

## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND  
COMPLIANCE DIVISION  
Energy Branch

RESOLUTION E-3229  
May 8, 1991

**R E S O L U T I O N**

RESOLUTION E-3229. PACIFIC GAS AND ELECTRIC COMPANY  
REQUEST TO ESTABLISH ALTERNATIVE RESIDENTIAL TIME-OF-  
USE RATES.

BY ADVICE LETTER 1349-E, FILED ON MARCH 22, 1991.  
SUPPLEMENTED BY ADVICE LETTER 1349-E-A, FILED ON APRIL  
11, 1991.

---

**SUMMARY**

1. Pacific Gas and Electric Company (PG&E) requests approval of three new experimental residential time-of-use (TOU) rate schedules. These schedules would be available only in the Delta District, which is located in eastern Contra Costa county. These rate schedules are part of PG&E's strategy to defer the need for a new substation in the Delta District.
2. This Resolution grants the request on an experimental basis.

**BACKGROUND**

1. Approximately 25,000 residential customers account for most of the load in the Delta District. Many of these residential customers are commuters. Peak use on the transmission and distribution system occurs around 7 P.M.
2. PG&E currently has a time-of-use (TOU) schedule available to all residential customers, schedule E-7. That schedule has higher rates during an on-peak period of 12 to 6 P.M. About 900 customers in the Delta district are currently served on schedule E-7. In order to capture local peaks, PG&E would change the peak period on its new schedule EA-7 to 4 to 8 P.M. PG&E estimates that as many as 800 additional customers would take service under this rate schedule. Schedule EA-7 is designed to have the same average rates per season as Schedule E-7.
3. The experimental TOU schedules are based on system average marginal costs. Even though rates are aimed at reducing transmission and distribution peaks, rates are based on the same marginal costs that apply to the system as a whole.

4. The second schedule, EL-A7, applies to low-income customers. It is identical to EA-7, except the charge for the TOU meter is waived. This follows the Commission's policy of waiving the meter charge for TOU schedules for low-income customers stated in the decision establishing the Low Income Rate Assistance Program, D.89-09-044.

5. The third schedule, EB-7, differs in several respects from TOU rates for residential customers. Schedule EB-7 is intended to test customer response to sophisticated hardware. Customers will be provided with an Energy Management System that will be controlled through a smart thermostat. Schedule EB-7 includes a critical period of up to 100 hours per year. Customers will be signaled at least one hour in advance of those times when transmission and/or distribution capacity is constrained. Usage will be charged at an extra high rate of 55 cents per kilowatt hour during this super peak period. In addition, this schedule has no baseline allowance. PG&E estimates 100 customers would be served under this rate schedule.

6. Schedules EA-7 and EL-A7 will be funded from the existing budgets for residential TOU meters. Schedule EB-7 will be funded from the existing customer education budget.

7. The Delta district is growing at a rate of 8 to 10 MW annually, with current peak load of about 90 MW. The local peak generally occurs during July, August, and September. If current load growth continues, PG&E will need to construct a new substation during 1994-1995 at a cost of about \$15 million. PG&E indicates that a decision to build this substation would be made early in 1993.

8. PG&E seeks incremental funding for the Delta project in its Energy Cost Adjustment Clause (ECAC) proceeding. The Delta project would focus and intensify energy efficiency efforts, so that PG&E would offset approximately 7 to 8 MW of annual load growth. PG&E filed its ECAC application in April 1991, and a decision on that application is expected in late 1991. PG&E is unable to estimate the contribution to a reduction in load growth provided by the three experimental rate schedules, but believes it to be small.

#### NOTICE

1. Public notice of this filing has been given by publication in the Commission's calendar on March 27, 1991, and by mailing copies of the advice letter to interested parties.

#### PROTESTS

1. There were no protests.

2. The Division of Ratepayer Advocates (DRA) filed comments supporting the advice letter. DRA did note longer run concerns about the definition of the on-peak period and other aspects of rate design, but believes these concerns should not stand in the way of implementing these experimental rates.

### DISCUSSION

1. Ideally, these new rate schedules would be considered within the context of the Delta project. If funding for the Delta project were denied, the purpose of these rate schedules would be undermined. However, given the ECAC schedule and time to hear the issues related to the Delta project, it is unlikely that a Commission decision would be issued in time in order to implement new rate schedules before the summer peak is over. This would provide only one summer of data before PG&E would decide to build a new substation. One summer may be inadequate to provide the data and degree of certainty necessary to system planners to decide not to build.

2. PG&E's inability to estimate load impacts of these schedules indicates a need for reporting and documentation. Until such time as the Commission issues more comprehensive reporting guidelines, PG&E should report annually on the number of participants and the load impact for each of the new experimental rate schedules. In addition, PG&E should provide the same data for E-7 participants in the Delta district.

3. The proposed rate design is untested. While the proposed schedules should provide useful data, Commission approval is based on the very limited showing in PG&E's advice letter filing, and should not be construed as a precedent. If PG&E should wish to continue ratemaking that is more closely tailored to local load characteristics, its showing in the next general rate case should fully address the implications of local ratemaking.

4. Few E-7 customers are expected to switch to alternative rate schedules. PG&E believes many E-7 customers are commuters who are not at home during the 12 to 6 P.M. peak period. Current E-7 customers are unlikely to switch to an alternative rate schedule which would require usage changes when customers are at home to avoid peak charges.

5. If PG&E is successful in deferring this substation, its future capital budget and revenue requirement will be smaller.

### FINDINGS

1. PG&E requests authorization to establish three new TOU rate schedules for residential customers within the Delta district.

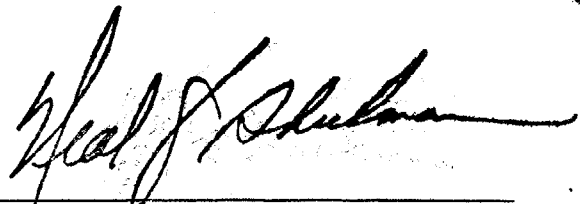
2. PG&E states that the Delta district is growing rapidly, and that a decision on whether to build a new substation will be made in early 1993.
3. If the Commission did not approve this request, it could contribute to the need to construct a new substation. While the likely load impacts are small, the Commission will authorize these experimental rate schedules to maximize the probability that need for local capacity will be deferred.
4. It is only reasonable to authorize this experiment if the results of the experiment are reported.

**THEREFORE, IT IS ORDERED that:**

1. Pacific Gas and Electric Company is authorized to establish Schedules EA-7, ELA-7, and EB-7.
2. Pacific Gas and Electric Company shall report on the results of all residential time-of-use schedules within the Delta District annually and within two months of the end of the summer season. Copies of this report are to be provided to the Division of Ratepayer Advocates and the Commission Advisory and Compliance Division.
3. Advice Letter 1349-E of Pacific Gas and Electric Company is approved as filed.
4. Advice Letter 1316-E, and the attached tariff sheets shall be marked to show that they were approved for filing by Commission Resolution E-3229.
5. This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on May 8, 1991. The following Commissioners approved it:

**PATRICIA M. ECKERT**  
President  
**G. MITCHELL WILK**  
**JOHN B. OHANIAN**  
**DANIEL Wm. FESSLER**  
**NORMAN D. SHUMWAY**  
Commissioners

  
\_\_\_\_\_  
Neal J. Shulman  
Executive Director