Original

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND COMPLIANCE DIVISION
Energy Branch

RESOLUTION E-3073
February 10, 1988

RESOLUTION

PACIFIC GAS AND ELECTRIC COMPANY. ORDER REJECTING TARIFF REVISIONS RELATING TO BOOKING OF RECORDED NON-INVESTMENT EXPENSES AND TO TARGET CAPACITY FACTOR CALCULATION FOR THE DIABLO CANYON POWER PLANT.

(Advice No. 1180-E, filed November 18, 1988.)

SUMMARY

1. Pacific Gas and Electric Company (PG&E) filed Advice No. 1180-E with proposed tariff provisions to comply with Decision (D.)87-10-041 to reflect: A. booking of recorded non-investment expenses for Diablo Canyon Power Plant (Diablo), with a limit of $197,076,000 annually, and B. revision of its target capacity factor (TCF) tariff to change the target capacity band from 55-80% to 55-75% and to measure plant performance over three fuel cycles instead of one cycle.

2. Advice No. 1180-E is rejected, and a new filing is ordered. The non-investment expense revisions are rejected because PG&E's proposal exceeds the authority granted in D.87-10-041. The proposed TCF revisions are rejected due to problems with the tariff terms and in response to protest of Advice No. 1180-E by the Attorney General of the State of California (AG).

BACKGROUND

3. PG&E currently books one-twelfth of $161,862,000 monthly into its Diablo Canyon Adjustment Account (DCAA) to allow eventual recovery of the non-investment costs associated with both Units 1 and 2 at Diablo. The $161,862,000 is a forecast amount, subject to downward revision, and includes production expenses (also called operating and maintenance, or O&M, expenses), refueling expenses exclusive of nuclear fuel, administrative and general expenses, and property and business taxes. It does not currently include decommissioning expenses or franchise fees and uncollectibles.

4. In D.87-10-041 the Commission authorized PG&E to book in the DCAA its recorded non-investment expenses, with a cap of $197,076,000 annually. This was intended to allow PG&E to recover expenses that exceed the present tariff level of $161,862,000, but for which no reasonable amount has been authorized. The new tariff terms would be in effect only until a reasonable forecast amount is authorized. Hearings on reasonable non-investment expenses are now scheduled for March, 1988 in A.84-06-014 and A.85-08-025, the Diablo prudency proceedings.

5. On January 13, 1988 PG&E and the Division of Ratepayer Advocates (DRA) filed with Administrative Law Judge Albert C. Porter a stipulation on the level of non-investment expenses, in the Diablo prudency proceedings. The stipulated level for the same expense categories reflected in the current tariffs is $200 million annually, in 1988 dollars. The Commission has not yet acted to approve or reject the stipulation. Any such action will require a hearing and subsequent 30 day comment period before the matter can be acted upon.

6. The Diablo TCF mechanism is intended to equitably allocate the risk involved in plant operation between the utility and ratepayers, and to provide the utility with an incentive to strive for superior plant performance. The TCF band is the range of achieved capacity factors within which the TCF mechanism will not be triggered. The utility is penalized if a plant unit capacity factor, as measured over a defined period of time, falls below the TCF band. Likewise, the utility receives a reward if the unit achieves a capacity factor above the TCF band.

7. Presently PG&E's TCF tariff includes a TCF band of 55-80%, to be measured over one fuel cycle. In D.87-10-041 the Commission authorized PG&E to change the TCF band to 55-75% and to measure plant unit capacity factor over a TCF period of three cycles.

8. PG&E's current TCF tariff is in effect for both plant units, but the TCF penalties or rewards cannot be applied to the current fuel cycles. The TCF tariff is applicable only to the first 12 months of operation of Unit 1 and for the first fuel cycle of Unit 2. Both of these periods have been completed. PG&E earned a $14 million reward for operation of Unit 1, which was booked to the Energy Cost Adjustment Clause (ECAC) account in June, 1986 for eventual recovery. Operation at Unit 2 was within the TCF band, and neither penalty nor reward were required.

DISCUSSION OF NON-INVESTMENT EXPENSES

9. In Advice No. 1180-E PG&E requested that its non-investment expenses be booked on a recorded basis in the DCAA, which was ordered in D.87-10-041. However, PG&E went beyond the terms and intentions of D.87-10-041 by changing the tariff language in its Preliminary Statement, Section G.5(b)(1). The present tariff orders that PG&E make monthly debit entries to the DCAA equal to "one-twelfth of $161,862,000, which consists of $69,953,000 for

Unit 1 and $91,909,000 for Unit 2." Further terms relate to retroactivity and eventual determination of prudent amounts. In Advice No. 1180-E PG&E requests that recorded expenses be booked to the DCAA, with an overall annual cap of $197,076,000.

10. The original tariff was written to include monthly bookings at an annual rate, rather than bookings that do not exceed an annual total, in part to avoid problems with authorization of differing amounts for partial years. In D.87-10-041 the Commission intended to retain as closely as possible the terms of the present tariffs, changing only the dollar amounts. This is stated in the discussion section of D.87-10-041, at p.13-14: "But, since the $162 million is subject to a downward adjustment only, we believe PG&E should be given the chance now to recover, on a balancing account basis and subject to review and possible refund, its reasonable non-investment expenses for Diablo. ... We will accomplish this by <u>continuing the terms of the stipulations except for the amount of non-investment costs that may be booked as deferred debits</u>" (emphasis added). PG&E's proposed tariff changes clearly go beyond changing the amount, by changing the terms under which DCAA bookings are made.

11. PG&E should be authorized to book into the DCAA monthly debits for recorded non-investment expenses, not to exceed one-twelfth of $197,076,000. No other interpretation of the annual expense cap should be allowed.

12. Because the PG&E-DRA stipulation on non-investment expenses has not yet been approved by the Commission, the level of stipulated expenses is not relevant to Commission action on Advice No. 1180-E.

PROTEST TO ADVICE NO. 1180-E

13. On December 2, 1987 the AG filed a protest to Advice No. 1180-E. The protest seeks to preserve the AG's rights until the Commission has the opportunity to address the AG's Petition for Modification of D.87-10-041 (Petition), filed November 17,1987.

14. PG&E responded to the protest, claiming that it was a protest to the Commission's decision, not PG&E's compliance, and that Advice No. 1180-E should be approved as filed.

15. The CACD staff has reviewed the protest and the issues argued therein, which are set forth in the Petition. The issues in the Petition and in the protest are identical.

16. The AG claims that clarification is needed in two areas. First, there are two ways to calculate capacity factor "over three fuel cycles". The calculation could be the arithmetic average of the capacity factors for the three separate fuel cycles in the period, or it could be the time-weighted capacity factor, equivalent to the overall capacity factor for the three fuel cycles taken together. Second, there is uncertainty about how the

capacity factor calculation should be modified to exclude the effects of "reductions or cessations of output ... required by the [Nuclear Regulatory Commission] and ... not the result of PG&E's actions."

17. In Advice No. 1180-E PG&E calculates capacity factor as the arithmetic mean of the three separate fuel cycles in each period. PG&E's proposal for a three-cycle TCF calculation was first presented in Exhibit 73 in A.84-06-014 and A.85-08-025. In that testimony PG&E made no recommendation about how to calculate capacity factor for the period. During cross examination PG&E's witness stated (Tr. 9065) that its proposal is not to use a weighted average. However, the same witness also stated (Tr. 9064), "... maybe a weighted average is a more correct way to look at it." Consideration of the time for each fuel cycle would provide a better measure of overall plant performance. PG&E should resubmit tariff revisions in which capacity factor is calculated as the weighted average capacity factor for three cycles.

18. The proposed tariff language regarding exclusion of plant output reductions which are not the result of PG&E's actions should also be further modified. The proposed note on the tariff sheet to replace current Sheet No. 10110-E should be amended to state that actual calculation modifications must be approved by the Commission on a case-by-case basis. In this way the Commission reserves judgment on responsibility for plant outages and output reductions.

19. The AG's protest is upheld, and PG&E should resubmit tariff sheets with the above modifications.

DISCUSSION OF TARGET CAPACITY FACTOR

20. In addition to resolution of the AG's protest, the staff of the Commission Advisory and Compliance Division (CACD) has further concerns with PG&E's proposed TCF tariff.

21. PG&E has modified the present TCF tariff to reflect the California jurisdictional factor authorized in its most recent general rate case. That alteration is reasonable.

22. PG&E's proposed tariff would calculate a TCF penalty/reward following the third fuel cycle (since commercial operation date) for each Diablo unit, to be applied to unit production only in the third cycle but using the average capacity factor for cycles one, two and three. Both plant units are now operating in their second fuel cycles, and the Unit 1 third cycle is now estimated to begin in June, 1988. As proposed, the amount of the penalty/reward after the third cycle would depend on plant production during a time before the new TCF mechanism becomes effective. D.87-10-041 orders that the new TCF mechanism "becomes effective at the beginning of the next full fuel cycle for each unit". Strict interpretation of this order and possible concerns about

retroactive ratemaking lead CACD staff to conclude that any calculation of TCF penalty/reward should exclude consideration of plant production or capacity factor during fuel cycles 1 and 2, which for both Diablo units were completed or underway at the time D.87-10-041 was issued.

23. PG&E should wait until the end of cycle 5 for each unit, then calculate average capacity factor over cycles 3, 4 and 5, then apply any penalty/reward to all three of those cycles. In this way a prospective three cycle period is used in the calculations, and all cycles are exposed to the TCF penalty/reward. Subsequent to the fifth cycle, the penalty/reward should be applied only to the most recent fuel cycle.

24. The current TCF tariff provisions for PG&E (as well as for Southern California Edison Company and San Diego Gas and Electric Company, relating to the San Onofre Nuclear Generating Station and the Palo Verde Nuclear Generating Station) do not adequately treat the ratemaking circumstances at the end of any nuclear unit lifetime, whether retirement is planned or accidental. Lengthy, unforeseen loss of plant output is the situation most perilous to ratepayers, yet neither present nor proposed tariffs protect ratepayers when protection is most needed.

25. As PG&E proposes, a fuel cycle ends when refueling is complete and "... when the unit is paralleled to the electrical system following the outage." This definition suffices if there is a next fuel cycle, but does not allow for completion of a TCF period when the unit is retired or goes out of service for a long period of time.

26. PG&E should resubmit its TCF tariff to include terms dealing with accidental or planned loss of service. CACD staff recommends appending the phrase "or when the unit is retired" to the definition for the end of a refueling cycle.

27. On January 25, 1988, in response to an ongoing data request, PG&E notified CACD staff that the maximum dependable capacity (MDC) for Diablo Unit 2 has been revised, from 1079 MWe net to 1087 MWe net, effective February 1, 1988 for ratemaking purposes. The revised value should be included in resubmitted TCF tariff sheets.

FINDINGS

1. D.87-10-041 authorized PG&E to book recorded non-investment expenses for Diablo Units 1 and 2, with a cap of $197,076,000 annually. D.87-10-041 also adopted a Diablo TCF band of 55-75%, to be applied over a TCF period of three fuel cycles.

2. The AG filed a timely protest to Advice No. 1180-E. The grounds for the protest are set forth in the AG's Petition for Modification of D.87-10-041, relating to calculation of TCF capacity factor to be used for TCF rewards and penalties.

3. In Advice No. 1180-E PG&E's proposed tariff language regarding non-investment expenses is not in compliance with the orders and intentions of D.87-10-041. PG&E should resubmit tariff provisions which cap the monthly booking of recorded non-investment expenses at one-twelfth of $197,076,000.

4. In Advice No. 1180-E PG&E's proposed tariff provisions regarding TCF are not in compliance with D.87-10-041. PG&E should resubmit tariff sheets which:

A. calculate capacity factor during the TCF period as the weighted average capacity factor for the period, and

B. note that modifications to the capacity factor calculation for certain outages or reductions, which are in the best interests of ratepayers or not the result of PG&E's actions, are subject to approval by the Commission, and

C. exclude past and present fuel cycles from TCF capacity factor calculations, and apply future penalties and rewards to all fuel cycles beginning with the next full fuel cycle for each unit, and

D. adequately define TCF rewards or penalties when any plant unit is retired, and

E. revise unit capacities for most recent MDC test results.

5. PG&E's Advice No. 1180-E should be rejected, without prejudice.

6. Because issues regarding booking of non-investment expenses and TCF tariff provisions are now decided, PG&E should submit revised tariff sheets complying with D.87-10-041 and this Resolution, to become effective five days after filing.

THEREFORE, it is ordered that:

1. Pacific Gas and Electric Company Advice No. 1180-E is rejected, without prejudice.

2. The protest to Advice No. 1180-E by the Attorney General of the State of California is upheld.

3. To comply with Ordering Paragraphs 2 and 3 of Decision 87-10-041 Pacific Gas and Electric Company shall file within 15 days of the effective date of this Resolution revised tariff sheets complying with the terms of Findings 3 and 4 of this Resolution. The revised tariff sheets shall become effective five days after filing and shall be marked to show that they were approved for filing by Commission Resolution E-3073.

4. The Executive Director shall cause copies of this Resolution to be served on all parties to Applications 84-06-014 and 85-08-025.

5. This Resolution is effective today.

I certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on February 10, 1988. The following Commissioners approved it:

STANLEY W. HULETT
President
DONALD VIAL
FREDERICK R. DUDA
G. MITCHELL WILK
Commissioners

Executive Director