contract. The new interruptible service priority arrangements adopted herein will require modifications of the G-61 contract.

In its petition for rehearing of Decision No. 82414 SDG&E asserted that we have already decided the parity issue as evidenced by our posture before the FPC in Docket No. CP 72-211, the Transwestern Coal Gasification Company proceeding. We strongly rejected that contention in Decision No. 82745 (mimeo page 2). SDG&E now asserts that if we authorize a modification of its service contract with SoCal providing for parity our action would be inconsistent with our posture in the Transwestern curtailment case. This Commission's Transwestern appeal was based upon the FPC's establishing curtailment procedures which affected rates without substantial evidence and without a hearing after the FPC had issued a policy statement without notice and hearing, upon the FPC's shifting the burden of proof from an applicant to an intervenor, and upon the failure of the FPC to evaluate the environmental impact of the curtailment plan. This decision, unlike the FPC decision, is based upon a voluminous body of evidence and it contains an evaluation of the environmental impact of a gas reallocation based upon the evidence received at lengthy Phase II hearings. We will not evaluate or act upon Edison's motion requesting a negative declaration based upon Edison's Environmental Data Statement in this interim order.

San Diego generally supports SDG&E's opposition to reallocation of gas and modification of SDG&E's contract. San Diego argues that conservation efforts of SDG&E's customers have benefited the San Diego area in providing lower fuel costs for industrial and commercial purposes, which results in more jobs.

DWP argues that SDG&E admits that it received full value in the past for the charges it has paid for gas; that SDG&E admits that G-58 customers were not in a position to obtain better levels of service for their steam plants while SDG&E could; that SDG&E benefited from Commission decisions rather than by foresight; that the crux of the unjust discrimination issue lies in the inability of the G-58 customers to negotiate for equivalent service vis-a-vis SDG&E; that the Commission must determine an equitable basis for administering parity; and that DWP favored allocations based on requirements on an average year basis.

IID requests a fair and equitable disposition of this proceeding.

The Commission staff argues that parity, or at least modified parity, should be ordered at this time. The staff supported a parity position in Application No. 52696 which differed from SoCal's parity proposal at that time in that the staff recommended and the Commission approved of the inclusion of the smaller G-58 customers as well as Edison, DWP, and SDG&E.

The staff argues that the similarities between the electrical utilities operations of SDG&E and the G-58 customers far outweigh the differences between them when weighed in light of the disparities in levels of electric generating service arising out of the gas supply shortage. These differences are related to SDG&E's operations as a wholesale customer, operating an integrated gas system which supplies firm, regular interruptible, and utility electric gas service compared to G-58 utility electric operations. The staff also argues that if existing curtailment priorities are continued there might be adverse effects on out-of-state gas supplies because of FPC end-use curtailment priorities (see footnote 6 herein); and that modified parity might not be appropriate in light of the intent of SB 1476 regarding end use.[19/]

Appendix B, attached hereto, contains authorized rates based

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19/ SDG&E argues that no evidence on end use was permitted and it would not be appropriate to consider this staff argument.

upon the above-described parity arrangement designed to provide equal levels of service for SoCal's G-58 and SDG&E's G-54 customer. The authorized rates eliminate SDG&E's $1,170,000 facility charge and increase commodity charges to SoCal's G-58, G-60, G-61, and G-53-T customers, increase exchange revenues, and decrease SoCal's gas cost. The rate increases have been spread on a weighted basis, giving consideration to the differential in levels of service between regular interruptible and utility electric customers, and to the Phase I test year volumes. There will be no net increase in revenues to SoCal arising out of these changes in rates, exchange revenues, and gas cost.

It is not appropriate to modify the daily contract demand or the demand charges contained in SoCal's Schedule G-61. SDG&E will still be able to demand deliveries of 21 $M^2$cfd plus contracted for peaking deliveries every day such deliveries are needed for meeting its firm requirements, consistent with the other provisions of the agreement. It will no longer be entitled to a higher level of service for its G-54 service to meet an annual floor level of deliveries.

SoCal's gas service agreement with SDG&E should be modified to show that:

(a) The daily contract demand relates specifically to SDG&E's firm requirements.

(b) SDG&E's regular interruptible and G-54 service should be curtailed in parallel with SoCal's regular interruptible and G-58 customers.

(c) The make-up gas provisions and the provision[20/] that peaking gas volumes are not additive to total volumes deliverable to buyer under other provisions of the agreement (i.e., the annual floor) should be eliminated.

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20/ SDG&E's Exhibit 69, the gas service agreement between SoCal and SDG&E as amended to date by the parties, does not contain the disputed modification to the agreement filed in SoCal's Advice Letter No. 857 which we adopted in Decision No. 81802 dated August 28, 1973 in Case No. 9474.

SoCal's Rule 23 should be modified to provide for the apportionment of gas to its G-58 customers and to SDG&E's customer as described above. Provisions of Rule 23 which have been superseded by this order should be eliminated (i.e., inclusion of the first 4 $M^2$cfd of the DCQ in the A-priority and the footnote governing service to SDG&E contained in Supplement B to Rule 23). Supplement B to Rule 23 should be modified to include the monthly pro rata apportionments of 541 $M^2$cfd in the A-block curtailment classification for each of the G-58 customers, including 16 $M^2$cfd for potential Long Beach deliveries to Edison, and for SDG&E's G-54 service. The balance of the current DCQ's should be shown in the S-1 block, adding 24 $M^2$cfd for the potential Long Beach deliveries to Edison. No change is necessary regarding curtailment practices for regular interruptible service. Inclusion of Long Beach's A-priority gas as a portion of Edison's supply would increase the gas volumes received by Long Beach if there is no reduction of the 541 $M^2$cfd A-block priority available for electric generation. Therefore, an increase in Long Beach's initial commodity rate is appropriate.

SDG&E states that there would be a very substantial impact upon it if it had to absorb increased fuel costs without rate relief. We will permit SDG&E to file a request for rate relief on its fuel adjustment clause to offset increased fuel costs and direct a PGA filing to reflect changed gas costs. Edison is the only utility under our jurisdiction which would benefit from reallocation. Edison should be directed to file an offset rate reduction. Such filings should be based on current estimates.

Fuel Supply Storage & Transport

SDG&E submitted evidence to show that it would have to replace 10,206 $M^2$cf of gas with approximately 1.59 million barrels of low sulfur fuel oil which would have adverse environmental effects in the San Diego Air Basin; that it would have to

contract for such fuel oil supplies on a long-term basis; that this additional fuel oil might cost more than existing supplies, possibly as much as $15 to $20 a barrel; that its present oil storage was being fully utilized; that it would have to construct approximately 800,000 barrels of new storage and would require new facilities to transport the oil and provide for barging of oil; that it would have to obtain San Diego Coast Regional Commission approval to construct these facilities; that its capital outlay for these facilities would be approximately 11-1/2 million dollars; that it would take SDG&E over one year to put the new facilities into operation; that most of the added oil would have to be burned at its South Bay plant; and that the oil would have to be transported at a cost of approximately 35 cents per barrel from its Encina plant to its South Bay plant. SDG&E raised the possibility of its need to shed electrical loads because of lack of fuel oil if reallocation should occur.

As noted above, SDG&E anticipates that it would not have any gas for electrical generation in 1976. SoCal shows anticipated deliveries of gas for electrical generation through October 1975.

Periodic estimates of anticipated gas supplies are being provided to the affected electrical utilities. All of these electric utilities are faced with the problem of obtaining fuel oil to meet their full potential requirements on the SoCal system beginning in the latter part of this year, and of the necessity of providing storage, and/or other facilities to accomplish this purpose. In order to prevent one of the electric utilities from being faced with actual load curtailment as a result of the reallocation ordered herein (e.g., SDG&E or IID) the G-58 and G-61 contracts should be modified to provide for emergency supplies over and above the potential deliveries for steam electric purposes,

possibly by an arrangement similar to that which has been afforded to Edison by PG&E at Edison's Coolwater plant. Edison obtains gas deliveries at Coolwater over and above its entitlement from PG&E[21/] by paying for the additional gas the equivalent price of fuel oil to PG&E. Such a provision should be subject to the ability of the electric utility giving up gas to meet its own generating requirements. Prudent electric utility management should be making the necessary arrangements to utilize oil for all of its requirements which are now met by SoCal.

SoCal states that Decision No. 80430 requires it to curtail its B- through E-block regular interruptible customers and firm customers, if necessary, to meet the annual floor of deliveries to SDG&E. The highest priority of gas which can be utilized for SDG&E's G-54 deliveries is its A-block priority. SDG&E's tariffs provide that gas cannot be delivered under SDG&E's A, S-1, or S-2 priorities if higher priority B-block gas is being curtailed. SDG&E's regular interruptible customers are curtailed in parallel with SoCal's regular interruptible customers. At the present time SDG&E supplies regular interruptible service under B to E priorities.

SDG&E is correct in stating that SoCal need not provide deliveries to meet the floor if no A-block gas is available.

Interim Order

SDG&E contends that we cannot go forward and reallocate gas on an interim basis without having completed the environmental

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21/ PG&E's ability to provide higher levels of service to its electric generating customers than SoCal can provide to its G-58 and G-61 customers is not germane to this proceeding.

procedures set forth in Rule 17.1 of our Rules of Practice and Procedure. SDG&E ignores the discussion of this issue contained in Decision No. 83573. We said:

> "The presiding examiner also received briefs regarding whether the Commission should issue an interim order either reallocating gas supplies or preserving the status quo pending issuance of a final decision after completion of the CEQA proceedings.
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> * * *
>
> "Applicant anticipates further deterioration in the level of available gas supplies to meet steam plant requirements after 1974. Applicant states that Canadian opposition will prevent several utilities, including itself, from obtaining a hoped-for gas supply (see discussion on pages 7 and 73 of Decision No. 83160). The record shows that completion of the CEQA procedures, if an EIR is required, may take over one year. [Emphasis added.]
>
> "We concur with the examiner's ruling that there should be an expeditious resolution by interim order of whether or not the denial of reallocation (i.e., preservation of the floor) will result in unreasonable discrimination for the future. The examiner stated that after the receipt of evidence the matter should be submitted for interim order after short oral arguments covering the concepts involved; that environmental evidence will be taken for consideration in an interim order; and that if the record discloses that there is unreasonable discrimination, such discrimination should not continue without any action on our part pending final preparation of all necessary documents to conform to the CEQA procedures. These rulings are reasonable. If unreasonable discrimination does not exist the CEQA procedures are moot. If an unreasonable discrimination exists, the CEQA procedures will be fully complied with prior to our issuance of a final order in Phase II.

"Edison petitioned the Commission to issue an interim order, pending final disposition of the issues, containing indemnification provisions. Edison contends that such an interim order would lawfully promote the ends of justice in light of the prima facie showings of disparities in projected 1974 levels of service for electric utility generation contained in this record; that most of the gas under consideration is for the same end use, utility electric generation; that there are inordinate cost differences between natural gas and low sulphur fuel oil (the higher-priced fuel needed if the gas is not used for generation); and that this procedure will eliminate the possibility of any advantage accruing to any party by delaying the Phase II proceedings till the gas supplies available from the applicant are reduced to negligible amounts." (Decision No. 83573 at pp. 5-7.)

Legislative policy on CEQA is contained in Sections 21000 and 21001 of the Public Resources Code.

Section 21001 states in part:

"21001. The Legislature further finds and declares that it is the policy of the state to: (a) Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state....(d) Ensure that the long-term protection of the environment shall be the guiding criterion in public decisions...." (Emphasis added.)

The Supreme Court in No Oil, Inc. v City of Los Angeles (1975) 13 C 3d 68 recognized the long-term protection requirement when it quoted CEQA approvingly: "In CEQA, the Legislature sought to protect the environment by the establishment of administrative procedures drafted to 'Ensure that the long-term protection of the environment shall be the guiding criterion in public decisions.'" (13 C 2d at 74.) The action we are taking herein will have short-term

rather than long-term consequences. The procedural constraints of CEQA, when applied to the special fact situation in this proceeding, operate to defeat rather than promote the salutary purposes sought to be achieved by CEQA. The record in this proceeding shows that, whether or not reallocated, it is probable that all gas subject to reallocation will be gone by the end of October 1975. The record in this proceeding has dealt substantially with the environmental issues.

The staff estimated that it would take roughly nine months after receipt of an EDS to complete a Draft EIR (see T-2236 ff). The examiner estimated that there would be a two-month review period of the Draft EIR; that another month would probably be required for hearings on the Draft EIR; that additional time would be needed for the preparation of a Final EIR by the examiner; and that review and comments on the Final EIR would take another one and one-half months. All of this time would have to pass prior to the preparation and issuance of a decision based on the Final EIR.

Edison filed its EDS accompanied by a motion for a Negative Declaration on March 20, 1975. San Diego and SDG&E filed pleadings in opposition to the Edison motion. The Commission staff has circulated Edison's EDS for review and comments and is proceeding with its obligations under CEQA. It is reasonably certain that by the time a Draft EIR is completed, circulated, modified, heard, and an EIR is prepared, circulated, considered, and a final decision rendered, there would be no gas left to reallocate. (This result would occur even if Edison had filed its EDS in October 1974 rather than March 1975.) On the other hand, there is some evidence that additional gas supplies may become available so it is necessary to complete the requirements of CEQA. This Commission would fail in the exercise of its constitutional mandate in implementing the powers conferred upon it by the Legislature, which include Sections 451, 453, and 454 of the Public Utilities Code, if it permitted the perpetuation

of unjust, unreasonable, and discriminatory rates and service. Our action herein is necessary to fulfill those obligations while there is A-block gas available for reallocation and sale to SoCal's G-58, G-53-T, G-60, and G-61 customers.

CEQA should not be interpreted to place form before substance; to do so could result in an order requiring reallocation when there is no gas to reallocate. (Cf. Atlanta Gas Light Co. v FPC (5th Cir 1973) 476 F 2d 142; American Smelting & Refining Co. v FPC (DC Cir 1974) 494 F 2d 925.) Strict adherence to the CEQA procedures would prevent this Commission from eliminating discrimination and from mitigating short-term air quality effects both in the greater Los Angeles area and in San Diego County by changing gas delivery patterns by SoCal and by SDG&E.

This interim decision implements Section 21000(g) of the Public Resources Code:

> "It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage."

San Diego and SDG&E participated fully in developing a complete record on the negative environmental aspects of this project on the San Diego area. This opinion sets forth their evidence and arguments and provides for mitigating the adverse environmental impacts of reallocation on SDG&E and provides for a new method of delivering available gas to customers affected by reallocation to reduce air pollution downwind of their plants. Because of these adverse effects and method of mitigation, a Negative Declaration is not appropriate.

Case No. 9884 dated March 11, 1975, the investigation on the Commission's own motion into the establishing of priorities among the types of categories of customers of every electrical corporation and every gas corporation in the State of California and among the uses of electricity or gas by such customers, states in part:

> "The operation of a plan for the allocation of gas, or electricity during a period of continuing shortages, must not be deferred until the full panoply of CEQA procedures has been followed where, as now in the case of gas, there is a real and urgent need for the present operation of an allocation plan. If such a plan could not be placed into effect for perhaps several years pending resolution of inevitable environmental controversies under CEQA, we would be confronted with a statutory impossibility to perform our primary constitutional and statutory responsibilities of assuring safe, reliable and efficient operation of gas and electric utilities for the public benefit. Moreover, the constraints of time in SB-1476 itself seem to preclude a full development of CEQA procedures in the establishment of an initial set of priorities for the allocation of gas and electricity.
>
> "Accordingly, the procedures of CEQA will not be required with respect to the initial setting up of priorities for the allocation of gas and electricty in time of shortages thereof. If it appears during these proceedings that CEQA requirements are applicable, subsequent hearings will be set for the fulfillment of those requirements and possible further refining of the allocation priority systems as initially established.
>
> This is not to say that environmental issues will not be considered herein. When environmental issues are brought to light by our staff, or other parties, appropriate findings will be made thereon."

Environmental Impact

The issue of the environmental impact of reallocation was raised by San Diego. SoCal, Edison, SDG&E, and San Diego all made presentations on the environmental impact of reallocation.

The environmental impacts of reallocation of gas relate to the combustion by-products released into the atmosphere when either gas or fuel oil are burned for generating electricity, or for industrial uses, and of the interaction of these by-products, including interactions with other air pollutants, usually in the presence of sunlight. The production of oxides from such interactions could not be quantified in this proceeding. The effect of reallocation in the San Diego area would be to require burning of greater amounts of fuel oil in SDG&E's generating stations, primarily at its South Bay plant, to substitute for lost volumes of gas. In four affected air basins within the SoCal service area there would be a greater availability of gas and a decline in usage of fuel oil to SoCal's G-58 and G-53-T customers. The evidence shows that the only air basins where possible significant air quality changes might occur would be in the South Coast Air Basin (SC Basin) primarily the greater Los Angeles area, and the San Diego Air Basin (SD Basin). The burning of fuel oil releases greater quantities of nitrogen oxides ($NO_x$) into the atmosphere than does the burning of gas to meet a given heating requirement. Standards have been set for concentrations of one constituent of $NO_x$, namely, nitrogen dioxide ($NO_2$). The burning of fuel oil releases quantities of sulfur dioxide ($SO_2$) and of particulate matter which are not present in the by-products of burned natural gas.

The testimony of the company witnesses of SoCal and Edison showed various air pollution standards, and the anticipated tonnage of contaminants which would be released into the atmosphere if parity, modified parity, or the floor governed SoCal's allocations.

Their testimony stressed the far greater level of pollution in the SC Basin as opposed to the SD Basin. Edison contends that maximum concentrations of these contaminants exceeded Federal Environmental Protection Agency (EPA) standards in the SC Basin but did not exceed EPA standards in the SD Basin.

SoCal's estimate for its average year 1974 shows that on an average day under the floor there would be 30.1 tons of $NO_x$ produced in SDG&E's steam plants, plus 45.5 tons of $SO_2$, and 4.5 tons of particulates. On a parity basis these quantities would increase[22/] to 31.2 tons per day of $NO_x$, 52.4 tons of $SO_2$, and 5.2 tons of particulates. Edison modified a 1970 inventory of air contaminants in the SC and SD Basins to show changes in generating loads and the anticipated effects of gas reallocation, and derived the concentration of these contaminants as follows:

Projected Maximum Annual Pollutant Concentration
1974

| Curtailment Method | Nitrogen Dioxide in ppm | Sulfur Dioxide in ppm | Particulates in $ug/m^3$ annual geometric mean |
|---|---|---|---|
| | **South Coast Air Basin** | | |
| Floor | 0.094 | 0.055 | 108 |
| Parity | 0.094 | 0.055 | 108 |
| Modified Parity | 0.094 | 0.055 | 108 |
| | **San Diego Air Basin** | | |
| Floor | 0.025 | 0.008 | 58 |
| Parity | 0.025 | 0.009 | 58 |
| Modified Parity | 0.025 | 0.009 | 58 |
| | **National Standards** | | |
| | 0.05 | 0.03 | 75 |

22/ There would be a lesser increase in switching from the floor to modified parity.

SDG&E presented evidence showing that there were later emissions inventory data for the SC Basin and the SD Basin; that between 1970 and 1972 pollutants in the SC Basin changed as follows: $NO_x$ increased by two percent, $SO_2$ increased by 30 percent, and particulates increased by 15 percent; that the corresponding changes for the SD Basin were $NO_x$ increased by 37 percent, $SO_2$ increased by 51 percent, and particulates decreased by 67 percent; that measured maximum pollutant concentrations differ from changes in pollution discharges; that use of long-time periods and averaging on a basinwide basis tend to obscure the actual changes in air quality impact which would result from reallocation of gas.

SDG&E stressed localized effects downwind of its South Bay plant where it anticipated most of the substitution of fuel oil for gas would have to take place in the event parity was instituted. SDG&E stressed percentage changes in levels of contaminants under various meterological conditions and extreme adverse short-term ground level concentrations which might be expected if oil was substituted for gas at South Bay. Table 1 shows SDG&E's estimates of maximum one hour concentrations of $NO_2$ burning oil only and burning gas only at various generating stations in the SC and SD air basins under three meteorological conditions: limited mixing (LM), regular dilution (RD), and plume breakup (PB). These estimates were based on modifications to EPA's programs developed by the consulting firm engaged by SDG&E, SAI.[23/]

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23/ Edison has employed the services of SAI for other studies.

Table 1

SDG&E Estimate of Maximum[24/]
One Hour Concentration of $NO_2$

| Company[a/] & Plant | Capacity in MW | $NO_2$ Full Load on Oil (ppm) Meteorological Conditions | | | $NO_2$ Full Load on Gas (ppm) Meteorological Conditions | | |
|---|---|---|---|---|---|---|---|
| | | LM | RD | PB | LM | RD | PB |
| E Mandalay | 430 | .04 | .04 | .32 | .04 | .03 | .28 |
| E Ormond Bch. | 1,500 | .31 | .17 | 1.42 | .22 | .12 | 1.02 |
| D Valley | 510 | .13 | .10 | .81 | .08 | .06 | .54 |
| B Burbank [b/] | 175 | .02 | .05 | .46 | .02 | .05 | .46 |
| G Glendale | 150 | .02 | .10 | .83 | .02 | .10 | .83 |
| P Pasadena [c/] | 230 | .05 | .18 | 1.58 | .05 | .18 | 1.58 |
| E Etwinda | 1,024 | .09 | .08 | .71 | .05 | .05 | .40 |
| E San Bernardino | 124 | .02 | .12 | 1.02 | .01 | .09 | .77 |
| E. Highgrove | 154 | .04 | .21 | 1.81 | .03 | .13 | 1.09 |
| D Scattergood | 310 | .12 | .13 | 1.11 | .06 | .07 | .60 |
| E El Segundo | 1,020 | .10 | .10 | .83 | .09 | .08 | .72 |
| E Redondo Bch. | 1,310[d/] | .13 | .10 | .89 | .11 | .09 | .77 |
| D Harbor | 355 | .17 | .12 | 1.03 | .15 | .11 | .93 |
| E Long Bch. | 0[e/] | - | - | - | - | - | - |
| E Alamitos | 1,950 | .19 | .16 | 1.33 | .14 | .11 | .94 |
| D Haynes | 1,580 | .24 | .15 | 1.33 | .11 | .07 | .64 |
| E Hunt. Bch. | 870[f/] | .10 | .09 | .73 | .08 | .07 | .56 |
| S Encina | 589 | .86 | .08 | .71 | .04 | .05 | .45 |
| S Sta. B | 65 | .02 | .06 | .54 | .01 | .04 | .33 |
| S Silver Gate | 252 | .03 | .10 | .83 | .02 | .07 | .61 |
| S South Bay | 689 | .07 | .08 | .71 | .03 | .04 | .32 |

California one hour standard 0.25 ppm

a/ E - Edison D - DWP G - Glendale B - Burbank P - Pasadena S - SDG&E

b/ Magnolia and Olive Stations

c/ Broadway and Glenarm Stations

d/ Plus 1,530 MW not in use 11/17

e/ 360 MW cold standby

f/ Plus 121 MW peaking unit

24/ SDG&E originally made an error in calculation resulting in higher concentrations than shown above and characterized its original calculation as representing "very adverse" conditions.

Table 1 shows that if SDG&E's South Bay plant utilized all oil or all gas at full load the following one hour maximum $NO_2$ concentrations could occur:

| Extreme Meteorological Condition | Oil | | Gas | |
|---|---|---|---|---|
| | Conc. in ppm | % Calif. 1 hour Standard | Conc. in ppm | % Calif. 1 hour Standard |
| Limited Mixing | 0.07 | 28 | 0.03 | 12 |
| Regular Dilution | 0.08 | 32 | 0.04 | 16 |
| Plume Breakup | 0.71 | 284 | 0.32 | 128 |

SDG&E's consultant testified that a maximum plume breakup condition could be expected to occur once in several years, based upon SAI programs.

The evidence shows that there are few air quality measuring stations in the SD Basin and that most of the earlier measurements were not representative of the emissions which came from the South Bay plant. SDG&E recently established a weather station downwind of South Bay and used weather data from this station in its analysis.

SoCal's environmental witness testified that the acute health problems were associated with short-term high level concentrations of pollutants.

The Health Officer of San Diego County, who also held the title of Air Pollution Control Officer for the county, testified for San Diego in opposition to reallocation. He was primarily concerned with the 609.2 tons per year (13.7 percent) increase of oxides of nitrogen which would be produced from SDG&E's South Bay power plants as a result of parity. He was also concerned with increases in sulfur dioxide and particulates. He testified that hydrocarbons, $NO_x$,

and ozone interreact under an inversion layer in the presence of sunlight in a manner which affects people with chronic lung disease and heart trouble, which irritates eyes, noses, and throats, which affects plants, soils materials, and cracks rubber; that state and federal ambient air quality pollutant standards were developed in response to research reports on adverse effects from the above mentioned pollutants; that he desired to reduce pollutants in the SD Basin and meet ambient air standards at all times; that such standards have built in safety features; that the State Air Resources Board requires that these standards be met by 1977; that San Diego County established more stringent rules to control discharge levels of pollutants, e.g., reduction of the concentration of $NO_x$ to 125 ppm using gas and 225 ppm using fuel oil, requiring the use of low sulfur fuel oil for large boilers, and regulations to reduce particulate discharges; that state and federal governments are controlling automobile exhaust discharges of $NO_x$; and that he was encouraging the use of nuclear plants to generate power for the SD Basin.

He further testified that with the control strategies in force the State Air Resources Board did not anticipate that the San Diego Basin would have a problem in meeting the ambient $NO_2$ standards in 1977, but that the effects of gas reallocation were not considered by the Board; that $SO_2$ emissions were not a problem and he did not foresee them being a problem in the future; that there were excessive levels of particulates and of oxidants; that transport of contaminants from the SC Basin and from Mexico caused episodes where federal standards were exceeded, that particulate concentrations at San Ysidro, which were nearly double that recorded at any other monitoring station, are a result of emissions from uncontrolled particulate sources south of the border[25/] (e.g., unregulated open

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25/ In the first quarter of 1974 the state particulate standards were exceeded 80 percent of the time and the federal standards were exceeded 20 percent of the time at San Ysidro.

burning of combustible refuse); that in 1973 the more stringent state particulate standards were exceeded at all monitoring stations while the federal standards were exceeded one percent of the time at one station; that SDG&E advised his office that their fuel oil usage would increase from 3-1/2 million barrels in 1969 to eight to nine million barrels in 1974, and to about 20 million barrels in 1980.

Exhibit 80-1 shows that the maximum one-hour average of $NO_2$ measured in downtown San Diego was 0.20 ppm in 1973 and in 1974. The one-hour $NO_2$ highs measured at Oceanside were 0.27 ppm in 1973 and 0.15 ppm in 1974.

If past increases in fuel oil usage by SDG&E and expected increases to an anticipated usage of 20 million barrels of fuel oil by 1980 would not pose problems in meeting the 1977 $NO_2$ or $SO_2$ standards, it is difficult to envision how an increase of under two million barrels of fuel oil as a substitute for gas, under a parity situation reallocation of gas, would prevent the realization of the $NO_2$ and $SO_2$ standards.

The record does not indicate if particulate standards could be met absent the transportation of particulates from other air basins. The ambient measurements are so far in excess of any predicted concentrations emanating from the South Bay plant that it is unlikely that a switch from floor to parity deliveries would significantly affect meeting the 1977 standards, even if SoCal could supply substantial volumes of gas for electric generation purposes in 1977. This situation would require a substantial augmentation of SoCal's gas supply between the winter of 1976 and the winter of 1977 since no SDG&E G-54 deliveries are anticipated in 1976.

The following tabulation shows the change in fuel mix used at SDG&E's fossil fuel generating plants from 1967 to 1973:

Fuel Burned For SDG&E
Electric Generation
1967-1973

| Year | Residual Oil (Bbl) | Diesel Oil (Bbl) | Natural Gas ($M^2$cf) | Total Fuel: expressed as Gas ($M^2$cf) | Gas Level of Service in Percent |
|---|---|---|---|---|---|
| 1967 | 814,533 | 1,755 | 40,748.0 | 45,875.0 | 88.8 |
| 1968 | 1,304,148 | 9,311 | 40,470.4 | 48,707.3 | 83.1 |
| 1969 | 1,701,182 | 22,302 | 39,149.9 | 50,007.6 | 78.3 |
| 1970 | 2,276,560 | 39,968 | 41,216.4 | 55,781.6 | 73.9 |
| 1971 | 3,356,865 | 120,839 | 42,541.5 | 64,347.3 | 66.1 |
| 1972 | 5,047,755 | 123,543 | 42,541.9 | 74,789.1 | 56.9 |
| 1973 | 8,274,718 | 83,273 | 32,201.2 | 84,229.9 | 38.2 |

The following tabulation shows SDG&E's estimates of tonnages of contaminants produced by fuel source for 1967 to 1973:

Tonnage Of Contaminants
Discharged By SDG&E
1967-1973

| Year | Oxides of Nitrogen (Tons Per Year) | | | |
|---|---|---|---|---|
| | Gas | Residual | Diesel | Total |
| 1967 | 4,276 | 881 | 1.5 | 5,159 |
| 1968 | 4,249 | 1,410 | 8.0 | 5,667 |
| 1969 | 4,105 | 1,840 | 19 | 5,964 |
| 1970 | 4,315 | 2,462 | 34 | 6,811 |
| 1971 | 4,437 | 3,630 | 104 | 8,171 |
| 1972 | 4,431 | 5,459 | 106 | 9,996 |
| 1973 | 3,310 | 8,949 | 72 | 12,331 |

| Year | Sulfur Dioxide (Tons Per Year) | | | |
|---|---|---|---|---|
| | Gas | Residual | Diesel | Total |
| 1967 | - | 4,031 | 1.6 | 4,033 |
| 1968 | - | 6,455 | 8.4 | 6,463 |
| 1969 | - | 8,421 | 20 | 8,441 |
| 1970 | - | 11,269 | 36 | 11,305 |
| 1971 | - | 10,892 | 109 | 11,001 |
| 1972 | - | 8,328 | 111 | 8,439 |
| 1973 | - | 13,653 | 75 | 13,728 |

| Year | Particulates (Tons Per Year) | | | |
|---|---|---|---|---|
| | Gas | Residual | Diesel | Total |
| 1967 | - | 183 | .3 | 183 |
| 1968 | - | 293 | 1.6 | 295 |
| 1969 | - | 383 | 3.9 | 387 |
| 1970 | - | 512 | 7.0 | 519 |
| 1971 | - | 755 | 21 | 776 |
| 1972 | - | 1,135 | 22 | 1,157 |
| 1973 | - | 1,862 | 15 | 1,877 |

SDG&E's estimates of tonnage of contaminants which would be produced by its generating plants in 1974 under the floor, parity, and modified parity are tabulated below:

Estimated Tonnage Of
Contaminants Discharge 1974

| Delivery Method | Oxides Of Nitrogen (Tons Per Year) | | |
|---|---|---|---|
| | Natural Gas | Fuel Oil | Total |
| Floor | 2,044.0 | 8,942.5 | 10,986.5 |
| Parity | 1,058.5 | 10,329.5 | 11,388.0 |
| Modified Parity | 1,095.0 | 10,256.5 | 11,351.5 |

| Delivery Method | Sulfur Dioxide (Tons Per Year) | | |
|---|---|---|---|
| | Natural Gas | Fuel Oil | Total |
| Floor | - | 16,607.5 | 16,607.5 |
| Parity | - | 19,126.0 | 19,126.0 |
| Modified Parity | - | 19,016.5 | 19,016.5 |

| Delivery Method | Particulates (Tons Per Year) | | |
|---|---|---|---|
| | Natural Gas | Fuel Oil | Total |
| Floor | - | 1,642.5 | 1,642.5 |
| Parity | - | 1,898.0 | 1,898.0 |
| Modified Parity | - | 1,898.0 | 1,898.0 |

SDG&E's estimates of annual changes in emission from prior years are tabulated below:

Change In Total Emissions By Year 1968-1974

| Year | | | Total Change | Percent Change |
|---|---|---|---|---|
| **Oxides Of Nitrogen (Tons Per Year)** | | | | |
| 1968 | | | 508.0 | 9.8 |
| 1969 | | | 297.0 | 5.2 |
| 1970 | | | 847.0 | 14.2 |
| 1971 | | | 1,360.0 | 20.0 |
| 1972 | | | 1,825.0 | 22.3 |
| 1973 | | | 2,335.0 | 23.4 |
| 1974 | (Estimated) | Floor | (1,344.5) | (10.9) |
| | | Parity | (943.0) | (7.6) |
| | | Modified Parity | (480.0) | (7.9) |
| **Sulfur Dioxide (Tons Per Year)** | | | | |
| 1968 | | | 2,430.0 | 60.3 |
| 1969 | | | 1,978.0 | 30.6 |
| 1970 | | | 2,864.0 | 33.9 |
| 1971 | | | (304.0) | (7.7) |
| 1972 | | | (2,562.0) | (23.3) |
| 1973 | | | 5,289.0 | 62.7 |
| 1974 | (Estimated) | Floor | 2,879.5 | 20.9 |
| | | Parity | 5,398.0 | 39.3 |
| | | Modified Parity | 5,288.5 | 38.5 |
| **Particulates (Tons Per Year)** | | | | |
| 1968 | | | 112.0 | 61.2 |
| 1969 | | | 92.0 | 31.2 |
| 1970 | | | 132.0 | 34.1 |
| 1971 | | | 257.0 | 49.5 |
| 1972 | | | 381.0 | 49.1 |
| 1973 | | | 720.0 | 62.2 |
| 1974 | (Estimated) | Floor | (234.5) | (12.5) |
| | | Parity | 21.0 | 1.1 |
| | | Modified Parity | 21.0 | 1.1 |

The following tabulations show Edison's estimates of maximum annual concentrations of $NO_2$, $SO_2$, and particulates expressed as micrograms per cubic meter (ug/ $m^3$), State and National Ambient Air Quality Standards, and the ratio of concentrations to the standards under floor and parity conditions:

| | Maximum Annual Concentrations of Pollutants in Micrograms per cubic meter | | | |
|---|---|---|---|---|
| Pollutant | Floor | Parity | National Standards | State Standards |
| $SO_2$ | 0.68 | 1.06 | 80 | |
| $NO_2$ | 0.56 | 0.66 | 100 | |
| Particulates | 0.09 | 0.14 | 75 primary | 60 |
| Particulates | | | 60 secondary | |

| | Maximum Annual Ground-Level Concentrations As Percentages of National Standards | | Percentage Increase from floor to parity |
|---|---|---|---|
| Pollutants | Floor | Parity | |
| $SO_2$ | 0.85 | 1.35 | 55 |
| $NO_2$ | 0.56 | 0.66 | 18 |
| Particulates | 0.12 | 0.19 | 55 |
| | Percentage of State Standards | | |
| Particulates | 0.15 | 0.23 | |

Other air quality standards are:

(a) Sulfur Dioxide

California

24 hour - 0.10 ppm or 260 ug/$m^3$
1 hour - 0.5 ppm or 1,310 ug/$m^3$

National

24 hour primary - 365 ug/$m^3$ or 0.14 ppm
3 hour secondary - 1,300 ug/$m^3$ or 0.5 ppm

(b) Suspended Particulate Matter

California

24 hour - 100 ug/$m^3$

National

24 hour primary 260 ug/$m^3$
24 hour secondary 150 ug/$m^3$

(c) Nitrogen Dioxide

California

1 hour - 0.25 ppm or 470 ug/$m^3$

Edison's witness states that these annual values assume 100 percent conversion of $NO_x$ which he feels are probably overstated by at least 50 percent; that the above tabulated ground level concentrations are less than those allowed in a Class I (best air quality) area under EPA's recently promulaged significant detereoration regulations; that if background values for the several pollutants were taken into consideration the percentage increases in ground level concentrations in going from floor to parity in average year 1974 would be about one percent because of the higher starting levels; that he concludes that the minute differences between annual ground level concentrations which would result from the operation of SDG&E's South Bay plant under floor and parity conditions cannot be measured at all by any known monitoring procedure; that any attempt to differentiate between ground level concentrations of pollutants which would result from parity rather than floor conditions at South Bay in average year 1974 is misleading and unwarranted; and that the South Bay plant can be operated under parity conditions without any deleterious effect on the air quality of SD Basin.

Edison's study shows the following $SO_2$ rates for the four South Bay steam plant units; Unit 1 - 325 lb/hr, Unit 2 - 310 lb/hr, Unit 3 - 312 lb/hr, Unit 4 - 126 lb/hr.

The 126 lb/hr average $SO_2$ emission rate for Unit 4, the least used of the units, appears to be about 60 percent low because it includes downtime in the average. It appears that there would be an understatement of hourly emission rates with all four units operating of approximately seven percent for sulfates and particulates and a lesser percentage for $NO_2$.

Edison's study used the average year gas-oil fuel mix at South Bay, Lindberg Field meteorological data, and the EPA Climetological Dispersal Model (CDM).

An SDG&E witness tabulated 1974 gas and oil deliveries anticipated to be made to SDG&E's South Bay plant and ratios of oil to gas based upon:

(a) Monthly, seasonal, and annual gas and oil fuel consumption at SDG&E's South Bay plant using a March 1974 estimate. This estimate showed an annual decline in gas deliveries from 17,767 under the floor to 7,881 $M^2$cf under parity. The difference of 9,886 $M^2$cf, would have to be made up by substitution of fuel oil for gas to meet SDG&E's generating loads.

(b) A similar analysis of 10 months recorded and two months of estimated data for 1974 showing a decline from 14,704 $M^2$cf under the floor to 11,038 $M^2$cf under parity a difference of 3,666 $M^2$cf.

(c) A modification of (b) to eliminate out of pattern deliveries caused by rescheduling gas deliveries destined for SDG&E.

(d) An alternative wherein deliveries in excess of the floor were eliminated by spreading above parity deliveries to South Bay of 9,886 $M^2$cf in six equal increments from the months of May through October 1974.

(e) An alternative wherein deliveries in excess of the floor were eliminated by spreading above parity deliveries to South Bay of 9,886 $M^2$cf in four equal increments from the months of July through October 1974.

The tons of various contaminants produced under floor and parity conditions based upon these fuel usages were shown on a monthly, a seasonal, and an annual basis for all of the alternatives, together with the percentage change for each time span. The accompanying text explained the method used and evaluated the differences expressed as percentage changes to show adverse effects of reallocation.

Edison was critical of the use of SDG&E's methodology of stressing percentage changes of pollutants rather than on absolute levels of pollutant concentrations and permissible limits for such pollutants.

An extreme example of such play on percentages is contained in Table 16 and the accompanying text on pages 3.2-28 and 3.2-29 of SDG&E's Exhibit 106. Table 16 shows, inter alia, an increase in $SO^2$ of 3,798 percent in July 1974 in going from floor to parity, an annual total of 4,563 tons of $SO_2$ under parity, which equals 380 tons per average month, and a production of $SO_2$ in July 1974 of 346.9 tons under parity. Thus in a month where the tonnage of $SO_2$ produced would be lower than the average monthly production of this contaminant the table shows a 38-fold increase in production of this particular contaminant.

SDG&E's witness derived a hypothesis to justify his incredible conclusion that "the maximum impact from burning oil at the South Bay power plant is probably less than the air quality impact that would occur from a switch from floor to parity." (See Exhibit 106 pages 3.4-6 ff).

SDG&E's witness testified that the primary effect of reallocation would be felt in the summer and fall months when most of the additional gas curtailment would occur during periods of adverse meteorological conditions; that the actual rather than the projected deliveries are more realistic; that the plant perameters and emissions used in SDG&E's Exhibit 68 are probably more appropriate for average load conditions at South Bay than for full load conditions and were used in its CDM calculations; that if full load conditions were used for long period air quality calculations it is possible that the predicted maximum air quality impact for the full load situation may be less than that for the average load situation since

the increase in emissions under full load is offset by the increase in plume height leading to greater dispersion of contaminants; that the maximum monthly air quality improvement downwind of the Alamitos plant is 29 percent compared to a 120 percent increase[26/] in air pollution downwind of South Bay in going from all gas to all oil; that institution of parity would double the days under which all oil or mostly oil would have to be burned at South Bay; that there would be a greater impact and a greater probability of higher short-term concentrations of pollutants under these conditions; that differences between day and night production of pollutants and meteorological conditions and carry-over of pollutants from one day to the next when there is a persistent stagnant air condition must be evaluated; that wind speed data "indicates that the moderate to strong critical wind speeds associated with the absolute maximum downhill concentrations from the regular dilution and plume breakup model are within the realm of feasibility"; that measured $SO_2$ concentrations downwind of SDG&E's South Bay power plant "are well below the applicable California and federal air quality standards, but are large enough to be considered significant above the background level and the threshold of detection for the air quality monitoring instrument being used"; that "Significant concentrations of the two pollutants are defined as being $SO_2$ concentrations of greater than or equal to 0.10 ppm and nitrogen dioxide concentrations greater than or equal to 0.25 ppm"; that if Edison's and DWP's G-58 gas were used at their Alamitos and Haynes plants there would be a maximum benefit insofar as lessening the impact of local air pollution and a benefit to the SD Basin in reducing pollution when there was a movement of air from the SC Basin to the SD Basin.

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26/ This improvement downwind of Alamitos or downwind of the closely situated Alamitos and Haynes plants would be greater in absolute magnitude than the total concentration of pollutants downwind of South Bay.

SDG&E's witness testified that the EPA CDM program is not valid in the southern California area; that he was discussing possible changes of the EPA CDM with EPA's meteorologists; that a definitive model validation would be necessary to resolve the issue of which air quality model was the appropriate one to use in the SD Basin; that running its data through the SAI CDM program results in predicted concentrations of pollutants three times higher than the EPA CDM; that Edison's results were understated by approximately 25 percent because of its use of Lindbergh Field meteorological data rather than SDG&E's meteorological station downwind[27/] of South Bay because the prevailing wind directions differed and because the contaminants being discharged from the South Bay plant would be confined to a narrower arc downwind of the plant than would be predicted using the Lindbergh Field data; that there is some preliminary model validation for the LM condition.

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27/ Edison attacks the statistical validity of using short-term wind measurements near SDG&E's South Bay plant.

The following tabulation contains SDG&E's estimate of 1974 annual maximum pollutant concentrations downwind of its South Bay power plant, downwind of Edison's Alamitos plant, and downwind of both the Alamitos plant and DWP's Haynes plant. The appropriate annual standards and the ratio of these discharges to the most stringent annual standards have been incorporated in the tabulation.

SDG&E Estimate of Ground Level Concentrations Of Pollutants Downwind of Selected Power Plants

| Pollutants at Selected Plants | Annual Concentrations Fuel: Oil | Fuel: Gas | Annual Standards: National[a/] | State | Ratio of Oil Concentration to Most Stringent Annual Standard |
|---|---|---|---|---|---|
| **SDG&E South Bay Plant (689 Megawatts)** | | | | | |
| $SO_2$ (ppm) | 0.0034 | 0 | 0.03 | - | 11.3% |
| $NO_2$ (ppm) | 0.0020 | 0.0009 | 0.05 | - | 4.0 |
| Particulates ($ug/m^3$) | 0.9 | 0 | 75[b/] | 60 | 1.5 |
| **Edison Alamitos Plant (1,950 Megawatts)** | | | | | |
| $SO_2$ (ppm) | .0675 | 0 | 0.03 | - | 225 |
| $NO_2$ (ppm) | .0469 | 0.0332 | 0.05 | - | 93.8 |
| Particulates ($ug/m^3$) | 21.7 | 0 | 75[b/] | 60 | 36.2 |
| **Combined Edison Alamitos and DWP Haynes Plants (3,530 Megawatts)** | | | | | |
| $SO_2$ (ppm) | 0.1109 | 0 | 0.03 | - | 369.7 |
| $NO_2$ (ppm) | 0.1008 | 0.0588 | 0.05 | - | 201.6 |
| Particulates ($ug/m^3$) | 33.5 | 0 | 75[b/] | 60 | 55.8 |

a/ Primary standard to be met three years after EPA adoption of implementation plan. Secondary standard to be met within a "reasonable time" after EPA approval of implementation plan. Primary and Secondary levels are the same for $SO_2$ and $NO_2$.

b/ Secondary standard 60 micrograms per cubic meter.

SDG&E's estimate of maximum monthly concentrations of pollutants downwind of certain power plants is tabulated below. There are no monthly national or California standards for these pollutants.

| Pollutants at Selected Plants | Monthly Maximum Concentrations Fuel | |
|---|---|---|
| | Oil | Gas |
| **SDG&E South Bay Plant (689 Megawatts)** | | |
| $SO_2$ (ppm) | 0.0064 | 0 |
| $NO_2$ (ppm) | 0.0038 | 0.0017 |
| Particulates ($ug/m^3$) | 1.7 | 0 |
| **Edison Alamitos Plant (1,950 Megawatts)** | | |
| $SO_2$ (ppm) | .1380 | 0 |
| $NO_2$ (ppm) | .0960 | .0680 |
| Particulates ($ug/m^3$) | 44.4 | 0 |
| **Combined Edison Alamitos and DWP Haynes Plants (3,530 Megawatts)** | | |
| $SO_2$ (ppm) | .2272 | 0 |
| $NO_2$ (ppm) | .2066 | .1204 |
| Particulates ($ug/m^3$) | 68.6 | 0 |

Moderate to strong critical wind speeds are associated with the absolute maximum downwind concentrations under RD or PB conditions. These wind conditions are not necessarily coincident with the attainment of maximum concentrations from pollutant sources other than from generating plants.

SDG&E's March 1974 projection shows that oil usage at South Bay would provide approximately 50 percent of the plant's fuel requirements at the floor level of deliveries and 78 percent of the plant's fuel requirements at parity deliveries. SDG&E's "actual basis"[28/] for ten months recorded and November and December 1974 estimated shows that SDG&E cut "actual" gas usage from its March 1974 projection of 17,767 $M^2$cf to 14,709 $M^2$cf, a decline of 3,058 $M^2$cf, or 17.2 percent, at South Bay while its total G-54 supply increased by approximately 40 percent over earlier estimates and that oil usage represents approximately 56 percent of "actual" South Bay fuel usage at the floor and would have represented approximately 67 percent at parity (See pages 3.2-2 ff of Exhibit 106). SDG&E's maximum South Bay projections show the worst case, a switch from all gas burning to all oil burning.

The record shows that SoCal has flexibility in the scheduling of its gas deliveries to its G-58 customers and to SDG&E's G-54 customer. SDG&E's smaller and older Silver Gate and Station B plants are operated primarily on oil because it is easier for SDG&E to meet the higher $NO_x$ discharge permitted using oil compared to using gas to avoid lowering the allowable generating capacity at these plants. Station B is located in downtown San Diego, a high population density area. Silver Gate is located in an industrial area on the outskirts of San Diego.

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28/ The November and December estimates of deliveries constitute 3.4 percent of total gas deliveries for 1974. The use of purchased liquified natural gas (LNG) from an independent supplier for electric generation was not discussed on this record. LNG vaporization facilities exist at South Bay. SDG&E has contracted for an LNG supply equal to approximately two percent of its South Bay fuel requirements.

Had SDG&E delivered a pro rata proportion of its increased G-54 gas supply to South Bay the air pollution impact of switching from floor to parity would have been lessened considerably for 1974. SDG&E prefers not to use gas at South Bay to lessen incremental costs and reduce total SD Basin emissions.

SDG&E's analysis of maximum ground level concentration of pollutants utilizing all oil or all gas for generating power at its South Bay plant provides the limits of potential maximum levels of pollution which could occur. The use of all oil is not representative of what might be expected on an annual basis for 1974. However, it could well be representative of what might be expected in 1976 when no gas from SoCal is available. The potential for use of all gas at South Bay has disappeared along with the decline in SoCal's supplies. Under parity the frequency of occurrences of higher levels of pollution would increase and there would be a greater possibility of attaining a maximum level.

SDG&E's estimates of increased annual maximum concentrations of particulates and $SO_2$ in switching from all gas to all oil at South Bay are below the respective allowable pollutant concentration increase permitted in a EPA Class I and Class II air quality area. Only 44 percent of the South Bay fuel requirements were supplied by gas under floor conditions for SDG&E's "actual" 1974 estimate.

After 1975 the effects of the switch from floor to parity compared to preserving the floor are as follows:

(a) There would be no effect if no gas could be supplied by SoCal for electric generation.

(b) A change in end-use priorities could further reduce electric generation levels of service compared to what would be obtained under the present price volume priorities regardless of any action taken herein.

(c) There would be little effect if there were a substantial augmentation of SoCal's gas supplies so that it could make deliveries on a parity basis for all of its retail and wholesale customers.

(d) If SoCal should contract for limited added gas supplies which could be made available for electric generation, SDG&E would lose gas in a switch from floor to parity if there was a difference between the quantities of gas required to meet its firm and regular interruptible deliveries and the annual floor.

In order to mitigate potentially high short-term air quality impacts downwind of the South Bay and Encina plants SDG&E should take the following actions:

(a) Monitor meteorological conditions and predictions of expected adverse meteorological conditions in the vicinity of its South Bay and Encina plants.

(b) Work out an arrangement with SoCal's dispatcher to provide available A-block gas during periods of unfavorable meteorological conditions.

(c) Schedule its own deliveries of gas to Encina and to South Bay to minimize pollution during periods of severly adverse meteorological conditions.

SoCal should confer with its G-58 customers to work out a procedure such as outlined above to utilize gas in a manner to minimize air pollution in the SC Basin. Edison and DWP, which have numerous plants in the SC Basin, should review the suggestions of SDG&E's witness concerning the maximum use of gas at locations where air pollution from their steam plants is at a maximum. We do not know what operating problems would be attendant upon our ordering that all of the A-block gas be delivered to a particular plant(s). An effort should be made to ascertain the feasibility of scheduling deliveries of available gas supplies to minimize air pollution particularly when adverse meteorological conditions exist. If such arrangements can be reduced to writing they should be incorporated in SoCal's Tariff Rule 23 and the respective service agreements.

Findings

1. Decision No. 80430 evaluated the requirements of the various utility electric generating customers served by SoCal and the requirements of SDG&E for utility electric generation. The decision established DCQ's to be used for purposes of curtailment of utility electric generating service on a parity basis, which includes a DCQ of 157.1 $M^2$cfd for SDG&E, and also established the floor concept of minimum annual deliveries to SDG&E.

2. Test year 1972 is embodied in Decision No. 80430. Estimated 1972 sales were approximately 979 $M^3$cf, which excluded special contract deliveries of 44 $M^3$cf sold for utility electric generation by SDG&E and SoCal's G-58 customers. Test year 1972 regular G-58 deliveries were 207.275 $M^3$cf.

3. As a result of declines in SoCal's gas supply the floor overrode parity considerations for deliveries destined for SDG&E steam plants in 1974. Deliveries to SoCal's G-58, G-53-T, and G-60 customers and interruptible A-block exchange deliveries were

further curtailed to provide the difference between parity and floor deliveries to SDG&E.

4. The Phase I test year 1974 is embodied in Decision No. 83160. Adopted test year sales contained in Decision No. 83160 total 782,850 $M^2$cf, which includes G-53 deliveries of 60,077 $M^2$cf and deliveries for SDG&E's G-54 customer of 20,809 $M^2$cf. In addition there would be a net injection into storage of 39,354 $M^2$cf to insure adequate supplies for meeting SoCal's peak firm requirements.

5. The Phase I proceedings were necessary to arrive at the required additional revenues to yield a reasonable rate of return for SoCal and Pacific Lighting Service Company based upon existing interruptible service priorities. The issues of further rate modifications, which include priorities of service, and of environmental considerations were deferred to a separate Phase II proceeding.

6. This proceeding is not the appropriate one for determining end-use allocations of gas by SoCal. A common pool concept combining G-53-T, G-53, and G-61 A and S-1 priorities is contrary to the intent of Sections 2771 to 2776 of the Public Utilities Code.

7. In Phase II it is necessary for us to determine the reasonableness of the existing priorities and the resulting levels of service to SoCal's G-53, G-60, and G-53-T customers and to SDG&E's G-54 steam plant customer. An investigation of alternate fuel or energy supplies and the costs related to other fuel or energy supplies used by SoCal's customers for electric generation is not germane to the priority of service issue.

8. All of the bases upon which levels of service were considered herein show an excessive preference and unreasonable discrimination in favor of SDG&E as compared to the G-53 customer class.

9. There are excessive variations in levels of service between the individual G-58 customers.

10. The evidence in the Phase II proceedings shows that undue discrimination would exist if we allowed SoCal to make future deliveries of natural gas based upon present delivery priorities to its G-53-T, G-58, G-60, and G-61 customers.

11. We have an adequate record which will permit us to issue an interim order in SoCal's Phase II rate increase application. The expeditious resolution of our constitutional and statutory obligations to fix just and reasonable rates with no unreasonable discrimination requires the issuance of an interim order based upon our determination that there would be unreasonable discrimination if deliveries are permitted to continue on the present priority basis.

12. The latest estimates made in this proceeding of electric utility requirements on SoCal, which are based upon partially recorded and best estimates for the balance of the 1974 estimated year, are the appropriate ones to use, with a modification related to inclusion of Edison's supply from the city of Long Beach, in the determination of levels of service provided SoCal's G-58 customers and SDG&E's G-54 customer.

13. There is no need to divide the present A-block supplies of gas into a regular interruptible grouping and a steam plant grouping.

14. The total potential A-block requirements for retail and wholesale steam plant use contained in SoCal's Rule 23 should be increased from 525 $M^2$cf to 541 $M^2$cf to include Long Beach's A-block requirement. A-block deliveries to Long Beach are resold to Edison. The corresponding change in SoCal's A-block out-of-state limitation for steam plant use should be an increase from 21 percent to 21.64 percent to incorporate Long Beach's A-block gas. Each of the G-58 customers and SDG&E should be entitled to A-block deliveries of such supplies as are available based upon the pro rata proportion of their total requirements to the total requirements of the group. The

initial percentages of total requirements to be used in apportioning the 541 $M^2$cf potential A-block requirements of the G-58 and G-61 customers should be the percentages shown on the tabulation on page 19 herein. Revised S-1 potential requirements should be determined by subtracting A-block potential requirements from present DCQ's for each of the companies. In the case of Edison, its total requirements should be split into a portion supplied directly by SoCal and a portion supplied on a resale basis from Long Beach. Edison's present DCQ should be increased by 40 $M^2$cfd to reflect inclusion of Long Beach's potential A and S-1 requirements.

15. The above described revision of SoCal's Rule 23 sets up a new system of delivery priorities under which SoCal's G-58 customers and SDG&E's G-54 customers will obtain comparable levels of service. This revision of SoCal's Rule 23 is just and reasonable. Long Beach's sales to Edison should be considered as a portion of Edison's supply from SoCal and Long Beach's potential A and S-1 entitlements should be considered as requirements on SoCal's system.

16. A gas supply which is not a part of SoCal's gas supply should not be considered in determining levels of service, with the exception of out-of-state diversions of SoCal's gas supply or of nonregulated G-58 gas supplies as described on page 23.

17. The decline of gas supplies available for electric generation is continuing. It is not anticipated that any gas will be available for electric generation in 1976. The percentage of deliveries to each of the G-58 customers and G-61 customers should be updated on a monthly basis to equitably apportion the remaining gas supplies by following the procedures outlined in this opinion.

18. Adoption of a modified parity approach would be at variance with the intent of the law contained in recently enacted Sections 2771-2776 of the Public Utilities Code.

19. Continuation of present priority arrangements would result in a subsidy by the G-58 utilities and ultimately their customers of SDG&E and ultimately SDG&E's customers.

20. Appendix B of this decision contains rates which will be authorized which are based upon the parity arrangement adopted herein designed to provide equal levels of service for SoCal's G-58 customers and SDG&E's G-54 customer. The authorized rates eliminate SDG&E's $1,170,000 facility charge and increase commodity charges to SoCal's G-58, G-60, G-61, and G-53-T customers, increase exchange revenues and decrease SoCal's gas costs. The rate increases have been spread on a weighted basis, giving consideration to the differential in levels of service between regular interruptible and utility electric customers and to the Phase I test year 1974 volumes. There will be no net increase in revenues to SoCal arising out of these changes in rates, exchange revenues, and gas costs.

21. SoCal's gas service agreement with SDG&E should be modified to show that:

(a) The daily contract demand relates specifically to SDG&E's firm requirements.

(b) SDG&E's regular interruptible and G-54 service should be curtailed in parallel with SoCal's regular interruptible and G-58 customers.

(c) The make-up gas provisions and the provision that peaking gas volumes are not additive to total volumes deliverable to buyer under other provisions of the agreement (i.e., the annual floor) should be eliminated.

22. The average cost of gas for SDG&E's gas department will change as of the effective date of SoCal's revised Rule 23. SDG&E should be directed to file a purchased gas adjustment clause application for a rate change on a prospective year basis beginning on the effective date of SoCal's Rule 23 filing.

23. SDG&E's electric department expenses will increase because of its need to substitute more costly oil to make up for the decline in gas volumes expected to be available under Schedule G-54 and because of higher average gas costs. SDG&E should be authorized to file a fuel adjustment clause application for rate relief for a prospective period beginning on the effective date of the revised purchased gas adjustment filing.

24. Long Beach will receive increased volumes of A-block gas because of reallocation.

25. Edison is the only utility under our jurisdiction which would benefit from reallocation. Edison should be directed to file an offset rate reduction. Such filings should be based on current estimates.

26. In order to prevent one of the electric utilities from being faced with actual load curtailment as a result of the reallocation ordered herein SoCal should file modified G-58 and G-61 contracts to provide for emergency delivery of gas to a G-58 or G-61 customer which is above its allocated share of gas for steam electric purposes and to provide for compensation to the utility relinquishing gas on an alternative or substitute fuel basis. Such provision should be subject to the ability of the electric utility giving up gas to meet its own generating requirements.

27. The environmental impacts of reallocation of gas relate to the combustion by-products released into the atmosphere when either gas or fuel oil are burned for generating electricity, or for industrial uses, and of the interaction of these by-products, including interaction with other air pollutants, usually in the presence of sunlight.

28. The effect of reallocation in San Diego area would be to require burning of greater amounts of fuel oil in SDG&E's generating stations primarily at its South Bay plant, to substitute for lost volumes of gas. In four affected air basins within the SoCal service area there would be a greater availability of gas and a decline in usage of fuel oil to SoCal's G-58 and G-53-T customers. The only air basins where possibly significant air quality changes might occur would be in the SC Basin primarily the greater Los Angeles area, and the SD Basin.

29. The burning of fuel oil releases greater quantities of $NO_x$ into the atmosphere than does the burning of gas to meet a given heating requirement. Air quality standards have been set for concentrations of a constituent of $NO_x$, namely, $NO_2$. The burning of fuel oil releases quantities of $SO_2$ and of particulate matter which are not present in the by-products of burned natural gas.

30. The degree of air pollution in the SC Basin is far higher than in the SD Basin. Transportation of pollutants from the SC Basin and from Mexico to the SD Basin have caused episodes when federal air quality standards have been exceeded. The effect of the reallocation of gas on the SC Basin will be to reduce air pollution in the SC Basin.

31. Acute health problems have been associated with short-term high level concentrations of air pollutants.

32. SDG&E's oil usage for electric generation has increased by over 7.5 million barrels from 1967 to 1973. SDG&E expects to use approximately 20 million barrels of oil for electric generation by 1980.

33. Reallocation of gas would have required increased oil usage of under two million barrels in 1974. No gas from SoCal is expected to be available for SDG&E electric generation in 1976. The availability of gas for SDG&E electric generation in 1977 is not certain.

34. The Health and Air Pollution Officer of San Diego County was aware of anticipated increases in oil usage for SDG&E's generating plants. He testified that with the county's air pollution control program in force the State Air Resources Board did not anticipate that the SD Basin would have a problem in meeting ambient $NO_2$ or $SO_2$ standards in 1977, but that the effects of gas reallocation were not considered in that determination.

35. SDG&E's estimate of annual maximum concentrations of pollutants, downwind of its South Bay plant burning oil, using short-term weather data from its own weather station and the SAI CDM program, are equal to the following percentages of the most stringent of State or National standards $SO_2$ - 11.3 percent, $NO_2$ - 4.0 percent, and Particulates 1.5 percent. The comparable percentages downwind of Edison's Alamitos plant are $SO_2$ - 225 percent, $NO_2$ - 93.8 percent, and Particulates - 36.2 percent. The comparable percentages downwind of both Edison's Alamitos plant and the nearby DWP Haynes plant are $SO_2$ - 369.7 percent, $NO_2$ - 201.6 percent, and Particulates 58.8 percent.

36. Edison's estimates of annual maximum concentrations downwind of SDG&E's South Bay plant based upon an estimated gas oil-mix, long-term Lindbergh Field meteorological data, and the EPA CDM program show minor increases in ground level concentrations in going from the floor to parity, even when the emission rates for Unit 4 are corrected as described herein.

37. SDG&E's prediction of excessive maximum one hour concentrations of $NO_2$ downwind of South Bay equals 284 percent of the California one hour standard burning oil and 128 percent of the California one hour standard burning gas, based on SAI programs, under a plume breakup meteorological condition which could be expected to occur once in several years. Under limited mixing conditions and regular dilution conditions the maximum one hour concentrations are well below California standards.

38. SoCal has flexibility in the scheduling of its gas deliveries to its G-58 customers and to SDG&E's customers.

39. The EPA is reviewing the objections of SDG&E's consultant as to the validity of the EPA CDM model in Southern California. Further work is necessary to validate the accuracy of the theoretical air quality models.

40. SDG&E has flexibility in delivering gas to its major generating stations. The concern SDG&E expressed at the hearings about adverse effects of increased oil usage at South Bay was not reflected in its distribution of increased overall G-54 gas deliveries.

41. SDG&E should follow the procedures outlined herein to mitigate potentially high short-term air quality impacts downwind of its Encina and South Bay plants.

42. SoCal should confer with its G-58 customers to provide G-58 gas in a manner designed to minimize air pollution in the SC Basin. Edison and DWP should review the suggestions of SDG&E's witness concerning the maximum use of gas at locations where air pollution from their steam plants is at a maximum.

43. SoCal should ascertain the feasibility of scheduling deliveries of available gas supplies to minimize air pollution particularly when adverse meteorological conditions exist. If such arrangements can be reduced to writing they should be incorporated in SoCal's Rule 23 and the respective service agreements.

44. The more critical short-term air quality impact of burning oil rather than gas at SDG&E's South Bay plant can occur at any time under either the floor or parity. In "actual" year 1974, 56 percent of the South Bay plant's fuel requirement was met with oil operating under floor conditions. The percentage of oil would increase under the authorized reallocation.

45. Implementation of the mitigating procedures discussed herein would reduce the more critical short-term air quality impact attendant to reallocation of gas.

46. To prepare an Environmental Impact Report in this proceeding would require at least an additional 12 months. By the time a final decision, based on an EIR, was issued in this proceeding there would be no gas left to reallocate.

Conclusions

1. There has been a drastic decline in gas volumes available to SoCal, most of which was absorbed by increased steam plant curtailments.

2. SoCal's present curtailment practices do not provide for a just and reasonable apportionment of declining volumes of gas available for electric generation by its G-58 customers and by SDG&E's G-54 customer or for a just and reasonable apportionment of gas to its G-53-T or G-60 customers.

3. SoCal's curtailment priorities, which are contained in its Rule 23 should be revised as described herein to provide for a just and reasonable apportionment of declining volumes of gas to be used for electric generation by SoCal's G-58 customer and by SDG&E's G-54 customer and for the apportionment of gas to SoCal's G-53-T and G-60 customers. Further monthly modifications of SoCal's curtailment priorities should be filed to reflect changed gas requirements on the basis described herein, to provide for a just and reasonable apportionment of gas used for electric generation by its G-58 customers and by SDG&E's G-54 customer.

4. SoCal's present rates are just and reasonable based upon present curtailment practices.

5. The revision of rates of SoCal's G-53-T, G-58, G-60, and G-61 customers contained in Appendix B, attached to this order, should be filed to establish just and reasonable rates based upon SoCal's revised curtailment priorities.

6. Revised service agreements between SoCal and its affected retail and wholesale customers should be filed to conform to the new curtailment practices.

7. SoCal, should file modified G-58 and G-61 contracts providing for emergency delivery of gas to a G-58 or G-61 customer which is above its allocated share of gas for steam electric purposes and providing for compensation to the utility able to relinquish gas, on an alternative or substitute fuel basis.

8. SDG&E should consider short-term high pollution concentration impacts as well as incremental cost and total SD Basin emissions in its G-54 dispatching.

9. SDG&E should be permitted to file an application for electric rate relief.

10. Edison should be ordered to file an offset electric rate reduction.

11. SoCal and SDG&E should confer on a procedure for scheduling the dispatch of available A-block or of lower priority gas from SoCal to SDG&E to minimize potentially high short-term air quality impacts in the SD Basin during periods of adverse meteorological conditions. SDG&E should revise its own dispatching procedures to conform to this goal.

12. SoCal and its G-58 customers should confer on a procedure for scheduling the dispatch of A-block or of lower priority gas from SoCal to the G-58 customers to lessen potentially high short-term air quality impacts in the SC Basin during periods of adverse meteorological conditions. Edison and DWP should review the feasibility of utilizing available gas supplies at the most advantageous plant location(s) to minimize air pollution.

13. SDG&E should be ordered to file a revised PGA to reflect changed gas costs.

14. Because there may be no gas to reallocate in 1976 this decision will be made effective on the date of issuance.

INTERIM ORDER ON PHASE II

IT IS ORDERED that:

1. Southern California Gas Company is authorized and directed to file the revised G-53-T, G-58, G-60, and G-61 tariff schedules with changes in rates, charges, and conditions set forth in Appendix B of this decision, and concurrently to cancel its present schedules for these classes of service. Such filing shall comply with General Order No. 96-A. The filing date shall be ten days after the effective date of the order herein. The effective date of the new and revised tariff sheets shall be the date of filing.

2. Southern California Gas Company is authorized and directed to file a revised Rule 23 consistent with Findings 14, 15, 16, and 17 herein. The filing date shall be ten days after the effective date of the order herein. Such filing shall comply with General Order No. 96-A. The effective date of the new and revised tariff sheets shall be the date of filing. The new and revised schedules shall apply only to service rendered on and after the effective date thereof.

3. Southern California Gas Company is authorized and directed to file a new gas service agreement with San Diego Gas & Electric Company in conformity with Finding 21 herein. This agreement shall be filed ten days after the effective date of the order herein. Such filing shall comply with General Order No. 96-A. The effective date of the new and revised gas service agreement shall be the date of filing. If San Diego Gas & Electric Company disputes the language proposed by Southern California Gas Company it shall file a proposed gas service agreement consistent with Finding 21 herein ten days after the effective date of this order. This Commission shall resolve any dispute regarding the new G-61 gas service agreement. In the event of such a dispute Southern California Gas Company's revised Rule 23 shall govern deliveries until the Commission resolves the dispute.

4. San Diego Gas & Electric Company is authorized and directed to file a purchased gas adjustment clause application for a rate change on a prospective year basis beginning on the effective date of Southern California Gas Company's Rule 23 filing.

5. San Diego Gas & Electric Company is authorized to file a fuel adjustment clause application for rate relief for a prospective period beginning on the effective date of the revised purchased gas adjustment filing.

6. Southern California Edison Company is authorized and directed to file an offset fuel adjustment clause application for a rate reduction. This reduction shall be based on reduced fuel costs for a prospective period beginning on the effective date of Southern California Gas Company's Rule 23 filing. This application shall be filed ten days after the effective date of the order herein.

7. Southern California Gas Company is authorized to file modified G-58 and G-61 contracts to provide for emergency delivery of gas to a G-58 or G-61 customer which is above its allocated share of gas for steam electric purposes which provides for compensation to the utility relinquishing gas on an alternative or substitute fuel basis. Such a provision shall be subject to the ability of the electric utility giving up gas to meet its own generating requirements. Southern California Gas Company shall file these contracts on or before ten days after the effective date of this order.

8. San Diego Gas & Electric Company shall monitor predicted and actual meteorological conditions at its South Bay and Encina plants and modify its own G-54 dispatching in a manner designed to minimize potentially high short-term air quality impacts downwind of these plants.

9. Southern California Gas Company shall confer with its G-58 and G-61 customers to determine what modifications of its dispatching procedures are possible to minimize potentially high short-term adverse air quality downwind of the G-58 and G-61 generating plants affected by its deliveries. Southern California Gas Company shall report upon the results of its negotiations concerning revised gas dispatching procedures for electric generation purposes twenty days after the effective date of this order. The report shall include a discussion of concentrating gas deliveries to a plant(s) to minimize potentially high short-term adverse air quality impacts and of proposed meteorological monitoring procedures and reporting to be carried out by Southern California Edison Company, Los Angeles Department of Water and Power, and San Diego Gas & Electric Company. Any revised dispatching arrangements consistent with these objectives which have been reduced to writing shall be incorporated in Southern California Gas Company's Rule 23 and in the respective service agreements with the G-58 and G-61 customers.

10. A final order in this proceeding shall resolve the issues related to Southern California Edison Company's Environmental Data Statement in compliance with Rule 17.1 of this Commission's Rules of Procedure. If necessary, any required modifications to the reallocation procedure, rates, or service agreements ordered herein shall be made.

The effective date of this order is the date hereof.

Dated at San Francisco, California, this 10th day of JUNE, 1975.

Vernon L. Sturgeon
President

William Symons, Jr.

Leonard M. Grimes, Jr.

John Bohnett

Commissioners

APPEARANCES

APPLICANT

Robert Salter and David B. Follett, Attorneys at Law, for Southern California Gas Company.

INTERESTED PARTIES

Chickering & Gregory, by Donald Richardson and David Lawson; and Gordon Pearce, Attorneys at Law, for San Diego Gas & Electric Company.

John W. Witt, City Attorney, by William S. Shaffran, V. P. DiFiglia, and Ronald L. Johnson, Attorneys at Law, for City of San Diego.

Rollin E. Woodbury, Robert J. Cahall and H. Robert Barnes, by H. Robert Barnes, Attorneys at Law, for Southern California Edison Company.

Arthur T. Devine and Frederick H. Kranz, Jr., Attorneys at Law, for Los Angeles Department of Water and Power.

Burt Pines, City Attorney, by Leonard L. Snaider, Attorney at Law; and Manuel Kroman, for Department of Public Utilities and Transportation, City of Los Angeles.

Leonard Putnam, City Attorney, by Harold A. Lingle and Robert W. Parkin, Deputy City Attorneys; and Edward C. Wright, General Manager, Long Beach Gas Department, for City of Long Beach.

Roy A. Wehe, for City of Long Beach and for Imperial Irrigation District.

INTERESTED PARTIES (Continued)

Frank R. Manzano, Senior Assistant City Attorney, and Peter C. Wright, Attorney at Law; and W. H. Fell, by W. S. Miller, for City of Glendale.

Eldon V. Soper, Attorney at Law, and James D. Woodburn; and Warren D. Hinchee, by Lynn L. McArthur, for Public Service Department, City of Burbank.

Earl R. Steen, Deputy City Attorney, for City of Pasadena.

Brobeck, Phleger & Harrison, by Gordon E. Davis, Attorney at Law, for California Manufacturers Association.

Earl A. Radford, Attorney at Law, for Shell Oil Company.

Gary Morrison, Attorney at Law, for Regents of the University of California, Los Angeles.

Hugh M. Flanagan and J. Randolph Elliott, Attorneys at Law, for California Portland Cement Company & Associates.

Evan A. Santell, Attorney at Law, for Atlantic Richfield Company.

Henry F. Lippitt, 2nd, Attorney at Law, for California Gas Producers Association.

FOR THE COMMISSION STAFF

Janice E. Kerr, Attorney at Law, Eugene S. Jones, and Chris Bassett.

APPENDIX B


Rates authorized include tracking offsets and GEDA increases to April 2, 1975.

## SCHEDULE NO. G-53T

RATES

| Commodity Charge: | Per Meter Per Month: |
|---|---|
| Regular Usage: | |
| First 440,000 therms, per therm | 8.452¢ |
| Next 660,000 therms, per therm | 8.223 |
| Over 1,100,000 therms, per therm | 8.058 |
| Special Rate for Air Conditioning Usage, May through October: | |
| First 11,000 therms, per therm | 7.966¢ |
| Next 11,000 therms, per therm | 7.802 |

## SCHEDULE NO. G-58

RATE

The rate for all gas supplied under this schedule is 75.14¢ per million Btu.

## SCHEDULE NO. G-60

RATES

| | |
|---|---|
| Monthly Demand Charge: | |
| Per Mcf of Daily Contract Demand | $3.2502 |
| Commodity Charge, per therm: | |
| Up to 42,500 Mcf on any day | 6.994¢ |
| For usage between 42,500 and 68,000 on any day: | |
| Up to accumulated usage of 1,000,000 Mcf during contract year | 8.412¢ |
| In excess of 1,000,000 Mcf during contract year | 10.781¢ |
| Minimum Annual Charge for Additional Peaking Demand | $172,000 |

SCHEDULE NO. G-61

RATES

| | |
|---|---|
| Monthly Demand Charge: | |
| Per Mcf of Contract Daily Maximum Demand | $2.0278 |
| Commodity Charge, per million Btu | 74.85¢ |
| Additional Peaking Demand Gas: | |
| Annual Charge for Peaking Demand | $286,000 |
| Commodity Charge per million Btu of Monthly Delivery | 94.39¢ |