

PUBLIC UTILITIES COMMISSION

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November 28, 2007

Advice Letter 2946-E-B

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Subject: Revision to Rate Schedule E-RSAC – Residential
Smart AC Program

Dear Mr. Cherry:

Advice Letter 2946-E-B is effective February 23, 2007.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean H. Gallagher".

Sean H. Gallagher, Director
Energy Division



Brian K. Cherry
Vice President
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December 8, 2006

Advice 2946-E

(Pacific Gas and Electric Company ID U 39 E)

Subject: Proposal for Residential Air Conditioning Cycling Program for Summer 2007

Public Utilities Commission of the State of California

Pacific Gas and Electric Company (PG&E) submits a proposal for an Air Conditioning (AC) cycling program for electric residential and small (<200kW) commercial customers for the summer of 2007. PG&E will file an application early next year proposing a multi-year AC cycling program building upon the summer 2007 program and adding significant new demand response (DR) in 2008, 2009, and 2010.

Purpose

Commissioner Peevey's August 9, 2006 Assigned Commissioner's Ruling (ACR) in the demand response consolidated proceeding, Application (A.) 05-06-006 *et al.* requested PG&E and the other investor-owned utilities to propose enhancements to their DR portfolios to increase the amount of DR available for summer 2007. Commissioner Peevey's ACR dated August 15, 2006, in *Order Instituting Rulemaking to Consider Refinements to and Further Development of the Commission's Resource Adequacy Requirements Program*, Rulemaking (R.) 05-12-013, ordered PG&E and San Diego Gas & Electric to file reports in R.06-02-013 addressing the need to increase air conditioning cycling program capacity for summer 2007, in light of the July 2006 heat storm and growth in demand.

In response to the ACRs, PG&E's August 30, 2006 filing for enhancements to its demand response programs included a proposal to implement a full-scale AC cycling program beginning in 2007 to replace the small pilot AC cycling program approved by the Commission in Decision (D.) 06-03-024. On November 30, 2006, the Commission issued D.06-11-049 (the Decision), which conceptually approved the program proposed in this advice letter (AL) and specifically found that AC

cycling can result in concrete load reduction capability in PG&E's service territory.¹ Ordering Paragraph 4 of the Decision requires PG&E to file an advice letter "within 20 days to implement an Air Conditioning (AC) Cycling program for 2007 consistent with this decision. PG&E shall provide detailed budget information including the costs of installing the switches, incentives, and any other costs."

Proposal

PG&E proposes to initiate an AC cycling program in 2007, with a goal of installing 5,000 devices by June 2007. The program proposed in this AL would include two direct load control technology options to maximize customer participation. The customer would have a choice between a switch or a Programmable Controllable Thermostat (PCT).

AC switches have a long record of success and generally have lower installation costs. However, switches do not take into account the building's temperature change, require ongoing education of Heating, Ventilation, and Air Conditioning (HVAC) contractors, and have higher long-term maintenance costs than PCTs.

Benchmark and focus group data indicate that some customers, particularly commercial ones, prefer PCTs over the switch technology. PCTs limit the increase in a building's temperature during curtailment. It is the easiest technology to apply to new homes, and can provide notice to customers when an event occurs. PCTs are also generally more compatible with price-responsive programs than switches. However, they are more expensive than switches and require an appointment to be scheduled for installation. Customer research also indicates that residential customers who already have a programmable thermostat may not be interested in a replacement.

Given this balance, PG&E recommends that customers be given a choice of either the switch or PCT technology. In both cases, PG&E believes that relatively minimal financial incentives for customers will be necessary to encourage participation. Market research and feedback from vendors who regularly operate these programs indicate that seasonal payments offer very little incentive to participate. Instead of financial incentives, PG&E proposes to market the program as a "societal good" that will result in cleaner air and improved service reliability. The proposed financial incentive structure is as follows:²

¹ D.06-11-049, Finding of Fact 15.

² PG&E may offer token gifts or prizes at the end of the summer season as a "thank you" for participating in the program.

Customer	Switch and PCT
Residential	One time incentive of up to \$50, plus installation of device
Small Commercial <200kW	One time incentive of up to \$100, plus installation of device

Residential switches would be operated using a 50% cycling feature for a maximum of 100 hours per year. The cycling feature will allow PG&E to cycle the AC unit remotely, i.e., by turning the unit on and off for up to 15 minutes of each half hour of the event. Single-day operations would be limited to six consecutive hours. The program would be called to reduce system peak demand during emergency or near-emergency situations, a local emergency, or during limited program testing.

Commercial switches would be similar to those used for PG&E's residential participants, except that the curtailment period would use a 30% duty cycling feature. This reduction in cycling is proposed because commercial customers have less flexibility and will need to feel minimal discomfort to participate in the program. Participation would also be limited to 100 hours per year.

The residential and small commercial PCT would allow PG&E to remotely control a customer's thermostat up to 100 hours per year. PG&E would adjust a customer's thermostat up to a maximum of four degrees during each event. Events would be limited to six consecutive hours and also would have the same trigger as for the AC switch.

Participants using either device would have the ability to opt out of a particular curtailment through either a dedicated telephone line or a website. This opt-out option would not be available during a Stage 3 event. The opt-out option should encourage further participation by allowing some customer flexibility. Benchmark data indicates that these programs can be operated in such a way as to minimize the number of participants who actually utilize this option. The DR impact from event opt-outs has also already been taken under consideration when estimating average kW reduction per site.

PG&E submits the proposed electric tariff sheets that further detail the proposed programs, entitled Schedule E-CACC – A/C Cycling - Commercial, and Schedule E-RACC – A/C Cycling - Residential. PG&E is currently reviewing vendor bids received in response to PG&E's October 2006 AC Cycling RFP. Additional program details will be determined in the bidder negotiations.

Customer Marketing and Subscription

PG&E will develop a marketing plan to encourage customer enrollment. The marketing plan would include a direct mailing campaign, website notice, and targeted media support.

PG&E proposes two methods for enrolling customers in the program. Similar to Southern California Edison's program, PG&E will encourage customers to sign up on a website developed for this purpose. Customers who do not have access to a computer and renters or leaseholders would be required to complete a paper application.

Both the web-based and paper application would require information from the customer including, the account information, contact information, a device selection (either switch or PCT), installation authorization, and an acknowledgement that members of the affected household have no health problems that may prohibit program participation.

To expedite installation, PG&E proposes to install the switches without a prior appointment, unless the customer elects an appointment or must be present to provide access to the technician. PCT installation requires an appointment.

Budget Proposal and Recovery of Costs

PG&E anticipates a total ten-year program budget of \$5.97 million, plus \$0.46 million for Evaluation, Measurement and Verification (EM&V), for a total of \$6.43 million. The Commission approved a budget of \$1 million for a pilot AC cycling program for 2006–2008 in D.06-03-024. PG&E proposes to fund the installation and operation of the 5,000 devices in 2007 and 2008, using the previously-approved funds for the AC cycling pilot program and through fund shifting from other programs within the approved 2006-2008 DR program budget³. The estimated budget for 2007-2008 is \$4.68 million. Details of the anticipated budget are shown in Appendix A. The additional \$1.75 million required to fund the operation of the 5,000 switches from 2009-2017 will be requested in PG&E's application for a multi-year program. PG&E will record the 2007 and 2008 costs associated with the AC cycling program in the Demand Response Expenditures Balancing Account (DREBA).

Should the Commission reject PG&E's application for a multi-year program, PG&E will still have ongoing costs associated with the 5,000 original devices. PG&E will have entered into multi-year contracts for the installation, operation and

³ PG&E does not anticipate exceeding the 50 percent fund-shifting cap approved in D.06-03-024 for any DR program. Should it become necessary to exceed the cap, PG&E will file an advice letter in advance seeking authority to do so, pursuant to the fund-shifting limits approved in D.06-03-024.

maintenance of the devices. In such a case, PG&E would request funding for the ongoing operation of the 5,000 devices in future demand response budget applications.

Concurrent with the filing of the application next year, PG&E will file an advice letter seeking permission to create a memorandum account in which to record costs associated with the 10,000 additional devices proposed in its application. PG&E plans to begin incurring costs related to the expanded program during the summer of 2007 before the Commission rules on PG&E's application in order to maximize summer 2007 participation and maintain program momentum.

Protest Period

Anyone wishing to protest this filing may do so by sending a letter by **December 28, 2006**, which is **20 days** from the date of this filing. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. Protests should be mailed to:

CPUC Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Avenue
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: ijnj@cpuc.ca.gov and mas@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

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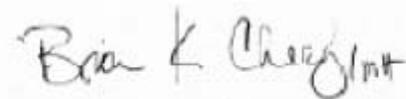
Effective Date

PG&E requests that this advice filing become effective on regular notice by **January 11, 2007**, which is 34 calendar days after the date of filing.

Notice

In accordance with General Order 96-A, Section III, Paragraph G, a copy of this Advice Letter is being sent electronically or via U.S. mail to parties shown on the attached list and to the service lists for **A.05-06-006**. Address changes should be directed to Rose De La Torre at (415) 973-4716. Advice Letter filings can also be accessed electronically at:

<http://www.pge.com/tariffs>



Vice President - Regulatory Relations

Attachments

cc: Service Lists – A.05-06-006

Limited Access to Confidential Material:

The portions of this advice letter so marked Confidential Protected Material are submitted under the confidentiality protection of Section 583 of the Public Utilities Code and General Order 66-C. Pursuant to the Administrative Law Judge's Ruling Clarifying Interim Procedures For Complying with Decision 06-06-066, issued August 22, 2006 in Rulemaking 05-06-040, a separate Declaration of Confidential Treatment regarding the confidential information is filed concurrently herewith.

Confidential Attachment:

Appendix A

Estimate of Program Costs Based on Bidder Proposals