

Public Utilities Commission

<AdviceLetter>

Attachment A

Cal. P.U.C.
Sheet No.

Title of Sheet

Cancelling Cal.
P.U.C. Sheet No.

July 7, 2000

ADVICE 1463-E
(U 338-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

**SUBJECT: 2000 and 2001 Residential Swimming Pool Pump
Tripper Program to Assist in the Shortage of
Generating**

Southern California Edison Company (SCE) hereby submits for filing, its proposal for implementation of the Swimming Pool Pump Tripper Program.

PURPOSE

By this advice filing SCE proposes to implement the residential Swimming Pool Pump Tripper (SPPT) load management program as part of its Energy Efficiency program portfolio for program years (PY) 2000 and 2001, in an effort to help alleviate generating capacity shortages affecting the State of California in the summers of 2000 and 2001. Specifically, SCE seeks authorization to: (1) utilize unspent energy efficiency public purpose program funds to implement the SPPT program for PY2000 and PY2001; and (2) exempt these program expenditures and budget from SCE's energy efficiency performance award mechanism.

INTRODUCTION

Shortage of Generating Capacity

When operating reserves fell below 5% of forecast demands on June 26, 27, and 28, the California Independent System Operator (CAISO) declared Stage II Emergencies on each of those days. The ISO also requested the implementation of the Utility Distribution Companies' curtailable load programs. Requests for voluntary load curtailment ranged from 240 MW to 1,200 MW during these Stage II Emergencies.

During the time frame referenced above, the CAISO experienced loads 6%-7% below their all-time peak. However, the CAISO still found it necessary to curtail load in order to maintain operating reserves. Part of the reason for such shortages under non-peak load conditions is the reduced availability of power imports. Neighboring regions (i.e. the Pacific Northwest and Southwest) have been experiencing high load growth which at times limits the availability of imports into the CAISO controlled grid. This limited import capability along with load growth in California and the lack of new generation contributes to a greater likelihood of electric supply shortages for the CAISO this summer. The CAISO recently reported a 4%-9% probability that they will require firm load curtailments this summer, in light of currently available resources.

Five new generation projects have been approved by the California Energy Commission and are under construction. Fourteen additional generation projects are in various stages of the licensing process.

However, due to the lead-time for the planning, siting, licensing, and construction of power plants, it is unlikely that a significant amount of new generation will be available before the end of 2001. It is therefore imperative that shorter lead-time options such as energy conservation and demand side management be implemented to reduce the likelihood of Stage II and Stage III (rotating outage) emergencies.

PROPOSAL TO ASSIST IN SHORTAGES OF GENERATING CAPACITY

In an effort to help alleviate this shortage of generating capacity, SCE is proposing to implement the residential Swimming Pool Pump Tripper program that focuses on reducing on-peak load by setting residential swimming pool pump timers to operate during off-peak hours.

Program Description

The residential Swimming Pool Pump Tripper program focuses on reducing on-peak load by setting residential swimming pool pump timers to operate during off-peak hours. The program will target pool maintenance contractors, swimming pool supply stores and pool owners without existing pool maintenance agreements. The program will provide incentives to install/set pool pump timers to operate during off-peak hours, thereby reducing total peak load. The target markets will include residential single-family and certain multi-family swimming pools. SCE operated a similar program in the late 1970's and early 1980's to address capacity shortages. A complete program description is shown in Attachment A of this advice filing.

The SPPT program will be available to participants during 2000 and 2001. It is expected that the program will produce nearly 20 MW of on-peak demand reduction during PY2000 and over 40 MW in PY2001.

Measurement and Verification

SCE intends to provide verified results of the demand reductions associated with this program. These results will be reported in SCE's Annual Energy Efficiency Report along with the results of all SCE energy efficiency programs. Program participation and the associated energy and demand savings will be verified through a sampling of participating customers.

Cost Effectiveness

The program described above is cost-effective on an ex ante (before-the-fact) basis. Such cost-effectiveness has been determined by a comparison of the benefits of providing demand-side resources during the summer peak hours to the costs of developing and delivering the program. The benefits developed in this cost-effectiveness calculation are used to approximate the value of available capacity during all peak hours (i.e., the hours in which a Stage III outage is most likely to occur). A proxy value of \$500 per MWh, representative of the current energy price cap, was utilized in the calculation of Total Benefits at Cap (See Table 1, Attachment A). These costs were compared to the program administrative and incentive costs incurred in the development and delivery of the program. The benefits of the program from the PY2000 total \$1.15 million compared with program costs of \$0.380 million. The benefits of the program from PY2001 demand impacts are \$15.63 million, compared with \$3.15 million in costs in PY2001.

In addition to the resource value attributed to the program's load reductions, the benefit of this program also includes the customer value of uninterrupted service. SCE reported such value in its March 1999 Customer Value of Service Reliability Study, submitted as part of its Performance-Based Ratemaking Mid-term Review. This study provided a value of \$5.36 that customers would be willing to pay during a summer weekday to avoid an afternoon service interruption, an interruption such as would happen as the result of a Stage III outage. While we have not included a service reliability adder as part of this cost effectiveness showing, it is clear that the inclusion of this adder would further increase the cost-effectiveness of this program.

PROGRAM FUNDING SOURCES

Program Budget and Funding Sources

The SPPT program's budget is \$0.383 million for PY2000 and \$3.147 million for PY2001. The SPPT program will utilize Energy Efficiency Public Purpose Program (EEPPP) funds. Specifically, the EEPPP funds identified for this activity include: (1) unspent, uncommitted, and unbudgeted PY1998 and PY1999 energy efficiency funds; and (2) PY2000 energy efficiency performance award budget. Unspent PY2000 California Board for Energy Efficiency budget will not be utilized. These funds will be identified in a future filing to support additional Market Assessment and Evaluation activities during PY2000 and PY2001. Any remaining EEPPP

funds will be utilized for other program activities to be identified by SCE in future filings.

Performance Award Mechanism

SCE's PY2000 performance award mechanism allows SCE to apply program expenditures associated with the EEPPP funds towards achievement of the aggressive implementation component of the mechanism. However, SCE proposes to exclude the budget for this program from the basis for establishing SCE's aggressive implementation targets and will exclude any expenditures, including commitments and incentives, in the calculation of its performance award achievement.

This advice filing will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule.

EFFECTIVE DATE

SCE requests that the Commission approve this advice filing at its August 3, 2000 Commission Meeting. If the Commission does not issue a decision at its August 3, 2000 meeting, the proposed demand reduction efforts will be unavailable to help ameliorate the capacity shortage during a significant part of the summer. To the extent any delay beyond August 3, 2000 contributes to declaration of a Stage III emergency and rotating outages, the public welfare will be harmed. The Commission may reduce the 30-day comment period provided by Public Utilities (PU) Code § 311(g)(1) for resolutions in accordance with its rules adopted pursuant to PU Code § 311(g)(3). Pursuant to Rule 77.7(f)(9), SCE requests that the Commission reduce the 30-day comment period due to public necessity.

In order to act by August 3, 2000, the Commission must reduce the protest period, as well as the review and comment period for the draft resolution. In order to accomplish this objective SCE proposes the following schedule, which incorporates reductions to the normal protest period and to the review and comment period on a resolution¹.

¹ On July 6, 2000, the Commission adopted, as part of its decision on SCE's PY2000 energy efficiency program plans, a process and timeline under which utilities and other parties may propose peak mitigation that the Commission would address in time for full implementation for the summer of 2001. However, as explained herein, SCE wishes to implement this program (and others filed concurrently with this advice filing) on an expedited schedule in order to allow SCE the opportunity to implement the program in time to produce peak mitigation benefits during the summer of 2000. SCE will file additional energy efficiency program proposals for summer 2001 as part of another advice filing that will be filed with the Commission by July 21, 2000.

Action	Due Date
File Advice Letter	7/7/2000
Protests to Advice Letter	7/17/2000
Reply to Protests	7/20/2000
Draft Resolution	7/27/2000
Comments to Draft Resolution	7/31/2000
Reply to Comments	8/2/2000
Final Resolution	8/3/2000

NOTICE

To provide timely and adequate notice, SCE is serving this filing electronically on appearances of record in A.99-09-049, etc. Anyone wishing to protest this advice filing may do so by letter which must be received by SCE no later than 10 days after the date of this advice filing. Protests should be mailed, and sent via facsimile or electronic mail to:

IMC Program Manager
Energy Division
California Public Utilities Commission
505 Van Ness Avenue, Room 4002
San Francisco, California 94102
Facsimile: (415) 703-2200
e-mail: www.cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronic mail to the attention of:

Donald A. Fellows
Manager of Revenue and Tariffs
Southern California Edison Company
2244 Walnut Grove Avenue, Rm. 303
Rosemead, California 91770
Facsimile (626) 302-4829

Bruce Foster
Vice President of Regulatory Operations
Southern California Edison Company
601 Van Ness Avenue, Suite 2040
San Francisco, California 94102
Facsimile (415) 673-1116

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

In accordance with Section III, Paragraph G, of General Order No. 96-A, SCE is mailing copies of this advice filing to the interested parties shown on the attached service list and A.99-09-049. Address change requests to the attached GO 96-A Service List should be directed to Emelyn Lawler at (626) 302-3985.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing open for public inspection at SCE's corporate headquarters.

Southern California Edison Company

Donald A. Fellows, Jr.

DAF:eml:1463e.doc
Enclosures

Attachment A

Program Description - Residential Swimming Pool Pump Tripper Program

Program Name

Residential Swimming Pool Pump Tripper Program

The Residential Swimming Pool Pump Tripper Program is a load management program that reduces on-peak demand by setting residential swimming pool pump timers to operate during off-peak hours. The program will target pool maintenance contractors, swimming pool supply stores and pool owners without existing pool maintenance agreements. The program will provide incentives to install/set pool pump timers to operate during off-peak hours, thereby reducing total peak load. The target markets will include residential single-family and some multi-family swimming pools.

Program Objective

The objective of this program is to reduce on-peak demand by shifting operation of swimming pool pumps to off-peak hours. SCE will provide an incentive to pool maintenance contractors, swimming pool supply stores, and consumers to set pool pump timers to operate the pumps during off-peak hours. To verify compliance with the program, SCE would utilize contract inspectors to perform random inspections of pool pump timer installation/settings.

Market Statistics

There are approximately 650,000 swimming pools in Southern California. Of this amount, 350,000 residential swimming pools are in SCE's service territory. This total also includes approximately 21,000 multi-family swimming pools.

There are maintenance about 825 pool maintenance contractors and approximately 70 swimming pool stores that offer pool services for both single family and multi-family swimming pools in SCE's service territory. Based on swimming pool industry information, SCE believes there are approximately 192,500 (or 55% of the 350,000) swimming pools maintained by pool maintenance contractors and swimming pool supply stores in SCE's service territory. This program's participation goal is to achieve a 5% (or 9,625 pools) market penetration rate for PY2000, and 10% (19,250 pools) market penetration rate for PY 2001. To achieve this market penetration level, the program will offer participating contractors up to \$20 incentive per pool, per month to maintain appropriate pool pump timer installation/settings.

Based on swimming pool industry information, SCE believes there are approximately 157,500 (or 45% of the 350,000) pools in SCE's service territory that are owner maintained. This program's participation goal is to achieve a 2%

(or 3,150 pools) market penetration rate for PY2000 and a 5% (or 7,875 pools) market penetration rate for PY2001. To achieve this market penetration level the program will offer participating owners of these pools up to a \$20 incentive per month to maintain appropriate pool pump timer installation/settings.

Overall, the PY2000 program has the potential of achieving peak load reduction (load shift) results of 19.2 MW from approximately 12,775 swimming pools serviced by pool maintenance contractors, swimming pool supply stores and residential pool owners. Approximately 40.7 MW of peak load reduction is forecast for PY2001 from approximately 27,125 swimming pools.

Program Process

The program will generate interest through bill inserts and direct mail campaigns targeting swimming pool contractors, swimming pool supply stores and residential pool owners. This will include obtaining mailing lists through various sources (i.e., associations, swimming pool retailers, etc.) and preparing direct mail literature for distribution through regular mail. Program participants (contractors, suppliers and owners) will be given specific written guidelines and operating procedures which includes: how to communicate the program to customers, an incentive plan for participation, verification procedures, and participation agreements, etc.

Interviews with swimming pool owners and pool maintenance contractors indicate that approximately 8 – 10 hours per day of pump operation are required during summer months. Program procedures will require that pools are installed with timers in working condition, and pump operation hours must be during off-peak hours. Program planners recommend splitting operation hours between morning and evening hours (after 6 p.m.).

To confirm that program participants comply with program requirements, SCE will contract with outside vendors to verify at least 10% of the program participant's compliance each month. There are no customer installation and maintenance costs associated with this program.

Expected On-Peak Demand Reductions

PY2000	– 19.2 MW
PY2001	– <u>40.7 MW</u>
Total	59.9 MW

Budget

PY2000 –	
Administrative	\$127,750
Incentive	<u>255,500</u>
PY2000 Total Program Budget	\$383,250

PY2001 –	
Administrative	\$976,500
Incentive	<u>2,170,000</u>
PY2001 Total Program Budget	\$3,146,500

Cost Effectiveness

The total benefits of the program are \$1.15 million for the results of this program in the summer of 2000, with a total cost basis of \$0.38 million. The total benefits of the program are \$15.63 million for the results of this program for the summer of 2001, with a total cost basis of \$3.15 million in 2001. (See Table 1).

Table 1

Year: 2000			Costs (\$M)			Summer Peak Hours [1]	Energy Price Cap per MWh	Benefits (\$M) Total Benefits at Cap (i = c x g x h)
No. (a)	Program (b)	Summer Capacity Savings (MW) (c)	Cost (d)	Incentive (e)	Total Cost (f = d+e)			
1	Pool Tripper	19	\$ 0.13	\$ 0.26	\$ 0.38	120	\$ 500	\$ 1.15

Year: 2001 (Includes 2000 load impact)			Costs (\$M)			Summer Peak Hours	Energy Price Cap per MWh	Benefits (\$M) Total Benefits at Cap (i = c x g x h)
No. (a)	Program (b)	Summer Capacity Savings (MW) (c)	Cost (d)	Incentive (e)	Total Cost (f = d+e)			
1	Pool Tripper	60	\$ 0.98	\$ 2.17	\$ 3.15	522	\$ 500	\$ 15.63

Notes:

[1] (20 Peak days in August, 2000) x 6 peak hours per day

In addition to the resource value attributed to the program's load reductions, the benefits of this program also include the customer value of uninterrupted service. SCE reported such a value in its March 1999 Customer Value of Service Reliability Study, submitted as part of its Performance-Based Ratemaking Mid-term Review. This study provided a value of \$5.36 that residential customers would be willing to pay during a summer weekday to avoid an afternoon service interruption, an interruption such as would happen as the result of a Stage III outage. While we have not included a service reliability adder as part of this cost effectiveness showing, it is clear that the inclusion of this adder would further increase the cost-effectiveness of this program.