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ORIGINAL

Decision No. 82881

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's
Own Motion into the Adequacy and
Reliability of the Energy and Fuel
Requirements and Supply of the
Electric Public Utilities in the
State of California.

Case No. 9581
(Filed July 3, 1973)

FOURTH INTERIM OPINION AND ORDER

Background

On November 13, 1973 this Commission by Decision No. 82139 put into effect a voluntary conservation and curtailment program designed to achieve a reduction of 10 percent in the consumption of electric energy compared to the corresponding month of the prior year. The goal was increased to 15 percent by Decision No. 82305 issued January 3, 1974. To achieve the additional 5 percent, Decision No. 82305 ordered the electric utilities to file tariffs restricting the use of electricity with respect to specific areas including indoor and outdoor lighting, outdoor public gatherings, and space heating and air conditioning. The objectives sought by the Commission were the consequence of the disruptions in the delivery of fuel oil for steam electric generation.

Since the issuance of Decision No. 82305, the immediate threat of serious shortages of fuel oil for steam electric generation and possible economic consequences has eased somewhat. It appears that the substantial savings achieved by the California consumer through the voluntary and mandatory conservation and curtailment measures, the heavy winter rains with a good mountain snowpack making greater than normal hydroelectric power available, and the lifting of the Arab oil embargo have contributed significantly to the improved supply picture.

Our review of the record indicates that while the fuel oil shortage for steam electric generation still appears to exist to some degree, for the immediate future there has been a stabilization of available supply. For the reasons discussed below we have determined that the levels of conservation and curtailment of electricity can be relaxed to some extent for the time being, and that procedures to deal with the fluctuating and apparently continuing shortage of fuel for electric generation should be established.

Petroleum Supply and Demand and Its
Effect Upon Electricity Supply in
California

The supply and demand of petroleum is of significance in considering curtailment and conservation measures concerning the consumption of electricity in California and procedures for determining measures for its efficient use.

When these hearings began in July 1973, it was clear that all California utilities were having difficulty obtaining commitments for deliveries of fuel oil to meet their foreseeable needs. The increased demand for fuel oil occurred at a time of declining supplies of natural gas historically used for steam electric generation and a growing worldwide demand for crude oil and refined products with a low-sulphur content. Exhibit No. 35 presented by Mr. Sherman H. Clark of Sherman H. Clark Associates on July 27, 1973 and sponsored by Southern California Edison Company analyzed statistical information from traditional energy industry resources. Mr. Clark's testimony and exhibit analyzed the California energy balance, petroleum in California and District V, and the free world petroleum supply and demand situation. Events subsequent to the introduction of Exhibit No. 35 have not disproved its contents and analysis.

Table 18 of Exhibit No. 35 illustrates the fact that the United States will become increasingly dependent upon foreign sources for petroleum, or its alternatives, if energy consumption is to continue to increase, with the deficit of 4.8 million barrels per day in 1972 increasing to 12.9 million by 1976.

Factors Limiting Additional Petroleum Supplies

While it may be assumed that higher prices will provide incentive to explore and develop additional reserves, it appears that supplies from the Alaskan North Slope will not be available until the latter part of this decade and that production from offshore reserves and the outer continental shelf on the West Coast and the East Coast of the United States would not be available until the beginning of the 1980s. A second limiting factor is the expectation of relatively unchanged refinery capacity in the United States over the next few years because of the construction lead time for new facilities. This was discussed at some length in our opinion of September 25, 1973 in Decision No. 81931. Table 19 of Exhibit No. 35 is reproduced herein to show the relatively unchanged refinery capacity in the United States through 1975 as compared to substantial planned growth in Latin America, Western Europe, and Japan. Table 19 also shows that operating at 90 percent of capacity worldwide, product shortfall will increase through 1975 to a level of approximately 5 million barrels a day.

TABLE 19

FREE WORLD REFINING CAPACITY
(Thousands of Barrels per Day)
1972-1975

	Installed 1972	Planned Expansion			Capacity at End of		
		1973	1974	1975	1973	1974	1975
United States	13,087.0	249.9	158.4	150.0	13,336.9	13,495.3	13,645.3
Canada	1,725.0	115.0	84.0	140.0	1,840.0	1,924.0	2,064.0
Latin America	6,450.8	168.6	439.0	473.5	6,619.4	7,058.4	7,531.9
Western Europe	17,374.2	497.9	1,485.5	2,028.0	17,872.1	19,357.6	21,385.6
Africa	710.4	37.0	137.1	247.0	747.4	884.5	1,131.5
Middle East	2,693.3	125.0	179.0	157.0	2,818.3	2,997.3	3,154.3
Japan	4,315.6	256.0	445.0	95.0	4,571.6	5,016.6	5,111.6
Other Far East and Oceania	3,489.5	233.6	430.5	435.2	3,723.1	4,153.6	4,588.8
Total Free World	49,845.8	1,683.0	3,358.5	3,725.7	51,528.8	54,887.3	58,613.0
Output at 90% capacity					46,376	49,399	52,752
Free World demand					48,000	52,500	57,600
Product deficit					1,624	3,101	4,848

Source: Capacity: Oil and Gas Journal, December 25, 1972 and March 26, 1973.
Demand: S. H. Clark Associates.

California refineries have long been considered a principal world source of residual fuel oil. However, reference to Tables 10, 11, and 12 of Exhibit No. 35 shows a growing deficit for products coming from California refineries through 1976. The demand for and supply from California refineries, and resulting deficits, are tabulated below for the years 1972 through 1976.

RESIDUAL FUEL OIL SUPPLY-DEMAND
BALANCE IN CALIFORNIA
(Thousands of barrels per day)
(Exhibit No. 35, Page 33)

<u>Year</u>	<u>Demand</u>	<u>Supply From California Refineries</u>	<u>Surplus (Deficit)</u>
1972	238	257	19
1973	385	315	(70)
1974	592	336	(256)
1975	712	341	(371)
1976	770	445	(325)

The deficits shown, which rapidly exceed California's refinery output, must be made up from foreign sources in view of the general refinery deficit situation for the entire United States.

Due to strict sulphur content limitations, California utilities have special requirements for low-sulphur, residual fuel oil (0.5 percent sulphur or less). The following table shows the California output of and requirements for residual fuel oil by range of sulphur content in thousands of barrels per day.

CALIFORNIA OUTPUT OF AND REQUIREMENTS FOR
RESIDUAL FUEL OIL BY RANGE OF SULPHUR CONTENT
(Thousands of barrels per day)
(Exhibit No. 35, Page 41)

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
<u>More than 0.5% sulphur</u> <u>(Conventional fuel oil)</u>					
Output	117	110	110	110	110
Requirements	74*	80	85	90	95
Movements out (in)	41	30	25	20	15
<u>0.5% sulphur or less</u> <u>(Low-sulphur fuel oil)</u>					
Output	140	205	226	231	335
Requirements	164	305	508	622	675
Movements out (in)	(24)	(100)	(282)	(391)	(340)

*The difference between the sum of production and net imports and total consumption is due to stock changes.

Movements out of California will be conventional oil, while the movements into California will be a growing requirement for low-sulphur fuel oil. Moreover, it is apparent that even if the movements out of California were completely eliminated and that portion of output was reduced to low-sulphur content, the need for imports would still be enormous.

Since most of the refinery capacity shown above was constructed before the imposition of strict sulphur content standards, there is little, if any, refinery desulfurization capacity presently available. Consequently, to achieve a low-sulphur residual refined product, the refinery must process low-sulphur crude. Moreover, the potential for low-sulphur refined fuel in the past has been somewhat reduced due to what is believed to be the mixing of low-sulphur crude at storage points prior to shipment and again at other storage stages prior to refining. Algeria, Libya, Nigeria, and Indonesia account for approximately 80 percent of the world's very low-sulphur crude oil.

Accordingly, due to rapidly increasing worldwide demand for low-sulfur fuel and limited refinery desulfurization capacity, it can be expected that the supply of 0.5 percent or less sulfur fuel oil probably will not be sufficient to meet worldwide demand in 1974 and longer.

California utilities have stated that plans are under way to bypass the refinery capacity shortage by altering certain boilers to burn low-sulphur crude oil directly.

From the foregoing, it appears that for the foreseeable future there will be chronic shortages of legally conforming fuel oil available for steam electric generation in California. Consequently, to the extent that alternative energy generating capacity is not available to meet growing demand for electrical energy, conservation and curtailment measures will be required in order to prevent serious dislocations.

A fourth factor, the dynamics of the world petroleum industry, may become a substantial additional factor influencing the need for conservation and curtailment measures. Rearrangements of low-sulphur crude supplies and/or a recombination of crudes, increased blending of distillate and residual fuel oil, and possibly an easing of environmental standards in some carefully considered cases may help to alleviate the projected shortages but will not solve the need for an ever-growing supply of fuel suitable for steam electric generation. Accordingly, price competition to secure supplies of fuel may become a factor of even greater significance than it already is.

For the reasons stated above, it appears that until other sources of oil and ultimately alternatives to oil are developed in sufficient amounts to fulfill demand for energy, there will be a growing worldwide dependence upon supplies of oil from established producing sources. To the extent these currently producing sources do not satisfy increasing concentration of demand, it is inescapable

that conservation and curtailment practices concerning the use of energy are necessary and desirable in order to prevent serious economic dislocations and to encourage the use of available energy in a way which will be of the greatest benefit to the public health, safety, and well-being.

Modification of Conservation and Curtailment
Objectives and Procedures

In establishing a systematic approach to conservation and curtailment measures the essentially voluntary character of such measures, if they are to be successful, must be emphasized. Further, the ultimate objective is to conserve electric energy in such a way that available supplies are used to the greatest public benefit.

Analysis of periodic reports filed by the electric utilities pursuant to Commission orders since the voluntary conservation and curtailment plan was put into effect in November indicates the level of electric kilowatt hour sales has declined within a range of 10 to 20 percent below projected sales levels. The following table summarizes the reduction in projected sales levels reported by the three major California utilities from December through March:

	<u>December</u>	<u>January</u>	<u>February</u>	<u>March</u>
Pacific Gas and Electric Co.	5.1%	12.1%	12.2%	11.1%
San Diego Gas & Elec. Co.	12.3%	17.9%	15.3%	13.0%
Southern Calif. Edison Co.	16.4%	13.4%	21.5%	22.0%

It must be concluded that the voluntary conservation efforts have received broad based public support. After the commencement of the conservation program in November, the savings continued to increase during the winter months. The residential class maximum savings were in the area of 15 percent in January and about 12 percent in March as seasonal load levels declined. Commercial sales levels declined within a range of 11 percent to 18 percent below projected levels in January and from 13 percent to 20 percent in March. It is reasonable to assume that commercial savings levels can be maintained during the spring and summer months. Past usage patterns indicate it may be more difficult to effect residential savings during the spring and summer months. Overall it is our conviction that, at present, adequate levels of the conservation of electrical energy can be reached primarily through voluntary programs without materially curtailing electric services to agriculture, industry, or other uses necessary for the state's economic and social well-being.

The Federal Energy Office (FEO) program for the allocation of petroleum products to electric generating utilities provides for energy conservation levels ranging from 5 percent to 7 percent by months through April of 1974. It is the expressed intent of the Federal program to promote a national conservation effort so that some states, such as California, which have a relatively more exposed position to fuel shortages, will not have to absorb a disproportionate curtailment.^{1/}

^{1/} Before 1972 about 80 percent of the steam-electric generation in California was fueled by natural gas. Since 1972 substantial additional requirements for conforming fuel oils have occurred to offset rapidly diminishing supplies of natural gas. Decline of natural gas for interruptible industrial use has aggravated competition for fuel oil as industrial operators have been forced to depend more and more upon alternative fuels to natural gas.

The successful voluntary conservation program had the fortuitous assistance of a relatively mild winter and above-average availability of electric energy from hydroelectric resources. Accordingly, for the time being it will be possible to reduce conservation objectives to levels ranging from 5 to 15 percent below previously projected normal levels. These less stringent levels of conservation will be more in line with the announced federal objectives. In so relying upon these objectives, we recognize the authority, and, necessarily, the responsibility of the FEO to allocate fuel supplies in such a way as to maintain a level of electric service of from 5 to 15 percent below normal. For the reasons discussed below the new voluntary conservation guidelines announced herein will be established by classes of service, starting with a level of 5 percent below normal projections for the very small residential customers and ranging upward to an objective of 15 percent below normal projections for large commercial customers.

Electrical Energy Usage Requirements

A summary of the testimony of various classes of users of electrical energy, their essential requirements, and the reasonable approaches to conservation will be helpful in explaining the voluntary goals to be established for conservation of electrical energy by classes of service.

Analysis of end-user testimony shows that the more essential the energy use in the operations of the user, the less discretion there is in reducing total consumption. Put another way, as the proportion of total monthly use of electricity directly in the manufacturing process increases, a correspondingly smaller amount of the total monthly use is available for conservation if the manufacturer is not to reduce output and thereby suffer adverse economic consequences. Testimony by the witness for the California Manufacturers Association recommended that for industrial users, conservation efforts be directed towards that portion of total

electrical load not used directly in the manufacturing process but to the remaining load which would be subject to effective conservation measures. Examples most numerous given were conservation of electricity in office operations such as reduction in lighting loads where possible, reduction in space conditioning loads, and analysis of office loads for elimination of unneeded uses, together with efforts to encourage conservation practices by employees.

Users of electricity in continuous process operations are limited in their discretion as to the time in which conservation efforts could be most effective. For example, a continuous process manufacturer may not be able to reduce his load during system-peak hours if the processing cycle has not been completed, without loss or damage to the product.

Other loads are so directly essential to public health, safety, and well-being that reduction in usage could have an immediate and sustained adverse effect upon the public well-being. Power necessary for the operation of municipal services such as hospitals, traffic lights, communications systems, sewage pumping systems, or the spectrum of farm industry operations essential for the production of food and fibre should enjoy a preferred position in the use of available energy.^{2/}

^{2/} See Exh. 97 (Energy Requirements for Agriculture in California, Joint Study Calif. Dept. of Food and Agriculture, Univ. of Calif., Davis,) for a comprehensive summary of what appears to be the beginning of an ongoing analysis of the use of energy in agricultural operations, as an example of the intensive use of energy and its significance in agricultural operations.

In the commercial field the use of energy for illumination and for aesthetic attraction seems to have a correlation with the amount of business stimulated thereby. The record indicates that many small businesses rely primarily upon an illuminated identification of their whereabouts to inform the public of the services to be offered. Larger commercial enterprises, either in testimony in the record or in complaints filed subsequent to the implementation of Rule 14.1 prohibiting and curtailing certain uses of electricity for illumination, allege substantial hardship suffered by reductions in the use of illuminated business identification facilities. Other complaints allege substantial loss of business by not being permitted to illuminate store window displays during daylight hours. The ban on the use of commercial illumination during the daytime has caused some public inconvenience resulting from the turning off of time and temperature displays which are effective only when illuminated.

Other complaints have been filed pursuant to Rule 14.1 where decorative water fountains have been turned off. In such cases it appears that both private and public commercial projects associated with such water fountains have been endangered through loss of the pleasing and aesthetic attraction of the water fountain. Additionally, it has been alleged that substantial investments of thousands of dollars in the mechanical equipment to operate such fountains is endangered as a result of deterioration of such equipment from non-use over long periods of time.

From the outset of the energy conservation and curtailment program, it has been our intention to assist the public as much as possible by informing the public as to how they may proceed voluntarily to conserve energy and thereby contribute to the overall public benefit. It has not been our intention to seek out particular segments of the public or the economy and impose disproportionately burdensome restrictions. However, the necessity for maintaining procedures for conserving energy and controlling shortages to the extent it is possible is manifest. Accordingly, the following schedule of voluntary conservation of the use of electrical energy will be put into effect:

Residential - Less than 400 Kwhr/month	5%
Next 600 Kwhr/month	5-10%
All over 1000 Kwhr/month	10-15%
Commercial, Public Authority, and Industrial, Non-Demand	10%
Commercial and Public Authority, Large Industrial, Large	15-20%
Agricultural	5%
Street Lighting and Other	5-10%
Resale	10%

All utilities in California will be required to inform their customers by appropriate advertising and notices setting forth the conservation objectives above. Each utility will be allowed flexibility in establishing a base period and specific usage reduction guidelines due to differences in billing procedures, climatological factors, and other variables. Since the percent reduction plans remain voluntary, the utilities will not be required to notify customers individually of recommended usages levels but will provide all customers general information and specific details upon request.

This continued voluntary program will provide for an ongoing accumulation of valuable experience in implementing conservation programs that will be the least disruptive of essential electrical services. It must be emphasized that a shortage of residual fuel oil for steam-electric generation is anticipated to continue into 1976 and perhaps beyond. Therefore, it may become necessary to return to higher levels of conservation and/or stricter curtailment measures as the winter months approach or thereafter. During the summer months it is most important that air conditioning loads be curtailed by all customers to the fullest extent feasible. Cooling should not be utilized to reduce the ambient temperature below 78°F.

Accordingly, the continuous effort by all citizens now will be helpful in maintaining storage levels of fuel to offset the potential of adverse energy supply conditions later in the year. The Commission will release monthly status reports of the levels of reduced usage curtailment actually achieved and a comparison to the conservation goals currently in effect.

At present it appears that operation of ornamental fountains will not have a measurable adverse effect upon fuel supplies and could be of benefit to the public at large. Accordingly, decorative and ornamental fountains will be allowed to operate, but not to be illuminated. Likewise, the use of energy for commercial illumination during daytime for time and temperature signs and for display window illumination will be permitted. However, a corresponding increased effort at conservation of energy should accompany such illumination in order not to increase overall use. Finally, business establishments will be allowed to illuminate more than one sign from sunset to one-half hour after closing or until 10:30 p.m.

Findings of Fact

1. The outstanding conservation efforts of California electric customers under the voluntary conservation program instituted by Decisions Nos. 82139 and 82305 have achieved reduced levels of electric consumption in the range of 10 percent to 20 percent below projected sales levels for the months December through March.
2. The FEO has established nationwide energy conservation levels ranging from 5 percent to 7 percent below projected levels through April of 1974.
3. Over the next few years worldwide demand for crude oil and particularly low-sulphur crude oil will expand faster than production.
4. Over the next few years the demand in California for low-sulphur residual fuel oil and other petroleum refined products will continue at levels above that of existing refinery capacity.
5. For California utilities supplies of low-sulphur residual fuel oil and low-sulphur crude oil will continue in tight supply at fluctuating levels of intensity.

6. Pursuant to Rule 14.1 - orders to be filed in each utility company's tariffs pursuant to Decision No. 32305, several complaints have been filed alleging extreme economic hardship caused by compliance with mandatory prohibitions and curtailments in the use of electricity.

Conclusions

1. Present levels of voluntary curtailment have achieved levels greater than the range of conservation set by the FEO nationwide.

2. By orders herein, reduced levels of conservation in line with the FEO nationwide plan are appropriate.

3. Systemwide levels of 10 percent below projected sales levels should be established. Multi-level conservation guidelines for each class of service should be set for voluntary conservation programs as follows:

Residential - Less than 400 Kwhr/month	5%
Next 600 Kwhr/month	5-10%
All over 1000 Kwhr/month	10-15%
Commercial, Public Authority, and Industrial, Non-Demand	10%
Commercial and Public Authority, Large	15-20%
Industrial, Large	5%
Agricultural	5%
Street Lighting and Other	5-10%
Resale	10%

4. Fuel oil for steam-electric generation in California will continue to be in tight supply with fluctuating levels of intensity.

5. Procedures for conservation and curtailment should continue in existence so that prompt action can be taken in the event greater levels of conservation again become necessary.

6. All regulated utilities will be required to provide information to their customers by appropriate advertising and notices setting forth the new conservation objectives ordered herein.

7. The Commission will issue a monthly bulletin reporting on statewide levels of conservation from projected levels in order to keep the public informed of the energy availability outlook.

8. A continued and growing dependence over the foreseeable future on foreign imports of fuel for steam-electric generation in California requires continued diligence in conservation of the use of electric energy.

9. Deliveries of electricity for the operation of decorative and ornamental water fountains without illumination will be authorized.

10. Business establishments will be allowed to operate two electric signs rather than one under current time restrictions.

11. By orders herein, deliveries of electricity for the operation of time and temperature signs will be authorized.

12. By orders herein, the use of electricity for illumination of commercial displays during daylight hours will be authorized subject to intensified alternative conservation efforts by enterprises engaging in daylight illumination of commercial displays.

IT IS ORDERED that:

1. All regulated electric utilities are authorized to adjust their conservation efforts, if necessary, in order to achieve a systemwide level of not less than 10 percent from normal usage.

2. All customers of regulated electric utilities are requested to effect voluntary conservation efforts within their class of service in accordance with the following guidelines:

Residential - Less than 400 Kwhr/month	5%
Next 600 Kwhr/month	5-10%
All over 1000 Kwhr/month	10-15%
Commercial, Public Authority, and Industrial, Non-Demand	10%
Commercial and Public Authority, Large	15-20%
Industrial, Large	5%
Agricultural	5%
Street Lighting and Other	5-10%
Resale	10%

3. All regulated electric utilities are directed to provide general information to their customers by appropriate advertising and notices setting forth the new conservation objectives ordered herein.

Within thirty days after the effective date of this order, each utility shall file its plan for administering its new plan including the base period utilized and examples of data and information being made available to its customers.

4. Regulated utilities may supply electricity for the operation of decorative and ornamental fountains, but not for the illumination thereof.

5. Regulated electric utilities may provide electricity for the illumination of time and temperature signs.

6. Regulated electric utilities may supply electricity for the operation of commercial lighting displays.

7. Electricity may be supplied for the illumination of two business signs by a subscriber rather than one sign as previously ordered.

8. Appendix A of Decision No. 82305 putting into effect Rule 14.1 is modified to conform with the above. The revised Appendix A is attached hereto.

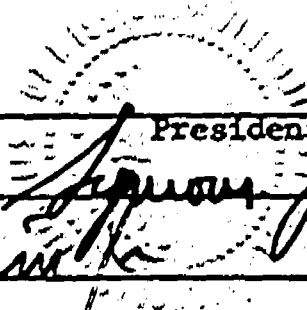
9. The reporting requirements ordered in paragraph 2 of the first interim order herein shall continue in effect pending further order of the Commission.

The Secretary is hereby directed to cause certified copies of this order to be served upon each respondent to this investigation and also upon the various governmental agencies, publicly owned electric utilities, major fuel suppliers, and other informed parties

listed in Appendix C to the Order Instituting Investigation, to members of the California Legislature, and to those parties entering appearances, not otherwise included in Appendix A or Appendix C to the Order Instituting Investigation.

The effective date of this order is the date hereof.

Dated at San Francisco, California, this 15th
day of MAY, 1974.


William J. Aguirre President
[Signature]
[Signature] Commissioners

Commissioner Vernon L. Sturgeon, being necessarily absent, did not participate in the disposition of this proceeding.

I abstain.
Thomas Moran

REVISED APPENDIX A
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PROHIBITIONS AND CURTAILMENT PROVISIONS

(a) Outdoor Advertising and Decorative Lighting

- (1) No customer shall at any time 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 utility.
- (2) Notwithstanding the provisions of subsection (a)(1) hereof, each business establishment may operate its time and temperature, window and display lighting, and illuminate two outdoor signs during normal business hours and until one-half (1/2) hour after closing or 10:30 p.m., whichever is later, and each billboard may be illuminated between the hours of sunset and 10:30 p.m., local time, and two hours before daylight during the months of October through March. Non-illuminated fountains may be operated during normal business hours.

(b) Functional Outdoor Lighting

- (1) 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, and when not open for business.
- (2) Notwithstanding the provisions of subsection (b)(1) 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 utility 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.

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(c) Comfort Heating and Cooling

- (1) 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 heat to raise the temperature therein above 68°F, nor to provide cooling to reduce the temperature therein below 78°F, except where other temperatures are specifically required by law. Where it is not established that a net energy savings can be achieved by operating space conditioning equipment during non-business hours, such equipment shall be turned off.
- (2) Notwithstanding the provisions of subsection (c)(1) hereof, any commercial or industrial buildings wherein the space heating and cooling control systems provide for a single temperature set-point, 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.

(d) 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.

(e) Indoor Business Lighting

- (1) 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.
- (2) Notwithstanding the provisions of subsection (e)(1) hereof, a business establishment may provide sufficient illumination at all times to provide a minimal level of protection and security to persons and property.
- (3) 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.