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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION RESOLUTION E-4127
February 28, 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 authorizes PG&E to implement the Demand Response Cafeteria Style Menu (CSM) Program with the following modifications: (1) PG&E give customers the option to change their committed load reductions on a month to month basis as soon as practicably reasonable, consistent with what is currently allowed under the Capacity Bidding Program; (2) PG&E develop the Information Technology (IT) system for the CSM such that it is sufficiently flexible to allow it to be used to manage and operate existing and future DR programs; (3) PG&E provide monthly reports to Energy Division regarding program enrollment, migration and load impacts; (4) PG&E provide an evaluation of its marketing and outreach activities to Energy Division.

BACKGROUND

On July 13, 2007, PG&E filed advice letter 3085-E, proposing the Cafeteria Style Menu Demand Response Program. 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.

Resolution E-4127 was issued by Energy Division on October 19, 2007 with comments and reply comments received on October 31, 2007, and November 6, 2007, respectively. On November 16, 2007 and November 19, 2007, Energy Division sent data requests to PG&E seeking further information and clarification on the CSM proposal. PG&E submitted responses to those data requests on November 29, 2007 and December 12, 2007. A Draft Alternate Resolution was issued for public comment on December 28, 2007. Comments and reply comments to the Draft Alternate Resolution were filed on January 23 and January 28, respectively. In their comments, parties raised due process concerns regarding the Draft Alternate's reliance on the information contained in PG&E's responses to Energy Division's data requests. In response, the Commission reopened the comment period on January 29 and provided redacted versions of the data responses to parties. Additional comments and reply comments were received on February 20 and 25, respectively.

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. The Commission recognizes that any forecast involves uncertainty.

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.

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.

The Commission recognizes that any forecast of future customer enrollment will necessarily be uncertain and while we acknowledge that PG&E's estimates may be optimistic, we are not persuaded that this uncertainty justifies rejecting the CSM program. PG&E has indicated that the CSM program has been designed to be responsive to customer preferences for greater flexibility in how demand response programs are structured, as indicated through feedback from customer focus groups as well as extensive review of secondary research. We believe that PG&E has demonstrated that there is sufficient potential interest in this type of program and program structure to warrant pursuing the CSM proposal further. However, the Commission will require PG&E to carefully monitor customer enrollment and participation, in the form of monthly reports to the Energy Division, so that the performance and cost-effectiveness of the CSM program can be more extensively analyzed in the future. These reports will consist of data on:

- The number of customers enrolled
- For each combination of CSM options, in all option categories, the number of customers and total enrolled MW
- The number of enrolled customers who have previously participated in another demand response program and the CSM combination chosen by those customers. To help quantify the level of customer migration to the CSM from existing DR programs, we require PG&E to collect information from customers regarding their historical participation in DR as part of the CSM application process. More specifically, PG&E is directed to ask CSM customers if they have previously participated, or are currently participating in any type of DR program or activity (including those not sponsored by PG&E), what DR programs they were enrolled in and when they were last enrolled in said programs.
- Customer performance during events, disaggregated to show performance of customers choosing the committed and non-committed options, the various notification times, and both new customers and customers migrating from other Demand Response programs. Energy Division shall provide further guidance by which customer performance will be measured or such guidance will be determined via the demand response load impact protocols under development in R.07-01-041, should that process be completed prior to the summer of 2008.

DRA finds that the incentive structure of the CSM program may result in migration of customers from the Capacity Bidding Program (CBP) without an actual increase in demand reductions. The Commission finds that while DRA's protest has some merit, because of the current CBP customer enrollment, migration to CSM is unlikely.

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 little interest in the day-of CBP program as compared 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.

In addition, in their response to a data request by Energy Division, PG&E reports that they currently have no directly-enrolled CBP customers. Since all of PG&E's CBP customers are enrolled through aggregators, and the actual incentive payments received by those customers are unknown, concerns of customer migration from CBP to CSM is purely speculative. The program monitoring and reporting which will be required of PG&E, discussed above, will enable the Commission to more extensively analyze this possibility in the future.

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. The Commission finds that the existing evidence on customer behavior is insufficient to determine how customers will view the CSM program.

PG&E states that they are 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 are signing up but not participating, because those programs do not fit with their needs. PG&E notes that if those customers are able to choose more of the specific characteristics they are seeking, they will be more likely to participate. PG&E argues that there is no reason to think that the CSM program will be too complex for customers.

The Commission believes it is premature to make a judgment either way as to whether the offer of more choices will be too complex for customers to understand. However, we note that PG&E has conducted a fairly extensive review of the literature on the topic of Demand Response and customer preferences as well as conducted focus groups further exploring this issue. On the basis of this research, PG&E has concluded that customers would be more inclined to participate in a program that allows them to tailor how they participate in demand response. The Joint Parties do not contest the validity of PG&E's conclusions, rather they offer largely anecdotal evidence to support their contention that the CSM will create confusion in the marketplace.

In addition DRA suggests that the multiplicity of triggering events in the CSM will further confuse customers relative to existing DR programs. DRA's argument suggests that the transparency of the triggering event from the customer perspective plays an important factor in a customer's willingness to participate in a DR program inasmuch as it allows a customer to better assess the risk that they will be called to reduce load. This further suggests that existing DR programs have triggers that are transparent in comparison to the CSM. We disagree with this view. First, the triggers in existing programs do not appear to be particularly transparent. It is not at all evident that a participating customer would be able to easily anticipate if they are going to be called to reduce load under existing programs, given the technical nature of many of the existing triggers and the extensive discretion allowed to PG&E for some DR program triggers.. Second, we believe participants can reasonably manage their risk in the CSM through the customization the program allows. In particular, customers are given great latitude in terms of how much load they will provide if called upon, the frequency and duration of events, and the amount of notice they must be given prior to an event.

We are generally persuaded that the additional choice and flexibility offered by the CSM has the potential to attract customers that would otherwise be unwilling to participate in DR. However, as observed by DRA, the choice set offered under CSM in some circumstances appears to limit, rather than expand, customer choice relative to the existing programs. In particular under the CSM if a customer elects to "commit" to reducing load by a certain number of MW, they are locked into this commitment for the duration of the six month summer period. In contrast, in the Capacity Bidding Program, customers can change the number of committed MW monthly. As one of the ostensible goals of the CSM is to attract customers that would otherwise not participate in DR, by offering additional flexibility, we agree with DRA that it is important to retain this option. We therefore direct PG&E to modify the CSM as soon as practicably reasonable to give customers the ability to change their committed reductions on a month to

month basis.[1] We recognize that such a change may require changes to the incentives a customer is eligible to receive.
To further enable the Commission to determine if the CSM program is truly responsive to customer needs and enabling DR participation, we will require PG&E to perform a process evaluation of the 2008 CSM program. PG&E should submit to the Energy Division, within 30 days of the date of this Resolution, a Process Evaluation plan which includes:

- A work plan and schedule for a process evaluation during summer 2008, including a plan and schedule for pre-event surveys in the early summer
- A mechanism for customer feedback on the website interface, which includes both a mechanism for customers comments on the interface and a mechanism for modification of the website based on those comments
- Ongoing analysis of the data presented in the monthly reports discussed above, and an explanation of how modifications will be made to the CSM program if this analysis indicates the program is not meeting its enrollment goals.

This evaluation plan should inform the marketing effectiveness report described below.

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. We anticipate evaluating the cost-effectiveness of this program and all Demand Response programs once cost-effectiveness protocols have been developed and adopted.

[1] Note that in changing the program pursuant to this paragraph, PG&E could alter the CSM to allow customers to choose the length of time they are committing to a given load reduction, provided a customer can choose to commit to that load reduction for a period as short as a month.

DRA protests the cost of the program. The budget for the program is appropriate to determine if customers are able to contribute more demand response through the proposed program.

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. PG&E argues that the budget is accurate for the requirements of the program.

The Commission acknowledges DRA's point that ideally, all DR programs should be evaluated comparatively in the next three-year funding cycle. However, in an ACR dated August 9, 2006, the Commission explicitly directed the utilities to propose augmentations and improvements to the suite of Demand Response programs approved in D.06-03-024. The ACR came on the heals of the 2006 heat storm, a period characterized by unusually high temperatures that affected large portions of the state, and was intended to encourage the IOUs to reevaluate the DR programs that had been approved for the 2006-2008 cycle, with an eye toward further increasing their contribution to system reliability. By design, the ACR envisioned the IOUs coming forward with proposals outside of the normal three-year cycle, and PG&E's proposal is wholly consistent with that direction. Therefore, the Commission concludes that the program's potential to gain additional demand response MWs for the summer of 2008, and, furthermore, the opportunity the program affords to determine if PG&E's unique approach is effective, offsets the concerns raised by DRA.

In its responses to Energy Division's data request, PG&E indicated that the IT system developed for the CSM could be used to manage and operate current and future DR programs. Given the high costs of the IT system we explicitly direct PG&E to design and develop this system to be sufficiently flexible to allow it to be used for purposes of managing and operating current and future DR programs, as well as allow for potential modification to the options provided to customers, and allow for the potential future participation of aggregators. We believe this is critical in safeguarding ratepayer expenditure by mitigating the risk of stranded costs in the event the CSM program as approved herein is discontinued or significantly altered at some later date.

DRA and the Joint Parties both express concern about the impact of CSM on the budget of other Demand Response programs. The Commission agrees with DRA and the Joint Parties that identifying the affected programs and the anticipated impact on them are important, but finds that PG&E has subsequently provided sufficient information to mitigate these concerns. PG&E proposes to use previously-allocated money to fund the CSM program by transferring it from other Demand Response programs. Initially PG&E did not identify the programs from where the money will come from nor the potential impact on those programs. PG&E now states that since the results of its 2007 DR programs are now available, they have been able to determine that they can transfer funds to the CSM program from the Integrated Demand Side Management (IDSM) & Marketing program and that this fund shifting will not have any negative impact on PG&E's dispatchable DR programs.

DRA, Comverge and the Joint Parties protest that third party Demand Response providers (aggregators) will be negatively impacted by the program. The Commission finds that the incentive structure of CSM does not appear to give an unfair advantage to PG&E at expensive of the aggregators. 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. We agree. In addition, in response to a data request by Energy Division, PG&E has provided a comparison between the incentive payments paid by PG&E to its contracted aggregators and the incentive payments of the most similar CSM options. Upon review of that comparison the Commission agrees with PG&E's conclusion that the incentive structure of CSM does not appear to give an unfair advantage to PG&E at the expense of the aggregators' contracts.

We note that even if the CSM program were to fully duplicate the options and incentives that are available to individual customers under existing DR programs, aggregators still offer important advantages to prospective DR customers. Aggregators provide a means to accessing substantial amounts of DR that would otherwise go untapped by pooling DR potential across numerous customers. This pooling allows aggregators to provide firm DR commitments even if there is a reasonable probability that a given customer is not going to reduce load if an event is triggered. In contrast, if an individual customer chooses to sign up directly with PG&E, they forgo the opportunity to pool their risk of under or non-performance if a DR event is triggered with other participants. As a result customers may be left with limited options; either choosing to not to participate in DR at all, or signing up under an uncommitted, "best-effort" DR program, and receiving the far lower incentives those programs provide. Aggregators offer these customers a third option.

In addition, aggregators are capable of offering a multitude of services above and beyond what the utility can offer. DR program administration – aggregation, marketing, outreach, etc. – is the core business competency of aggregators. As such, if aggregators are faced with increasing competition from utilities, or for that matter, from one another then we would expect aggregators to continue bringing creative demand response solutions to the market.

We do, however, share the Joint Parties concerns that the CSM may simply "cannibalize" existing DR programs without substantially increasing the total amount of MW of DR capability in PG&E's service territory. To allow the Commission to better understand this potential impact, as described above, we impose certain reporting requirements on PG&E to help us monitor this program and assess its incremental contribution to total MW of DR capability as well as its impact on customer participation in existing DR programs.

Joint Parties protest the lack of a marketing plan. The Commission notes that PG&E has provided further information about their marketing efforts and will require that PG&E provide additional information on marketing in an evaluation. Joint Parties argue that PG&E has failed to identify how the CSM program would be marketed, provide marketing cost information in their budget, or state whether they will be using their own staff or engaging the services of third parties for marketing. Joint Parties point out that marketing and outreach is particularly important for a complicated program such as the CSM.

PG&E did not address this issue in their response to the Joint Parties' protest. However, in response to a data request from the Energy Division, PG&E has provided further information about their marketing procedures and budget.

PG&E intends to train their Account Executives about the CSM program, which will enable them to assist customers. While this may be sufficient, we strongly encourage PG&E to consider retaining the services of a third party with experience conducting marketing and outreach for energy management and DR programs. Ultimately the success of any DR program will require that customers have a clear understanding of how the program works, how to develop strategies to achieve demand reductions in response to events, and how those strategies mesh with the various options available under the CSM. The Commission will require PG&E to submit information about the effectiveness of their marketing and outreach activities and procedures in an evaluation report to be submitted by September 15, 2008. PG&E's evaluation of the effectiveness of its marketing and outreach activities and procedures for CSM will,at a minimum, address the following questions:

- Do PG&E's marketing and outreach efforts result in the predicted level of customer enrollment?
- Are PG&E's Account Executives able to satisfactorily answer customer inquiries about how to choose CSM options?
- Are PG&E's Account Executives able to provide guidance to customers regarding what opportunities they have to reduce load and how that opportunity dovetails with the options available under CSM?
- Is this guidance tailored to the specific needs of given customers or customer segments (e.g. commercial building, industrial building, educational institution, etc.)
- What are the number of customer inquiries and type of inquiries received about the CSM program?
- Identify where customers may be confused by CSM or are having difficulty with determining which CSM options to choose.
- How does the ratio of customer inquiries to customer enrollments compare with PG&E's other Demand Response programs?
- Is PG&E's CSM website easy to use and understand and overall customer satisfaction with the site.

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.

The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

Comments were filed by DRA, Comverge and the Joint Parties on February 20, 2008. PG&E filed reply comments on February 25, 2008.

FINDINGS

1. PG&E filed Advice Letter 3085-E which proposes to implement a new Demand Response program called the Cafeteria Style Menu (CSM) program.
2. The Commission understands that there is always a degree of uncertainty about future customer enrollment in DR programs.
3. Customer migration from the Capacity Bidding Program to the CSM program appears unlikely to occur.
4. PG&E's research shows that more customers would participate in Demand Response if the programs offered more choice and flexibility. It is premature to make a judgment as to whether the offer of more choices will be too complex for customers to understand.
5. Cost-effectiveness is outside the scope of this advice letter.
6. The proposed budget for the program is appropriate to determine if customers are able to contribute more demand response through the proposed program.
7. PG&E proposes to transfer previously-allocated money from other Demand Response programs to fund the CSM program, which will not have any negative affect on any dispatchable demand response program.
8. The CSM program does not appear to give an unfair advantage to PG&E at the expensive of contracts between PG&E and the aggregators.
9. PG&E shall submit information to the Commission about the effectiveness of its marketing plan and procedures in an evaluation report to be submitted by September 15, 2008.

THEREFORE IT IS ORDERED THAT:

1. PG&E's proposed Cafeteria Style Menu Demand Response Program as requested in Advice Letter 3085-E, is approved, as modified below.

2. PG&E shall change the CSM program to give customers the option to change their committed load reductions on a month to month basis as soon as practicably reasonable.

3. PG&E shall develop the Information Technology (IT) system for the CSM such that it is sufficiently flexible to allow it to be used to manage and operate existing and future DR programs;

4. PG&E shall file monthly reports to the Energy Division, which will provide the following data about the CSM program:
    - The number of customers enrolled
    - For each combination of CSM options, in all option categories, the number of customers and total enrolled MW
    - How many enrolled customers have previously participated in another demand response program, including demand response programs other than those run by PG&E
    - Customer performance during events, disaggregated to show performance of customers choosing the committed and non-committed options, the various notification times, and both new customers and customers migrating from other Demand Response programs.

5. PG&E should submit to the Energy Division, within 30 days of the date of this Resolution, a Process Evaluation plan which includes:

    1. A work plan and schedule for a process evaluation during summer 2008, including a plan and schedule for pre-event surveys in the early summer
    2. A mechanism for customer feedback on the website interface, which includes both a mechanism for customers comments on the interface and a mechanism for modification of the website based on those comments
    3. Ongoing analysis of the data presented in the monthly reports discussed above, and a explanation of how modifications will be made to the CSM program if this analysis indicates the program is not meeting its enrollment goals.

6. On September 15, 2008 PG&E shall file with Energy Division an evaluation of the effectiveness of its CSM marketing and outreach activities and procedures that will, at a minimum, address the following questions:
   - Do PG&E's marketing and outreach efforts result in the predicted level of customer enrollment?
   - Are PG&E's Account Executives able to satisfactorily answer customer inquiries about how to choose CSM options?
   - Are PG&E's Account Executives able to provide guidance to customers regarding what opportunities they have to reduce load and how that opportunity dovetails with the options available under CSM?
   - Is this guidance tailored to the specific needs of given customers or customer segments (e.g. commercial building, industrial building, educational institution, etc.)
   - What are the number of customer inquiries and type of inquiries received about the CSM program?
   - Identify where customers may be confused by CSM or are having difficulty with determining which CSM options to choose.
   - How does the ratio of customer inquiries to customer enrollments compare with PG&E's other Demand Response programs?
   - Is PG&E's CSM website easy to use and understand and overall customer satisfaction with the site.

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 28, 2008; the following Commissioners voting favorably thereon:

/s/ Paul Clanon
Paul Clanon
Executive Director

MICHAEL R. PEEVEY
PRESIDENT

DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
Commissioners

Commissioner Timothy Alan Simon, being necessarily absent, did not participate.