

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

I.D.# 7086

RESOLUTION E-4127

February 14, 2008

R E S O L U T I O N

Resolution E-4127. PG&E proposes to institute a new Demand Response resource called the Cafeteria Style Menu program.

By Advice Letter 3085-E Filed on July 13, 2007.

SUMMARY

This Resolution denies PG&E permission to institute the Demand Response Cafeteria Style Menu (CSM) Program at this time. While the Commission appreciates PG&E's innovative attempt to attract more customers to Demand Response programs, the amount of required investment and scarcity of available information on customer behavior leads us to believe that this attempt is unlikely to succeed in attracting sufficient enough new customers to make the program worthwhile. PG&E may re-submit its CSM proposal as part of its 2009-2011 Demand Response budget application so that it can be evaluated within the context of PG&E's Demand Response portfolio.

BACKGROUND

The Cafeteria Style Menu represents a new approach to Demand Response. PG&E proposes to allow customers to choose, from a menu of options, the characteristics that make up the design of the Demand Response program they will participate in. PG&E offers customers options in several different categories:

- The time of day events are called (either 1-7 p.m. weekdays or at any hour on any day except holidays)
- The event duration (2-3, 3-5, or 4-6 hours)
- Notification (½ hour, 4 ½ hours, 1 day, or two days before a called event)
- Maximum number of consecutive event days (1, 2 or 3)
- Maximum number of events per summer (3 - 25)
- The amount of the load reduction during an event, and whether the demand reductions are committed or non-committed. (Customers committing to

reduce demand receive both capacity and energy payments, but incur penalties if they do not reduce demand when an event is called. Customers choosing the non-committed option receive only energy payments for the demand reductions they actually make.)

PG&E is estimating that they will obtain an additional 42 MW of Demand Response by the end of summer 2008 with this program, although some of this represents customers who migrate from other programs. The program will be triggered at PG&E's discretion, based on CAISO or local emergencies, high temperatures or demand, or the need for generation with a heat rate of 15,000 BTU/kWh.

PG&E states that having these choices will make it easier for customers to determine which type of Demand Response best meets their needs. PG&E proposes a budget of \$4 million for 2007 and 2008, which would be shifted from already-approved funds for other Demand Response programs.

NOTICE

Notice of AL 3085-E was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section III-G of General Order 96-A.

PROTESTS

Advice Letter 3085-E was protested by EnerNoc, Inc., Comverge, Inc., and EnergyConnect, Inc. (Joint Parties) on August 2, 2007 and by the Division of Ratepayer Advocates (DRA) on August 21, 2007. DRA filed a late protest with the permission of the Energy Division.

PG&E responded to the protest of the Joint Parties on August 9, 2007 and to the protest of DRA on August 29, 2007.

DISCUSSION

DRA questions the accuracy of PG&E's forecast of 42 MW. Energy Division agrees with DRA that PG&E provides little evidence of the accuracy of this forecast.

DRA states that PG&E has no basis for its prediction that they will enroll approximately 216 new customers, for a total of 42 MW, in this program. PG&E states that their estimate of the number of customers who will sign up for CSM is based on the 2005 Itron (formerly Quantum) Demand Response program analysis, which determined that PG&E should be able to sign up 400 additional Demand Response customers per year. PG&E assumed that 54% of that number will sign up for CSM by October 2008, for a total of 216 new customers. According to PG&E's response to an Energy Division data request, the reason why they are estimating that 54% of 400, or 216 new customers, will sign up for the CSM program by October is that based on program enrollment statistics from 2005 and 2006, 54% of annual Demand Response program enrollment occurs from June 1 to October 31.

However, if PG&E believes that 216 customers will sign up for CSM from June 1, 2008 (the presumed starting date for program enrollment) until October 31, 2008, then that implies that they are assuming that the rate of enrollment in CSM will be about 400 customers per year, based on their past experience that 54% of annual Demand Response program enrollment occurs from June 1 to October 31. In other words, PG&E is assuming that in five months commencing in June 2008, they will attract over half of the *entire* body of potential annual new customers estimated by Itron with this program. However, PG&E provides little evidence that the CSM program will attract the mass of customers it assumes.

In addition, PG&E's estimate of 42 MW by October 31 implies that the available MW in August and September, when Demand Response events are the most likely to be called, will be less than 42 MW.

DRA also points out that part of PG&E's estimate of 42 MW is based on MWs contributed by the approximately 20 customers migrating from other programs. DRA argues that these customers do not provide any incremental Demand Response increases, and their load reductions should not be considered as part of the CSM program's contribution to Demand Response increases. PG&E states that the customers migrating from other programs will reduce their demand more than they would have in their current program because the structure of CSM better fits their needs.

In addition, DRA analyzed the rates paid to customers who choose various options, and found that a customer choosing the options most similar to the day-of CBP program would receive a capacity payment that is as much as 36% higher

per kW under CSM, as well as an energy payment that is much higher. This could result in a little interest in the day-of CBP program to CSM. On the other hand, DRA's comparison of the CSM option most similar to the day-ahead CBP program finds that the capacity payments are higher in the CBP program. PG&E says that the two programs are not exactly the same and so DRA's comparison is inaccurate.

Energy Division finds that PG&E's forecast of 216 new customers and 42 additional MWs is based on tenuous assumptions. It is very difficult to believe that all of the additional customers estimated two years ago by Itron will sign up for this program. In addition, PG&E provides no rationale for their estimate of customer migration from other Demand Response programs, nor much evidence that those customers who do migrate will increase their demand reductions. Therefore, there is an extremely high level of uncertainty around the actual program enrollment, which makes it very difficult to determine its value. In addition, Energy Division is convinced by DRA's analysis that the CSM incentive levels are set in a way that could possibly result in either a large migration from other Demand Response programs or suppress interest in those programs.

PG&E states that their research shows that customers want the flexibility and additional choice offered by the CSM. Joint Parties argue that, on the contrary, this program will add further complexity to PG&E's already numerous and complex Demand Response offerings. Energy Division finds that there is not enough information on customer behavior to predict how customers will react to this new program.

PG&E is attempting to be more responsive to their customers' needs by offering a Demand Response resource that includes many of the characteristics that their research has shown that customers are seeking. PG&E's premise is that a sizable number of customers are not now signing up for Demand Response programs, or else signing up but not participating, because those programs do not fit with their needs, and that if those customers are able to choose more of the specific characteristics they are seeking they will be more likely to participate.

While this is certainly true of *some* customers, whether this is true of the *majority* of customers who are currently not enrolled in a Demand Response program, or even a significant enough number of them to make this program worthwhile, is very difficult to determine. PG&E states that their analysis of customers' needs is based on their review of extensive research and on focus groups conducted.

PG&E responded to an ED data request detailing this research. While PG&E has certainly reviewed all of the available literature and tried to gauge customers' needs through focus groups, there simply is not enough information on customer behavior to judge whether PG&E's strategy will be successful.

In addition, the argument offered by the Joint Parties that *too much* choice will confuse customers and make them *less* likely to enroll in a Demand Response program may be true. However, in the absence of any definitive research to support either the Joint Parties' or PG&E's view, it is very risky to accept PG&E's conclusion. The CSM program represents a highly experimental and expensive way to test the theory that more choice and flexibility will attract customers.

Energy Division also agrees with the Joint Parties statement that "requiring PG&E to include CSM in its next three year DR program proposal . . . will allow both PG&E and the Commission to evaluate all of PG&E's program offerings side-by-side and determine, with input by all affected parties, which offerings to terminate so as to minimize the clutter and confusion."

Cost-effectiveness protocols for Demand Response programs are being developed as part of another proceeding (R.07-01-041) and are outside the scope of this Advice Letter. The Joint Parties protest the lack of cost-effectiveness analysis submitted by PG&E. However, while the Commission desires that all its Demand Response programs be cost-effective, there are at this time no official procedures for determining Demand Response cost-effectiveness.

DRA protests the cost of the program. Energy Division agrees that the requested budget seems excessive and that it would be preferable to evaluate CSM as part of PG&E's overall Demand Response portfolio. PG&E's budget for the CSM program is approximately \$4 million, over half of which is for related IT development. DRA questions why more than \$2 million is budgeted for IT development when "most of the IT infrastructure needed for CSM should be in place already for the administration of existing DR programs." In addition, DRA believes that the \$826,500 budgeted for design and development is excessive. DRA believes that the program budget could be better evaluated if it were re-submitted as part of the next three year funding cycle for Demand Response programs.

DRA and the Joint Parties both express concern about the impact of CSM on the budget of other Demand Response programs. Energy Division agrees with DRA and the Joint Parties that identifying the affected programs and the anticipated impact on them is important and finds PG&E's explanation without merit. PG&E proposes to use previously-allocated money to fund the CSM program by transferring it from other Demand Response programs. However, they do not state which programs the money will come from nor the potential impact on those programs. PG&E argues that it cannot state which programs will be affected at this time, but that it is likely that the CSM budget can come from excess funds due to the lack of need for demand response (so far) this summer. The lack of relevant information puts the Commission in a position of approving a budget shift without knowing the consequences for other programs. The rationale for requiring advice letter filings for budget shift proposals is to weigh the impact on those programs whose funding will be reduced.

DRA and the Joint Parties protest that no role is provided for third party Demand Response providers (aggregators) in this program. Energy Division agrees that the CSM program *may* give an unfair advantage to PG&E at expensive of aggregators, although this could easily be mitigated by allowing aggregator participation in the CSM program. The Joint Parties express concern that the CSM program may affect the five recently-signed Demand Response contracts between PG&E and aggregators. DRA points out that its analysis indicates that the incentive levels of the CSM program seem to be designed to favor customer migration from other programs, most of which currently allow for aggregator participation. PG&E argues that they should not be denied permission to submit creative new Demand Response programs just to protect aggregators from competition.

Energy Division is also concerned about several other aspects of this program:

- **Will the CSM program be able to align with the CAISO's wholesale market design?** Fitting Demand Response resources with the CAISO's wholesale market is a key part of the Commission's Demand Response policy. A program which has varying event durations, notification times, number of events, etc. will not be easy to integrate into CAISO wholesale markets.
- **The CSM program may be difficult and costly to evaluate.** The CSM program has many variables, hence few customers are likely to choose any

one particular set of options. Evaluation of the few customers choosing each set of options will be expensive, and may not result in any useful information about customer choice.

- **It seems premature to introduce a new program at a time when research which will examine the program's main impetus is just beginning:** As part of R.07-01-141, and within the Demand Response Measurement & Evaluation Committee, the Commission is beginning to look at the issue of customer costs, benefits and behavior related to Demand Response.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

All parties in the proceeding have stipulated to reduce the 30-day waiting period required by PU Code section 311(g)(1) to 28 days. Accordingly, this matter will be placed on the first Commission's agenda twenty-eight days following the mailing of this draft resolution. Comments shall be filed no later than 12 days following the mailing of this draft resolution, and reply comments shall be filed no later than 18 days following the mailing of this draft resolution.

FINDINGS

1. PG&E filed Advice Letter 3085-E which proposed to institute a new Demand Response resource called the Cafeteria Style Menu (CSM) program.
2. There is little evidence that the CSM program will achieve its goal of 42 MW by October 2008.
3. There is not enough available research on customer behavior to determine if PG&E's premise – that many more customers would participate in Demand Response if the programs offered more choice and flexibility – is true.
4. Cost-effectiveness is outside the scope of this proceeding. However, the budget requested by PG&E is so large that it would be preferable to evaluate

CSM as part of PG&E's overall Demand Response portfolio during the next three year program cycle.

5. There is concern about the impact of CSM on the budget of other Demand Response programs, given that PG&E proposes to use transfer previously-allocated money from other Demand Response programs to fund the CSM program.
6. The CSM program *may* give an unfair advantage to PG&E at expensive of aggregators, although this could easily be mitigated by allowing aggregator participation in the CSM program.
7. It is unclear if the CSM program will be able to align with the CAISO's wholesale market design.
8. The CSM program may be difficult and costly to evaluate.
9. It is premature to introduce a new program at a time when research which will examine the program's main impetus is just beginning.

THEREFORE IT IS ORDERED THAT:

1. The request of the PG&E to institute the Cafeteria Style Menu Demand Response Program as requested in Advice Letter 3085-E is denied. PG&E may resubmit it as part of their 2009-2011 Demand Response program portfolio.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on February 14, 2008; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director