

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**RESOLUTION E-4011**

**August 24, 2006**

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

Resolution E-4011. San Diego Gas & Electric (SDG&E) is authorized to modify Schedule 20/20-TOU, also known as the Commercial & Industrial (C&I) Peak Day 20/20 Program as requested.

By Advice Letter (AL) 1811-E Filed on July 27, 2006.

---

**SUMMARY**

This Resolution approves SDG&E's proposal to modify its Peak Day 20/20 Program as requested.

**SDG&E's three modifications will enable greater customer participation, ensure the program will be available for the rest of the summer, and allow SDG&E to use it when it is most needed.**

Energy Division recommends approval of SDG&E's proposals because the proposals not only ensure that the program remains viable this summer but could also lead to an increase in demand response MWs. Energy Division believes that solidifying and expanding an existing demand response program for the remainder of this summer is a high priority as electricity demand reached unprecedented levels in the July heat wave.

**SDG&E's modifications were not evaluated for cost-effectiveness as that issue is beyond the scope of this resolution.**

Intervenors who opposed SDG&E's advice letter raised the issue of cost-effectiveness, citing the program costs and savings from 2005 as evidence that the program is too expensive, and provides too few benefits. Energy Division recommends that the Commission defer the issue of cost-effectiveness to a more appropriate forum, and that the Commission focus on whether the proposed changes can increase the amount of MWs this summer.

**SDG&E's proposal does not require an increase to SDG&E's demand response budget.**

SDG&E will cover any additional costs of its proposals by shifting funds within its existing demand response three-year budget.

**BACKGROUND**

SDG&E's C&I 20/20 Peak Day Program (Peak Day 20/20 program) is a part of SDG&E's three-year ('06-'08) demand response budget application which the Commission approved recently in D.06-03-024 <sup>1</sup> in A.05-06-006.

**The Peak Day 20/20 Program compensates customers if they are able to reduce electricity usage during the peak hours on critical days.**

The Peak Day 20/20 Program is open to customers with a minimum demand of 20 kW. Participants receive a 20% discount on their energy and demand charges if they are able to reduce an average of 20% of their electricity usage (between the hours of 11 am and 6 pm) each time they are notified by SDG&E of a Peak Day 20/20 event. SDG&E notifies the participants one day in advance, and will trigger a Peak Day 20/20 event if: (1) the local temperature is forecast to reach 84 degrees or higher and when system load is forecast to be at 3,620 MWs, or (2) there are extreme conditions such as an alert from the California Independent System Operator (CAISO).

The program has a limit of 15 events per summer, and summer is defined as May 1 through September 30. Participants receive a 20% discount to their peak-energy and demand charges only if they can meet, on average, the minimum 20% reduction in use for each event (per billing period). In other words, an average reduction of 19% per event by the participant during the billing period does not qualify for the discount. If no events are called, the participants receive no discounts. The program has been in place since 2005.

**SDG&E proposes changes to the Peak Day 20/20 Program with intention of increasing operational flexibility and attracting more participation this summer.**

---

<sup>1</sup> The decision adopted an amended settlement which reduced SDG&E's original budget proposal.

Via AL 1811-E, SDG&E requests Commission approval for three modifications to the program that it believes will result in additional demand response MWs this summer. The proposed modifications are only for the summer of 2006. The three modifications are:

- (1) **Modify the incentive structure by lowering the minimum load reduction threshold from 20% to 10% and reward participants in proportion to what they reduce.** Customers who reduce load by 10% would receive a 10% discount. Reductions between 10% and 20% will be rewarded with a discount equivalent to the amount reduced (e.g. a 15% load reduction receives a 15% discount). SDG&E states that this modification will enable customers who are unable to reach the 20% threshold an opportunity to participate.
- (2) **Eliminate the maximum on the number of Peak Day 20/20 Events.** The current program has a limit of 15 events per summer. SDG&E states that it has used 9 events to date and is therefore concerned that it could exhaust the remaining 6 program events well in advance of September 30.
- (3) **Modify the triggering mechanism so that SDG&E has greater flexibility in determining when to call the program.** The current tariff language *requires* SDG&E to trigger the program if the triggering conditions as described above exist. SDG&E requests that the tariff be modified so that it may exercise discretion on when to trigger the program after considering other operational and market factors. SDG&E claims that this change will enable it to better utilize the program.

**SDG&E does not request additional funding for the changes proposed.**

SDG&E states that the additional costs that result from the proposed changes (such as incentive payments) can and will be covered by SDG&E's existing three-year budget. D.06-03-024 enables SDG&E to shift funds between programs<sup>2</sup> and therefore SDG&E states that no additional funding is necessary.

---

<sup>2</sup> Section II.D.3 of the Amended Settlement adopted by D.06-03-024 enables the utilities to shift as much as 50% of funds between programs within a budget category.

## **NOTICE**

Notice of AL 1811-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section III-G of General Order 96-A as well as to the parties in A.05-06-017 et. al.

## **PROTESTS**

SDG&E's AL 1811-E was protested by The Utility Reform Network (TURN) on August 1, 2006. Protests were also filed by the Utility Consumers Action Network (UCAN) and the Division of Ratepayer Advocates (DRA) on August 2, 2006, one day after the accelerated protest deadline.<sup>3</sup> A letter of support was filed by EnerNOC, a demand response provider.

SDG&E responded to the protests of all three parties on August 3, 2006.

## **DISCUSSION**

**TURN, UCAN and DRA (the intervenors) argue that the Peak Day 20/20 Program is not cost-effective and that SDG&E's request to eliminate the event cap will exacerbate this problem.**

The intervenors cite the 2005 evaluation<sup>4</sup> of the Peak Day 20/20 Program as evidence that the program is too expensive, and provides too few benefits. TURN states,

“The Wirtshafter Report calculates the cost of SDG&E's C&I 20/20 program at \$30 to \$80 per kW of demand reduced per event, or a cost of **between \$450/kW-yr to \$1200/kW-yr** based on calling the maximum number of 15 events contained in the current tariff. SDG&E's proposal to

---

<sup>3</sup> SDG&E requested an accelerated protest period of 5 days. The Commission's Executive Director granted SDG&E's protest schedule on July 28, 2006.

<sup>4</sup> “Evaluation of the California Statewide 20/20 Demand Reduction Programs” by Wirtshafter Associates, dated June 6, 2006.

eliminate this maximum limit would increase the costs even more. In comparison, the Commission recently adopted a capacity value of \$52/kW-yr for PG&E's advanced meter project<sup>5</sup> and SDG&E itself uses a capacity value of \$85/kW-yr for its current proposal to deploy an advanced metering infrastructure."

DRA states that the program costs as reported by the 2005 evaluation are not justified. Both TURN and UCAN express skepticism that the Peak Day 20/20 program provides meaningful load reductions during extreme heat waves.

In its response, SDG&E states that the findings of the 2005 evaluation reflect the program a year ago. SDG&E provides evidence to show that the overwhelming majority of the program's enrollment in 2006 (in terms of MWs) is from large customers (300+ kW). SDG&E provides this information as evidence that the cost-effectiveness problem identified in 2005 is less of an issue in 2006.<sup>6</sup>

SDG&E also attempts to rebut the intervenors' skepticism of the program's value by stating that the program delivered 11.7 MWs on June 29 and 13.1 MWs on June 30.

**The issue of cost-effectiveness is outside the scope of this resolution.**

The issue of cost-effectiveness is usually a relevant one as the Energy Action Plan favors demand response programs that are cost-effective. However Energy Division believes that this resolution is not the proper forum for parties to debate the cost-effectiveness of SDG&E's proposal for the following reasons:

- D.06-03-024 approved SDG&E's three-year ('06-'08) demand response budget, which includes funding for the Peak Day 20/20 program. That decision defers the question of cost-effectiveness for the demand response

---

<sup>5</sup> D. 06-07-027, p. 49.

<sup>6</sup> The Wirtshafter report concluded that the program's recruitment of small customers may have caused the program's cost-ineffectiveness (since demand response reductions provided by small customers are not significant enough to offset the costs to recruit, educate and sign up these customers). Pg. xxii of the Executive Summary.

programs that it approved to a process outlined in D.05-11-009.<sup>7</sup> That process has been initiated, and therefore should be the proper forum to determine a cost-effectiveness method for demand response programs.

- The issue of measuring cost-effectiveness of demand response programs is a complex undertaking and deserves an evaluation much more comprehensive than what can be provided via this advice letter under expedited review. For example, a typical approach to valuing demand response programs is comparing the cost of the program to the cost of building a peaker on a dollar per MW basis. The intervenors appear to be taking this approach in their opposition to SDG&E's proposals. However, that comparison does not capture the potential benefits of a demand response program in a situation where demand has suddenly and unexpectedly increased to a point where available resources are straining to meet that demand. In such a situation there is not enough time to construct a peaker plant but it may be possible to modify an existing demand response program so that it provides more demand response to avert rolling blackouts. In this situation, the value of a demand response program rises significantly, but how to quantify that value remains unclear.

The heat wave that hit California in late July caused unprecedented demand that strained the state's electrical grid for several days. Because prolonged hot weather can occur in August and September, Energy Division's chief concern is ensuring that demand response programs are available if needed. Rather than engage in a debate about the cost-effectiveness of either the program or the proposed modifications to the program, Energy Division believes it is more important for the Commission to focus on whether SDG&E's proposed modifications have the potential to deliver more demand response MWs this summer or at least preserve what the program is currently delivering.

---

<sup>7</sup> See discussion under "Cost Benefit Issues" in D.06-03-024. The process initiated by D.05-11-009 includes a cost-effectiveness scoping workshop (held in March 2006) and the release of a draft set of load impact protocols for public comment (distributed in April 2006). Energy Division staff (along with staff from the California Energy Commission) has prepared a next step recommendation which is under consideration by the Commission.

**Lowering the minimum load reduction threshold from 20% to 10% and rewarding participants in proportion to what they reduce could increase the amount of MWs delivered by the program.**

Energy Division concludes that SDG&E's proposed modification to the incentive structure (as described in (1) in the Background Section) will encourage more participation in the program. Energy Division reaches this conclusion based on information in the 2005 evaluation which found that of the 1,265 accounts that were enrolled in the program, only 332 of those accounts (26%) were able to reach the minimum 20% threshold.<sup>8</sup> This information appears to validate SDG&E's claim that many participants in 2005 were frustrated by the design of the program because several had attempted to reduce their loads, but were unable to meet the 20% threshold (and thus received no incentive). Modification of the incentive structure as proposed by SDG&E would obviously address this problem and could even attract new participants leading to an overall improvement in program performance.

**Eliminating the maximum on the number of Peak Day 20/20 events ensures SDG&E the use of the program for the remainder of the summer.**

SDG&E requests that the current maximum of 15 events be eliminated since it has already used 9 events as of July 27, thereby leaving only 6 events for the remaining two months of the summer.

DRA argues that SDG&E's proposed third modification (enabling SDG&E more flexibility on when to trigger an event) should be a sufficient remedy for the problem (assuming SDG&E acts judiciously), and therefore it is not necessary to eliminate the event cap. Energy Division concludes that authorizing SDG&E more flexibility in triggering the program certainly helps the situation, but does not ensure that the program will be available through September 30. Energy Division agrees with SDG&E's proposal to eliminate the 15 event cap.

---

<sup>8</sup> "Evaluation of the California Statewide 20/20 Demand Reduction Programs" by Wirtshafter Associates, dated June 6, 2006. See Table ES-9.

**Modifying the triggering mechanism so that SDG&E has greater flexibility in determining when to call the program better ensures that the program will be used when most needed.**

SDG&E requests that the tariff language be modified so that it will be able to consider operational and market conditions in addition to the triggering conditions listed in its tariffs. The current tariff language requires SDG&E to trigger the program when temperatures are forecast to reach 84 degrees and when system load is forecast to be 3,620 MWs. In its advice letter, SDG&E states that even if these conditions arise, it may not be necessary to trigger the program because of off-setting operational and market factors. Energy Division concludes that by allowing SDG&E more discretion for triggering the program, it could better utilize the resource when it is most needed.

**COMMENTS**

Public Utilities Code section 311(g) and Rule 77.7 of the Commission's Rules of Practice and Procedure generally require a 30 day public review and comment period on draft resolutions. However, pursuant to section 311(g)(3) and Rule 77.7(f), this period may be reduced where "public necessity" requires reduction of the 30-day period. "Public necessity" refers to circumstances in which the public interest in the Commission adopting a resolution before expiration of 30 days clearly outweighs the public interest in having the full 30-day period for review and comment.

Here the public interest in adopting this resolution before expiration of a 30-day review and comment period is the potential avoidance of rotating outages, which can impact public health and welfare. The resolution addresses changes to a demand response program, which could lead to higher amounts of available demand response this summer. The heat wave in July 2006 resulted in unprecedented demand and strained the electrical grid. Demand response programs lower system demand during critical periods like the July heat wave and can play a role in averting rotating outages. This clearly outweighs the public interest in having a full 30-day period for review and comment. Having a full 30-day period for review and comment will delay the Commission's action on this resolution which is not in the public interest as there is the possibility of heat waves for the remaining summer months. Furthermore, the resolution addresses one pre-existing voluntary program and the changes do not negatively impact participants in that program.

Accordingly, on August 8 the draft resolution was served on the parties to SDG&E Advice Letter 1811-E, released for public comment, and placed on the Commission's agenda for August 24, 2006. Comments were due on August 16, 2006 and reply comments on August 21, 2006.

SDG&E and DRA filed comments on August 16 and SDG&E filed reply comments on August 21.

DRA continues to oppose the SDG&E's advice letter on the grounds that the proposed program revisions will exacerbate costs for ratepayers without providing commensurate benefits. DRA argues that better options are available for SDG&E to obtain more demand response MWs such as increasing the bonus payment in the Demand Bidding Program when market prices are below \$0.25 per kWh. DRA also states that lowering the C&I 20/20 Program's minimum threshold from a 20% reduction to a 10% reduction may be counterproductive since some customers who could achieve the 20% threshold will now ease their efforts. Finally DRA restates its concern that providing more funds to the C&I 20/20 Program using funds from other programs will cause a reduction in funding for more cost-effective and deserving demand response programs in SDG&E's portfolio.

SDG&E supports the draft resolution. In response to DRA's comments, SDG&E refutes DRA's argument that the proposed changes will exacerbate costs without commensurate benefits. SDG&E points out that the incentive structure of the program rewards participants only for what they produce, and thus revising the incentive structure as proposed can only produce benefits for SDG&E's ratepayers. SDG&E also states that DRA's proposal to change the Demand Bidding Program may have merit, but SDG&E focused on the C&I 20/20 Program because it had the greatest potential to produce the biggest gain in MWs in the short period of time remaining this summer. According to SDG&E, the C&I 20/20 Program has the largest enrollment, the largest demonstrated load reduction from among SDG&E's current programs, and one of the best potentials for increased demand response based on customer performance below the 20% threshold. Finally SDG&E states that the existing fund shifting guidelines enables it to do what it is proposing: moving funds from underperforming programs to programs that can expand demand response.

Energy Division agrees with SDG&E's position that C&I 20/20 Program as revised in the draft resolution will continue to require MW reductions by

participants in order for them to be paid, and thus there are commensurate benefits for SDG&E's ratepayers. Energy Division agrees with SDG&E that given the short time left for this summer, its selection of the C&I 20/20 Program was the appropriate choice to obtain the most potential MWs expeditiously. Energy Division acknowledges DRA's concern that moving the minimum threshold from 20% to 10% provides some participants an incentive to actually reduce their efforts. But lowering the threshold minimum will also encourage less-able participants to provide some demand response that cannot be obtained under the current threshold. That potential upside outweighs the potential downside in Energy Division's opinion.

Energy Division concludes that the resolution does not need to be modified with respect to the comments provided, and should therefore be approved by the Commission.

## **FINDINGS**

1. The additional costs that result from SDG&E proposed changes (such as incentive payments) to the Peak Day 20/20 program can and will be covered by SDG&E's existing three-year budget.
2. This resolution is not the proper forum for parties to debate the cost-effectiveness of SDG&E's proposal because (1) there is another Commission process to address cost-effectiveness, and (2) the issue of cost-effectiveness is inherently complex and deserves an evaluation much more comprehensive than what can be provided via this advice letter under expedited review.
3. Lowering the minimum load reduction threshold of the Peak Day 20/20 Program from 20% to 10% and rewarding participants in proportion to what they reduce could increase the amount of MWs delivered by the program.
4. Eliminating the maximum on the number of Peak Day 20/20 events ensures SDG&E the use of the program for the remainder of the summer.
5. Modifying the program's triggering mechanism so that SDG&E has greater flexibility in determining when to call the program better ensures that the program will be used when most needed.

6. Demand response programs lower system demand during critical periods like the July heat wave and can play a role in averting rotating outages. The public interest in adopting this resolution at the Commission's August 24<sup>th</sup> meeting, in order to improve this demand response program for the remainder of this summer, clearly outweighs the public interest in having a full 30-day period for review and comment.

**THEREFORE IT IS ORDERED THAT:**

1. The request of San Diego Gas & Electric to modify its Schedule 20/20-TOU as requested in Advice Letter AL 1811-E is approved.
2. The proposed modifications are approved only for the remaining summer months (August and September) of 2006.

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 August 24; the following Commissioners voting favorably thereon:

\_\_\_\_\_  
STEVE LARSON  
Executive Director

MICHAEL R. PEEVEY  
PRESIDENT  
GEOFFREY F. BROWN  
DIAN M. GRUENEICH  
JOHN A. BOHN  
RACHELLE B. CHONG  
Commissioners