PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

EVALUATION AND COMPLIANCE DIVISION ENERGY BRANCH RESOLUTION E-3040 June 24, 1987

RBSOLUTION

PACIFIC GAS AND ELECTRIC COMPANY (PG&E). ORDER AUTHORIZING PG&E TO MODIFY ITS REAL-TIME PRICING TARIFF, SCHEDULE A-RTP, AND ITS ACCOMPANYING ELECTRICITY SERVICE AGREEMENT. Advice Letter No. 1151-E, Filed May 5, 1987)

SUMMARY

1. By Advice Letter No. 1151-E, filed May 5, 1987, and in compliance with Decision 86-12-091 and Resolution E-3030, PG&E requests authorization to modify its Real-Time Pricing tariff, Schedule A-RTP, and its accompanying electricity service agreement, Form No. 70-704, consistent with electric rate Schedule E-20 and its associated curtailable and interruptible options as adopted in D.86-12-091, and to extend the expiration date for this schedule to December 31, 1990.

2. PG&E is authorized to modify its electric rate Schedule A-RTP and accompanying electricity service agreement, Form No. 70-704 as requested.

BACKGROUND

1. Real-Time Pricing (RTP) is the practice of continually updating electric energy prices to reflect changes in the cost of producing and delivering electricity; i.e., it is based on marginal costs of electricity. Ideally, RTP can be viewed as a refinement of time-of-use (TOU) rates. The RTP schedule offers customers who can adjust their patterns of use the opportunity to lower their bills. Additionally, it makes possible better use of utility capacity.

2. By Decision No. 83-12-068, dated December 22, 1983, in Application No. 82-12-048, the Commission authorized PG&E to conduct a voluntary experiment in real-time pricing applicable to large commercial and industrial users. Under this experimental program, participants were given a daily price schedule by hour of energy usage with one-day notice in advance. The Commission adopted funding of \$419,000 in 1984,

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adjusted for escalation, for this program. On May 1, 1985, the Commission approved PG&E's first year RTP case study implementation by Resolution E-2039; said Resolution called for the tariff to expire on March 31, 1986.

3. On March 19, 1986, by Resolution E-2075, the Commission approved an extension of the experimental tariff schedule through May 31, 1986. On April 16, 1986, by Resolution E-2083, the Commission approved an additional extension of the tariff schedule through March 31, 1987.

4. Resolution E-2083 also required PG&E to submit to the Commission a final RTP report on February 1, 1987 which proposed adjustments and/or refinements of the pricing algorithm, especially the Karginal Shortage Cost component.

5. In Decision 86-12-091 to PG&E's recent general rate case and Electric Cost Adjustment Clause (ECAC), the Commission allowed Schedule A-RTP to remain in effect, but its rate design, including the hourly rate algorithm, should be adjusted during 1987 to be consistent with the adopted TOU, curtailable, and interruptible rate design in D.86-12-091 for commercial and industrial rates before a time extension would be allowed.

6. On April 8, 1987, by Resolution E-3030, the Conmission approved an extension of the current tariff schedule through June 30, 1987 while the new algorithm and rate design were developed by PG&E and reviewed by the Public Staff Division (PSD). Resolution E-3030 also directed PG&E to file a new advice letter prior to June 1, 1987, reflecting the revised real-time pricing algorithm and rate design.

7. PG&E has now filed Advice Letter No. 1151-E seeking Connission approval to inplement its new algorithm and rate design revisions, and to extend tariff Schedule A-RTP through December 31, 1990--three and one-half years beyond its current expiration.

PROTESTS

1. No protests have been received regarding this advice letter filing.

DISCUSSION

1. PG&E has filed Advice Letter No. 1151-E in compliance with D. 86-12-091, dated December 22, 1987, and Resolution E-3030, dated April 8, 1987. The purpose of this filing is to modify PG&E's Real-Time Pricing tariff, Schedule A-RTP, and its accompanying electric service agreement, Form 79-704, as directed by D. 86-12-091. Resolution E-3040 June 24, 1987 Page 3

2. The Commission staff has reviewed this advice letter filing and has determined that PG&E has modified Schedule A-RTP such that the pricing algorithm and rate design have incorporated revisions addressing D.86-12-091's requirement for consistency with electric rate Schedule E-20 and its associated curtailable and interruptible options for commercial and industrial customers. These revisions have also incorporated suggestions provided to PG&E by the CPUC Public Staff Division (PSD).

3. PG&S has provided the Commission staff with periodic reports on the RTP project. The staff has found these report to be useful in determining the status and progress of this program. Therefore, the staff recommends that submission of an annual report be continued.

4. Except as noted above, this filing will not increase any other rates or charges, cause withdrawal of service, or conflict with any other rate schedules or rules.

5. The Evaluation and Compliance Division staff recommends approval of this advice letter filing.

FINDINGS

1. We find that the rates, charges and conditions of services authorized in this Resolution are just and reasonable; therefore,

IT IS ORDERED that:

1. Pacific Gas and Electric Company is hereby authorized to modify its Real-Time Pricing tariff, Schedule A-RTP, and its accompanying electricity service agreement, Form No. 79-704, and to extend said tariff schedule through December 31, 1990 as requested by Advice Letter No. 1151-E.

2. Pacific Gas and Electric Company is authorized by Section 489 of the Public Utilities Code and by Sections III and VI of General Order 96-A to place Advice Letter No. 1151-A into effect today.

3. Pacific Gas and Electric Company shall submit a report to the Commission, directed to the Chief of the Energy Branch of the Evaluation and Compliance Division, for each Calendar year that the RTP program and tariff remains in effect. The report shall be submitted no later than March 31 of each following year and shall contain the information as outlined in Attachment A hereto. Resolution E-3040 June 24, 1987 Page 4

4. The effective date of this Resolution is June 24, 1987.

I certify that this Resolution was adopted by the Public Utilities Conmission at its regular meeting on June 24, 1987. The following Commissioners approved it:

Executive Director

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STANLEY W. HULETT President FREDERICK R. DUDA JOHN B. OHANIAN Commissioners

Commissioner Donald Vial, being necessarily absent, did not participate.

Commissioner G. Mitchell Wilk being necessarily absent, did not participate.

Resolution E-3040 Attachment 1

REPORTING REQUIREMENTS FOR REAL TIME PRICING

The focus of the annual report should be to:

- a. Develop and denonstrate an RTP formula.
- b. Demonstrate hardware to transmit RTP's and measure responses.
- c. Work with customers to develop scenarios for customer responses to RTP's.
- d. Record the cost-effectiveness of the RTP rate based on actual data.

The report should include at least the following:

- a. Policy Context and Goals (and how the studies will provide information to answer the policy questions).
- b. development of RTP Formula.
- c. Case Studies:
 - 1. Experience with RTP (what were the forecasted prices, actual prices, range, influential factors).
 - 2. Hardware/Software description and experience.
 - Discussion of potential customer response scenarios.
 - Response (actual and projected sales and revenues, elasticities).
 - 5. Ability to collect data needed for policy analysis.
 - 6. Customer acceptance (what they liked, did not like and customers' suggested modifications).
- d. Sensitivity Study.
- e. Associated Efforts: Analysis of RTP associated efforts.
- f. Summary/Conclusions of Case Studies, Sensitivity Study and Associated Efforts.

g. Recommendations for future Experiments.