Application of San Diego Gas & Electric Company (U-902-M) for Approval of Demand Response Programs and Budgets for the Years 2012 through 2014.

Application 11-03-\_\_\_

# CHAPTER III PREPARED DIRECT TESTIMONY OF GEORGE KATSUFRAKIS

### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

March 1, 2011

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#### CHAPTER III

#### PREPARED DIRECT TESTIMONY

#### OF GEORGE KATSUFRAKIS

#### I. PURPOSE

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The purpose of my testimony is to describe the portfolio of demand response ("DR") programs and associated budgets that SDG&E proposes to offer to its customers during the three-year program cycle of 2012-2014. This testimony presents SDG&E's proposed programs and budgets, explains SDG&E's program development process, its plan on how to market and implement these programs, and how the proposed programs make up a key component of SDG&E's integrated demand side management portfolio.

#### **Summary of Estimated Demand Response Programs Load Impacts**

The following table summarizes the estimated load impacts (in megawatts) SDG&E anticipates being able to achieve through its proposed DR programs portfolio:

	<u>2012</u>	<u>2013</u>	<u>2014</u>
Total MW	163 MW	207 MW	220 MW

The load impacts are presented herein for summary purposes. The discussion surrounding the development of the load impacts, as well as the supporting materials underlying the load impacts can be found in Chapter V, Section IV of Leslie Willoughby/Kathryn Smith's testimony.

#### II. BACKGROUND

#### Demand Response Programs History

SDG&E has been developing and offering an array of DR programs to its customers since 2001. During this time period, the scope of these programs has changed as more

experience is gained, and the concept of DR as a vital and integral element of resource planning and energy management has become more fundamental and accepted. While perhaps not as broad or as mature as the initiatives of SDG&E's Energy Efficiency ("EE") portfolio, DR is nonetheless a critical component of SDG&E's Customer Programs' portfolio as well as an essential element of its energy procurement and management strategy.

#### Significant Commission Decisions/Proceedings

In 2001, the Commission issued a series of three decisions which directed SDG&E to design and implement numerous DR programs; D.01-04-006, D.01-07-025 and D.01-06-009 ordered SDG&E to implement a number of programs of which several continue and are subject to modifications in this filing including Base Interruptible Program (BIP), Optional Binding Mandatory Curtailment Program (OBMC), an Air Conditioner Cycling (A/C Cycling) program, and Rolling Blackout Reduction Program (RBRP) which utilizes customer's backup generation capabilities to augment energy supplies. In addition to these programs Senate Bill (SB) No. 5 (1st Extra Session, 2001), also referred to as SBX1 5, required the utilities to implement the Scheduled Load Reduction Program (SLRP) which is also addressed in this filing.

#### Rulemaking R.07-01-041

On June 10, 2002, the Commission opened a new proceeding, R. 02-06-001, the Advanced Metering, Demand Response and Dynamic Pricing Rulemaking, which continued and expanded the development and evaluation of DR programs and related dynamic pricing structures.

On November 18, 2005, the Commission issued D.05-11-009, which subsumed a number of items from R. 02-06-001. D.05-11-009 noted that significant progress had been made in the development of DR programs, and identified several key issues for further development. Those

issues included, among others, the development of protocols for assessing the load impacts and cost-effectiveness of DR programs. Subsequently, the Commission opened a new Rulemaking, R. 07-01-041, on January 25, 2007, establishing a forum in which these, and an expanded slate of issues, including the reassessment of the annual DR program targets and the integration of DR programs into the California Independent System Operator's Market Redesign and Technology Upgrade (MRTU) process, would be addressed.

The R.07-01-041 proceeding was divided into four phases; Phase 1 established methodologies for determining Load Impacts and Cost Effectiveness, Phase 2 addressed Demand Response goals, Phase 3 was initiated to determine the treatment and integration of emergency triggered program into the CAISO wholesale market and Phase 4 is addressing issues associated with Direct Participation in the CAISO wholesale market.

Phase 1 Load Impact and Cost Effective protocols were initially set forth in D.08-04-050 and subsequently modified in D.10-04-006 and finalized in D.10-12-024. SDG&E's calculations of Load Impacts and Cost Effectiveness in this Application are made in accordance with these decisions and are provided in Leslie Willoughby/Kathryn Smith's testimony in Chapter V and Kevin McKinley's testimony in Chapter IV respectively. Phase 3 of the proceeding concluded with D.10-06-034 which resulted in a settlement agreement which among other things established caps on emergency triggered programs and resulted in the development of a new CAISO product, Reliability Demand Response Program which informs changes to SDG&E's emergency triggered programs elsewhere in this filing. Phase 4 has yet to be concluded, and leaves open some issues that are associated with integrating with the CAISO markets which are addressed both in this filing and the SDG&E report on Wholesale Market Integration that was filed with the Commission on January 31, 2011.

#### 1. 2009 - 2011 Demand Response Programs (D09-08-027)

On August 24 2009 the Commission issued D.09-08-027, adopting A.08-06-002, SDG&E's Application proposing its 2009-2011 DR programs and budgets. In addition to adoption of the 2009–2011 DR programs and budgets, D09-08-027 also established various requirements for the current filing in Ordering Paragraph 41. On August 27, 2010 an ALJ guidance ruling clarified the requirements set forth in D09-08-027 and other Commission orders that impact and informs the current filing including D.10-06-036 which updates the availability requirements for Demand Response programs to be eligible to receive maximum Resource Adequacy credits.<sup>1</sup>

#### 2. New Demand Response Programs

While the Commission has not specifically directed SDG&E to undertake any new DR programs in the 2012 – 2014 program cycle, the current application requests funding for several new programs and a pilot in addition to the continuation of existing programs. The proposed new programs are designed to make DR available to a broader population, expand the use of enabling technologies and provide a deeper pool of resources to fulfill SDG&E's portfolio needs. Each program is designed to comply with the compendium of Commissions directives on Demand Response while furthering the goal of Integrated Demand Side Management. The DR programs and the methods by which they will meet these objectives are discussed in more detail in subsequent sections of this testimony.

<sup>&</sup>lt;sup>1</sup> The protocols for amending Resource Adequacy rules for DR are ongoing in R.09-10-032.

#### III. DEMAND RESPONSE PROGRAM DESIGN CONSIDERATIONS

In developing its portfolio of proposed DR programs, SDG&E has undertaken a comprehensive evaluation of its customer base, stakeholders and existing programs. In support of and in addition to the guidance provided in R.07-01-041, SDG&E has developed overarching strategies that include developing price responsive programs, maintaining a level playing field for Aggregators, encouraging Integrated Demand Side Management (IDSM) solutions for customers and increasing stakeholder engagement. A detailed discussion of these guiding principles can be found in Chapter I Section III of Mark Gaines' testimony.

#### **Strategies**

Using the CPUC issued Guidance Document as reference, and the principles outlined in Chapter I of Mark Gaines' testimony, SDG&E's design effort included the development of key strategies and the inclusion of a stakeholder feedback process. Critical items identified during this process for incorporation into program design were:

- The ability to attract and strengthen relationships with third party Aggregators to support the use of the most cost effective solution, providing access to all Aggregators as the market and technologies continue to develop.
- Support the development and implementation of enabling technologies to provide reliable demand response.
  - Promote Auto DR:

SDG&E believes that enabling AutoDR will provide additional and more reliable demand response and create a technology solution to provide long-term reductions consistent with T&D cost avoidance. Further discussion is included in Chapter IV Section III of Kevin McKinley's testimony on D Factor.

Provide demand response programs that are simple and easy for the customer to understand and participate in.
Enable DR programs for integration into the CAISO Wholesale Market.
Design programs to be as price responsive as possible.
Use pricing to support the development of DR resources for the highest value

This process engaged internal and external stakeholders, including advisory meetings with customers, Demand Response Providers (DRPs), Community Based Organizations and other demand response stakeholders to get their thoughts on our existing programs as well as their thoughts on the proposed changes SDG&E planned for the 2012-2014 program cycle. These stakeholder meetings provided the opportunity to discuss our program strategies and receive feedback that impacted the design and implementation of our proposed portfolio.

#### **Stakeholder Discussions**

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- Specific topics that were raised during these discussions included:
- 15 The accuracy of the current 10 in 10 baseline adopted during the last program cycle.
- 16 Ability to provide increased transparency for event trigger.
- 17 TI capacity incentives for Aggregators for implementation of Auto-DR customers.
  - Ability to provide a financial commitment long enough to support Aggregator investment for technology driven programs.
  - Subsequent review and evaluation resulted in critical design changes proposed in this application, which were also reviewed with stakeholders during a follow-up advisory meeting.

#### **Resulting Program Changes**

As a result, the following design changes are proposed within this application:

- SDG&E proposes to adjust its current baseline to a 10 day average of aggregated customer usage over the preceding 10 similar days with a 40% day-of adjustment. The analysis and a discussion of different baselines are presented in Chapter V, Section VII of Leslie Willoughby/Kathryn Smith's testimony.
  - SDG&E proposes a TI incentive mechanism for Aggregators that facilitate load reduction from CPP-D customers with Auto-DR.
- SDG&E proposes to honor pricing for customers enrolled in the Capacity Bidding and Technology Incentive's CPP Premium Incentive mechanism programs through an Aggregator for 3 years from contract signature.
- SDG&E proposes to eliminate Multiple Program Participation (MPP) so that customers enrolled in BIP, CBP and DemandSMART<sup>TM</sup> will not also be eligible to participate in CPP. The analysis and rationale for this decision can be found in Mark Gaines' Testimony in Chapter I, Section II.

#### 14 Strategic Program Design Changes

#### **Changes in Programs to Support Wholesale Market Integration**

During the 2012-2014 Program Cycle SDG&E intends to transition critical programs for integration into the CAISO markets and is proposing a number of modifications to current programs to achieve this. SDG&E's goal is to limit "customer facing" changes to the program while supporting the integration on the wholesale level. SDG&E has targeted Capacity Bidding Program for initial transition to the wholesale market in 2013, using lessons learned from previous pilots (Participating Load Pilot and Demand Response Wholesale Market Pilot).

#### **Price Responsiveness**

With a goal to design programs to be as price responsive as possible, SDG&E in the process of developing proxy price triggers for all Day-Ahead and Day-Of programs. For CBP, in 2013, an event will be triggered when a bid into the wholesale market has been accepted and awarded. Using data from current initiatives such as the Demand Response Wholesale Market Pilot (DRWMP), SDG&E will refine its methodologies for establishing these price triggers during 2011. Aggregators and other market participants will continue to be involved in discussions to determine ways to provide price sensitive programs with transparent triggers.

#### **Multiple Program Participation**

As referenced above, the elimination of Multiple Program Participation was discussed during the advisory meetings. SDG&E believes that one of the values resulting in offering MPP is enabling a viable business model for Aggregators consistent with the strategy to attract and strengthen those relationships to meet SDGE's day-of system needs. However after reviewing the issues surrounding this effort, SDG&E believes that this can be accomplished without introducing the confusion and complications associated with MPP.

#### **TI Program Incentive Modifications**

To meet the objectives of ensuring a viable business model for aggregators and meeting day-of system needs, SDG&E proposes adding two components to its Technical Incentive (TI) program: 1) A CPP Premium incentive mechanism that provides an incentive to Aggregators that support CPP-D customers with their enabling technologies and 2) A CPP-D day-of energy incentive mechanism for select CPP-D customers whose usage during an event is below a reference level. A further discussion of these components can be found in Section IV as well as in the TI Program Implementation Plan (PIP) in Appendix B.

#### **Market Development**

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SDG&E proposes to use standard offer approaches such as those associated with the CBP that pays all Aggregators the same amount for event driven load reduction to create healthy competition and enable a successful market for all stakeholders.

#### **Small Customer Market Penetration**

In the 2012-2014 program cycle SDG&E will be transitioning smaller customers to the CPP-D rate as well as looking to enroll them into DR programs. An issue raised in stakeholder discussions, is the investment required to penetrate small customer segments. We recognize the challenge that cost effectiveness presents to Aggregators as they take on this activity and, to address this challenge, SDG&E proposes guaranteeing Aggregators a three year payment stream for efforts in attracting new customers to the Capacity Bidding Program as well as the new CPP Premium that is part of the Technical Incentive program. The development of this proposal was discussed during advisory meetings. For example, if an Aggregator signed up a customer in December of 2014, the last month of the program, they would be guaranteed a payment equal to the 2014 program rate for three years. If, however, an Aggregator elects to move a customer to another program the former rate will no longer be guaranteed, but the rate will be guaranteed if SDG&E reduces the program payment schedule or eliminates the program altogether. This payment structure would encourage Aggregators to work with smaller, less cost effective customers enrolling them in a standard offer similar to the guaranty and encouragement Aggregators have with a bilateral contract. This addition will provide Aggregators with enough time to build substantial portfolios that are portable, and flexible to bid load directly into the wholesale market without being contractual bound with the utility.

#### **Resource Adequacy**

Resource Adequacy brings substantial value to demand response cost effectiveness.

Designing programs that align with Resource Adequacy requirements is essential to ensure: 1) grid operation has the resources when they will most likely be needed and 2) rate payers get value from their investment in DR.

To contribute to the reliability of the state's electrical grid, SDG&E acquires capacity to meet peak load conditions and the amounts and characteristics of that capacity are aligned by the state's Resource Adequacy requirements. Demand Response programs bring substantial value to the utility by reducing peak demand, allowing SDG&E to avoid acquiring added generation that would sit idle except for the few hours it would be needed to meet peak load conditions.

SDG&E has designed its DR programs to align with the state's Resource Adequacy requirements to ensure rate payers get the significant value associated with reduced Resource Adequacy requirements that come from the contribution of DR.

In Order D.10-06-036, the Commission changed the peak hours definition to 1 pm – 6 pm for April through October and 4 pm - 9 pm for November through March. Given our mix of available resources, SDG&E believes that there is negligible value to having additional resources available from November to March, 4-9 pm, or April, 1-6 pm so we cannot justify paying for DR resources to be available during these periods. Analysis of SDG&E historical data on peak loads and loss of load expectation suggest the probability of a DR program being needed in the peak hours during the months of November through April to meet peak load is close to zero. In Chapter IV, Section III, the testimony of Kevin McKinley regarding the A factor more fully explains the analysis. The DR template allocation of capacity value to months also confirms that the value of capacity to meet peak loads is negligible during the period November to April.

With the need for DR concentrated in the period May through October, SDG&E concluded continuing the current DR programs over May to October with full availability during the hours of 1 pm to 6 pm would provide continuity with the past program structure without any loss of capacity value. DR programs will provide SDG&E Resource Adequacy value when it is needed – May to October.<sup>2</sup>

The Resource Adequacy Decision 10-06-036 also placed restrictions on generation resources to receive Resource Adequacy value – that they be available at least four hours per day for three consecutive days. While that requirement was not placed on DR programs, SDG&E has altered its DR programs to meet that same requirement. All core SDG&E DR programs are available for a minimum of four hours during the hours of 1pm – 6pm for three consecutive days.

Each of the DR programs has different program parameters which affect availability including restrictions on the hours available per month, or the number of calls per month, or the hours per call, but these restrictions provide customers with greater certainty. These program differences do not affect their qualification for Resource Adequacy, but do affect the capacity value of the specific DR program. These program parameters have been accounted for in valuation process through the A factor as described in the testimony of Kevin McKinley, Chapter IV, Section III.

#### **Exemplary Tariffs and Related Document Updates**

Below is a summary of the document changes requested by SDG&E. This is not a complete list of program changes SDG&E is proposing, but is intended to list tariffs, rules and contracts requiring Commission approval.

<sup>&</sup>lt;sup>2</sup> The analysis of peak demand does not take into consideration transmission events that could occur in any month. The BIP program offers an option for DR customers who can provide load reductions throughout the year. The pricing of the BIP program has been changed to reflect the bulk of capacity occurring in the summer months.

- Critical Peak Pricing Emergency (CPP-E)
  - SDG&E proposes eliminating the CPP-E rate and, therefore, the EECC-CPP-E tariff. A discussion of this can be found in Section IV.
- Base Interruptible Program
  - SDG&E proposes modifying the tariff's flat monthly payment of \$7/kW/Mo for Option A to differentiated rate of \$12/kW/Mo for May through October and \$2/kW/Mo for November through April. SDG&E also proposes modifying the flat Excess Energy Usage Charge of \$4.50/kWh for Option A to a differentiated rate of \$7.80/kWh for May through October and \$1.20/kWh for November through April.
  - o SDG&E proposes removing Option B from the tariff.
  - SDG&E proposes modifying the BIP tariff per D.09-08-027 to remove the backup generation provision from the BIP and add a clause prohibiting the use of backup generation to achieve load reduction.
  - In accordance with the ALJ Guidance Ruling, the following requirement will be added to the Base Interruptible Program Tariff, "In the absence of an actual event there will be at least one program test event called per year."
- Scheduled Load Reduction Program (SLRP)
  - SDG&E proposes to modify Multiple Program Participation language in tariff; Added reference to Rule 41
- Optional Binding Mandatory Curtailment (OMBC)
  - SDG&E proposes eliminating the OBMC program and, therefore, the OBMC tariff. A discussion of this can be found in Section IV.

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#### • Capacity Bidding Program (CBP)

- SDG&E proposes modifying the tariff to increase CBP capacity incentives by 10% and redistribute the monthly payment so that the \$/kW payment in critical months like August are increased and the \$/kW payment in shoulder months like May are reduced.
- SDG&E proposes modifying the CBP tariff per D.09-08-027 to remove the backup generation provision from the CBP and add a clause prohibiting the use of backup generation to achieve load reduction
- SDG&E proposes allowing Aggregators to sign a contract that provides guaranteed payments for three years.
- In accordance with the ALJ Guidance Ruling, the following requirement will be added to the Capacity Bidding Program Tariff, "If an actual event is not initiated by late Summer, a test event will be called during the peak months of August or September."

#### • TA/TI

 SDG&E proposes allowing Aggregators to sign a contract that will allow them guaranteed payments from the CPP Premium Incentive for three years.

#### • Rule 41 MPP

- SDG&E proposes removing CPP-E and OBMC from Rule 41.
- SDG&E proposes modifying Rule 41 to remove the multiple program
   participation for CPP-D with CBP, BIP, SLRP, PLS and the Aggregator
   Managed Programs.

Attached to my testimony as Appendix C are exemplary DR program tariffs that would implement the various program changes listed above. To the extent that the currently effective tariffs set forth in Appendix C may change as a result of some other proceeding in the interim between the time this testimony is submitted and a final Commission decision is issued in this proceeding, the inclusion of the exemplary tariffs herein is not meant to supersede those changes.

#### IV. DEMAND RESPONSE PROGRAM PORTFOLIO

#### A. Introduction

The following discussion presents an overview of the various programs that make up the DR programs component of SDG&E's integrated portfolio of programs for 2012-2014. Each program is briefly discussed in the sections that follow, with proposed changes to those programs for 2012-2014 highlighted. Budgets supporting each proposed program are contained in Table A-1 of Appendix A, while detailed Program Implementation Plans (PIPs), with program descriptions, implementation plans and other significant details contained in Appendix B.

As described more fully below, SDG&E is proposing to implement a comprehensive portfolio of integrated DR programs and budgets for the three-year 2012 – 2014 program cycle. The proposed annual program budgets are summarized below, with further detail contained in Table A-1 of Appendix A:

	2012	2013	2014
Program Budget (\$ million)	\$ 29,172	\$ 20,907	\$ 19,100

The budgets proposed herein are associated with the portfolio of demand response programs discussed in subsequent sections of my testimony and set forth in Appendix A. Any additional program budgets that are proposed and associated with other programs are discussed separately within the testimony of other SDG&E witnesses in this proceeding, and are in addition to the proposed budgets set forth in my testimony.

SDG&E proposes that the following programs be continued, or newly established, as integral components of its 2012 – 2014 DR programs portfolio. Each proposed, continued or new program is described in general terms in the following sections, and each is represented by a detailed PIP contained in Appendix B. Additionally, SDG&E has included in the discussion below information on those programs within its proposed DR programs portfolio that have been

adopted by the Commission in other proceedings, and which make up a portion of the overall portfolio. Finally, Table A-2 of Appendix A contains a summary matrix which presents summary information on each program, including a brief description and the proposed 2012 – 2014 program budget summary.

#### **B.** Demand Response Programs

#### i. Emergency Programs

#### 1. Emergency DR Programs Funded within this Application

#### Base Interruptible Program (BIP)

The Base Interruptible Program (BIP) is a statewide voluntary program that offers participants a monthly capacity payment in the form of a bill credit in exchange for their commitment to reduce their energy consumption to a pre-determined minimum level when called on to do so with short notice during emergency situations. BIP imposes a significant penalty to participating customers for non-performance during a program event. Customers with the capability to reduce their demand by 15% with a minimum of 100 kW and who have an IDR meter and telecommunications equipment installed are eligible to participate in BIP. Participants may either be utility bundled or direct access customers.

Customers may enroll in BIP either directly through SDG&E, or as part of an aggregated group through an approved third-party Aggregator/Provider. BIP is designed for customers with a firm load reduction plan in place and who can reduce load with certainty when requested. Events can be triggered by forecast or notification of one or more of the following conditions: a CAISO Stage 1 emergency is imminent, a CAISO Stage 2 emergency, a CAISO call for interruptible load or at SDG&E's discretion for various conditions including system contingencies.

Currently BIP has 19 customers enrolled in Option A (30 minute notice) and one customer enrolled in Option B (three hour notice). Enrollment is at 8.2 MW and during its 2010 test event delivered approximately 4.5 MW of load reduction. SDG&E proposes that the existing BIP program be continued through the 2012 – 2014 program cycle. SDG&E agrees with the Commission's comments in D.06-11-049 that "...BIP was created as a statewide program, in part so that it attracts customers in multiple service territories. We believe the program should be continued on a statewide basis." SDG&E proposes to continue BIP during the 2012 – 2014 program cycle as its primary

SDG&E proposes to continue BIP during the 2012 – 2014 program cycle as its primary emergency program, with limited changes to the existing program:

- SDG&E proposes modifying BIP to conform to CAISO's Reliability Demand Response Product (RDRP). As such, the three hour response time that is allowed in Option B does not align with the 40 minute RDRP curtailment requirement and, therefore, SDG&E proposes eliminating this option of the BIP product. Removing BIP Option B will have a very small impact on customers as it has not been a popular customer preference and only one customer on this rate option.
- Because of the correlation between system overloads and hot weather, SDG&E
  proposes a summer month rate premium to reflect the increased likelihood of an event as well as
  the higher value of load in the warmer months. Winter rates have been reduced accordingly to
  maintain the 2009-2011 \$/kW-yr payment structure.
- In accordance with CPUC D.10-06-034 that adopted a settlement agreement between the Commission, CAISO, the other utilities, and intervening parties, SDG&E has capped participation in BIP at 20 MW. BIP is SDG&E's only emergency-triggered program, and by enforcing the 20 MW cap, SDG&E will prevent over-enrollment in emergency triggered

<sup>&</sup>lt;sup>3</sup> D.06-11-049, mimeo, at page 31.

- SDG&E proposes eliminating Multiple Program Participation (MPP) for BIP.

  The analysis and rationale for this decision can be found in Chapter I, Section II of Mark Gaines' testimony, but in short, SDG&E feels that allowing customers to participate in BIP and CPP creates the risk of over estimating the resources available to address system upsets. Currently there are four BIP customers (six accounts) that are also on CPP. This change would require that these customers either choose CPP and therefore cannot participate in BIP or stay on BIP and select another tariff.
- In accordance with Commission's guidance in D.09-08-027, SDG&E proposes modifying the BIP tariff to remove the backup generation provision and to add a clause prohibiting the use of backup generation to achieve load reduction.

SDG&E's proposed budget for the BIP program is approximately **\$4.2 million** for the 2012- 2014 program cycle, as set forth in Appendix A.

The continuation of BIP is expected to provide a valuable contribution to the availability of demand response resources to SDG&E, and to provide ongoing options to customers wishing to participate in demand response. SDG&E's load impact analysis estimates a load reduction potential from BIP of **16 MW** in 2014, well below the 2014 cap adopted in D.10-06-034.

Program costs have increased for BIP in this program cycle from the 2009 – 2011 program cycle by about three million dollars. This increase is a result of a forecasted load reduction increase of 10 MW. An exemplary tariff for the BIP program that reflects the proposed changes described above can be found in Appendix C.

#### 2. Emergency DR Programs Not Funded within this Application

#### Scheduled Load Reduction Program (SLRP)

The SLRP was initially established pursuant to the provisions of California SB5X, dated January 17, 2001. Customers electing to participate in SLRP are required to reduce their electric load during specific time periods of their choosing, and are paid an incentive for that reduction, which must be a minimum reduction of 100 kW or 15% of total load. SDG&E has included SLRP in its demand response program through the current, 2009 – 2011 program cycle, but has not received any customer enrollments. SDG&E proposed to eliminate SLRP as part of its 2006 – 2008 program portfolio, in A.05-06-017, but because the Commission determined that the program is Legislatively-mandated, that proposal was denied by D.06-03-024. SDG&E has continued to offer the program and will continue the program through the 2012 – 2014 program cycle, and will maintain the existing program collateral and educational material, but will minimize the program expenditures due to the lack of customer interest in the program.

SDG&E has no customers on SLRP, has not allocated any budget for the SLRP program and is not anticipating any customers will enroll in this program in the 2012 – 2014 program cycle.

#### 3. Emergency DR Programs SDG&E Proposes Eliminating

#### Optional Binding Mandatory Curtailment (OBMC)

The Optional Binding Mandatory Curtailment (OBMC) Program is a voluntary program whereby participants are exempted from rolling blackouts/rotating outages in exchange for reducing power on their circuit upon 15-minute notice from SDG&E during an electricity shortage. Customers who can commit to reducing up to 15% of the total circuit load during an OBMC event are eligible to participate.

Following the energy crisis the Commission authorized OBMC as a statewide program through D.01-04-006. OBMC was expected to have wide appeal, as it exempts participating businesses from rolling blackouts and/or rotating outages. Participation in OBMC ensures that businesses on an impacted electric circuit will not face power outages, affording those customers the opportunity to eliminate such inconveniences as work interruptions, increased costs, etc.

Following its establishment, SDG&E initially had two large manufacturers enroll in OBMC in 2001, but as the apparent risk of blackouts diminished, those customers dropped from the program in 2002 and SDG&E's OBMC program has not had any customers enroll since. Because the program calls for load reductions across the entire circuit, the feedback SDG&E received from these customers was that they were concerned that other customers on their circuit would not also commit to a load reduction sufficient to ensure a minimum reduction of 15%. As a result, SDG&E proposes that the OBMC Program be terminated effective January 1, 2012.

#### Critical Peak Pricing - Emergency (CPP-E)

CPP-E is an existing voluntary rate option under which participating customers are called upon with very short advance notice (30 minutes) on a day-of basis of the need for an immediate load reduction. Participating customers typically have previously identified the actions they can take to reduce load on such a short-notice basis, and can therefore provide a valuable resource to SDG&E in times when near-immediate load reductions are necessary in response to system emergency or other extreme conditions. As a result of the Settlement Agreement adopted by D.08-02-034, and the establishment of CPP-D, the CPP-E program was authorized to be continued, and was a component of the 2009 – 2011 DR program cycle.

CPP-E has been available on an optional basis to customers with a minimum demand of 20 kW who can respond rapidly to the need for load reductions, and who wish to opt-out of the

CPP-D program. CPP-E was designed for customers who have the ability to modify their business operations and reduce load with extremely short notice. SDG&E would activate a CPP-E event primarily during a system reliability emergency, as determined by SDG&E. This could include, but is not necessarily limited to a CAISO Stage 1 or Stage 2 alert, or when local grid operators determine that firm load reliability is threatened. CPP-E provides for a maximum of 80 event hours per year, with events limited to no more than six hours per day, four days per week and 40 hours per month.

Although the short-notice product has value to SDG&E, this rate has had limited interest by customers and is duplicative with other DR offerings. As a result, SDG&E proposes that the CPP-E Program be removed as a customer option for the 2012 – 2014 program cycle and the rate be terminated effective January 1, 2012. SDG&E will work with the six customers that are enrolled in this program to transition them to another demand response offering.

Although CPP-E is a rate-based program, and was developed in the context of SDG&E's rate design proposals in its 2008 General Rate Case, SDG&E requests that the rate be removed during this proceeding rather than in future Rate Design Window, General Rate Case or similar proceedings.

#### ii. Price Responsive Programs

#### 1. Price Responsive DR Programs Funded within this Application

#### Capacity Bidding Program (CBP)

#### 1. Description

SDG&E's CBP program has increased in enrollment since its start in June 2007.

SDG&E's CBP has seen steady growth of approximately 140 accounts per year and continued interest from third-party providers. SDG&E anticipates continued growth in the program during the 2012- 2014 program cycle.

CBP is a supply-side bidding program, where customers make a monthly commitment to provide load reduction when called upon during program events. Participating customers receive a monthly capacity incentive payment for their committed load reductions, as well as an energy incentive payment based on the actual amount of energy reduced during the event. Participating customers are also subject to performance penalties, should they fail or fall short of delivering the committed load reduction when called upon to do so.

#### 2. Products

The CBP program has both day-ahead and a day-of program options to provide customers the flexibility of designating load reduction that requires longer event notification through the day-ahead products and designation load reductions that can be achieved with shorter notification through the day-of event products. Customers are permitted to designate separate day-ahead and day-of capacity nominations, but cannot designate the same nominated load under both options. SDG&E believes that by providing both options customers are able to better identify load reductions that they can provide under each scenario, and thereby create a greater opportunity to realize the maximum load reduction potential. Further, by offering day-

ahead and day-of program notice options, CBP provides SDG&E with a valuable, multi-faceted resource for day-ahead planning and for short, same-day notice in response to temporary, same-day, short notice emergency conditions that may not be known a day in advance.

Within the day-ahead and day-of options, CBP offers participating customers three product types within each option. These different product types reflect varying load reduction time durations, identifying both minimum and maximum load reduction event duration. As with the day-ahead and day-of alternatives, the CBP program product types are intended to provide participating customers with the flexibility of selecting from among a mix of alternatives in identifying the load reduction time frames that best suit their operational needs and other parameters. By providing such options, SDG&E believes that customers are better able to align their load reduction capability with their ability and flexibility to deliver load reductions when needed.

#### 3. Eligibility

Enrollment is open to all non-residential customers with demands above 20 kW, including bundled utility service customers, Direct Access (DA) customers, and Community Choice Aggregation (CCA) customers.

Per the Commission's guidance, "In at least two previous decisions, the Commission has stated it does not consider backup generation to be a type of demand response, and has rejected requests to use demand response funds to support backup generation." SDG&E proposes modifying the CBP tariff to remove the backup generation provision from the CBP and to add a clause prohibiting the use of backup generation to achieve load reduction.

<sup>&</sup>lt;sup>4</sup> D.09-08-027.

SDG&E proposes eliminating Multiple Program Participation (MPP) for CBP. The analysis and rationale for this decision can be found in Chapter I, Section II of Mark Gaines testimony, but in short SDG&E feels that allowing customers to participate in CBP and CPP over estimates the resources available to address system upsets and will result in duplicative payments for the same DR capacity. Currently there are 23 CBP customers (35 accounts) that are also on CPP. This change would require that these customers either choose CPP and therefore cannot participate in CBP or stay on CBP and select another tariffed rate.

#### 4. Incentive Payments

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CBP operates during the months of May through October. The capacity payments specified each month are intended to reflect the varying, month-to-month, energy market prices, having greater value during the peak summer months of July through September, and lesser value during the shoulder months of May and October. In the 2012 - 2014 program cycle SDG&E proposes increasing the annual incentive payment by 10% for the two to six hour products and the four to eight hour products in order to better reflect the benefit of the avoided capacity cost for DR programs that are capable of calling at least five hour events. The incentives for the one to four hour products were not increased because they do not meet the five hour criteria mentioned above. SDG&E also proposes adjusting the monthly payments to more closely reflect the seasonal adjustment to the energy value. SDG&E conducted an analysis using CAISO's Reliability Capacity Services Tariff from June 1, 2006 and the top 250 highest priced hours from 2006-2008 to shape the monthly incentive payments for CBP. The analysis suggested that the incentives for key months, like July and August, should be increased while the incentives for shoulder months should be further reduced. The values shown in the CBP tariff in Appendix C reflect the results of that analysis.

#### 5. Event Trigger

The program event trigger is based on an equivalent energy market heat rate of 15,000 Btu/kWh, intending to fit CBP into an exemplary typical day's energy resource supply curve. Functioning in much the same fashion as a generation supply, the intent of this heat rate trigger is that a CBP event would be triggered whenever the energy market would dictate that an equivalent 15,000 Btu/kWh resource would be acquired. In the 2012 – 2014 program cycle, SDG&E proposes bidding the CBP day-ahead products into the wholesale market. Instead of a heat rate trigger, SDG&E will aggregate customers into a Proxy Demand Resource (PDR) and submit energy bids into the CAISO day-ahead market for their combined load reduction at a predetermined price. The act of the bid clearing the day-ahead market, then becomes the trigger for calling a CBP event.

#### 6. Baseline Calculation

In order to accurately reflect load drop, SDG&E proposes shifting from an event baseline that uses a 10 day average of individual customer usage over the preceding 10 similar days with a 20% day-of adjustment individual to a baseline that uses a 10 - day average of aggregated customer usage over the preceding 10 similar days with a 40% day-of adjustment. A detailed analysis and discussion of baselines is presented in Section VII of Leslie Willoughby/Kathryn Smith's testimony.

#### 7. Three Year Contract

Although over 92% of SDG&E's non-residential customers have peak demands of less than 50 kW, only 3% of the accounts on the CBP have a peak demand less than 50 kW. In fact, currently just over 85% of CBP accounts have peak demands greater than 200 kW and only about 7% of the accounts on CBP are less than 100 kW. These numbers show the success

Aggregators have had penetrating SDG&E's large customer segment and the challenge they've had enrolling smaller customers. Cost effectiveness has been an issue in penetrating the small customer segment and SDG&E recognizes the challenge that cost effectiveness presents to Aggregators as they enrolled new customers on CBP. To address this challenge, SDG&E proposes signing a three year contract with Aggregators for the new customers they enroll in CBP. This guaranteed three year payment stream will increase the benefits of marketing, and enrolling, smaller customers and smaller chain accounts. As a result of this program change, SDG&E would accrue funds at the end of the program cycle to honor the remaining payments of these Aggregator contracts in the out years.

#### 8. Summary

CBP has been a successful program, in terms of customer acceptance, enrollment and participation, as evidenced by the current and projected enrollment. SDG&E proposes to continue the program during the 2012–2014 program cycle with only a few changes to the program provisions currently in effect:

- SDG&E proposes removing the backup generation provision from the CBP and adding a clause prohibiting the use of backup generation to achieve load reduction
- Eliminated multiple program participation for CBP.
- SDG&E proposes a 10% increase in their annual incentive payments with increased payments for key months like August and reduced payments for shoulder months like May.
- SDG&E proposes establishing a price trigger and bidding the CBP day-ahead products into the wholesale market using CAISO's Proxy Demand Resource (PDR) product.

- SDG&E proposes modifying the methodology for calculating the baseline load from an individual 10-in-10 with a 20% adjustment to an aggregated 10-in-10 with a 40% adjustment.
- SDG&E, in an effort to support the Aggregators as they build their portfolio of demand response resources, proposes allowing the Aggregators to sign three year contracts with customers. As a result SDG&E would accrue funds at the end of the program cycle to honor the remaining payments of these contracts in the out years.

SDG&E's proposed budget for the CBP program is approximately \$11.9 million over the three year cycle, as set forth in Appendix A. This is about a seven million dollar increase from the 2009 – 2011 program cycle. This increase is reflective of a "best case scenario" of customer enrollment. As discussed in Chapter II, Section IV of Athena Besa's testimony, cost recovery will only occur after the costs are incurred by SDG&E and, therefore, this optimistic forecast will not impact rates unless it is realized.

The continuation of CBP is expected to provide a significant contribution to the availability of demand response resources to SDG&E, and to provide ongoing options to customers wishing to participate in demand response. SDG&E's load impact analysis estimates a load reduction potential from CBP of **28 MW** in 2014. An exemplary tariff for the CBP program that reflects the proposed changes described above can be found in Appendix C.

## 2. Price Responsive DR Programs Partially Funded within this Application $DemandSMART^{TM}\ Program\ (DSP)$

The 2009-2024 DemandSMART<sup>TM</sup> Program (DSP) is the result of SDG&E's 2010

Procurement Supply RFO, and is a third-party administered Day-Of Load reduction program that

offers capacity and energy incentive payments in exchange for reducing energy consumption through enrolled end-use customers during demand response events. The program provides firm capacity to SDG&E by reducing peak demand through the use of energy management expertise, technology and communications networks. This program is available to commercial/industrial customers, greater than 100 kW, receiving bundled service or Direct Access service and being billed on a commercial, industrial or agricultural rate schedule. Participation in this program must be taken in combination with the customer's otherwise applicable rate schedule. Customers may only participate on the DSP through the authorized third-party. Customers participating in the DSP are not eligible to participate in any other utility demand response programs that offer capacity payments and energy payments.

This program can be called from the beginning of May until the end of October on any weekday between the hours of 12 pm to 6 pm and is limited to one event per day and a maximum of 50 hours per year. The DSP's administrator will be notified at least 30 minutes prior to an event.

The DSP agreement is a 15 year contract, effective from 2009 through 2024. The Aggregator committed to provide up to 25 megawatts (MW) of dispatchable load reduction during the 2010 season, the Aggregator's commitment will increase to 35 MW during the 2011 capacity delivery season and finally to 40 MW starting with the 2012 capacity delivery season until the end of the contract term. This program had limited success in its first season delivering well below its capacity requirement of 25 MW. Even when a more favorable method for calculating the baseline was applied to the 2010 participation, the delivered MW are still well below the targeted capacity. SDG&E feels the San Diego customer base and their energy consumption profiles may not be suitable for delivery of such an ambitious load reduction.

In addition to transitioning CBP customers to DSP, the contracted Aggregator has signed up a number of new customers. Although the majority of customers have been signed up since this program commenced, the load these new customers bring is significantly smaller than the load from the older, CBP customers. In 2010, as DSP struggled to meet its commitment, it became clear that San Diego's limited industrial base and relatively small population of non-residential customers make it challenging to quickly develop a large non-residential demand response portfolio.

SDG&E proposes one modification to DSP in this filing; eliminating Multiple Program Participation (MPP) for DSP. The analysis and rationale for this decision can be found in Chapter I, Section II of Mark Gaines' testimony, but in short SDG&E feels that allowing customers to participate in DSP and CPP, over estimates the resources available to address system upsets and will result in duplicative payments for the same DR capacity. Currently there are 19 DSP customers (42 accounts) that are also on CPP. This change would require that these customers either choose CPP and therefore cannot participate in DSP or stay on DSP and select another tariff.

SDG&E's proposed budget for the DSP program is approximately \$640 thousand over the three-year cycle, as set forth in Appendix A. The budget dollars listed above reflect only the energy incentive costs for events during the program cycle. The balance of the Commission approved contract costs is confidential pursuant to the RFO Solicitation to P.U. Code 583,454.5(g), GO 66-C and D.06-06-066.

The continuation of DSP will provide ongoing options to customers wishing to participate in demand response. To prevent confusion and avoid double counting, the PIP for

DSP does not provide a load impact number, but SDG&E's load impact analysis estimates a load reduction potential from DSP of **15 MW** in 2014.

#### Peak Time Rebate (PTR)

In D.07-04-043 SDG&E received approval for its Advanced Metering Infrastructure Project as well as funding approval for developing the Peak Time Rebate (PTR) program. Funding for this project ends in 2011 and, therefore, the costs required for administering the PTR program for the years 2012 – 2014 are included in this application.

The PTR program, adopted by the Commission in D.08-02-034, provides residential customers the opportunity to earn a bill credit for lowering their consumption during PTR events. Under the provisions of D.08-02-034, PTR has been approved to become effective only after eligible customers have a Smart Meter installed at their premises and SDG&E has completed the required IT and billing and notification system modifications necessary to implement PTR and reflect the appropriate customer bill impacts. PTR billing and associated bill impacts are currently anticipated for a scaled roll-out beginning in 2011.

SDG&E, through the PTR program, provides customers notification on a day-ahead basis that a PTR event will occur on the following day. In emergency situations, a PTR event can be called on a day-of basis to help address an emergency, but day-of events are not the primary design or intended use of the program. During a regularly-scheduled billing period, customers who reduce load during PTR events will receive a program incentive in the form of a bill credit. The PTR program is designed to leverage SDG&E's Smart Meter installation to encourage large-scale customer participation in DR events. PTR is a two-level rebate program, providing a basic incentive level for customers that reduce energy use through manual means and a premium incentive for customers that reduce energy use through automated enabling technologies.

Customers will be provided information about their level of participation through web presentment channels, e-mails and on their energy bill. The applicable bill credit will be calculated for participating customers based on their event day reduction in electric usage below their established customer-specific reference level (Customer Reference Level or CRL, which is a specific calculation of recent energy consumption).

The majority of SDG&E customers will be eligible for PTR participation in 2012 after SDG&E IT system enhancements are complete and all customers' smart meters are installed and tested. Customers will be provided with a PTR education kit including information on the PTR program, a description of the meter and energy consumption data they will be provided and guidance on how to reduce their energy consumption on PTR events. The intent of the information is to assist customers in achieving the bill credit. Furthermore, through this kit and other integrated marketing communications methods, customers will be encouraged to sign up for day-ahead electronic notifications of peak days through email, text, voicemail, and other similar technologies.

PTR relies on the modification of customer behavior, social change and customer acceptance of new programs and technologies that make managing energy easier. PTR is an opportunity to begin to transform its residential customer's knowledge about time-dependent energy costs through the introduction of event driven incentive rates to customers who have not traditionally been exposed to these types of rate structures.

The fundamental objective of the PTR program is to help customers on this rate achieve load reduction during peak energy consumption periods. SDG&E believes that customers are far more likely to respond positively to a PTR event if they have a clear understanding of what is being asked of them and are given enough information to allow them to make an educated and

informed decision. Customers will be provided educational materials that are designed to: 1) educate them on how DR and PTR are mutually beneficial, 2) educate them on the PTR rate and their eligibility, 3) encourage them to sign-up in a peak day notification service, 4) present tactical solutions that help them understand how to change their energy usage behavior during peak-time rebate event notifications, and 5) encourage them to install automated enabling technologies. Notifications informing customers of pending events may take the form of outbound calls, email, text message, SDG&E website or the general media. Customers will be able to find their Customer Reference Level (CRL) on-line and enroll for PTR event and performance feedback notifications via email and/or text messages

The introduction of PTR in 2011 and its larger roll-out in 2012 is expected to provide a significant contribution to the availability of DR resources to SDG&E, and to broaden the participation of residential customers. SDG&E's load impact analysis estimates a load reduction potential from PTR of **67 MW** in 2014. The benefit from this load reduction is not included in our cost benefit analysis for SDG&E 2012-2014 DR portfolio, but the estimate is included here for completeness. Although the initial funding for the customer communication and PTR education was included in SDG&E's Smart Meter proceeding, and adopted by D.07-04-043, SDG&E seeks to transition this program into the DR portfolio and, as such, requests incremental PTR funding for administration, education and outreach of the program.

SDG&E's proposed budget for the administration, marketing, education and outreach of PTR program for over 1.1 million residential customers is **\$4.8 million** over the 2012 – 2014 program cycle, as set forth in Appendix A. Additionally, as with CPP-D, because PTR is a rate-based program, and was developed in the context of SDG&E's rate design proposals in its 2008

General Rate Case, SDG&E reserves the right and option to propose updates or modifications to the PTR program in future Rate Design Window, General Rate Case or similar proceedings.

# 3. Price Responsive DR Programs Not Funded within this Application Critical Peak Pricing – Default (CPP-D)

CPP-D is a day-ahead DR rate option that became effective on May 1, 2008 and SDG&E actively worked with its customers to prepare them for the new rate. Customers with a peak demand greater than 200 kW were initially defaulted onto the CPP-D rate and customers with peak demands between 20 and 200 kW are planned to be transitioned onto the CPP-D rate in 2013 pending complete smart meter deployment which includes billing infrastructure updates and making one year of usage data available to customers.

CPP-D, in conjunction with the deployment of Smart Meters, provides customers with the information and opportunity to manage their electric costs by either reducing their energy consumption during high-cost pricing program event periods, or by shifting all or a portion of their energy consumption from the higher-cost pricing periods to lower-cost pricing periods.

The CPP-D program is designed for bundled customers whose maximum demand is equal to or exceeds 20 kW for twelve consecutive months, and whose facilities are equipped with the necessary fifteen-minute interval data recording meter and telecommunications equipment. Customers may choose to pay for the higher-priced critical peak period electricity when it is used during a program event period, or they may opt to reserve a specific amount of energy through the payment of a fixed Monthly Capacity Reservation Charge (CRC). In either instance, the higher critical peak period energy charge paid by the customer or the CRC payments reflects the customer's decision to either consume energy during the critical peak period, reserve a specific amount of energy, or to reduce consumption during the critical peak periods.

Historically, customer participation in DR programs has been low, largely due to low customer acceptance or a lack of customer education. With an aggressive awareness and education campaign associated with the implementation of the CPP-D program, SDG&E hopes to increase customer understanding and acceptance of DR, and thereby achieve greater participation and results. Through the introduction of the CRC provision of the CPP-D program, customers will be able to self-select and reserve a specific level of generation capacity that will meet their individual electricity needs during critical peak pricing program events which, in turn, will provide customers with the economic incentives to reduce their energy consumption to their CRC level during a CPP-D program event. The concept behind the CRC is to provide customers with a hedge against the CPP-D critical peak rate, by giving them the opportunity to reserve the specific level of capacity they anticipate needing, at a fixed price. Customers are notified by 3:00 pm on the day prior to the activation of a program event, which is determined based on established program triggers. Customers will have this advance notice of a CPP-D program event and can adjust their energy consumption on the day of the program event. To facilitate the transition onto CPP-D, the program offers bill protection to customers for the first 12 months that a customer is on the program. Bill protection provides a risk-free opportunity to test CPP-D and gain experience with the flexibility offered under this new program.

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CPP-D has provided a significant contribution to SDG&E's DR portfolio and although eliminating multiple program participation will impact CPP-D there is still forecasted growth as smaller customers become eligible for the rate. SDG&E's load impact analysis estimates a load reduction potential from CPP-D of **54 MW** in 2014. CPP-D program implementation and administration was originally included within SDG&E's 2008 General Rate Case, and adopted by D.08-02-034, **SDG&E** does not seek additional funding for the CPP program as part of

this filing. Because of synergies with SDG&E's dynamic rate application (A.10-07-009), no incremental CPP-D funding for the administration, marketing and outreach of the CPP program is required in the next program cycle. SDG&E does not seek any changes to the CPP-D program from what was adopted by D.08-02-034. Additionally, because CPP-D is a rate-based program, and was developed through SDG&E's rate design proposals in its General Rate Case proceeding, SDG&E reserves the right and option to propose updates or modifications to the CPP-D program in future Rate Design Window, General Rate Case or similar proceedings.

### PeakShift @ Work

The small nonresidential class of customers was initially scheduled to participate in the Peak Time Rebate (PTR) program along with the residential sector. In accordance with Commission guidance from the Pacific Gas & Electric Rate Design Window decision<sup>5</sup>, SDG&E has proposed to bypass PTR (A.08-11-014) and transition the small nonresidential segment directly onto the new PSW tariff (A.10-07-009).

PeakShift at Work (PSW) is a dynamic rate that will be the new default rate for small (<20kW) non-residential bundled customers. PSW is SDG&E's newly proposed day-ahead DR rate option that includes Time of Day (TOD) energy prices with a rate adder that takes effect on special ReduceYourUse Days when energy prices are expected to soar. As with its predecessor CPP-D, SDG&E may call up to 18 ReduceYourUse Days in a year, based on the same triggers as

<sup>&</sup>lt;sup>5</sup> PG&E Dynamic Pricing Decision, D.08-07-045.

CPP-D. Customers will be notified by 3:00 PM the day ahead that the next day will be a ReduceYourUse Day, and that the PSW rate adder will be in affect during the on-peak time period.

Preparing the small nonresidential market for PSW represents a significant educational challenge. All eligible small non-residential customers will be defaulted to PSW unless they proactively select another option. In addition to the challenge of understanding PSW, the customer will also be asked to take a much more active role in managing their energy usage, since this will have a direct effect on their energy bill. For this to happen, customers must have at least a basic understanding of the rates, and this requires that a significant effort to education and outreach the rate and tools available. SDG&E plans a multi-year education and outreach program so that customers can make fully informed decisions, and successfully manage their costs under the new rate.

The funding for the PSW program implementation and administration was included within SDG&E's A.10-07-009, and as such, **SDG&E does not seek incremental funding for the administration, marketing and outreach of the PSW program.** SDG&E does not seek any changes to the PSW program from what was just filed in A.10-07-009.

# PeakShift @ Home

In response to SB 695, which allows the Commission to implement time-variant pricing on a default basis for residential customers, SDG&E is also proposing in A.10-07-009 PeakShift at Home (PSH) as an opt-in dynamic rate for residential customers. SDG&E believes educating residential customers on the concept of time-variant energy pricing will take time. Thus, by implementing PSH as an optional rate, SDG&E can begin the process of exposing residential

customers to the concept of time-variant pricing in advance of implementing PSH as the default rate for these customers in the future.

The PSH rate structure consists of TOD energy rates that vary by time period (on-peak, semi-peak and off-peak) and by season (summer and winter). In addition, during critical peak hours (11 AM to 6 PM) when ReduceYourUse events are called, energy rates will increase by the amount of the PeakShift Period Adder.<sup>6</sup>

The PSH rate is a day-ahead rate designed to provide bundled customers with energy price signals to encourage reductions in energy usage during higher priced hours. The main objective of the PSH rate is to encourage demand response during high system peak days when ReduceYourUse Days are triggered. Customers will pay significantly higher energy rates during the relatively few critical peak hours of ReduceYourUse Days in exchange for paying lower energy rates during all remaining hours of the summer period. The PSH rate structure will also encourage customers to use less energy during peak hours year-round by charging higher energy rates during on-peak and semi-peak hours compared to off-peak hours.

Customers are not able to receive more than one incentive payment for the same kWh reduction. For this reason, customers choosing to take service on PSH will also be choosing to opt-out of the PTR rate since participation on both PSH and PTR would provide customers with double incentives for the same kWh reduction.

During a given calendar year the PSH program can call a maximum of eighteen (18) ReduceYourUse Days any day of the week, year-round. Although ReduceYourUse Days can be called year-round these days are most likely to occur in summer months (May through October)

<sup>&</sup>lt;sup>6</sup> Unlike the default CPP-D rate for medium and large non-residential customers, the opt-in PSW and PSH rate do not include a capacity reservation charge (CRC) component, which provides a hedge against ReduceYourUse Day pricing.

when hot weather prompts high air-conditioning use. The ReduceYourUse Day and trigger provision is identical to what is proposed for PSW.

Consistent with notification requirements adopted for CPP-D and proposed for PSW, notification will be no later than 3 PM the day before a ReduceYourUse Day. Customers may elect to be notified of a ReduceYourUse Day by email message, text message, or alphanumeric pager. Notification will also be posted on the SDG&E website.

Although not required for opt-in rates, SDG&E understands the obstacle in getting customers to participate on PSH will be their uncertainty of the rate's benefits. SDG&E will, therefore, include 12 months of Bill Protection for the first year a customer takes service under PSH.

The funding for the PSH program implementation and administration was included within SDG&E's A.10-07-009, and as such, **SDG&E does not seek incremental funding for the administration, marketing and outreach of the PSH program**. SDG&E does not seek any changes to the PSH program from what was just filed in Application 10-07-009.

#### Summer Saver

SDG&E's Summer Saver Program is a direct load control cycling program available to residential, small business and agricultural customers with central air conditioners.

Administered under a third-party<sup>7</sup> contract, the program utilizes direct load control during the summer months to cycle customer end-use equipment as a tool to assist SDG&E in managing electric system demand. Through direct load control, the program provides for participants' equipment to be automatically controlled during times of high energy consumption, constrained

<sup>&</sup>lt;sup>7</sup> SDG&E's initial contract to administer the Summer Saver Program was with Comverge, Inc. Pursuant to the Second Amendment to the contract, effective January 19, 2007, the contract was assigned from Comverge, Inc. to. Alternative Energy Resources, Inc. (AER), a wholly-owned subsidiary of Comverge, Inc.

energy supplies or transmission capacity, or other system emergency conditions. As currently designed, Summer Saver Program events may be triggered by SDG&E based on a CAISO Stage 1 or Stage 2 event, or based on local system emergency or other conditions as determined by SDG&E.

On June 9, 2004, the Commission issued D.04-06-011, which approved a number of utility proposals to address short-term and long-term grid reliability needs. Among those proposals approved by D.04-06-011 was SDG&E's proposal to implement an Air Conditioner Cycling Program, through a third-party arrangement with Comverge, Inc. The original proposal from Comverge was in response to SDG&E's May 16, 2003 Request for Proposals (RFP), and targeted commercial customers with maximum demands no greater than 100 kW. SDG&E's original contract with Comverge was approved by D.04-06-011, which also directed SDG&E to amend the contract to include a residential customer component. SDG&E filed Advice Letter 1639-E on November 18, 2004, requesting approval of the First Amendment to the contract with Comverge, which was approved by the Commission in Resolution E-3913, dated February 10, 2005. The amended contract, which is the basis of the Summer Saver Program, specified a 10-year term, with an initial target load reduction capacity of 30.2 MW, and with a maximum allowable demand response capacity of 70 MW (up from the original contract provision of 40 MW).

Subsequently, in D.06-11-049, the Commission approved SDG&E's proposals to add a number of augmentations and improvements to its existing DR programs, which included several additions to the Summer Saver Program. Those additions included providing residential customers with a new 100% cycling option in addition to the existing 50% cycling option, and offering non-residential customers a new 30% cycling option in addition to the existing 50%

cycling option. Further, the program was expanded to allow weekend program events for new program participants. As a result of the expanded program provisions, SDG&E and Comverge negotiated the Second Amendment to the contract underlying the Summer Saver Program, which was filed with the Commission in SDG&E's Advice Letter 1871-E on February 1, 2007. The Second Amendment to the contract was approved, in part, by the Commission in Resolution E-4078, dated April 12, 2007. As part of that Second Amendment, SDG&E and Alternative Energy Resources (AER), Inc. agreed to an increase in the target load reduction capacity from the original 30.2 MW to a new level of 42.2 MW, with a further revision to increase the maximum allowable DR capacity from the original 40 MW to 100 MW at AER's sole discretion.

The Summer Saver Program is an integral component of SDG&E's DR portfolio, and, pursuant to the existing contract between SDG&E and AER, will continue through (and beyond) the 2012 – 2014 program cycle. As a result of the Commission's prior approval of the program as a component of the May 16, 2003 RFP process in D.04-06-011, and the integration of the program and associated funding up to the maximum allowable capacity of 100 MW, SDG&E does not at this time seek any incremental funding for the Summer Saver Program.

SDG&E will continue with its current program marketing strategy and tactics during the 2012 – 2014 program cycle. The currently-effective contract between SDG&E and AER outlines AER's program development and implementation work, and additional opportunities will be evaluated to help further promote the program in conjunction with other energy management programs.

Because the Summer Saver program is available to residential customers, and with the implementation of the PTR program, it is possible that there may be occasions on which both a Summer Saver and PTR program event will be activated on the same day. In those situations

where both programs are called as a day-of event, customers participating in the Summer Saver and PTR programs will receive the capacity payment credit provided by their initial enrollment in the Summer Saver Program, as well as the current PTR energy credit for customers with enabling technologies of \$1.25/kWh of load reduction achieved during the PTR event. SDG&E does not consider this to represent a duplication of program incentive payments, as the capacity payment provided by the Summer Saver Program is just that---a capacity payment made in exchange for the customer's enrolled capacity in the program, capacity over which the program maintains direct load control. The PTR energy credit payment reflects an incentive payment made only on the condition of an actual measured load reduction achieved during a program event.

SDG&E's load impact analysis forecasts a load reduction from Summer Saver of **24 MW** in 2014. Summer Saver program implementation and administration is funded through SDG&E long term resource planning RFP process, **SDG&E does not seek incremental funding for the administration, marketing and outreach of the Summer Saver program.** 

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#### C. Enabling Programs and Pilots

#### 1. Enabling Programs Funded within this Application

# Technical Assistance/Technology Incentives (TA/TI)

SDG&E believes that both the Technical Assistance (TA) and Technology Incentive (TI) programs are an essential strategy for the 2012 – 2014 program cycle in order to identify opportunities, develop, grow and sustain load reduction through DR program participation, as well as a means by which enabling technology can be further encouraged and utilized to help achieve load reduction opportunities. The TA/TI programs currently function as a two-step process in the development of DR opportunities. As the first step in the process, the TA audit helps customers identify DR load reduction, load management and energy efficiency opportunities. The TI program operates as the second step in the process, by helping customers focus their attention and investment on specific opportunities and through the installation and use of specific enabling technologies and systems. SDG&E proposes adding a third "assist" step to the "identify" and "install" steps. This final step is a new design feature of the TI program and will provide incentives for Aggregators that both help CPP-D customer participate in TI to install enabling technologies as well as work with those customers, on an on-going basis to reduce their load during CPP-D events.

With the introduction of the Default Critical Peak Pricing (CPP-D) program SDG&E has seen increased customer interest and participation in the TA and TI programs and motivation in managing energy consumption and costs. As new customers are placed on the CPP-D rate, SDG&E believes that this trend of increasing awareness and interest in DR, energy management and, in particular, the use of enabling technologies will increase. The TA and TI programs, as well as a new third TI assistance step, are important vehicles in working with customers to

identify their DR and energy management opportunities, provide the financial incentives for the installation of energy management technologies, and assist customers with their new enabling technologies in achieving greater reductions across the entire DR portfolio.

#### Technical Assistance (TA)

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The TA program is essentially an energy audit service designed to survey a customer's facility to help the customer identify methods for reducing energy costs and to encourage greater participation in DR and EE programs. Customers who have a minimum demand of 20 kW or higher are eligible to receive TA. During the current 2009 – 2011 program cycle, the TA audit process has been geared towards identifying and quantifying DR strategies and finding EE opportunities and leads. SDG&E intends to continue the TA audit process in much this same fashion during the 2012 – 2014 program cycle while encouraging a more comprehensive EE offering as well. Customers that qualify for a TA audit will receive an in-depth assessment of their facilities and operations, which includes specific recommendations and calculations of kW energy saving potentials. Customers can elect to use a preferred engineering firm to conduct the TA audit, or they may request that SDG&E assign the audit to a firm that is under contract with SDG&E. After the audit is complete, it is reviewed by the TA Review Engineer for verification of the feasibility and calculation of the load reduction potential identified. The audit recommendations will identify load reduction potential, as well as strategies, processes and enabling technologies for achieving the load reduction. Customers will also be provided with specific EE recommendations, including estimated costs, savings, payback periods, and the likely program incentives and rebates that may be available. The integrated TA audit will also recommend appropriate DR and EE programs for the customer to participate in. A new aspect of the TA program is a link to the energy efficiency portfolio where their programs will pay the

auditor an incentive when customers install energy efficiency measures that were recommended in their audits. Although historically TA audits have included energy efficiency recommendations, this new feature will provide auditors additional motivation to find IDSM opportunities.

The payment to the TA Auditor will continue to be limited to \$100/kW of approved load shed potential, and will not exceed the actual total cost of the audit. For the 2012 – 2014 program cycle, SDG&E proposes adding a restriction to the payment for the TA audit. Payment for the audit will be dependent on the customer's enrollment in a DR program or rate for a minimum of one year.

There is a high drop-off going from customers that have received a TA audit to customers that install enabling technologies through the TI program. Currently SDG&E must perform over seven TA audits to get one customer that is willing to install enabling technology through TI. The drop-off for customers that participate in our DR programs is appreciably better, but still only fifty percent: For every two Capacity Bidding Program customers that have had a TA audit only one of them will install enabling technologies through TI. This program change will help ensure that the TA audit money is targeted to customers that are seriously considering participation in a demand response program or rate.

SDG&E will promote TA through its customer contact personnel, including Account Executives, Program Managers, Demand Response Aggregators, Energy Management System Service Providers and Trade Allies. SDG&E will also leverage its relationships with other companies including the California Center for Sustainable Energy (CCSE), local engineering consultants, lighting or HVAC contractors and equipment vendors.

## **Proposed Changes to the TA Program**

 SDG&E proposes modifying the timing of the \$100/kW payment from its current form, after the drop reduction test, to actual enrollment and participation in a specific demand response program.

SDG&E's proposed budget for the TA program is approximately \$3.3 million for the 2012-2014 program cycle, as set forth in Appendix A. This amount is notably less than the \$10 million funding request in 2009 – 2011, but this request is only for one year whereas the 2009 – 2011 request was for three years. As discussed in Chapter II, Section II of Athena Besa's testimony, and in accordance with the ALJ's guidance ruling, the TA funding requested in this application is for 2012 only. Funding for 2013 and 2014 will be requested in the IDSM section of the energy efficiency application.

## Technology Incentive (TI) Program

The TI program provides qualified financial incentives to participating customers that are intended to encourage customer adoption and installation of DR strategies, measures and enabling technologies. TI is designed to help offset the customer's costs of purchasing and installing such systems and technologies by providing a financial incentive and interest-free On-Bill Financing for qualified customers. The financial incentive is associated with the level of energy reduction (kW) that the measure can provide. Eligible technologies include, but are not limited to, energy management systems, remote switches, dual-level lighting, software upgrades and the addition of control points. Upon the installation of the equipment, completion of a load shed test to verify the load reduction enabled by an Automated Demand Response (AutoDR) technology and enrollment in a DR program, the customer may receive an incentive payment of up to \$300/kW of verified load reduction, not to exceed the cost of the project.

The \$300/kW incentive payment level represents a ceiling on the actual incentive payments, depending upon the actual installed cost of the equipment and the results of the customer's first year of participation in a DR program. In addition to the \$300/kW payment for AutoDR enabling technologies, SDG&E currently offers a \$100/kW incentive for customers that choose to install enabling technologies that are not AutoDR enabled.

For 2012 – 2014 SDG&E proposes eliminating the \$100/kW TI incentive payment for approved non AutoDR enabled load reduction. SDG&E believes that the elimination of the non-AutoDR incentive payment will encourage the installation of AutoDR systems and technologies which, based on the Statewide Pricing Pilot are shown to provide better results during DR events<sup>8</sup>.

Although TI load drop tests have over the last few years become more reflective of what a customer can truly achieve during an event, SDG&E proposes tying TI incentive payment to event performance actual customer performance during an event season to ensure incentives more closely align with program results. SDG&E proposes modifying the requirements of the \$300/kW incentive for each of the two payments from:

First payment: 60% payment upon completion of a load shed test

**Second payment:** 40% payment upon enrollment and participation in a specific demand response program, to requirements that focus more on actual event results.

The proposed requirements for the \$300/kW incentive's two payments are:

**First Payment:** 60% (\$180/kW for verified load reduction) paid after the completion of the load shed test and enrollment in a demand response program

**Second Payment:** 40% (up to \$120/kW for proven load reduction) based on the customer load reduction results from their first year's participation in DR programs.

All applications for technology incentives must be submitted with an invoice and supporting documents to SDG&E for evaluation. The customer must have a load shed test completed, demonstrating and documenting the load reduction capability. The test engineer will validate and approve the results of the load shed test. Final payment will be calculated after the completion of the customer's first year in a DR program or rate and will be based on their average annual program results.

### **Proposed Technology Incentives CPP Premium Incentive Mechanism**

The CPP Premium incentive is designed to achieve greater energy reduction from CPP-D customers during events. This incentive is designed to facilitate Aggregators in attracting CPP-D customers to install enabling technologies and, after these technologies are installed, get customers to maximize their load reductions during CPP-D events.

With a signed agreement an Aggregator can receive incentives for driving DR event performance with CPP-D customers. Aggregators will be eligible for a \$4/kW-mo payment in summer and a \$1/kW-mo payment in winter. The proposed budget for this incentive mechanism is incorporated within the TI program. In order to be eligible for this incentive Aggregators must work with customers, using TI funds, to install AutoDR enabling technologies. Upon installation of enabling technologies, Aggregators will work with customers during CPP-D events to help customers reduce their demand. Customers will benefit by reducing their CPP energy charges and Aggregators will receive monthly payments that can reach \$30/kW-yr. Until an event is called, the Aggregator payment will be equal to 75% of the customer's load shed test results. Following an event, the payment will be based on the average of the customers' monthly results. This value will carry forward for months when no events are called. A customer must average at

<sup>&</sup>lt;sup>8</sup> California's Statewide Pricing Pilot: Commercial and Industrial Analysis Update, 6/28/06.

least 50% of their load drop test results in order for the Aggregator to be eligible for the monthly payment.

## **Proposed Technology Incentives CPP Day-Of Incentive Mechanism**

The CPP Day-of incentive provides an event based energy payment to Aggregators for day-of load reduction from customers they have signed up as part of the CPP Premium option discussed above. CPP-D is a day-ahead program, but this payment would be for load reduction from CPP-D customers that received day-of notification. It is anticipated that there will be occasional system upsets with short notice; an example could be an incorrect mild weather forecast on Friday for the weekend. High weekend temperatures drive the need to call an event on Monday, but because of the mild forecast SDG&E would have missed the opportunity to call CPP-D day-ahead. This component would allow SDG&E to, with short notice, call on technology enabled customers that are supported by Aggregators and have a higher propensity to respond to event. Energy savings for these events would be based on what these customers would have used assuming a 10-in-10 baseline proposed for the Capacity Bidding Program. The CPP-D rate would not change for the customer during this day-of event. The incentive for the aggregator under this option is \$1.09/kWh and the proposed budget for this incentive mechanism is incorporated within the TI program.

The following modifications to the TI program are proposed for the 2012-2014 program cycle:

#### **Proposed Changes to the TI Program**

• SDG&E proposes eliminating the \$100/kW TI incentive payment for approved non AutoDR enabled load reduction.

- SDG&E proposes modifying the \$300/kW incentive payments so that the first Payment of 60% (\$180/kW for verified load reduction) is paid after the completion of the load shed test and enrollment in a demand response program and the second Payment of 40% (up to \$120/kW for proven load reduction) is based on the customer load reduction results from their first year's participation in DR programs.
- SDG&E proposes providing Aggregators, through the CPP Premium Incentive
  Mechanism, with an incentive payment of \$4/kW-mo in summer and \$1/kW-mo
  payment in winter to facilitate working with CPP-D customers to drive load drop
  during CPP-D events.
- SDG&E proposed providing Aggregators, through the CPP Day-Of Incentive Mechanism, an incentive of \$1.09/kWh for to help CPP-D customers reduce their energy use with short, day-of notification.

SDG&E's proposed budget for the TI program is approximately **\$9.1 million** for the 2012 – 2014 program cycle, as set forth in Appendix A. This amount is less than the \$12.7 million that was requested in the 2009 – 2011 program cycle. Although the scope of TI has expanded to include the "CPP Premium" and "CPP Day-of" incentive mechanisms, TI expenses in the current program cycle have been less than what was originally forecasted and, therefore, the TI budget was adjusted accordingly.

#### **Emerging Technology**

The Emerging Technology Demand Reponses (ET-DR) program consists of evaluating demand-reducing technologies and strategies that are applicable to the San Diego region and market. The focus is on technologies and strategies that promise significant, cost-effective

scalable for market-wide implementation. The program is intended to identify, evaluate and demonstrate technologies that have strong potential to reduce power consumption during periods of higher energy prices or tight energy supplies in all SDG&E customer segments (residential, agricultural, commercial and industrial), and to help in bringing these technologies to commercial availability. To maximize DR, small-scale technology demonstration projects are planned across SDG&E's customer segments. Working in partnership with customers, manufactures and SDG&E program staff, technologies are also evaluated for potential inclusion in statewide codes and standards. Additionally, collaborations with trade associations, organizations and other California utilities help drive program objectives and reduce demonstration and evaluation costs. Each project will evaluate and discuss the technology's or strategy's barriers, risks, merits and cost effectiveness. Additionally each project will investigate its applicability to DR and Energy Efficiency, its fit within SDG&E's existing programs as well as the CAISO wholesale market. Finally, each report will have recommendations for further support and next steps. Technologies or strategies tested in the ET-DR program and found to be viable may subsequently be transitioned into existing utility programs or become the basis for new programs in support of market introduction.

demand reduction in the short- or mid-term, and that appear to be sufficiently reliable and

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In addition to the testing and reports, the ET-DR program will help promote successful technologies and educate customers on technology benefits. All final ET-DR reports will be published on the Emerging Technology Coordinating Council's Website.

The ET-DR program will focus primarily on the following categories:

- Energy Storage Decentralized energy storage can flatten the load curve by shifting demand from peak times. Energy storage will support grid operations to balance local power supply and demand. Innovative storage options will be explored with an emphasis on practicality and cost effectiveness.
- Advanced Controls A large amount of energy is wasted in unoccupied rooms that are air conditioned, illuminated, or have other energy consuming devices that do not need to be running. A subset of projects will focus on advanced controls that intelligently curtail, disable or shift this energy use such that impact to building occupants is minimal with an emphasis on technology that integrates with existing, enabling infrastructure such as internet connections, Wi-Fi networks, BMS, AMI, home automation, etc.
- o **Electric Vehicles** Electric vehicles present a new and growing load control opportunity. Emerging Technologies will test a variety of electric vehicle supply equipment (EVSE), communication and transaction processing technologies. The EVSE equipment will enable control of electric vehicle (EV) charging equipment and facilitate service pricing plan options: start/stop load control and rate-of-charge commands (240V and 120V). Observe user behavior in terms of charging equipment choices as influenced by relative ease-of-use and pricing plans that reflect the cost of each type of EV charging option.

ET-DR doesn't provide direct incentives. Instead, ET shares between 0% and 100% of the pilot implementation cost. The actual rate is determined on a case by case basis, and depends

on factors like total project cost, customer eagerness and risk tolerance, project payback and anticipated load drop.

SDG&E's proposed budget for the ET-DR program is approximately **\$2.1 million** over the three year cycle, as set forth in Appendix A.

#### Small Customer Technology Deployment (SCTD)

SDG&E's Small Customer Technology Deployment (SCTD) Program will offer automated DR enabling technologies at no cost for up to 15,000 participating SDG&E residential customers and as many as 3,000 small commercial customers (<100 kW). SDG&E proposes using Smart Meter interval data to identify, market to, and install load control devices in the homes of residential and small commercial businesses with significant air conditioning and residential customers with mid-day pool pump usage.

SDG&E's SCTD program will target customers that participate in the Whole House and Small Commercial Direct Install programs that SDG&E offers as part of our energy efficiency portfolio. Additionally SDG&E will explore opportunities to target the roughly 200 participants from our Borrego Springs Micro Grid Comprehensive Energy Efficiency Delivery Pilot. These customers have demonstrated a desire for energy management and will be ideal candidates for a more comprehensive IDSM solution.

These automated enabling technologies will provide incremental load reduction benefits during demand response events and create a technology platform that will support future dynamic pricing rate design for residential and small commercial customers. In fact, results from the statewide pricing pilot suggest that for residential customers about two thirds of the demand reduction can be attributed to enabling technologies. For small commercial customers the results were equally noteworthy: customers with demands less than 20 kW were not price

responsive without enabling technologies, but displayed a significant level of price responsiveness on critical day with enabling technologies. On critical days, customers with demands between 20 kW and 200 kW were nearly twice as responsive with enabling technologies as without. This price responsiveness resulted in a 13 percent reduction in peak period energy use for customer with demands less than 20 kW and a 9.57 percent reduction for customers with demands between 20 kW and 200 kW<sup>10</sup>.

Potential end use loads include central air conditioning, refrigeration, lighting, pool pumps and electric water heaters. SDG&E may consider 3<sup>rd</sup> party Aggregators or vendors for possible implementation of the SCTD program including the recruitment of potential customers. Although commercially available enabling technologies for the residential and commercial markets exist, the installation complexities require the average residential customer to have an experienced vendor to make sure the devices are installed and commissioned to the customer's smart meter properly. In addition to providing deeper load reductions, the SCTD program is designed to increase the number of vendors capable of these installations and, over time, SDG&E believes that the SCTD program will influence technology solutions that are simple enough for the average home owner or renter to install and utilize during a DR event.

The 2009 - 2011 Residential Automated Controls Technology (RACT) pilot is intended to evaluate customer acceptance and use of enabling technologies. Smart meter deployment delays have caused the start of this pilot to slip from 2010 until April 2011. Data from this pilot will inform both this program, and the PTR program discussed earlier, about system functionality and equipment acceptance, use and value. These results will inform future programs, including PTR, of ways to further encourage and support customer's use of such

<sup>&</sup>lt;sup>9</sup> Quantifying the Benefits Of Dynamic Pricing In the Mass Market, Appendix C.

<sup>&</sup>lt;sup>10</sup> California's Statewide Pricing Pilot: Commercial & Industrial Analysis Update.

1 technologies as they participate in DR programs. Upon completion of the RACT pilot, SDG&E

2 proposes filing an evaluation report and an SCTD implementation plan by Advice Letter for

3 Commission review. SDG&E requests approval of the SCTD program and budget with this

filing, but SDG&E will not launch the SCTD program until the Advice Letter has been

approved. SDG&E proposes limited spending prior to the approval of the Advice Letter to

support the RACT pilot infrastructure and customers.

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SDG&E's proposed budget for the SCTD program is approximately \$13 million over the three-year cycle, as set forth in Appendix A.

The SCTD Program has a forecasted load reduction potential of **12 MW** in 2014.

# 2. Pilots Funded within this Application

## Locational Demand Response (LDR) Program

Although SDG&E has only one local capacity area, it may benefit from a substation-based locational demand response program that targets distribution circuits. This pilot will help determine if locational demand response program at the circuit level can provide a large enough load drop to justify scaling it up into a program

A locational demand response program that targets strained circuits might prove to be a cost effective way to postpone system upgrades provided it can deliver consistent and guaranteed results. Because there are so few options when a circuit reaches its capacity there needs to be a high level of confidence that when an event is called customers will respond and do so in a consistent, dependable way. This pilot will leverage existing programs, including energy efficiency programs, to determine what load impact a concentrated marketing effort coupled with premium, locational incentives can have on a targeted circuit. While energy efficiency and demand response programs have value throughout SDG&E's territory, there placement on a

strained circuit has the added potential of distribution benefits. With this pilot SDG&E will collaborate with the direct install energy efficiency program to not only reduce energy consumption, but also power demand. SDG&E Energy Efficiency Direct Install program will offer all C&I customers with peak demand less than 100 kW on the target circuit free retrofits of select energy efficiency measures as well as making recommendations for other low cost retrofits. Additionally, SDG&E will leverage their demand response enabling technologies programs including Summer Saver, and SCTD programs to install load control devices, like programmable communicating thermostats, that will increase load drop on event days. Finally, SDG&E will offer premium incentives to customers on the target circuit that install and use Permanent Load Shifting (PLS) technologies. This premium incentive is an emerging technologies track for PLS and in order to qualify for this incentive the installed technology must fall within the definition of emerging PLS technologies; technologies like batteries and small thermal energy storage would qualify. The \$750/kW PLS incentive, \$500/kW from the PLS program described in greater detail below and an additional \$250/kW for an emerging technology, will be reduced to \$300/kW for technologies that cannot shift load for the prescribed seven hours, but can deliver 3 hours of permanent load shifting within the 11 AM to 6 PM timeframe.

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SDG&E will investigate the load impact the energy efficiency and demand response programs were able to have on the target circuit on a permanent basis and also determine the event driven impact and consistency this pilot was able to affect.

SDG&E's proposed budget for the LDR is \$433 thousand over the three year cycle, as set forth in Appendix A.

# New Construction Demand Response Pilot (NCDRP)

The New Construction Demand Response Pilot ("NCDRP") is designed as an enabling technology deployment pilot for the new construction market. The pilot will test the New Construction market as a delivery channel for SDG&E Demand Response ("DR") enabling technologies. SDG&E will work with builders, architects, and others weaving DR technologies into the integrated building design process. The technologies that are installed will help achieve load reduction during critical peak energy usage periods as well as provide customers with real time information on dynamic pricing.

The NCDRP is uniquely positioned to investigate and affect demand response opportunities during the construction of the building. These opportunities would either be lost if not installed during construction or, at a minimum, would cost more to retrofit at a later time.

NCDRP will provide financial incentives as well as assistance for design teams to facilitate participation in the pilot. This pilot will be integrated into SDG&E existing New Construction Energy Efficiency Program offerings, namely California Advanced Homes Program and Savings by Design. In fact, these two programs will act as the delivery channel for the NCDRP technologies.

In addition to technology incentives, NCDRP will focus on providing education and outreach to an audience that is currently not being reached.

 Design Assistance - SDG&E's engineers and account executives will work with design teams comprised of builders, architects and engineers to identify appropriate load control technologies and strategies 12

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## D. Marketing and Outreach

#### Customer Education, Awareness and Outreach (CEAO)

Customer Education, Awareness and Outreach Programs are a comprehensive, multifaceted marketing/communications effort that entails a variety of initiatives aimed at increasing
customer knowledge, understanding and acceptance of DR and inciting behavior change/action.

This effort is essential to the successful communication, participation and execution of the
overall DR program portfolio. These initiatives provide the foundation for delivering DR
benefits to customers, and will complement both statewide efforts as well as the programspecific marketing efforts to acquire new customers, retain existing customers and encourage
participation when called upon. The various general awareness and education initiatives are
intended to increase the overall awareness and interest in: 1) the DR concept; 2) the benefits DR
delivers to customers; and 3) the importance of DR programs in both the utility's and the
customer's energy management mix.

Customer Education, Awareness and Outreach efforts will extend across residential, small/medium commercial, large commercial and industrial and direct access customer segments, and will include the following:

# Demand Response Education, Awareness and Outreach

# **Background**

As customers move from awareness of the entire integrated portfolio of EE and DR programs to interest in a specific type of demand response program, campaigns and specific materials are needed to move the customer through awareness and interest and towards action/enrollment in a program; once the customer understands the benefits, they should be driven to action. An integrated portfolio of both EE and DR programs and services will be

presented alongside the education around demand response as a concept in this effort, discussed also in Chapter II, Section II of Athena Besa's testimony. It should be noted that marketing dollars from specific programs will focus on "closing the sale" – creating customer desire out of easy to understand materials that clearly explain the benefits of that program. The marketing plan for each individual demand response program is also a component of education, awareness and outreach and all marketing/ communication efforts will be complementary.

#### Rationale

Customers are facing a fundamental shift in their perception of demand response, from situational or emergency driven to price driven. Increased education will be needed to help customers understand that demand response is about more than shifting load on hot days, that additional monitoring and action may be required as the criteria for calling events is changing. However, the original challenge still remains: demand response events continue to be driven by specific conditions and are therefore episodic. Customers may experience a long delay between enrollment in a program and an actual need for program participation/execution. Implementation of an on-going awareness and education campaign is necessary to continue momentum and ensure that SDG&E receives the necessary participation/reduction when demand response events are called.

#### Education and Awareness Campaign

As we build awareness through continuity of messages and media over time, this broader focus will educate and prepare customers for price responsiveness and the savings opportunities that can be realized through the use of advanced meters and a combination of different demand side management programs.

# Target Audiences

Both business and residential outreach programs will target specific groups through a collaborative communication process. The key underlying objective is to proactively position SDG&E as the expert energy resource and facilitator for program education and participation. Customer messages will be tailored in a manner that will enable customers to understand and participate in demand response programs. SDG&E will provide information to show how customers can shift and reduce during critical energy periods. We will also include information on how to reduce consumption on an ongoing basis (energy efficiency and conservation).

# Coordination with Statewide Marketing

SDG&E recognizes that an integrated statewide marketing, education and outreach (SWME&O) campaign is important. The stated purpose of that program is to "increase consumer awareness and participation in demand side management activities and to encourage behavior changes that save energy, reduce greenhouse gas emissions, and support clean energy solutions." The importance of the utility's role in communicating with our individual customers, however, cannot be understated. In a 2009 study completed by Interbrand, an important finding was made about the relationship between previous statewide messaging and local utility communications.

- "Despite 26% of respondents saying that Flex Your Power (FYP) had a unique message about energy, a detailed examination shows that its key messages and actions are equally credited to other brands, as well as a fictional brand (Green Power).
- The utility brands in the study often performed at parity with or above FYP on message comprehension measures;

Utility brands were equally credited with motivating energy saving actions and associated
 with smart energy use.<sup>11</sup>

Utility customers most expect to hear information from their local provider, and oftentimes they attribute messages from other entities to the utility. It is therefore important that we maintain our own marketing and messaging in order to minimize customer confusion and drive home the various benefits of our programs and services through an integrated marketing effort.

SDG&E's proposed budget for the Customer Education, Awareness and Outreach program is approximately **\$2.4 million** over the three year cycle, as set forth in Appendix A. This budget proposal reflects a reduction in scope from the 2009 – 2011 program cycle years which, as directed by the ALJ Guidance Ruling, SDG&E anticipates including in the Integrated Demand Side Management chapter of the energy efficiency proceeding.

## Flex Alert Network and Engage 360

#### **Background**

Flex Your Power (FYP) was California's statewide energy efficiency marketing and outreach campaign, initiated in 2001. In 2008, there was an indirect impact program evaluation feedback report showing that the FYP program affected general awareness rather than behavior. From that analysis, the CPUC directed utilities to fund strategic activities that would provide "a comprehensive focus that is necessary to engage consumers in adopting energy efficiency broadly as a way of life." Four strategic activities were outlined: (1) Develop an energy efficiency brand; (2) integrated marketing; (3) social marketing; and (4) internet based networking. Given this directive, Engage 360 was developed and the Flex Alert program was

<sup>&</sup>lt;sup>11</sup> Interbrand; Final Draft Public Brand Assessment Report; November 16 2009, page 11.

transitioned to fall under the integrated statewide Marketing, Education and Outreach (ME&O) efforts.

Flex Alert Network (FAN), formerly known as Flex Your Power Now (FYPN), is the demand response extension of Flex Your Power (FYP). FAN conducts a Flex Alert to notify California businesses, governments, and residents when California's energy resources are reaching peak levels to prevent Stage 1 Emergencies.

In Q3 2010 California IOU's partnered with the new implementers of the Engage 360 brand (Draft FCB) to develop a campaign to transition the Flex Alert program components from the former implementer, McGuire, and re-launch a new emergency alert notification system to replace Flex Alert in 2011. The re-launch will include not only an emergency alert notification system, but will also include an expanded scope to create a general awareness campaign to be developed around demand response concepts at a high level.

# **General Awareness**

In an effort to begin laying the foundational groundwork for holistic education around time of use pricing, etc., the statewide ME&O team believed the new program design would have a component for general awareness. This general awareness effort would focus on a message which educates customers on reducing electricity during peak hours. The strategy would incorporate four key actions for participants: (1) Turn up A/C to 78 degrees or higher; (2) Use major appliances after 7pm; (3) Don't use unnecessary appliances; and (4) Tell others.

This effort would continue to be a collaboration among California's utilities, residents, businesses, institutions, government agencies and non-profit organizations working to reduce peak energy consumption. Historically, the Flex Alert campaign (media buys, etc.) had been available for standby use; however there had not been any Flex Alert related activity at the

statewide level since 2007. Therefore, the program is underspent due to lack of Flex Alert events, primarily due to additional DR programs adding reliability to the grid and sufficient Resource Adequacy throughout the state. The general awareness campaign effort brings another level of visibility for peak energy conservation.

# Program Proposal

The focus for 2011 is to transition the scope of work outlined in the FYP effort to be within the scope of the new Engage 360 campaign. This scope included changes of the lead IOU administrator from PG&E to SCE. During 2012 and 2013, it is proposed that the implementation of the DR general awareness campaign effort and the implementation of the event notification system become the focal point of the DR Emergency Alert effort.

# **Budget to Implement Program**

SDG&E is requesting only funding for 2012 in the amount of **\$210,000** to continue Flex Alert Network one additional year before transitioning to EE.

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# E. Non DR Programs Funded Within This Application

Permanent Load Shifting (PLS
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The Commission has determined that Permanent Load Shifting, while not a DR program, is to be included and funded in the Utility DR Applications. Permanent Load Shifting (PLS) is routine load shifting from one time period to another to help meet peak loads during periods when energy use is typically high. PLS decreases electricity usage during peak hours and shifts load to other hours to provide operational and resource planning benefits for the utility or ISO systems

D.06-11-049 directed the utilities to initiate a Request for Proposal (RFP) process to solicit five-year proposals from third parties for permanent load shifting programs. In the 2009 – 2011 program cycle SDG&E worked with the two contractors that they selected from PLS RFP released in 2008. The technologies implemented in San Diego included Thermal Fly Wheeling and Gas Cooling. The results of these pilots were included in the PLS report that was issued November 30 under A 08-06-001 Statewide Joint Utility Study of Permanent Load Shifting.

SDG&E's PLS program will focus on two technology types: Thermal Storage and Non-Thermal Storage. An example of thermal storage is making ice or chilled water at night to provide cooling during the day thereby reducing the on-peak air conditioning load. Non-thermal storage includes chemical batteries that are charged with electricity during the night and discharged during on-peak hours. SDG&E's proposes providing a standard capacity offer of \$500/kW, target contractors who will work with customers to implement the selected technologies and to ensure systems are properly designed, properly built and commissioned and properly operated. The contractors, guided by the results of the E3's Permanent Load Shifting study, use the capacity based standard offer to provide customers the technology to shift energy

use, on an on-going basis, away from weekdays 11 AM to 6 PM. during May 1st through Oct 31<sup>st</sup>. 2 For the 2012 – 2014 program cycle, SDG&E's load impact analysis estimates a load shift 3 potential from PLS of 4.5 MW in 2014 and SDG&E's proposed budget to administer the PLS 5 program is approximately **\$3.1 million**, as set forth in Appendix A. 6

### V. QUALIFICATIONS

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My name is George Katsufrakis. My business address is 8335 Century Park Court, San Diego, California, 92123. I am employed by San Diego Gas & Electric as Manager of Operations for Customer Programs. My responsibilities include design and implementation of energy efficiency and demand response program for the Sempra Energy Utilities. I have been employed by Sempra Energy Utilities since 1996.

I graduated from University of California, Berkeley with a Bachelors of Science degree in Mechanical Engineering and I am a registered professional engineer in California.

I have not previously testified before the Commission.

Appendix A

**Budgets** 

### Table A-1 SAN DIEGO GAS AND ELECTRIC

### SUMMARY OF UTILITY DEMAND RESPONSE PROGRAMS AND BUDGETS FOR 2012-2014 BY PROPOSED PROGRAM CATEGORY

(Thousands of Dollars)

Line	Programs by Category		Budget Requested for 2012-2014				
		Footnote	2012	2013	2014	Total	
		rootriote	2012	2013	2014	Total	
1	Category 1 - DR Programs						
2	Base Interruptible Program (BIP) Optional Binding Mandatory Curtailment/Scheduled Load		1,113	1,283	1,783	4,179	
3	Reduction Programs (OBMC/SLRP)	1					
4	Summer Saver	2	0.040	4.050	4.000	44.000	
5	Capacity Bidding Program (CBP) DemandSMART <sup>TM</sup> Program	3	3,648	4,053	4,238	11,939	
7 8	(DSP) Peak Time Rebate (PTR)	3	200 2,658	220 1,038	220 1,076	640 4,772	
9	Total		7,619	6,594	7,317	21,530	
10	Category 2 - Enabling Programs, Pilots, DR Integration Policy & Planning						
11	Permanent Load Shifting (PLS) Emerging Technology DR (ET-		775	1,188	1,106	3,069	
12	DR) Locational Demand Response		700	704	707	2,111	
13	(LDR) New Construction Demand		141	144	148	433	
15	Response (NCDRP) Sm Customer Tech Deployment		554	283	289	1,126	
16	(SCTD)		5,822	4,432	2,755	13,009	
17 18	Technology Incentives (TI)  Total		3,014 11,006	3,023 9,774	3,031 8,036	9,068 28,816	
10			11,000	0,111	0,000	20,010	
19	Category 3 - Evaluation,  Measurement, and Verification  Evaluation, Measurement and						
20	Verification		1,676	1,913	1,526	5,115	
21	Total		1,676	1,913	1,526	5,115	
22	Category 4 - System Support Activities						
23	Regulatory Policy & Program Support		700	745	786	2,231	
24	IT Infrastructure & System Support		2,829	1,503	1,078	5,410	
25	Total		3,529	2,248	1,864	7,641	
26	Category 5 - DR Core Marketing and Outreach						
27	Customer Educational and Outreach (CEAO)		423	378	357	1,158	
28	Total		423	378	357	1,158	
29	Category 6 - Integrated Programs						
30	Technical Assistance (TA)		3,321	-	-	3,321	
31	Microgrid Program (MICROGRID)		119	-	-	119	
32	Flex Alert Network (FLEX) Customer Educational and	4	210	-	-	210	
33	Outreach - IDSM		1,269	-	-	1,269	
34	Total		4,919	-	-	4,919	
35	GRAND TOTAL		29,172	20,907	19,100	69,179	

### Footnotes:

- Tournotes:

  1 D.08-02-034 2006 GRC filing for OBMC, SLRP, and CPP-D.
  A.10-12-005 2012 GRC filing for OBMC, SLRP and CPP-D.
  2 D. 04-06-011 Filling for Summer Saver.
  3 D.09-09-015 Filing for DemandSMART™.
  4 FLEX is an integrated program, and should be classified in Category 10 per D.09-08-027.

### Table A-2 San Diego Gas and Electric Company Approved/Pending Amounts for Demand Response-related Activities 2009-2014

Current							Authorized Amou	nt				
Proceeding	Source	Program	Authorization	Cost Description	2009	2010	2011	2012	2013	2014	Balancing Accounts	MW Enrolled
Demand Response 2009-2011	Demand Response Application	Other DR Programs	D.09-08-027	DR Activities and Budgets for 2009-2011, IDSM		\$13,961,208					Advanced Metering and Demand Response Memorandum Account (AMDRMA)	26.73
Demand 2009	Order Adopting Changes to DR Programs	PLS	D.06-11-049 D.09-08-017	Peak Load Shifting	\$1,436,333	\$1,436,333	\$1,436,333				Advanced Metering and Demand Response Memorandum Account (AMDRMA)	2.8
014	Demand Response Application	Other I Progra	A.11-03-XX (Pending)	DR Activities and Budgets for 2012-2014, IDSM, IT Technology, Costs for Wholesale Market Integration				\$25,539,000	\$18,461,000	\$16,698,000	Advanced Metering and Demand Response Memorandum Account (AMDRMA), Market Redesign Tehcnology Upgrade Memorandum Account (MRTUMA)	
Response 2012-2014	Order Adopting Changes to DR Programs	PLS	A.11-03-XX (Pending)	Peak Load Shifting				\$775,000	\$1,188,000	\$1,106,000	Advanced Metering and Demand Response Memorandum Account (AMDRMA)	
Demand Respon	Advanced Metering Infrastructure (AMI)	PTR	A.11-03-XX (Pending)	Peak Time Rebate (PTR) implementation				\$2,658,000	\$1,038,000	\$1,076,000	Advanced Metering and Demand Response Memorandum Account (AMDRMA)	
ğ	RFO for Supply Resources	Demand SMART <sup>TM</sup>	A.11-03-XX (Pending)	Aggregator Managed Contract Incentives				\$200,000 (2)	\$220,000 (2)	\$220,000 (2)	Advanced Metering and Demand Response Memorandum Account (AMDRMA), Energy Resource Recovery Act (ERRA)	
	RFP for Long Term Resource Planning'	Summer	D.04-06-011 R.01-10-024	Smart AC Program and Budget Update							Advanced Metering and Demand Response Memorandum Account (AMDRMA), Energy Resource Recovery Act (ERRA)	24.98
sðı	Advanced Metering Infrastructure (AMI)	Advanced Metering Infrastructure (AMI)	A.05-03-015 D.07-04-043	Incremental cost recovery for AMI Customer Education and Outreach for PTR	\$7,141,000	\$7,141,000	\$7,141,000				Advanced Metering and Demand Response Memorandum Account (AMDRMA)	Not yet implemented.
Other Proceedings	RFO for Supply Resources	Demand SMART <sup>TM</sup>	A.09-03-012 D.09-09-015	2009 - 2024 Aggregator Managed Program - Contract Administration and Capacity Incentives							Advanced Metering and Demand Response Memorandum Account (AMDRMA), Energy Resource Recovery Act (ERRA)	7.89
8	2008 GRC	CPP-D, OBMC, SLRP	A.07-01-047 D.08-02-034	DR Activities for CPP-D, OBMC, SLRP	\$799,000	\$799,000	\$799,000				N/A	60.53
	2012 GRC	CPP-D, OBMC, SLRP	A.10-12-005 (Pending)	Market Analysis, New Construction and DR Activities (CPP-D,				\$799,000	\$799,000	\$799,000	N/A	
	Dynamic Pricing Proceedi ng (DPP)	PeakShift @Home PeakShift @Work	A.10-07-009 (Pending)	Incremental cost recovery for DPP implementation				\$29,676,000	\$24,893,000	\$15,717,000	2012 GRC	
	(1) \$4 M of approved 2006-2008 budget allocated to contracts resulting from RFP in D.06-11-009. D.09-08-027 authorized an additional \$309K for contract adminstration for 2009-2011.  (2) Incentive payments for energy only  (3) Originally approved by AMI proceeding  Legend:  Green - Authorized											

Green - Authorized

Yellow - Pending

### Table A-3 SAN DIEGO GAS AND ELECTRIC BREAKDOWN OF UTILITY DEMAND RESPONSE PROGRAM BUDGETS 2012-2014 BY PROPOSED PROGRAM CATEGORY

(Thousands of Dollars)

SDG&E Demand Response	Budget Requested for 2012-2014 (Thousands of Dollars)						
Program	Administration	Administration Subcontractor	Marketing and Outreach	Incentives	Total	Cost Effectiveness	
Base Interruptible Program	360	300	165	3,354	4,179	1.15	
Capacity Bidding Program	1,466	2,100	150	8,223	11,939	Day-Ahead .90 Day-Of .96	
DemandSMART <sup>™</sup> Program				640	640	0.84	
Peak Time Rebate	903		3,868		4,772		
Technical Assistance	422	650	32	2,217	3,321		
Technology Incentives	1,293	1,650	95	6,030	9,068		
Emerging Technology DR	536	1,575			2,111		
Small Customer Technology Deploymer	397		1,639	11,093	13,128	0.82	
Locational Demand Response	373			60	433		
New Construction DR Pilot	608	45	48	425	1,126		
Customer Educational and Outreach	645		1,782		2,427		
Flex Alert Network (FLEX)			210		210		
Permanent Load Shifting	450	300	84	2,235	3,069		
Total	7,453	6,620	8,072	34,277	56,423		

### Appendix B

### **Program Implementation**

Plans (PIPs)

# Base Interruptible Program (BIP) Program Implementation Plan (PIP)

### **Program Name**

Base Interruptible Program (BIP)

### **Projected Program Budget**

Program Name	2012 Budget	2013 Budget	2014 Budget	Total 2012-2014 Budget
Base Interruptible Program	\$1,113,000	\$1,283,000	\$1,783,000	\$ 4,179,000

### **Projected Load Impacts by Year**

Program	2012 Load	2013 Load	2014 Load
Name	Impact	Impact	Impact
Base Interruptible Program	11 MW	13 MW	16 MW

### **Projected Cost Effectiveness for 2012-2014**

Program	2012-2014 Cost
Name	Effectiveness
Base Interruptible Program	1.15

### **Program Descriptors**

- Market Sector
  - Non-Residential
- Program Classification
  - Core
- Program Statement
  - BIP is a continuation of the program that commenced in 2001 and offers a monthly capacity payment to non-residential customers who can commit to curtail at least 15% of Monthly Average Peak Demand, with a minimum load drop of 100 kW.
  - BIP will use the CAISO's Reliability Demand Response Product (RDRP) in the 2012-2014 program cycle to bid into the wholesale market, in accordance with CPUC Decision (D.) 10-06-034, adopting the "Reliability-Based Demand Response Settlement Agreement" (Settlement

- Agreement) in Rulemaking R.07-02-041 The Settlement Agreement also caps emergency program enrollment and SDG&E will keep BIP below the level established in that proceeding.
- While BIP is and will continue to be a retail demand response product that enables emergency responsive demand response resources to state and local situations, modifications will be necessary to meet the requirements of the CAISO RDRP during the 2012 2014 program cycle. SDG&E will begin modifying and transitioning its BIP product based upon the CAISO RDRP business requirements that have a projected release date of spring of 2012. SDG&E anticipates that the program will be fully compliant with the RDRP requirements during the 2012-2014 program cycles.
- Based on the preliminary design documents provided by the CAISO, SDG&E anticipates making the following modifications to the existing BIP program design:
  - Option B will be eliminated as it does not comply with notification timelines for the RDRP product and historically there is very limited participation in this option
  - o Incentive payments will be differentiated by season to better reflect the capacity value of the program on a monthly basis and in alignment with SDG&E's Resource Adequacy needs
  - o Require a test event annually if no event is triggered based on program criteria

### • Program Fundamentals

• See Base Interruptible Program Tariff

### **Program Rationale and Expected Outcomes**

### • Implementation Design

### • Delivery mechanisms

- BIP program can be called for multiple reliability-only events, including system emergencies (CAISO alerts and stages), Transmission emergencies (loss of resources), and Local transmission and distribution system (overload) emergencies.
- Program participants are notified of a curtailment event via the internet and alpha numeric page and have 30 minutes from the time of receipt of notice to curtail to achieve load their load drop

### Incentives

• Customers receive a monthly capacity payment and are subject to Excess Energy Charges if they do not achieve their firm service level during an event in the manner detailed in the tariff

### • Delivery and Coordination

• As an emergency program, BIP is designed to be responsive to the CAISO objective to avoid involuntary load shedding when all market based options have been exhausted.

### • Program objectives

• Provide a highly dependable quantity of DR that can be called on to mitigate transmission system emergencies or contribute to system reliability needs during extreme emergencies.

### • Program cycle

• 2012 - 2014

### **Program Strategy**

### • Target Audience

 Medium to large Commercial and Industrial customers who can curtail up to 15% of their firm service level and minimum 100kW and Aggregators who can provide a minimum of 1MW of curtailable load.

### • Marketing, Education & Outreach

• The BIP outreach and marketing effort is limited and focuses on educating relevant customers with expressed interest to first explore DR program opportunities that are not restricted to emergency situations.

### • Aggregator Considerations

• BIP will be designed to enable participation of an Aggregator with large or small aggregated resources that may be configured to offer energy economically in response to a reliability event for the delivery of energy in a real-time emergency.

### • CAISO Relationship

• The proposed modifications to the program that will be made to comply with the Settlement Agreement will allow BIP to integrate into the California ISO market and operations and be dispatched by the CAISO real-time economic dispatch algorithm. The enrollment caps for the program which are also required by the Settlement Agreement are designed to limit the amount of DR that is not visible to the CAISO wholesale market process.

### • Statewide Coordination

• The CPUC, CAISO, PG&E and SCE are parties to the Settlement Agreement and the modifications to BIP are consistent with the direction and efforts to modify other emergency DR programs throughout the State.

### • Integrated/coordinated DSM

• Participation in BIP does not interfere with a customer's ability to invoke Energy Efficiency measures. The use of a firm service level for event measurement and the Excess Energy charge create a need for an increased level of active energy management, providing an incentive for participants to seek additional tools and opportunities to manage their energy use.

### EM&V

• Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a ten year forecast based on ex-post event results. The impact evaluation will be completed by April 1<sup>st</sup> each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

### **Pilots**

• As an emergency program that is ultimately limited by the enrollment caps imposed by D.10-06-034, any pilot activity associated with the program would be for enabling technologies from other programs and not exclusive to BIP.

# Capacity Bidding Program (CBP) Program Implementation Plan (PIP)

### **Program Name**

Capacity Bidding Program (CBP)

### **Projected Program Budget**

Program Name	2012 Budget	2013 Budget	2014 Budget	Total 2012-2014 Budget
Capacity Bidding Program	\$3,648,000	\$4,053,000	\$4,238,000	\$ 11,939,000

### **Projected Load Impacts by Year**

Program Name	2012 Load Impact	2013 Load Impact	2014 Load Impact
Capacity Bidding Program Day-ahead	10 MW	11 MW	11 MW
Capacity Bidding Program Day-of	13 MW	15 MW	17 MW

### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012 -2014 Cost Effectiveness
Capacity Bidding Program Day-Ahead	0.90
Capacity Bidding Program Day-Of	0.96

### **Program Descriptors**

- Market Sector
  - Non-Residential
- Program Classification
  - Core

### • Program Statement

- The CBP is the continuation of the program begun in 2007. The program offers participants the ability to earn incentive payments for load reduction during specific periods of time identified as service products within the program.
- CBP is available Commercial and industrial customers, greater than 20 kW, receiving bundled service, Direct Access service or Community Choice Aggregation service and being billed on a

commercial, industrial or agricultural rate schedule are eligible to enroll. Customers may also enroll through a third party demand response providers (Aggregators).

- The 2012-2014 Capacity Bidding Program continues to offers participants three different options to provide for different lengths of time for load reduction commitments.
- The annual capacity payments for the two to six hour and four to eight hour products will have a 10% premium over the one to four hour product to reflect the increased value of DR capacity that provides at least five hour events.
- Monthly capacity payments for July through September are higher than May, June and October to reflect the higher value during those months.
- SDG&E proposes to change the settlement calculation during 2012-2014 using an aggregated baseline calculation and allowing for a day-of adjustment of up to 40%.
- Aggregators that enroll new customers will have the option of signing a three year contract with SDG&E to guarantee revenue in an effort to incent aggregators to expand offerings to smaller loads
- Participant must remain in the program for a minimum of 12 calendar months.
- SDG&E also proposes enabling CBP for bidding as PDR during the 2012-2014 program cycle. In order to match CAISO PDR registration timelines, the enrollment and nomination due dates associated with PDR are proposed to be 15 days earlier than previously required.

### • Program Fundamentals

• See Tariff

### **Program Rationale**

### • Implementation Design

### • Delivery mechanisms

- CBP program can be called for multiple reasons, including system emergencies (CAISO alerts and stages), transmission emergencies (loss of resources), and local transmission and distribution system (overload) emergencies.
- The Capacity Bidding Program will hold at least one program event per year in order to maintain consistency with the requirements on other sources of Qualifying Capacity.

### Incentives

• Participants receive a monthly capacity payment as well as an energy payment for events called in both the "Day-Ahead" and "Day-Of" options. In both options the participant is also subject to penalties for non-performance.

### • Delivery and Coordination

• The program offers both day-ahead and day-of options and operates during peak load season (May – October) and provides for up to 24 hours of load reduction per product per month.

### • Program objectives

• Provide a highly dependable quantity of DR that can not only be relied upon to address local transmission emergencies but can also be used as a resource to bid into the CAISO wholesale market instead of using generation.

### • Program cycle

• 2012 - 2014

### **Program Strategy**

### • Target Audience

• Non-Residential Customers with a demand greater than 20 kW

 Aggregators who can provide technology and energy management services to small commercial customers

### • Marketing, Education & Outreach

• SDG&E plans to market this program directly to large customers through third party Aggregators and SDG&E Account Executives. This segment is already familiar with the objectives of demand reduction and many of the available programs. The following specific marketing activities are planned.

Date	Activity
2012-2014	Conduct two Annual off site Customer Trainings
2012-2014	Present Information at Aggregators Sponsored Forums
2012-2014	Develop and Distribute Fact Sheets
2012-2014	Conduct special training for Aggregators
Each year	A Customer Recognition Newspaper Ad

### • Aggregator Considerations

CBP will be designed to enable participation by Aggregators with large or small aggregated
resources that may be configured to offer load reduction economically in response to a
curtailment event. Ongoing coordination with Aggregator participants include marketing and
special training as outlined above to encourage participation and ensure that all eligible
aggregators have the opportunity to participate.

### • CAISO Relationship

• CBP will be enabled to provide for bidding as a PDR resource into the CAISO wholesale markets during 2012-2014.

### • Statewide Coordination

• Regular joint utility communications to provide CBP consistency throughout the State.

### • Integrated/coordinated DSM:

- Encourage IDSM by emphasizing Demand Response opportunities during the Energy Efficiency TA audit.
- As DR enabling technologies are integrated onto the AMI Network the utility will have to ensure that this process is handled efficiently and securely. As these enabling technologies emerge, the utility with have to work with manufacturers to ensure technologies can be added to the network efficiently and seamlessly. Negative technology integration impacts may include; lengthy installation times, communication failures between the enabling technology and the AMI network, security breaches to utility back-office or participant site. To overcome these barriers the utility will work closely with manufacturers to test and ensure the enabling technology integration happens as required and expected by utility Management, IT, and Security staff.
- Participants will receive marketing information on IDSM opportunities concerning Energy Efficiency and self-generation.

### EM&V

• Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a ten year forecast based on ex-post event results. The impact

evaluation will be completed by April 1<sup>st</sup> each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

### • Pilots

 During 2011 SDG&E plans to implement the Demand Response Wholesale Market Pilot (DRMWP). This pilot will include activities to test and support the enablement of PDR capabilities

# DemandSMART<sup>TM</sup> (DSP) Program Implementation Plan (PIP)

### **PROGRAM NAME**

DemandSMART<sup>TM</sup> (DSP)

### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
DemandSMART <sup>TM1</sup>	\$200,000	\$220,000	\$220,000	\$640,000

### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
DemandSMART <sup>TM 2</sup>	N/A	N/A	N/A

### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012 -2014
	Cost Effectiveness
DemandSMART <sup>TM</sup>	0.84

### **PROGRAM DESCRIPTORS**

- Market Sector
  - Non-Residential
- Program Classification
  - Core

-

<sup>&</sup>lt;sup>1</sup> Budget request is only for energy incentive funding. The balance of program is funded by prior Commission approval.

<sup>&</sup>lt;sup>2</sup> The DemandSMART<sup>TM</sup> program was approved by the Commission in D. 09-09-015. Load impacts from this program are not reflected in this PIP in order to avoid any potential double counting of benefits not considered by the funding requests contained in this application.

### • Program Statement

- The base DemandSMART<sup>TM</sup> Program resulted from SDG&E's Request for Offers for Supply Resources March 9, 2007 and is an aggregator administered Day-Of Load reduction program that offers capacity and incentive payments to the contracted program aggregator in exchange for reducing energy consumption through end use customers who are enrolled in the program
- The DemandSMART<sup>™</sup> contract was approved through 2024; this funding request is only for energy portion of the incentive during the 2012-2014 program cycle. These incentives were not a part of the program application which was approved by the Commission in Decision 09-09-015.
- The program provides firm capacity to SDG&E by reducing peak demand through the use of energy management expertise, technology and communications networks. This program is available to both bundled and Direct Access customers who have a peak load greater than 100 kW and who are billed on a commercial, industrial or agricultural rate schedule. Participation in this program must be taken in combination with the customer's otherwise applicable rate schedule. Customers may only participate on DSP through the program aggregator that combines the loads of one or more customers for the purpose of participating in this program.
- Customers participating in the DemandSMART<sup>TM</sup> program will not be eligible to participate in any other Utility demand response programs or rates that provide capacity payments and/or energy payments.

### • Program Fundamentals

- Eligibility Bundled and Direct Access time of use customers with a demand of 100kW or greater
- Months of Operation May through October
- Curtailment Window Weekdays, 12 PM to 6 PM
- Trigger At SDG&E's discretion as required to support system reliability and/or meet load and resource requirements
- Notification 30 minutes prior
- Event Duration 2 to 5 hours
- Incentives
  - Monthly capacity payment
  - o Event energy payment calculated with a 3 in 10 baseline
- Penalty for event non-performance.

### • Non-incentive customer services:

• The program aggregator provides an Online Interface to customers.

### **Program Rationale & Expected Outcomes**

### • Implementation Design

- The DemandSMART™ Program is administered by a program aggregator and is open to any customer who provides a minimum of 100 kW load reduction. The program offers its participants the flexibility to identify their load reduction amounts and the time periods of reduction.
- The DemandSMART<sup>TM</sup> Program allows participation by individual customers through the program aggregator, who is responsible for enrolling customers into a load reduction portfolio. Installed technologies will empower customers to improve DR participation and manage their electric energy usage.
- Installed technologies may be expected to:
  - Automate load reduction during demand response events

- Notify participants that a DR event is pending, terminated, underway, or completed
- Provide off-peak load shifting capabilities
- Allow remote connectivity and controllability of technologies
- Be reliable long-term solutions for DR and IDSM
- SDG&E may call an event during the operational months whenever system conditions warrant DemandSMART<sup>TM</sup> Program events are due to such factors as weather conditions, power plant outages or transmission bottlenecks. SDG&E can also call one test event per year at its discretion.

### • Delivery Mechanisms

• The program aggregator recruits participants, helps them develop demand reduction strategies, handles notifications of load shedding events, and distributes payments. The program aggregator has the flexibility to customize their offering to individual customers and to diversify the portfolio sufficiently to hedge the risk of non-response.

### • Incentives

• Participants receive a monthly capacity payment and energy incentives in return for load reductions during events. Funding for the energy based incentives during the 2012 – 2014 program cycle will come through this current application. Funding for the capacity incentives was approved in D. 09-09-015.

### • Program Objectives

- Provide an option by which customers can contribute toward reducing peak energy consumption on the utility grid, while at the same time managing and controlling their individual energy consumption and costs.
- Reduce overall energy costs for customers, California, and the SDG&E community by the reduction of peak energy demands

### • Program cycle

• 2012-2014

### PROGRAM STRATEGY

### • Target audience

• Non-Residential customers with demand greater than 100 kW

### • Marketing, Education & Outreach

- The DSP program coordinates with the Customer Education Awareness and Outreach (CEAO) effort to funnel customers to programs through 1) a broader effort to create understanding and awareness about the importance of demand response as a concept and 2) a segmented effort to generate interest in the wide range of programs that are offered by SDG&E. Through a broad-reaching marketing effort that includes mass media channels, CEAO is designed to create awareness of the SDG&E DR portfolio, and segmented efforts which include direct response, online campaigns and outreach at events, to generate program interest by promoting customized solutions for customers
- The DSP marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.

### • Customer Research & Feedback

- The DSP Program will utilize the following tools for research and feedback:
  - Meter Data
  - o DR Participation Data
  - Impact evaluations

- Measure event and non-event changes in energy use due to the program
- Provide estimates of gross and net energy and demand saving
- o Process evaluations
  - Provide recommendations to improve program effectiveness
  - Document program procedures and activities
  - Measure customer satisfaction
- **CAISO** relationship: N/A

### Integrated/coordinated DSM:

- Encourage IDSM by emphasizing Demand Response opportunities during the Energy Efficiency TA audit.
- As DR enabling technologies are integrated onto the AMI Network the utility will have to ensure that this process is handled efficiently and securely. As these enabling technologies emerge, the utility with have to work with manufacturers to ensure technologies can be added to the network efficiently and seamlessly. Negative technology integration impacts may include; lengthy installation times, communication failures between the enabling technology and the AMI network, security breaches to utility back-office or participant site. To overcome these barriers the utility will work closely with manufacturers to test and ensure the enabling technology integration happens as required and expected by utility Management, IT, and Security staff.
- Participants will receive marketing information on IDSM opportunities concerning Energy Efficiency and self-generation.

### • EM&V

- Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a 10-year forecast based on ex-post event results. The impact evaluation will be completed by April 1<sup>st</sup> each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed.
- Pilots N/A

# Peak Time Rebate (PTR) Program Implementation Plan (PIP)

### **PROGRAM NAME**

Peak-Time Rebate (PTR)

### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
Peak Time Rebate	\$2,658,000	\$1,038,000	\$1,078,000	\$4,772,000

### **Projected Load Impacts by Year**

Program Name	2012 Load Impact	2013 Load Impact	2014 Load Impact
Peak Time Rebate <sup>3</sup>	N/A	N/A	N/A

### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012 -2014 Cost Effectiveness
Peak Time Rebate	N/A

### **Program Descriptors**

- Market Sector
  - Residential
- Program Classification
  - Core

### **Program Statement**

- The Peak Time Rebate (PTR) schedule tariff was approved by the Commission in Decision 08-02-015. This Schedule is applicable, in combination with the customers' otherwise applicable rate schedule. This tariff is applicable to electric bundled residential customers with an installed smart meter on an individually metered service point which has been tested and verified according to SDG&E procedures.
- The tariff provides a bill credit for each kWh of actual reduction during each PTR event. Customers with enabling technology receive a higher bill credit. As described in the tariff, an enabling technology is defined as technology which can be initiated through a signal from the Utility to reduce electric use for specific end use equipment or appliances and has been registered with the Utility by the customer.
- The key objectives of this program are to supplement the approved tariff by providing an overall educational campaign for residential customers about the PTR tariff and how to benefit from participation. All eligible SDG&E customers will receive information about the rate and be provided

<sup>&</sup>lt;sup>3</sup> The Peak Time Rebate program was approved by the Commission in D. 08-02-015. Load impacts from this program are not reflected in this PIP in order to avoid any potential double counting of benefits not considered by the funding requests contained in this application

with conservation tips and the benefit of utilizing enabling technologies to maximize their bill credit. The budget is higher in the first year in conjunction with the roll-out of PTR for customers who have Smart Meters installed and are therefore able to participate in the PTR.

- There are no penalties for non-participation if the customer does not reduce usage below their PTR customer-specific reference level; customer is billed on their applicable rate as they would be for a non-event day.
- The PTR program, for the first time on a large scale, will allow customers to participate in a rate based program. The PTR program will evaluate the acceptance and participation on this rate based program. With the emergence of dynamic pricing PTR serves as a stepping stone to familiarize residential customers with the benefits of a rate based program.

### • Program Fundamentals

• Included in Tariff

### Non-incentive customer services

- PTR will provide a means for SDG&E to demonstrate to residential customers some of the benefits of smart metering. These include:
  - o Greater visibility into usage
  - Capability and demonstration of aggregating demand response for the benefit of the community
  - Detailed response feedback

### PROGRAM RATIONALE AND EXPECTED OUTCOMES

### • Implementation Design

- With the completion of Smart Meter installations territory wide by 2012, SDG&E will have the
  opportunity to implement the approved Peak Time Rebate (PTR) Tariff Schedule. Smart Meters
  provide a platform for a variety of new energy products and services to help residential customers
  manage their energy consumption and associated costs. In addition, the implementation of the
  PTR tariff allows SDG&E's customers a unique opportunity to:
  - o Receive increased Demand Response benefits though active participation;
  - o Receive higher incentives through Enabling Technologies;
  - o Become more educated about conservation and energy efficiency;
  - o Take the first step in preparation for dynamic pricing.
- A PTR event may be called on any day of the year. There is no limit to the number of PTR events that may be called. As such this program will support a year round educational campaign in order to maximize program participation. If no events are called in a year, a test event will be scheduled to test related systems, notifications, and customer performance.

### • Program cycle

• 2012-2014

### **PROGRAM STRATEGY**

- Target audience
  - All SDG&E Residential Customer Segments will be targeted.

### • Marketing, Education & Outreach

- The PTR program marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.
- The objectives of the Marketing, Education, & Outreach (ME&O) Strategy are:
  - o Educate customers on how demand response and PTR are mutually beneficial.
  - o Educate customers on the PTR Rate and their eligibility.
  - o Get customers to enroll for individual event notifications and event performance feedback, which will help to achieve demand reduction MW goals.
- The educational campaign required to optimize program participation with PTR includes the following:
  - o Rate Introduction
    - Rate education and eligibility direct mail, web
  - o Event notification education channels offered and how to sign up
    - Pre-event notifications email, text (SMS)
    - Post-event performance email, SMS, bill
  - o Conservation tips via direct mail, web

### Program Delivery

- All residential customers will receive educational materials about the new PTR rate when they are eligible to participate. The educational materials will inform and motivate customers to sign up for PTR notifications.
- PTR will also use new communication channels to inform customers on event days. Day-ahead notifications will be utilized for PTR to allow customers sufficient time to change their energy use prior to the event (ex. changing their thermostat settings before heading to work).
- Customers will also be educated about demand response event days, their eligibility to participate on the event days, how and why they are receiving a bill credit, and conservation tips on how they can maximize their bill credit. This education will utilize direct mail, email, web, and other communication channels as they become available to educate customers on PTR.
- Customers will be able to enroll for PTR event and performance feedback notifications via email and/or text (SMS).
  - o Mass media, web, and social media may also be utilized for notifying customers who do not enroll for email or SMS notifications.
  - Event notifications will provide customers with an email and/or SMS the day-before the event.
- PTR will include several elements as a way to influence behavior/performance.
  - o Provide access to online tools for participants to manage their energy.
  - o Provide customers with choice, control, and convenience.
    - Choice Customer can choose how they want to be communicated with.
    - Control Customers can control how often they are communicated to; control their energy use with specific energy savings goals (i.e. customer-specific reference level); etc.
    - Convenience Customers can take action when it is convenient for them when they receive a communication from SDG&E (i.e. day-ahead event notification). Customers can also evaluate their event performance when it is convenient for them.

### Customer Research & Feedback

- The PTR program will utilize all pertinent process and program impact research data collected from Measurement Evaluation studies. Additional research may be employed to evaluate ongoing activities related to program implementation. These research tools may include:
  - Customer Satisfaction Surveys
    - Online
    - Mail in
  - Notification Messaging
    - Timing of receipt of messaging
  - o Program Effectiveness
    - Analyzing the hourly event performance, notifications, customer-specific reference levels, etc. will allow the program effectiveness to be measured and identify ways to improve.
    - Measuring event and non-event changes in energy use and/or receipt of notifications will allow the program to measure if notifications are successfully contributing to load reduction.
- Event Performance Feedback
  - Currently customers have to wait for event performance information to appear on monthly bills when events are called. Upon full deployment of the PTR technology solution, SDG&E will provide customers with their customer-specific reference level which provides an energy baseline which they should aim to conserve below during a PTR curtailment event. Customers will also receive event performance feedback the day after the event. Providing customers with feedback sooner will help customers understand how their actions result in energy savings
  - Customers will be provided their event performance even if they were not able to reduce below their customer-specific reference level.
- Aggregator Considerations: NA
- CAISO Relationship: NA
- Statewide Coordination
  - Regularly scheduled meetings/phone calls with the other California IOUs will take place for PTR. Best Practices and lessons learned will be shared with local and statewide groups.
- Integrated/coordinated DSM: NA
- Integrate across other demand response initiatives:
  - Program will be served by the enabling technologies provided by the Residential Technology Deployment Pilot and the Residential New Construction Pilot

### • EM&V

• Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a ten year forecast based on ex-post event results. The impact evaluation will be completed by April 1st each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

### Pilots

• The proposed New Construction pilot will provide technology infrastructure that enables PTR.

# Technical Assistance (TA) Program Implementation Plan (PIP)

### **Program Name**

Technical Assistance (TA)

### **Projected Program Budget**

Program	2012	2013	2014	2012-2014
Name	Budget	Budget	Budget	Budget
Technical Assistance	\$3,321,000	\$0	\$0	\$3,321,000

### **Projected Load Impacts by Year**

Program	2012 Load	2013 Load	2014 Load
Name	Impact	Impact	Impact
Technical Assistance	N/A	N/A	N/A

### **Projected Cost Effectiveness for 2012-2014**

Program	2012 -2014
Name	Cost Effectiveness
Technical Assistance	N/A

### **Program Descriptors**

- Market Sector
  - Non-Residential
- Program Classification
  - Core
- Program Statement
  - The program provides qualified commercial customers with a demand response audit generally at no charge contingent upon the customer enrolling in a qualified Demand Response (DR) program or rate for one year. The program will pay up to one hundred dollars for the approved kW identified by the audit. This "incentive" is paid directly to the auditor. The customer has the option of choosing their own auditor or having the Utility choose one on their behalf. An extensive report is produced, identifying demand response opportunities and recommending strategies to be implemented and then leading them to one of SDG&E's DR programs. The ultimate goal is to have customers move from the audit phase to the implementation stage and enabling the strategies identified.
  - Emphasis will be placed on identifying both EE and DR opportunities and encouraging the customer to move forward with all recommendations.

- An integrated approach to EE and DR will be the goal of the program, making it as seamless as possible to the customer
- A bonus will be paid to the auditor if the EE measures identified in the audit are installed.
- Implementing Auto-DR will be the ultimate goal with every audit that is prepared for the customer.

### • Measures:

• Gas and Electric measures are not a direct part of this program; however, measures will be identified as part of the audit.

### • Non-incentive customer services

• The program offers free workshops to both end use customers, auditors and vendors, who might be implementing the technologies identified.

### **Program Rationale**

### • Implementation Design

### • Delivery mechanisms

- The Technical Assistance Program is driven through the utility Account Executives, Program Advisors, Segment Advisors, aggregators, controls vendors, and engineering consultants. It is also promoted through utility held workshops and business associations.
- The Account Executives will be involved in promoting the Technical Assistance audit to their customers and moving them to an appropriate Demand Response Program, based on audit findings.

### • Incentives:

• The TA Program does not provide ongoing incentives, but rather covers all or part of the cost of conducting the energy audit.

### Delivery and coordination

- o Integrated audits will be stressed so that both demand response and energy efficiency concerns and opportunities are met for the customer.
- To support Integrated Demand Side Management (IDSM), funding will be set aside to provide energy efficiency audits to the same facility that received a demand response audit, under the TA/TI program.
- o SDG&E believes that approaching each customer with a "whole system" solution will attract more interest and promote overall efficiencies.
- The economic downturn will be a barrier in moving customers to implement any suggestions that would be funded from their operating budgets.

### • Program Cycle

• 2012-2014

### **Program Strategy**

### • Target Audience

• The Technical Assistance Program is geared to any commercial, industrial or agricultural customer with a monthly on-peak demand of at least one meter with 100kW of demand or greater serving the facility. Its purpose is to identify automated demand response opportunities, provide suggested strategies on how to implement them and identify cost effective energy efficiency opportunities that exist.

Recruit customers that are on or receptive to participating on one of the following programs;
 Critical Peak Pricing Default, Capacity Bidding, DemandSMART<sup>TM</sup>, Base Interruptible or authorized pilots.

### Education & Outreach

- The TA marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.
- At least one Utility sponsored workshop will be held each year to educate and direct customers to the audit process. Presentations will be made by Segment Advisors, Program Advisors and Account Executives to various business associations promoting the program.
- The program is typically marketed through the utility Account Executive, for the larger assigned customers. Program Advisors, Segment Advisors, Aggregators, controls' vendors and auditors will be utilized to reach smaller customer.

### • Customer Research and Feedback

- Audit results with the customer findings will be presented within thirty days.
- SDG&E will endeavor to review the audit in person, rather than simply sending it out to the customer to provide a better opportunity to overcome any resistance or objections to the recommendations by the customer.
- A customer survey will be requested following the completion and review of the audit to evaluate the process and their experience with the program.

### • Aggregator considerations

- Aggregators provide a set of "feet on the street" for utility programs. Additional qualified aggregators will be pursued and encouraged to participate in the programs.
- CAISO Relationship: NA

### • Integrated DSM

 The program will continue to emphasize Energy Efficiency and Demand Response opportunities seeking to integrate EE and DR during the TA audit process. Due to the comprehensive nature of the TA audit and the emphasis on EE and DR integration, funding for the program in 2013 and beyond will be a part of SDG&E's IDSM funding requests

### EM&V

 Analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

### Pilots N/A

# Technology Incentives (TI) Program Implementation Plan (PIP)

### **Program Name**

Technology Incentives (TI)

### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
Technical Incentives	\$3,014,000	\$3,023,000	\$3,031,000	\$9,068,000

### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
Technical Incentives	N/A	N/A	N/A

### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012 -2014
	Cost
	Effectiveness
Technical	N/A
Incentives	

### **Program Descriptors**

- Market Sector
  - Non-Residential
- Program Classification
  - Core

### • Program Statement

- The program provides qualified commercial customers with incentives to help with technologies that enable load reduction, through automated demand response, at the customer location. The program offers up to three hundred dollars (\$300.00/kw) of approved, installed and verified kW reduction from a load shed test or 100% of the cost of installing enabling devices, whichever is less for Automated Demand Response (Auto-DR) measures. Only Auto-DR measures that meet open ADR Standards will be considered eligible for incentives under this program.
- Measures N/A

### Non-incentive customer services

• The program offers free workshops to both end-use customers and vendors, who might be implementing the technologies that had been identified.

### **Program Rationale**

### • Implementation Design

- The Technology Incentives Program is primarily driven through utility Account Executives, Program Advisors, Segment Advisors, third party aggregators, controls vendors, and engineering consultants. It is also promoted through utility held workshops and business associations.
- SDG&E Account Executives will be involved in promoting the Technology Incentives program to their customers and moving them to an appropriate Demand Response Program, based on what was identified in the audit and the capability of the facility's Energy Management Systems (EMS).
- Customers receiving a Technical Incentive will be obligated to enroll and participate in at least one of SDG&E Auto-DR programs or rates, for a full year.
- Auto-DR technology provided through an aggregator will also enable SDG&E CPP Peak Day option which will provide customers on CPP-D with an incentive payment to curtail on short notice when SDG&E requires load reductions that were not evident in the Day Ahead timeframe.
- The incentive includes a performance based component based upon the customer's actual achieved load reduction using the installed Auto-DR device(s).
  - Installation Payment 60% of the total eligible incentive will be given after installation, load shed test, and upon enrollment in a qualified DR program or rate.
  - Performance Payment The remaining 40% of the eligible incentive is paid at the end of the first DR season or calendar year as applicable to the program or rate, following the payment of the 60% payment referenced above and is based on the actual rate of participation as determined during the DR season. The full 40% incentive balance will be paid if the customer's participation is equal to or greater than the actual load shed test reduction. If the actual performance is less than the actual load shed reduction, the Performance Payment will be reduced proportionally with the measured load reduction.
  - Example of the 60%/40% split
    - TI Load Shed tested and approved for 100 kW
    - Customer can receive up to \$300/kW of approved reduction or cost of enabling, whichever is less. (eligible for up to \$30,000 incentive)
    - Total project cost is \$35,000 and since this cost is greater than the eligible incentive, the incentive payment is limited to \$30,000.
    - The Installation Payment equal to 60% of the total incentive is paid upon installation, load shed test, and enrollment (in this case \$30,000 is eligible for incentive) 60% = \$18,000
    - After one year of DR event(s) the customer's participation rate averaged 60 kW. (60/100 = .60) The Performance Payment would thus equal 60% of the remaining \$12,000 or in this case \$7,200.
  - A TI incentive mechanism, CPP Premium, is available to aggregators who provide Auto DR
    technology to customers participating on the Critical Peak Pricing Day Ahead rate. Evidence
    from the Statewide Price Pilot shows that event participation doubles for medium sized
    customers with enabling technologies. Providing the additional incentive to aggregators is
    designed to further expand Auto DR capability into the customer space.
    - TI incentive payment to Aggregator requires Auto-DR for CPP-D
    - Based on Twelve months \$30.00/kW
    - Effective January through December
    - \$4.00/kW paid monthly May through October.
    - \$1.00/kW paid monthly November through April

- This provides an incentive, a revenue stream and performance measurement for the aggregator, which keeps the aggregator, engaged with the DR customer.
- An additional incentive mechanism is available for aggregators for day-of load reduction from customers they have signed up as part of the CPP Premium option. The payment would be for day-of load reduction from CPP-D customers with Auto-DR.
  - Effective January through December
  - Three hour notification
  - 10-in-10 baseline with 40% day-of adjustment
  - \$1.09/kWh
  - This provides a day-of load reduction opportunity for CPP-D customers

### • Program Cycle

• 2012-2014

### **Program Strategy**

### • Target Audience

- The Technology Incentives Program is geared to any commercial, industrial or agricultural customer with a monthly on-peak demand of 20 kW or greater. Its purpose is to enable/incentivize measures that were identified by the Technical Assistance audit.
- Potential customers are those that can or are participating in one of the following programs; Critical Peak Pricing Default, Capacity Bidding, DemandSMART<sup>TM</sup>, or any authorized pilot.

### • Marketing, Education & Outreach

- The program is typically marketed through utility Account Executive, for the larger assigned customers. Aggregators, Segment Advisors, Program Advisors, controls vendors and auditors are utilized to reach smaller customers.
- Utility sponsored workshops will be held to educate and direct customers toward automation.
- The TI program marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.

### • Customer Research & Feedback

- Follow up during the entire process with the customer needs to have higher emphasis and surveys after measures have been processed need to be continually evaluated for efficiencies and making it user friendly for the customer/vendor.
- A customer survey will be requested following the installation and enrollment in a DR program to evaluate the process and their experience with the program.

### • Aggregator considerations

- Aggregators provide a set of "feet on the street" for utility programs. Additional qualified aggregators will be pursued and encouraged to participate in the programs.
- Offering aggregators an incentive to be involved with CPP-D customers, as well as a CPP day of component, will add a new dimension to Auto-DR and at the same time emphasize energy efficiency to the customer.

### • **CAISO Relationship:** NA

### Innovation

• Incentives for aggregators to drive participation from non-residential customers on CPP Rate

### • Integrated DSM

• Emphasis will be given to identify Energy Efficiency opportunities during the entire TI process.

• Integrated audits will be stressed so that both demand response and energy efficiency concerns are met for the customer. Approaching each customer with a "whole system" solution should attract more interest and promote overall efficiencies.

### • <u>EM&V</u>

- Analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program
- Pilots N/A

### Emerging Technologies Demand Response (ET – DR) Program Implementation Plan (PIP)

### **Program Name**

Emerging Technologies Demand Response (ET – DR)

**Projected Program Budget** 

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
Emerging Technology Demand	\$700,000	\$704,000	\$707,000	\$2,111,000
Response				

### **Projected Load Impacts by Year**

Program Name	2012 Load Impact	2013 Load Impact	2014 Load Impact
Emerging Technology Demand	N/A	N/A	N/A
Response			

### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012 -2014
	Cost Effectiveness
Emerging	
Technology	N/A
Demand	
Response	

### **Program Descriptors**

- Market sectors
  - Non-Residential
  - Residential
- Program Classification
  - Core
- Program Statement
  - The ET-DR Program consists of evaluating demand-reducing technologies and strategies that are applicable to the SDG&E region and market. The focus is on technologies and strategies that promise significant, cost-effective demand reduction in the short and/or mid-term time horizon,

and that hold promise to be sufficiently reliable and scalable for market-wide implementation. Each evaluation project will address:

- o The technology's or strategy's overall merits
- o Applicability to demand reduction and related factors such as energy efficiency
- o Applicability to our region, market and frameworks such as CAISO
- Applicability to existing SDG&E programs
- Possible adoption barriers
- Cost effectiveness
- o Risks
- o Recommendation about the utility's further support and involvement
- The program's evaluation projects may include techniques and methods that may not be exclusively technology-driven. The emphasis of each project will vary on case by case basis, and may include:
  - o Technology Assessments
  - o Scaled Field Placements
  - Demonstration Showcases
  - Technology Development
  - o Business Incubation
  - Market / Behavior Studies
- Technologies or strategies found to be viable may subsequently be integrated into existing utility programs or become the basis for new programs in support of market introduction.

#### Program Fundamentals

- Eligibility- All Bundled and Direct Access customers
- Months of Operation Year round
- ET-DR doesn't provide direct incentives. Instead, the program shares the pilot implementation cost at a rate between 0% and 100%. The actual rate and dollar contribution is determined on a case-by-case basis, and depends on the following factors:
  - o Total project cost to pilot customer, consisting of
    - Parts
    - Installation
  - Customer Eagerness to Participate
  - o Financial viability for the pilot customer (payback time)
  - o Anticipated load drop.

#### Measures:

- HVAC Significant demand reduction potential exists for HVAC technologies, in particular related to space cooling in the SDG&E service territory climate. Some projects will explore this potential by evaluating promising HVAC control technologies, including standalone controls as well as those that integrate with the smart grid. Special emphasis will be placed on technologies that are easy to retrofit into existing systems and buildings as these make up the majority of the untapped market.
- Energy Storage Decentralized energy storage can contribute to flattening the load curve by shifting demand from peak times to when inexpensive energy is abundant. Also, energy storage will support grid operations to balance local power supply and demand. Several innovative storage methods will be explored, with particular emphasis on practicality and cost effectiveness.
- Advanced Controls A large amount of energy is wasted in unoccupied rooms or buildings that are
  fully conditioned or have their lights on, or have other active consumers of electricity that do not
  need to be running when not actively in use. A subset of projects will focus on advanced controls
  that allow for intelligently curtailing, disabling or shifting this energy use such that impact to

building occupants is minimal. Priority will be given to technology that integrates with existing, enabling infrastructure such as internet connections, Wi-Fi networks, BMS, AMI, home automation, etc.

• Electric Vehicles - This demonstration will complement SDG&E's EV Rate and Technology Study with temporary experimental EV rates approved by the CPUC in June of 2010. A variety of electric vehicle supply equipment (EVSE), communication and transaction processing technologies will be tested. The EVSE equipment will enable control of electric vehicle (EV) charging equipment and facilitate service pricing plan options: start/stop load control and rate-of-charge commands (240V and 120V). Observe user behavior in terms of charging equipment choices as influenced by relative ease-of-use and pricing plans that reflect the cost of each type of EV charging option.

#### • Non-incentive customer services

- Some of our projects will have desirable secondary impacts that go beyond Demand Response. These impacts include, but are not limited to:
  - Energy Efficiency
  - Integration of Security with Controls
  - o Individual Customer Education
  - o Market-wide Customer Education

#### **Program Rationale and Expected Outcomes**

#### • Implementation Design

• Emerging Technology starts by identifying technologies from a quarterly scan and screening process. Implementation, or technology transfer, occurs after a product has been evaluated and reported on.

#### Delivery and coordination

- The Emerging Technology Program is driven through the utility Account Executives, Program Advisors, Segment Advisors, aggregators, controls vendors, and engineering consultants.
- Installation may be done in multiple instances if scalability needs to be evaluated, and/or if there is reason to believe that results may vary significantly from instance to instance.
- Evaluation of the pilot by an independent 3rd party, with focus on relevant factors identified in the Program Statement. The 3rd party produces a report for publishing on the ETCC website.
- Program management expresses a recommendation about the utility's further support and involvement, and if applicable, next steps.

#### • Program Cycle

• 2012 - 2014

#### **Program Strategy**

#### • Target Audience:

Emerging Technologies will target Residential, Commercial, and Industrial customers

#### Education and Outreach

• New DR capable technologies will be displayed at highly visible locations around SDG&E's territory through demonstration showcases. Additionally, all emerging technology project reports will be published on the ETCC Website.

#### Customer Research and Feedback

• Emerging Technology will identify potential participants using customer surveys, Smart Meter interval data, and DR participation data. Emerging Technologies will use Process evaluations to get customer feedback and improve the engagement process.

#### • Aggregator considerations N/A

#### • CAISO Relationship

• Some products/projects that Emerging Technology investigates may interface with the CAISO wholesale market. The necessary considerations will be developed in more detail when planning each project.

#### • Statewide Coordination

• SDG&E is a member of the Emerging Technologies Coordinating Council Reports on all projects will be published on the ETCC website.

#### • Integrated/coordinated DSM

- DSM integration and coordination will take place on a project by project basis. In addition to Demand Response, ET projects can include: Energy Efficiency, Energy Storage and Renewable Energy Generation.
- Projects incorporating Integrated Demand Side Management will be reported on the IDSM Quarterly reports.
- **EM&V** N/A
- **Pilots** N/A

# Small Customer Technology Deployment (SCTD) Program Implementation Plan (PIP)

#### **Program Name**

Small Customer Technology Deployment (SCTD)

#### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
Small Customer Technology Deployment	\$5,941,000	\$4,432,000	\$2,755,000	\$13,128,000

#### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
Small Customer Technology Deployment	6MW	10 MW	12 MW

#### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012-2014 Cost Effectiveness
Small Customer Technology Deployment	0.82

#### **Program Descriptors**

- Market Sector:
  - Residential & Small Commercial
- Program Statement:
  - The 2012-2014 Small Customer Technology Deployment (SCTD) Program will facilitate implementation of Automated Demand Response (DR) enabling technologies at no cost to residential and small commercial customers (<100 kW). SDG&E proposes using Smart Meter interval data to identify, market to, and install load control devices in the homes of residential customers with mid-day pool pump and air conditioning usage as well as small commercial business customers with significant air conditioning loads.

- Technology which enables the Utility to provide a signal to reduce electric use of specific end use equipment or appliances will be supported in this program. The customer must register the specific equipment and appliances with the Utility for approval. The intent is to provide a mechanism for customers to participate in a dynamic rate by automating load reduction associated with central air conditioning, pool pumps, electric water heaters, and other appliances.
- Tailored deployment strategies, will help to maximize the level of customer participation, use, and acceptance of commercially available demand response technologies. Technologies will focus on automated solutions enabling passive participation by a market sector that is less likely to actively engage in energy management activities.
- The SCTD Program will give participants and the utility the ability to manage various end use electric loads year round through the use of utility tested and certified enabling technology. These installed technologies will empower customers to improve DR participation and manage energy usage. With the continuous implementation of energy efficiency programs including the emergence of the statewide whole house program and its focus on comprehensive efficiency improvements, participants will also be educated about available IDSM integration opportunities.

#### • Program Fundamentals

- Participants must remain on a rate or in a program throughout the entire cycle and must periodically verify that the enabling technology is still installed and operational. SDG&E reserves the right to remove the enabling technology at no cost to the participant.
- The curtailment window will be dependent on the rate or program that the customer is enrolled in.
- No direct incentives will be provided to the customer. The SCTD Program will provide and install enabling technologies at no cost to the qualifying customer.
- SCTD's residential participants will be eligible to receive a higher PTR bill credit based on their use of a registered qualified enabling technology.
- Customers who participate in the SCTD Program will agree to remain on a DR program or rate until December 31, 2014
- Potential Measures
  - Lighting and associated controls
  - Direct Load Controllers
  - o Programmable Communicating Thermostats (PCT)
  - Electric Water Heaters Controllers

#### • Non-incentive customer services

• Each installed enabling technology may be supported by online presentment tools designed to provide additional functionality in terms of managing energy use during PTR event and non-event periods. As such, participating customers will not only be able to achieve load reduction during DR events, but will also have the ability to manage their energy use during non-DR event periods as well.

#### **Program Rationale and Expected Outcomes**

#### • Implementation Design

#### • Delivery mechanisms

- SDG&E customers will be contacted through direct mail, cross program marketing, internet marketing/enrollment and third party aggregator program promotion to ensure customers have various channels and means to enroll and participate in the SCTD Program.
- SDG&E may work with small commercial DR aggregators to determine areas where cost can be minimized through aggregator based installation.
- Events will be called based on the criteria of the program that the customer is enrolled in.

#### Incentives

• Participating customers will receive enabling technologies and at no cost and will be eligible for the program/rate incentives for which they are enrolled.

#### • Delivery and coordination

- Program is designed to leverage AMI infrastructure and facilitate participation in existing and future dynamic rates and DR programs that the customer qualifies for.
- The 2012-2014 SCTD programs will target customers across multiple segments (i.e. homeowners and renters). All participants must have a SDG&E Smart Meter and active SDG&E account.
- Customers enrolled in the SCTD Program must have a qualifying end-use appliance or equipment that can be curtailed during a DR event in order to participate in the program.
- Enrolled customers will receive the following:
  - Materials that educate customers on how to maximize the use of automated enabling technologies.
  - Materials that highlight the positive environmental impacts resulting from participation in a DR program.
  - o Access to technology support and help-lines during DR events.
- Potential SCTD participants may be targeted through e-mail or direct mail based on interval data analysis. This customer energy use profile assessment may also be supplemented by cross program marketing within targeted areas, and retailer engagement campaigns designed to support the possible highest level of awareness about the benefits of enabling technologies.
- SDG&E will coordinate the required activities to install the appropriate technology and to
  educate the customer about its functionality and application during both event and non-event
  days. SDG&E may employ designated vendors that support these technologies as part of its
  deployment process and will put in place a high level support structure to address customer
  questions and issues related to the technology deployment before, during and following the
  equipment installation.

#### • Program Objectives

- The enabling technologies provided to participants will be essential to automate load reduction minimizing the need for the customer to take actions to initiate load reduction strategies during a DR event. The targeted market segment typically doesn't have the resources to monitor energy use at a granular level and to encourage participation in DR programs, response to events needs to be "hands free."
- The SCTD Program will provide a no cost technology solutions for qualified customers to use automated enabling technologies to achieve load reduction during DR events. The key program goals are to:
  - Optimize DR program participation and awareness
  - o Achieve a predictable load reduction
  - Optimize the positive customer experience during a called demand response event
  - o Maximize program participation and engagement
  - Leverage new and developing channels for cost effective enabling technologies to customers
  - Develop lessons learned and best practices

#### • Program cycle:

• 2012-2014

#### **Program Strategy**

#### • Target Audience:

- Small Commercial
  - The SCTD Program goal is to recruit up to 3,000 SDG&E small commercial customers with demand less than 100 kW.
  - Additionally SDG&E's SCTD program will target customers that participate in the Small Commercial Direct Install program that SDG&E offers as part of our energy efficiency portfolio.
  - Enrolled customers must have an identified end use appliance or equipment that can be curtailed in order to participate in the program.

#### • Residential:

- Up to 15,000 participating SDG&E residential customers
- Additionally SDG&E's SCTD program will target customers that participate in the Whole House program that SDG&E offers as part of our energy efficiency portfolio.
- SDG&E will target the roughly 200 participants from our Borrego Springs Micro Grid Comprehensive Energy Efficiency Delivery Pilot. These customers have demonstrated a desire for energy management and will be ideal candidates for a more comprehensive IDSM solution.

#### • Marketing, Education & Outreach

- The SCTD program coordinates with the Customer Education Awareness and Outreach (CEAO) effort to funnel customers to programs through 1) a broader effort to create understanding and awareness about the importance of demand response as a concept and 2) a segmented effort to generate interest in the wide range of programs that are offered by SDG&E. Through a broad-reaching marketing effort that includes mass media channels, CEAO is designed to create awareness of the SDG&E DR portfolio, and segmented efforts which include direct response, online campaigns and outreach at events, to generate program interest by promoting customized solutions for customers
- The SCTD program marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.
- Program specific activities:
  - Printed and online educational materials that educate customers how to maximize the use of automated enabling technologies.
  - Participants will receive informational materials that will educate participants about the available programs and incentives for Small Commercial customers.
  - Participants will receive informational material regarding DR participation through aggregators
  - Participants will receive messaging that explains the positive environmental impacts DR participation delivers.

#### • Customer Research & Feedback

- The SCTD Program will utilize all pertinent process and program impact research data collected from Measurement Evaluation studies. Additional research may be employed to evaluate ongoing activities related to program implementation. These research tools may include:
  - Participant Surveys
  - Focus Groups
  - Smart Meter Interval Data Analysis
  - DR Event Participation Data

#### • Program Delivery

- Program will employ targeted marketing efforts in conjunction with interval data analysis to identify customers that could potentially reduce their load during a called event
- Provide technology features and capabilities allowing for maximum utilization of DR offerings
- Retailers may also be key partners to the utility through in-store signage and collateral, educating customers about the benefits of enabling technologies, and best end-use applications for these technologies within the home. The utility will work with retailers to facilitate this educational process, and will work closely to identify potential synergies and opportunities that will support enabling

#### Aggregator considerations

- Aggregators will be considered for SCTD program participation and may receive funding to implement DR enabling technologies so long as the customer has not also received funding.
- CAISO N/A
- Statewide Coordination N/A

#### • Integrated/coordinated DSM

- Each installed enabling technology may be supported by available online presentment tools designed to provide additional functionality in terms to managing energy use during DR event and non-event periods. As such, participating customers will not only be able to achieve load reduction through the use of their enabling technology during DR events, but will also have the ability manage their energy use during non DR event periods as well.
- This program will maximize the utilization of Integrated Demand Side Management (IDSM) efforts to help participants identify energy efficiency and renewable opportunities through the promotion of:
  - Energy Efficiency Programs
  - Demand Response Programs
  - Partnerships Programs

#### EM&V

Annually a load impact evaluation of the program will be conducted in accordance with the load
impact protocols including a ten year forecast based on ex-post event results. The impact
evaluation will be completed by April 1st each year and will be filed with the CPUC.
Additionally, other analysis related to program design (such as a baseline analysis) will be
conducted as needed. One process/market evaluation for the program is planned during the three
year cycle to be used to inform future program design and to evaluate and improve the operation of
the program.

#### **Pilots**

• SDG&E will also recruit from a pool of residential customers that were part of the SDG&E 2009-2011 RACT Pilot to participate in the SCTD program.

# Locational Demand Response Pilot (LDR) Program Implementation Plan (PIP)

#### **Program Name**

Locational Demand Response Pilot (LDR)

#### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
Locational Demand Response Pilot	\$141,000	\$144,000	\$148,000	\$433.000

#### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
Locational Demand Response Pilot	N/A	N/A	N/A

#### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012-2014 Cost Effectiveness
Locational Demand Response Pilot	N/A

#### **Program Descriptors**

- Market Sector
  - Non-Residential
  - Residential
- Program Classification
  - Pilot
- Program Statement
  - The pilot will determine the viability of Demand Response use for the purpose of addressing localized system overloads and constraints. SDG&E doesn't have multiple Local Capacity Areas as defined in the CAISO Resource Adequacy process but does incur costs for transmission and distribution projects to address overload issues on specific circuits or sub-stations. In an attempt to mitigate the overloads and constraints found on these circuits and sub-stations, SDG&E is proposing a Locational Demand Response Pilot to determine if there is sufficient Demand Response to provide a meaningful level relief on circuits or sub-stations with overloads and/or

constraints. The Pilot will leverage existing programs such as Permanent Load Shifting, Energy Efficiency Direct Install Program, Summer Saver, and other programs to supply the load reductions. Targeted communications efforts will be used to increase the number of customers in the identified area participating in these programs.

- The pilot will determine the means by which a load reduction of at least 2 MW can be achieved. By utilizing an IDSM approach, SDG&E looks to acquire load reductions that are both reliable and sustainable and are targeted to specifically identified circuits that are at or nearing capacity. The pilot proposes to increase participation in the Permanent Load Shift program by offering participants on identified circuits or sub-stations a pilot participation payment.
- The objective of the Locational Demand Response Pilot is to study the following issues:
  - o Are customers in identified/targeted areas willing to increase levels of participation
  - o Can a more reliable and sustainable load drop be achieved in a targeted area?
  - O Does a participation payment/incentive produce greater participation?
  - o Can aggregators be utilized to garner targeted participation in this area?
  - o Inform whether the methods employed during the pilot are appropriate for a broader deployment to achieve specific levels of additional load drop in areas of need.
- **Measures:** Pilot participation payment for qualified PLS enrollees
- Non-incentive customer services: N/A

#### **Program Rationale and Expected Outcomes**

#### • Implementation Design

- An assessment of current DR on targeted circuits will be conducted to determine if the target level of MW impact can be achieved based on existing program enrollment
- If it is determined that the existing program enrollment is insufficient to achieve the target level, a recruitment plan will be developed to increase program participation in the local area
- Due to the myriad of technical and commercial issues associated with targeted dispatch (calling a DR event for a subset of customers enrolled in a DR program) the pilot will determine if the coincidental use of DR events is sufficient to achieve the targeted load drop and whether or not the use of DR coincides with periods of overload on the circuit.
- The cost to achieve the level of required participation will be studied through a pilot participation payment to Permanent Load Shifting participants in the targeted area. Non-Residential Customers on PLS will be eligible for a \$750 per kW payment on a first come, first served basis to the extent that they can achieve a load shift for the duration of the PLS period of 11 AM to 6 PM. To the extent that only three (3) hours of load shift can be achieved during the 11 AM to 6 PM window, PLS customers will be eligible for a \$300 per kWh payment.
- Results of pilot expected to inform whether increased DR participation by itself is sufficient to achieve needed levels of load reduction in areas with identified overloads.
- Results will also determine whether or not increased recruitment for DR participation in the targeted area is sufficient to achieve needed levels of participation.

#### • Program Cycle

• 2012-2014

#### **Program Strategy**

#### • Target Audience

- All customers within the identified circuit or substation will be courted.
- Direct Access customers are eligible.

#### • Marketing, Education & Outreach

- The Locational Demand Response Pilot will leverage the Customer Education Awareness and Outreach (CEAO) effort to funnel customers to programs through 1) a broader effort to create understanding and awareness about the importance of demand response as a concept and 2) a segmented effort to generate interest in the wide range of programs that are offered by SDG&E.
- The Pilot will then provide targeted and additional communications to customers in the targeted area focused on awareness building and education about the various load reduction tactics and DR programs that are available to them
- Leverage Aggregator relationships to saturate outreach efforts in area(s) of identified need

#### • Program Delivery

• Pilot will utilize the existing delivery channels through vendors, contractors and aggregators to induce additional recruitment and activity for DR participation in the identified area.

#### • Customer Research & Feedback

• The level of participation during DR events across the various programs will be tracked by providing the required data elements to capture the activity in the targeted area

#### • Aggregator considerations

• While there are no specific aggregator requirements for the pilot, the relationship with aggregators will be essential since they provide a set of "feet on the street" for utility programs and can supplement the recruitment effort in the targeted area.

#### • CAISO relationship

 Results of the pilot will inform best methods of meeting and achieving local area reliability requirements if it is determined in the future that SDG&E requires local capacity area designations

#### **Program Theory and Other Attributes**

#### Program Design to overcome barriers

- Identification and tracking of customers in DR programs in targeted area
- Recording, cross referencing and comparison of circuit loading in during pilot to correlate to DR event performance
- Tracking of customers eligible for PLS incentive in settlement

#### • Integrated/coordinated DSM

• The load reductions that the Locational Demand Response Pilot is attempting to achieve and study is agnostic as to how those load reductions are achieved and the marketing and outreach efforts will emphasize that participation through any DR program or Energy Efficiency effort will meet the program objectives.

#### • Integrate across other demand response initiatives

• The Locational Demand Response Pilot does not provide any load reductions or event notifications within itself and is dependent on existing DR programs and other DR activities to meet its objectives

#### EM&V

• Due to the nature of the pilot, standard evaluation and measurement is not applicable. Analysis will focus on whether or not the stated objectives are and can be achieved.

#### **Pilots** Proposed Program is a pilot

## New Construction Pilot (NCDRP) Program Implementation Plan (PIP)

#### **Program Name**

New Construction Pilot (NCDRP)

#### **Projected Program Budget**

Program Name	2012	2013	2014	Total 2012-2014
	Budget	Budget	Budget	Budget
New Construction Pilot	\$554,000	\$283,000	\$289,000	\$1,126,000

#### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
New Construction Pilot	N/A	N/A	N/A

#### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012-2014 Cost Effectiveness
New Construction Pilot	N/A

#### **Program Descriptors:**

- Market sector
  - Residential and Non-Residential New Construction (Cross-cutting)
- Program Classification
  - SDG&E Pilot
- Program Statement:
  - The New Construction Demand Response Pilot Program ("NCDRP") will be designed as an Enabling Technology Pilot Program. The pilot tests the New Construction market as a delivery channel for SDG&E Demand Response ("DR") Technologies. This will be accomplished by working with builders, architects, and others in integrating DR technologies into the design process. The technologies that are installed will help achieve load reduction during critical peak energy usage periods as well as provide customers with real time information on dynamic pricing.
  - NCDRP will provide financial incentives as well as design assistance to facilitate participation in the pilot. This pilot will be administered and implemented by the same program and implementation staff as existing SDG&E New Construction Energy Efficiency Programs, namely California Advanced Homes (CAH) and Savings by Design (SBD).

#### • Program Fundamentals:

- Incentives
  - SDG&E will cover 75 100% of incremental cost for the pilot for the installation of the DR enabling equipment
- The measures for the pilot may include, but are not necessarily limited to:
  - Energy management systems ("EMS");
  - Internet Gateways;
  - Room Air Conditioning Controllers;
  - Pool Pump Controllers;
  - Electrically heated Spa Controllers;
  - Automated Lighting Controls;
  - Programmable Communicating Thermostats ("PCT's");
  - Online curtailment management and monitoring tools;
  - Smart appliances;
  - In Home Displays ("IHD's");
  - Load control devices
    - Smart Strips
    - Smart Panels
    - o Plug Load Controllers
  - Thermal Energy Storage
  - Electricity Storage (battery)
    - The utility load reduction signal and/or communication will allow the home to be responsive to dynamic pricing signals from SDG&E

#### Non-incentive customer services:

- Design Assistance
  - Working with design teams to integrate DR technologies early in the design process.
  - Ensure compatibility or handshake of devices interfacing with Smart Meters, HAN, IHD's, etc.
  - Ensure that communicating devices are within their maximum communicating range of each other and Smart Meters. If not, ensure hardwired "repeaters" are installed and linking otherwise out or range devices.
- Workforce Education and Training ("WE&T"):
  - Ensure contractors are aware and knowledgeable of DR enabling technologies. SDG&E will train contractors on the proper installation of DR enabled technologies and that the devices are properly connected to and communicating with Smart Meters.
  - SDG&E will take lead in the training of sales staffs / leasing agents for residential projects and occupants / facility staff for nonresidential projects. The result of this training will enable staffs to educate customers on the benefits of DR and energy management.
- Marketing Support
  - SDG&E will partner with homebuilders participating in the pilot in developing marketing collateral that explains technologies in the home and a pathway to participate in SDG&E DR programs.

#### **Program Rationale and Expected Outcomes**

#### • Implementation Design

- Delivery mechanisms
  - SDG&E will work with current CAHP and SBD customers and leverage those relationships in identifying potential candidates for the pilot.
- Delivery and coordination
  - NCDRP will complement the DR offerings in Customer Programs in two ways:
    - o Installation of DR enabling technology.
    - Education and Outreach to prospective customers to increase number of customers that participate in DR programs. Also, both residential and nonresidential participants in the pilot will have Auto DR capability that will enable demand response in critical load demand times.

#### • Program objectives

- Facilitate Integrated Demand Side Management
- Determine the effectiveness of a New Construction DR technology enabling program.
- Measure adoption rate of homes that have the DR enabling technology installed into DR programs.
- Educate New Construction market factors in DR concepts and benefits.
- Determine if the cost savings associated with early design influence are enough to offset New Construction participants who received the DR technologies but did not participate in a DR program.
- Provide design assistance during the design phase of a project that obviates expensive retrofits at a later time.
- Evaluate effectiveness of PLS enabling technologies, including bill analysis and operation of devices.

#### • Program cycle

• 2012 -2014

#### **Program Strategy**

#### • Target audience

- Residential Homebuilders / Developers
- Nonresidential Owners/Developers

#### • Marketing, Education & Outreach

- The New Construction pilot marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.
- As part of the new construction kickoff SDG&E will lead a training session for construction staff on the installation of DR technologies selected for the project.
- New Construction will ensure that processing and associated support staffs are adequately trained to comply with pilot requirements.

#### • Program Delivery

- The two delivery channels for this pilot are California Advanced Homes Program for the residential pilot participants and Savings by Design for the nonresidential pilot participants.
- SDG&E will, for the first time, work with the builders and design teams during the design and construction phase to ensure DR enabling technologies are incorporated into the project.

#### • Aggregator considerations

- SDG&E will manage this pilot to the extent possible that aggregators and potentially their proprietary Energy Management Systems are considered when installing enabling technologies into the commercial building.
- An expected outcome of this pilot is to answer the question of what level of preparedness can SDG&E make a commercial building ready for Auto DR and still have aggregators able to install potentially proprietary energy management systems.
- CAISO relationship N/A

#### • Integrated/coordinated DSM

- This pilot program will select homes that have or are participating in the California Advanced Homes or Savings by Design programs. This will be a prerequisite to participation in the DR pilot, ensuring the homes and businesses will be energy efficient.
- Integrate across other demand response initiatives.
  - As a DR enabling program the New Construction DR Pilot Program will feed projects into existing new residential and nonresidential DR programs.

#### EM&V

• Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a ten year forecast based on ex-post event results. The impact evaluation will be completed by April 1st each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

**<u>Pilots</u>** The program is a DR pilot.

## Customer Education, Awareness and Outreach Core (CEAO) Program Implementation Plan (PIP)

#### **Program Name and Program ID**

Customer Education, Awareness and Outreach (CEAO)

**Projected Program Budget** 

Program	2012	2013	2014	Total 2012-2014
Name	Budget	Budget	Budget	Budget
CEAO	\$1,692,000	\$378,000	\$357,000	\$2,427,000

#### **Projected Load Impacts by Year**

N/A

#### **Projected Cost Effectiveness for 2012-2014**

N/A

#### **Program Descriptors**

- Market sector
  - Residential, Non-Residential
- Program Classification
  - Core

#### • Program Statement

- Customer Education, Awareness and Outreach (CEAO) provides a comprehensive marketing effort that entails a variety of initiatives aimed at increasing customer knowledge, understanding of demand response and inciting behavior change/action.
- The various general awareness and education initiatives are intended to increase overall awareness and understanding of demand response by communicating the following:
  - o General demand response concepts
  - o Benefits that demand response delivers to customers
  - o The importance of demand response in a customer's energy portfolio
- CEAO will extend across residential, small/medium commercial, large commercial and industrial customer segments. It will achieve the specific awareness and interest goals through the following efforts:
  - o Research on customer attitudes and perceptions
  - o Education and awareness umbrella campaign
  - o Targeted business and residential outreach
  - o Interactive media

#### **Program Rationale and Expected Outcomes**

- Program Implementation and Design
  - Delivery mechanisms
    - The main objective of CEAO is to lead the effort to funnel customers from an understanding of our broad portfolio of programs to interest in specific demand response programs. This will be done by first creating awareness of the range of services and then subsequently segmenting the effort to drive interest in specific programs.

#### • Delivery & coordination

- Program Objectives
  - The main objective of the campaign is to
    - o Increase awareness of the range of utility demand response programs; and
    - o Drive interest in the individual programs that benefit each particular customer.

#### • Program Cycle

• 2012-2014

#### **Program Strategy**

#### • Target Audience

- CEAO will extend across residential, small/medium commercial, large commercial and industrial customer segments.
  - Residential and Small/Medium Commercial
    - Expectations around participation from Residential and Small/Medium customers are dramatically increased from past years based on a much larger portfolio of programs for this audience.
    - Communications to the residential segment must tie closely together with the education efforts of the dynamic pricing programs.
  - Large Commercial/Industrial
    - Will be provided communication and marketing information primarily through their assigned account representative.
    - Already familiar with the objectives of demand reduction and many of the available programs.
    - Will benefit the most from new efforts including the research studies and the interactive media.

#### • Marketing Education & Outreach

- CEAO aims to achieve drive awareness and generate interest with specific target audiences through the following efforts:
  - Research on customer attitudes and perceptions
  - Education and awareness umbrella campaign
  - o Targeted business and residential outreach
  - o Interactive media

#### Program Delivery

- Program objectives will be accomplished through the use of the following:
  - o Mass media channels, e.g. print and broadcast advertising
  - o Targeted communications, e.g. direct mail, and e-mail,
  - Account Executive contact and educational resources, e.g. online tools, audits, seminars, workshops and community outreach events.
- Audience segmentation will be used to determine appropriate messaging and individualized tactics.

#### Customer Research & Feedback

- In order to understand the effectiveness of our marketing messages, a concerted research effort will follow customer attitudes from pre-enrollment through post-event follow up. Awareness, Trial and Usage (ATU) studies can directly inform the demand response programs about modifications that should be made to marketing messages in order to:
  - o Increase enrollment; and
  - o Increase participation in individual events.

#### • Education and Awareness Umbrella Campaign

 The Education and Awareness Umbrella Campaign aims to educate customers on the concept and benefits of demand response. This campaign is specific to demand response and a majority of the funding for DR specific communications under CEAO is reserved for this effort.

#### • Targeted Business and Residential Outreach

- The Business Outreach Program will:
  - o Provide direct interaction and communications to local business communities within specific municipalities of SDG&E's service territory
  - o Broaden awareness of demand response
- The Residential Outreach Program will:
  - Leverage local community, civic events, ethnic fairs and community networks to
    optimize the number of residential customers who hear and understand the benefits of
    demand response
  - o Help customers take action when necessary.
  - o Provide community organizations and individuals the opportunity to work with us to help their audience understand the benefits to their local community.

#### • Interactive Media

- Increasingly, our customers are driven online to educate and inform themselves at their own pace. The web is a central repository for an excess of information that a customer must sift through to find what they need. In addition, customers are forcing a shift from static rote information to interactive and individualized presentation. Within sdge.com, a concerted effort is needed to make information interactive, accessible and easy to understand.
- Currently, online tools exist to assist customers in understanding their energy usage and pricing signals, allow for online enrollment, and respond to alerts. However, these are currently set up assuming that a customer is already aware of and interested in the information. CEAO can assist in driving customers to these tools via multimedia tutorials, videos and other interactive elements to help them understand how critical the tools are to their individual success.
- Aggregator Considerations N/A
- CAISO N/A

#### • Statewide Coordination

Coordination with the Statewide Marketing Education and Outreach team is critical in order
to ensure that messages are consistent and that each leverages the other to the maximum
extent. The Customer Programs Marketing and Outreach team, which oversees the CEAO
program are also the representatives to the SWME&O team which helps to maintain
consistency and integration between the efforts as much as possible.

#### • Integrated/coordinated DSM

- Pursuant to Commission guidance on IDSM, it should be noted that the budget for 2012 reflects communications plans for demand response in two capacities:
  - o Integrated with communications about energy efficiency (to be combined with funding approved in the 2010 2012 Energy Efficiency decision); and
  - Communications that focus solely on demand response and their benefit to customers.
- In any comprehensive plan, both integrated and DR specific types of communication are called for. In 2013 and 2014, the budget reflects only the latter: communications that focus solely on demand response. An integrated marketing budget for comprehensive messaging will be filed as part of the next energy efficiency portfolio in 2013.

EM&V N/A Pilots N/A

## Demand Response Education and Emergency Alerts (DR Alerts) Program Implementation Plan (PIP)

#### **Program Name**

Demand Response Education and Emergency Alerts (DR Alerts)

#### **Projected Program Budget**

Program Name	2012 Budget	2013 Budget	2014 Budget	Total 2012-2014 Budget
DR Alerts	\$210,000*	0	0	\$210,000

<sup>\*</sup>Program dollars for 2013 – 2014 will be requested as part of the IDSM funding in the 2013-2015 EE Program cycle.

#### **Projected Load Impacts by Year**

Program Name	2012 Load	2013 Load	2014 Load
	Impact	Impact	Impact
DR Alerts	N/A	N/A	N/A

#### **Projected Cost Effectiveness for 2012-2014**

Program Name	2012-2014 Cost Effectiveness					
DR Alerts	N/A					

#### **Program Descriptors**

- Market sector
  - Residential, Non-Residential
- Program Classification
  - Core
- Program Statement
  - As part of the California Energy Efficiency Strategic Plan, a working group is exploring different alternatives for statewide branding for demand response awareness. Extensive research showed an inordinate amount of confusion surrounding Flex Alerts, Flex Your Power (FYP), Flex Your Power Now!, etc. Therefore, the recommendation of the team is to modify the education component of Flex Alert Network (FAN) so that it integrates within the messaging framework of Engage360.
  - Based on the CPUC ALJ Guidance Ruling for 2012 2014 DRP Application, we are requesting bridge funding in 2012, and will address the need for continued funding for demand response

alerts, education and outreach under the next energy efficiency (2013-2015) application within the IDSM section.

#### **Program Rationale and Expected Outcomes**

#### • Implementation Design

- In early 2011, FAN will be rebranded as a more generic "emergency alert" message and a new general awareness component of FYP will be integrated into the statewide EE brand, Engage 360.
- The general awareness component, under Engage360, will educate customers on the importance of their actions, specifically around reducing electricity during peak hours. This will be differentiated from local Customer Education, Awareness and Outreach where increased education is needed to drive awareness and interest in specific local utility programs. SDG&E's marketing efforts will ensure consistency and integration between our local education and the statewide effort in all cases.
- In order to effectively integrate this program into Engage 360, we are only requesting bridge funding for 2012 to maintain the current program.

#### • Delivery mechanisms

• The DR emergency alerts will continue to notify California businesses, governments and residents when California's energy resources are reaching peak levels to prevent Stage 1 Electrical Emergencies as called by CAISO. When an emergency event is called, Californians will be requested to follow specific conservation and load-shifting measures to reduce their electricity use. Awareness around what those specific recommendations are will be generated from the DR messaging that is integrated into the Engage360 campaign.

#### Incentives

• N/A. DR Alerts is a general educational and informational program and does not provide incentives

#### • Delivery and coordination

• DR Alerts is a statewide program that will be delivered and coordinated through the State.

#### **Program Strategy**

#### • Target Audience

• DR Alerts will extend across residential, small/medium commercial, large commercial and industrial customer segments. The statewide implementer of the Engage360 brand (DraftFCB) will undertake a detailed analysis of appropriate target audiences as part of their strategic plan for the general awareness campaign.

#### • Marketing Education & Outreach

- The general awareness campaign component will promote behavior change by reinforcing four specific messages within the context of the Engage360 brand:
  - o Turn up A/C to 78 degrees or higher;
  - Use major appliances after 7pm;
  - o Don't use unnecessary appliances; and
  - o Tell others

#### • CAISO relationship

• Program is designed to work in conjunction with the CAISO Alerts, Warning and Emergency (AWE) messaging to prevent Stage 1 electrical emergencies.

#### Statewide coordination

• DR Alerts is a statewide program that will be delivered and coordinated through the State under a contract that is administered by SCE. SDG&E works closely with SCE and PG&E to assure that the messaging delivery of the DR Alerts messaging is inclusive of SDG&E's specific needs.

#### • Program design to overcome barriers

- The Marketing, Education and Outreach component of the California Energy Efficiency Strategic Plan describes a vision where "Californians will be engaged as partners in the state's energy efficiency, demand-side management and clean energy efforts by becoming fully informed of the importance of energy efficiency and their opportunities to act."
- A critical component of statewide demand response education happens when the customer is presented with information about demand response and its importance both on a statewide and at a local level. It is difficult to present a picture of Demand Response on its own, it is important to frame it within the overall context of saving or reducing energy use. Presentation of an integrated message within the Engage360 brand is key to driving customer understanding and action.

#### EM&V

• The program will be evaluated in the same manner as Engage 360.

Pilots N/A

## Permanent Load Shifting (PLS) Program Implementation Plan (PIP

#### **Program Name**

Permanent Load Shifting (PLS)

#### **Projected Program Budget**

Program	2012	2013	2014	Total 2012-2014			
Name	Budget	Budget	Budget	Budget			
Permanent Load Shift	\$775,000	\$1,188,000	\$1,106,000	\$3,069,000			

#### **Projected Load Impacts by Year**

Program	2012 Load	2013 Load	2014 Load
Name	Impact	Impact	Impact
Permanent Load Shift	2 MW	3 MW	4 MW

Note: Load Shift is Cumulative Across the 3 Years

#### **Projected Cost Effectiveness for 2012-2014**

Program	2012-2014 Cost					
Name	Effectiveness					
Permanent Load Shift	N/A					

#### **Program Descriptors**

- Market Sector
  - Non-Residential
- Program Classification
  - Core

#### • Program Statement

- The SDG&E Permanent Load Shifting (PLS) program provides eligible customers an incentive to purchase and install qualified PLS technology for the purpose of shifting peak load to off peak hours on a regular basis. Unlike other demand response programs, PLS operates continuously, not just at peak times and during events, and it can reduce summer peak demand as much or more than typical demand response programs. Permanent load shifting often involves storing thermal energy or electricity produced during off-peak hours and then using the stored energy to support load during peak periods.
- Permanent Load Shifting (PLS) as originally adopted by D.06-11-049, refers to shifting energy usage from one time period to another on a recurring basis. Previous Commission decisions approved utility Requests for Proposals (RFP's) to solicit multi-year commitments with third parties for permanent load shifting projects to reduce peak demand resulting in various statewide

PLS pilot programs. The Commission ordered further study and an evaluation of the utility PLS pilot programs and related issues in Decision 09-08-027. Strategies to increase the availability and to influence current program design were considered and implemented based upon the study results issued December 1, 2010. Further direction will be provided through the pending CPUC PLS Guidance Document and other interested parties. Based on the pending direction and information, the 2012-2014 PLS program is subject to change.

#### Program Fundamentals

- A non-recurring incentive for up to \$500 per kW for the installation of technologies such as thermal energy storage (TES) and deep cycle batteries to achieve a permanent load shift for the entire on-peak period (currently defined as 11 a.m. 6 p.m.).
- Incentive payments are based on ratepayer neutral levels of \$800 per kW to \$1,600 per kW and TOU rate differentials as identified and recommended in the Statewide Joint IOU Study of Peak Load Shifting.
- Incentive not to exceed 50% of project cost and assumes a 3-5 year payback.
- While there is no restriction on when the customer starts the load shift or when they charge the storage device the customer's load shift would be verified through historic usage data and validated during the commissioning inspection.

#### **Program Rationale & Expected Outcomes**

- The overarching goal of PLS is routine shifting of load from one time period to another during the day to reduce system-wide peak loads during periods when energy use is typically high and improve grid operations in the process. Permanent load shifting from peak hours to off peak hours provides operational and resource planning benefits for SDG&E with an anticipated energy cost savings to the customer. The location of the PLS technology should be behind the customer meter, expanding eligibility to all commercial customers.
- It is difficult to create a simple, technology neutral PLS program design that addresses all of the different technologies and cost effective incentive levels. This challenge was recognized in the PLS study and recommendations were made to create two technology categories: 1) mature and 2) emerging. A mature technology category includes larger thermal storage systems and process shifting applications with the medium and large customer. An emerging technology category includes the small customer for thermal energy storage and electrical battery storage. The 2012-2014 PLS program is based on the recommendations provided in the Statewide Joint IOU Study of Peak Load Shifting issued on November 30, 2010. This study identified a range of \$500 per kW to \$2,500 per kW in avoided cost benefits for PLS technologies depending upon the number of hours and which hours the load was shifted in order to reshape the load curve.

#### • Implementation Design

#### • Delivery Mechanism

- The Permanent Load Shifting program is primarily promoted through SDG&E Account Executives and contractors, who perform outreach and education. It is also communicated through SDG&E held workshops and business associations.
- The customer has the option of choosing their own vendor or having SDG&E work with the customer to identify opportunities through a verification report produced by the customer or sub-contracted vendor. Upon SDG&E measurement and verification of potential load shift and commissioning, a one- time incentive payment will be provided to the customer.

#### • Program Objectives

• The key objective of the PLS program is to shift energy usage during the full duration of the on-peak time period to semi-peak and off-peak time periods on a permanent basis May

through October. Due to the year round nature of the technology additional benefits may be realized.

#### • Program Cycle

• 2012-2014

#### **Program Strategy**

#### • Target Audience

- All commercial customers within the SDG&E service territory with the potential of shifting
  electric load for the full duration of on-peak hours to off-peak and semi-peak hours on a regular,
  recurring basis.
- Customers engaged in new construction and retrofit projects.
- Direct Access customers are eligible to participate in the program.

#### • Marketing, Education & Outreach

- The PLS program coordinates with the Customer Education Awareness and Outreach (CEAO) effort to funnel customers to programs through 1) a broader effort to create understanding and awareness about the importance of demand response as a concept and 2) a segmented effort to generate interest in the wide range of programs that are offered by SDG&E. Through a broad-reaching marketing effort that includes mass media channels, CEAO is designed to create awareness of the SDG&E DR portfolio, and segmented efforts which include direct response, online campaigns and outreach at events, to generate program interest by promoting customized solutions for customers
- The PLS program marketing effort focuses on creating program specific material highlighting the benefits to relevant customers with expressed interest and a call to action and develops marketing materials and messages that make it easy for the customer to engage in the enrollment process.
- To educate customers on the advantages of PLS, a bill analysis tool is available for all customers to determine the financial impact of shifting their energy load. This tool will also be used to identify and target customers who will benefit from PLS technologies. Marketing and outreach efforts will be directed at these customers for potential participation.

#### Program Delivery

 Permanent Load Shifting (PLS) is similar to demand response programs in that it shifts load during summer peak hours, however the load shift occurs without triggers and is not linked to specific events.

#### CAISO relationship

• Permanent Load Shifting can assist with system reliability and supports the changing needs of the electric grid by providing off-peak demand that aligns with intermittent resource generation.

#### • Statewide coordination

- Participated in Statewide Study as ordered by the Commission in D.09-08-027 and the program is utilizing study recommendations that were developed by analyzing statewide pilot results.
- SDG&E regularly meets with SCE and PG&E to ensure that the technology and process approaches to program design are consistent.

#### • Integrated DSM

 PLS customers may participate in Demand Response programs as long as the kW load reduction in response to other programs is incremental to the shift in load achieved through the PLS program.

• The identification of energy efficiency opportunities and the installation of recommended measures will be developed within the PLS program where applicable and cost effective. At a minimum, a strategy will be defined for customers to act on energy efficiency opportunities prior to the installation and commissioning of PLS equipment.

#### • Integration across other demand response initiatives

Customers will also be provided the opportunity to use the SDG&E Technical Audit program to
identify and create a PLS verification report, inclusive of additional energy efficiency and
demand response opportunities, rebates and incentives.

#### EM&V

• Annually a load impact evaluation of the program will be conducted in accordance with the load impact protocols including a ten year forecast based on ex-post event results. The impact evaluation will be completed by April 1st each year and will be filed with the CPUC. Additionally, other analysis related to program design (such as a baseline analysis) will be conducted as needed. One process/market evaluation for the program is planned during the three year cycle to be used to inform future program design and to evaluate and improve the operation of the program.

#### **Pilots**

• Program design is informed by the experience and activities of the PLS pilots authorized in D.06-11-049.

### **Appendix C**

### **Proposed Demand Response**

**Program Tariffs** 



Revised Cal. P.U.C. Sheet No.

21944-E

Canceling Revised Cal. P.U.C. Sheet No.

21349-E Sheet 1

#### SCHEDULE BIP

#### BASE INTERRUPTIBLE PROGRAM

#### **APPLICABILITY**

The Base Interruptible Program (BIP) offers a monthly capacity payment to non-residential customers who can commit to curtail at least 15% of Monthly Average Peak Demand, with a minimum load drop of 100 kW and who request service on this schedule.

BIP enrollment will be capped in accordance with CPUC Decision (D.) 10-06-034, adopting the "Reliability-Based Demand Response Settlement Agreement" in Rulemaking R.07-02-041.

#### **TERRITORY**

Within the entire territory served by the Utility.

#### **RATES**

Committed Load Incentive and Excess Energy Usage Charges are set forth in Table 1

Table 1 - Committed Load Incentives and Excess Usage Charges

Month/s	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>
<u>Term</u>	<u>B</u>	<u>B</u>	<u>B</u>	<u>B</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>B</u>	<u>B</u>
Monthly												
<b>Incentive Per</b>								· ·				
<u>kW</u>	\$2.00	<u>\$2.00</u>	\$2.00	<u>\$2.00</u>	<u>\$12.00</u>	<u>\$12.00</u>	<u>\$12.00</u>	\$12.00	<u>\$12.00</u>	<u>\$12.00</u>	<u>\$2.00</u>	\$2.00
Excess												
Energy												
<u>Usage</u>												
Charge Per												
<u>kWh</u>	<u>\$1.20</u>	<u>\$1.20</u>	<u>\$1.20</u>	<u>\$1.20</u>	<u>\$7.80</u>	<u>\$7.80</u>	\$7.80	<u>\$7.80</u>	<u>\$7.80</u>	<u>\$7.80</u>	<u>\$1.20</u>	<u>\$1.20</u>

\$7/kW/Mo Option A: Committed Load Incentive:

**Excess Energy Usage Charge:** \$4.50/kWh

\$3/kW/Mo Option B: Committed Load Incentive:

Excess Energy Usage Charge: \$1.88/kWh

Customers must enroll in both Terms A & B

#### SPECIAL CONDITIONS

- Definitions: The Definitions of terms used in this schedule are found either herein or in Rule 1, 1. Definitions.
- 2. Qualifying Customer: Applicable to all non-residential time-of-use metered customers who can commit to curtail at least 15% of Monthly Average Peak Demand, with a minimum load reduction of 100 kW and who request service on this schedule and comply with Special Condition 3. This tariff is available to bundled, Direct Access, and Community Choice Aggregation (CCA) customers. Qualifying customers are required to complete a Base Interruptible Program Contract with SDG&E in order to participate in this Schedule BIP.
  - Third-Party Marketers Aggregators: Customers can participate in this Schedule BIP directly a. with SDG&E or via a Third-Party Aggregator Marketer. Customer participation in this Schedule BIP via a Third-Party Marketer shall be subject to the terms and conditions of this Schedule BIP and Rule No. 29, Third-Party Aggregators Marketers for BIP.

(Continued) 1C0 Issued by Date Filed Jul 19, 2010 Lee Schavrien Advice Ltr. No. 2185-E Effective Aug 18, 2010 Senior Vice President Decision No. 10-06-034 Regulatory Affairs Resolution No.



Revised Cal. P.U.C. Sheet No.

21944-E

Canceling Revised Cal. P.U.C. Sheet No.

21349-E

#### SCHEDULE BIP

Sheet 1

#### BASE INTERRUPTIBLE PROGRAM

#### 3. **Program Operation:**

Interruptible Period: Shall be the period of time during which the Utility has informed the a. customer to interrupt load by use of a communications process utilizing equipment as described in Special Condition 14. The Utility will coordinate with the customer the manner of communications and provision of the interruption notice to the customer. Customer is responsible for assuring that any communications process is not interfered with in any manner. Customer is responsible to respond to the communications in a manner consistent with this tariff. If the Utility initiates communications indicating that an interruption period is occurring and other customers have received the communications then the customer shall be deemed to have received the communications if the Utility can verify that it initiated the communications to the customer.



(Continued) Issued by

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21945-E

San Diego, California

Canceling Revised Cal. P.U.C. Sheet No.

20914-E

#### SCHEDULE BIP

#### Sheet 2

#### BASE INTERRUPTIBLE PROGRAM

#### SPECIAL CONDITIONS (Continued)

- Program Operation (Continued)
  - b. Interruptible Period Termination. An interruptible period will terminate upon notification that the Stage 2 or other emergency has ended.
  - Committed Load: Is the difference between the customer's or aggregator's group recorded C. Monthly Average Peak Demand less the customer's selected Firm Service Level, as shown in the Customer's Base Interruptible Program Contract (Form 142-05207).
  - Excess Energy Usage: Is the amount of energy used by the customer or aggregator's group d. during any 15 minute interval of an Interruptible Period that is in excess of the customer's or aggregator's group selected Firm Service Level.
  - Monthly Average Peak Demand: Solely for the purpose of this tariff, Monthly Average Peak e. Demand is the average hourly demand recorded between the hours of 11:00 a.m. and 6:00 p.m. Monday through Friday, excluding holidays, or when BIP events were called during a calendar month. The Monthly Average Peak Demand is recalculated on a monthly basis, using historical demand.
  - f. Firm Service Level: Customer's or aggregator's group maximum expected level of demand, as specified by the customer in the Base Interruptible Program Contract (Form 142-05207), during any 15 minute interval of an Interruptible Period.
  - Additional Group Aggregation Requirements: To calculate the aggregate Monthly Average Peak Demand, the Utility will sum the Monthly Average Peak Demand for each participating g. meter. The Monthly Average Peak Demand is recalculated on a monthly basis, using historical demand.
- Program Triggers: A BIP Event can occur by one or more of the following: 4.
  - a. After the California Independent System Operator (CAISO) has (i) forecasted a Stage 1 Emergency and publicly issued a Warning notice; (ii) has taken all necessary steps to prevent the further degradation of its operating reserves; and (iii) notified SDG&E that a Stage 1 Emergency is imminent; or
  - b. After the CAISO has declared a Stage 2 Emergency.
  - c. CAISO calls for Interruptible Load. The Utility may call for an Interruptible Period provided the Interruptible Period commences within 30 minutes (Option A) or 3 hours (Option B) after the Utility initiates communications to the customer.
  - d. Extreme temperature conditions impacting system demand.
  - e. SDG&E discretionary events for test purposes, program evaluation or system contingencies. SDG&E expects that actual events would normally, under most circumstances, eliminate the need for a test. It is expected that In the absence of an actual event, there will be at least one program test event per year.

Special One-Time Opt-Out Window: Beginning fifteen (15) days after the date of Commission approval of Advice Letter 2040-E, modifying the Program Trigger provisions above, and for a period of 30 days thereafter, customers receiving service under this Schedule may upon written notice to SDG&E exercise one of the following options:

- (1) Terminate service under Schedule BIP and return to the otherwise applicable tariff (OAT). Requests to terminate service under this Schedule and to return to the OAT will be effective on the next regularly scheduled meter read date after a timely receipt of request, or
- (2) Increase or decrease the FSL. Increases or decreases in the FSL will be effective at the beginning of the next calendar month after timely receipt of the signed Amendment to Base Interruptible Program Contract (Form 142-05207).

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Canceling Revised Cal. P.U.C. Sheet No.

20315-E Sheet 3

#### SCHEDULE BIP

#### BASE INTERRUPTIBLE PROGRAM

# SPECIAL CONDITIONS (Continued)

- 5. Program Availability. BIP is available to be called year round. BIP shall be limited as to its availability to customers based on any limitations the Utility has in getting communications systems in place. The Utility will staff up as quickly as practical to provide this service to as many customers as quickly as practical so long as communications are in place before service commences.
  - Limitation of Interruptible Periods:
    - Option A.—The Interruptible Periods shall not exceed four (4) hours for any calendar day, nor 10 Interruption Periods per calendar month, nor 120 hours during any calendar year.
    - Option B. Interruptible Periods shall not exceed three (3) hours for any calendar day, nor ten (10) events during a calendar month, or ninety (90) hours per calendar year.
- 6. Customer Specific Baseline: As written, Customer Specific Baseline does not apply to the Base Interruptible Program tariff.
- **Incentive/Energy Payment:** 7.
  - Committed Load Incentive Payment: Is determined by multiplying Committed Load by a. Committed Load Incentive. This credit will be applied to the bill of the customer on their otherwise applicable rate within 90 days of the Interruptible Period. The customer's total bill for service, including the Committed Load Incentive Payment, shall always be a positive value, or zero. Committed Load Incentive shall be zero if the Committed Load is less than 100kW or less than 15% of the customer's recorded Monthly Average Peak Demand.
  - Excess Energy Usage Charge: Customer shall pay a charge multiplied by Excess Energy b. Usage. This charge will be applied to the bill of the customer on their otherwise applicable rate within 90 days of the Interruptible Period.
- Actual Demand Reduction: Actual Demand Reduction equals the difference between the customers Monthly 8. Average Peak Demand and the Firm Service Level.
- Event Notification/Communication: Customers, at their expense, must have access to the Internet and 9. an e-mail address to receive notification via the Internet. In addition, all customers must have, at their expense, an alphanumeric pager that is capable of receiving a text message sent via the Internet. A customer cannot participate in the Program until all of these requirements have been satisfied. Customers participating in BIP with a third party marketer will be notified by the Marketer using the agreed upon notification method.

In the event of a Program curtailment operation, customers on the Program will be notified using one or more of the above-mentioned systems. Receipt of such notice is the responsibility of the participant. Once notified, the customer is expected to log into the Program's Internet web site within 30 minutes of event notification and acknowledge participation in the curtailment. Failure to acknowledge a curtailment notice does not release the customer from its obligation to participate. The Utility does not guarantee the reliability of the pager system, e-mail system or Internet site by which the customer received notification.

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3C0 2040-E Advice Ltr. No. Decision No.

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Resolution No. E-4220



20916-E

Canceling Revised Cal. P.U.C. Sheet No.

20545-E Sheet 4

## SCHEDULE BIP

#### BASE INTERRUPTIBLE PROGRAM

# SPECIAL CONDITIONS (Continued)

- 9. Event Notification/Communication (Continued)
  - Advance Notification: Event notification will be sent as follows: a.
  - i. Customers who choose Option A will be notified 30 minutes in advance of the Base Interruptible Program Event.
  - Customers who choose Option B will receive notification 3-hours in advance of the Base Interruptible Program Event.
- Event Cancellation: Once a BIP event has been initiated, the subsequent event will not be 10. cancelled, however, the event can be terminated based on termination of the emergency situation.
- 11. Contract Requirement: A customer must complete a Base Interruptible Program Contract (Form 142-05207) in order to receive service on this Rate Schedule.
  - a. Insurance. Insurance may not be used to pay Excess Energy Usage Charge for willful failure to comply. Each customer must provide the utility with an executed declaration that states "I do not have, and will not obtain, insurance to compensate me in any way for any portion of the bills associated with the Excess Energy Usage Charge." Such declaration (Form 142-05209) must be on file with the Utility within 30 days of the effective date of the tariffs or the customer will immediately be terminated from service under Schedule BIP.
  - Contract Termination. Customers may change their Firm Service Level or discontinue participation in the Program only once per year, by written notification to the Utility, and during the month of November. Such changes will become effective the following program month.
- <u>Multiple Program Participation</u>: A customer may participate simultaneously in Schedule BIP, Schedule DBP, or EECC-CPP-D. However, <u>U</u>under no circumstance will a customer taking service 12. under the above listed rate schedules and this schedule receive more than one incentive payment for the same interrupted/curtailed load. If a BIP and CPP-D event is called the same day, the rate incentive would take precedence over the program incentive Eligibility for Multiple Program Participation is defined in Rule 41
- 13. Termination of Schedule: This Schedule is in effect until modified or terminated in the rate design phase of SDG&E's next general rate case or similar proceeding.
- 14. Metering Requirement: Customer's electric meter must be an interval data recorder with related telecommunications capability, compatible with the Utility's meter reading and telecommunications systems. Metering and telephone equipment must be in operation for at least a full calendar month prior to participating in the program to establish a Monthly Average Peak Demand. If required, the Utility will provide and install the metering equipment at no cost to the customer.
  - Metering equipment must be in operation for at least a full calendar month prior to a. participating in the program to establish a Monthly Average Peak Demand.

(Continued) 4C0 Issued by Date Filed Nov 12, 2008 Lee Schavrien 2040-E Jan 29, 2009 Advice Ltr. No. Effective Senior Vice President Regulatory Affairs Decision No. Resolution No. E-4220



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P.U.C. Sheet No. 19141-E

Canceling Original Cal. P.U.C. Sheet No.

# Sheet 5

20917-E

#### **SCHEDULE BIP**

# BASE INTERRUPTIBLE PROGRAM

#### SPECIAL CONDITIONS (Continued)

- 14. <u>Metering Requirement</u> (continued)
  - b. For Direct Access and CCA customers, BIP compliance shall be determined from a telephone accessible electric revenue interval meter that can be read remotely by the Utility, and/or from alternative metering and telecommunications acceptable to the Utility. Direct Access and CCA customers are required to allow the Utility telecommunication access to its electric revenue meter for the purposes of determining BIP compliance.
- 15. <u>Utility Testing:</u> At the Utility's discretion, BIP participants may be requested to participate in up to two program tests <u>per year</u> demonstrating their ability to reduce load to their contracted Firm Service Level. —During a BIP program test, penalties will apply. The Utility may request the customer demonstrate to Utility's satisfaction that the customer has the capability to reduce load to their Firm Service Level during a BIP event.
- 16. <u>Utility Reporting</u>: Utility will provide the Commission with a monthly report on the economics of this Rate Schedule. The monthly report may contain information on individual customer performance. Customers on this tariff must agree to allow the Utility, the California Energy Commission (CEC) or its contracting agent to conduct a site visit for measurement and evaluation, and agree to complete any surveys needed to evaluate the BIP program. Furthermore, customer shall provide all load data and background information, under appropriate confidentiality protections needed to complete this evaluation. The data will also be made available to academic researchers, under appropriate confidentiality protections, to facilitate the understanding of demand response.
- 17. <u>Failure to Reduce Energy</u>: As per the BIP tariff, Special Condition 7 (b), failure to comply with a BIP load reduction event will result in the applicable rate being applied to all excess energy used above the Firm Service Level.
- 48. Emergency Generation Limitations: Customers are prohibited from achieving load reduction by operating back up or onsite standby generation. may achieve energy reductions by operating backup or onsite generation. The customer will be solely responsible for meeting all environmental and other regulatory requirements for the operation of such generation. Not withstanding all other applicable Utility Rules and Tariffs, customer may synchronize and operate its own standby generation in parallel with the electric system up to 60 cycles to minimize service interruption during the transfer of electric service between the Utility electric system and the customer's Emergency Standby Generation, such operation shall only occur during the period starting 15 minutes prior to and ending 15 minutes after an interruptible period defined in this Schedule. Customer must receive approval of their interconnection plans from Utility prior to operation of their generator in parallel with Utility's system. In no Event shall the customer operate its own standby generation in parallel with the Utility electric system during Utility service interruptions.

Upon termination or expiration of the term of this Schedule or associated Form Contract, customer agrees to either 1) dismantle all equipment necessary for customer's own standby generation to synchronize and operate in parallel with the Utility electric system for the purpose of electric service transfer from the Utility electric system to the customer's own standby generation, or 2) purchase and install a generator output meter meeting Utility's standards and either comply with applicable tariffs or take service under a contract.

49-18. <u>Dispute Resolution:</u> Any dispute arising from the provision of service under this schedule or other aspects of the Base Interruptible Program will be handled as provided for in the Utility's Rule 10, Disputes.

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Cal. P.U.C. Sheet No.

19141-E

# **SCHEDULE BIP**

Sheet 5

BASE INTERRUPTIBLE PROGRAM

5C0 Issued by Date Filed Nov 12, 2008 Lee Schavrien Advice Ltr. No. 2040-E Effective Jan 29, 2009 Senior Vice President Regulatory Affairs Decision No. Resolution No.

#### BASE INTERRUPTIBLE PROGRAM CONTRACT

This Contract is made and entered into by and between the following parties:

San Diego Gas & Electric Company, a California corporation, hereinafter referred to as "SDG&E" and \_\_\_\_\_\_, hereinafter referred to as "Customer", and jointly, or individually, referred to as "Parties" or "Party".

#### I. RECITALS

**WHEREAS**, Customer is herein requesting to take service pursuant to the BIP tariff, Schedule BIP, Base Interruptible Program ("BIP").

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

#### II. TERM

This Contract shall become effective when signed by both parties, and remains effective unless terminated sooner by the terms herein. Customers may modify their Firm Service Level, as set forth on Attachment B, which is attached hereto and incorporated herein by reference, or discontinue participation in BIP only once each year during the month of November (which modification shall be effective the following January 1). Customer shall provide written notification of such changes to: Attention BIP Manager, SDG&E, 8335 Century Park Court, CP 12E12C, San Diego, CA 92123.

#### III. FIRM SERVICE LEVEL

Customer shall reduce energy use to their selected Firm Service Level amount identified in Attachment B consistent with Schedule BIP, which is attached hereto as Attachment C and incorporated by reference.

#### IV. PROGRAM COMMITMENT

Customer shall select between two notification options set forth in Schedule BIP, either Option A or Option B, for program participation and earned incentive as consistent with Schedule BIP included herein.

Ontion A:	
<del>орион                                   </del>	
Option B:	

# IV. THIRD-PARTY MARKETER Aggregator PARTY Aggregator

Customer may, at any time, select to participate in BIP via a MarketerAggregatora Aggregator (as such term is defined in Rule 29, Third-Party MarketerAggregatorsParty Aggregators for Base Interruptible Program) by submitting a "Notice to Add, Change or Terminate a Third-Party MarketerAggregatorParty Aggregator for Base Interruptible Program" (Form No. 142-05216) and designating a MarketerAggregatora Aggregator therein. Except in the case of a termination of a MarketerAggregatora Aggregator Aggregator Aggregator and SDG&E as provided in Rule 29, Customer may only change MarketerAggregatorschange Aggregators, or otherwise terminate its designation of a MarketerAggregatora Aggregator, during the month of November (with such change or termination becoming effective the following January 1), by submitting a "Notice to Add, Change or Terminate a Third-Party MarketerAggregatorParty Aggregator for Base Interruptible Program" (Form No. 142-05216) setting forth such change or termination.

Participation in BIP via a <u>MarketerAggregatoran Aggregator</u>, including the designation and termination of <u>such MarketerAggregatorsuch Aggregator</u> and its services, shall be subject to the terms and conditions of Rule 29, Third-<u>Party MarketerAggregators</u> Party <u>Aggregators</u> for Base Interruptible Program.

SDG&E must receive a signed "Authorization To: Receive Customer Information or Act on a Customer's Behalf" to release customer-specific electric usage data to any designated Marketer Aggregator designated Aggregator. Subject to Customer authorization, for each request to release customer-specific electric usage data, SDG&E will provide a maximum of the most recent 12 month's customer electric usage data (or all data available if Customer has less than 12 month's usage history) to Customer, or such designated

<u>MarketerAggregatordesignated Aggregator</u>. If Customer, or its <u>designated MarketerAggregatordesignated</u> <u>Aggregator</u>, requests this historic usage more than two times per year for a specific service account, SDG&E shall have the ability to assess a processing charge if approved by the Commission.

If any security has not been provided or does not adequately cover the outstanding charges owed by a designated MarketerAggregatordesignated Aggregator to SDG&E, Customer will be liable for any such remaining outstanding charges (including Excess Energy Usage Charges) to the extent incurred by Customer, as provided in Rule 29, Third-Party MarketerAggregators Party Aggregators for Base Interruptible Program.

#### VI. ASSIGNMENT

Customer shall not assign this Contract without prior written consent of SDG&E.

#### VII. DISPUTE RESOLUTION

Any dispute that cannot be resolved between the Parties shall be settled by the means set forth in Schedule BIP. In any action in litigation to enforce or interpret any of the terms of this Contract, the prevailing party shall be entitled to recover from the unsuccessful party all costs, expenses (including expert testimony) and reasonable attorneys fees (including fees and disbursements of in-house and outside counsel) incurred therein by the prevailing party.

#### VIII. DISCLAIMER OF WARRANTY

No promise, representation, warranty, or covenant not included in this Contract has been, or is relied on by either Party. Each Party has relied on its own examination of this Contract, the counsel of its own advisors, and the warranties, representations, and covenants in the Contract itself.

#### **VIIIIX.** LIMITATION OF LIABILITY

The limitations of liability set forth below in this Section IX shall not apply to errors or omissions caused by willful misconduct, fraudulent conduct, or violations of law.

In no event shall SDG&E, its shareholders, directors, employees, agents or subcontractors (including, without limitation, suppliers of the Utility System) (collectively "SDG&E Parties") be liable to Customer for any direct, indirect, consequential, special, incidental, or punitive damages under any other theories including, but not limited to, tort, contract, breach of warranty or strict liability for (i) the design, manufacture, installation, operation, maintenance, performance or demonstration of the Utility System, or (ii) the acts or omissions of, or the performance or non-performance under any agreement with Customer by, any Marketer Aggregatorany Aggregator designated by Customer pursuant to Section V above. The "Utility System" includes any metering, meter communication equipment, Internet communication software, energy demand management software and related goods and services. SDG&E shall not be responsible for any business loss, actual or implied, as a result of the partial or complete failure of the Utility System to operate.

#### IX. COMPLIANCE WITH LAWS

The parties shall comply with the terms and conditions of Schedule BIP, and all local, state and federal rules, regulations and laws, including, if Customer designates a Third-Party Marketer Aggregator Party Aggregator pursuant to Section V above, Rule 29, Third-Party Marketer Aggregators Party Aggregators for Base Interruptible Program.

#### XI. COMMISSION CONTINUING AUTHORITY

This Contract shall at all times be subject to the Commission and to any changes or modification that the Commission may, from time to time, direct in the exercise of its jurisdiction.

Notwithstanding any other provision of this Contract, either Party shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for a change in rates, charges, classification, or any rule, regulation, or agreement relating thereto.

XI <mark>I</mark> .	ESSENTIAL CUSTOMER DECLAR	ATION
	I hereby state that I am the	(title) of
(comp	any), and am authorized to make this	leclaration on behalf of my company at the following location

Address	-		_	
City			_	
State	California	Zip	-	
stated abo	ove under the California	Public Utilities Commis	pany is considered an essentia ssion's rules and is exempt fro E interruptible program for all o	m rotating outage

location stated above under the California Public Utilities Commission's rules and is exempt from rotating outages. I declare that I have voluntarily elected to participate in an SDG&E interruptible program for all or part of my electrical load based on adequate back-up generation or other means to interrupt load when requested by SDG&E, while continuing to meet my essential needs.

IN WITNESS WHEREOF, SDG&E and Customer have executed this Contract:

Customer	San Diego Gas & Electric Company
Ву	Ву
Title	Title
Date	Date

The following attachments are attached hereto and incorporated by reference:

Attachment A: Customer Contact Information
Attachment B: Customer Account Information

Attachment C: Schedule BIP

# ATTACHMENT A Base Interruptible Program Customer Contact Information

Name: Title: Mailing Address:	
Telephone Number: Pager Number: Email Address:	
Secondary Contact: Name: Title: Mailing Address:	
Telephone Number: Pager Number: Email Address:	
Additional Contact: Name: Title: Mailing Address:	
Telephone Number: Pager Number: Email Address:	
Additional Contact: Name: Title: Mailing Address:	
Telephone Number: Pager Number: Email Address:	
Additional Contact: Name: Title: Mailing Address:	
Telephone Number: Pager Number: Email Address:	

# ATTACHMENT B Base Interruptible Program Customer Account Information

Site #1 Account Name Account Number Site Address Existing Electric Meter Number Customer Selected Firm Service Level (kW)	
Site #2 Account Name Account Number Site Address Existing Electric Meter Number Customer Selected Firm Service Level (kW)	
Site #3 Account Name Account Number Site Address Existing Electric Meter Number Customer Selected Firm Service Level (kW)	
Site #4 Account Name Account Number Site Address Existing Electric Meter Number Customer Selected Firm Service Level (kW)	
Site #5 Account Name Account Number Site Address Existing Electric Meter Number Customer Selected Firm Service Level (kW)	

Attach additional Customer Account Information sheets to this contract if required. (Sheet \_\_\_ of \_\_\_)

# ATTACHMENT C Base Interruptible Program Schedule BIP





Original	Cal. P.U.C. Sheet No.	19190-E

Canceling Cal. P.U.C. Sheet No.

#### **RULE 29**

Sheet 1

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THIRD-PARTY MARKETERS AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

The terms and conditions of this Rule shall apply to Third-Party Marketers Aggregators (referred to herein as "Aggregator Marketer" or "Aggregators Marketers"), who contract with SDG&E to perform functions on behalf of customers related to participation in the Base Interruptible Program ("BIP"). The Marketer Aggregator shall manage BIP enrollment for customers and ensure customer compliance with applicable tariff and contract requirements. The Marketer Aggregator is required to sign an Third-Party Marketer Aggregator Agreement for Base Interruptible Program (Form No. 142-05215) (the "Marketer Aggregator Agreement") with the Utility and, as part of such agreement, shall act on behalf of customers with respect to the receipt of incentive payments from and the payment of charges to the Utility under BIP. This Rule shall also apply to the Utility's customers participating in BIP who have designated a Marketer Aggregator under Schedule BIP to act on their behalf.

Marketers are appointed by individual customers in the "Notice to Add, Change or Terminate Third-Party Marketer Aggregator for Base Interruptible Program" submitted by such customers to the Utility.

The specific requirements of individual customers are described in Schedule BIP and the BIP Contract (Form No. 142-05207) between the customer and the Utility. A customer's participation in BIP through the use of a Marketer Aggregator under this Rule is subject to the terms and conditions of Schedule BIP and the incentives and charges associated with Schedule BIP.

# A. GENERAL

- Eligibility and Application for Marketer Aggregator Status.
  - a. Marketers Aggregators are required to complete an Marketer Aggregator Agreement with the Utility and to furnish all financial information required by the Utility to ensure that the Marketer Aggregator is able to perform its obligations under the Marketer Aggregator Agreement and this Rule.
  - b. Marketers Aggregators approved by the Utility may market BIP to customers eligible to participate in BIP under Schedule BIP. The Marketer Aggregator shall enter into and maintain signed contracts with each eligible customer electing to participate in BIP through Marketer Aggregator whereby such customer authorizes Marketer Aggregator, as its representative, to receive incentive payments and to pay penalty charges on behalf of such customer in connection with such customer's participation in BIP ("Customer Contract"). The Utility shall not be responsible for monitoring, auditing, reviewing or enforcing such Customer Contracts between the Marketer Aggregator and such customers. Once Marketer Aggregator has entered into a Customer Contract with an eligible customer, Marketer Aggregator shall deliver a "Notice by Third-Party Marketer Aggregator to Add or Delete Customers" adding such customer.
  - c. Marketers must ensure that each customer whom it represents in BIP pursuant to a Customer Contract (i) has entered or enters into the Base Interruptible Program Contract (Form No. 142-05207), (ii) has completed a "Notice to Add, Change or Terminate a Third-Party—Marketer Aggregator for Base Interruptible Program" designating such—Marketer Aggregator, and (iii) has delivered all such documents, instruments, consents and agreements as may be required for such customer's participation in BIP and designation of such—Marketer Aggregator (including, without limitation, an "Authorization To Receive Customer Information or Act on a

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Sheet 1

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Canceling Cal. P.U.C. Sheet No.

**RULE 29** 

THIRD-PARTY MARKETERS AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

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Cal. P.U.C. Sheet No.

19191-E

#### **RULE 29**

Sheet 2

#### THIRD-PARTY MARKETERAGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

# A. <u>GENERAL</u> (Continued)

- Eligibility and Application for Marketer Aggregator Status (Continued)
  - d. To participate as a third-party-marketer Aggregator in BIP, eligible customers whom Marketer Aggregator represents in BIP pursuant to Customer Contracts shall have committed, in the aggregate, to provide the Utility with a minimum of 1 MW of Committed Load (as defined in Schedule BIP) on a monthly basis ("Minimum Load Reduction"). A-Marketer Aggregator shall not be entitled to participate as a third-party-marketer Aggregator in BIP if such-Marketer Aggregator cannot obtain or maintain the Minimum Load Reduction. If the Marketer Aggregator is unable to maintain the Minimum Load Reduction by the first of each month, the Marketer Aggregator will be given 14 calendar days from the date of such inability to make up the committed load capacity in order to achieve the Minimum Load Reduction. If sufficient committed load capacity is not added within such 14 calendar days, the MarketerMarketer Aggregator Agreement may be terminated, at the Utility's sole discretion, and the provisions of Section E below shall apply.
  - e. The Marketer Aggregator must have access to the Internet and an e-mail address to receive event notifications and communications via the Internet. In the event of a BIP curtailment event as set forth in Schedule BIP, using one or more of the above-mentioned systems, the Utility will notify the Marketer Aggregator at the same time that the customers are notified under Schedule BIP. Receipt of such notice from the Utility is the responsibility of the Marketer Aggregator. The Utility does not guarantee the reliability of the e-mail system or Internet site by which the Marketer Aggregator receives the notification.
  - f. The term of the Marketer Aggregator Agreement between a Marketer Aggregator and the Utility shall be 3 years, beginning on the calendar day upon which the Marketer Aggregator Agreement is accepted by the Utility and ending 3 years from such date, unless terminated earlier in accordance with this Rule or the Marketer Aggregator Agreement.

#### Customer Elections

- Eligibility for BIP is limited to customers that meet the requirements set forth in Schedule BIP.
- b. Customers may designate only one <u>Marketer Aggregator</u> at a time for each participating meter using the "Notice to Add, Change or Terminate Third-Party <u>Marketer Aggregator</u> for Base Interruptible Program" (Form No. 142-05216).

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Cal. P.U.C. Sheet No.

19192-E

#### **RULE 29**

Sheet 3

#### THIRD-PARTY MARKETERAGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

# A. <u>GENERAL</u> (Continued)

#### 2. Customer Elections (Continued)

- c. Except in the case of a termination of the Marketer Aggregator Agreement between a customer's Marketer Aggregator and the Utility as provided in Section E below, customers may elect to change their designation of a Marketer Aggregator or terminate their Customer Contract with a Marketer Aggregator only during the month of November, with such changes or termination becoming effective the following January 1. Prior to any changes in the designation or any termination of a Marketer Aggregator, a customer shall deliver to the Utility a "Notice to Add, Change or Terminate a Third-Party Marketer Aggregator for Base Interruptible Program" (Form No. 142-05216) notifying the Utility of such change or termination. In the event a customer whom the Marketer Aggregator represents in BIP elects to change third-party markete Aggregators or to terminate its Customer Contract with the Marketer Aggregator, the Marketer Aggregator shall deliver to the Utility, by November 30, a "Notice by Third-Party Marketer Aggregator to Add or Delete Customers" confirming such change or termination.
- d. Customers whom the <u>Marketer Aggregator</u> represents in BIP may only elect to change its Firm Service Level during the month of November for any participating meter. As provided in Schedule BIP, the <u>Marketer Aggregator</u> shall deliver to the Utility a written notification of such change prior to such change taking effect.

#### 3. Rates

- a. Committed Load Incentive Payments (as defined in Schedule BIP) payable on account of a customer shall be in accordance with the rates as set forth in Schedule BIP.
- b. Excess Energy Usage Charges (as defined in Schedule BIP) and any other charges or fees due to the Utility on account of a customer shall be in accordance with the rates set forth in Schedule BIP.

#### 4. Fees, Surcharges and Taxes

Applicable taxes will be added to all billings, including any other fees, surcharges and taxes applicable within the city of political subdivision where the electricity is actually used.

#### 5. Release of Customer Information

The Utility must receive a signed "Authorization To Receive Customer Information or Act on a Customer's Behalf" prior to the release of customer usage data to the <u>Marketer Aggregator</u>. Subject to customer authorization, for each request to release customer usage data, the Utility will provide a maximum of the then most recent 12 months of the customer's electric usage data (or all data available if the customer has less than 12-months usage history) to the customer or to the <u>Marketer Aggregator</u>. If a customer, or the <u>Marketer Aggregator</u>, requests this historic usage data more than 2 times per year for a specific customer account, the Utility shall have the ability to assess a processing charge if approved by the Commission.

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Sheet 3

THIRD-PARTY MARKETERAGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

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**RULE 29** 

Sheet 4

# THIRD-PARTY MARKETESAGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

# B. <u>ESTABLISHMENT OF MARKETER AGGREGATOR'S Aggregator'S ABILITY TO PERFORM</u>

#### 1. Participation in BIP

Prior to, and as a condition to, the Marketer Aggregator's execution of a Marketer Aggregator Agreement, the Marketer Aggregator shall be required to furnish the Utility with financial information satisfactory to the Utility, as requested by the Utility, in order for the Utility to determine whether the Marketer Aggregator is able to perform its obligations under the Marketer Aggregator Agreement. Based on the Utility's valuation of such information, Utility may require security in an amount to be determined by the Utility. In the event the Utility determines that a financial change has or could adversely affect the creditworthiness of the Marketer Aggregator, or if the Marketer Aggregator does not provide the requested financial information or required security deposit, the Utility may terminate the Marketer Aggregator's participation in BIP immediately or require the Marketer Aggregator to provide additional security.

All information provided by the <u>Marketer Aggregator</u> to the Utility will remain strictly confidential.

#### 2. <u>Security</u>

The Utility may require, on a case by case basis, that the <u>Marketer Aggregator</u> provide adequate security in order to participate, or continue to participate, in BIP. Such security may be in one of the following forms, in the amounts to be determined by the Utility:

- a. <u>Cash Deposit</u> Deposits will earn interest at the 3-month commercial paper rate.
- b. <u>Letters of Credit</u> Irrevocable and renewable standby Letters of Credit issued by a major U.S. financial institution acceptable to the Utility.
- c. <u>Surety Bonds</u> Renewable surety bonds in a form acceptable to the Utility, which are issued by a major insurance company acceptable to the Utility.
- d. <u>Guarantees</u> Guarantors must furnish financial information as requested by the Utility and have credit standards acceptable to the Utility. Guarantees must be accompanied by other forms of security equal to at least 20% of the credit requested. "Other forms of security deposit" shall include those items outlined above and any other form and amount of collateral to which the Utility, in its sole discretion, agrees in writing.

If the Utility determines that security is required, it is due and payable upon demand prior to the commencement of the <u>Marketer Aggregator</u>'s participation in BIP. All forms of security shall be retained as long as the <u>Marketer Aggregator</u> is participating in BIP.

#### C. FINANCIAL ARRANGEMENTS

The <u>Marketer Aggregator</u> Agreement shall establish the <u>Marketer Aggregator</u>'s right to receive all incentive payments due to, as well as the <u>Marketer Aggregator</u>'s obligation to pay to the Utility all penalty payments or charges incurred by, the eligible customers participating in BIP whom the <u>Marketer Aggregator</u> represents pursuant to Customer Contracts. All

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Vice President Regulatory Affairs Resolution No. Co-11-049

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Sheet 4

# THIRD-PARTY MARKETES AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

incentive payments and penalty payments and charges will be calculated in aggregate on an individual customer basis by individual participating meter data pursuant to Schedule BIP.

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THIRD-PARTY MARKETERS AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

#### C. <u>FINANCIAL ARRANGEMENTS</u> (Continued)

#### 1. Incentive Payments to Customers

Subject to the provisions of Section D, for each customer participating in BIP via the Marketer Aggregator, the Utility shall pay the Marketer Aggregator the customer's monthly Committed Load Incentive Payment (as defined in Schedule BIP) in lieu of payment thereof directly to such customer ("Customer Incentive Payments"). The amount of Customer Incentive Payments due to a Marketer Aggregator for all customers whom such Marketer Aggregator represents in BIP shall be aggregated and paid by the Utility to such Marketer Aggregator in one lump sum payment ("Aggregated Customer Incentive Payment"). Customers participating in BIP via a Marketer Aggregator authorize the Utility to make such payment of Customer Incentive Payments to the Marketer Aggregator in lieu of payment thereof directly to such customer, and such customers release the Utility from any and all liabilities and obligations to pay such incentive payments directly to such customers.

The <u>Marketer Aggregator</u> is required to pay each customer whom it represents in BIP pursuant to a Customer Contract the agreed upon amount of incentive payments as set forth in such Customer Contract.

The Utility will calculate the Committed Load Incentive Payments for each customer due to Marketer Aggregator and provide verified individual customer data to the Marketer Aggregator within 10 business days following the end of the calendar month, subject to the Marketer Aggregator Agreement and the authorization of such customer.

# 2. Penalty Payments or Charges to Utility

Subject to the provisions of Section D, the <u>Marketer Aggregator</u> is required to pay the Utility the full amount of any and all penalty payments or Excess Energy Usage Charges incurred by each customer whom such <u>Marketer Aggregator</u> represents in BIP pursuant to a Customer Contract.

The Utility will monitor customer event performance and provide verified individual customer settlement data to be included with a bill to the <u>Marketer Aggregator</u> within 10 business days of the end of the calendar month, subject to the <u>Marketer Aggregator</u> Agreement and the authorization of such customer.

#### D. BILLING AND PAYMENT TERMS

# 1. <u>Billing and Payment Terms for Marketer Aggregator Payments</u>

Subject to Section D.2, the Utility shall pay the <u>Marketer Aggregator</u> the Aggregated Customer Incentive Payment due to the <u>Marketer Aggregator</u> within 90 days after the end of the calendar month in which such incentive payment accrued.

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**THIRD-PARTY MARKETES AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM** 

# D. <u>BILLING AND PAYMENTS TERMS</u> (Continued)

2. <u>Billing and Payment Terms for Charges Payable by Marketer Aggregator</u>

Any and all amounts due to the Utility for Excess Energy Usage Charges incurred during a particular month by a customer whom a Marketer Aggregator represents in BIP pursuant to a Customer Contract shall offset any Aggregated Customer Incentive Payments due to such Marketer Aggregator in respect of such month. In the event that any portion of the Excess Energy Usage Charges due to the Utility in a particular month exceeds the Aggregated Customer Incentive Payments payable to the Marketer Aggregator for such month, the Utility shall bill the Marketer Aggregator for such excess amount. The bill shall be due and payable by the Marketer Aggregator upon receipt.

#### 3. Method of Payment

All payments will be submitted electronically or by wire transfer unless otherwise agreed to by the Utility.

#### 4. <u>Late Payment</u>

The Utility's bill to-Marketer Aggregator will be considered past due if it is not paid within 15 calendar days after transmittal. If a-Marketer Aggregator does not pay any bill rendered to it by the Utility within such 15 calendar days, then:

- a. A 7-day notice may be mailed to the Marketer Aggregator and to each of the customers whom it represents in BIP pursuant to a Customer Contract. If the charges in the notice remain unpaid after the expiration of the 7-day notice, the Utility shall have the right to either (i) terminate the Marketer Aggregator Agreement and Marketer Aggregator's participation in BIP or (ii) make a draw under any security provided by the Marketer Aggregator for such outstanding amounts. If Marketer Aggregator's participation in BIP is terminated, the Marketer Aggregator remains responsible for all outstanding charges incurred by each customer whom Marketer Aggregator represented in BIP prior to such termination, even if such charges are identified after the termination becomes effective; and
- b. The <u>Marketer Aggregator</u> will be unable to add eligible customers until late payments are cured.

If a Marketer Aggregator pays late 3 or more times by 7 days or less, or pays late one or more time by greater than 7 days in any contiguous 12-month period, then, in addition to all other rights of the Utility resulting from such late payments (or any non-payments), the Utility may require full collateral in the form of cash, irrevocable standby letter of credit, security bond or any other security instrument deemed appropriate by the Utility. If such collateral is requested and not provided by the Marketer Aggregator to the Utility, the Marketer Aggregator's participation will be subject to termination by the Utility.

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**RULE 29** 

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THIRD-PARTY MARKETES AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

D. <u>BILLING AND PAYMENTS TERMS</u> (Continued)

5. <u>Customer Liability for Marketer Aggregator Obligations</u>

Any draw by the Utility under any security deposit provided by the Marketer Aggregator to pay any outstanding charges owed by such Marketer Aggregator in connection with its participation in BIP as a Marketer Aggregator shall be applied pro rata to each customer whom such Marketer Aggregator represents in BIP that incurred such charges, which pro rata basis shall be based upon the amount of such customer's portion of such outstanding charges in relation to the aggregate amount of such outstanding charges. If any security provided by the Marketer Aggregator has not been provided or does not adequately cover the outstanding charges owed by the Marketer Aggregator to the Utility, such customers will be liable for any remaining outstanding charges to the extent still owing on the account of such customer.

# E. TERMINATION OF MARKETER Aggregator AGREEMENT

If a payment is not received within 7 days of the issuance of a past due notice, the <u>Marketer Aggregator</u>s participation in BIP pursuant to the <u>Marketer Aggregator</u> Agreement will be subject to termination. In addition, if the Utility receives any notification that the <u>Marketer Aggregator</u> has filed or will be filing any type of bankruptcy, or is closing its business, the <u>Marketer Aggregators</u> participation pursuant to the <u>Marketer Aggregators</u> Agreement will be terminated immediately and all of the <u>Marketer Aggregator</u>'s rights thereunder shall be terminated.

Upon termination of the <u>Marketer Aggregator</u> Agreement between the Utility and the <u>Marketer Aggregator</u>:

- 1. Termination notices will be sent to the <u>Marketer Aggregator</u> and to each of the customers whom the <u>Marketer Aggregator</u> represents in BIP;
- 2. All fees, charges and other obligations of the <u>Marketer Aggregator</u> to Utility shall be immediately due and payable without further notice of demand; and
- 3. At the time of termination, if the <u>Marketer Aggregator</u> has not paid Utility billings, any security provided by <u>Marketer Aggregator</u> shall be applied to recoup unpaid bills.

The customers whom the Marketer Aggregator represented in BIP will have 14 days from the date of termination of the Marketer Aggregator Agreement in which to continue their participation in BIP through another Marketer Aggregator or directly with the Utility without the designation of a Marketer Aggregator. Such customers shall submit a "Notice to Add, Change or Terminate a Third-Party Marketer Aggregator" (Form No. 142-05216) setting forth their election. If such customer does not submit such "Notice to Add, Change or Terminate a Third-Party Marketer Aggregator for Base Interruptible Program" (Form No. 142-05216) by the time specified above, such customer will be deemed to have elected to continue its participation in BIP directly with the Utility without the designation of a Marketer Aggregator.

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#### **RULE 29**

Sheet 8

#### THIRD-PARTY MARKETERS AGGREGATORS FOR BASE INTERRUPTIBLE PROGRAM

# F. <u>ARBITRATION OF DISPUTES</u>

The terms and conditions of the agreement governing the relationship between the <u>Marketer Aggregator</u> and a customer with respect to such customer's participation in BIP through such <u>Marketer Aggregator</u> are independent of the Utility. Any disputes arising between <u>Marketer Aggregator</u> and such customer shall be handled between those parties.

If a customer disputes a Utility bill, the disputed amount will be deposited with the California Public Utilities Commission (hereinafter referred to as "Commission") pending resolution of the dispute under the existing Commission procedures for resolving such disputes with the Utility. If a customer has a billing dispute with its—Marketer Aggregator, the customer will remain obligated to pay Utility charges in a timely manner. The—Marketer Aggregator shall not withhold payment of any such Utility charges pending resolution of any such disputes. If a Marketer Aggregator disputes a Utility bill, the disputed amount will be deposited with the Commission pending resolution of the dispute under existing Commission procedures. No termination of participation in BIP will occur for this dispute while the Commission is hearing the matter, provided that the—Marketer Aggregator has deposited the full amount in dispute with the Commission or with the Utility.

#### G. <u>UTILITY SERVICES</u>

The Utility shall continue to read customer meters and provide customers with all other regular utility services.

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# THIRD-PARTY MARKETERAGGREGATOR AGREEMENT FOR BASE INTERRUPTIBLE PROGRAM

Form 142-05215 (04-0603-11) may be. Marketer Aggregator acknowledges that each customer it represents is subject to the terms and conditions of Schedule BIP.

- 1.3 <u>Eligibility</u>. The customers represented by <u>MarketerAggregator</u> in BIP pursuant to a Customer Contract shall have committed, in the aggregate, to provide Utility with the Minimum Load Reduction (as defined in Electric Rule No. 29). If <u>MarketerAggregator</u> is unable to achieve or otherwise maintain the Minimum Load Reduction at any time, <u>MarketerAggregator</u> shall have fourteen (14) calendar days from the date of such inability to make up the committed load capacity in order to achieve the Minimum Load Reduction. If <u>MarketerAggregator</u> fails to achieve the Minimum Load Reduction within such fourteen (14) day period, this Agreement may be terminated, at Utility's sole discretion, and the terms and provisions for such termination as set forth in Electric Rule No. 29 shall apply.
- 1.4 <u>Definitions</u>. Except where explicitly defined herein, the capitalized terms used in this Agreement shall have the meanings set forth in Electric Rule No. 29 or Schedule BIP.

#### II. REPRESENTATIONS

- 2.1 <u>Representations and Warranties</u>. Each Party represents and warrants, individually for itself, as follows:
- 2.1.1 Such Party is and shall remain in compliance with all applicable laws and tariffs, including applicable CPUC requirements.
- 2.1.2 Each person executing this Agreement for such Party has the full power and authority to execute and deliver this Agreement and bind the entity on whose behalf this Agreement is executed.
- 2.1.3 The execution, delivery and performance of this Agreement have been duly authorized by all necessary action by such Party, and this Agreement constitutes such Party's valid and binding obligation, enforceable against such Party in accordance with its terms.
- 2.1.4 All duties under this Agreement shall be performed by such Party in accordance with applicable recognized professional standards.
  - 2.2 Additional Representations of Marketer Aggregator.
- 2.2.1 With each submission of a "Notice by Third Party Marketer Aggregator to Add or Delete Customers" adding a customer with respect to a service account, Marketer Aggregator represents and warrants, at the time of submission thereof and from time to time until Marketer Aggregator submits such notice for the removal of such customer from its representation, that:
  - (a) Such customer is eligible to participate in BIP and has elected to participate in BIP through MarketerAggregator;
  - (b) Such customer has (i) entered into a Base Interruptible Program Contract (Form No. 142-05207) with Utility, (ii) completed a "Notice to Add, Change or Terminate a Third-Party Marketer Aggregator for Base Interruptible Program" (Form No. 142-05216) and delivered such notice to Utility, and (iii) completed, executed and delivered to Utility all such other documents, instruments, consents and agreements as any be required for such participation in BIP and designation of such Marketer Aggregator (including, without limitation, an "Authorization To: Receive Customer Information or Act on a Customer's Behalf"); and

- Marketer Aggregator has entered into a Customer Contract with such (c) customer whereby such customer has authorized Marketer Aggregator to receive incentive payments from and to pay penalty charges to Utility on behalf of such customer in connection with such customer's participation in BIP.
- With each submission of a "Notice by Third Party Marketer Aggregator to Add or Delete Customers" dropping a customer with respect to a service account, Marketer Aggregator represents and warrants that:
  - Such customer has elected, or has been deemed to have elected, to (a) terminate its participation in BIP through MarketerAggregator with respect to such service account; and
  - Such customer has (i) completed a "Notice to Add, Change or Terminate a Third Party Marketer Aggregator for Base Interruptible Program" (Form No. 142-05216) and delivered such notice to Utility, and (ii) delivered all such other documents, instruments, consents and agreements as any be required for terminating Marketer Aggregator's representation of such customer in BIP with respect to such service account.

#### III. SECURITY

Marketer Aggregator acknowledges that it has provided, prior to the execution of this Agreement, any and all financial information of Marketer Aggregator required by Utility. Marketer Aggregator acknowledges that MarketerAggregator shall have a continuing obligation to provide such additional financial information to Utility upon the Utility's written request. Concurrently with the execution of this Agreement, and from time to time thereafter, MarketerAggregator shall deliver any security required by Utility pursuant to Electric Rule No. 29. Additionally, Marketer Aggregator represents and warrants that there has been no materially adverse change in its financial position from the date of the latest available and provided financial statements to the date hereof. In the event that (a) Utility determines that a material financial change in Marketer Aggregator has adversely affected Marketer Aggregator's creditworthiness subsequent to the execution of this Agreement, or (b) Marketer Aggregator does not provide the financial information or security requested by Utility, Utility may terminate this Agreement as of the day written notice is given or require Marketer Aggregator to provide additional security as provided in Electric Rule No. 29.

# IV. BILLING AND PAYMENT

- 4.1 Billing and Payment Terms. During the term of this Agreement, each Party shall make the payments or credits to the other Party as provided in Electric Rule No. 29.
- 4.2 Billing Address. Statements, invoices and billings shall be by first class U.S. mail to the following addresses:

If to Marketer Aggregator:		
If to Utility:		
	3	Form 142-05215

	Billing Collections	1 4
4.3 following acco	unts:	Payments shall be submitted electronically or by wire transfer to the
If to M	tility:	

# V. TERM

Disputed Bills or Charges. Marketer Aggregator agrees to resolve any disputed bills

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and/or charges in accordance with Electric Rule No. 29.

The term of this Agreement shall commence on the Effective Date and shall terminate three (3) years from the Effective Date, unless terminated earlier pursuant to Section 6 below.

#### VI. TERMINATION

- 6.1 <u>Termination by Utility</u>. If payment is not received within seven (7) days of the issuance of a past due notice, or upon any other breach of this Agreement by <u>MarketerAggregator</u>, <u>MarketerAggregator</u>'s participation in BIP pursuant to this Agreement will be subject to termination by Utility as set forth in Electric Rule No. 29. In addition, if Utility receives any notification that <u>MarketerAggregator</u> has filed or will be filing any type of bankruptcy, or is closing its business, <u>MarketerAggregator</u>'s participation in BIP pursuant to this Agreement shall be terminated immediately, subject, however, to any bankruptcy laws that take precedence of the rules set forth in Electric Rule No. 29 in respect of such bankruptcy. Utility's termination rights set forth in this Section 6.1 shall be in addition to any rights and remedies as may be provided by law or in equity as a result of <u>MarketerAggregator</u>'s failure to pay, breach, bankruptcy or other actions or omissions.
- 6.2 <u>Rights and Responsibilities</u>. The Parties' rights and responsibilities following termination of this Agreement are set forth in Electric Rule No. 29.

#### VII. LIMITATION OF LIABILITY

Utility's liability to <u>MarketerAggregator</u> for any loss, cost, claim, injury, liability or expense, including reasonable attorneys' fees, relating to or arising from any act or omission in Utility's performance of this Agreement shall be limited to the amount of direct damage actually incurred. In no event shall Utility be liable to <u>MarketerAggregator</u> for any indirect, special, consequential or punitive damages of any kind whatsoever, whether in contract, tort or strict liability.

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#### VIII. <u>INDEMNIFICATION</u>

- 8.1 <u>Indemnification of Utility.</u> To the fullest extent permitted by law, <u>Marketer Aggregator</u> shall indemnify, defend and hold harmless Utility, and its current and future parent company, subsidiaries, affiliates and their respective shareholders, officers, directors, employees, agents, representatives, successors and assigns (collectively, the "Indemnified Parties"), from and against any and all claims, actions, suits, proceedings, losses, liabilities, penalties, fines, damages, costs or expenses, including without limitation reasonable attorneys' fees (a "Claim"), resulting from (a) any breach of the representations, warranties, covenants and obligations of <u>Marketer Aggregator</u> under this Agreement, (b) any act or omission of <u>Marketer Aggregator</u>, whether based upon <u>Marketer Aggregator</u>'s negligence, strict liability or otherwise, in connection with the performance of this Agreement, or (c) any third party claims of any kind, whether based upon negligence, strict liability or otherwise, arising out of or connected in any way to <u>Marketer Aggregator</u>'s performance or nonperformance under this Agreement. This indemnification obligation shall not apply to the extent that such injury, loss or damage is caused by the willful misconduct of Utility or Utility's sole negligence.
- 8.2 <u>Defense of Claim.</u> If any Claim is brought against the Indemnified Parties, MarketerAggregator shall assume the defense of such Claim, with counsel reasonably acceptable to the Indemnified Parties, unless in the opinion of counsel for the Indemnified Parties a conflict of interest between the Indemnified Parties and MarketerAggregator may exist with respect to such Claim. If a conflict precludes MarketerAggregator from assuming the defense, then MarketerAggregator shall reimburse the Indemnified Parties on a monthly basis for the Indemnified Parties' defense costs through separate counsel of the Indemnified Parties' choice. If MarketerAggregator assumes the defense of the Indemnified Parties with acceptable counsel, the Indemnified Parties, at their sole option and expense, may participate in the defense with counsel of their own choice without relieving MarketerAggregator of any of its obligations hereunder.
- 8.3 <u>Surviva</u>l. <u>Marketer Aggregator</u>'s obligation to indemnify Utility under this Section 8 shall survive the termination of this Agreement.

# IX. NOTICES

9.1 <u>Mailing Address</u>. Except for statements, invoices and bills, which shall be submitted pursuant to Section 4 above, any formal notice, request, or demand concerning this Agreement shall be given in writing by Utility or <u>Marketer Aggregator</u>, and shall be (a) mailed by first-class mail, (b) mailed by registered, certified or other overnight mail, (c) delivered in hand, or (d) faxed with confirmation as set forth below, to the other party as indicated below, or to such other address as the parties may designate by written notice.

Fax :		
ility:		
t	Fax :tility:	

Fax:	

9.2 <u>Notices</u>. Notices delivered by hand shall be deemed received when delivered. Notices sent by facsimile shall be deemed received upon receipt but must be confirmed by mail within seventy-two (72) hours. Notices delivered by first class mail shall be deemed received forty-eight (48) hours (not including weekends and holidays) after deposit, postage prepaid, in the U.S. mail, or if certified, registered or overnight mailing is used, as acknowledged by the signed receipt of mailing.

# X. CONFIDENTIALITY

- 10.1 <u>Confidentiality</u>. <u>MarketerAggregator</u> shall not disclose any Confidential Information obtained pursuant to this Agreement to any third party, including any affiliates of <u>MarketerAggregator</u>, without the express prior written consent of Utility. As used herein, the term "Confidential Information" means proprietary business, financial and commercial information pertaining to Utility, customer names and other information related to customers, including energy usage data ("Customer Information"), any trade secrets and any other information of a similar nature, whether or not reduced to writing or other tangible form. Confidential Information shall not include: (a) information known to <u>MarketerAggregator</u> prior to obtaining the same from Utility; (b) information in the public domain at the time of disclosure by <u>MarketerAggregator</u>; (c) information obtained by <u>MarketerAggregator</u> from a third party who did not receive the same, directly or indirectly, from Utility; or (d) information approved for release by express prior written consent of an authorized representative of Utility.
- 10.2 <u>Use of Confidential Information</u>. <u>Marketer Aggregator</u> hereby agrees that it shall use the Confidential Information solely for the purpose of performing under this Agreement. <u>Marketer Aggregator</u> agrees to use at least the same degree of care <u>Marketer Aggregator</u> uses with respect to its own proprietary or confidential information, which in any event shall result in a reasonable standard of care to prevent unauthorized use or disclosure of the Confidential Information.
- 10.3 <u>Authorized Disclosure</u>. Notwithstanding any other provisions of this Section 10, <u>MarketerAggregator</u> may disclose any of the Confidential Information in the event, but only to the extent, that, based upon advice of counsel, <u>MarketerAggregator</u> is required to do so by the disclosure requirements of any law, rule, regulation or any order, decree, subpoena or ruling or other similar process of any court, governmental agency or regulatory authority. Prior to making or permitting any such disclosure, <u>MarketerAggregator</u> shall provide Utility with prompt written notice of any such requirement so that Utility (with <u>MarketerAggregator</u>'s assistance if requested by Utility) may seek a protective order or other appropriate remedy.
- 10.4 <u>Term.</u> The confidentiality provisions set forth in this Section 10 shall remain in full force and effect with respect to any Confidential Information until the date that is five (5) years after the date of disclosure of such Confidential Information; provided, further, that such confidentiality provisions shall remain in full force and effect with respect to any Customer Information in perpetuity.
- 10.5 <u>Remedies</u>. The Parties acknowledge that the Confidential Information is valuable and unique, and that damages would be an inadequate remedy for breach of this Section 10 and the obligations of <u>MarketerAggregator</u> are specifically enforceable. Accordingly, the Parties agree that in the event of a breach or threatened breach of this Section 10 by <u>MarketerAggregator</u>, Utility, its parent company(ies), subsidiaries and/or affiliates, who shall be third party beneficiaries of this Agreement, shall be entitled to seek an injunction preventing such breach, without the necessity of proving damages or posting any bond. Any such relief shall be in addition to, and not in lieu of, monetary damages or any other legal or equitable remedy available to Utility, its direct and indirect parent company(ies), subsidiaries or affiliates.

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# XI. MISCELLANEOUS

- 11.1 <u>Assignment</u>. This Agreement, and the rights and obligations granted and/or obtained by <u>MarketerAggregator</u> hereunder, shall not be further transferred or assigned by <u>MarketerAggregator</u> without the prior written consent of Utility. Any assignment in violation of this Section 11.1 shall be void.
- 11.2 <u>Independent Contractor</u>. <u>Marketer Aggregator</u> shall perform its obligations under this Agreement as an independent contractor, and no principal-agent or employer-employee relationship or joint venture or partnership shall be created with Utility.
- 11.3 <u>Choice of Law.</u> This Agreement shall be carried out and interpreted under the laws of the State of California, without regard to any conflict of law principles thereof. Except for matters and disputes with respect to which the CPUC is the proper venue for dispute resolution pursuant to applicable law or this Agreement, the federal and state courts located in San Diego County, California shall constitute the sole proper venue for resolution of any matter or dispute hereunder. The Parties submit to the exclusive jurisdiction of such courts with respect to such matters and disputes.
- 11.4 <u>Resolution of Disputes</u>. Any dispute arising between the Parties relating to the interpretation of this Agreement or to the performance of a Party's obligations hereunder shall be reduced to writing and referred to the Parties' designated representative for resolution. The Parties shall be required to meet and confer in an effort to resolve any such dispute. Any dispute or need for interpretation arising out of this Agreement which cannot be resolved after discussion between the Parties shall be submitted to the CPUC for resolution. If <u>MarketerAggregator</u> disputes a Utility bill, the resolution of such dispute shall be as set forth in Electric Rule No. 29.
- 11.5 <u>Waiver</u>. Any failure or delay by either party to exercise any right, in whole or part, hereunder shall not be construed as a waiver of the right to exercise the same, or any other right, at any time thereafter.
- 11.6 <u>Governmental Actions</u>. This Agreement shall be subject to the continuing jurisdiction of the CPUC and all orders, rules, regulations, decision or actions of any governmental entity (including a court) having jurisdiction over Utility or this Agreement. The Agreement is subject to such changes or modifications by the CPUC as it may direct from time to time in the exercise of its jurisdiction.
- 11.7 <u>Entire Agreement</u>. This Agreement, including the Attachments listed below, sets forth the entire understanding of the Parties as to the subject matter hereof, and supersedes any prior discussions, offerings, representations or understanding (whether written or oral), and shall only be superseded by an instrument in writing executed by both Parties. This Agreement shall not be modified by course of performance, course of conduct or usage of trade.

Attachment A: Schedule BIP

Attachment B: Electric Rule No. 29 – Third-Party Marketer Aggregator Aggregators for Base Interruptible Program

Attachment C: Notice by Third-Party Marketer Aggregator to Add or Delete Customers

11.8 <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

11.9 <u>Headings</u>. The headings contained in this Agreement are solely for the convenience of the Parties and shall not be used or relied upon in any manner in the construction or interpretation of this Agreement.

IN WITNESS WHEREOF, the authorized representatives of Utility and Marketer Aggregator have executed this Agreement as of the Effective Date.

UTILITY:	<b>MARKETER</b> AGGREGATOR:
SAN DIEGO GAS & ELECTRIC COMPANY	
By:	By:
Signature:	Signature:
Name:	Name:
Title:	Title:



# Notice to Add, Change or Terminate Third-Party Marketer Aggregator for Base Interruptible Program

Instructions: Customers of an Aggregator Third-Party Marketer-for the Base Interruptible Program (BIP) use this form to officially notify San Diego Gas & Electric Company (SDG&E) of your intent to add, change or terminate a designated Aggregator Third-Party Marketer. Type or print the information requested in the appropriate boxes, sign it, then submit it to SDG&E's Demand Response Programs Department. The Form must be submitted by U. S. mail, fax or e-mail; however, SDG&E may require that you mail the original as soon as possible, if you have faxed or e-mailed the Form.

Fax to: Demand Res Attn: BIP M 858-654636 E-mail: drp@sempra	anager -1298-5745	Mail signed original to:	Demand Response Programs Attn: BIP Manager San Diego Gas & Electric Company 8306-8335 Century Park Court CP42KCP12C San Diego, CA 92123	
SDG&E may give not	ice of its receipt of this Form to	Customer or Third Party Mar	<del>keter</del> Aggregator.	
Customer Name:				
Customer Account Number(s):				
Third Party Marketer Aggregator:				
Specify Requested Add/Change/Termina	tion:			
Effective date:		month/day/year		
Marketer Aggregator to written contract between	o act as its Third Party Marketer een Customer and such Third Parter Aggregator to represent Cust	FAggregator pursuant to applicate Marketer Aggregator. Cus	mer hereby designates the above named Third Party cable SDG&E tariff rules and rate schedules and the stomer understands that notification of the designation mitted by the Third Party Marketer Aggregator in order	
notice of change or te	rmination to SDG&E. Custome order to change or terminate the	er understands that Customer n	omer, in its sole discretion, by providing official written nust submit such written notice between November 1 tor, with such change or termination becoming effect	1
	is being sent to the other party. and contractual provisions. Thi		oject to the <del>Third Party Marketer</del> <u>Aggregator</u> complying ollowing:	ıg
Signature:			Date:	
Name:				
Title:				

Company			
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 Form 142-05216

 (04-0603-11)
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19149-E

Canceling Revised Cal. P.U.C. Sheet No.

16076-E

## SCHEDULE SLRP

Sheet 1

# SCHEDULED LOAD REDUCTION PROGRAM

#### **APPLICABILITY**

The Scheduled Load Reduction Program (SLRP) offers bill credits to business that commit to reducing their power by a set amount on pre-determined days from June 1 through September 30 regardless of whether there is an electricity shortage.

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# **TERRITORY**

Within the entire territory served by the Utility.

# **RATES**

SLRP Event Incentive Rate:

\$0.10 per kWh of Reduced Load for each SLRP Event

#### SPECIAL CONDITIONS

1. Definitions: The Definitions of terms used in this schedule are found either herein or in Rule 1, Definitions.

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- 2. Qualifying Customer: To participate in Schedule Load Reduction Program, non-residential customers must be served under a time-of-use (TOU) rate and have a monthly maximum demand of 100 kW or greater and be able to reduce a minimum fifteen percent (15%) of the Customer Specific Baseline Usage, with a minimum load reduction of 100kW.
  - Average Annual Demand: Is equal to the Customer's total kWh consumption for the a. previous 12 months, divided by 8760.
  - Essential Use Customers: Customers who are deemed essential under the Emergency Load b. Curtailment Plan as adopted in Decision 01-04-006 and Rulemaking 00-10-002, must submit a written declaration to the Utility that states that the customer is, to the best of that customer's understanding, an essential customer under CPUC rules and exempt from rotating outages. It must also state that the customer voluntarily elects to participate in the SLRP for part of its load based on adequate backup generation or other means to interrupt load upon request by the respondent Utility, while continuing to meet its essential needs. In addition, an essential customer may commit no more than 50% of its average peak load to interruptible programs.

#### 3. **Program Operation:**

Interruptible Period: SLRP participants will select, on the Scheduled Load Reduction a Program Contract, up to three specific SLRP Events. Each SLRP Event(s) corresponds with the day of the week and the time the customer agrees to reduce load (e.g., Tuesday Noon to 4:00 p.m., which is SLRP Event 2B, and Friday 4:00 p.m. to 8:00 p.m., which is SLRP Event 5C). Participants in SLRP will only be required to reduce load during the summer season (June 1 through September 30) during the time period that corresponds with the customer's elected SLRP Event(s) as stated on the Scheduled Load Reduction Program Contract. Participants must make an election of up to three time periods from among the following options per week, with no more than two of the same time periods, as limited by Special Condition 3b:

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(Continued) Issued by

Advice Ltr. No. 1783-E

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Lee Schavrien

Date Filed Effective

Mar 27, 2006 Apr 30, 2006

Vice President Regulatory Affairs

Resolution No.

Decision No. 06-03-024



19150-E

Canceling Revised Cal. P.U.C. Sheet No.

14674-E

## SCHEDULE SLRP

Sheet 2

#### SCHEDULED LOAD REDUCTION PROGRAM

# SPECIAL CONDITIONS (Continued)

3. Program Operation: (Continued)

> Interruptible Period: (Continued) a.

## **SLRP Events**

Day of Week	Time Period A 8:00 a.m. to Noon	Time Period B Noon to 4:00 P.M.	Time Period C 4:00 P.M. to 8:00 P.M.
1 - Mondays 2 - Tuesdays	1A 2A	1B 2B	1C 2C
3 - Wednesdays	3A	3B	3C
4 - Thursdays	4A	4B	4C
5 - Fridays	5A	5B	5C

- Interruptible Period Limitation: SLRP is limited to a maximum total of 30 megawatts (MW) of b. estimated contracted SLRP Event Reduction Amount for any given day, on a first-come, first-serve basis.
- Committed Load Reduction: The amount of load the customer commits to reduce during all C. hours of each selected SLRP Event, as designated on the customer's Scheduled Load Reduction Program Contract (Form 142-00012). The Committed Load Reduction amount must be at least fifteen percent (15%) of the Customer Specific Baseline usage, with a minimum load reduction of 100kW during the time period that corresponds with the customer's elected SLRP Event(s) as stated on the Scheduled Load Reduction Program Contract. For the duration of the Contract, participants are required to comply and reduce load each and every time their elected SLRP Event(s) (day of the week and corresponding elected time) occurs. The customer will not receive any type of notification to reduce load under the SLRP, but it is the customer's responsibility to take the appropriate actions necessary to comply with the load reduction when their elected SLRP Event(s) (day of the week and corresponding elected time) transpires.
- 4. Program Triggers: No trigger. Specific time selected by customer.
- 5. Program Availability: SLRP is available during the summer season (June 1 through September 30).
  - a. Limitation of Interruptible Periods: The Interruptible Period shall not exceed fifteen times per week, three each day, Monday through Friday, excluding Holidays.
  - Events are either from 8:00 a.m. to 12:00 noon, 12:00 noon to 4:00 p.m., or from 4:00 p.m. b. to 8:00 p.m. on a specific day of the week, as shown in Special Condition 3a (SLRP Events).
- Customer Specific Baseline: The Customer Specific Baseline is defined as the average consumption 6. for the hours of 8 a.m. to 8p.m. from within the immediately preceding ten similar days prior to the event. The Customer Specific Baseline will exclude days when the customer was paid on Schedule DBP, DBP-E, C&I Peak Day 20/20 and RBRP to reduce load, days subject to rotating outages, or days of the customer's SLRP events...

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Canceling Original Cal. P.U.C. Sheet No.

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#### SCHEDULE SLRP

Sheet 3

# SCHEDULED LOAD REDUCTION PROGRAM

# SPECIAL CONDITIONS (Continued)

- Incentive/Energy Payment: Incentive payments, subject to SLRP Non-Compliance, will be calculated 7. by multiplying the kilowatt-hour (kWh) SLRP Event Reduction Amount during each hour of the SLRP Event by an incentive level of \$0.10 per kWh for each SLRP Event. This credit will be applied to the bill of the customer on their otherwise applicable rate within 90 days of the SLRP Event. Under no circumstances will a customer receive more than one incentive payment for the same interrupted/curtailed load.
- Actual Demand Reduction: The Actual Demand Reduction equals the difference between the 8. Customer Specific Baseline and the recorded hourly kWh consumption during each hour that corresponds with the customer's elected SLRP Event(s) as stated on the Scheduled Load Reduction Program Contract, and the customer's actual energy usage during those same hours. Note, if this difference does not meet the Committed Load Reduction stated in Special Condition 3c, no incentive payment will be made.
- 9. Event Notification/Communication: The customer will not receive any type of notification to reduce load under the SLRP, but it is the customer's responsibility to take the appropriate actions necessary to comply with the load reduction when their elected SLRP Event(s) (day of the week and corresponding elected time) transpires.
- Event Cancellation: Once a SLRP Event has been initiated, compliance to curtailment is mandatory 10. under SLRP and the customer must reduce at least its Committed Load Reduction during its selected SLRP Event. SLRP may be closed by the Utility without notice when the interruptible program subscription limits set forth by the CPUC have been fully subscribed.
- 11. Contract Requirement/Request for Service: As a condition precedent to commencing service on this Schedule, customer shall submit to the Utility a completed and signed Scheduled Load Reduction Program Contract (Form 142-00012) and, if acceptable to Utility, the Utility shall sign and return the Contract to customer. A customer may not commence service on this Schedule until the Utility has signed and returned the Form Contract to the customer. The Contract shall expire on December 31 each year.
  - Contract Termination. Customers will remain on SLRP unless the participant discontinues a. participation in the Program. Customers shall provide written notification of such changes to the Utility during the November Review Period. Cancellation of contracts will take effect January 1 of the following year.
    - The Utility reserves the right to terminate Schedule SLRP, with CPUC approval and thirty days written notice to participants.
- Multiple Program Participation: SLRP participants are precluded from participating in the CAISO 12. Ancillary Services Load Program or the Utility's AL-TOU-CP, CPP, CPP-E, BIP, Summer A/C Saver, Celerity, OBMC and CPA-DRP programs. A customer may participate simultaneously in Schedule DBP. DBP E. C&I Peak Day 20/20 and RBRP. However, under no circumstance will a customer taking service under the above listed rate schedules and this Schedule receive more than one incentive payment for the same interrupted/curtailed load. Refer to Rule 41 for Multiple Program Participation criteria.
- 13. Termination of Schedule: This Schedule is in effect until modified or terminated in the rate design phase of SDG&E's next general rate case or similar proceeding.

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Canceling Revised Cal. P.U.C. Sheet No.

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## SCHEDULE SLRP

#### SCHEDULED LOAD REDUCTION PROGRAM

# **SPECIAL CONDITIONS** (Continued)

- 14. Metering Requirement: Customer's electric meter must be an interval data recorder with related telecommunications capability, compatible with the Utility's meter reading and telecommunications systems. If a customer meets the requirements of this tariff and does not have the correct metering equipment, the Utility will provide.
  - Metering equipment must be in operation for at least 10 days prior to participating in the a. program to establish a Customer Specific Baseline.
  - b. The communications equipment must be in place prior to the commencement of service under this Schedule.
  - Customers receiving an interval meter from the Utility through this Program will be able to C. continue to use it at no additional cost even after the Program is terminated, provided that the customer remains in the Program continuously for a minimum period of one year, and achieves its Committed Load Reduction in at least 10 SLRP events.
  - A customer who receives an interval meter through this Program, but later elects to leave d. the Program or who is terminated from SLRP for non-compliance prior to the one-year anniversary date, will reimburse the Utility for all expenses associated with the cost, installation and maintenance of the meter. Pursuant to Electric Rule 2, Section I, such charges will be collected as a one-time payment, and any failure to pay such charges will subject the customer to service termination pursuant to Electric Rule 11.E.
- Utility Testing: Customers are not required to participate in tests. 15.
- Utility Reporting: Utility will provide the Commission with a monthly report on the economics of this 16. Rate Schedule. The monthly report may contain information on individual customer performance. Customers on this tariff must agree to allow the Utility, the California Energy Commission (CEC) or its contracting agent to conduct a site visit for measurement and evaluation, and agree to complete any surveys needed to evaluate the SLRP program. Furthermore, customer shall provide all load data and background information, under appropriate confidentiality protections needed to complete this evaluation. The data will also be made available to academic researchers, under appropriate confidentiality protections, to facilitate the understanding of demand response.
- Failure to Reduce Energy: There are two possible types of non-compliance within SLRP, both of 17. which will result in non-payment of incentives available under SLRP:
  - a. Failure to Reduce Load. A participating customer, who does not reduce its load by the Committed Load Reduction during each hour of their elected SLRP Event Time Period, will not receive an incentive payment for any load reduction that they may have achieved during that SLRP Event. Failure to successfully comply in five (5) SLRP Events in a rolling 12month period will result in the removal of the participant from SLRP.
  - Load Shifting. The intent of SLRP is to achieve load reduction, not on-peak load shifting. b. Load shifting to the On-Peak period (12:00 p.m. to 6:00 p.m.) is considered non-compliance. Load shifting will be determined as follows:

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## SCHEDULE SLRP

Sheet 5

#### SCHEDULED LOAD REDUCTION PROGRAM

# SPECIAL CONDITIONS (Continued)

- 17. Failure to Reduce Energy (Continued)
  - b. Load Shifting: (Continued)
    - To determine if Load Shifting has occurred for customers with existing interval i. meters in operation for at least 12 months, and who do not meet the criteria specified in Section 2 below, the customer's average kWh consumption in the monthly On-Peak period from the same month of the previous year will be compared to the average monthly On-Peak kWh consumption of the Event(s). Energy consumption (kWh) in excess of 15% of the Committed Load Reduction above the kWh consumption during the same month of the previous year's On-Peak kWh consumption will cause that month's SLRP Event Reduction Payment to be reduced to zero.
    - For customers with less than 12 months of interval meter data, or for those ii. customers with interval meters whose current year's same month average usage varies by more than five percent (5%) of the previous year's same month average usage, the participant's energy usage (kWh) during the on-peak period for the following four weekdays after a curtailment, unaffected by program operations and excluding holidays, will be evaluated and cannot be greater than the customer's posted baseline amount by more than 15%. In addition, for customers who have elected a morning SLRP Option (Time Period A), the energy usage during the onpeak period for the day of the curtailment will also be evaluated and cannot exceed the customer's posted baseline amount by more than 15%. Failure to meet this limitation in any of the review days will cause the respective SLRP Event Reduction Payment for that event to be reduced to zero.
- 18. Emergency Generation Limitations: Not withstanding all other applicable Utility rules and rate schedules, customer may synchronize and operate its own generation in parallel with the Utility electric system up to 60 cycles to minimize service interruption during the transfer of electric service between the Utility electric system and the customer's Emergency Generation, such operation shall only occur during the period starting 15 minutes prior to and ending 15 minutes after a SLRP Event defined in this Schedule. The customer must review its interconnection plans with the Utility prior to operation of its generator in parallel with the Utility's system. In no event shall the customer operate its own generation in parallel with the Utility electric system during Utility service interruptions.

Upon termination or expiration of the term of this Schedule or Contract, customer agrees to either (1) dismantle all equipment necessary for customer's own generation to synchronize and operate in parallel with the Utility electric system for the purpose of electric service transfer from the Utility electric system to the customer's own generation, or (2) purchase and install a generator output meter meeting the Utility's standards and either comply with applicable tariffs or take service under a contract.

19. Dispute Resolution: Any dispute arising from the provision of service under this schedule or other aspects of the Schedule Load Reduction Program will be handled as provided for in the Utility's Rule 10, Disputes.

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19646-E Sheet 1

#### SCHEDULE CBP

#### CAPACITY BIDDING PROGRAM

#### **APPLICABILITY**

The Capacity Bidding Program ("Program") is a voluntary demand response program that offers customers various product options by which participants can earn incentive payments in exchange for reducing energy consumption when requested by the Utility. This schedule is available to commercial and industrial Utility customers, greater than 20 kW, receiving Bundled Utility service, Direct Access ("DA") service or Community Choice Aggregation ("CCA") service, and being billed on a Utility commercial, industrial or agricultural rate schedule. Service on this rate schedule must be taken in combination with the customer's otherwise applicable rate schedule. This schedule is also available to "Aggregators", defined herein as a third party entity that combines the loads or one or more Utility customer service accounts for the purpose of participating under this schedule. "Participant" as used in this schedule shall mean Utility customers participating in the Program or Aggregators participating in the Program.

#### **TERRITORY**

Within the entire territory served by the Utility.

#### **RATES**

All charges and provisions of a participating customer's otherwise applicable rate schedule shall apply. All charges and provisions of a customer participating through an Aggregator shall apply. Customers who elect to sign up directly with the Utility for participation in the CBP will be paid at a maximum of 80% of the available capacity payment. Aggregators will receive 100% of the capacity payment for the amount of load reduction received in any given month. The tables below set forth the rates that will be paid to Participants under this schedule for each Product type and will be fixed for a three year program cycle. period of two vears-2010 and 2011:

1. Load Reduction Incentive Payment, Day-Ahead Program Option (\$/kW-month):

Product	May	Jun	Jul	Aug	Sep	Oct
	2.43	6.55	<u>14.21</u>	<u>17.56</u>	<u>11.60</u>	3.50
1 to 4 hours	<del>5.37</del>	7.35	<del>13.54</del>	<del>15.11</del>	<del>9.77</del>	<del>4.71</del>
	2.74	7.39	<u>16.25</u>	19.99	<u>13.14</u>	<u>3.94</u>
2 to 6 hours	<del>5.51</del>	<del>7.54</del>	<del>14.07</del>	<del>15.63</del>	<del>10.06</del>	<del>4.81</del>
	<u>2.81</u>	<u>7.61</u>	<u>16.99</u>	20.76	<u>13.71</u>	<u>4.05</u>
4 to 8 hours	<del>5.65</del>	<del>7.76</del>	<del>14.71</del>	<del>16.23</del>	<del>10.49</del>	4.94

2. Load Reduction Incentive Payment, Day-Of Program Option (\$/kW-month):

Product	May	Jun	Jul	Aug	Sep	Oct
	<u>2.91</u>	7.85	<u>17.05</u>	21.08	13.92	420
1 to 4 hours	<del>6.44</del>	<del>8.82</del>	<del>16.25</del>	<del>18.13</del>	<del>11.72</del>	<del>5.65</del>
	3.29	<u>8.87</u>	<u> 19.50</u>	23.99	<u>15.77</u>	<u>4.73</u>
2 to 6 hours	6.61	<del>9.04</del>	<del>16.89</del>	<del>18.75</del>	<del>12.07</del>	<del>5.78</del>
	3.38	<u>9.13</u>	20.39	<u>24.91</u>	<u>16.45</u>	<u>4.86</u>
4 to 8 hours	6.79	<del>9.31</del>	<del>17.66</del>	<del>19.48</del>	<del>12.59</del>	<del>5.93</del>

3. Energy Usage Reduction Incentive Payment, All Program Options (cents/kWh):

The applicable rate to be applied in calculating the Energy Usage Reduction Incentive Payment is generally the daily Utility city gate natural gas price multiplied by the Program dispatch heat rate of 15,000 Btu/kWh for each kilowatt hour of energy reduction during Events. See Energy Usage

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#### **SCHEDULE CBP**

#### CAPACITY BIDDING PROGRAM

Reduction Incentive Payment Special Condition 6.b., for a further description of the calculation of the Energy Usage Reduction Incentive Payment, the development of the payment amount, and any payment amount adjustments.

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#### **SCHEDULE CBP**

Sheet 2

#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS

- 1. <u>Definitions</u>: The Definitions of terms used in this schedule are found either herein or in Rule 1, Definitions.
- Qualifying Customer: Service under this schedule is available to all non-residential time-of-use metered customers with demand in excess of 20 kW who elect to participate. Customers electing to participate in the Program must meet and comply with all of the requirements for such participation as set forth in this Schedule. Participating customers must have the required metering and operable communications equipment installed prior to and while participating in the Program. See Metering Requirement Special Condition 13, for additional details. Participating customers must have the required notification equipment in place prior to participation in the Program. See Event Notification/Communication Special Condition 8, for additional details.
  - a. <u>Aggregators</u>: In the event customers elect to participate in the Program via an Aggregator, such participation, and such Aggregator's participation in the Program, are subject to the terms and conditions of this schedule and Rule 30, Aggregators for the Capacity Bidding Program (CBP). Customers participating in the Program may designate only one Aggregator at a time for each participating meter and may change such designation only after the expiration of the Minimum Term in respect of such participating meter (unless terminated earlier, as set forth in Term, Special Condition 189). Prior to any changes in the designation or any termination of an Aggregator, a customer shall deliver to the Utility a "Notice to Add, Change or Terminate an Aggregator for Capacity Bidding Program" (Form 142-05302) notifying the Utility of such change or termination.
  - b. <u>Direct Access and Community Choice Aggregation Customers</u>: The Utility will no longer provide energy payments to <u>Participantste or Aggregators</u> for load reductions from DA or CCA customers during CBP events (\$0/kWh), due to the Scheduling Coordinator (SC)-to-SC trade and payment changes to the CBP program. <u>Participants and Aggregators</u> will still receive capacity payments from the Utility for DA or CCA customers' load as applicable under this Schedule. This provision does not prevent DA or CCA customers from entering into arrangements with their respective ESPs or CCAs to receive part or all of the energy benefits derived from the DA or CCA customers' load reductions during CBP events. The Utility will notify existing CBP <u>Participants and Aggregators</u> of this recent SC-to-SC program change.

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Sheet 3

#### **SCHEDULE CBP**

#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

3. <u>Program Operation</u>: Participants may nominate from among the following product types ("Products") under the Program:

Day- Ahead Products	Minimum Duration per Event	Maximum Duration per Event	Maximum Cumulative Event Duration Per Operational Month	Maximum Events Per Day
1-4 Hour	1 hour	4 hours	24	1
2-6 Hour	2 hours	6 hours	24	1
4-8 Hour	4 hours	8 hours	24	1

Day-Of Products	Minimum Duration per Event	Maximum Duration per Event	Maximum Cumulative Event Duration Per Operational Month	Maximum Events Per Day
1-4 Hour	1 hour	4 hours	24	1
2-6 Hour	2 hours	6 hours	24	1
4-8 Hour	4 hours	8 hours	24	1

Participants may nominate a different Product for each month of the Program's operational season (as set forth below), and any combination of Products for each such operational month in respect of the Nominated Load Reduction for such operational month. Each nominated Product must specify the portion of Nominated Load Reduction associated thereto without overlap between nominated Products for such operational month. Customer participation—in within Day-Ahead and/or Day-Of product types is defined in Rule 41.

The Program's operational season is from-May 1 through October 31.

Each operational month of the Program begins and ends at the beginning and ending of such calendar month.

The Program's operational days are Monday through Friday during the Program's operational season, excluding Utility holidays, as defined in Rule 1.

The Program's operational hours are from 11:00 a.m. to 7:00 p.m. during each of the Program's operational days.

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#### **SCHEDULE CBP**

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#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

3. Program Operation: (Continued)

- a. <u>Interruptible Period</u>: Each interruptible period ("Event") shall be the period of time during which the Utility has informed the Participant to curtail energy consumption by use of a communications process utilizing equipment described in the Event Notification/Communication Special Condition 8.
- b. <u>Interruptible Period Termination</u>: An Event will terminate upon notification by the Utility that the Event has ended, provided that an Event shall not continue longer than the duration prescribed therefore for the Product nominated by the Participant as described in the table above.
- c. Load Reduction Nominations:
  - i. <u>Generally</u>: Participants must submit monthly nominations for the reduction of load ("Load Reduction Nominations") to the Utility not later than <u>fifteen 5—(15)</u> calendar days prior to each Program operational month. <u>If the 5<sup>th</sup> calendar day prior to the operating month falls on a weekend or holiday, the nomination must be submitted by the preceding Friday</u>. All Load Reduction Nominations must allocate the amount of load reduction nominated among each Product nominated for such operational month (such nominated amount, the "Nominated Load Reduction"), without overlap of such Nominated Load Reduction among any such selected Product during such operational month. All Load Reduction Nominations are fixed for their associated operational month, but may change from operational month to operational month. Participants may not submit Load Reduction Nominations unless all requirements specified in this schedule have been met.
  - ii. Additional Aggregation Requirements: Load Reduction Nominations submitted by Aggregators must differentiate the amount of Nominated Load Reduction for each nominated Product therein between Bundled customers and DA/CCA customers. A participating customer may be included in only one Aggregator's aggregated customers group/portfolio for a given operational month. No later than five (5) fifteen (15) calendar days prior to the first day of the operational month, each Aggregator must specify which participating customers are to be included in each Product set forth in such Aggregator's Load Reduction Nomination for that operational month. The aggregated group of participating customers for each nominated Product will be used to determine the Baseline (see Customer-Specific Baseline Special Condition 5) and associated Program performance during that operational month.
- d. <u>Cancellation of Nominations</u>: Any changes or cancellations of Load Reduction Nominations for an operating month must be submitted by the Participant to the Utility not later than five (5) fifteen (15) calendar days prior to such operating month. If such fifth (5<sup>th</sup>) calendar day prior to such operating month falls on a weekend or holiday, such change or cancellation must be submitted by the preceding Friday. If a Participant fails to nominate a load reduction for a Product for a particular operational month, then the default Nominated Load Reduction therefore shall be zero (0).

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#### **SCHEDULE CBP**

#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

- 3. Program Operation: (Continued)
  - Third-Party Coordinators: Utility may contract with one or more third parties ("Coordinators") e. to assist Utility in the administering, coordination and/or scheduling of the Program and may designate such Coordinators as the sole point of contact in respect of such services by notifying the applicable Participants of such designation.
  - f. Program Triggers: The Utility may call an Event whenever the Utility's electric system supply portfolio reaches a resource dispatch equivalence of 15,000 Btu/kWh heat rate, or as Utility system conditions warrant.
- Program Availability: An Event may be called during the Program's operational season, operational 4. days and operational hours as defined above. The Program shall be limited as to its availability to Participants based on any limitations that the Utility has in getting communications systems in place. The Utility will staff as quickly as practical to provide this service to as many Participants as quickly as practical so long as communications are in place before service commences.
  - a. Limitation of Interruptible Periods: Events shall be limited as follows:
    - i. Day Ahead: For Participants selecting Day-Ahead Products, Events shall be called by the Utility with notice to such Participants not later than 3:00 p.m. on the day prior to the Event day. Notices will be issued by 3:00 p.m. on the business day immediately prior to a holiday or weekend if a CBP Event is planned for the first business day following the holiday or weekend. The Events shall not exceed the maximum duration (in hours) corresponding with the Product nominated by the Participant as set forth in the table above. The maximum cumulative duration of an Event during any operational month shall not exceed 24 hours.
    - ii. Day Of: For Participants selecting Day-Of Products, Events shall be called by the Utility with notice to such Participants by 9:00 a.m. but not later than two (2) hours prior to the commencement of the Event. The Events shall not exceed the maximum duration (in hours) corresponding with the Product nominated by the Participant as set forth in the table above. The maximum cumulative duration of an Event during any operational month shall not exceed 24 hours.
- 5. Customer Specific Baseline: In order to participate in the Program, Participants must have a valid baseline ("Baseline") for each Product nominated each day of an operational month, which Baseline must be established not later than fifteen 5 (15) calendar days prior to the first day of such operational month of the Program. Baselines shall be established as follows:
  - Participating Customers: The baseline is equal to the average electricity consumption (in a. MWh) of the participant during the applicable Program Event hour over the ten (10) immediately preceding similar days prior to the Program Event day. Similar days exclude weekends, holidays, and days, when load reductions were requested or when outages were called.

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#### **SCHEDULE CBP**

Sheet 5

#### CAPACITY BIDDING PROGRAM

Participating Customers: For customers enrolled in the Program directly with the Utility, the Baseline for any given operational day is defined as the average consumption for the hours of 11 a.m. to 7:00 p.m. for the ten (10) highest days from within the immediately preceding ten (10) similar non-holiday week days prior to the Event. The baseline will exclude weekends, holidays, and days when a customer was paid to reduce load, when load reductions were requested, was subject to a CPP event or when rotating outages are called.



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#### SCHEDULE CBP

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#### **CAPACITY BIDDING PROGRAM**

#### SPECIAL CONDITIONS (Continued)

- 5. Customer Specific Baseline: (Continued)
  - b. Aggregators: For Aggregators, the Baseline for each Product nominated for any given operational day is based on such Product's associated aggregated group of customers on such operational day. To calculate an aggregated baseline, baselines for individual meters included in the aggregation as described above are calculated and summarized to determine a produce level baseline for each Aggregator. The past ten (10) similar days will include Monday through Friday, excluding Utility holidays, and will additionally exclude days when a customer in such aggregated group was subject to a rotating outage, was subject to a CPP event, was subject to an OBMC event, was subject to any other demand response program event, was interrupted.

For Aggregators, the hourly load profile for the aggregated group of participating accounts on such day shall be determined by summing the hour by hour interval metering data for each participating account. The Baseline Hourly Energy Usage is equal to the average electricity consumption (in MWh) of the aggregated group of Participating Accounts during the applicable Program Event hour over the ten (10) immediately preceding similar days prior to the Program Event day. Similar days exclude weekends, holidays, and days when load reductions were requested or when outages were called.

- c. <u>Day-Of Adjustment</u>: Participants and Aggregators may choose to have their baselines calculated using a Day-Of Adjustment. The Day-Of Adjustment is calculated using the first three of the four hours prior to the event divided by the average load for the same hours using the last 10 weekdays for CBP participants. This Day-Of Adjustment shall not exceed plus or minus 2040% of the Participant's calculated baseline. Participants must elect or optin to receive this adjustment. The Participant/Aaggregator may select a baseline or a baseline with a day-of adjustment for each service account when they nominate for the operating month.
- 6. <u>Incentive/Energy Payment and Non-Performance Penalties</u>:
  - a. Load Reduction Incentive Payment:
    - i. If the Utility does not call an Event during an operational month, the amount of the Load Reduction Incentive Payment for such operational month is calculated by summing, for each Product nominated in such operational month, the product of the Nominated Load Reduction for such nominated Product and the Load Reduction Incentive Payment rate as set forth in the table above for such nominated Product.
    - ii. If the Utility calls one or more Events during an operational month, the amount of the Load Reduction Incentive Payment for such operational month is calculated by summing the Adjusted Event Capacity Payment Amounts for each Product nominated in such operational month, which is calculated as follows: The "Unadjusted Hourly Event Capacity Payment Amount" for each Product nominated in such operational month is equal to the product of the Nominated Load Reduction for such nominated Product and the Load Reduction Incentive Payment rate as set forth in the table above for such nominated Product, divided by the number of Event

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#### **SCHEDULE CBP**

#### CAPACITY BIDDING PROGRAM

hours called during such operational month, and the "Adjusted Event Capacity Payment Amount" for each such Product nominated in such operational month is calculated based on the Actual Load Reduction (as defined in the Actual Load Reduction Special Condition 7) for such Product in such operational month:

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#### **SCHEDULE CBP**

#### **CAPACITY BIDDING PROGRAM**

#### SPECIAL CONDITIONS (Continued)

6. <u>Incentive/Energy Payment and Non-Performance Penalties:</u> (Continued)

Actual Load Reduction for such Product	Adjusted Event Capacity Payment Amount for such Product
More than 100 percent of Nominated Load Reduction for such Product	Payment equal to 100 percent of Unadjusted Event Capacity Payment Amount for such Product
90 – 100 percent of Nominated Load Reduction for such Product	Payment calculated by prorating between 90 and 100 percent of Unadjusted Event Capacity Payment Amount for such Product
75 – 89.99 percent of Nominated Load Reduction for such Product	Payment equal to 50 percent of Unadjusted Event Capacity Payment Amount for such Product.
50 – 74.99 percent of Nominated Load Reduction for such Product	<u>Zero (0)</u>
Less than 50 percent of Nominated Load Reduction for such Product	Penalty (i.e. negative amount) equal to 50 percent of Unadjusted Event Capacity Payment Amount for such Product
	Penalty equal to (.50 minus Actual Reduction divided by Nominated Load reduction) multiplied by the Unadjusted Event Capacity Payment Amount.

If the Load Reduction Incentive Payment amount as calculated above yields an amount less than zero (i.e. a penalty amount), then such penalty amount shall be payable by Participant to the Utility in accordance with the Disbursement of Payments Special Condition 6.c. below.

#### b. <u>Energy Usage Reduction Incentive Payment:</u>

- If the Utility does not call an Event in respect of a Product during an operational month, no monthly Energy Usage Reduction Incentive Payment in respect of such Product is payable for such operational month.
- ii. If the Utility calls one or more Events during an operational month in respect of a Product, bundled customers enrolled directly with SDG&E or directly with SDG&E or through Aggregators are eligible to receive the amount of monthly Energy Usage Reduction Incentive Payment for such Product that is equal to the Actual Load Reduction for such Product times a 15,000 Btu/kWh heat rate times the Utility's delivered natural gas price ("Delivered Natural Gas Price") for each operational day of each such Event (which Delivered Natural Gas Price is determined by the posted California Border Natural Gas Index Price plus the cost of applicable transportation

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#### **SCHEDULE CBP**

**CAPACITY BIDDING PROGRAM** 

to the Utility's service territory, and adjusted as follows:

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#### SCHEDULE CBP

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#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

- 6. <u>Incentive/Energy Payment and Non-Performance Penalties:</u> (Continued)
  - b. <u>Energy Usage Reduction Incentive Payment</u>: (Continued)
    - ii. (Continued)
      - (a) Shortfall Energy Amount: In the event of a Shortfall Energy Amount (as defined in the Actual Load Reduction Special Condition 8) in respect of such Product for such operational month, the monthly Energy Usage Reduction Incentive Payment amount for such Product will be reduced by an amount equal to the product of such Shortfall Energy Amount and the greater of (i) the Energy Usage Reduction Incentive Payment Price or (ii) the CAISO hourly SP15 ex-post energy price for each Event hour. If such calculation of Energy Usage Reduction Incentive Payment amount for such Product yields an amount less than zero (i.e. a penalty amount), then such penalty amount shall be payable by Participant to the Utility in accordance with the Disbursement of Payments Special Condition 6c.
        - (i) the Utility's Delivered Natural Gas Price is not in the right units. EURP price and ISO ex-post are both in \$/MWh.
      - (b) Excess Energy: In the event that the Actual Load Reduction for such Product during an Event in such operational month exceeds the Nominated Load Reduction for such Product in such operational month (such excess amount, "Excess Energy Amount"), then the Energy Usage Reduction Incentive Payment amount for such Product will be increased by an amount equal to the product of such Excess Energy Amount and the Utility's Delivered Natural Gas Price during the Event; provided, however, that, for purposes of calculating the Energy Usage Reduction Incentive Payment amount, the Excess Energy Amount for a Product cannot exceed 50 percent of the Nominated Load Reduction for such Product.

Direct Access and Community Choice Aggregation are not eligible for the Energy Usage Reduction Incentive payments nor subject to Energy Usage Reduction penalties.

#### c. <u>Disbursement of Payments</u>:

i. Customers: For customers participating directly with the Utility, the CBP incentive will be calculated based on the customer's Actual Load Reduction. In no case will a customer receive a credit payment for a given hour if it does not meet the minimum energy reduction threshold, as nominated in the monthly Load Reduction Nomination. The billing and payment of Load Reduction Incentive Payments and Energy Usage Reduction Incentive Payments, as well as all other amounts, charges, penalties and fees due and payable in respect of this Program, to or from customers participating in the Program will be paid by the Utility within 30 days after the end of the event operating month, but no more than 60 days after the end of the event operating month will be made in the course of customer's normal billing for services with the Utility consistent with Utility's tariffs.

Customers: For customers participating directly with the Utility, the CBP incentive will be

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 Effective
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 Senior Vice President

 Decision No.
 Regulatory Affairs
 Resolution No.

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Cal. P.U.C. Sheet No.

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**SCHEDULE CBP** 

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#### CAPACITY BIDDING PROGRAM

Sheet 8

calculated based on the customer's Actual Load Reduction. In no case will a customer receive a credit payment for a given hour if it does not meet the minimum energy reduction threshold, as nominated in the monthly Load Reduction Nomination. The billing and payment of Load Reduction Incentive Payments and Energy Usage Reduction Incentive Payments, as well as all other amounts, charges, penalties and fees due and payable in respect of this Program, to or from customers participating in the Program will be paid by the Utility within 30 days after the end of the event operating month, but no more than 60 days after the end of the event operating month will be made in the course of customer's normal billing for services with the Utility consistent with Utility's tariffs.



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#### **SCHEDULE CBP**

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#### **CAPACITY BIDDING PROGRAM**

#### SPECIAL CONDITIONS (Continued)

Disbursement of Payments (continued)

- 6. Incentive/Energy Payment and Non-Performance Penalties: (Continued)
  - ii. <u>Aggregators</u>: The billing and payment of Load Reduction Incentive Payments and Energy Usage Reduction Incentive Payments, as well as all other amounts, charges, penalties and fees due and payable under this schedule, Rule 30 or the Aggregator Contract, to or from Aggregators are set forth in Rule 30.
  - d. Failure to Pay: In the event a participating customer fails to pay any amounts to the Utility as and when due, the rules governing such failure to pay, and the Utility's and such customer's rights and obligations therewith, as set forth in the Utility's tariff will apply. In the event a participating customer fails to pay any amounts to the Utility as and when due, the rules governing such failure to pay, and the Utility's and such customer's rights and obligations therewith, as set forth in the Utility's tariff will apply. The Aggregator Contract will set forth the rights and obligations of the Utility and the Aggregator party thereto in respect of any failure to pay amounts as and when due to the Utility.
  - e. Customer Liability for Aggregator Failure to Pay. If, due to a Shortfall Energy Amount which results in a penalty to be paid by an Aggregator to Utility in respect of Load Reduction Incentive Payments and/or Energy Usage Reduction Incentive Payments, such Aggregator fails (or is deemed to have failed) to fully pay to Utility such penalty amounts, and any security provided by such Aggregator is insufficient to cover such outstanding penalty amounts, then each customer represented by such Aggregator under the applicable Aggregator Contract will be liable for its pro rata share of such outstanding penalty amounts, which pro rata share will be based upon such customer's contribution to such Shortfall Energy Amount.
  - If, due to a Shortfall Energy Amount which results in a penalty to be paid by an Aggregator to Utility in respect of Load Reduction Incentive Payments and/or Energy Usage Reduction Incentive Payments, such Aggregator fails (or is deemed to have failed) to fully pay to Utility such penalty amounts, and any security provided by such Aggregator is insufficient to cover such outstanding penalty amounts, then each customer represented by such Aggregator under the applicable Aggregator Contract will be liable for its pro rata share of such outstanding penalty amounts, which pro rata share will be based upon such customer's contribution to such Shortfall Energy Amount.
- 7. <u>Actual Load Reduction</u>: A Participant's "Actual Load Reduction" during an Event for each Product nominated by such Participant is equal to:
  - a. In the case that such Participant is a customer participating directly with the Utility, the extent that the actual energy usage of such customer during such Event for such Product is less than such customer's Baseline for such Product.
  - In the case that such Participant is a customer participating directly with the Utility, the extent that the actual energy usage of such customer during such Event for such Product is less than such customer's Baseline for such Product.
  - b. In the case that such Participant is an Aggregator, the extent that the actual energy usage of the aggregated group of customers during such Event for such Product is less than such aggregated group of customer's Baseline for such Product.

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#### SCHEDULE CBP

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#### CAPACITY BIDDING PROGRAM

In the event the Actual Load Reduction for such Product during an Event in such operational month is less than the Nominated Load Reduction for such Product in such operational month, such deficient amount is the "Shortfall Energy Amount" for such Product in such operational month.

8. <u>Event Notification/Communication</u>: Participating entities (customers, aggregators, ESPs) must, at their own expense, have access to the Internet and an e-mail address to receive Event notifications via the Internet. In addition, Participants must have, at their own expense, an alphanumeric device that is capable of receiving a text message sent via the Internet. Participants will be notified via the Utility's designated Internet website. As a courtesy, notification may also be given via pager, e-mail, or cellular telephone; however, the official notification shall be posted to the Utility's designated Internet website in accordance with the time parameters set forth herein. No Participating entity may participate in the program until all of these requirements have been met.



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#### SCHEDULE CBP

#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

- 9. <u>Event Cancellation</u>: Once an Event has been initiated in accordance with the provisions herein, the Event will not be cancelled; however, the Event may be terminated as provided in the Interruptible Period Termination Special Condition 3.b.
- 10. <u>Contract Requirement</u>: Participating <u>customers –and eustomers and Aggregators</u> must execute all applicable agreements prescribed by the Utility prior to participation under this schedule. Necessary agreements may include the following:
  - a. <u>For Utility customers, a Capacity Bidding Program Customer Contract (Form 142-05300)</u> ("Customer Contract");

For Utility customers, a Capacity Bidding Program Customer Contract (Form 142-05300) ("Customer Contract");

- b. For Aggregators, an Aggregator Agreement for Capacity Bidding Program (CBP) (Form 142-05301) ("Aggregator Contract").
- 11. Multiple Program Participation: Eligibility for Multiple Program Participation is defined in Rule 41. For example, customers receiving service under Schedule EECC-CPP-D are eligible to concurrently participate in the Day-Of option of the Capacity Bidding Program. If a Day-Of CBP event is called on the same day a Schedule EECC-CPP-D event is active or is scheduled to be active, CPP-D customers participating in CBP shall not be eligible to receive the Energy Usage Reduction Incentive Payment under this schedule. Additionally, to the extent usage reduction occurring on a Day-Of CBP event has been provided by customers receiving service under Schedule CPP-D, individual customers and Aggregators shall not be eligible for the Energy Usage Reduction Incentive Payment for such usage reduction. Customers or Aggregators with customers who have dual program combination shall be subject to the same Capacity Performance Incentives and Non-Performance Penalties, described above.
- 12. <u>Termination of Schedule</u>: This schedule is in effect until modified or terminated through the Utility's Demand Response Programs portfolio Application proceeding, or through the annual program evaluation and modification process most recently adopted by the Commission in D. 06-03-024.
- 13. <u>Metering Requirement</u>: Each participating customer must have an approved interval meter and approved meter communications equipment installed and read by SDG&E. The Utility must have access to the customer's meter data on a daily basis for a period of no less than ten (10) calendar days to establish a valid customer specific baseline.

An approved interval meter is capable of recording usage in 15-minute intervals and being read remotely by the Utility.

For customers with billed maximum demand of 20 kW or greater during one of the past 12 billing months, the Utility will, if required, provide and install the metering and communication equipment at no cost to the customer.

14. <u>Utility Testing</u>: At the Utility's discretion, up to two (2) Events may be called during each operational season for the purpose of testing of the Program ("Test Events"). All notification protocols, as well as all applicable payments and penalties, will apply during Test Events. The only difference between a Test Event and an actual Event is the absence of the prerequisite trigger condition of 15,000

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#### **SCHEDULE CBP**

Sheet 10

#### CAPACITY BIDDING PROGRAM

Btu/kWh heat rate criteria. A Test Event may be scheduled on a day-ahead or a day-of basis on any applicable weekday, within the operational parameters contained herein. If an actual event is not initiated by late summer a test event will be called during the peak months of August or September.



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2129-E-A

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#### **SCHEDULE CBP**

Sheet 11

#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

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- 15. Utility Reporting: The Utility will provide the Commission with a periodic report on the performance results of this schedule. The report may contain information on individual Participant performance. which will be provided to the Commission under applicable confidentiality protections. Participants must agree to allow the Utility, the California Energy Commission ("CEC") and their respective agents, employees, contractors, representatives and designees to conduct a site visit for measurement and evaluation, and agree to complete any surveys needed to evaluate the Program. Furthermore, Participants shall provide all load data and background information, under appropriate confidentiality protections needed to complete this evaluation. The data may also be made available to academic researchers, under appropriate confidentiality protections, to facilitate the understanding of demand response.
- Failure to Reduce Energy: A failure to comply with an Event will result in the applicable penalty 16. provisions (including the payment therefore by the Participant incurring such penalty) being applied as described herein.
- Emergency Generation Limitations: Participating customers are prohibited from achieve achieving 17. energy reductions by operating backup or onsite standby generation. The customer will be solely responsible for meeting all environmental, legal and other regulatory requirements for the operation of such generation. Not withstanding all other applicable Utility Rules and Tariffs, such customer may synchronize and operate its own standby generation in parallel with the electric system up to 60 cycles to minimize service interruption during the transfer of electric service between the Utility electric system and the customer's back-up or standby generation. Such operation shall only occur during the period starting 15 minutes prior to and ending 15 minutes after an Event defined in this Schedule. Such customer must receive approval of their interconnection plans from Utility prior to operation of their generator in parallel with Utility's system. In no event shall such customer operate its own standby generation in parallel with the Utility electric system during Utility service interruptions.

Upon termination or expiration of the term of this schedule or associated Customer Contract, such customer agrees to either (i) dismantle all equipment necessary for customer's own standby generation to synchronize and operate in parallel with the Utility electric system for the purpose of electric service transfer from the Utility electric system to such customer's own standby generation, or (ii) purchase and install a generator output meter meeting Utility's standards and either comply with applicable tariffs or take service under a contract.

<del>18</del>17. Dispute Resolution: Any dispute arising from the provision of service under this schedule or other aspects of the Program will be handled as provided for in the Utility's Rule 10, Disputes.

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#### **SCHEDULE CBP**

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#### CAPACITY BIDDING PROGRAM

#### SPECIAL CONDITIONS (Continued)

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4918. Term: Except as set forth below, each Participant must remain in the Program for a minimum of 12 calendar months ("Minimum Term") unless (a) the Program expires earlier, or (b) such Participant's Program contract with the Utility (that is, the Customer Contracts in the case of customers and Aggregator Contracts in the case of Aggregators) expires or terminates earlier. After the expiration of the Minimum Term, Participants may terminate its Program contract with the Utility and its participation in the Program by submitting to the Utility written notification of such termination, which termination shall be effective on the date that is the later of (i) the beginning of the calendar month that is immediately after the expiration of the Minimum Term, and (ii) the beginning of the calendar month that is closest to but at least thirty (30) calendar days after the Utility receives such notification.

In the event of termination of an Aggregator Contract between an Aggregator and Utility, the customers whom such Aggregator represented under such Aggregator Contract will have fourteen (14) days from the date of receipt of notice of such termination by Utility in which to continue their participation in the Program in respect to the represented service meters through another Aggregator or directly with Utility without the designation of an Aggregator. or directly with Utility without the designation of an Aggregator. Customers electing the foregoing must submit a "Notice to Add, Change or Terminate an Aggregator" (Form 142-05302) setting forth their election. If such customer does not submit such form by such 14-day period, such customer will be deemed to have elected to continue on the Program with respect to such service meters directly with the Utility without being represented by an Aggregator. with respect to such service meters directly with the Utility without being represented by an Aggregator.

12C0 Issued by Date Filed Oct 30, 2006

Advice Ltr. No. 1799-E-A Lee Schavrien Effective Oct 30, 2006

Vice President
Decision No. Regulatory Affairs Resolution No.

# AGGREGATOR AGREEMENT FOR CAPACITY BIDDING PROGRAM (CBP)

This Aggregator Agreement for Capacity Bidding Program ("Agreement") is made and entered into this day of, 200 (the "Effective Date"), by and between San Diego Gas &
Electric Company ("Utility"), a corporation organized and existing under the laws of the State o
California, and
WHEREAS, the California Public Utilities Commission ("CPUC") has authorized the Capacity Bidding Program (CBP) ("Program") as set forth in Schedule CBP, which is attached hereto at Attachment A and incorporated herein by this reference, whereby Utility pays participating Utility customers monthly incentive payments in return for pre-determined load reduction; and
WHEREAS, the CPUC has authorized the participation of third-party aggregators to aggregate the load reductions of one or more participating Utility customers, and Aggregator desires to participate in the Program as such a third-party aggregator, subject to the applicable Utility tariff rules and rate schedules.
NOW, THEREFORE, in consideration of the mutual undertakings set forth below, the Parties agree as follows:
I. <u>AGGREGATOR STATUS</u>
1.1 <u>Status.</u> Aggregator's status under this Agreement shall be as an "Aggregator" under Schedule CBP and Electric Rule 30, which is attached hereto as Attachment B and incorporated herein by this reference. Aggregator shall be subject to, and shall comply with, all applicable tariff rules and regulations (which rules and regulations are hereby incorporated herein as an integral part of this Agreement), including, but not limited to, the rates, terms and conditions set forth in Rule 30 and Schedule CBP, as such rules and regulations may be amended from time to time.
1.2 <u>Eligibility</u> . As a condition to participating in the Program as an "Aggregator," Aggregator shall meet the eligibility and qualification requirements set forth in Rule 30.
1.3 <u>Definitions</u> . Except where explicitly defined herein, the capitalized terms used in this Agreement shall have the meanings set forth in Rule 30 or Schedule CBP.
II. <u>REPRESENTATIONS</u>
2.1 <u>Representations and Warranties</u> . Each Party represents, warrants and covenants, individually for itself, as follows:
2.1.1 Such Party is and shall remain in compliance with all applicable laws and tariffs, including applicable CPUC requirements.
2.1.2 Each person executing this Agreement for such Party has the full power and

authority to execute and deliver this Agreement and bind the entity on whose behalf this Agreement is

executed.

- 2.1.3 The execution, delivery and performance of this Agreement have been duly authorized by all necessary action by such Party, and this Agreement constitutes such Party's valid and binding obligation, enforceable against such Party in accordance with its terms.
- 2.1.4 All duties under this Agreement shall be performed by such Party in accordance with applicable recognized professional standards.

#### 2.2 Additional Representations of Aggregator.

- 2.2.1 With each submission of a "Notice by Aggregator to Add or Delete Customers" (Form 142-05303), which is attached hereto as Attachment C and incorporated herein by reference, adding a customer with respect to a service account to its representation, Aggregator represents and warrants, at the time of submission thereof and from time to time until Aggregator submits such notice for the removal of such customer from its representation, that:
  - (a) Such customer is otherwise eligible to participate in the Program and has elected to participate in the Program through Aggregator;
  - (b) Such customer has (i) entered into a Customer Contract (Form 142-05300) with Utility, (ii) completed a "Notice to Add, Change or Terminate a Third-Party Aggregator for Capacity Bidding Program" (Form 142-05302) and delivered such notice to Utility, and (iii) completed, executed and delivered to Utility all such other documents, instruments, consents and agreements as any be required for such participation in the Program and for the designation of such Aggregator (including, without limitation, an "Authorization To: Receive Customer Information or Act on a Customer's Behalf"; and
  - (c) Aggregator has entered into an Aggregator/Customer Contract with such customer consistent with the requirements of this Agreement.
- 2.2.2 With each submission of a "Notice by Aggregator to Add or Delete Customers" (Form 142-05303) dropping a customer with respect to a service account from its representation, Aggregator represents and warrants that:
  - (a) Such customer has elected, or has been deemed to have elected, to terminate its participation in the Program through Aggregator with respect to such service account; and
  - (b) Such customer has (i) completed a "Notice to Add, Change or Terminate an Aggregator for Capacity Bidding Program" (Form 142-05302) and delivered such notice to Utility, and (ii) delivered all such other documents, instruments, consents and agreements as any be required for terminating Aggregator's representation of such customer in the Program with respect to such service account.

#### III. SECURITY

Aggregator acknowledges that it has provided, prior to the execution of this Agreement, any and all financial information of Aggregator required by Utility. Aggregator acknowledges that Aggregator shall have a continuing obligation to provide such additional financial information to Utility upon the Utility's written request. Concurrently with the execution of this Agreement, and from time to time thereafter, Aggregator shall deliver any security required by Utility pursuant to Rule 30. Additionally, Aggregator represents and warrants that there has been no materially adverse change in its financial

position from the date of the latest available and provided financial statements to the date hereof. In the event that (a) Utility determines that a material financial change in Aggregator has adversely affected Aggregator's creditworthiness subsequent to the execution of this Agreement, or (b) Aggregator does not provide the financial information or security requested by Utility, Utility may terminate this Agreement as of the day written notice is given or require Aggregator to provide additional security as provided in Rule 30.

#### IV. BILLING AND PAYMENT

- 4.1 <u>Billing and Payment Terms</u>. During the term of this Agreement, each Party shall make the payments or credits to the other Party, and in such amounts, as provided in Schedule CBP.
- 4.2 <u>Billing Address</u>. Statements, invoices and billings shall be by first class U.S. mail to the following addresses:

If to Ag	ggregator:
If to Ut	ility:
	San Diego Gas & Electric Company Billing Collections Manager
4.3 following accord	Payment Address. Payments shall be submitted electronically or by wire transfer to the unts:
If to Aş	ggregator:
If to Ut	ility:
4.4	Disputed Bills or Charges Aggregator agrees to resolve any disputed bills and/or

4.4 <u>Disputed Bills or Charges</u>. Aggregator agrees to resolve any disputed bills and/or charges in accordance with Rule 30.

#### V. TERM

This Agreement shall become effective on the date that this Agreement is signed by both Parties ("Effective Date"), and remains effective unless terminated sooner by the terms herein. The term of this Agreement shall continue for at least twelve (12) calendar months after the Effective Date ("Minimum Term"), or unless (a) the program is extended beyond the current program cycle () the Program expires earlier (which is expected to occur on December 31, 2008 unless the Program is extended by the CPUC),

or (b) this Agreement terminates earlier as set forth in this Agreement.

After the expiration of the Minimum Term, either Party may terminate this Agreement by written notification to the other Party of such termination, which termination shall be effective on the date that is the later of (i) the beginning of the calendar month that is immediately after the expiration of the Minimum Term, and (ii) the beginning of the calendar month that is closest to but at least thirty (30) calendar days after the non-terminating Party receives such notification.

In the case of a three (3) year commitment for participation in CBP, SDG&E agrees to provide as much protection as possible to allow the Aggregator to maintain the current program rates throughout that period for those customers enrolled.

#### VI. EVENTS OF DEFAULT

- 6.1 <u>Events of Default</u>. An "Event of Default" shall mean:
  - if Aggregator defaults on the due and timely payment of monies when the same shall become due and payable, and such default shall continue for a period of seven (7) days after written notice thereof by Utility to Aggregator; or
  - (b) if Aggregator defaults in the performance or observance on its part of any other covenant, obligation or agreement contained in this Agreement to be performed by Aggregator (other than the payment of monies, which is governed by clause (a) above), and such default shall continue for a period of sixty (60) days after written notice thereof to Aggregator by Utility; provided, however, that if such default shall be such that it cannot be remedied by Aggregator within such sixty (60) day period, it shall not constitute an Event of Default if corrective action to cure such default is commenced by Aggregator within such sixty (60) day period and Aggregator diligently pursues the cure of such default until the default is remedied; or
  - (c) if Aggregator (i) makes an assignment or any general arrangement for the benefit of creditors, or (ii) files a petition or otherwise commence, authorize, or acquiesce in the commencement of a proceeding or case under any bankruptcy or similar law for the protection of creditors or have such petition filed or proceeding commenced against it which is not dismissed within thirty (30) days of such filing.
- Remedies. If an Event of Default occurs and is continuing, Utility may terminate this Agreement and exercise any other remedies available to it at law, in equity, by statute or otherwise, subject, however, to the dispute resolution procedures set forth in Section 11.4 below. In addition, if an Event of Default for the payment of monies occurs and is continuing where Aggregator is the Defaulting Party, then the Utility may make a draw under any security provided by Aggregator for any such outstanding amounts due and payable from Aggregator.
- 6.3 <u>Remedies Not Exclusive</u>. No remedy by the terms of this Agreement conferred upon or reserved to Utility is intended to be exclusive of any other remedy, but each and every

- such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or existing at law or in equity or by statute.
- 6.4 <u>Rights and Responsibilities Following Termination</u>. The Parties' rights and responsibilities following termination of this Agreement are set forth in Rule 30.

#### VII. LIMITATION OF LIABILITY

Utility's liability to Aggregator for any loss, cost, claim, injury, liability or expense, including reasonable attorneys' fees, relating to or arising from any act or omission in Utility's performance of this Agreement shall be limited to the amount of direct damage actually incurred. In no event shall Utility be liable to Aggregator for any indirect, special, consequential or punitive damages of any kind whatsoever, whether in contract, tort or strict liability. In addition, in no event shall Utility, its shareholders, directors, employees, agents or subcontractors (including, without limitation, suppliers of the Utility System) (collectively "Utility Parties") be liable to Aggregator for any claims, losses, liabilities or damage (whether direct, indirect, consequential, special, incidental, or punitive damages under any other theories including, but not limited to, tort, contract, breach of warranty or strict liability) for (i) the design, manufacture, installation, operation, maintenance, performance or demonstration of the Utility System, or (ii) the acts or omissions of, or the performance or non-performance of, Aggregator or any customer under any Aggregator/Customer Contract to which such customer is party. The "Utility System" includes any metering, meter communication equipment, Internet communication software, energy demand management software and related goods and services. Utility shall not be responsible for any business loss, actual or implied, as a result of the partial or complete failure of the Utility System to operate.

#### VIII. INDEMNIFICATION

- 8.1 <u>Indemnification of Utility</u>. To the fullest extent permitted by law, Aggregator shall indemnify, defend and hold harmless Utility, and its current and future parent company, subsidiaries, affiliates and their respective shareholders, officers, directors, employees, agents, representatives, successors and assigns (collectively, the "Indemnified Parties"), from and against any and all claims, actions, suits, proceedings, losses, liabilities, penalties, fines, damages, costs or expenses, including without limitation reasonable attorneys' fees (a "Claim"), resulting from (a) any breach of the representations, warranties, covenants and obligations of Aggregator under this Agreement, (b) any act or omission of Aggregator, whether based upon Aggregator's negligence, strict liability or otherwise, in connection with the performance of this Agreement, or (c) any third party claims of any kind, whether based upon negligence, strict liability or otherwise, arising out of or connected in any way to Aggregator's performance or nonperformance under this Agreement. This indemnification obligation shall not apply to the extent that such injury, loss or damage is caused by the willful misconduct of Utility or Utility's sole negligence.
- 8.2 <u>Defense of Claim.</u> If any Claim is brought against the Indemnified Parties, Aggregator shall assume the defense of such Claim, with counsel reasonably acceptable to the Indemnified Parties, unless in the opinion of counsel for the Indemnified Parties a conflict of interest between the Indemnified Parties and Aggregator may exist with respect to such Claim. If a conflict precludes Aggregator from assuming the defense, then Aggregator shall reimburse the Indemnified Parties on a monthly basis for the Indemnified Parties' defense costs through separate counsel of the Indemnified Parties' choice. If Aggregator assumes the defense of the Indemnified Parties with acceptable counsel, the Indemnified Parties, at their sole option and expense, may participate in the defense with counsel of their own choice without relieving Aggregator of any of its obligations hereunder.
  - 8.3 Survival. Aggregator's obligation to indemnify Utility under this Section 8 shall survive

the termination of this Agreement.

#### IX. NOTICES

9.1 <u>Mailing Address</u>. Except for statements, invoices and bills, which shall be submitted pursuant to Section 4 above, any formal notice, request, or demand concerning this Agreement shall be given in writing by Utility or Aggregator, and shall be (a) mailed by first-class mail, (b) mailed by registered, certified or other overnight mail, (c) delivered in hand, or (d) faxed with confirmation as set forth below, to the other party as indicated below, or to such other address as the parties may designate by written notice.

If to A	ggregator:	
	Fax :	
If to U	tility:	
	Fax :	

9.2 <u>Notices</u>. Notices delivered by hand shall be deemed received when delivered. Notices sent by facsimile shall be deemed received upon receipt but must be confirmed by mail within seventy-two (72) hours. Notices delivered by first class mail shall be deemed received forty-eight (48) hours (not including weekends and holidays) after deposit, postage prepaid, in the U.S. mail, or if certified, registered or overnight mailing is used, as acknowledged by the signed receipt of mailing.

#### X. CONFIDENTIALITY

- 10.1 <u>Confidentiality</u>. Aggregator shall not disclose any Confidential Information obtained pursuant to this Agreement to any third party, including any affiliates of Aggregator, without the express prior written consent of Utility. As used herein, the term "Confidential Information" means proprietary business, financial and commercial information pertaining to Utility, customer names and other information related to customers, including energy usage data ("Customer Information"), any trade secrets and any other information of a similar nature, whether or not reduced to writing or other tangible form. Confidential Information shall not include: (a) information known to Aggregator prior to obtaining the same from Utility; (b) information in the public domain at the time of disclosure by Aggregator; (c) information obtained by Aggregator from a third party who did not receive the same, directly or indirectly, from Utility; or (d) information approved for release by express prior written consent of an authorized representative of Utility.
- 10.2 <u>Use of Confidential Information</u>. Aggregator hereby agrees that it shall use the Confidential Information solely for the purpose of performing under this Agreement. Aggregator agrees to use at least the same degree of care Aggregator uses with respect to its own proprietary or confidential information, which in any event shall result in a reasonable standard of care to prevent unauthorized use or disclosure of the Confidential Information.

- 10.3 <u>Authorized Disclosure</u>. Notwithstanding any other provisions of this Section 10, Aggregator may disclose any of the Confidential Information in the event, but only to the extent, that, based upon advice of counsel, Aggregator is required to do so by the disclosure requirements of any law, rule, regulation or any order, decree, subpoena or ruling or other similar process of any court, governmental agency or regulatory authority. Prior to making or permitting any such disclosure, Aggregator shall provide Utility with prompt written notice of any such requirement so that Utility (with Aggregator's assistance if requested by Utility) may seek a protective order or other appropriate remedy.
- 10.4 <u>Term.</u> The confidentiality provisions set forth in this Section 10 shall remain in full force and effect with respect to any Confidential Information until the date that is ten (10) years after the date of disclosure of such Confidential Information; provided, further, that such confidentiality provisions shall remain in full force and effect with respect to any Customer Information in perpetuity.
- 10.5 <u>Remedies</u>. The Parties acknowledge that the Confidential Information is valuable and unique, and that damages would be an inadequate remedy for breach of this Section 10 and the obligations of Aggregator are specifically enforceable. Accordingly, the Parties agree that in the event of a breach or threatened breach of this Section 10 by Aggregator, Utility, its parent company(ies), subsidiaries and/or affiliates, who shall be third party beneficiaries of this Agreement, shall be entitled to seek an injunction preventing such breach, without the necessity of proving damages or posting any bond. Any such relief shall be in addition to, and not in lieu of, monetary damages or any other legal or equitable remedy available to Utility, its direct and indirect parent company(ies), subsidiaries or affiliates.

#### XI. MISCELLANEOUS

- 11.1 <u>Assignment</u>. This Agreement, and the rights and obligations granted and/or obtained by Aggregator hereunder, shall not be further transferred or assigned by Aggregator without the prior written consent of Utility. Any assignment in violation of this Section 11.1 shall be void.
- 11.2 <u>Independent Contractor</u>. Aggregator shall perform its obligations under this Agreement as an independent contractor, and no principal-agent or employer-employee relationship or joint venture or partnership shall be created with Utility.
- 11.3 <u>Choice of Law.</u> This Agreement shall be carried out and interpreted under the laws of the State of California, without regard to any conflict of law principles thereof. Except for matters and disputes with respect to which the CPUC is the proper venue for dispute resolution pursuant to applicable law or this Agreement, the federal and state courts located in San Diego County, California shall constitute the sole proper venue for resolution of any matter or dispute hereunder. The Parties submit to the exclusive jurisdiction of such courts with respect to such matters and disputes.
- 11.4 <u>Resolution of Disputes</u>. Any dispute arising between the Parties relating to the interpretation of this Agreement or to the performance of a Party's obligations hereunder shall be reduced to writing and referred to the Parties' designated representative for resolution. The Parties shall be required to meet and confer in an effort to resolve any such dispute. Any dispute or need for interpretation arising out of this Agreement which cannot be resolved after discussion between the Parties shall be submitted to the CPUC for resolution. If Aggregator disputes a Utility bill, the resolution of such dispute shall be as set forth in Rule 30.
- 11.5 <u>Waiver</u>. Any failure or delay by either party to exercise any right, in whole or part, hereunder shall not be construed as a waiver of the right to exercise the same, or any other right, at any time thereafter.

- 11.6 <u>Governmental Actions</u>. This Agreement shall be subject to the continuing jurisdiction of the CPUC and all orders, rules, regulations, decision or actions of any governmental entity (including a court) having jurisdiction over Utility or this Agreement. The Agreement is subject to such changes or modifications by the CPUC as it may direct from time to time in the exercise of its jurisdiction.
- 11.7 <u>Entire Agreement</u>. This Agreement, including the Attachments listed below, sets forth the entire understanding of the Parties as to the subject matter hereof, and supersedes any prior discussions, offerings, representations or understanding (whether written or oral), and shall only be superseded by an instrument in writing executed by both Parties. This Agreement shall not be modified by course of performance, course of conduct or usage of trade.

Attachment A: Schedule Capacity Bidding Program (CBP)
Attachment B: Rule 30 – Aggregators for Capacity Bidding Program (CBP)
Attachment C: Notice by Aggregator to Add or Delete Customers

- 11.8 <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.
- 11.9 <u>Headings</u>. The headings contained in this Agreement are solely for the convenience of the Parties and shall not be used or relied upon in any manner in the construction or interpretation of this Agreement.

IN WITNESS WHEREOF, the authorized representatives of Utility and Aggregator have executed this Agreement as of the Effective Date.

UTILITY:	AGGREGATOR:
SAN DIEGO GAS & ELECTRIC COMPANY	
By:	By:
Signature:	Signature:
Name:	Name:
Title:	Title:

## ATTACHMENT A

Schedule Capacity Bidding Program (CBP)



## ATTACHMENT B

 $Rule \ \ 30-Aggregators \ for \ Capacity \ Bidding \ Program \ (CBP)$ 



## ATTACHMENT C

## Notice by Aggregator to Add or Delete Customers





SDG&E CUSTOMER INFORMATION			
Project ID	SDG&E Customer #:	SDG&E Customer Name:	
<b>Customer Address:</b>		City:	Zip Code:
Facility Contact:		Phone:	Email:
Lead Contact Person:		Phone:	Email:

ENGINEER / AUDITING FIRM INFORMATION			
Engineering / Auditing Company Name			
Mailing Address			
Mailing City	Mailing St	Mailing Zip	
Name of Engineer / Auditor	Engineer's California P.E License Number	Tax ID#	
Phone Number 1	Fax Number	Tax Status C	Corporation
Phone Number 2	Email Address	*Cost of Technical Audit	
Date(s) of Technical Audit	# of Days Required to Complete Technical Audit	# of Hours Required to Complete Technical Audit	

<sup>\*</sup>Note: SDG&E cannot pay more than \$100 per kW of approved demand response load reduction.



CUSTOMER CERTIFICATION			
certify that I am an authorized representative of ("Company") [must match name of SDG&E Customer provided above]. I acknowledge hat the Authorized Engineering / Auditing Firm Representative identified above conducted an on-site audit of each of the Company's facilities listed in this Report. certify that, to the best of my knowledge, the information provided to the Authorized Engineering / Auditing Firm Representative by the Company is accurate. I lso acknowledge that the measures described are ones that we are willing and able to implement during Demand Response events.			
Printed Name of Authorized Customer Representative			
Signature of Authorized Customer Representative			
Date			
E	NGINEER / AUDITOR CERTIFICATION		
I certify that, to the best of my knowledge, the information contained in this Technical Audit Report ("Report") is accurate. I further certify that my findings, analysis and recommendations are based on detailed, on-site audit(s) of each of the SDG&E Customer's facilities listed in this Report, as well as the information provided by the utility and the Customer in connection with this Report.			
Printed Name of Authorized Engineering / Auditing Firm Representative			
Signature of Authorized Engineering / Auditing Firm Representative			
Date			
(Optional)			

Engineer Certification Stamp Here



If Summaries exceed space allotted, please include information in the Appendix.

Customer Interview Summary				
Briefly describe the date, customer representative, engineer / auditor, and topics discussed during the customer interview				
E-2124 - D				
Facilities Description and Operations Summary				
Briefly summarize the customers facilities and operations schedule and activities				
Energy Systems Summary				
Briefly describe the energy systems for the customer's facilities				



Demand Response Measures Summary			
Briefly describe the recommended demand response measures and the customer's willingness to implement these measures			
Energy Efficiency Measures Summary			
Briefly describe the recommended energy efficiency measures and the customer's willingness to implement these measures			



## **Discrepancies Chart**

Step 1: Review and verify the information on the provided Technical Assessment discrepancies and missing information in the chart below. Additional discrepancies can be included in the Appendix of this report.

uisc .	aiscrepancies can be included in the Appendix of this report.				
		Field Name (Provided In Verified			
	Service Account	Customer Information	Provided	Revised	
#	#	Form)	Information	Information	Comments
1		,			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Cor	Comments:				



### **Instructions**

Step 1

Complete the discrepancies chart above

Step 2

For each measure identified, complete the three tables (measure information, demand response projection and energy efficiency reduction). The measure may be a demand response measure, an energy efficiency measure or both. For example, open office area fluorescent lighting may be demand responsive through shutting off a portion of the fixtures and may be a potential energy efficiency project through conversion from T12 lamps to T8 lamps. The demand response measure should be evaluated without consideration of the energy efficiency measure. The energy efficiency measure should include a demand reduction component and energy consumption component. In a lighting retrofit, there should be a both a permanent demand reduction and ongoing energy usage reduction. Each measure considered should be marked as feasible or not feasible.

Step 3

Project the total values for the feasible demand responsiveness and energy efficiency measures, including days to implement, installation cost, demand reduction and energy consumption reduction (energy efficiency only).

Step 4

Attach detailed calculations in the Appendices.



#### Energy Efficiency Opportunities Checklist (Add opportunities, as identified)

<u>HVAC</u>	Yes/No	<u>Lighting</u>	Yes/No	Process	Yes/No
Air Conditioning Unit Replacement		Fluorescent Lamp Retrofit		Office Equipment Sleep Mode	
Variable Speed Drive - Fan		Electronic Ballast Upgrade		Kiln/Oven Upgrade	
Variable Speed Drive - Pump		Incandescent Lamp Replacement			
High Efficiency Packaged DX Unit		Metal Halide to CFL Retrofit			
High Efficiency Packaged Heat Pump		Fluorescent Delamping		<u>Other</u>	
CV to VAV Conversion		LED Exit Lighting		Gas Water Heater Upgrade	
Use Evaporative Cooling		High Efficiency Signage		Electric Water Heater Upgrade	
Indirect Evaporative Cooling				Cooking Appliances Conversion	
Demand-based Ventilation				Cooking Appliances Upgrade	
High Efficiency Boiler		Controls		Add Window Film	
Economizer Cycle		Programmable Thermostats		Install/Add Roof/Wall Insulation	
High Efficiency Motor Retrofit		Equipment Timeclock		Refrigeration	
Multi-Speed Motor Retrofit		Energy Management System		Light Colored Roof Surface	
High Efficiency Compressor		Selective Switching		Passive Solar Heating	
High Efficiency Chiller		Hydronic Temperature Reset		Window Replacement	
Cooling Tower Fan Pony Motor		Temperature Setback		Roller/BlindsDrapery Shading	
Fume Hood Airflow Reduction		Duty Cycling - Unoccupied		Infiltration Reduction	
Attic Exhaust Fans		Boiler OSA Temperature Reset		Vestibule Air Lock	
Add/Increase Duct Insulation		Add Occupancy Sensors		Compressed Air Reduction	
Low Pressure Drop Filters		<u>Daylighting</u>		Process Vacuum Reduction	
Reduce Overventilation		Vending Machine		Low Flow Plumbing Fixtures	
Steam Trap Optimization		Charging Stations		High Efficiency Transformers	
Add Low Load Boiler		Demand Limiting Controller		Power Factor Correction	
Thermal Energy Storage				Optimize Defrost Control	
Ceiling Fans				Increase Refrigeration Insulation	
ECM Fan Motor Upgrade				Refrigeration Space Doors/Curtains	
				Compressor Floating Head Pressure Control	
				Pool Dehumidification Heat Recovery	
				Pool Cover	
				Elevator Optimization	
				Add Skylights	



	Step 2: Provide information for all Energy Systems and determine if demand response and/or energy efficiency measures					
		are feasible and identify any		50 00		
	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures	
	Enter Service Account # from Verified Customer Info	Describe the control systems	Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	Feasible Not Feasible	
	Strategy Comments		Implementation Barriers			
1	Identify control system purpose, hours of operation, and area served		Identify and implementation barriers including financial, technical, customer willingness.			
	Energy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		Lighting Panels and Room to Room Lighting (Complete all that Apply)			
	Unit ID (i.e. AC-1)	Load Factor	Floor#	Watts per Fixture		
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures		
	Volts Max kW Per Unit		Circuit #	rcuit # Voltage		
	Running Amps Motor Efficiency		SPC Code Measured Amps			
Provi	Provide a description of all demand response measures recommended by the Engineering/Auditing Firm. The Projected Max kW and Average kW Reduction					

must be calculated for the SDG&E Summer Peak Period and not off peak reduction. (SDG&E Summer Peak is 11AM to 6 PM May 1st through September 30th) **Energy System/Service Response Measure Measure Description** Account **Projected Reduction** Reference Control System and Describe the demand response measure Automated Max KW Service Account from Above ☐ Semi-Automated Manual Avg KW Implementation Time Implementation Implementation Analysis **Financial Estimate Estimate** Brief Description of Implementation Plan, Dependencies, and Rebound Increase Reduction Measures \$ Days **Reduction Time Period Demand Load Reduction Calculation** Describe the time period for on Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this peak demand reduction report.



Pro	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.					
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction		
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW		
1	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction		
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh		
	Implementation Time Estimate	Energy Efficiency Calculation				
	Days	Provide calculations on Appendix pages to this report				

	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info	Describe the control systems	Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	Feasible Not Feasible
	Strategy Comments		Implementation Barriers		
2	Identify control system purpose, hours of operation, and area served		Identify and implementation barriers including financial, technical, customer willingness.		
	Energy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		Lighting Panels and Room to Room Lighting (Complete all that Apply)		
	Unit ID	Load Factor	Floor #	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts Max kW Per Unit		Circuit # Voltage		
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	



	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction		
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated	Max KW		
			Semi-Automated Manual	Avg KW		
	Implementation Analysis		Implementation Financial Estimate	Implementation Time Estimate		
2	Brief Description of Implementation					
			\$	days		
	Reduction Time Period	Demand Load Reduction Calculation				
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.				



Pro	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.					
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction		
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW		
2	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction		
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh		
	Implementation Time Estimate	Energy Efficiency Calculation				
	days	Provide calculations on Appendix pages to this report				



	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info		Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	☐ Feasible ☐ Not Feasible
		Strategy Comments	Implem	entation Barriers	
3	Identify control system purpose, hours of operation, and area served		Identify and implementation barriers including financial, technical, customer willingness.		
	E	Energy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		and Room to Room Light plete all that Apply)	ting
	Unit ID	Load Factor	Floor#	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts	Max kW Per Unit	Circuit #	Voltage	
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	

	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction		
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated Semi-Automated	Max KW		
			Manual	Avg KW		
		Implementation Analysis	Implementation Financial Estimate	Implementation Time Estimate		
3	Brief Description of Implementation	Plan, Dependencies, and Rebound Increase Reduction Measures	\$	days		
	Reduction Time Period	Demand Load Reduction Calculation				
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.				



Pro	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.					
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction		
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW		
3	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction		
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh		
	Implementation Time Estimate	Energy Efficiency Calculation				
	days	Provide calculations on Appendix pages to this report				



	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info		Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	Feasible Not Feasible
		Strategy Comments	Implementation Barriers		
4	Identify control system purpose, hours of operation, and area served		Identify and implementation barriers including financial, technical, customer willingness.		
	Energy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		Lighting Panels and Room to Room Lighting (Complete all that Apply)		
	Unit ID	Load Factor	Floor#	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts	Max kW Per Unit	Circuit #	Voltage	
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	

	Energy System/Service Account	Service Measure Description		Projected Reduction		
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated Semi-Automated	Max KW		
			Manual	Avg KW		
	Implementation Analysis		Implementation Financial Estimate	Implementation Time Estimate		
4	Brief Description of Implementation	Plan, Dependencies, and Rebound Increase Reduction Measures	\$	days		
	Reduction Time Period	Demand Load Reduction Calculation				
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.				

Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.



	Energy System	Energy System Measure Description		Projected Permanent Summer Peak Demand Reduction
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW
4	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh
	Implementation Time Estimate	Energy Efficiency Calculation		
	days	Provide calculations on Appendix pages to this report		

Servic Accoun	Energy System Description	on Location	Energy System Demand Response Type Measures		
Enter Servi Account # f Verified Customer I	rom	Identify location of control syste and area served	m		
	Strategy Comments	Ir	Implementation Barriers		
5 Identify con	trol system purpose, hours of operation, and area serv	ldentify and implementation bar willingness.	riers including financial, technical, customer		
	Energy Systems, Motors, and Miscellaneous L (Complete all that Apply)		Lighting Panels and Room to Room Lighting (Complete all that Apply)		
Unit ID	Load Factor	Floor #	Watts per Fixture		
Horse Pow	er # of Units	Panel ID/Room #	# of Fixtures		
Volts	Max kW Per Unit	Circuit #	Voltage		
Running A	mps Motor Efficiency	SPC Code	Measured Amps		



	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction			
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated Semi-Automated	Max KW			
			Manual	Avg KW			
		Implementation Analysis	Implementation Financial Estimate	Implementation Time Estimate			
5	Brief Description of Implementation Plan, Dependencies, and Rebound Increase Reduction Measures  \$ days						
	Reduction Time Period	Demand Load Reduction Calculat	ion				
	Describe the time period for on peak demand reduction						
Dona	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.						
Pro	vide a description of energy effic	ciency measures identified by the Engineering/Auditing Firm.					
Pro	vide a description of energy effic	ciency measures identified by the Engineering/Auditing Firm.		Projected Permanent			
Pro	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction			
Pro			Controls  EMCS Equipment Programmable Manual Other	Summer Peak Demand Reduction  KW			
5	Energy System  Describe Energy System	Measure Description  Describe the energy efficiency measure  Implementation Analysis	EMCS Equipment Programmable Manual	Summer Peak Demand Reduction			
	Energy System  Describe Energy System	Measure Description  Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other Implementation	Summer Peak Demand Reduction  KW  Projected Annual Consumption			
	Energy System  Describe Energy System	Measure Description  Describe the energy efficiency measure  Implementation Analysis	EMCS Equipment Programmable Manual Other Implementation Financial Estimate	Summer Peak Demand Reduction  KW  Projected Annual Consumption Reduction			



	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info		Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	Feasible Not Feasible
		Strategy Comments	Implementation Barriers		
6	Identify control sys	stem purpose, hours of operation, and area served	Identify and implementation barriers including financial, technical, customer willingness.		
	Eı	nergy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		nd Room to Room Light lete all that Apply)	ing
	Unit ID	Load Factor	Floor #	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts	Max kW Per Unit	Circuit #	Voltage	
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	

	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction			
	Reference Control System and Service Account from Above	Describe the demand response measure	☐ Automated ☐ Semi-Automated	Max KW			
			Manual	Avg KW			
		Implementation Financial Estimate	Implementation Time Estimate				
6	Brief Description of Implementation	Plan, Dependencies, and Rebound Increase Reduction Measures	\$	days			
	Reduction Time Period	Demand Load Reduction Calculation					
	Describe the time period for on peak demand reduction  Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.						



Pro	vide a description of energy effici	iency measures identified by the Engineering/ Auditing Firm.		
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW
6	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh
	Implementation Time Estimate	Energy Efficiency Calculation		
	days	Provide calculations on Appendix pages to this report		

Servi Accou		Energy System Description	Location	Energy System Type	Demand Response Measures
Enter Serv Account # Verified Customer	from	e control systems	Identify location of control system and area served	☐ Heating and AC ☐ Lighting Controls ☐ Process Systems ☐ Energy Systems ☐ Other	Feasible Not Feasible
		Strategy Comments	Implementation Barriers		
7 Identify co	ntrol system purpose	, hours of operation, and area served	Identify and implementation barriers including financial, technical, customer willingness.		
	Energy Syster	ns, Motors, and Miscellaneous Load (Complete all that Apply)	Lighting Panels and Room to Room Lighting (Complete all that Apply)		ting
Unit ID		Load Factor	Floor#	Watts per Fixture	
Horse Po	ver	# of Units	Panel ID/Room #	# of Fixtures	
Volts		Max kW Per Unit	Circuit #	Voltage	
Running A	Amps	Motor Efficiency	SPC Code	Measured Amps	



	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction			
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated Semi-Automated	Max KW			
			Manual	Avg KW			
		Implementation Financial Estimate	Implementation Time Estimate				
7	Brief Description of Implementation						
			\$	days			
	Reduction Time Period	Demand Load Reduction Calculation					
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.					

Pro	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.					
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction		
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW		
7	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction		
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh		
	Implementation Time Estimate	Energy Efficiency Calculation				
	days	Provide calculations on Appendix pages to this report				



	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info		Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	☐ Feasible ☐ Not Feasible
		Strategy Comments	Implementation Barriers		
8	Identify control sys	stem purpose, hours of operation, and area served	Identify and implementation barriers in willingness.	cluding financial, technical, customer	
	E	nergy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		and Room to Room Light blete all that Apply)	ting
	Unit ID	Load Factor	Floor #	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts	Max kW Per Unit	Circuit #	Voltage	
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	

	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction			
	Reference Control System and Service Account from Above	Describe the demand response measure	☐ Automated ☐ Semi-Automated	Max KW			
			Manual	Avg KW			
		Implementation Financial Estimate	Implementation Time Estimate				
8	Brief Description of Implementation	Plan, Dependencies, and Rebound Increase Reduction Measures					
			\$	days			
	Reduction Time Period	Demand Load Reduction Calcul	ation				
	Describe the time period for on peak demand reduction						



Pro	vide a description of energy effic	iency measures identified by the Engineering/ Auditing Firm.		
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW
8	Implementation Analysis		Implementation Financial Estimate	Projected Annual Consumption Reduction
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh
	Implementation Time Estimate	Energy Efficiency Calculation		
	days	Provide calculations on Appendix pages to this report		

	Service Account #	Energy System Description	Location	Energy System Type	Demand Response Measures
	Enter Service Account # from Verified Customer Info	Describe the control systems	Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	Feasible Not Feasible
		Strategy Comments	Implementation Barriers		
9	Identify control sys	stem purpose, hours of operation, and area served	Identify and implementation barriers in willingness.	ncluding financial, technica	al, customer
	Energy Systems, Motors, and Miscellaneous Load (Complete all that Apply)		Lighting Panels and Room to Room Lighting (Complete all that Apply)		
	Unit ID	Load Factor	Floor#	Watts per Fixture	
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures	
	Volts	Max kW Per Unit	Circuit #	Voltage	
	Running Amps	Motor Efficiency	SPC Code	Measured Amps	



	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction			
	Reference Control System and Service Account from Above	Describe the demand response measure	Automated Semi-Automated	Max KW			
			Manual	Avg KW			
		Implementation Analysis	Implementation Financial Estimate	Implementation Time Estimate			
9	Brief Description of Implementation						
			\$	days			
	Reduction Time Period	Demand Load Reduction Calculation					
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and provide calculations on Appendix pages to this report.					

Pro	Provide a description of energy efficiency measures identified by the Engineering/Auditing Firm.								
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction					
	Describe Energy System	Describe the energy efficiency measure	☐ EMCS ☐ Equipment Programmable ☐ Manual ☐ Other	KW					
9		Implementation Financial Estimate	Projected Annual Consumption Reduction						
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh					
	Implementation Time Estimate								
	days Provide calculations on Appendix pages to this report								



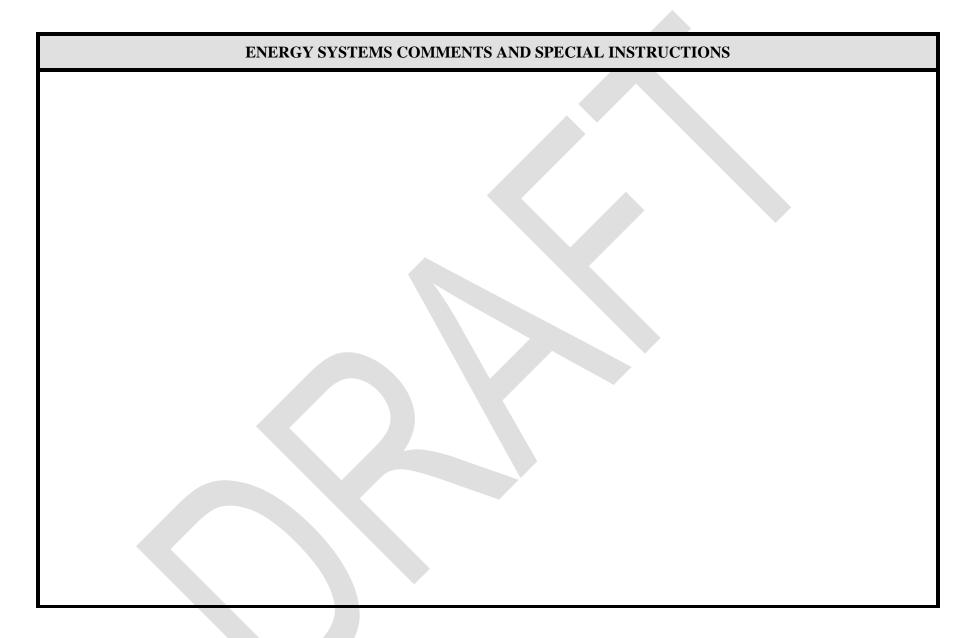
	Service Account #	Energy System Description	Location Energy System Demand Respon Type Measures				
	Enter Service Account # from Verified Customer Info	Describe the control systems	Identify location of control system and area served	Heating and AC Lighting Controls Process Systems Energy Systems Other	☐ Feasible ☐ Not Feasible		
		Strategy Comments	Implementation Barriers				
10	Identify control sys	stem purpose, hours of operation, and area served	Identify and implementation barriers including financial, technical, customer willingness.				
	Е	nergy Systems, Motors, and Miscellaneous Load (Complete all that Apply)	•	nd Room to Room Light lete all that Apply)	ting		
	Unit ID	Load Factor	Floor#	Watts per Fixture			
	Horse Power	# of Units	Panel ID/Room #	# of Fixtures			
	Volts	Max kW Per Unit	Circuit #	uit # Voltage			
	Running Amps Motor Efficiency		SPC Code	Measured Amps			

	Energy System/Service Account	Measure Description	Response Measure	Projected Reduction		
	Reference Control System and Service Account from Above	Describe the demand response measure	☐ Automated ☐ Semi-Automated	Max KW		
			Manual	Avg KW		
		Implementation Financial Estimate	Implementation Time Estimate			
10	Brief Description of Implementation	Plan, Dependencies, and Rebound Increase Reduction Measures	\$	days		
	Reduction Time Period	Demand Load Reduction Calculation				
	Describe the time period for on peak demand reduction	Describe the methodology used to determine the potential on peak load reduction, and report.	provide calculations on App	endix pages to this		



Pro	vide a description of energy effici	iency measures identified by the Engineering/ Auditing Firm.		
	Energy System	Measure Description	Controls	Projected Permanent Summer Peak Demand Reduction
	Describe Energy System	Describe the energy efficiency measure	EMCS Equipment Programmable Manual Other	KW
10		Implementation Financial Estimate	Projected Annual Consumption Reduction	
	Brief Description of Implementation	Plan and Dependencies or barriers	\$	KWh
	Implementation Time Estimate			
	days	Provide calculations on Appendix pages to this report		







SUMMARY OF DEMAND RESPONSE MEASURES							
Total Time and Financial Estimate		Time	Days	T ( I D   I D   I		Max	KW
		Cost	st \$		Total Demand Reduction:		KW
A. Incentive based on Projected kW Reduction: \$	S		(kW demand reduction x \$	6100.00/kW)			
B. Cost of Technical Audit: \$	S						
C. Estimated Incentive Amount: \$	S		(Incentive amount equal to	the lesser of [A.] or [B.])			

#### DEMAND RESPONSE MEASURES COMMENTS AND SPECIAL INSTRUCTIONS

The Projected Max kW and Average kW Reduction must be calculated for the SDG&E Summer Peak Period and not off-peak reduction. (SDG&E Summer Peak is 11AM to 6 PM starting May1st and lasting until September 30th). Specifics are program dependent.

#### **CONSIDERATIONS:**

- How will the measure be implemented fully automated to fully manual?
- What is the time frame (start time), duration (hours) and magnitude (kW) of the demand reduction?
- What is the reliability of the estimated duration and magnitude (weather or time-of-week dependencies)?
- How will a rebound increase in demand during recovery from temporary demand response be minimized, if applicable?



SUMMARY OF ENERGY EFFICIENCY MEASURES				
Total Time and Financial Estimate	Time	Days	Total Permanent Summer Peak Demand Reduction	kW
	Cost	\$	Total Annual Energy Consumption Reduction	kWh



<u>Return thi</u> s fo	orm by fax or U.S. mail to:					
	SDG&E I	PROGRAM CONTACT INFO	PRMATION			
Contact	TA / TI Team					
Phone	(858) 654-1184	Fax	(866) 209-5347			
Address	8335 Century Park Court CP12C San Diego, CA 92123-1530	Email	TATI@semprautilities.com			
	nclude audit labor Cost Summary to prepare this report as well as Calculations Support used to determine baseline and demand reduction measures and energy fficiency measures. Additional information can be returned as appendices to this form. Please provide a table of appendices below and label accordingly.					
		APPENDIX				
efficiency mea	Please provide all documentation that would be needed for an engineer / auditor to verify the control systems, recommend demand response measures and recommended energy efficiency measures provided in this technical assessment					
		CDC OF INVERDMAL LICE ONLY				
		SDG&E INTERNAL USE ONLY				
☐ Incomplet	te – Return to Engineer / Auditor	Send to PVE for Review				
<b>Decision Date</b>	e:	Decision By:				
Comments						
Potential Den Response Pro						
Potential Ene	ergy					



# APPENDIX AUDIT COST SUMMARY DEMAND RESPONSE CALCULATIONS



# APPENDIX AUDIT COST SUMMARY ENERGY EFFICIENCY CALCULATIONS



# 20\_12 SDG&E Technology Incentive Program (TI) Technology Incentive Reservation Request

SDG&E Customer Information	Customer Name:
SDG&E Account #:	Customer Address:

SDG&E Internal Use only	TI Project #:	TA Project #:

Customers are advised to reserve technology incentives funding from the Technology Incentive (TI) program for eligible demand response measures.

#### **Eligibility for Technology Incentives**

The TI Program offers technology incentives for the installation of demand response automation measures that provide dispatchable on-peak load reduction at customer-owned facilities.

Incentives of up 300/kW (not to exceed the cost of measure equipment and labor) are available for AutoDR – For a customer to qualify for this incentive they must have the capability to accept the demand response signal automatically utilizing their EMS and the load shed must occur automatically with no human intervention.

To be eligible for a technology incentive from the TI program, the customer-owned facility must be receiving bundled or direct access electric service from SDG&E, must have interval electric meter, and must be billed on a SDG&E commercial, industrial or agricultural rate schedule.

To request a technology incentive payment from SDG&E, customers must install eligible demand response measure(s), and complete and submit the TI Program Application for Technology Incentive. All incentive payments are subject to the availability of funds and the measurement and verification of the actual dispatchable on-peak load reduction achieved by the installed demand response measure(s).

#### How to Reserve Technology Incentives Funding:

- 1. Complete and sign this Reservation Request.
- 2. Fax or email the completed Reservation Request to the TI Program Manager at 866-209-5347 or TATI@semprautilities.com.
- 3. SDG&E will confirm the reservation by emailing a confirmation to you at the email address you provide. Your reservation is not valid until you receive confirmation.
- 4. Your reservation is only in effect for 180 calendar days from the date of confirmation. Failure to submit a complete Application for Technology Incentive by the 180<sup>th</sup> calendar day from the date of confirmation will result in forfeiture of the reservation, in which case either a new reservation will be required or your technology incentive application will be reviewed on first-come, first-served basis.

#### **Reservation Request:**

I hereby request, on behalf of the SDG&E Customer listed above, a technology incentive reservation from SDG&E for the demand response measures listed on page 2 of this Reservation Request. I understand that this reservation will be in effect for 180 calendar days commencing from the date I receive written confirmation from SDG&E of the reservation, which may be different from the reservation requested. I also understand and acknowledge that this reservation does not guarantee future payment of any incentives under the TI program. SDG&E reserves the right to modify or reject any Reservation Request that, in SDG&E's sole judgment, contravenes the requirements of the TI program. I certify that all of the information provided in this Reservation Request is true and correct in all respects.

Signature of SDG&E Customer:	Date:
Printed Name of SDG&E Customer:	
Signature of Authorized Representative:	Date:
Printed Name of Authorized Representative:	Date:
Email of Authorized Representative:	Date:

Last Updated: 9/27/10 Page 1 of 2



# 20\_\_12 SDG&E Technology Incentive Program (TI) Technology Incentive Reservation Request

Identify all of the Demand Response Measures for which a reservation is being requested:

#	Service Account #	Measure Description	Measu	ire Type	Projected Reduction	Project Cost
1			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
2			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
3			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
4			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
5			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
6			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
7			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
8			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
9			☐ Lighting☐ Motor	☐ AC ☐ Other	kW	\$
10			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
11			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
12			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
13			☐ Lighting ☐ Motor	<ul><li>□ AC</li><li>□ Other</li></ul>	kW	\$
14			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
15			☐ Lighting ☐ Motor	☐ AC ☐ Other	kW	\$
		kW	\$			



#### ABOUT THIS FORM

This 20\_\_12 Technology Incentives (TI) Application (Application) enables San Diego Gas & Electric Company (SDG&E) customers to apply for technology incentives from SDG&E's Technology Incentives Program (TI Program) for qualifying measurable automated demand response measures (Auto-DR). The TI Program offers technology incentives for the purchase and installation of qualified demand response measures that provide verified dispatchable on-peak load reduction at the customer-owned facilities. Eligible customers can receive \$300/kW of verified dispatchable on-peak load reduction, not to exceed the actual, reasonable cost of the installed measure(s). Only- Auto-DR qualifies for \$300/kW of verified dispatchable on-peak load reduction not to exceed the actual, reasonable cost of the installed measure(s). — For a customer to qualify for this incentive they must have the capability to accept the demand response signal automatically, utilizing their EMS and the load shed must occur automatically with no human intervention and enroll in one of SDG&E's accepted Demand Response Programs. The dispatchable on-peak load reduction is defined as existing load that, upon request, could be temporarily reduced for SDG&E's entire on-peak period or temporarily shifted from SDG&E's on-peak period to another time period. SDG&E's on-peak period is defined as Monday through Friday ( some programs include Saturday ), 11:00AM to 6:00PM, excluding holidays, starting May 1st and ending as late as the end of October. (Program dependenting)

This Application is designed to enable a customer to request a technology incentive for up to ten (10) qualifying demand response measures for an individual SDG&E Service Account. If a technology incentive is being requested for multiple service accounts, the customer must provide a separate request for each unique SDG&E service account number. If a customer has more than ten (10) requests, please complete as many applications as necessary.

#### PROGRAM RULES AND REQUIREMENTS

#### CUSTOMER ELIGIBILITY FOR TECHNOLOGY INCENTIVES

To be eligible for a technology incentive from the TI Program, the customer's facility must be receiving bundled or direct access electric service from SDG&E. ("Bundled" electric service must be billed on an SDG&E commercial, industrial, or agricultural "time of use" rate schedule).

#### QUALIFYING DEMAND RESPONSE MEASURES

To qualify under the TI Program, a demand response measure must:

- Be commercially available technology; and
- Enable dispatchable on-peak load reduction at the customer-owned facility.

Technology incentives are intended for automation and/or technology improvements. The TI Program will not provide technology incentives for manual improvements to existing equipment or for load reduction enabled by customer behavior changes.

#### HOW TO APPLY FOR A TECHNOLOGY INCENTIVE

To request a technology incentive from SDG&E's TI Program, eligible customers must:

- 1. Purchase and install qualifying demand response measure(s).
- 2. Complete, sign and submit this Application to SDG&E along with all required supporting documentation. Be sure to provide all requested Customer Information on Pages 7 through 9 of this Application, and all requested information for each qualifying demand response technology purchased and installed on Pages 10 through 20. In addition, select a program participation option for the service account on Page



- 54, Section 12. Customer must submit a separate Application for each service account for which a technology incentive is requested.
- 3. Sign the completed application.
- 4. Provide proof of purchase and installation of the qualifying demand response measure by attaching receipts, cancelled checks, credit card statements or other documentary proof to the completed Application.
- 5. The signed Application and all required supporting documentation must be mailed to the TATI Program Manager:

SDG&E Attn: TATI Program Manager 8335 Century Park Court CP12C San Diego, CA 92123-1569

To expedite your request you can also fax or email your Application and supporting documentation to the TATI Program Manager. Fax to (866) 209-5347 or email TATI@semprautilities.com. We will process your request but wait to approve until all originals have been received by mail.

Note: Failure to submit a **complete** Application (including all required supporting documentation) will delay the processing of a technology incentive request. SDG&E will consider an Application received on the date SDG&E has confirmed receipt of a complete Application by mail. The TI Program's technology incentives are paid on a first-come, first served basis until program funds are no longer available or until the TI Program is terminated, whichever comes first.

Upon receipt of a completed Application and verification of customer's eligibility, a TI Program representative will contact the customer representative designated below to schedule an on-site visit to verify installation and to measure and verify the actual dispatchable on-peak load reduction enabled by the installed qualifying technology. Installation verification and measurement verification of actual dispatchable on-peak load reduction enabled by qualifying technology may, at SDG&E's sole discretion, be conducted during one or more site visits. For measurement and verification of actual dispatchable on-peak load reduction enabled by qualifying technology, SDG&E will generally require that the customer accommodate a request for each required on-site visit within five (5) business days of such request.

Eligible customers will receive, on a first-come, first served basis, a technology incentive paid on verified dispatchable on-peak load reduction enabled by qualifying technology, not to exceed the actual, reasonable cost of the installed measure(s) (including the purchase price and any costs associated with installation by a third-party). Any in-house costs associated with installation by an employee will not be considered as part of the cost of the installed measure(s). All incentive payments are subject to verification of eligibility, the availability of funds, and the measurement and verification of the actual dispatchable on-peak load reduction enabled by the installed qualifying demand response measure(s).

A technology incentive will generally be paid as follows:

- Sixty percent (60%), \$180/kW of the eligible technology incentive is payable upon verification of (i) eligibility and (ii) installation of qualifying demand response measure(s), validated load shed test and enrollment in an eligible Demand Response program.
- Up to forty percent (40%), \$120/kW of the eligible technology incentive is paid at the end of the first DR season or calendar year, as applicable to the program or rate. The full 40% incentive balance will be paid if the customer's participation is equal to or greater than the validated load shed reduction. If the actual



performance is less than the validated load shed reduction, the Performance Payment will be reduced proportionately.

Customer's receiving Technology Incentives are obligated to participate in an eligible Demand Response Program or rate for a full year. For those Third-party Aggregators, who are working with Customer's customers participating in CPP-D, who are working with a third-party Aggregatormay be eligible for -additional incentives may be provided to the Aggregator for a three year commitment. Customers will be required to provide validation of Aggregator relationship.

Notwithstanding the foregoing, SDG&E reserves the right to verify installation and/or measure and verify actual dispatchable on-peak load reduction enabled by the installed qualifying demand response technology at any time, at its sole discretion, before issuing any technology incentive payment.

#### DEMAND RESPONSE PROGRAM PARTICIPATION REQUIREMENT

The following demand response programs qualify for purposes of the TI Program's Auto-DR - (programs are subject to change):

- Base Interruptible Program (BIP)
- Capacity Bidding Program (CBP)
- \_\_\_
- Critical Peak Pricing Default (CPP-D)
- DemandSMART<sup>TM</sup>
- Other program/rate/pilot<del>r any eligible program or rate</del>.

If the Service Account is currently participating in one of the qualifying demand response programs listed above, the customer shall continue to participate in such program per the terms and conditions of current program enrollment. Customer is responsible for providing proof of enrollment. (See the Agreement section below.)

SDG&E will verify enrollment of the Service Account in one of the qualifying demand response programs and reserves the right to-verify participation in a qualifying demand response program prior to issuing any payment of the final forty percent (40%) of the actual technology incentive. The full 40% incentive balance (\$120/kW) may be paid if the customer's participation is equal to or greater than the validated load shed reduction, as determined by the actual called demand response events.

#### **AGREEMENT:**

I am an authorized representative of the SDG&E customer listed below ("Customer"). I have read all of the information contained in this Application, and understand that, to the extent that Customer has questions about the TI Program, Customer may contact SDG&E directly for additional information before signing this Application. By signing this Application, I hereby acknowledge and agree on behalf of Customer that:

- 1. The information Customer has provided in this Application is true and correct in all respects.
- 2. Customer understands that the TI Program terms and conditions apply to this Application, and that Customer is responsible for complying with all TI Program terms and conditions as set forth in this Application.
- 3. Customer is responsible for complying with any applicable laws, including, without limitation, state and local government conditions, restrictions, codes, ordinances, rules and regulations.



- 4. Customer is solely responsible for selection of the qualifying demand response products and technologies, including the manufacturers, dealers, suppliers and/or installers thereof, and the purchase, installation and ownership/maintenance of the qualifying demand response products and technologies. I understand that the manufacturers, dealers, suppliers and installers selected by Customer are not agents or representatives of SDG&E, and that SDG&E makes no representations regarding manufacturers, dealers, contractors, materials or workmanship.
- 5. Customer has not received any incentives for the same measure(s) provided under the TI Program from any other SDG&E program or from another utility, state, or local program. Customer agrees not to apply for or receive any incentives for the same measure(s) provided under the TI Program from another utility, state, or local program.
- 6. Customer understands that TI Program funding is limited. The TI Program is effective as of January 1, 20\_12 and is offered on a first-come, first-served basis through December 31, 20\_12 or until funding is depleted or the Program is terminated, whichever comes first. SDG&E reserves the right to modify or terminate the TI Program at any time without notice.
- 7. SDG&E reserves the right to modify or terminate the TI Program at its discretion, without prior notice, or by order of the California Public Utilities Commission. Customer understands that the TI Program is subject to availability of funds.
- 8. Customer agrees that SDG&E employees, contractors and agents are permitted to enter onto Customer's facilities identified in this Application for purposes of verifying the installation of demand response measure(s) described in this Application and measuring and verifying the actual dispatchable on-peak load reduction enabled by such measures.
- 9. Customer understands that SDG&E employees, contractors and agents have been authorized to contact Customer for purposes of verifying the installation of demand response measure(s) described in this Application, and measuring and verifying the actual dispatchable on-peak load reduction enabled by such measures. Customer understands that any other services, installations, improvements or equipment provided to Customer by any SDG&E employee, contractor or agent have not been authorized by SDG&E, and SDG&E assumes no responsibility therefore.
- 10. CUSTOMER UNDERSTANDS THAT SDG&E MAKES NO WARRANTY, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, USE OR APPLICATION OF ANY DEMAND RESPONSE MEASURE OR PRODUCT.
- 11. Customer agrees that SDG&E has no liability whatsoever concerning the (1) quality, safety and/or installation of the demand response measures, technologies or products, including their fitness for any particular purpose, (2) the estimated dispatchable on-peak load reduction of the demand response measures, technologies or products, (3) the workmanship of any third parties, (4) the installation or use of the measures, technologies or products including, without limitation, effects on indoor pollutants, or (5) any other matter with respect to the TI Program. Customer waives any and all claims against SDG&E, its parent company, affiliate companies, directors, officers, employees or agents arising out of any activities conducted by or on behalf of SDG&E in connection with Customer's Application under the TI Program; provided, further, that without limiting the generality of the foregoing, none of such parties shall be liable hereunder for any type of damages, whether direct, indirect, incidental, consequential, punitive or special, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. Customer agrees to indemnify SDG&E, its parent company, affiliate companies, directors, officers, employees and agents against all loss, damage, expense, fees, costs and liability arising from any measures installed.
- 12. Customer elects to satisfy the TI Program's demand response program participation requirement as follows (select one):



The Service Account is currently participating in one of the qualifying demand response programs	s or
rates listed in this Application, and Customer agrees to continue to participate in such program per	
program terms and conditions.	
Customer understands that -the final payment of up to forty percent (40%) of the total technology incentive	e is
subject to SDG&E's verification of the enrollment of the Service Account in one of the qualifying demand	d

13. Customer agrees that SDG&E has no liability whatsoever concerning the (1) quality, safety and/or installation of the demand response measures, technologies or products, including their fitness for any particular purpose, (2) the estimated dispatch-able on-peak load reduction of the demand response measures, technologies or products, (3) the workmanship of any third parties, (4) the installation or use of the measures, technologies or products including, without limitation, effects on indoor pollutants, or (5) any other matter with respect to the TI Program. Customer waives any and all claims against SDG&E, its parent company, affiliate companies, directors, officers, employees or agents arising out of any activities conducted by or on behalf of SDG&E in connection with Customer's Application under the TI Program; provided, further, that without limiting the generality of the foregoing, none of such parties shall be liable hereunder for any type of damages, whether direct, incidental, consequential, punitive or special, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. Customer agrees to indemnify SDG&E, its parent company, affiliate companies, directors, officers, employees and agents against all loss, damage, expense, fees, costs and liability arising from any measures installed.

response programs or rates as required under the TI Program's terms and conditions.

Customer Name	
Signature of Authorized Representative:	Date:
Printed Name of Authorized Representative / Title:	
Email of Authorized Representative:	



	CU	STOMER I	NFORMATION					
Customer Name:	Enter Name on SDG&E Electric Bi issued to the customer name display	Service Account #:	Enter SDG&E Customer #					
Mailing Address:	Submit the mailing address that the Technology Incentive Funds to be mailed to.							
Mailing City:		Mailing State:		Mailing Zi	):			
Federal Tax ID Number:		Tax Status: (Check One)	☐ Individual/Sole Prop. ☐ Partnership ☐ Other		rporation empt/Non Profit			
Technical Aud		☐ Yes If Yes ☐ No, Not Int ☐ No, Please ☐						
-	rved Technology Incentive Funds?  Date & Time #1	□ No □ Yes If Yes, Date:  Provide preferred test date and time. The verification engineer will do their best to accomodate this time but may not be available.						
Preferred Test	Date & Time #2		d preferred test date and ti ccomodate this time but ma					
	$\mathbf{F}$	ACILITY/L	OCATION INFORM	IATION				
Service Address:	Enter Service Account/Facilty Addr	ress						
Service City:	Enter Service Account/Faciltiy City	Service State:	CA	Service Zip:	Enter Service Account Zip Code			
Building Type:	Low Rise Campus High Rise Other	# of Floors:		Age of Facility:				
Facility Type:	Owner Both Tenant% Tenants	Operations Schedule:  Provide hours of operations for office and/or production facility and shift schedules. Specifically identify schedules during weekdays between 11AM and 6PM.						
Energy Management System	Does the facility currently have an Energy Management System. If Yes, please provide the Manufacturer, Model #, Purchase Date, and description of points control by this system and the control schedule.							



CURRENT DEMAND RESPONSE PROGRAM PARTICIPANT?  NO YES (If Yes, Complete Below)								
Specify Programs / Rate	<u> </u>	CPP – D	☐ <del>Ca</del> j	pacity Bidding Program <u>CB</u>	P Other			
Required Load Reduction	Provide Required Load Reduction Optional Binding Mandatory Cur Bidding Program							
Current Demand Response Procedures	Provide procedures that are curre	ntly in place to	curtail energy duri	ing SDG&E sponsored der	nand response events			
	ADDITIO	NAL INFO	RMATION &	<b>COMMENTS</b>				
#1 Technology	INSTALLI Describe the demand respon Manufacturer, Model Numb	nse equipment t	hat has been purch	E EQUIPMENT INF				
	nd Response Equipment in an SDG&E Technical Audit?	☐ YES	IDENTIFY TI NUMBER FR	HE DEMAND RESPONSI ROM THE REPORT AND	STOP HERE			
		□NO	~	THE ADDITION INFORM				
ONLY COMPI	LETE THE REMAINING SECT	TIONS ON TH	IIS PAGE, IF YO	U ANSWERED "NO" TO				
Response Type	☐ Automated ☐ Semi-Automated ☐ Manual	Projected Reduction	Max KW Avg Max KW	Load Reduction Time Perio	1			
Load Reduction Calculation Description								
Total Cost to Implement Technology	\$	Cost of Equipment	\$	Labor Cos for Installatio	\$			
	ENERG	SY USING S	SYSTEM INF	ORMATION				
Energy Using System Description	System 30,000 sq foot conditioned warehouse)							
Energy Using System Location	Describe the energy using sy	ystem location	within the facility					



Op	Hours of Operation/ Usage Strategy  Describe the hours and schedule of operations of this energy using system									
	SELECT ENERGY SYSTEM TYPE AND PROVIDE ALL APPLICABLE FACTORS (ONLY Complete Type A OR Type B)									
	TYPE A - HVAC and PROCESS SYSTEMS									
T										
Y			Trocess System	Load Fa			7 D			
P	Unit ID	Volts		/ Duty C		Max kW Unit	Per			
E	Horse Power	Running Amp	os	# of Uni		Motor				
A						Efficience	ey			
				OR						
			TYP	E B - Lighting						
T	Type:	Lighting Lighting	Panels							
Y P	Floor #	Circuit #		Watts p	er	Voltage				
E				Fixture						
В	Panel	SPC Code		# of Fix	tures	Measure	ed			
Ь	ID/Room #					Amps				
		ADDITIO	NAL INFO	RMATION &	& COMMI	ENTS				
Date	rida anri addition	al information that would be he		MUMITON	COMM	21110				
#2		INSTALLE	D DEMAN	D RESPONS	E EQUIPN	MENT INFOR	MATION			
	chnology scription	Describe the demand respons Manufacturer, Model Numbe		inits, and all other	applicable in	formation.				
Wa	s this Demand R	Response Equipment	☐ YES			D RESPONSE ME EPORT AND <mark>STO</mark>				
		n SDG&E Technical Audit?					ON ON THIS PAGE			
			□NO	COMPLETE	THE ADDIT	ION INFORMATI	ON ON THIS PAGE			
ON	NLY COMPLET	E THE REMAINING SECT	IONS ON TH	IIS PAGE, IF YO	DU ANSWEI	RED "NO" TO TH	IE QUESTION ABOVE			
Res	sponse Type	☐ Automated	Projected	Max KW		Load Reduction	Identify the time period that the technology will			
	Trans JP		Reduction	Avg Max KW		Time Period	be activated			
Load Reduction Calculation Describe the methodology used to determine the Max kW and Avg Max kW reduction provided by the Demand Response Equipment. If spot metering was used, provide where and when measurement occurred.  Description										
	tal Cost to		Contact			Labor Cost				
	plement	\$	Cost of Equipment	\$		for	\$			
Tec	chnology					Installation				
		<b>ENERG</b>	Y USING S	SYSTEM INF	ORMATI	ON				
Sys	Energy Using System Description Description Description Description Description Description Description Description									



	ergy Using tem Location									
Op	Hours of Operation/ Usage Strategy  Describe the hours and schedule of operations of this energy using system									
	SELECT ENERGY SYSTEM TYPE AND PROVIDE ALL APPLICABLE FACTORS (ONLY Complete Type A OR Type B)									
	TYPE A - HVAC and PROCESS SYSTEMS									
Type:										
P E	Unit ID		Volts		Load Fa / Duty C			Max kW Unit	V Per	
A	Horse Power		Running Am	ps	# of Uni			Motor Efficience	су	
				•	OR					
Т	Type:				E B - Lighting					
Y		Lighting	Lighting	g Panels						
P E	Floor #		Circuit #		Watts p Fixture	er		Voltage		
В	Panel ID/Room #		SPC Code		# of Fixt	tures		Measure Amps	ed	
			ADDITIO	NAL INFO	RMATION &	& COM	IMEN'	ΓS		
Pro	vide any addition	al information						_~		
#3			INSTALLE	D DEMAN	D RESPONS	E EQU	IPME	NT INFOR	MATION	
	chnology	Describe the	demand respons	se equipment th	hat has been purch mits, and all other	nase and	installed	at the facility.	Be sure to provide	
	scription s this Demand F			YES	IDENTIFY T	HE DEM	AND R	ESPONSE ME ORT AND STO		
	commended in a			□NO					ON ON THIS PAGE	
ONLY COMPLETE THE REMAINING SECTIONS ON THIS PAGE, IF YOU ANSWERED "NO" TO THE QUESTION ABOVE										
Res	sponse Type	Automate	d	Projected Reduction	Max KW Avg Max KW		1	Load Reduction Fime Period	Identify the time period that the technology will be activated	
Cal Des	nd Reduction culation scription				e the Max kW and us used, provide w		when m	easurement occ	led by the Demand curred.	
Imj	al Cost to plement chnology	\$		Cost of Equipment	\$		f	Labor Cost for Installation	\$	
	ENERGY USING SYSTEM INFORMATION									



Sys	ergy Using stem scription	Describe the energy using system that will be control by the new demand response equipment.( i.e. HVAC System for 30,000 sq foot conditioned warehouse)								
En	ergy Using stem Location	Describe the energy using system location within the facility								
Op	urs of eration/ Usage ategy	Describe the hours and schedule of operations of this energy using system								
	SELECT ENERGY SYSTEM TYPE AND PROVIDE ALL APPLICABLE FACTORS (ONLY Complete Type A OR Type B)									
			TYPE	E A - HVAC	and PROCESS	SYSTEMS	S			
T	Type:	☐ Heating an	nd AC 🔲 Pi	rocess Syster	ns 🗌 Energ	y Systems	<b>□Other</b>			
Y P	Unit ID		Volts		Load F		Max k	Max kW Per		
E A	Horse Power		Running Amps	;	/ Duty # of Ur		Unit Motor			
					OR		Efficie	ncy		
				TYP	E B - Lighting					
T Y	Type:	Lighting	Lighting l	Panels						
P E	Floor #		Circuit #		Watts Fixture		Voltag	e		
В	Panel ID/Room #		SPC Code		# of Fi	ktures	Measu Amps	red		
ADDITIONAL INFORMATION & COMMENTS										
110	Provide any additional information that would be helpful.									
#4		I	INSTALLED	DEMAN	D RESPONS	SE EQUI	PMENT INFO	RMATI	ON	
Des	Technology Describe the demand response equipment that has been purchase and installed at the facility. Be sure to provide Manufacturer, Model Number, number of units, and all other applicable information.  Was this Demand Response Equipment Recommended in an SDG&E Technical Audit?  Tyes  IDENTIFY THE DEMAND RESPONSE MEASURE NUMBER FROM THE REPORT AND STOP HERE  OCMPLETE THE ADDITION INFORMATION ON THIS PAGE									
ONLY COMPLETE THE REMAINING SECTIONS ON THIS PAGE, IF YOU ANSWERED "NO" TO THE QUESTION ABOVE										
Res	sponse Type	Automated		Projected Reduction	Max KW Avg Max KW		Load Reduction Time Period	that th	fy the time period ne technology will ivated	
Cal	ad Reduction Iculation scription						kW reduction prov hen measurement o		he Demand	
Im	tal Cost to plement chnology	\$		Cost of Equipment	\$		Labor Cost for Installation	\$		
	ENERGY USING SYSTEM INFORMATION									



Energy Using System Description  Describe the energy using system that will be control by the new demand response equipment. (i.e. HVAC System 30,000 sq foot conditioned warehouse)						t.( i.e. HVAC System for		
	ergy Using stem Location	Describe the energy using s	ystem location	within the facility				
Op	urs of eration/ Usage ategy	Describe the hours and schedule of operations of this energy using system						
	SELI	ECT ENERGY SYSTE		ND PROVIDI lete Type A OR		PLICABLE FA	ACTORS	
		TY	PE A - HVAC	and PROCESS	SYSTEMS			
T Y	Type:	☐ Heating and AC ☐	Process System	ms 🗌 Energ	y Systems	Other		
P	Unit ID	Volts		Load Fa	,	Max kW Unit	Per	
E A	Horse Power	Running Ar	nps	# of Uni		Motor Efficience	cv	
			l	OR		Efficient		
T	The state of the s		TYP	E B - Lighting				
T Y	Type:	Lighting Lighting	ng Panels					
P E	Floor #	Circuit #		Watts p Fixture	er	Voltage		
В	Panel ID/Room #	SPC Code		# of Fix	tures	Measure Amps	ed	
	ADDITIONAL INFORMATION & COMMENTS							
Pro	vide any addition	al information that would be	helpful.					
#5		INSTALL	ED DEMAN	D RESPONS	E EQUIPM	IENT INFOR	MATION	
	chnology	Describe the demand respo					Be sure to provide	
Des	scription	Manufacturer, Model Num				ormation.  D RESPONSE ME	ASURE	
		Response Equipment on SDG&E Technical Audit?	YES	NUMBER FI	ROM THE RE	PORT AND STO	P HERE	
Kec	commended in a	I SDG&E Technical Addit.	□NO	COMPLETE	THE ADDIT	ON INFORMATI	ON ON THIS PAGE	
ON	NLY COMPLET	E THE REMAINING SEC	TIONS ON TH	IIS PAGE, IF YO	OU ANSWER	ED "NO" TO TH	IE QUESTION ABOVE	
Das	T	Automated	Projected	Max KW		Load	Identify the time period that the technology will	
Res	sponse Type		Reduction	Avg Max KW		Reduction Time Period	be activated	
	ad Reduction	Describe the methodology						
	lculation scription	Response Equipement. If s	pot metering wa	is used, provide w	here and wher	n measurement occ	curred.	
Tot	tal Cost to	_	Cost of	_		Labor Cost	_	
	plement chnology	\$	Equipment			for Installation	\$	



		E	NERGY USING	SYSTEM INFORI	MATION		
Sys	ergy Using tem scription	Describe the energy 30,000 sq foot cond		be control by the new d	emand response equi	pment.( i.e. HVAC System for	
	ergy Using tem Location	Describe the energy	using system location	within the facility			
Op	urs of eration/ Usage ategy	Describe the hours	and schedule of operati	ons of this energy using	system		
	SEL	ECT ENERGY S		ND PROVIDE AL		E FACTORS	
				and PROCESS SYST			
Т	Type:	☐ Heating and A			_		
Y P	Unit ID	Volts	<u> </u>	Load Factor	Ma	nx kW Per	
E A	Horse Power	Run	ning Amps	/ Duty Cycle # of Units	Un Mo	-	
				OR	En	reiency	
			TYI	PE B - Lighting			
T Y	Type:	Lighting	<b>Lighting Panels</b>				
P E	Floor #	Circ	uit #	Watts per Fixture	Voi	ltage	
В	Panel ID/Room #	SPC	Code	# of Fixtures	Me An	easured nps	
	ADDITIONAL INFORMATION & COMMENTS						
Pro	vide any addition	al information that w	ould be helpful.				
#6		INST	TALLED DEMAN	ND RESPONSE E(	UIPMENT INF	ORMATION	
Teo	chnology	Describe the deman	d response equipment t	that has been purchase a	nd installed at the fac	ility. Be sure to provide	
	scription	Response Equipment			EMAND RESPONS		
		n SDG&E Technical			THE REPORT AND ADDITION INFORM	MATION ON THIS PAGE	
ON	ONLY COMPLETE THE REMAINING SECTIONS ON THIS PAGE, IF YOU ANSWERED "NO" TO THE QUESTION ABOVE						
Res	sponse Type	Automated	Projected Reduction	Max KW Avg Max KW	Load Reduction Time Peri		
Cal	nd Reduction culation scription			ne the Max kW and Avg as used, provide where a	Max kW reduction p	provided by the Demand	
Im	al Cost to plement	\$	Cost of Equipment	\$	Labor Co for	\$	



		ENER	GY USING S	SYSTEM INFO	RMATION		
Sys	ergy Using stem scription	Describe the energy using 30,000 sq foot conditioned		be control by the new	demand respo	onse equipment	.( i.e. HVAC System for
	ergy Using stem Location	Describe the energy using	system location	within the facility			
Hours of Operation/ Usage Strategy  Describe the hours and schedule of operations of this energy using system							
	SEL	ECT ENERGY SYST		ND PROVIDE A lete Type A OR Typ		CABLE FA	CTORS
		7		and PROCESS SYS			
T Type:							
Y P E	Unit ID	Volts		Load Factor	r	Max kW Unit	Per
A	Horse Power	Running A	Amps	# of Units		Motor Efficienc	У
				OR			
TD	m		TYP	E B - Lighting			
T Y	Type:	Lighting Light	ting Panels				
P	Floor #	Circuit #		Watts per		Voltage	
E B	Panel ID/Room #	SPC Code		Fixture # of Fixture	es	Measure Amps	d
		ADDIT	IONAL INFO	ORMATION & (	COMMENT		
Pro	vide any addition	al information that would b	e helpful.				
#7		INSTALI	LED DEMAN	D RESPONSE I	EQUIPMEN	NT INFORM	MATION
	chnology scription	Describe the demand resp Manufacturer, Model Nur	onse equipment to	hat has been purchase inits, and all other ap	and installed a	at the facility.	Be sure to provide
		Response Equipment	☐ YES	IDENTIFY THE NUMBER FROM			
Red	commended in a	n SDG&E Technical Audi	t? NO	COMPLETE TH	E ADDITION	INFORMATION	ON ON THIS PAGE
ON	NLY COMPLET	E THE REMAINING SE	CTIONS ON TH	IIS PAGE, IF YOU	ANSWERED	"NO" TO TH	E QUESTION ABOVE
Res	sponse Type	Automated	Projected Reduction	Max KW Avg Max KW	R	oad leduction lime Period	Identify the time period that the technology will be activated
Cal	ad Reduction Iculation scription	Describe the methodology Response Equipement. If					
Im	tal Cost to plement chnology	\$	Cost of Equipment	\$	fo	abor Cost or	\$



		ENE	RGY USING S	SYSTEM INFO	RMATION		
Sys	ergy Using etem scription	Describe the energy using 30,000 sq foot conditions		be control by the ne	w demand response	e equipment.( i.e	. HVAC System for
	ergy Using etem Location	Describe the energy usin	g system location	within the facility			
Op	urs of eration/ Usage ategy	Describe the hours and so	chedule of operation	ons of this energy us	ing system		
	SEL	ECT ENERGY SYST		ND PROVIDE . lete Type A OR Ty		ABLE FACT	ORS
			TYPE A - HVAC	and PROCESS SY	STEMS		
T Type:							
Y P E	Unit ID	Volts		Load Fact	or	Max kW Per Unit	
A	Horse Power	Running .	Amps	# of Units		Motor Efficiency	>
				OR			
T	T	T		E B - Lighting			
T Y	Type:		nting Panels				
P E	Floor #	Circuit #		Watts per Fixture		Voltage	
B	Panel ID/Room #	SPC Code	е	# of Fixtur	res	Measured Amps	
		ADDIT	TIONAL INFO	RMATION &	COMMENTS		
Pro	vide any addition	al information that would l	oe helpful.				
#8		INSTAL	LED DEMAN	D RESPONSE	EQUIPMENT	'INFORMA'	ΓΙΟΝ
	chnology scription	Describe the demand res Manufacturer, Model Nu					are to provide
Wa	s this Demand F	Response Equipment	☐ YES	IDENTIFY TH	E DEMAND RESI OM THE REPORT	PONSE MEASU	
Recommended in an SDG&E Technical Audit?  NO  COMPLETE THE ADDITION INFORMATION ON THIS PAGE							
ON	NLY COMPLET	TE THE REMAINING SE	ECTIONS ON TH	IIS PAGE, IF YOU	ANSWERED "N	O" TO THE Q	UESTION ABOVE
Res	sponse Type	Automated	Projected Reduction	Max KW Avg Max KW		uction that	ntify the time period the technology will activated
Cal	nd Reduction  culation  scription	Describe the methodolog Response Equipement. I		ne the Max kW and A	Avg Max kW reduc	ction provided by	the Demand
Tot Im	cal Cost to	\$	Cost of Equipment	\$	for	or Cost \$	



		E	NERGY	USING S	YSTEM IN	FORMAT	ION	
Sys	ergy Using tem ecription	Describe the energy 30,000 sq foot condi			be control by the	new demand	response equipmen	nt.( i.e. HVAC System for
	ergy Using tem Location	Describe the energy	using syster	n location v	vithin the facility	7		
Hours of Operation/ Usage Strategy  Describe the hours and schedule of operations of this energy using system								
	SEL	ECT ENERGY S			ND PROVID ete Type A OR		PPLICABLE F	ACTORS
			TYPE	A - HVAC	and PROCESS	SYSTEMS		
T	Type:	☐ Heating and AC		cess Syster		y Systems	Other	
Y P E	Unit ID	Volts			Load F	actor	Max kV Unit	W Per
A	Horse Power	Running Amp			# of Un		Motor Efficier	ıcy
					OR			
Т	Type:				E B - Lighting			
Y			Lighting Pa	anels				
P	Floor #	Circu	it#		Watts <sub>I</sub> Fixture		Voltage	2
E B	Panel ID/Room #	SPC	Code		# of Fix		Measur Amps	red
		AD	DITIONA	AL INFO	RMATION	& COMM		
Pro	vide any addition	al information that wo	uld be helpi	ful.				
#9		INST	ALLED	DEMAN	D RESPONS	E EQUIP	MENT INFOR	RMATION
	chnology cription	Describe the demand Manufacturer, Mode			nits, and all othe	r applicable i	nformation.	<u> </u>
		Response Equipment on SDG&E Technical		☐ YES			ND RESPONSE M EPORT AND <mark>STO</mark>	
Kec	commended in a	ii SDG&E Technicai	Audit:	□NO	COMPLETE	THE ADDI	ΓΙΟΝ INFORMAT	TION ON THIS PAGE
ON	LY COMPLET	E THE REMAINING	G SECTIO	NS ON TH	IS PAGE, IF Y	OU ANSWE	RED "NO" TO T	HE QUESTION ABOVE
Res	ponse Type	Automated		ojected eduction	Max KW Avg Max KW		Load Reduction Time Period	Identify the time period that the technology will be activated
Cal	nd Reduction culation ecription	Describe the method Response Equipeme			e the Max kW ar		W reduction provi	ded by the Demand
Tot	al Cost to	\$		ost of nuipment	\$		Labor Cost for	\$



Tec	chnology						Installation	
			ENERG	Y USING S	SYSTEM INI	FORMAT	ION	
Sys	ergy Using stem scription	Describe the end 30,000 sq foot c			be control by the	new demand	response equipmen	t.( i.e. HVAC System for
	ergy Using stem Location	Describe the end	ergy using sys	stem location	within the facility			
Op	urs of eration/ Usage ategy	Describe the ho	urs and sched	ule of operation	ons of this energy	using system	1	
	SELECT ENERGY SYSTEM TYPE AND PROVIDE ALL APPLICABLE FACTORS (ONLY Complete Type A OR Type B)							
			TYP	PE A - HVAC	and PROCESS	SYSTEMS		
T Y	Type:	☐ Heating and	d AC 🔲 l	Process Syste	ems 🔲 Energ	y Systems	☐Other	
P E	Unit ID	Volts			Load Fa		Max kV Unit	V Per
A	Horse Power	F	Running Amp	os	# of Uni	its	Motor Efficien	cy
					OR			
Т	Type:	TYPE B - Lighting  Lighting Lighting Panels						
Y P	Floor #	Lighting	Circuit #	graneis	Watts p		Voltage	
E B	Panel	s	SPC Code		Fixture # of Fix		Measur	ed
	ID/Room #						Amps	
_	11.1				DRMATION &	& COMM	ENTS	
PIO	vide any addition	al information tha	at would be ne	eipiui.				
#1		II	NSTALLE	D DEMAN	D RESPONS	E EQUIP	MENT INFOR	MATION
	chnology scription				hat has been purc		alled at the facility.	Be sure to provide
Wa	s this Demand R	Response Equipm	nent	☐ YES			ND RESPONSE ME EPORT AND <mark>STO</mark>	
Rec	commended in a	n SDG&E Techn	ical Audit?	□NO	COMPLETE	THE ADDI	TION INFORMAT	ION ON THIS PAGE
ON	LY COMPLET	E THE REMAIN	NING SECTI	ONS ON TH	IIS PAGE - IF Y	OU ANSWE	RED "NO" TO T	HE QUESTION ABOVE
Res	sponse Type	Automated		Projected Reduction	Max KW Avg Max KW		Load Reduction Time Period	Identify the time period that the technology will be activated
Cal	ad Reduction lculation scription				ne the Max kW an		xW reduction providen measurement occ	
Tot	tal Cost to	\$		Cost of	\$		Labor Cost	\$



	olement hnology		Equipment		for Installation				
		I	ENERGY USING S	SYSTEM INFORMAT	TION				
Sys	ergy Using tem ecription	30,000 sq foot con-	ditioned warehouse)	be control by the new demand	d response equipment.( i.e.	HVAC System for			
Energy Using System Location  Describe the energy using system location within the facility									
Hours of Operation/ Usage Strategy  Describe the hours and schedule of operations of this energy using system									
	SELECT ENERGY SYSTEM TYPE AND PROVIDE ALL APPLICABLE FACTORS (ONLY Complete Type A OR Type B)								
			TYPE A - HVAC	and PROCESS SYSTEMS					
T Y	Type:	☐ Heating and A	C Process System		Other				
P E	Unit ID	Volt	ts	Load Factor / Duty Cycle	Max kW Per Unit	>			
A	Horse Power	Run	nning Amps	# of Units	Motor Efficiency				
				OR					
Т	Type:			EB - Lighting					
Y			Lighting Panels			1			
P E	Floor #	Circ	cuit #	Watts per Fixture	Voltage				
В	Panel ID/Room #	SPC	C Code	# of Fixtures	Measured Amps				
		AI	ODITIONAL INFO	ORMATION & COMM	IENTS				
Pro	vide any addition	al information that w	ould be helpful.						

	TECHNOLOGY INCENTIVE SUMMARY								
Measure #	Total Reduction Based on Max kW	Total Reduction Based on Average Max kW	Total Cost of Equipment	Total Cost of Installation Labor	Total Tax				
1	kW	kW	\$	\$	\$				
2	kW	kW	\$	\$	\$				
3	kW	kW	\$	\$	\$				
4	kW	kW	\$	\$	\$				
5	kW	kW	\$	\$	\$				
6	kW	kW	\$	\$	\$				
7	kW	kW	\$	\$	\$				



8	kW	kW	\$ \$	\$
9	kW	kW	\$ \$	\$
10	kW	kW	\$ \$	\$
TOTAL	kW	kW	\$ \$	\$

SUMMARY OF TECHNOLOGY INCENTIVE MEASURES						
Total Time and Financial	Time	Days	Total Damand Daduation	Max	KW	
Estimate	Cost	\$	Total Demand Reduction:	Avg	KW	

SDG&E	<b>PROGRAM</b>	CONTACT INFORMATION
Return electronic copy of the completed fo	orm by email and	hard copy with signature by fax or U.S. mail to:
C. Estimated Incentive Amount:	\$	(Incentive amount equal to the lesser of [A.] or [B.])
A. Incentive based on Projected kW Reduction:	\$	(B. Cost of Technology Incentive: \$

Keturn elec	Return electronic copy of the completed form by email and hard copy with signature by fax or U.S. mail to:							
	SDG&E PROGRAM CONTACT INFORMATION							
Contact	TATI Program Manager							
Address	SDG&E Attn: TATI Program Manager 8335 Century Park Court CP12C San Diego, CA 92123-1569	Fax Email	866-209-5347 TATI@semprautilities.com					



	Original	Cal. P.U.C. Sheet No.	21501-E
Canceling		Cal. P.U.C. Sheet No.	

**RULE 41** 

Sheet 1

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# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

This Rule shall apply to all Utility demand response programs, rates designated to solicit demand response measures, and other Utility contracts designed to implement and administer programs to solicit demand response measures.

This rule will be an attachment to all Utility demand response program tariffs, rates designed to solicit demand response measures, and other Utility contracts designed to implement and administer programs to solicit demand response measures. The rule will also stand alone as a reference guide to govern customer participation in multiple Utility demand response tariffs, rates, and contract-based programs.

# A. **GENERAL**

- 1. Eligibility and Application for Multiple Program Participation
  - a. Customers and third-party contractors are required to comply with this rule when they participate in more than one Utility demand response tariff, rate, or contract during the same time periods.
  - b. Participation in Utility demand response program, tariff rate or contract shall at all times be governed by the applicable provisions, terms and conditions of such program, tariff, rate or contract.
  - c. Regardless of the provisions of this rule, customers and third-party contractors are precluded from receiving compensation from multiple programs for the same demand response reduction.
    - (i) Tests of these provisions must be reasonably satisfactory to the Utility allowing the Utility to test load control and meters and to audit meter data;
    - (ii) an acknowledgement to the Utility by the customer party thereto that (A) the Utility shall not be liable under any circumstances for the failure by their Aggregator, or by any other party, to adhere to Rule 41, and (B) in accordance with Rule 41, such customer may be liable for penalties or loss of incentives for failure to comply.
- 2. Requirements for Multiple Program Participation

Commission Decision 09-08-027 concluded that it is reasonable and consistent with the Commission's policy of encouraging cost effective demand response activities to allow customers to participate concurrently in two demand response activities and programs, as long as duplicative payments for a single instance of load drop can be avoided. This Rule implements multiple program participation by allowing customers to participate concurrently in one program that provides an energy payment and one that provides a capacity payment. where duplicative payments for a single instance of load drop is avoided

Customers may participate in two programs, one providing capacity payments and one providing energy payments.

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		(Continuea)		
1P0		Issued by	Date Filed	Nov 23, 2009
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**RULE 41** 

Sheet 2

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# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

- 2. Requirements for Multiple Program Participation (Continued)
  - Customers may not participate in two programs that are both either day-ahead or day-of notification programs; a participant may only participate in one day-ahead and one day-of program.

In the case of simultaneous or overlapping demand response program events, a single customer enrolled in two programs will receive payment only under the capacity program, not for the simultaneous event for the energy program, with the load reduction amount being credited to the capacity program.

This requirement is consistent with the principle of a capacity program, under which participating customers are compensated for their capability and availability to reduce load. In addition, the customer's settlement baseline for both programs will be calculated based on prior similar non-eventdays in which no programs are dispatched in which the customer participates.

This Rule will also apply regardless of whether the customer is enrolled in a utility-administered program or one administered by a third-party contractor. Combinations of programs, with critical peak pricing programs, are generally compatible with programs offering capacity payments.

This Rule is subject to revision from time to time by the Commission or as may be proposed by the Utility as demand response programs develop and experience with new programs, program interactions and multiple program participation results are evaluated.

3. Programs, Rates, and Contracts

> Capacity Program – a Demand Response Program that pays incentives to participants who reserve power reduction capacity with the availability and capability to meet requested load reductions during an emergency or abnormally high demands for power.

> Energy Program – a Demand Response Program that pays incentives to participants who reduce energy consumption upon notification from the Utility.

> Day-Ahead Program - a Demand Response Program that provides notification of a program event activation to participants the day prior to the event occurrence.

> Day-Of Program - a Demand Response Program that provides notification of a program event activation to participants on the day the event is to occur

		(Continued)		
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21503-E

Canceling

Cal. P.U.C. Sheet No.

**RULE 41** 

Sheet 3

# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

3. Programs, Rates, and Contracts (Continued)

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Name	Category	Day-Ahead or Day- Of	Incentive Type: Energy and/o f Capa city	Incompatible with others that are or pay	Exceptions [2]
Critical Peak Pricing - Default	Rate	<del>Day-Ahead</del>	Energy	Day-Ahead Energy Incentiv es	CBP-Day-Of [1]; OBMC; SLRP; Summer Saver
Critical Peak Pricing Emergen cy	Rate	<del>Day-Of</del>	Energy	Day-Of Energy Incentiv es	OBMC; SLRP; Summer Saver
Base Interrupti ble Program	<del>Program</del>	<del>Day-Of</del>	Capacity	Capacity Incentiv es	OBMC; SLRP; Summer Saver
Capacity Bidding Program (Day- Ahead)	Program	Day-Ahead	Energy and Capa city	Day-Ahead Energy or Capacity Incentiv es	OBMC; SLRP; Summer Saver
Capacity Bidding Program (Day-Of)	Program	<del>Day-Of</del>	Energy and Capa city	Day-Of Energy or Capacity Incentiv es	CPP-D; OBMC; SLRP; Summer Saver
Peak Generati on	Program	<del>Day-Of</del>	Energy	Day-Of Energy Incentiv es	OBMC; SLRP; Summer Saver
Summer Saver	3 <sup>rd</sup> Party Contr act	<del>Day-Of</del>	Neither	None	None
<del>OBMC</del>	<del>Program</del>	<del>Day-Of</del>	<del>Neither</del>	None	None
SLRP	Program	<del>Day-Of</del>	<del>Energy</del>	None	All Others
PLS	Pilot	<del>Day-Of</del>	<del>Energy</del>	None	None
Participating Load Pilot	Pilot	<del>Day Of</del>	<del>Capacity</del>	<del>Capacity</del> Incentiv es	CPP-D [3]
Aggregator Managed Program	3 <sup>rd</sup> -Party Contr act	<del>Day-Of</del>	Energy and Capa city	Energy or Capacity Incentiv es	CPP-D

Nov 23, 2009

(Continued)

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3P0

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# **RULE 41**

Sheet 3

21503-E

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# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

[1] Accounts on CPP-D are compatible with the CBP Day-Of

[2] All programs are compatible with OBMC, SLRP, and Summer Saver

[3] As PLP is a pilot dual participation is restricted to CPP-D

(Continued)

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3P0

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09-08-027

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Lee Schavrien
Senior Vice President
Regulatory Affairs

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San Diego Gas & Electric Company San Diego, California

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Sheet 4

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# RULE 41

# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

		CBP (Day-	CBP (Day-	Base Interruptible		
_	CPP-D	Ahead)	<del>Of)</del>	(BIP)	PEAK GEN	PLP

# SDG&E DEMAND RESPONSE PROGRAM COMPATIBILITY TABLE

	CPP-D	CBP (Day- Ahead)	CBP (Day-Of)	Base Interruptible (BIP)	PEAK GEN	PLP <u>PLS</u>	Aggregator Managed Program
CPP-D	NA	NO	¥ESNO	<u>YESNO</u>	NOYES	<u>YESNO</u>	YESNO
011-10	IVA	140	120110	120110	NOTEG	120110	TEOITO
CPP-E	NO	YES	NO	YES	NO	NO	NO
CBP (Day-Ahead)	NO	NA	NO	NO	NO <u>YES</u>	NO	NO
CBP (Day-Of)	YES <u>NO</u>	NO	NA	NO	NO	NO	NO
Base Interruptible (BIP)	YESNO	NO	NO	NA	YES	NO	NO
PEAK GEN	NOYES	NO	NO	YES	NA	NO	NO
PLS	NO	NO	NO	NO	NO <u>YES</u>	NA	NO
1. ==							
PLP	YES	NO	NO	NO	YES	NA	NO
Aggregator Managed Program	YES	NO	NO	NO	NO	NO	NA

# ENERGY INCENTIVE ONLY BOTH ENERGY + CAPACITY INCENTIVE

**CAPACITY INCENTIVE ONLY** 

#### COMPATIBILITY

ENERGY INCENTIVE	CAPACITY INCENTIVE	YES
CAPACITY INCENTIVE	ENERGY + CAPACITY INCENTIVE	NO
ENERGY + CAPACITY INCENTIVE	ENERGY INCENTIVE	LIMITED

(Continued)

4P0

Advice Ltr. No.

2128-E

Decision No. 09-08-027

Issued by Lee Schavrien

Senior Vice President Regulatory Affairs Date Filed

Nov 23, 2009

Effective

Resolution No.



Original	Cal. P.U.C. Sheet No.	21504-E

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iego Gas & Electric Company San Diego, California	Canceling	Cal. P.U.C. Sheet No.	
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<u>DEMAND R</u>	ESPONSE MULTIP	LE PROGRAM PARTICIPATION	
1	ı		
OBMC			
SLRP			

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Advice Ltr. No. 2128-E

Decision No. 09-08-027

(Continued)
Issued by
Lee Schavrien

Date Filed \_ Effective Nov 23, 2009

Senior Vice President Regulatory Affairs

Resolution No.



	Original	Cal. P.U.C. Sheet No.	21505-E
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**RULE 41** 

Sheet 5

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# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

# 4. <u>Program Descriptions</u>

The Base Interruptible Program (BIP) offers a monthly **capacity payment** to non-residential customers who can commit to curtail at least 15% of Monthly Average Peak Demand, with a minimum load drop of 100 kW. – **Schedule BIP** 

Critical Peak Pricing Default (CPP-D) is a commodity tariff that provides customers with an opportunity to manage their electric costs by either reducing **energy** load during high cost pricing periods or shifting load from high cost pricing periods to lower cost pricing periods. – **Schedule EECC-CPP-D** 

The Critical Peak Pricing-Emergency (CPP-E) schedule is an optional commodity tariff that offers customers the opportunity to respond to local Utility emergency situations and to manage their electric costs by either reducing **energy** load during high cost pricing periods or shifting load from high cost pricing periods to lower cost pricing periods. — **Schedule EECC-CPP-E** 

The Peak Generation Program provides utility customers with energy incentives to reduce the severity of rotating outages by using their Backup Emergency Generator when a Firm Load Curtailment Event or Transmission Emergency is called. **Schedule RBRP** 

The Participating Load Pilot ("Pilot") is a voluntary demand response pilot that offers customers the ability to earn **capacity** incentive payments in exchange for reducing energy consumption when requested by the Utility. **Schedule PLP** 

The Capacity Bidding Program ("Program") is a voluntary demand response program that offers customers various product options by which participants can earn **capacity and energy** incentive payments in exchange for reducing energy consumption when requested by the Utility. – **Schedule CBP** 

The Optional Binding Mandatory Curtailment Program (OBMC) provides exemption from rotating outages for certain eligible customers who can reduce electric load on their entire electric circuit by as much as 15% for each and every CAISO notice for "firm load curtailment". It is a critical program that should not be constrained by any other programs and pays neither capacity nor energy incentives. — Schedule OBMC

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 (Continued)

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 Issued by
 Date Filed
 Nov 23, 2009

 Advice Ltr. No.
 2128-E
 Lee Schavrien
 Effective

 Senior Vice President
 Segulatory Affairs
 Resolution No.



	Original	Cal. P.U.C. Sheet No.	21506-E
Canceling		Cal. P.U.C. Sheet No.	

**RULE 41** 

Sheet 6

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# DEMAND RESPONSE MULTIPLE PROGRAM PARTICIPATION

# 4. <u>Program Descriptions</u> (Continued)

The Scheduled Load Reduction Program (SLRP) offers bill credits to business that commit to reducing their power by a set amount on pre-determined days from June 1 through September 30 regardless of whether there is an electricity shortage. – **Schedule SLRP** 

Summer Saver reduces regional electricity demand by cycling customers central A/C unit "on and off" for a few hours during critical hot summer days.

Permanent Load Shifting (PLS) offers incentives to customers who shift energy (kW) usage from peak periods to non-peak on weekdays (M-F, excluding holidays) from May 1 through October 31. A basic requirement for participating PLS customers is that they be served on SDG&E's Schedule ALTOU, thereby foreclosing their participation in PLS.

Aggregator Managed Program (AMP) – Aggregators or third parties who have agreed with SDG&E to supply demand reduction as required per contract in return for both Capacity and Energy Incentives.

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6P0 Issued by Date Filed Nov 23, 2009

Advice Ltr. No. 2128-E Lee Schavrien Effective

Senior Vice President
Decision No. 09-08-027 Regulatory Affairs Resolution No.

# Appendix D Integration of Technical Incentives Report

# **Integration of Technical Incentives Report**

# San Diego Gas & Electric

# February 2011

Ordering Paragraph Decision 09-08-027 states the following:

San Diego Gas & Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company shall develop proposals for integrating their Technical Incentives programs with other, similar demand side management incentive or rebate programs, consistent with the discussion in Section 12 of this decision. *Each Utility shall submit a report on how to integrate these activities, consistent with the results of the Energy Efficiency Strategic Plan workgroups, as part of their next demand response program applications.* 

# Introduction

San Diego Gas & Electric (SDG&E) has implemented several initiatives designed to integrate our Technical Assistance / Technology Incentive (TA / TI) programs with other demand side management programs. The activities that are identified in this document are intended to provide some clarity on what methods are the most effective in achieving these desired goals, but additional data collection is required. Most of these efforts are still in progress, at this time we have not collected enough data to provide any firm recommendations. However, these endeavors have highlighted several challenges that have impeded the level of Integrated Demand Side Management (IDSM) activity and participation we are seeking. Most notably, IDSM has a highly segregated workforce. Contractors tend to either focus on energy efficiency or to focus on demand response activities and they have not integrated both opportunities into a comprehensive offering. The Utility is looking at approaches, both contractor driven and customer driven, to encourage the various stakeholders to either expand their offerings or partner with complementary organizations to provide comprehensive solutions. Recent stakeholder workshops have provided valuable insights on how we might further adapt our TA/TI programs to encourage this type of participation. SDG&E will use these workshops as an ongoing strategy to ensure our program design is centered on the customer while supporting the trade allies that implement our programs. These workshops provide a valuable forum for the stakeholder to

provide feedback on program design, development and implementation. In addition, quarterly reports will be generated to reflect the progress being made within this IDSM effort. SDG&E believes that a stronger emphasis on financial incentives will help achieve greater success implementing IDSM within the TA / TI programs. Direct implementers, like Aggregators, are critical to the success of IDSM and it is important that the Utility creates a favorable environment for them to work in. SDG&E believes properly placed incentives will create this environment and that these incentives come from two primary areas: program-linking incentives for direct implementers and a clear market need for integrated products and services. Section I of this report highlights the IDSM activities that SDG&E had been performing to address the first area: program-linking incentives. SDG&E has created third party programs, like Continuous Energy Improvement, to provide contractors programs they can implement that will drive IDSM. Additionally SDG&E has created financial incentives for these market actors, like the EE Bonus described below, that encourages IDSM technology installation. Section II of this report highlights the activities SDG&E has undertaken to raise the awareness of IDSM with customers and thereby create the market need. These activities includes targeting customer specific segments with tailored IDSM marketing material, providing bonuses for IDSM installations and publicly recognizing customers that have implemented integrated energy management solutions.

# **Section I – Contractor Driven Activities**

# **Integrated Audits**

Under SDG&E's Technical Assistance / Technology Incentive (TA/TI) program, audits are provided that present both Energy Efficiency (EE) and Demand Response (DR) opportunities. Per the TA/TI scope of work, contractors have been tasked to integrate both EE and DR in their assessments and recommendations. The goal is to maximize benefits to the facility while minimizing interruptions and interactions to the customer and their business. This approach has proven to be a good opportunity for the Utility to promote energy efficiency incentives and rebates that the customer may not have realized were available. Lighting and HVAC energy efficiency measures are the most common end uses auditors suggest to customers. These also happen to be the measures that provide the most opportunity for participating in demand response programs.

Our Institutional and Government Partnership Program has focused on developing an integrated approach to retrofitting and upgrading these facilities. By leveraging TA/TI, this program has been able to integrate Demand Response and Energy Efficiency opportunities within their existing offerings. Several projects have been initiated, most notably within the various universities and community colleges, and are being monitored to ensure that the customer takes advantage of all potential IDSM opportunities.

# **Coordination with Aggregators**

SDG&E continues to see the Aggregators as an important component to the success of IDSM. They have leveraged the TA/TI program to enroll customers into our DR programs, and, under the scope of work, identified energy efficiency measures as well. Based on workshop panels held by the Utility, stakeholders had an opportunity to provide feedback on the design and implementation of our programs. These meetings provided additional insights and ideas on how to better utilize Aggregator to help achieve our EE and DR goals. As a result, in the 2012-2014 cycle, we are proposing an incentive for the Aggregator to assist Auto-DR enabled Critical Peak Pricing customers achieve load reductions during a DR event. Additionally an EE incentive will be offered to the Aggregator to encourage the installation of the EE measures

identified in their TA audits. We want to utilize this "EE Bonus" program to encourage the Aggregator/Auditor to not only identify energy efficiency measures, but to actively pursue their installation.

# Third Party Pilots & Special Bonus Programs

SDG&E is currently working with an engineering consulting company to develop a pilot to provide integrated audits to specific target segments. These audits will look for gas and electric energy efficiency opportunities as well as demand response measures. By targeting specific segments, we will better understand and recognize the unique needs of our customer segments, and further customize our program portfolio to cater to these respective requirements. It is our intention to utilize this pilot as a stepping stone to further define the best methods for providing the most comprehensive approach to customers. The Technical Assistance audit will be utilized in this effort as the initial gateway with the customer to discover suitable EE and DR measures with acceptable paybacks.

# **Continuous Energy Improvement**

SDG&E is implementing a Continuous Energy Improvement (CEI) Program to provide selected customers with a strategic roadmap that will assist them with a detailed and ongoing energy improvement process. This effort will be an integrated approach that will target both EE and DR opportunities. A comprehensive assessment will be conducted to identify IDSM opportunities, systemic energy management practices and cultural shifts that can improve overall facility management practices. This pilot program will be utilized to help the IOU further adapt our future programs.

# Section II - Customer Driven Activities

# **Energy Saver Bonus Program**

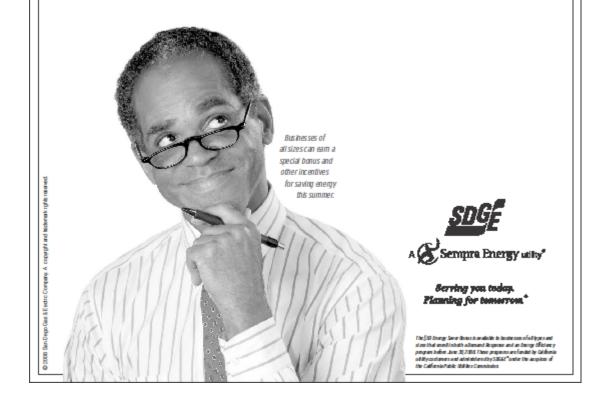
An Energy Saver Bonus Program was developed to further promote the integration of SDG&E's Energy Efficiency (EE) and Demand Response program offerings to its nonresidential customers. SDG&E offered a "bonus" based-component to encourage participation and enrollment in both Energy Efficiency (EE) and Demand Response (DR) programs in anticipation of Summer participation. The offer was made available to all commercial/industrial/agricultural customers or their contractors if they successfully participated in both an EE and DR program. The offer was made available to the following customer size categories: peak demand under 100 kW and peak demand over 100kW. A select group of EE and DR programs were identified to best promote this offer. An extensive Outreach campaign was developed to generate target audience awareness and actively solicit and increase enrollment in individual DR and EE programs. This effort also helped to enhance broader awareness of SDG&E's EE and DR program. The campaign consisted of a bill insert that was included in all commercial bills, a brochure for use by area contractors, print ads, radio IDs, ad libs, 60 second spots, and banner ads on a variety of print, radio and TV Web sites. The two 60 second spots promoting the Bonus used humor in an office setting to convey the message. The attached promotional materials on Pages 5 through 7 are examples of what was used to reach the targeted customers. The funding for the "bonus" was split between the energy efficiency and demand response programs and paid out of their respective marketing outreach budgets.



**Earn a bonus**Right now, by participating in **for your business.** both an energy-efficiency and a demand response program, your business can get a \$50 bonus. The improvements can help your company save energy and money year-round, and help the region save energy on critical days this summer. For details, call us at 1.800.644.6133, or visit sdge.com/energysaverbonus. These programs are part of our long-term

These programs are part of our long-term energy plan for the region. Saving energy is good for you and good for the environment. And now it comes with a bonus.





# Choose the energy-saving programs that work best for you.

Earn a bonus for your business by signing up now for SDGSE programs that can help your business save energy. To qualify for the bonus offer, your business or organization is required to sign up for at least one energy-efficiency improvement program AAP one critical peak (demand response) corselvation program. This brockure provides a brief summary of the program options available based on the average monthly energy use of your business.

## Bonus Option 1 For smaller businesses with swimpe districtly acounter (SEA or month)

# Year-Round Savings Energy Efficiency

Our Small Business Super Saver program offices cash rebrase to arrall business casconses who tread energy-efficient appraise to their lacilities. Currently, rebrase are available for many appear of energy improvements, from lighting at refrigeration earthrase. squipment. In many cases, casemens may qualify for opposite as no met.

#### Critical Summer Savines Demand Response

SINGLE's Peak Day Credit program offers bill credits for inducing electricity use when neathed by SINGLE on days when electricity demand exceeds the norm. To qualify, you will raised as agree to reduce years demand at less 10%, and you will receive a bill credit equal to the arrestet you wood (up or a maximum of 20%).

The Senter Saver program provides an annual payment to you when you agree to have your central air conditioning unit automatically set to cycle off and un for a few hours on high peak wage days. The amount of the annual payment to based on the store and number of A/C units at your facility.

# Bonus Option 2

For medium to larger to stresses with a verage and richly use to all it to per month

# Year-Round Savings Energy Efficiency

Our Express Efficiency program of law cosh rebutas for energy-efficiency improvements to commercial traductial or agricultural facilities. For natural gas improvements, participants must use a minir of 4,366 thems per month.

# Critical Summer Savings Dersard Response

Our **Domand Bidding** program allows your bustness to bid a level of load reduction you would be willing to achieve during critical pook energy use periode, as to propose a payment amount for which you would be willing to participate.

OR

SIXGLEN Post Day Codit program offers believed to fee reducing observing case when mostled by SIXGLE. on days when electricity demand accesses the norm. In quality, you will need to appear to reduce your demand at lease 10%, and you will receive a bill credit organize. the arrested you send (up to a maximum of 20%).

# Bonus Option 3

For madium to larger dustriction with a worder about this was now all the part month.

# Year-Round Savings Energy Efficiency

Our **Standard Performance Contract** program offers funding for nearofs projects involving commercial, industrial and agricultural concernors. The incompre armanus are deservined by the actual arrours of energy seved resulting from the installation of new адафитаты от вуванта

The Energy Savings Bild program provides financial incentives for inscaling qualifying now, high-efficiency equipment in your bostness. Classificant and project sponsors can propose orangy-senting projects for their facilities, and request an incentive amount to help triplement the project.

AND

# Critical Summer Savings Demand Regionse

Our **Technology Incentil-45** program offers treasuries for trivialing accomised domand reduction such cologies. These triumstons may off-set up to 100% of the tracelled equipment or upgrade costs.

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For a limited time. SDC&P'is offering a special

#### Energy Saver Bonus to

thank business customers for improving their energy efficiency and helping the region save energy during periods of peak demand.

Illusinesses of any size are eligible. Take a look inside for details on this bonus offer. and a summary of the programs offered that can help your business save energy.

For more information, call an SDC&E representative at 1.800.644.6133, visit sdge.com/energysaverbonus, or ask your contractor

is a Bright



Helping businesses identify ways to be more anarry efficient is around the ways SDGAE is doveloping anargy solutions for the region.

For more information, visit sdge.com/energysaverbonus or call 1.800.644.633.



Earn a bonus for ousiness.



# **Integrated Application**

SDG&E is also pursuing the development of an on-line application with the intent of integrating the Demand Response and Energy Efficiency offerings. SCE recently launched an online application and have made modifications to generate an integrated approach as well. In an effort to minimize the amount of start-up difficulties, SDG&E has been communicating with SCE to better understand what web model is the most effective and user-friendly. SDG&E will incorporate these best practices as we further develop our own tool.

# Integration through Segmented Marketing, Education & Outreach

Starting in 2009, all EE and DR program collateral was revised and structured in a way that all relevant programs were tailored and presented by segment rather than by program Each customer segment had segment specific, integrated program information presented to them, which included EE and DR messaging. Segments include:

- Wholesale/Retail/Offices (5 sub-segments)
- o Government/Utilities (5 sub-segments)
- Hospitality/Services (3 sub-segments)
- Manufacturing (3 sub-segments)
- o Institutional (3 sub-segments)
- Agriculture/Construction (2 sub-segments)

Pages 9 through 11 provide examples of the segmented business collateral.



SDG&E understand a

the heavy energy load

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why our energy efficient

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# Energy-Saving Solutions for Manufacturing Companies

#### Creating More Goods with Less Energy

SDGGE\* officer manufacturing companies financial incentives, deal or sout-bence, per formance audit and their ing to build greate an engy efficient or into their operations. What her fix making upgrades when you buy new equipment or neducing usage during periods of peak demand, SDGE\*s energy manugement in this times provide a wilder angle of customized solution x to help lower your electricity and netural gas coots and solidity our bottom in a

#### Key Equipment Installations to Reduce Energy Usage

- Yer lable: Spield Dr fives Installing variable speed drives on pumps, fars and other equipment electronically controls, mobine speed and can yield substantial energy savings. For example, reducing to speed by 20% can reduce energy use by usto 50%.
- Compressed Air Refroll thing your compressed air systems with veriableinsquency three can improve energy efficiency by up to 50% in addition, 50666, will cover up to 50% of the extres cost for none will be to compressors.
- Bolleam Replacing your sheem or hot water bottler with a high efficiency to older provides subsharidal energy swings. In addition, making sure your bottler has an efficient burner, insulation, headwater was nomitteen, automated to owdown control systems, and oxygen to in systems will optimize to bottler energy automated.



liven drilly operations that carry a termy energy load can become moreoverpy effections.

- Motors installing Nell oral Dischricel Manufachurers Association (NIRA) priest unself discop motors can note or nellated an ergy costs by up to 6%. Moreover, these motors are nor mell y constructed with helber manufachuring bechniques, insulation and bearings, which improve operational longwidy, wester less heat, cause less viscollors, and in crease en label thy.
- Pumps Select a pump and drive motors cornectly street to the load. Simply replacing throttling valves with speed controls can reduce energy use by as much as 60%.

CONTRACTOR AND AND

#### Solutions that Save Energy on the Production Floor

- Relations Bot also are the excited very for you to earn money on your energy will derif purchase. For exemple, qualifying variable intequency drives for IMAC fams, energy efficient lights, and storage heaters of the cash back for upgrades. To got debt individual information on eight a relation products, with adjac.com/internation on eight a relation products, with adjac.com/internation of one or contact the Energy Information Center at 1-800-644-613.3 for an application.
- Incest to us Our bechnology incentive payments help offset the costs of energy-suring upgrades, whether that's the installation on finer high efficiency equipment or systems, or the netroit of existing inhedrous business are based on the emount of energy saved. Be sure to contact SDGSE early in the design process or before you star tyour projection of your existing equipment and planta forming supported of your existing equipment and options between size and your existing equipment and options between size as of your existing equipment and options between size as of your existing equipment and options between size as of your existing equipment and options between size as of your existing equipment and options between size as of your existing equipment of the property of the property
- Demand Response = Deman diresponse initiatives help reduce electricity demand at pless times to prevent strain on our system. The sources, manufacturers can reselve finential incentives for reducing their energy use on hot summer dese.
- Benchmarkting = Benchmarkting with the Environmental Probation Agency's DIREGO STAR® For this Manager all owe yet by book and assess arrangy performance across your entire portfolio of buildings in a sesure and the environment. A Portfolio Manager will note your becility's every performance on a scale of 10 to 00 relative to similar buildings national de. Additional Information on an ergy planning is available in frough our Confirmans Energy Inconversable program at subsector.

Note: Beginning January 1, 2010 benchmer king will be required for all commercial customers who participate in energy efficiency programs.



Upgrading your equipment with energy efficiency in mind can felip reduce your energy use and coals.

Audita = Our Technical Audit and Technology Incentives provide on a terracity weakast one for outdoness using 20 kilo weth (Willy or more of selectricity). These audits range from simple alte essessments to comprehensive angineering studies and are designed to determine load reduction potential with least olderititying energy efficiency opportunities.

Our energy efficiency and demand resp once in that see just relevant soul present am dissip need to help moduce your energy usage, lower your o penating costs and generate neel survings. For more detects on how our energy man agement so build one can help you save more, or most your properties and the cost to be compared to the cost of the cost of the cost of today or cost our finerpy information Center at 1-900-64-49-100.



1-800-610-9008 (7343)

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"Many thanks to SDGSE's

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**Wice President of** 

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programs and province."

Production, Hakto Kih ola

Company, 2009 S0G&E

Dwg y Showcase Winner

They provided us

# Energy-Saving Solutions for Greenhouse Growers

Cultivating Energy Efficiency

SDEAE\* offers communical grower a finencial incentives, design analythmus, performance and its and that init glo jumpation the move toward more energy efficiently precincular go positions. Whether you're no plimbing your satisfying facilities or encicsing a dditional acreage under glazo or shade; SDEAE's energy management in this latives provide a wider angle of customized solutions to help lower your natural gas and all echricity coats and in greate the health of your bottom line.

#### Key Equipment Installations to Reduce Energy Usage

- Next Curtains and inframed Film Installing heat our brins with an energy windpursting realing greater than 40% common awarings realing greater than 40% common during inframe heat loss with a reducting digit investment produces and mit igating I gift is levels. Adding an inside layer of inframed placific film one minima within heat loss and reduces energy cools up to 20%.
- Water Pump Teating and Retrolits = Retroliting or replacing irrigation pumps that are before 50% overall pumping efficiency will result in long term on or gy and cost savings. In addition, cash back incestifives are also available to help the project pay for itself.
- Lightling and BNAC Controls Utilizing applicated timen and arrans that control lights, temperatures, fars, vents and screens on optimize growing conditions and boost heating and cooling savings.
- Not Water Rips Insulation Wrapping deam and hot water transport pipes, aspecially those coming directly from the bolle; with one to two inches of insulation neduces natural gas usage.



If years thinking of optimizing year winting facility, let \$200K help with everyy awing sold one.

 Premium Motors with Yarishie-Frequency Defeas — Premium efficiency motors are typically one to five per antiage point a more efficient than abendant efficiency motors.
 And alone they generally operate to riong periods of time, measurable sevings can addup quickly.

#### Opportunities that Create the Perfect Environment for Savings Growth

Risk atta: — The exciset way for you to earn money on your energy efficient purchases. For exempting reloates are set liable on qualifying greenhouse heat curbains, infrared film and a variety of other energy efficient upgrades. To get detail ed informer tion on eligible reloate products, visit adja. com/prosers or confact the Timergy information Centre at 14000-4444-45.23 for an application.

(Deline-feedall)

- Incentive sa Our bechnology incentive payments help offset the costs of energy saving upgrades, whether their's the installation of new high efficiency equipment or systems, on the retardit of existing infrastructure. Incentives, are based on the enround's energy saved, the sure to contact SDGEC early in the design process. before you start your project to ached deithe required pretrapedion of your existing equipment and options technical support.
- Interest Pres Financing = The On Bit Financing (OBF) Option all own qualified commercial and texpayer-funded customers to pay for energy efficient business improvements through their 5 0542; bit OBF works in conjunction with 50562; relates and incentive programs to provide an interest have financing option for eligible customers.
- Demand Response Deman diresponse infliatives help neduce electricity demand all pieck times to prevent strain on our system. For excerpia, growers can receive filmential incentives for reducing their energy use on hot summer days.
- Benchmarking Benchmarking with the Environmental Protection Agency's ENDERG'STARP Portfolio Manager allows you to brack and assess arrangy performance across your entire portfolio of buildings in a secure online environment. Portfolio Manager will rate your facility's arrangy performance on a scaled of the 100 metric who similar buildings nationel de. Additional Information on en engy planning is available to hough our Continuous Energy improvements program at adjace on.

Note: Beginning January 1,2010 benchmer king will be required for all commercial customers who participate in energy efficiency programs.



eliminating the cost of maintaining ideal governg conditionals cattoring the autoes of your touties. Smart design and applicating overnents can be an important despring done in reducing your future returnings, and electricity us.

AS SOGGE we know your business is highly competitive and accratitive to assessmel changes. As a mostil, we have developed strong ymanagement sould one with your specific meets in mind. Our energy efficiency and demand response in titlet less plus nelevent equipment and designed to help ned use your energy usage, gen or all med sevings and make your greenhouse floarish. For more details on how our energy management adultions can help you save money contact your Account Executive to day or call our Energy Information Cardina at 1-900-4-64-4-031.



F. C. BOX 129631 SAH DIRBO, CA 92112-9631 1-80 O-611-30 GK (T363)

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We as School out our

# Energy-Saving Solutions for Grocers

#### Energy Efficiency in Every Aisle

S DGSE\* offers it reacted i novertives, design assistances, per formance au dis an of training to help op through the benefit of an engyeffit dency measures in grocery stones. Whether it is, keeping dis consent frozen or healthy rosested chicken hot and need y to set, S DGSEs were gy management in it selves, provide a velor range of our stormized political to help lower your electricity and natural gas costs and incrower our before him.

#### Key Equipment Installations to Reduce Energy Usage

- Lighting —Specifying high with dency findment and controls can adultated by minimize energy usage. Replace adulting 1922 fluorescent length and respect to bell asks with 76 or 76 length with electronic bell adult minimized energy with electronic bell adult minimized energy with client lighting in adulty or cases. Intelligible of the lighting confront client depth of the lighting which play cases. Intelligible lighting confront bodin the lights where sufficient depthpl is assistable and put firms are staticture or occupy ency sensors in your walk in bosses to reduce aum sensorsy electricity by use.
- Bathiguestion Energy efficiency can be applied to all reach in, walk in, and under the country cooking and in the search, as well as food and drink storage and display cases. It statisting object adors, reserged til sent reach in cases, strip carteline, automated door closure, evaporation ten control lenn, and efficient wappendon from motions in cases and well in the high cut-conting costs as well. Replacing worm door gasteles, clearing condernar cools and topping off the refrigerent change are mail offerences.



Applying energy efficiency upgrades tounder-thecounter cooless, as well as food and ditals storage and display case, can save energy and money.

- N MAC —Purchasing a high-will dency parkaged or custom systems optimized for your other architecture of indicate the your other and indicate the control of the control
- Energy Management System Can autometically optimize settings to reflect usage, changing weather, and peak electric abustions.

(College designation)

#### Opportunities that Feed Energy Savings

- Relation Bits also are the excitation very for you to earn morey on your energy will disely purchases. For exemple, qualifying high will disely nothing existion and MVAC equipment office cash back for upgradies. To get detailed information on eight evident principle, with sign are onlying one or contract the Energy Information Comber at 19600-64-64-033 for an expell cation.
- Incent to as Our bechnology incent we paymen to help offset the costs of energy saving upgrades, whether that's the installation on invertible difficiency explorant or spatient, or the entent to it estating intent usture. Incentives are based on the error and of energy sevent. Be sure to contact SSGEZ early in the design process. or before you start your project to acted the the required pre-trapection of your estating explorants and options becomes as you.
- Demand Response Deman directions in his affixes help induce electricity demand all pask times to prevent shall non our system. For example, grosers aren need se fis and all incentives for reducing their energy use on hot summer days.
- Interest-Free Financing = The On (Bit Fin anding (OBF))
  Option at one qualified commercial and burpayer-funded
  customers to pay for energy efficient business improvemental through their 5 DGEZ bit. OBF works in conjunction
  with SDGEZ notate and inventive programs to provide an
  interest-free fin anding option for eligible customers.
- Benchmarking = Benchmarking with the Environmental Probation Agency's INSERS'S STAR® Por folio Manager allows by a to brack and assess energy performance across your entire portfolio of buildings in a secure online environment. A Portfolio Manager will rate your facility's energy performance on a scale of 15 to 100 relative to similar buildings nettometide. Additional Information on energy planning is evaluate the trough our Continuous Energy improvements in little" we study.



Having an energy management solution tall and for you can help near the lower.

Note: fleginning January 1, 2010 benchmer king will be required for all commercial customers who perticipate in energy efficiency programs.

• Audit = Our Technical Audit and Technology Incentives provide on site facility evaluation for our domen using 20 kido wells (x/W) or more of electricity. These audits range from simple also susserands to comprehensive angineering studies and are designed to determine load refutcion potential while also identifying energy efficiency opportunities.

Our energy efficiency and demand nep onse initiatives plus neivent equipment are deligned to reduce your energy uses, generate neil swin gar and help nouth's your bus trees. For more details on how our energy management adultions can help you save morey, entact your Account Doscutive today or call our Energy information Center at 1-800-644-6133.



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\$2000 Gas Blood and Float fell expany.

DOMESTIC CON STREET

In 2009, The "Business" pages of our website were also restructured to follow the segmented marketing approach. Each customer segment (manufacturing, education, retail, etc.) has integrated program information presented to them, including the above mentioned collateral, which combines EE and DR messaging.

SDG&E has an active outreach program that focuses on community events for both Residential and Business customer audiences. In 2009, we participated in 60 events (42 Residential / 18 Business) and in 2010 we participated in 75 events (69 Residential / 6 Business.) At these events, a wide variety of collateral and information is distributed, including brochures that integrate both energy efficiency and demand response messaging and program information. In addition to the segmented business collateral (presented above) which is distributed at industry specific events, select pages of the collateral that are our primary integrated pieces for distribution at general business and residential events are shown on Pages 13 and 14.



# A Guide to Services



www.sdge.com/business



# **Taking Care of Business**

As a business owner, managing daily operations is your main concern. That is why SDG&E® offers programs and services to help you lower your business energy use and control costs, so that you can put more focus on your business.

Please take a few moments to learn about the many programs and services available. Helping your business manage its energy usage is one of the ways that SDG&E works to provide exceptional customer service.

For more information, call our Business Contact Center 24 hours a day, seven days a week, at 1-800-336-7343 or visit www.sdge.com/business.



#### **On-Time Service Guarantee**

SDG&E guarantees on-time arrival for the most commonly requested service calls when scheduled at least one day in advance, or you'll receive a credit of \$15 to \$50 on your next SDG&E bill. The guarantee covers service turn-ons, gas appliance adjustments, meter rereads when you ask to be present, new meter installations, and inquiries about carbon monoxide, voltage and energy use.

# How to Start, Stop or Transfer Service

Call 1-800-336-7343 to start, stop or transfer your service; please notify us at least five workdays prior to the service need. The process takes a few minutes. You may also start, stop or transfer service online at www.sdge.com/customer. For special services, including requests for 5 or more accounts and/or requests for multiple furnigation orders, please e-mail orders@semproutdities.com or fax your request to 858-636-7755.

#### Where to Address Service Concerns

If you have concerns about our service, contact the California Public Utilities Commission by phone at 1-800-649-7570, on their website at <a href="https://www.epuc.ca.gov">www.epuc.ca.gov</a>, or by mail at the Consumer Affairs Branch, 505 Van Ness Ave., Room 2250, San Francisco, CA 94102.

# Rebates and Incentives to Help You Save

SDG&E's programs and services for business\* can help you save energy, save money and help the environment. To find out which of the programs below can best help your business, call the Energy Information Center at 1-800-644-6133 or visit www.sdqe.com/esc.

# **Energy-Efficiency Rebates**

SDG&E offers many rebates and incentives to help offset the cost of energyefficient equipment upgrades that can help lower your energy consumption. Rebates are available for heating, cooling, lighting, foodservice and more. A list of programs can be found at www.sdqecom/esc.

# **Demand Response Incentives for Saving**

SDG&E has special demand response programs that provide incentives and technical assistance for conserving energy during temporary critical times. For a list of opportunities, please visit www.sdge.com/esc and follow the links to "Rebates and Savings."

## On-Bill Financing

Zero-percent financing is available to eligible customers on qualifying energy-efficient business equipment improvements. Upgrade costs are typically offset with select SDG&E rebates and incentives. And you can conveniently repay this 0% loan through your monthly SDG&E bill. Visit www.sdge.com/ob/ or call 1-800-644-6133 to inquire about your eligibility for this program.

#### Design Incentives and Assistance for New Construction

You may qualify for incentives of up to \$150,000 for nonresidential new construction projects that exceed California Title 24 requirements by 10% or more through our Savings By Design program. Free design assistance, seminars and information resources are also available. More information is

3

# **Energy Showcase**

SDG&E also holds its own annual event for business customers, the Energy Showcase. Since 2006, this free event has been where SDG&E customers can learn more about ways their business can save money through integrated energy efficiency and demand response programs and supporting technology. The Energy Showcase includes an exhibitor's pavilion displaying the latest cutting-edge energy efficiency and demand response technologies. The pavilion traditionally features over 75 local, national and international exhibitors. In addition attendees are encouraged to attend one of six seminars on energy efficiency and demand response topics. The event features an awards luncheon, where top performing SDG&E commercial and industrial customers from the previous year are recognized. Winners are selected from all businesses that participated in SDG&E's energy efficiency and demand response programs and achieved measurable success. The Energy Showcase is free to anyone interested in attending, including business owners and residential customers.

# **Small Business Customer Campaign**

For small and medium business customers (under 100 kW) a three year phased campaign was launched in 2010. The goal of this three year campaign is to promote Demand Response, Energy Efficiency and additional services that we offer to our small and medium business customers. The first phase was delivered in July 2010 and consisted of direct mail, sent to approximately 80,000 customers.

Phase two of the campaign was delivered to approximately 55,000 customers in November 2010. Personalized direct mail (directed at the business owner), personalized landing pages (based on the type of industry our target audiences represent) and a follow-up email were sent to a specific set of target segments, including:

- 1. Groceries
- 2. Restaurants
- 3. Lodging
- 4. Other (e.g. Retail, Offices)

These segments were identified through research efforts as most receptive to participate in our programs.

The following pages represent some of the campaign material that was developed to target the small business customer.



# Get Ready to Save this Summer



Call SDG&E today and schedule a free on-site energy analysis. We can help your business save energy and money. Dear Business Owner:

SDG&E\* is here to help you manage your energy use and costs.

We have several options available for you to start saving this summer.

# 1. Sign up for a free Energy Consultation

If you're considering equipment or system upgrades, call our Energy Information Center at **1-800-644-6133** to schedule an appointment for a free on-site energy analysis with one of our energy consultants. They'll evaluate your facility's potential for energy savings and provide a follow-up report with recommendations for your top energy-saving opportunities. If you have older, inefficient equipment, or if you're considering making upgrades, this analysis could help you make the right choices.

#### 2. Sign up for our Summer Saver program

With SDG&E's Summer Saver program, your business can earn financial incentives for reducing the run-time of your central air conditioner during periods of high electricity use. Up to 15 days per year - from May through October - your business can save more, earn more, and help the environment.

As a Summer Saver plan member you can:

- Earn an annual credit on your SDG&E bill
- Help maintain reliability throughout the region
- Reduce greenhouse gas emissions
- Conserve natural resources

Enrollment is free, and you can change your participation at any time.

Contact our program administrator, Comverge, Inc., at 1-800-850-1705
to speak to a Customer Care Representative or visit sdge.com/summersaver.

Sincerely.

Joe Velasquez

Director, Commercial Industrial Services

J. Welsog

The Summer Saver Program is funded by California utility customent and administered by Sav Dilego Gas & Flexible "DGGE") under the auraphose of the California exhibit utilities (commission through a context awarde to Econ

