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Room 3102

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

EVALUATION AND COMPLIANCE DIVISION
Energy Branch

RESOLUTION E-3012
December 17, 1986

RESOLUTION

PACIFIC GAS AND ELECTRIC COMPANY (PG&E) ORDER AUTHORIZING APPROVAL TO REALLOCATE FUNDS IN EXCESS OF $2.5 MILLION TO TWO LOAD MANAGEMENT PROGRAMS, SPECIFICALLY, COMMERCIAL THERMAL ENERGY STORAGE (TES) AND INDUSTRIAL LOAD SHAPING.

By Advice Letter 1128-E filed November 3, 1986, Pacific Gas and Electric Company (PG&E) requests authorization to fund its Thermal Energy Storage (TES) and Industrial Load Shaping programs for 1986 at $3,346,000 and $3,879,000, respectively, by reallocating funds in excess of $2.5 million from less effective load management programs to those two programs.

BACKGROUND

TES and Industrial Load Shaping are two cost effective means of shifting peak loads that have been increasingly emphasized since Decision 83-12-068 was issued on December 22, 1983 in Pacific Gas and Electric Company's (PG&E) general rate case for test year 1984. Recognizing that conditions may change between general rate cases, the Commission in D. 83-12-068 provided for reallocation of funds among load management programs. Under the provisions of that decision PG&E may use its discretion to reallocate up to $2.5 million. Reallocations in excess of $2.5 million, such as the two addressed by this Resolution, require further Commission authorization.

The Advice letter was filed originally on October 31, 1986 without supporting information. Our Evaluation and Compliance Division's Energy Branch staff (E&C) then asked PG&E to develop and present the necessary information. This substantially increased the time required to review this filing. Moreover, the lack of supporting information elicited comments and inquiries from our Public Staff Division (PSD) which might have been unnecessary had the filing been complete.

PG&E proposes to to determine the capacity savings or load shift resulting from the TES and Industrial Load Shaping programs by estimates performed by professional engineers retained by participating customers. PG&E provided satisfactory assurances that all proposed participants will actually use their systems during the summer when the need for load management is the greatest.

DISCUSSION

The TES and Industrial Load Shaping programs have been of considerable interest to the E&C staff because of their effectiveness. The staff has been recommending that PG&E and other utilities with Load Management programs institute these programs. The definite plans required for these programs could not be completed in time for a funding proposal in PG&E's current general rate case, which was prepared over a year ago. Also, PSD did not, in its comments discuss PG&E's developing minimum load problems which are likely to become very significant in future summers unless significant loads are shifted from the day time peak period to the midnight until dawn minimum load period. Since the TES and Industrial Load Shaping programs expressly benefit the PG&E system by such load shifts these significant system benefits cannot be ignored.

However, in view of the continuing concerns of PSD that the $300/kW incentive level for TES is excessive based on near term capacity needs, and, that we are adopting a stiuplated $200/kW TES incentive level for Test Year 1987 in A.85-12-050, we will authorize that same level for all pending TES contracts under consideration in Advice Letter 1128-E. In doing so we specifically ask that for future analyses of these or similar utility programs the minimum load problem benefits be fully explored.

PG&E originally stated in its Advice Letter that for the Industrial Load Shaping program, approximately $32 million in revenues, net of costs and incentives, over a ten year period will accrue to PG&E from the two new participants, viz., Union Carbide and Liquid Air. Later in its November 24, 1986 letter, PG&E revised its estimate to a $27.4 million net revenue margin. We will tentatively accept this estimate, however, because of the importance of this matter in determination of revenue requirements in future rate proceedings, PG&E should periodically report the actual revenues it derives from the Industrial Load Shaping Program and TES. Estimates should be verified by recorded data for several customers with a previous consumption history.

FINDINGS

1. PG&E's request to reallocate load management funds as described in Advice Letter 1128-E is reasonable and should be authorized.

2. PG&E estimates it will derive a net revenue of $27.4 million from these programs over a ten-year period. Because of the importance of this matter in the determination of revenue requirements in future rate proceedings, PG&E should report the actual net revenue margin it derives from the TES and Industrial Load Shaping programs.

3. The customer incentives for TES should be reduced from $300/kW to $200/kW of avoided capacity for all pending contracts under this advice letter, consistent with the stipulated TES program incentive level in A.85-12-050.

Therefore:

1. PG&E is authorized to reallocate load management funds as requested by Advice Letter 1128-E but limited to an incentive level of $200/kW of avoided capacity for both TES and Industrial Load Shaping programs.

2. Any unspent funds resulting from the reduction of the avoided capacity payment authorized herein will be carried forward with interest for reallocation or refund as may be further ordered in A.85-12-050.

3. PG&E shall report semiannually to E&C Division the revenues it derives from the Industrial Load Shaping program. The first report for the year 1987 shall be submitted on March 1, 1988. It shall be of such format and include such information as E&C Division may prescribe. PG&E shall confer with E&C Division regarding these requirements at least 90 days prior to the due date of the report.

4. This Resolution is effective today.

I certify that this Resolution was adopted by the Public Utilities Commission on December 17, 1986. The following Commissioners approved:

DONALD VIAL
President
VICTOR CALVO
FREDERICK R. DUDA
STANLEY W. HULETT
Commissioners

Victor Weisser

Executive Director

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COMMENTS BY PUBLIC STAFF DIVISION (PSD)

PSD notes that TES is a new program not authorized by D. 83-12-068. In PG&E's pending general rate case (A. 85-12-050),the stipulated budget for TES is $1,366,000 for 1987. PG&E's request of $3,346,000 for 1986 is, accordingly, higher, both as to avoided capacity payment ($ per kW) and total program budget, than PSD would recommend.

PSD further notes that the $3,879,000 of incentives for two large customers in 1986 requested by this Advice Letter appear to be in addition to the $1.2 million funding for 1986 previously allocated to Industrial Load Shaping. The stipulated budget for 1987 in the pending rate case is $1,253,000. PG&E's request of $3,879,000 for 1986 is, accordingly, higher than Public Staff would recommend.

PSD believes programs of these magnitudes should normally be reviewed during a general rate case proceeding including careful analysis of the cost effectiveness to all ratepayers.

ADDITIONAL INFORMATION PROVIDED BY PG&E

Some, but not all, concerns of the Public Staff were addressed in PG&E's responses to E&C's inquiries, as discussed below.

PG&E identified the programs from which funds will be reallocated. These are: Commercial Air Conditioning, Residential Water Heater Direct Control, Community Electricity Management, Experimental TOU (Schedule No. A-20), and Group Load Curtailment, from which the total reallocation is $2,894,000. The remainder, amounting to $4,331,000, is available from unspent Load Management program funds carried over from 1985.

PG&E states that the incentive of $300/kW for TES is below the ceiling of the 10 year present worth of generation capacity costs in the years 1984-1993, 1985-1994, and 1986-1995 based on adopted values in D. 83-12-068. The present worth of the 10 year streams beginning in 1984, 1985, and 1986 are $595, $550, and $613, respectively, for a discount rate of 15%, consistent with D. 83-12-068. However, because of the downward trend in near term capacity values, an incentive level lower than the full present worth was adopted. The $300/kW incentive is applied to the avoided kW to a maximum per customer incentive payment of $150,000.

PG&E further states that the incentive of $200/kW for Industrial Load Shaping is the present worth for a 10 year stream of generation capacity cost for a discount rate of 13%, based on PG&E's marginal cost Exhibit 14A filed March 1986.