

Decision No. 87745 AUG 23 1977

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application
of SAN DIEGO GAS & ELECTRIC
COMPANY for review and consider-
ation of Time-of-Day Pricing
Tariffs pursuant to order in
Decision No. 85559 in Case No.
9804.

Application No. 56598
(Filed July 6, 1976)

Gordon Pearce and Vincent P. Master, Jr.,
by Vincent P. Master, Jr., Attorney at
Law, for applicant.

R. D. Leonard, for General Dynamics,
protestant.

John Witt, City Attorney, and Ronald Johnson,
Chief Deputy City Attorney, by William S.
Shaffran, Deputy City Attorney, and M. W.
Edwards, for City of San Diego; Robert A.
Enholm, for Conservation Division, California
Energy Commission; Roy A. Randall, for Pacific
Gas and Electric Company; Carol B. Henningson,
Attorney at Law, and Warren Ferguson, for
Southern California Edison Company; Charles J.
Mackres, Attorney at Law (Indiana), Etta Gail
Herbach, Attorney at Law, and Thomas J. Vargo,
for the United States Navy; E. Neal Arthur,
for Rohr Industries; and Ron Densmore, for
Kelco Co.; interested parties.

Peter Arth, Jr., Attorney at Law, Donald L.
Houck, and Page E. Golsan, Jr., for the
Commission staff.

O P I N I O N

Procedural Background

On August 31, 1974 the California Legislature adopted
Assembly Concurrent Resolution No. 192 (ACR 192) which requested
the Public Utilities Commission to make a thorough investigation of

alternatives to presently constituted rate structures of California electric utilities and of what changes, if any, should be made in such rate structures so that they would tend to discourage, rather than encourage, increased consumption of electricity. Among the alternatives specified by the Legislature was:

- "(4) Requiring new metering which would enable higher prices for consumption of electricity at the demand peaks each day."^{1/}

Pursuant to the request of the Legislature, the Commission instituted Case No. 9804, an order of investigation into electric rate structures. In its second interim report to the Legislature, Decision No. 85015, dated October 15, 1975, in Case No. 9804, the Commission noted,

"During the pendency of the investigation in Case No. 9804 we desire that progress be made in implementing the concept of peak-load pricing. In furtherance of that end, the respondent electric utilities should file specific proposed peak load tariffs by applications or advice letters for review by our staff and interested parties."

Ordering Paragraph 1 of Decision No. 85559 states:

"1. Within sixty days after the date of this order Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (Edison), the three major respondent electric utilities, shall file specific time-of-day pricing tariffs covering large usage customers for whom substantially all the necessary metering equipment has already been installed, by applications or advice letters for review by the staff and interested parties prior to implementation."

^{1/} The entire text of ACR 192 is reproduced as Appendix A of Decision No. 85559, dated March 16, 1976, in Case No. 9804.

SDG&E filed Advice Letter 405-E to implement time-of-day (TOD) pricing by revising the rates of its largest electric customers, served under its Schedule A-6, (A-6), based upon its 1976 test year estimate of sales and demands which were submitted in Application No. 55627. SDG&E complied with staff request to refile the advice letter rates in this application. After notice to the affected parties, hearings were held in the cities of San Diego and Chula Vista on October 25 and 26, 1976 and on March 8, 1977 before Examiner Jerry Levander. The matter was submitted on the latter date. However, additional information contained in Reference Item B was received on April 18, 1977.

SDG&E assumed that there would be a 5 percent decrease in the A-6 customers' contribution to its system peak demand (kw) and a shift of 3 percent of the on-peak consumption (kwhr) to semi-peak consumption, and a 3 percent shift of semi-peak consumption (kwhr) to off-peak consumption and designed rates to produce approximately the same level of A-6 revenues as authorized in Decision No. 85018 dated October 15, 1975 in Application No. 55627.

SDG&E designed revised A-6 rates to encourage the affected customers to shift their demands and consumption away from system peak periods, by reducing their loads as the SDG&E system approaches peak conditions, through efficient scheduling of energy utilization and adjustment of loads. SDG&E indicates that these large customers may experience a decrease in their electric bills. The following significant differences exist between its existing and proposed A-6 tariff:

- (1) The applicability clause was modified to make the schedule mandatory for existing customers and to provide for the transfer to A-6 of any customer whose peak demands exceeded 4,500 kw for three consecutive months. A customer whose maximum monthly demand fell below 4,000 kw for 12 consecutive months could elect to

continue service under A-6 or be served under any other applicable schedule.

- (2) TOD would be accomplished through utilization of three different time-price periods, (1) on-peak, (2) semi-peak, and (3) off-peak. There would be a different energy charge for each of these time periods and in addition, an on-peak demand charge based upon a customer's contribution to SDG&E's monthly system peak.
- (3) Due to incorporation of a monthly system peak in the rate schedule operation, customers on this schedule would be billed on a calendar month basis.
- (4) The limitation of monthly family service on the schedule would be deleted.
- (5) Due to the mandatory applicability of the schedule the long-term customer contract requirement and customer termination provisions would be deleted and a reconnection charge would be substituted.

SDG&E states that in addition to the conservation of energy (which was not quantified), one of the principal aims of the TOD concept is to reduce peak demand on the utility system through efficient allocation of electricity, which would postpone the need for installation of additional generating capacity to meet peak demand periods; that there would be long-term benefits to it in deferring or reducing the financing and installation of additional units and to the A-6 customers in its deferral of rate increases to meet the revenue requirements associated with such additions; and that any revenue reduction due to load shifting and efficient allocation would have an immediate impact on the customer.

SDG&E has shifted to a summer peaking system. Such peaks are primarily related to periodic incidences of hot weather precipitating the addition of large air-conditioning loads on its system. SDG&E states that its peak is more closely related to a specific base temperature pattern rather than a general seasonal weather

pattern; that the greatest demand control benefit which can be obtained from its large customers will result from close cooperation between itself and the A-6 customers on days of particularly adverse hot weather conditions; that the demand concept embodied in its TOD rates is designed to encourage such cooperation; that TOD would encourage more efficient use of its available capacities through system load leveling and a reduction in the growth of its peak system demand; that it has limited knowledge of the ability of its large customers to adjust their usage and peak-loads or of the effects of price elasticity on consumption and demand; that in the preparation of a TOD schedule it made assumptions regarding the decrease in the total A-6 contribution, as opposed to individual A-6 customer contributions, to system peak demands and to shifts in consumption between time periods; and that the tariff was designed to encourage all members of the class to effect whatever decreases in demand and shifts in usage as are possible. SDG&E's studies of system costs indicate that differential pricing between time periods is necessary to indicate periods of preferred energy usage. Edison did not propose differential pricing between time periods.

SDG&E's TOD proposal differs from those of PG&E and of Edison because it places responsibility on its A-6 customers to attempt to reduce their respective peak demands at the time of SDG&E's monthly system peak as opposed to reducing the absolute magnitude of their peak demands any time during the on-peak time intervals. In order to accomplish maximum potential peak-load reduction SDG&E will explain the TOD concept to each A-6 customer and will supply each A-6 customer with its estimate of the average-load profile for the next month and its estimate of the next monthly peak-load profile. ✓

SDG&E is designing and ordering equipment to transmit a real-time digital signal which will show the system load at any

given time. SDG&E's cost would be approximately \$14,000 for this equipment. By letter dated April 15, 1977 (Reference Item B), SDG&E supplied a revised estimate of the earliest date the signal could be made available, about 90 days from the date of the letter. The A-6 customer would have to obtain a telephone lease line and terminal equipment to obtain the signal results. An A-6 customer might be provided with a sufficient rate incentive to justify the installation of a load control system, interfaced with the signal, which could modify its operations by eliminating electric load to reduce its own contribution to SDG&E's peak demands. SDG&E would give the A-6 customers their best forecast of the peak-load pattern but the customer would have to utilize its judgement and bear the risks as to when the actual monthly system peak would occur during the on-peak period. The customer would bear the risk of misestimating when the maximum on-peak system load would occur. It would be unlikely that a system monthly peak would occur on a cool summer day and therefore, the customer might not have to closely monitor its operations on such a day.

SDG&E proposes that the transmitted system load signal would form the basis for determining A-6 customer billing demand charges even if the signal was in error. This condition should be incorporated in the special conditions in the tariff.

Special Condition 9 of the proposed A-6 states that "This schedule is not applicable to standby, auxiliary service or service operated in parallel with a customer's generating plant." SDG&E is reviewing its policy to determine the effects of co-generation on its operations, including load reduction on its system. If SDG&E decides to permit co-generation it would file an advice letter to modify the special condition in the affected tariffs.

Special Condition 2, the primary voltage discount, should be revised to indicate that the discount applies to energy delivered at higher voltages.

Staff Evidence

The staff reviewed SDG&E's proposal, obtained additional data, and recommended that: (1) The summer period should be from May 1 through September 30 rather than the June 16 through October 15 summer period proposed by SDG&E and that (2) the beginning of the summer on-peak period and the winter semi-peak period should be at 10 a.m. each week day rather than at 9 a.m. as proposed by SDG&E.

The staff's proposal has a semi-peak rate which is 2 mills above the off-peak rate and a peak rate which is 4 mills above the semi-peak rate. The staff's proposal includes a monthly customer charge of \$600. SDG&E proposed an energy differential charge of 1.5 mills between both off-peak and semi-peak periods and semi-peak and on-peak periods and did not propose any monthly customer charge.

The staff witness testified that SDG&E's calculations did not properly consider the cost associated with SDG&E's gas turbine operations nor the variations between actual load and dispatching of generating resources and SDG&E's economic dispatching estimate, both of which would affect the differential cost during the three daily time periods; that gas turbine operational data shows that the turbine units come on the line about 10 a.m. and the energy costs for gas turbine units are generally higher than those for SDG&E's base load production; and that he is proposing daily peak-hour periods to track costs as closely as possible so that those A-6 customers who were unable to shift loads will not be unfairly burdened by extended on-peak energy charges.

The staff used a base energy cost of 1.673 cents per kwhr for its off-peak energy rate which is the average energy cost on current base rates. This rate is slightly higher than SDG&E's proposed TOD off-peak rate of 1.650 cents per kwhr. The staff contends that energy cost should not be set below the average cost of energy at any time.

The staff witness characterized SDG&E's TOD proposal as superior to the proposals of PG&E and Edison in Applications Nos. 56124 and 56408. He testified that the load information provided by SDG&E should give its customers an effective indication that a monthly peak is a strong possibility on a given day; that a customer with electrical loads which could be deferred or accelerated for a short period of time could reduce its electrical demand during the system peak and reduce the related demand billing charges; that such customers could reduce their electrical loads for several hours during a few days each month and not worry about their peak demands during the rest of the month; that the resulting load reduction would reduce both peak and near peak demands and reduce the possibility of shifting the time of monthly peaks; that SDG&E's operations have changed from a winter peaking system to a summer peaking system; that SDG&E has been expanding its service in warmer inland areas creating earlier, larger, and more extended summer peak air-conditioning loads; that SDG&E's load characteristics will continue toward a more predominant summer peak; that the 1976 load data indicates that the afternoon summer peak starts occurring in May rather than after June 15 as estimated by SDG&E and ends in September rather than on October 15; and that daily peaks during May 1976 occurred both in the afternoon and in the evening but the larger daily peaks occurred in the afternoon and in October larger peaks generally occurred during the evening.

The staff witness noted that SDG&E's monthly maximum system load curve shows 9 a.m. system loads of about 80 to 90 percent of peak-load and 5 p.m. loads in the lower 90 percent of the summer peak-load. He recommends shortening the summer peak period from 10 a.m. to 5 p.m. as opposed to SDG&E's proposal for an on-peak period from 9 a.m. to 5 p.m. to obtain the same cutoff percentage of peak-load levels for starting and ending peak periods. The shorter on-peak period would give customers a greater opportunity to shift loads.

He acknowledged that errors in the advanced estimate of the system load profile for the average and peak periods could result in customer demand shifts which could accentuate peak demands and that there could be administrative problems in applying TOD rates for an increasing number of customers.

The staff witness felt that SDG&E's estimate of a 5 percent peak demand reduction and 3 percent energy shifts from on-peak to semi-peak and from semi-peak to off-peak are reasonable and should be adopted in this proceeding. He recommended that SDG&E be required to monitor and evaluate the effects of its rate proposal.

SDG&E stipulated as to the reasonableness of the changes proposed by the staff in modifying its TOD rate design.

Customer Positions

Several of the A-6 customers expressed concern about their ability vis-a-vis SDG&E to predict the forthcoming peaks and expressed a desire for short-term predictions of when peaks might occur. SDG&E responded that it wanted those customers to share the risk and shave their peak demands during several days of high demand each month and that it proposed a relatively high demand charge during the peak period to provide the biggest incentive to shave system peak demands during the on-peak period; and that the differentials in energy charges were designed to offset marginal differences in operating costs during the day.

A representative of Kelco Company (KC) stated that KC's production facilities operated 24 hours a day, seven days a week throughout the year with a variation in demand of plus or minus 4 percent from the average; that KC's production capabilities are usually at a maximum and a reduction in its production rate would increase costs; that KC could not shift its requirements on a day-to-day basis but that it could reduce its contribution toward the system peak for short periods if it had at least two hours of notice to allow it to systematically reduce its production activity in a safe and efficient manner; and that if TOD rates were established, sufficient communication must be established to minimize the economic effects on its production.

A witness for Rohr Industries (Rohr) stated that Rohr operated three shifts a day, seven days a week, and that during periods of peak-load Rohr would respond by reducing some of its demands on the system.

Customer concern was expressed that implementation of TOD rates would result in substantial revenue increases to SDG&E.

Discussion

The need for reduction of peak-loads on SDG&E's system is a necessary ingredient in long-term reduction in the need for construction and financing of new generating and transmission facilities. Unit costs for constructing new comparable facilities are increasing. The long-term effect of such financing would increase SDG&E's revenue requirements and rates.

Case No. 10292 dated March 23, 1977 is an investigation into possible electrical supply shortages due to drought conditions and of emergency measures to provide for mutual assistance to relieve or eliminate the shortage. A reduction in demand on SDG&E's system resulting from TOD rates would increase SDG&E's ability to assist other utilities. The delay in procurement of necessary system load

transmitting facilities by SDG&E should not delay implementation of TOD rates. A temporary arrangement should be utilized to supply demand data to the affected customers. This data should be updated as frequently as feasible.

SDG&E now has sufficient data to apply TOD pricing to four A-5 customers who would be reclassified as A-6 customers. A deferral of the reclassification of these customers is not appropriate.

The staff recommended changes to SDG&E's TOD proposal are reasonable and should be adopted.

There would be a de minimis differential in revenues if the predicted reduction in peak-load and energy shifts between demand periods occurred. Such revenues would total \$30,551,900,^{1/} which is \$6,500 less than revenue derived from current rates and consumption. At the adopted rates and estimates of consumption, there would be an increase in revenues to \$31,014,200,^{1/} or approximately 1.5 percent, if none of the affected customers changed their usage or consumption patterns. If a more extreme shift occurred involving a reduction in peak demand of 10 percent and a 5 percent energy shift from on-peak to semi-peak and from semi-peak to off-peak, there would be approximately 1.5 percent decrease in revenues to \$30,099,100.^{1/} Reductions in demands or in energy consumption would result in energy sale losses to SDG&E.

Findings

1. The costs of constructing and financing increments of generating plants and transmission facilities are more costly per unit than existing units.
2. The long-term effect of financing major new electrical facilities would increase SDG&E's revenue requirements and rates.
3. TOD rates would decrease peak demands, on-peak use, and semi-peak use on SDG&E's system.

^{1/} Excluding the rate increase authorized in Decision No. 87639 dated July 19, 1977 in Application No. 55627.

4. The modifications to SDG&E's TOD proposal discussed herein are reasonable.

5. The monitoring procedure recommended by the staff is reasonable.

6. Reduced peak demands and on-peak and semi-peak use on SDG&E's system should be encouraged to help meet drought emergency conditions affecting California utilities.

7. The revenues derived from the TOD rates authorized herein will have a de minimis effect, a \$6,500 reduction to \$30,551,900,^{2/} on SDG&E's revenues from those currently authorized if the affected customers reduce their peak demands by 5 percent, shift 3 percent of on-peak energy purchases to semi-peak periods, and shift 3 percent of semi-peak energy purchases to off-peak periods.

8. The changes in rates, charges, and tariff conditions authorized herein are just and reasonable and present rates and charges, insofar as they differ therefrom, are, for the future, unjust and unreasonable.

9. SDG&E should make temporary arrangements to supply demand data to its A-6 customers (including the above reclassified customers) until its permanent signal equipment is installed. This data should be updated as frequently as feasible.

The Commission concludes that the application should be granted to the extent set forth in the following order and is in all other respects denied.

^{2/} See Footnote 1.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Electric Company (SDG&E) is authorized and directed to file a revised A-6 tariff schedule within five days of the effective date of this order, with changes in rates, charges, and conditions as set forth in Appendix A attached hereto, and concurrently to cancel its present A-6 schedule for electric service. Such filing shall comply with General Order No. 96-A. The effective date of the new and revised tariff sheets shall be five days after the effective date of this order. The new and revised schedule shall apply only to service rendered on and after the effective date thereof.

2. SDG&E shall reclassify those A-5 customers whose electrical use meets the definitions contained in the revised Schedule A-6. SDG&E shall bill such customers on the revised Schedule A-6 commencing five days after the effective date of this order.

3. SDG&E shall make appropriate interim arrangements to supply its A-6 customers with system demand data pending the installation of its permanent equipment. This data shall be updated as frequently as feasible.

4. A special condition shall be added to those proposed by SDG&E as follows: "Peak demand charges shall be based upon customer demand and transmitted system load signal."

5. SDG&E shall carry out the monitoring and evaluation procedures contained in Appendix B of the staff report in this proceeding. The required annual reports to the Commission shall be filed on or before March 1 following the prior calendar year.

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6. SDG&E shall file a revised text for Special Condition No. 2 of its tariffs for large customers to indicate that the discount applies to energy delivered at higher voltages.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 23rd day of AUGUST, 1977.

*I will file a discount.
William Synovoff.*

Robert Bateman
President

Vernon L. Sturgeon
Richard D. Howell
Paul J. Delrieu
Commissioners

Appendix A
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SCHEDULE A-6

GENERAL SERVICE - LARGE

APPLICABILITY

Applicable to all customers receiving service on Schedule A-6 as of March 16, 1976 and thereafter to new customers whose maximum demand in any time period is 4,500 kw or greater and to existing customers on other schedules whose monthly maximum demand is 4,500 kw or greater for three consecutive months. Any customer whose maximum monthly demand has fallen below 4,000 kw for 12 consecutive months may, at his option, elect to continue service under this schedule or be served under any other applicable schedule.

TERRITORY

Within the entire territory served by utility.

RATES

	<u>Per Month</u>
Customer Charge	\$600.00
Peak Demand Charge for Customer Contribution to Monthly System Peak	6.41/kw
Energy Charge:	
On-Peak	\$0.00645/kwhr
Plus: Semi-Peak	0.00245/kwhr
Plus: Off-Peak	0.00045/kwhr

Where time periods are defined as follows:

	<u>May 1 - September 30</u>	<u>All Other</u>
On-Peak	10 a.m. - 5 p.m. Weekdays	5 p.m. - 9 p.m. Weekdays
Semi-Peak	5 p.m. - 9 p.m. Weekdays	10 a.m. - 5 p.m. Weekdays
Off-Peak	9 p.m. - 10 a.m. Weekdays Plus Weekends & Holidays	9 p.m. - 10 a.m. Weekdays Plus Weekends & Holidays

Time Periods:

All time periods listed are in Pacific Standard Time. During periods when Pacific Daylight Saving Time is in operation, one hour must be added to the listed times to arrive at actual "clock" times.

RATES (Continued)

Holidays:

The holidays specified in this schedule are: New Year's Day, Washington Birthday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day as designated by California Law.

Minimum Charge:

The monthly minimum charge shall be \$7,770.00 but not less than \$1.55 per kw of maximum demand.

Fuel Cost Adjustment:

The charges as determined above are subject to a fuel cost adjustment as provided for in Section 9. of the Preliminary Statement. The fuel cost adjustment billing factor set forth therein will be applied to all kilowatt-hours billed under this schedule.

Franchise Fee Differential:

The franchise fee differential as indicated below will be applied to the monthly billings calculated under this schedule for all customers within the corporate limits as follows:

City of San Diego 1.9%

Such franchise fee differential shall be so indicated and added as a separate item to bills rendered to such customers.

SPECIAL CONDITIONS

1. Voltage. Service under this schedule will be supplied at a standard voltage of the utility above 2 kv.

2. Primary Voltage and Energy Discount. A primary voltage and energy discount will only be allowed where delivery is made and energy is received at an available standard primary voltage. Under these circumstances, the charges before power factor adjustment and fuel cost adjustment will be reduced as follows:

1 percent in the range of 10.1 kv to 25 kv
4 percent above 25 kv

The utility retains the right to change its delivery voltage after reasonable advance notice in writing to any customer receiving a discount hereunder and affected by such change, and such customer then has the option to change his system so as to receive service at the new delivery voltage or to accept service without voltage and energy discount after the change in delivery voltage, through transformers owned by the utility. (Above condition also applies to other schedules that allows voltage discount in their tariff.)

SPECIAL CONDITIONS (Continued)

3. Voltage Regulators. Voltage regulators, if required by the customer, shall be furnished, installed, owned and maintained by the customer.

4. Peak Demand Charge. The peak demand charge shall be based on the average kilowatt input to the customer during that 15-minute interval containing the time of monthly system peak demand so long as monthly system peak demand occurs during the "On-Peak" time period. In the event that the monthly system peak occurs outside the "On-Peak" time period, the peak demand charge will be based on the average kilowatt input to the customer during that 15-minute interval containing the time of the highest system peak demand occurring in the "On-Peak" time period. Peak demand charges shall be based upon customer demand and transmitted system load signal.

In the case of hoists, elevators, furnaces and other loads where the energy demand is intermittent or subject to violent fluctuations, the utility may base the peak demand upon a five-minute interval instead of a 15-minute interval.

5. Maximum Demand. The maximum demand in any month shall be the average kilowatt input during that 15-minute interval in which the consumption of electric energy is greater than in any other 15-minute interval in the month as recorded by instruments installed, owned and maintained by the utility. For the purpose of determining the minimum charge the maximum demand shall in no case be less than the highest of (a) 4,500 kw, (b) 80 percent of the highest maximum demand registered during the preceding eleven months, or (c) the diversified resistance welder load computed in accordance with the utility's Rule 2F-2b.

In the case of hoists, elevators, furnaces and other loads where the energy demand is intermittent or subject to violent fluctuations, the utility may base the maximum demand upon a five-minute interval instead of a 15-minute interval.

6. Power Factor Adjustment. This schedule is based on service to loads having a maximum reactive kilovolt ampere demand not greater than 75 percent of the maximum kilowatt demand. In the event that the reactive demand exceeds 75 percent of the kilowatt demand, the customer shall, upon receiving written notice from the utility, install and operate such compensating equipment as may be necessary to reduce the reactive demand to 75 percent or less of the kilowatt demand. Unless such correction of reactive demand is made within ninety days, there will be added to each monthly bill following the ninety-day period a charge of 15 cents per kilovar of maximum reactive demand in excess of 75 percent of the maximum kilowatt demand (whether on-peak or off-peak) for the month.

SPECIAL CONDITIONS (Continued)

7. Reconnection Charge. In the event that a customer terminates service under this schedule and re-initiates service at that same location within 12 months, there will be a reconnection charge equal to the minimum charge which would have been billed had the customer not terminated service.

8. Digital Pulse Recorder Malfunction. In the event that the digital pulse recorder (DPR) malfunctions during the billing period, the energy sales will be based on the mechanical meter reading. Where the malfunction existed for less than 25% of the billing period, the energy sales will be prorated to time periods based on the energy division during the period when the DPR was working properly. Where the malfunction time exceeds 25% of the billing period, the energy sales will be prorated to time periods based on the energy division during the three previous calendar months. In the event that the DPR malfunctions during the time of Monthly System Peak, the Peak Demand Charge will be based on the customer contribution to the highest system peak during the time of proper DPR operation. In the event that the DPR malfunctions for more than 75% of the billing period, the Peak Demand Charge will be based on the average of the three previous customer contribution to Monthly System Peaks which have the same On-Peak hours.

9. Miscellaneous. This schedule is not applicable to standby, auxiliary service or service operated in parallel with a customer's generating plant.

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A. 56408 - D.
A. 56598 - D.

WILLIAM SYMONS, JR., Dissenting

Today the Commission fundamentally restructures electric rates for large users in the San Diego Gas & Electric and Edison service areas. Crucial changes such as these should be the product of careful deliberation and should further the well-being of all of our state's consumers. Unfortunately, today's decision does not meet these standards.

The Commission majority leaves the following issues unresolved:

1. What effect will the new rate structure have on the state's business climate? A negative one, to be sure. To come to this conclusion one need only read the voluminous testimony presented in recent cases by various business and labor organizations.^{1/} In its rush to restructure rates the Commission majority ignores this evidence.
2. What effect will the new rate structure have on consumption? No one knows for sure. We could, however, obtain an answer to this question merely by waiting a few months to obtain results from the PG&E time-of-day experiment. Unfortunately, the Commission majority lacks the patience to do this.

^{1/} (See Majority Decision in Application No. 56408, pp. 10-18.)

A. 56408 - D.
A. 56598 - D.

3. What is the role of the Legislature in setting time-of-day rates? Over the last few months, the Legislature has indicated a desire for a go-slow approach to rate reform, and an end to rates which discriminate against business. Today, the Commission majority ignores these wishes.
4. Will time-of-use rates be extended to all users of electricity? We are told yes; but the deadline for such a transformation is left vague. This puts the Commission in the ironic position of metering for time of use precisely that class of customer -- large industrial -- with the best load factor, while residences, which are most responsible for the peak, go scott-free. Metering the former but not the latter is

"somewhat akin to the fellow who having trouble with the ignition system in his car, rotates his tires because he owns a tire wrench."

I am not opposed to time-of-day rates. They are an effective way of making the price of electricity more cost-conscious than ever before. What I oppose is the Commission's lack of caution and its misapplication of the time-of-day rate concept.

Caution dictates we not adopt time-of-day pricing until the following conditions are met:

A. 56408 - D.
A. 56598 - D.

1. We make a thorough cost-benefit analysis of time-of-use metering and studies as to elasticity in the time-of-use of electricity. We should seriously consider whether the half billion dollars or more we may spend on time-of-use meters might not better be spent on new power facilities.
2. The Commission should monitor the results of the PG&E time-of-day rate experiment begun earlier this year before extending such rates to the two Southern California electric systems.

If, after the completion of these studies, the Commission decides time-of-use rates are desirable, they should be adopted only if they have the following characteristics:

1. Rather than punishing the high-load factor customer, such rates should recognize his unique value to the system. One way to do this was advanced by Edison in A. 56408: decrease his demand charge by 1½%/month for each percentage point his load factor exceeds 75%. For the "perfect" or 100% load factor customer, this would mean a one-third reduction in his demand charge -- ample recognition of his contribution to the overall health and fiscal stability of the system.
2. The PUC should also commit itself to time-of-use metering of all customers by a specific, early date. We should insist that the new rate structure not subsidize residential users by "socking it" to business.

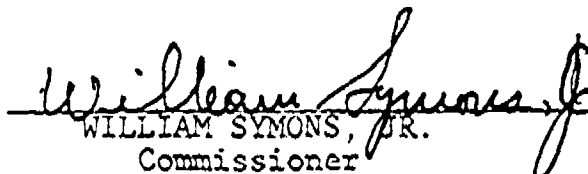
A. 56408 - D.
A. 56598 - D.

Such a universal time-of-use structure would recognize the fact that the potential for deferrals as to time-of-use are greatest in the residential and commercial class.

It would also contribute to the business climate of our state, and permit the PUC to carry out its legislative mandate not to handicap, by discriminatory power charges, California's energy-intensive industries.

3. Time-of-use rates can and should be cost based. For no good reason, we have abandoned this principle. The time-of-use rates are composed of customer charges, demand charges and commodity charges. The demand charges vary with time-of-use. That is appropriate. But commodity charges may not because fuel costs are often constant over time. If this is the case, as it seems to be for Edison, it should be reflected in the rate. The time-of-use variation of the total rate design should be where it belongs: in the demand portion of the bill.

San Francisco, California
August 23, 1977


WILLIAM SYMONS, JR.
Commissioner