rr

Decision No. 91184 JAN 8 - 1980

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's own motion into possible electrical energy supply shortages of electric public utilities resulting from the shutdown of certain nuclear generating facilities and emergency measures to provide for necessary mutual assistance.	OII No. 43 (Filed April 30, 1979)

(Appearances are shown in Decision No. 90427.)

SECOND SUPPLEMENTAL OPINION

Decision No. 90427 issued June 19, 1979 in this proceeding authorized Pacific Gas and Electric Company (PG&E), Southern California Edison Company (Edison), and San Diego Gas & Electric Company (SDG&E) to place into effect a summer reserve load sharing plan and statewide load reduction plan, which plan also applied in connection with the Sacramento Municipal Utility District (SMUD) and the Los Angeles Department of Water and Power (LADWP).

The decision also directed PG&E, Edison, and SDG&E to expand their energy conservation programs for 1979 filed pursuant to Ordering Paragraph 1 of Decision No. 86501 in accordance with the summary set forth in Appendix D to that decision. Each respondent electric utility was ordered to file a modification to its Tariff Rule 14.1 consistent with the modified Rule 14.1 set forth in Appendix E to Decision No. 90427. The purpose of the Rule 14.1 revision was to shift electric loads away from daytime peak periods during the summer months of 1979.

Supplemental Decision No. 90712 issued August 28, 1979 revised the provisions of Rule 14.1 adopted in Appendix E to Decision No. 90427 to establish the maximum summer temperature settings for ventilating and air conditioning at 78°F so as to conform with regulations of the Federal Department of Energy (DOE)

adopted in 10 CFR Part 490 (Federal Register, Volume 44, No. 130, July 5, 1979). Rule 14.1 also was revised to permit electric outdoor advertising signs to be shut off at midnight, rather than 10:30 p.m.

Decision No. 90712 set further hearings for the purpose of receiving evidence on the following subjects:

(a) A report and evaluation by the California Utility Power Systems Coordinator (Coordinator) of the operations of the statewide load reduction plan (including capacity saved) and reserve load sharing plan described in Ordering Paragraph 1 of Decision No. 90427. The report should include recommendations as to use of similar or revised procedures if there should be an emergency in the future affecting electrical capacity reserve margins.

(b) PG&E, Edison, and SDG&E also should present reports and evaluations of the effectiveness of their expanded 1979 energy conservation programs filed in compliance with Ordering Paragraph 2 of Decision No. 90427.

(c) Coordinator shall also report on the effectiveness of modified Tariff Rule 14.1 adopted in Ordering Paragraph 3 and appearing in Appendix E of Decision No. 90427. Recommendations as to keeping the rule in effect (as modified by D.90427) during the coming winter, together with further suggested modifications, should be included.

(d) PG&E, Edison, and SDG&E should each provide a report of winter fuel supplies for their respective systems.

(e) A summary of the ratepayer cost effects due to unplanned capacity outages for the period May through September on the PG&E, Edison, and SDG&E systems should be provided.

(f) Coordinator should provide a summary of intertie enhancement projects planned or under construction, both interstate and intrastate. The report should include circuit capacity, estimated costs, planned completion dates, and purpose of each of the projects.

(g) Coordinator shall make a recommendation as to changes in electric and gas Tariff Rule 14.1 for the coming winter heating season particularly with respect to the 68°F limit on space heating.

(h) Southern California Gas Company (SoCal) is made a respondent in this proceeding, for the limited purpose of coordinating with Coordinator with with respect to the recommendation in (g) above as it affects SoCal Tariff Rule 23.1.

The public hearing ordered in Decision No. 90712 was held before Administrative Law Judge Mallory on October 1 and 29, 1979, and OII No. 43 was adjourned to a date to be set.

Evidence was presented on behalf of PG&E, Edison, SDG&E, SMUD, LADWP, and Coordinator with respect to Topics (a), (b), (c) and (f) above. PG&E, Edison, and SDG&E presented the data concerning winter fuel supplies [Topic (d)], and the effect on ratepayers of unplanned outages [Topic (e)]. Coordinator presented recommendations concerning revised electric and gas Tariff Rule 14.1 to apply during the current winter season. The gas tariff recommendation was concurred in by SoCal. Evidence was presented by Modesto Irrigation District (MID) with respect to its voluntary air-conditioning load curtailment program (red, white, and blue card program).

An evaluation of the summer program adopted in Decision No. 90427 also was furnished by the Commission staff. The staff also presented proposed revised Tariff Rule 14.1 to apply during the current winter period. Evidence was presented on behalf of the California State Outdoor Advertising Association (CSOAA) in support of a revision of electric Tariff Rule 14.1 to permit billboard illumination in northern California (area served by PG&E) up to two hours before daylight during the months of October through March. The energy coordinator for Federated Department Stores testified in support of daytime illumination of department store window displays during the months of November and December.

Effectiveness of Summer Reserve Load Sharing and Statewide Load Reduction Plan

The prime objectives of the 1979 summer reserve load sharing and statewide load reduction plan was to intensify the level of coordination and the operation of the major electric systems and to maximize the transmission capability and the resources available to California. Part of the plan called for a three-stage program of customer-load reduction in the event that the margin within the State was reduced below 5 percent. Since the issuance of Decision No. 90427 it has not been necessary to implement the statewide emergency plan. However, on June 13,1979, PG&E believed it necessary to implement Stage I of its contingency plan due to a combination of circumstances which resulted in a projected reserve margin for the day of 4.9 percent.[1/] Stage I calls for voluntary curtailment by residential and small business customers and pre-arranged reductions in load by larger customers.

1/ On the morning of June 13, 1979, based on forecasted temperatures for the day, PG&E projected a peak demand of 13,172 MW for the area. On the basis of this projection, reserves would have been adequate. However, later in the morning the PG&E dispatcher became aware that employees of the California State Development of Water Resources (DWR) were going out on strike and shutting down both generating and pumping facilities as they left. This action resulted in a revised projected reserve margin of 4.9 percent. Stage I of PG&E's contingency plan was implemented. Since the customer demand in the PG&E area did not increase to the forecasted level, action by the other utilities was not required.

Using actual temperatures recorded for that day, PG&E projected a peak load of approximately 12,600 MW. The actual PG&E peak was 11,926 MW. Coordinator testified that it is not easy to interpret the events of June 13, to develop meaningful results of a true Stage I response. As an example, when state employees left their jobs they shut down pumping plants as well as generating stations. How this affected individual irrigation pumping from districts served by the canal is unknown. In addition, some industrial customers contacted by PG&E Division personnel exceeded Stage I load reductions by starting auxiliary power units; a step normally reserved for a Stage II alert. Based on this very limited experience, it would appear that the load reduction was in the range of 400 to 700 MW.

Coordinator testified that the major utilities have no substantive modifications to recommend for the statewide emergency plan. It has not been necessary to invoke the emergency statewide load reduction plan and reserve load sharing plan since their inception due to the normal day-to-day coordination efforts of the California electric utilities involved in the plans. Coordinator stated,however, it is felt that had the plans been required to be implemented, they would have been successful due to the cooperation among the five major California electric utilities. Therefore, Coordinator recommended that the same plans approved for the summer of 1979 continue to be utilized without change should there be an emergency in the future affecting electrical capacity reserve margins. To illustrate the normal day-to-day coordination and cooperation of the electric utilities, Edison submitted a list of some of the major transactions that have taken place between it and other electric utilities for the period June 1, 1979 to September 16, 1979. These capacity transactions, both between California utilities and utilities outside the State, assertedly avoided the need to invoke the emergency measures during the summer.

On the power supply side, the individual California systems' maximum peak loads are shown below (based upon data available as of September 19, 1979).

TABLE 1

1979 Maximum Peak Loads
(As of September 19, 1979)

	Forecasted Peak* (MW)	Peak to Date (MW)	Date of Peak	Percent Reserve Margin	Demand Increase Percent 1979 over 1978
PG&E	15,380	13,596	7/24/79	12.1	0.1
Edison	12,434	12,464	9/11/79	6.1	4.1
SDG&E	2,013	2,023	9/19/79	11.2	2.1
LADWP	4,016	4,090	6/12/79	12.8	-1.3
SMUD	-	1,547	7/30/79	-	-

* Forecasted peak data as submitted to CPUC and California Energy Commission (CEC) on May 18, 1979. PG&E forecasted peak includes SMUD.

Coordinator stated that the coordination and cooperation which exist among the five dispatching organizations of the California utilities continue to be excellent. The interchange of information in dealing with the tight supply problem is efficient and effective. This cooperation continues on a year-round basis to the benefit of electric utility customers throughout the State as well as to the operating systems.

Examples of this cooperation are described below. Dropping pumping loads by organizations such as DWR and Central Valley Project (CVP) has long been viewed as one means of bringing about prompt and substantial load relief. The DWR assisted the PG&E area on three occasions during the past summer. Certain long-term contractual problems have clouded the question of whether the DWR would be willing to provide assistance in the future. During the past summer the CVP did not reduce its pumping load for Stage I

conditions. However, through further discussions with the Mid-Pacific Region and WAPA, the Coordinator has been assured that CVP pumps would be interrupted for a Stage II condition. PG&E is hopeful that the recent change of position by the DWR with regard to its pumps in the PG&E area can be clarified in the near future and that the State will once again be responsive should it become necessary. Edison made arrangements with Metropolitan Water District to reduce pumping from the Colorado River by approximately 80 MW in the event severe capacity emergencies arose in California. During the week of September 9, 1979, when all-time peaks were experienced on the Edison system, the DWR indicated that it was willing to curtail pumping load and increase recovery generation should it become necessary. Edison met its load requirements without the need for this assistance.

Coordinator recommended that some streamlining of the daily operating reports to the staff of the CPUC and CEC is in order, inasmuch as Coordinator had gained the impression during much of the past summer that the reporting effort on the part of both utilities and regulatory organizations outweighs the value. The specific recommendation is that daily reports be made only on those days when the forecast for any one of the systems indicated a reserve margin of 5 percent or less.[2/]

2/ Daily reporting requirements ceased as of October 1, 1979 under staff direction, as it was clear that the period of summer peak temperatures had passed and sufficient capacity was available to cover normal fall peak loads.

Effectiveness of Expanded 1979
Energy Conservation Programs

Decision No. 90427 directed that the major regulated utilities develop and place into effect during the summer of 1979 augmented energy conservation programs. Such plans were filed with the Commission. LADWP and SMUD voluntarily initiated similar plans. Each utility presented in evidence analyses of the effectiveness of its plan. Complete evaluation of such plans was not possible as the programs were designed to run through October 31, and the evidence was presented on October 1 for regulated utilities and October 29 for the districts. The reports described in detail the several measures adopted to inform the public and utility employees of the need to conserve electrical energy and the steps to follow in reducing electric loads during peak periods of electrical use. The consensus of these reports is that public cooperation was excellent and that actual peak-day loads fell below anticipated peak-day loads because of voluntary conservation efforts made by the majority of the utilities' customers.

The utilities have indicated that detailed comparative analyses of their summer voluntary conservation campaigns will be made available in December. It is planned that further hearing in this proceeding will be scheduled in the early part of 1980 in order to determine whether an electrical capacity shortage may be expected in the summer of 1980 and whether programs similar to those adopted for the summer of 1979 should be ordered for 1980. We request that the five utilities furnish detailed analyses of their augmented 1979 conservation programs at such further hearings.

Effectiveness of Modified Rule 14.1 and Proposed Changes

The utilities believe that the provisions of Electric Rule 14.1 modified in accordance with Decision No. 90712 have contributed to reducing peak demand in the State of California this summer. The market research in connection with the effectiveness of the expanded conservation program will include questions to determine the public's cognizance of the requirements of Electric Rule 14.1 and the general levels of compliance experienced during the summer of 1979. The utilities expect to be able to quantify the demand reduction attributable to actions customers have taken in response to the utilities' augmented summer program (including Electric Rule 14.1) subsequent to the summer period. Coordinator stated, however, it will not be possible to further segment that quantification to determine the individual contribution of Rule 14.1. Until the results of the market research are made available to the Commission the utilities can be no more specific than to say that they are confident that the provisions of Electric Rule 14.1 in conjunction with the augmented summer program did contribute to the reduction of the peak electric demand in California this summer.

Winter Fuel Supplies

Detailed reports were submitted by PG&E, Edison and, SDG&E concerning the winter fuel supplies for their respective systems, with particular emphasis on the availability of fuel oil. Each of the utilities developed its report on the assumption that average precipitation and temperatures will prevail.

PG&E's report (Exhibit 22) indicates that its forecasted inventory at the end of November 1979 is 9,128,000 barrels. The target oil inventory at the end of November 1979 is 10,000,000 barrels. The minimum oil inventory drops to 3,818,000 barrels at the end of February 1980, which is less than the minimum inventory of 6,000,000 barrels PG&E believes is prudent. The report states:

> "The lower than preferred forecast oil inventories shown in the report are the result of several factors. The 1979 Pacific Northwest hydro situation has deteriorated to the point where almost no surplus energy, hydro or fossil, is expected to be available for export during the balance of 1979. Licensing of the Diablo Canyon units has been delayed due in part to NRC delays resulting from the Three Mile Island incident. Further delays of these units would result in additional oil requirements of about 900,000 barrels per month, per unit. Also affecting the 1979-80 winter fuel inventory situation is the scheduled outage of SMUD's Rancho Seco nuclear unit for refueling which, assuming the current level of operation, should occur early in 1980.
>
> "Several possibilities are under study as means of improving the fuel supply situation. Final decisions concerning these possibilities will be dependent upon what occurs in the next few months such as early winter precipitation in the PGandE area or new offers of surplus energy from other utilities outside the area. We will remain flexible in analyzing any potential fuel supply alternatives in order to allow the Company to cope with a situation such as a wet, warm winter which could reduce oil requirements. A wet, warm winter would significantly reduce electric loads and create additional hydroelectric generation. It would also reduce firm gas loads, making more gas available for use in steam electric plants. In contrast, a dry, cold winter would increase oil requirements.

"PGandE is currently analyzing the following alternatives toward enhancing the 1979-1980 winter fuel inventories. The most attractive options will be taken in time to satisfy anticipated requirements". 3/

* * *

"The Company is continuing to closely monitor its fuel inventory and supply situation as well as changing conditions in other areas so as not to overlook any potential energy or fuel sources."

PG&E indicated that increasing amounts of electric capacity are scheduled to be obtained from its Diablo Canyon Nuclear Power Plant which was scheduled to produce test voltages in November. We recognize that the federal Nuclear Regulatory Commission (NRC) has placed a six-month moratorium on the issuance of certificates. The inability to have available to it the capacity expected from Diablo Canyon may adversely affect PG&E's service during the summer of 1980.

3/ Those options are:

1. Obtain additional gas supplies.
2. Continue to request underlift make-up oil from major suppliers.
3. Maximize purchases of excess thermal energy from utilities outside the PG&E area. (Surplus Northwest energy of any type is currently unavailable due to greatly reduced hydro runoff in that region. In addition, the Northwest is a winter peaking area).
4. Increase operation of the three cogeneration plants at Avon, Martinez, and Oleum which is dependent upon the associated refineries having available fuel stocks.
5. Spot purchase residual fuel oil when available at a competitive price.
6. Analyze the effect of reducing end-of-year hydroelectric carryover storage. Any action of this sort must be weighed against the loss of protection against a following dry year.

Edison reported in Exhibit 40 that during the period October 1979 through May 1980 it would require the following gas and oil fuel (expressed in equivalent thousands of barrels):

Gas and Oil Requirement for Load	46,948
Less Estimated Gas Supply	9,595
Oil Requirement for Load	37,353
Anticipated Oil Deliveries	38,123

It was the conclusion of Edison's witness that it will have sufficient gas and oil supplies available for it to meet the gas and oil load that Edison will serve during the 1979-80 winter season.

The witness for SDG&E presented a report in Exhibit 39 that showed energy requirements and fuel inventories for that company. The witness concluded that on an as-expected weather basis, SDG&E will have sufficient fuel oil to meet its needs for the 1979-1980 winter months. The witness indicated that this is despite a major fuel supplier notifying the company of a reduction of crude feedstock and, therefore, reducing delivery of both low sulfur fuel oil and distillate oil beginning last July under contract force majeure provisions. Reduced deliveries from this supplier are expected to continue through the 1979-1980 winter months which would place fuel oil inventory at lower levels than they would have been. Some inventory cushion remains; however, in the event of adverse weather, additional supplies will likely be required to meet increased fuel oil burn.

Reports on Ratepayers' Cost Effects
Due to Unplanned Capacity Outages

The utilities report that it is difficult to respond to topic (e) because of the inability to assign or design a particular resource as a replacement for another. Keeping this in mind, PG&E developed a cost of the increased capacity necessary to

replace the capacity lost when the Rancho Seco Nuclear Power Plant was shut down during a period in May through August of 1979. The analysis showed that purchase of Rancho Seco capacity and energy from SMUD in the period January through August 1979 resulted in California jurisdictional savings of $47,955,000 over the estimated costs of gas and oil generation; and that the estimated cost of replacement of the lost Rancho Seco capacity and energy due to closure of Rancho Seco during May through August was $32,423,700, providing a net savings to PG&E's customers in that period of $15,531,300 over gas and oil generation.

Other utilities experienced no major unplanned outages.

Intertie Enhancement Projects

Coordinator presented a summary of intertie enhancement projects which are planned or under construction. Several projects are in the planning stage. Few projects are under construction which will increase the ability of California utilities to acquire additional out-of-state purchased power or which would enhance the ability of California utilities to interchange energy.

Adoption of 1980 Summer Program - Rule 14.1

Coordinator reported that it is the consensus of the utilities that the general public concept of the requirements of Electric Tariff Rule 14.1 was one of awareness and willingness to comply during the summer peak period of 1979.

Coordinator stated that the utilities believe the objectives of the Electric Rule 14.1 modifications adopted in Decision No. 90427 have been met. Coordinator recommended that the temporary provisions of Section A.2 of the Rule be terminated in accordance with its wording. The results of the utilities' market survey as well as the utilities' assessment of the potential severity of the statewide electric supply situation next summer will be the determinates as to whether or not the utilities will recommend to the Commission that these emergency provisions again be reinstated for the 1980 summer period.

The Commission staff witness also concluded that the electrical emergency plan filed pursuant to Decision No. 90427 worked well and should be used during the summer of 1980. The staff witness recommended that the office of Coordinator should be made permanent and that the emergency plan as used the past summer should be implemented as a permanent summertime measure. The staff witness recommended that the adoption of Rule 14.1 provisions as well as other conservation measures to be applied for the summer of 1980 be studied further and their adoption be deferred until further hearings are held, preferably in March 1980, inasmuch as there will be more data available and it will be possible to make a better forecast of the electrical supply and requirements for the summer of 1980 at that time.

The utilities ask that the office of Coordinator not be made permanent as, in their view, essential cooperation between the utilities can be achieved without such an office. The utilities also recommended that further hearings be held before the institution of an electric emergency plan for the summer of 1980. We need not rule on the request that the office of Coordinator be made permanent. We will defer consideration of this matter until the proceeding to be held in March. At such time circumstances may be clearer as to the necessity of continuing the function of Coordinator on a permanent basis.

Rule 14.1 - 1979-80 Winter Provision

Coordinator testified that the utilities believe that Gas and Electric Rules 14.1 are workable in their present form. Their concern with these tariffs deal primarily with the conflict that may result between the 68°F maximum temperature for space heating mandated by these tariffs and the 65°F for nonresidential buildings mandated by DOE in its Emergency Building Temperature Restrictions. The utilities believe that 68°F is a reasonable and adequate temperature restriction in light of the present energy situation in California. Coordinator cited Decision No. 89589 dated October 31, 1978 in Case No. 9581, et al. which found, among other things, that:

"1. Temperature limitations set forth in Decisions Nos. 86932 and 87241 (and implemented in respondent utility tariff rules) were designed specifically to meet the needs of the emergency natural gas shortage caused by the cold weather in the winter of 1976-1977 and drought conditions which existed during the winter of 1976 and the spring, summer and fall of 1977.

"2. The emergency conditions requiring a 65°F limit for heating are now past and the public is reacting accordingly by setting temperatures higher, despite said tariff rules, for personal comfort.

"3. Modifying the temperature setting from 65°F to 68°F as a limit for heating and retaining the 78°F limit for cooling, thereby adopting a 68-78°F temperature deadband, will not significantly affect customer comfort, but will continue to provide real energy savings. Furthermore, the softened temperature range may ultimately be more effective if it is seen as a more reasonable goal by both the customer and the utility."

In the same decision the CEC provided a memo which, among other things, stated that:

"The marginal savings realized for a 65°F thermostat setting versus a 68°F setting are fairly small in California's mild climate."

Coordinator also stated that the Conservation Branch of the CPUC, in a statement concerning the Emergency Building Temperature Restrictions delivered by Mr. L. D. Chow, P.E., to the Department of Energy on June 14, 1979, stated that, "The 65°F heating limit is generally considered to be somewhat uncomfortable and unnecessarily low in light of presently available energy supplies. The utilities believe that most customers will accept the more severe limitations for a short period of time during true emergencies, but will disregard the order once they feel the crisis has passed."

For the above reasons the utilities recommend that the Commission initiate action to petition the DOE for a relaxation of the 65°F maximum for space heating to 68°F for all classes of customers in California.

In the event that the DOE denies the petition for relaxation or is unable to react prior to this winter's heating season the utilities would again be faced with the possibility that confusion will be generated as the public becomes aware of the apparent conflict between the federal and state restrictions. If federal regulations are not relaxed the utilities recommend that the requirement for space heating for residential customers remain at 68°F but Tariff Rule 14.1 be modified for nonresidential customers in accordance with the DOE's Emergency Building Temperature Restrictions and to be applicable only to those customers covered in the federal document.

The Commission staff recommended in Exhibit 34 that the Electric and Gas Tariff Rules 14.1 provide for a maximum winter thermostat setting of 68°F except where more stringent federal regulations apply in order to eliminate public confusion between federal and state regulations. The staff witness also discussed a potential problem in the application of Electric Rule 14.1 related to swimming pools. Paragraph B.6.b. of Rule 14.1 limits to 3/4 horsepower the size of a pump to circulate solar heated water to and from the pool. There are approximately 9,000 to 15,000 noncomplying pools in California which use the existing larger filter pump to move solar heated water to the pool. The witness stated that a permanent solution should be deferred until further hearing in order to permit the staff to meet with representatives of the solar industry. As an interim measure the staff witness recommended that the 3/4 horsepower limitation be temporarily removed.

A witness appearing for the CSOAA presented evidence in support of an amendment of Electric Rule 14.1 that would permit billboard illumination in the area served by PG&E for the period from dusk to midnight and for two hours before daylight during the months of October through March, in lieu of the present requirement that signboard lights be turned off at midnight. The evidence shows

that conservation achieved in other areas by members of CSOAA may offset the additional energy required under the CSOAA proposal.

Red, White, and Blue Card Program

The initial hearings in OII No. 43 were held on a joint record with the hearings in Docket No. 79-N1-1 of the State Energy Resources Conservation and Development Commission (Energy Commission). An Energy Commission staff witness recommended that the Public Utilities Commission adopt, as a part of its voluntary augmented conservation program, a plan similar to the so-called red, white, and blue card system used by MID to reduce summertime electric consumption within the area served by it.[4/]

The Chief of this Commission's Energy Conservation Branch investigated MID's program and invited Mr. Gary H. Conover, MID's Energy Conservation Coordinator, to provide testimony before the Commission on behalf of MID. Mr. Conover provided testimony on October 1, 1979 which indicated that the MID red, white, and blue program appeared to be effective upon its inception in June 1977, during the 1977 California drought, but that customer participation has apparently dropped off in 1978 and 1979.

4/ Decision No. 90427 commented as follows on this issue:

"Specific comment is required only with respect to the proposed red, white and blue card program. That program is proposed to apply only to PG&E's system. The area served by PG&E has different service characteristics than the Modesto Irrigation District (Modesto). . . . The interim order will not adopt the proposed red, white and blue card system for this summer for PG&E's system, because that load reduction plan does not fit with the statewide plans proposed, and because the conditions encountered on PG&E's system are sufficiently different from those experienced by Modesto to require further study before implementation.

"Significant voluntary load reduction was achieved by Modesto under its plan, and PG&E may also achieve significant reductions on a broader scale if the Modesto plan is redesigned to fit PG&E's different circumstances. Desiring to wring out the last possible drop of energy conservation, we direct the Chief of our Conservation Branch to explore the actual practices applied in the Modesto experiment, to develop a plan suitable to PG&E's system with cooperation of the staff of SERCDC and the utility, and to furnish his report in the next series of hearings."

Discussion

The record shows that the summer electric reserve load sharing plan and the statewide electric load reduction plan implemented by utilities pursuant to Decision No. 90427 is a practical and workable plan. Depending upon the availability of hydroelectric and nuclear generation and purchased capacity from out-of-state sources, a capacity shortage may exist next summer. If such a shortage may be expected, the plans adopted for the summer of 1979 will provide a suitable framework for a similar program applicable for the summer of 1980. Therefore, we will schedule further hearings, as provided in the order which follows, in early 1980 for the purpose of evaluating the electric capacity available to the major California utilities during the summer of 1980 and, if a shortage is apparent, for the purpose of adopting new load sharing and load reduction plans for the summer. The utilities should present at such hearings their evaluations of the effectiveness of the conservation plans applicable during the summer of 1979. In addition, the regulated utilities should furnish data concerning available capacity, estimated consumption, and augmented energy conservation programs to cope with the peak demands anticipated during the summer of 1980, to our staff and to the staff of the Energy Commission in advance of the hearings.

The record indicates that Edison and SDG&E will have adequate fuel oil supplies to meet their electric generation needs through the winter of 1979-80, assuming that average winter weather conditions will be encountered and that no major unforeseen outage of long duration occurs. PG&E's estimated fuel oil supplies are barely adequate assuming normal weather conditions and no major unforeseen outages. However, PG&E appears to have sufficient supplies of natural gas to replace fuel oil under all but the worst possible weather conditions. We foresee no major electric capacity or energy shortage during the coming winter; therefore, no special or emergency planning appears to be required for that period.

The major proposed revision of Electric and Gas Tariff Rules 14.1 is to revise the provisions establishing maximum thermostat settings for the winter period. Both the utilities and the staff point out that temperature settings are set at 65°F for industrial buildings and businesses by DOE, and any rules established by this Commission should recognize the federal rules in order to avoid confusion. Rather than revise those portions of Electric and Gas Rules 14.1 relating to maximum temperature settings, we will delete those provisions from the Tariff Rule 14.1 required to be published by the regulated utilities.

Our conclusion herein to remove from Rule 14.1 the mandatory wintertime maximum space heating temperature setting of 68°F is based on the following facts: The current wintertime electric and gas supply situation is not nearly so critical as was the electric capacity shortage during the last summer when mandatory air-conditioning temperature settings were required to reduce loads during the daily peak periods of electricity usage. Thus, no emergency exists within California which requires maximum temperature setting for the winter period. Maximum wintertime settings of 65°F are applicable on a nationwide basis to space heating in commercial and industrial buildings pursuant to federal order. Residential temperature settings would be difficult to enforce on a mandatory basis in the absence of an emergency, and even in an emergency situation we have relied primarily on the cooperation of the residential and small business users to meet the Rule 14.1 requirements. While we have removed the mandatory temperature settings for space heating during the current winter season, we strongly urge maximum voluntary compliance of the 68°F settings by all residential customers of California gas and electric utilities (including those nonresidential customers who are exempted from the mandatory federal regulations) in order to reduce users' costs of energy in the face of rapidly rising

energy prices and to ensure an adequate supply for all utility customers. To this end, we direct regulated utilities to provide written information to their customers requesting voluntary compliance with the 68°F setting in order to ensure the lowest possible utility bills and to encourage conservation.

We expect that residential customers will practice conservation methods during the coming winter period to reduce their charges for electric and gas heating, and that an appropriate conservation measure is to maintain a maximum temperature setting for space heating at 68°F. We also point out that other effective conservation measures, such as attic insulation will also aid in keeping winter utility bills at the lowest possible level.

We will make minor revisions in Electric Rule 14.1 to incorporate therein the changes proposed by the utilities, our staff, and CSOAA. Those revisions are reasonable and are justified.

Findings of Fact

1. Coordinator, PG&E, Edison, and SDG&E have filed the reports and the information directed in Ordering Paragraph 2(a) through (g) of Decision No. 90712.

2. In addition, LADWP and SMUD have described the electric conservation programs initiated by them for application during the summer of 1979.

3. Further studies will be undertaken by the regulated utilities to determine the effectiveness of the augmented conservation measures instituted the summer of 1979. Reports on the results of these studies will be available in early 1980.

4. Based on the reports and attendant data furnished by the five utilities, the 1979 statewide load reduction plan and reserve sharing plan adopted pursuant to Decision No. 90407 operated effectively. Consideration should be given to initiation of a similar plan for application during the summer of 1980 in the event that capacity shortages may be expected on the systems of one or more major electric utilities.

5. Electric and Gas Tariff Rules 14.1 should be amended by deleting therefrom the maximum winter temperature settings for space heating now contained therein because such settings conflict with maximum settings directed by DOE for industrial and business use, and such maximum settings are merely advisory for residential customers. In addition, residential temperature settings would be difficult to enforce on a mandatory basis in the absence of an emergency. No critical electric or gas energy shortage or emergency is expected or anticipated in California during the winter of 1979-80.

6. The revisions of Electric Tariff Rule 14.1 (except as provided above) proposed by the utilities, our staff, and CSOAA are reasonable and should be adopted.

7. Fuel oil supplies of the regulated electric utilities available during the forthcoming winter months appear adequate assuming normal winter temperatures and snowfall, and sufficient capacity will be available to the regulated utilities to meet the winter needs of their electric customers without the institution of extraordinary load sharing or conservation programs for the winter months.

Conclusions of Law

1. Tariff Rule 14.1 should be amended as indicated in the above findings.

2. Further hearings should be held in this proceeding to determine (a) whether the Commission should institute programs for the summer of 1980 similar to those inaugurated pursuant to Decision No. 90427 for the summer of 1979, and (b) for the receipt of further evidence from the utilities concerning the effectiveness of conservation plans and the load reductions achieved during the summer of 1979.

3. The order herein should become effective on the date of issuance so that respondent utilities may establish revisions in Tariff Rule 14.1 as soon as possible.

SECOND SUPPLEMENTAL ORDER

IT IS ORDERED that:

1. Within five days after the effective date of this order, each respondent electric utility shall file a modification to its Tariff Rule 14.1 consistent with the modified Rule 14.1 set forth in Appendix A hereto. Such filing shall be made in accordance with General Order No. 96-A and shall be effective as of the date of filing.

2. Within five days after the effective date of this order, each respondent gas utility shall file a modification of its Tariff Rule 14.1 consistent with the modified Rule 14.1 (Rule 23.1, Southern California Gas Company) set forth in Appendix B hereto. Such filing shall be made in accordance with General Order No. 96-A and shall be effective as of the date of filing.

3. Respondents in this proceeding are directed to inform their gas and electric customers of the need to conserve energy supplies during the winter of 1979-80 and that conservation will mitigate the increased costs of energy during that period; and to urge their customers to conserve by voluntarily maintaining space heating temperature settings of 68°F or less.

4. Further hearing in OII No. 43 is scheduled before Administrative Law Judge Mallory commencing at 10:00 a.m., Wednesday, March 26, 1980, in the Commission's Courtroom, State Building, 350 McAllister Street, San Francisco, California.

OII 43 rr

5. At least ten days in advance of such hearing, respondents shall furnish to the Commission staff and to the staff of The Energy Commission appropriate data concerning their available generating capacity, estimated consumption, and their proposals for augmented energy conservation programs to cope with the peak demands anticipated for the summer of 1980.

The effective date of this order is the date hereof.

Dated JAN 8 - 1980, at San Francisco, California.

John E. Bryson
President

Commissioners

APPENDIX A

Rule No. 14.1

PROHIBITIONS AND CURTAILMENT PROVISIONS

A. General.

1. Historical Background.

This rule has been ordered effective by the Commission as an emergency measure pursuant to Decisions Nos. 82305, 82358, and 82881. It will be in full force and effect until declared ineffective by order of the Commission. This rule supersedes and cancels all tariff and contract provisions inconsistent with its terms. Paragraph B.1., herein, was temporarily suspended per Decision No. 83225, effective July 30, 1974.

2. Current Revisions

(D)

(D)

Paragraph B.6. added by this order will remain effective on a permanent basis unless changed, terminated, or suspended by further action of the Commission. Decision No. 90427 in OII No. 43 established an 80°F air conditioning lower temperature limit to be applied during all normal periods during the summer of 1979. By Decision No. 90712 the lower temperature limit for air conditioning was changed to 78°F during all normal periods. With the passing of the 1979 summer electrical peak period the Commission has determined that certain of the summertime emergency provisions established by Decisions Nos. 90427 and 90712 be terminated. Certain other provisions are modified in accordance with Decision No. 91184 in OII No. 43. (N)

B. Prohibited Uses.

1. Outdoor advertising and Decorative Lighting.

a. No customer shall during daylight hours make, cause, or permit any use of electrical energy for lighting of billboards, signs, advertising goods or services, or to identify the providers of goods or services, displays of goods, objects, or designs symbolic of commercial enterprises, trademarks or logo, or motors or devices to rotate or move advertising signs or operate pumps or other devices in fountains which are primarily decorative, building floodlighting, architectural or decorative lighting, or lights used for landscaping, or any similar form of lighting based upon the use of electrical energy supplied by the Company.

b. Notwithstanding the provisions of subsection B.1.a. hereof, each business establishment may operate a time and temperature sign and illuminate two outdoor signs during normal business hours and until one-half (½) hour after closing or 10:30 p.m., whichever is later, and each billboard may be illuminated between the hours of dusk and midnight and for two hours before daylight local time. (C) (C)

c. Non-illuminated fountains may be operated during normal business hours. (D)

(D)

2. Functional Outdoor Lighting.

a. No customer shall make, cause, or permit any use of electrical energy for the floodlighting of outdoor commercial areas, including, but not limited to, service stations, used car lots, new car lots, automobile parking lots, or similar businesses, between the hours of sunrise and sunset.

b. Notwithstanding the provisions of subsection B.2.a. hereof, after sunset, when such activities are open, the use of electrical energy for such purposes shall be reduced to fifty percent (50%) of normal or usual levels. Furthermore, prohibited uses of electrical energy from the Company are not applicable to that minimum lighting necessary for public safety, or for security, or that

required by law, or required for the lighting of essential buildings utilized for police, fire protection, health, and communications purposes.

3. Comfort Heating and Cooling.

a. During business hours, no customer shall at any time make, cause, or permit any use of electrical energy in any commercial or industrial establishment to provide cooling to reduce the temperature therein below 78°F. except where other temperatures are specifically required by law, by physicians for medical reasons, and for businesses whose principal activity involves the preservation of perishable foods. Where it is not established that a net energy savings can be achieved by operating space conditioning equipment during nonbusiness hours, such equipment shall be turned off. (D)

b. Notwithstanding the provisions of subsection B.3.a. hereof, any commercial or industrial buildings wherein the space heating and cooling control systems provide for a single temperature setpoint, or where such buildings are equipped with systems which heat and cool simultaneously or depend upon electric lighting as a part of the heating energy, the space conditioning systems shall be operated in a manner which minimizes electric energy use. Any commercial or industrial building may depart from the provisions of subsection B.3.a. when necessary to minimize electric energy use.

c. Electrical energy shall not be used by hotels, motels, similar guest accommodation establishments, or restaurants to heat or cool vacant guest rooms. Occupied rooms shall not be cooled below 78°F. (D)

d. No customer shall make, cause, or permit any use of electrical energy for cooling residences, apartments, or condominiums below 78°F except for medical reasons or where other temperatures are required by law. (D)

(D)

(D)

e. Notwithstanding the provisions of subsection B.3.a through d above, customers may pre-cool buildings equipped with economizers or outside air handling equipment to as low a temperature as desired provided that only outside air is used for such cooling purposes. Portable ventilating fans may be used at anytime regardless of space temperature. (T) (D)

4. Outdoor Public Gatherings.

No customer shall make, cause, or permit the use of electrical energy for recreational or cultural activities in excess of eighty-five percent (85%) of the normal or usual amount used by that customer for the same, or similar, activities.

5. Indoor Business Lighting.

a. No customer shall make, cause, or permit the use of electrical energy for lighting the interior of any business establishment during that period of time that said establishment is not carrying on the usual and customary activities of that business. (D) | (D)

b. Notwithstanding the provisions of subsection B.5.a hereof, a business establishment may provide sufficient illumination at all times to provide a minimal level of protection and security to persons and property. (T) (T)

c. Nothing in these subsections shall be construed to prohibit ordinary and customary maintenance and janitorial services at times other than those during which the business establishment is carrying on the usual and customary activities of that business. (T)

6. Swimming Pool Timers.

a. Timers associated with swimming pool pumps and filtration equipment shall not be used to operate such equipment during the peak usage periods of the day from 12:00 noon to 6:00 p.m.

b. Notwithstanding the provisions of subsection B.6.a., a circulating pump may be used to circulate solar heated water from solar collector panels to any pool or to return pool water to solar collector panels. (D) (D)

c. Notwithstanding the provisions of subsection B.6.a., pumps that activate hydro-massage and therapeutic or other equipment designed for the comfort of bathers may be set to operate by means of manual switches during any period when the pool is occupied.

C. Notification. The company shall notify the customer when it has learned of a prohibited use as defined in Section B, and, unless the customer will discontinue such use, Section D shall apply.

D. Noncompliance. The Company shall discontinue service to a customer for noncompliance with this rule, if, after notice of at least 5 days, the customer has not initiated compliance with such notice. Service will be restored after the customer establishes compliance with the rule.

E. Appeals Procedure. Requests, by customers of the Company, for special relief from the mandatory orders of prohibition or curtailment of certain end uses of electricity by reason of special hardship or impossibility of compliance shall be made to the California Public Utilities Commission in the manner provided for formal complaints under the Commission's Rules of Practice and Procedure. During the period the request is pending before the Commission, the Company shall not terminate service for noncompliance.

F. Liability of Company. The Company shall not, by taking action pursuant to this rule, be liable for any loss, damage, or injury, established or alleged, which may result or be claimed to result therefrom.

OII 43 rr/gf

APPENDIX B
Page 1 of 3
Rule No. 14.1

PROHIBITIONS, CONSERVATION, AND CURTAILMENT PROVISIONS

A. General

This rule has been ordered effective by the Commission as an emergency measure pursuant to Decision No. 86932. It will be in full force and effect until declared ineffective by order of the Commission. This rule supersedes and cancels all tariff and contract provisions inconsistent with its terms. This rule was amended by Decision No. 91184 in OII No. 43 to delete maximum space heating temperature requirements.

B. Prohibited or Restricted Uses

1. Advertising and Decorative Lighting:

   a. Natural gas shall not at any time be caused or permitted to be used for outdoor decorative lighting, torches, flares, or any similar form of gas lighting.

   b. Natural gas shall not at any time be caused or permitted to be used for indoor decorative purposes, such as artificial fireplace logs, except in such cases as such use of natural gas is primarily for the purpose of space heating and human comfort.

2. Comfort Heating and Cooling:

   a. (D)

   b. Natural gas used by all hotel, motel, and similar guest accommodation establishments and restaurants should not be used to heat vacant guest rooms. (D)

   c. (D)

   d. Any commercial or industrial buildings wherein the space heating and cooling control systems provide for a single temperature setpoint or where such buildings are equipped with systems which heat and cool simultaneously or depend upon electric lighting as part of the heating energy, the space conditioning systems shall be operated in a manner which minimizes total energy use. (D)

3. Outdoor Public Gatherings:

   Natural gas should not be caused or permitted to be used for recreational or cultural activities without a reasonable reduction of the normal or usual amount used by that customer for the same, or similar, activities.

(Continued)

APPENDIX B
Page 2 of 3
Rule No. 14.1

PROHIBITIONS, CONSERVATION, AND CURTAILMENT PROVISIONS

B. Prohibited or Restricted Uses (Continued)

4. Indoor Business Heating:

a. Natural gas shall not be caused or permitted to be used for heating the interior of any business establishment during that period that said establishment is not carrying on the usual and customary activities of that business.

b. Notwithstanding the provisions of subsection 4.a. hereof, a business establishment may provide sufficient heating at all times to provide a minimal level required to prevent pipe freezing or other damage.

c. Nothing in these subsections shall be construed to hinder or prohibit ordinary and customary maintenance and janitorial services at times other than those during which the business establishment is carrying on the usual and customary activities of that business.

5. Swimming Pool Heating:

Natural gas should not be caused or permitted to be used for the purpose of swimming pool heating except when the pool temperature is maintained at the coolest temperature compatible with pool usage and one of the following conditions is met:

a. The pool is primarily used for educational swimming instruction, competitive swimming events, or training associated with such competitive events.

b. The pool is primarily used for the maintenance or restoration of health pursuant to an organized or medically directed health-oriented swimming program, including senior citizens or retirement community swimming programs.

c. The pool is covered when not used for swimming.

d. The primary source of heat is a solar heater with a standby natural gas heater.

6. Commercial and Industrial Process:

Every effort should be made to reduce natural gas usage.

C. Notification

The Utility shall notify the customer when it has learned of a prohibited use as defined in Section B and, unless the customer will discontinue such use, Section D shall apply.

(Continued)

PROHIBITIONS, CONSERVATION, AND CURTAILMENT PROVISIONS
(Concluded)

D. Noncompliance

Rule No. 11(G) will be enforced with respect to this rule, and the Utility shall discontinue service to a customer for non-compliance with this rule if, after notice of at least 5 days, the customer has not initiated compliance with such notice. Service will be restored after the customer establishes compliance with the rule.

E. Appeals Procedure

Requests by customers of the Utility for special relief from the mandatory orders of prohibition or curtailment of certain end uses of gas by reason of special hardship or impossibility of compliance shall be made to the California Public Utilities Commission in the manner provided for formal complaints under the Commission's Rules of Practice and Procedure. During the period the request is pending before the Commission, the Utility shall not terminate service for noncompliance.

F. Liability of Utility

The Utility shall not, by taking action pursuant to this Rule, be liable for any loss, damage, or injury, established or alleged, which may result or be claimed to result therefrom.