

Application of San Diego Gas & Electric
Company (U-902-M) for Approval of
Demand Response Programs and Budgets
for the Years 2006 through 2008.

Application 05-06- _____

CHAPTER II

PREPARED DIRECT TESTIMONY

OF SUSIE SIDES

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 1, 2005

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CHAPTER II
PREPARED DIRECT TESTIMONY
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I. PURPOSE

The purpose of my testimony is to describe the portfolio of demand response programs, and associated budgets, that SDG&E proposes to offer to its customers during the three-year program cycle of 2006-2008. This testimony explains SDG&E's program development process, its plan on how to interface with its customers in marketing and implementing these programs, and how the proposed programs make up a key component of SDG&E's integrated demand side management portfolio. Additionally, because SDG&E's proposed portfolio of programs spans a new three-year cycle, my testimony describes SDG&E's proposal to present program modifications and updates to the Commission during this period, as well as SDG&E's proposal to maintain budget and funding flexibility for its programs.

II. SUMMARY OF ANTICIPATED DEMAND RESPONSE PROGRAM LOAD REDUCTIONS

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

| | 2005 | 2006 | 2007 | 2008 |
|---------------|------------|------------|------------|------------|
| Day-Ahead | 84 | 78 | 96 | 114 |
| Day-Of | 82 | 115 | 131 | 150 |
| TA/TI* | 15 | 50 | 90 | 120 |
| <i>Total:</i> | <i>181</i> | <i>243</i> | <i>317</i> | <i>384</i> |

*TA/TI: Technical Assistance Program/Technical Incentives Program

1 **III. BACKGROUND**

2 **A. Demand Response Programs History**

3 SDG&E has been developing and offering to its customers an array of demand response
4 programs since 2001. During this time period, the scope of these programs has changed as more
5 experience is gained with the programs, and the concept of demand response as a vital element
6 of resource planning becomes more fundamental and accepted.

7 **B. Significant Commission Decisions**

8 In 2001, the Commission issued three decisions which directed SDG&E to design and
9 implement numerous demand response programs. D.01-04-006 ordered SDG&E to implement a
10 Base Interruptible Program (BIP), a Voluntary Demand Response Program (VDRP), an Optional
11 Binding Mandatory Curtailment Program (OBMC), and an Air Conditioner Cycling (A/C
12 Cycling) program. Subsequently, D.01-07-025 was issued, suspending the VDRP, and replacing
13 it with the Demand Bidding Program (DBP). D.01-06-009 authorized SDG&E to implement a
14 Rolling Blackout Reduction Program (RBRP), utilizing customer's backup generation
15 capabilities to augment energy supplies. In addition to these Commission decisions, Senate Bill
16 (SB) No. 5 (1st Extra Session, 2001), also referred to as SBX1 5, required the utilities to
17 implement the Scheduled Load Reduction Program (SLRP).

18 During 2002, the Commission issued two additional decisions furthering the development
19 and implementation of demand response programs. In D.02-04-060, the Commission extended
20 demand response programs to the conclusion of the rate design phase of each utility's next
21 General Rate Case (GRC). This same decision extended SDG&E's RBRP program to be
22 consistent with all other interruptible programs and approved modifications to the SLRP. On
23 July 17, 2002, the Commission issued D.02-07-035, authorizing changes to the DBP. Most
24 notably, DBP was transitioned to a reliability program, triggered by the California Independent

1 System Operator (CAISO) on a Day-Ahead or Day-Of basis with customer incentives for
2 participation set at \$0.35/kWh.

3 **C. Rulemaking 02-06-001**

4 On June 10, 2002, the Commission opened a new proceeding, R.02-06-001, the
5 Advanced Metering, Demand Response and Dynamic Pricing Rulemaking, continuing and even
6 expanding the evaluation of demand response programs and related dynamic pricing structures.

7 In R.02-06-001, the Commission stated:

8 We emphasize that demand-responsive capabilities are important regardless of the
9 ultimate electricity market structure that emerges in the next few years. A
10 perfectly functioning wholesale and/or retail electricity market is not a
11 precondition for development of demand response. On the contrary, demand-
12 responsive capability can be a tool in mitigating the effects of a dysfunctional
13 market, as well as for controlling costs, even in a completely vertically integrated
14 and regulated market.¹

15 As the first task of R.02-06-001, the Commission stated its intent to "...consider a
16 strategic approach to the orderly development of demand-responsiveness capability in the
17 California electricity market over the next 18 months."² As a key element of the process by
18 which the Commission initiated the activities associated with R.02-06-001, two statewide
19 working groups were created to bring together key stakeholders to exchange ideas and develop
20 programs and proposals aimed at achieving the objectives articulated in R.02-06-001.

21 Working Group 2 (WG 2), established to consider programs and proposals aimed at
22 larger customers, has involved stakeholders interested in developing demand response
23 approaches for large customers. WG 2 has represented a diversity of stakeholder interests,
24 including investor owned utilities, municipal utilities, ratepayer advocate groups, large customer

¹ See R.02-06-001, mimeo, at page 1.

² See R.02-06-001, mimeo, at page 3.

1 trade associations, demand response vendors and consultants, energy service providers and the
2 CAISO.

3 Working Group 3 (WG 3) was established to consider programs and proposals directed
4 toward residential and small commercial customers, and, in particular, the development of a
5 Statewide Pricing Pilot (SPP) program, to test the effectiveness of and customer response to a
6 dynamic pricing tariff structure.

7 As part of the overall effort to develop and implement a comprehensive portfolio of
8 integrated demand response and energy efficiency programs, the program proposals reflected in
9 this Application are directed at both Working Group 2 and Working Group 3 interests, and have
10 been built on the extensive participation and discussions of all stakeholder interests.

11 **1. Establishment of Annual Demand Response Program Targets (D.03-06-032)**

12 On June 6, 2003, following the initial work of WG 2 and WG 3, and considering the
13 extensive interagency discussions involving agency decision makers from, among others, the
14 CPUC, the California Energy Commission (CEC) and the California Power Authority (CPA),
15 collectively known as Working Group (WG 1), the Commission issued D.03-06-032. This key
16 decision:

17 ...addresses the interagency vision for advancing statewide demand response
18 goals, links the task of meeting those goals with utility procurement requirements,
19 and adopts an initial set of voluntary tariffs and programs for large customers
20 whose electricity use exceeds 200 kW per month. The decision also sets annual
21 megawatt (MW) targets to be met through demand response and included in
22 investor-owned utility (IOU) procurement plans.³

23 D.03-06-032 goes on to note:

24 Early on during WG 1 meetings, the Principals endorsed the idea of developing a
25 long-term 'vision' and set of goals for demand response to help guide the efforts
26 of participants in this proceeding. The aim was not to prejudice issues but instead

³ See D.03-06-032, mimeo, at page 2.

1 to provide a framework and set of goals within the context of which activities in
2 this proceeding would be set.⁴

3 D.03-06-032 adopts a series of annual target goals for demand response programs,
4 establishing aggressive targets for the portfolio of programs to achieve. For SDG&E, the
5 adopted goals were demand reductions of 30 MW for 2003, 80 MW for 2004, and 3% of annual
6 system peak demand for 2005, growing to 4% in 2006 and 5% in 2007. A fundamental
7 component of SDG&E's focus in designing its portfolio of demand response programs has been
8 the annually-increasing program goals.

9 Additional provisions of D.03-06-032 modified the DBP to include both a price and a
10 reliability trigger, and created three new demand response programs: Critical Peak Pricing
11 (CPP), SDG&E's Hourly Pricing Option (HPO), and the California Power Authority's Demand
12 Reserves Partnership (CPA-DRP).

13 **2. 2005 Demand Response Programs (D. 05-01-056)**

14 On January 27, 2005, the Commission issued D.05-01-056, which approved demand
15 response programs and budgets for SDG&E, Pacific Gas and Electric (PG&E) and Southern
16 California Edison (SCE) for 2005 implementation. All three utilities had previously filed
17 demand response program portfolios and budgets for 2005 through 2008, but D.05-01-056
18 declined to adopt programs and budgets beyond 2005. Instead, D.05-01-056 directed the utilities
19 to prepare program and budget proposals for the 2006-2008 period, and file those proposals June
20 1, 2005.⁵ Additionally, D. 05-01-056 closed SDG&E's Hourly Pricing Option, Schedule HPO.⁶

⁴ See D.03-06-032, mimeo, at page 2.

⁵ See D.05-01-056, mimeo, at page 13, and Ordering Paragraph 3.

⁶ See D. 05-01-056, mimeo, Ordering Paragraph 2

1 **3. Default Critical Peak Pricing (CPP) (D.05-04-053)**

2 As directed by the Commission,⁷ on January 20, 2005, SDG&E filed its proposal for a
3 new Default CPP program and tariff, applicable to large customers and designed to be
4 implemented by June 1, 2005. In response to the Commission's direction, SDG&E's proposed
5 Default CPP was developed to put in place distinct pricing signals that would motivate customers
6 to reduce their energy consumption during periods of insufficient electricity supply. SDG&E's
7 proposal was developed with the benefit of considerable stakeholder discussion and input.
8 SDG&E's proposal essentially began with what already exists as a voluntary demand response
9 program, through the existing Rate Schedule EECC-CPP, and modified it into a non-voluntary,
10 default demand response tariff for large business customers.

11 After holding evidentiary hearings, and considering the positions of a variety of
12 stakeholders and interested parties, the Commission issued D.05-04-053 on April 21, 2005,
13 addressing the Default CPP proposals filed by SDG&E, PG&E and SCE.

14 D.05-04-053 states, in part:

15 After reviewing the potential demand reduction realistically achievable from
16 implementing the proposed default critical peak tariffs...the bill impacts...and the
17 likelihood that customers would have sufficient information and time to make
18 changes to their loads beginning June 1, 2005, we will not adopt new default rates
19 for Summer 2005. Instead, we lay out information learned from these
20 applications and a process to capture the lessons learned as with the goal of
21 comprehensive rate design reform for 2006.⁸

22 The Decision requires that the three utilities file new critical peak pricing proposals by
23 August 1, 2005, consistent with the provisions addressed in the decision. Additionally, D.05-04-
24 053 went on to adopt certain modifications to SDG&E's current voluntary critical peak pricing

⁷ See Administrative Law Judge and Assigned Commissioner Ruling, dated December 8, 2004, in R.02-06-001, directing the filing of Default Critical Peak Pricing Proposals for implementation by June 1, 2005.

⁸ See D.05-04-053, mimeo at page 2.

1 tariffs, and adopted a new, voluntary critical peak pricing-emergency tariff to help provide
2 immediate (within 30 minutes) load reductions when needed.
3 D.05-04-053 further highlights the ongoing importance of developing and implementing
4 comprehensive and integrated demand response program portfolios, but also adds emphasis to
5 the importance of a coordinated customer outreach, awareness and education component of the
6 portfolio. Providing the proper pricing signals through redesigned rates and programs, informing
7 customers and educating them as to the mechanics of pricing signals and program designs, and,
8 perhaps most importantly, allowing customers sufficient motivation and time to make the
9 necessary investments in technology to facilitate the changes necessary to indeed modify their
10 energy use patterns are all vital elements to a well designed and successful portfolio of demand
11 response programs.

12 **IV. PROGRAM DESIGN CONSIDERATIONS**

13 In developing its portfolio of proposed demand response programs presented in this
14 Application, SDG&E has undertaken a comprehensive evaluation of not only its existing
15 programs and customer reaction to them, but also the variety of demand response, energy
16 efficiency and other similar programs that are offered by utilities elsewhere in California and
17 across the country. SDG&E evaluated other programs in the context of such factors as program
18 design, program acceptance, customer participation and performance, and the costs to design,
19 market and implement the programs.

20 The feedback received from customers, as well as review of national, statewide and local
21 studies, indicates the challenges faced with demand response programs. Financial considerations
22 were frequently cited as a barrier, including that either the rewards (or incentives) were not high

1 enough or the risks were too great. Unwillingness or inability to shed load were also cited as
2 barriers.⁹

3 SDG&E also recognizes that a great deal of time is required in order to create awareness
4 of programs, generate customer interest, incite action and support customers after their
5 enrollment in programs. Unlike many other utility efforts, demand response programs are
6 episodic, variable and uncertain.

7 Additionally, due to the voluntary nature of these programs, actual load reduction, when
8 requested, has typically been far below enrollment potential. For example, the Independent
9 System Operator – New England (ISO-NE) has found that annual customer dropout rates can
10 approach 40 - 50%.¹⁰ These factors require that more marketing dollars be allocated to keeping
11 customers engaged in programs where enrollment and actual demand reduction events can be
12 months apart.

13 SDG&E has taken this critical customer feedback, as well as research results on other
14 utility programs, into consideration in the development of the 2006-2008 programs. Based on
15 the analysis of other programs, qualitative, quantitative and anecdotal research and its own staff
16 recommendations, SDG&E believes that it has included in this Application proposals that will
17 best serve its customers and help to meet the established annual targets as set forth by the
18 Commission.

⁹ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation - Non-Participant Market Survey Report*, August 5, 2004, pp 26-27

¹⁰ RLW Analytics, Neenan Associates, *An Evaluation of the Performance of the Demand Response Programs Implemented by ISO-NE in 2004*, December 29, 2004, p 2-6.

1 **V. DEMAND RESPONSE PROGRAM PORTFOLIO**

2 **A. Introduction**

3 The following discussion presents an overview of the various demand response programs
4 that make up SDG&E's integrated portfolio of programs for 2006-2008. Each of these programs
5 is briefly discussed here with proposed changes to existing programs for 2006-2008 highlighted.
6 Budgets supporting each proposed program, as well as a summary of the projected load
7 reductions are contained in Appendix A, while detailed program concept papers and program
8 descriptions are contained in Appendix B.

9 As described more fully below, SDG&E is proposing to implement a comprehensive
10 portfolio of integrated demand response programs and budgets for the three-year program cycle
11 2006-2008. The proposed program are budgets summarized below, with further detail contained
12 in Appendix A:

| | <u>2006</u> | <u>2007</u> | <u>2008</u> |
|------------------------------------|-----------------|----------------|----------------|
| Program Budget (\$ million) | \$ 21.11 | \$18.65 | \$15.88 |

15
16 **B. IDSM Concept**

17 By offering an integrated demand response and energy efficiency portfolio, while also
18 considering such other initiatives as distributed generation and renewable energy, SDG&E can
19 help its customers find opportunities to maximize the synergies that are created by and amongst
20 these various products and services. Energy efficiency involves the permanent, longer-term
21 reduction of energy usage in a manner that does not affect a customer's level of service or
22 productivity, generally accomplished by replacing older equipment with newer, more efficient
23 versions. It can also be accomplished by permanently shifting the timing or pattern of energy
24 usage. Demand response, on the other hand, involves a load reduction for a limited period of

1 time in response to an external trigger or event. This requires the customer to have in place an
2 identified demand reduction strategy, the necessary technology to implement the strategy, and
3 the motivation to temporarily reduce their load below what might be considered normal or
4 optimal levels of service.

5 Ideally, the end result is the most cost-effective level of load reduction that maximizes
6 the capital invested in the various programs. This integrated approach also benefits customers by
7 helping them maximize the efficiency of their operations and energy use, and at the same time,
8 reduce their overall energy costs. In turn, SDG&E can leverage these synergies allowing more
9 efficient operation of its electric system by working with customers to help reduce system load
10 (i.e., through deployment of energy efficiency programs, renewables and distributed generation)
11 and by helping to reduce peak loads (through demand response programs).

12 This approach is all the more important because of recent research that shows many
13 customers are unaware of demand response. For those business customers who are aware of
14 demand response, they believe that the activity is painful, incompatible with business operations,
15 or simply not possible. The CEC cited this as one of five technical barriers to greater acceptance
16 of demand response.¹¹ In Quantum's statewide program evaluation, demand response program
17 non-participants viewed demand reduction as incompatible with business operations.¹² In fact,
18 over 80% of the non-participants said they did not participate in the DBP because they were
19 unable to shift or reduce load. SDG&E believes that this represents a major stumbling block for
20 wider participation by customers in demand response programs.

¹¹ California Energy Commission, *Action Plan to Develop More Demand Response*, Report P400-02-016F, July, 2002, p. 37

¹² Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation, Summary of Phase 1 Research*, April 8, 2004, p. 4-6

1 How does the utility overcome such an enormous barrier? The Energy efficiency
2 initiative, through a generation of program years, has matured into a simple, accessible and
3 acceptable movement. Demand response must be simple, accepted and paired with other
4 initiatives that have been successful in the minds of customers. By combining efforts with
5 energy efficiency, a known, successful initiative that has saved customers money, the IDSM
6 approach will help overcome this barrier. As part of a recent American Council for an Energy-
7 Efficient Economy report, authors York and Kushler cited Quantum's work in California,
8 concluding that integrated approaches may help attract customer participation in programs.¹³

9 Evaluators of California's critical peak pricing and demand-bidding program
10 observed that most eligible customers stood only to save modest amounts from
11 their annual energy bills. The evaluators recommended, 'One strategy for
12 capturing a greater share of the value proposition is by integrating programs and
13 services to address different aspects of that proposition.'

14 To be successful, it is essential to coordinate the two concepts and, in particular, present
15 customers with ways in which to participate in both types of programs simultaneously. SDG&E
16 believes the IDSM effort will greatly benefit customers by providing a more uniform message
17 about energy management and eliminating any confusion between demand response and energy
18 efficiency. SDG&E expects that customers will be more willing to enroll in demand response
19 programs as part of an overall energy management strategy, thereby resulting in significantly
20 higher levels of energy savings and load reduction.

21 In order to maximize customer participation in the programs that are most effective and
22 beneficial to them, and to maximize the demand response under specific programs, the array of
23 demand response programs and other initiatives must be both intuitive to customers and easy for
24 them to understand and implement at their facilities. Through the integration of demand

¹³ Dan York, Martin Kushler, *Exploring the Relationship Between Demand Response and Energy Efficiency*, March, 2005, p. 52

1 response and energy efficiency programs, each with different and unique features, SDG&E has
2 attempted to reach the broadest group of customers possible. As SDG&E and its customers gain
3 more experience with these programs, further opportunities and program modifications will be
4 identified. This will allow SDG&E to fine tune its portfolio just as customer and other
5 stakeholder input has improved energy efficiency over the years.

6 Integrated messaging is essential to creating awareness. Each energy efficiency and
7 demand response program proposed by SDG&E will allude to comprehensive solutions
8 recognizing both permanent and episodic peak load reduction. IDSM, however, encompasses
9 more than adding demand response bullet points to energy efficiency program literature and vice
10 versa. This is simply a starting point to introduce a comprehensive solutions-orientation. IDSM
11 moves from integrated education collateral to integrated audits, technology, partnerships and
12 measures. SDG&E has incorporated demand response and energy efficiency activities in both its
13 2006-2008 demand response and energy efficiency program portfolios. This integrated portfolio
14 approach allows for joint marketing and outreach, workshops and seminars and ease of customer
15 understanding.

16 As indicated above, integrated messaging will be incorporated into every program's
17 literature. Given each program year requires new literature due to programmatic changes, the
18 cost to add message points is deemed to be negligible and is included in original program costs.
19 The following programs, however, require more than messaging to optimize energy efficiency
20 and demand response. While the IDSM programs are described in more detail here, the budgets
21 associated with these programs are included in the overall DRP budget in the appropriate cost
22 category.

1 **C. IDSM Programs**

2 The following programs in this section are described to illustrate the potential overlaps
3 and opportunities with energy efficiency. This testimony, however, is not intended to speak to
4 the specific energy efficiency measures described in this section, but rather to demonstrate the
5 concept of integrated programs.

6 **1. Advanced Home Program**

7 **a) Advanced Home**

8 The Advanced Home Program promotes residential new construction with a crosscutting
9 focus to sustainable design and construction, green building practices and emerging
10 technologies. The program supports efficient heating, cooling, water heating system and
11 building envelope design and installation. Some builders have indicated an interest in demand
12 response, if it makes sense for their home buyers. However, many more builders are unaware of
13 the potential. They will be educated on the various demand response technologies available in
14 new homes. This program explores the integration of Smart Thermostats, load control devices
15 and energy management systems for the new construction market. Once explored, incorporated
16 and exhibited, these elements will demonstrate the potential and opportunities to become
17 mainstream in the residential new construction market.

18 **b) Advanced Home Renovations**

19 The Advanced Home Renovation Program (AHRP) is designed to transform a pre-1978
20 vintage single-family home into a state-of-the-art energy efficient and demand response
21 showcase. The goal will be to demonstrate how little energy a typical San Diego family can use
22 without changing their lifestyle, and to increase the awareness of energy efficiency and
23 technological advances in electric and natural gas end uses.

1 All of the energy end uses will be completely removed and replaced with the highest
2 efficiency equipment and designs commercially available. Additionally, appliances will be
3 equipped with direct load control devices or Smart Appliances. The home's heating and cooling
4 system will be controlled via a Smart Thermostat and energy management system. The water
5 heating system will be re-worked with a solar water heating system with a high energy-factor
6 natural gas-fired instantaneous back-up system. The home electronics (TV, DVD, VCR, etc)
7 will be equipped with one (1) watt stand-by power systems where possible. The home's lighting
8 systems will utilize daylight harvesting, 4-pin hardwired compact fluorescent recessed lighting,
9 dimmable CFL fixtures, LED fixtures, premium T-8 lamps, motion sensors, and other advanced
10 lighting systems. Home office products will showcase the most energy efficient models. And
11 finally, the home will be equipped with a photovoltaic power generation system.

12 The information gathered through this showcase project will be used to design future
13 energy efficiency and demand response programs. In 2007 and 2008, demand response and
14 energy efficiency measures demonstrated in the AHRP will be eligible for financial incentives to
15 customers who install the same technologies.

16 **2. Home Energy Efficiency Survey**

17 The Home Energy Efficiency Survey (HEES) is a comprehensive multi-lingual outreach
18 program designed to educate a wide range of residential customers by offering on-line, mail and
19 telephone energy surveys. Energy surveys provide accurate and comprehensive information
20 about practices and opportunities, and make specific recommendations that are tailored to each
21 participants' energy use characteristics, appliance mix, and billing history. In addition, surveys
22 have proven to be an effective tool for reaching non-English speaking customers who otherwise
23 have limited access to reliable efficiency information.

1 Demand response and renewable technology elements will be incorporated into the
2 survey recommendations. A specific module will be built into the on-line energy audit that will
3 allow residential customers to identify ways they can reduce load during peak days. The surveys
4 will also promote demand response programs and services such as technology incentives and the
5 Summer Saver Program. The program minimizes lost opportunities by communicating
6 information in multiple languages to Southern California's diverse population. The HEEES
7 program serves as a tool to bring energy efficiency and demand response to all customer groups.
8 Particular attention will be given to customers eligible for assistance programs where providing a
9 combination of demand response measures, incentives, and energy efficiency makes sense.

10 **3. Sustainable Communities**

11 The goal of the Sustainable Communities Program is to generate sustainable energy and
12 demand savings by creating a network of sustainable/green building projects in SDG&E's
13 service territory. These projects will incorporate high performance energy efficiency and
14 demand response technologies, along with clean on-site generation, water conservation,
15 transportation efficiencies and waste reduction strategies. To better understand the demand
16 response technologies effect in concert with the other measures, SDG&E proposes to conduct
17 analyses and develop case studies for demand response measures in Leadership in Energy
18 Environmental Design (LEED) buildings.

19 Demand response fits well with the objectives of the Sustainable Communities Program.
20 This program seeks to create public showcase projects with targeted municipalities to develop
21 sustainable building policies for the communities they serve. If demand response is to be
22 successful, it needs subscription by community influencers. The program also seeks to publicize
23 individual project results in cooperation with participating cities and other region stakeholders in
24 an effort to increase community awareness and promote widespread local adoption of sustainable

1 design practices. Examples of successful demand response in the case studies SDG&E develops
2 will serve as a catalyst for increasing the number of sustainable communities within the region.

3 **4. Small Business Super Saver**

4 The Small Business Super Saver (SBSS) is an existing local program targeting businesses
5 with monthly demand of less than 100 kW. It is a prescriptive rebate program that encourages
6 customers to retrofit existing equipment with high efficiency equipment and demand response
7 technologies. Rebates are intended to cover a significant portion of the incremental cost
8 associated with installing this equipment. The program integrates contractor incentives, creating
9 a no-cost approach for the very small customer. For those customers who invest in these
10 technologies, On-Bill Financing will be available to help minimize the initial financial impact to
11 customers and help to stimulate higher participation in this customer market.

12 The SBSS will work closely with existing demand response programs to cross-market
13 where applicable. One area for cross-marketing is with the IDSM energy audit. In 2006,
14 SDG&E will continue its IDSM audit that supports both energy efficiency and demand response.
15 The purpose for an IDSM energy audit will be to provide a single coordinated audit service for
16 the customer and subsequently offer from its portfolio those programs best suited for the
17 customers' operations. The IDSM energy audit would operate under the umbrella of the
18 Technical Assistance Program.

19 **5. SDG&E Community Colleges Partnership**

20 The SDG&E Community Colleges Partnership offers incentives for retrofit and new
21 construction projects, continuous commissioning, and educational training for the community
22 colleges. Since the infrastructure is set and a concentrated effort is underway, the program can
23 easily feature integrated audits with demand response measures incorporated. The cooling
24 operations, for example, can feature control measures, which allow equipment cycling,

1 sequencing of operations, scheduling changes for heating, ventilation, air-conditioning (HVAC)
2 and lighting systems and improving the ability to meet set points. In the area of training, campus
3 energy managers and other staff will be trained on initial and continuous commissioning and will
4 receive tools to reduce energy consumption and peak demand through energy information at the
5 building systems level.

6 **6. On-Bill Financing**

7 The On-Bill Financing (OBF) pilot program will be administered through SDG&E's
8 energy efficiency program portfolio. To the extent that demand response technologies can be
9 identified and made available through OBF, SDG&E will make that accommodation. The
10 details of SDG&E's OBF proposal are described in the testimony of SDG&E Witness Spasaro in
11 SDG&E's Application for 2006-2008 Energy Efficiency Programs and Budgets, filed on June 1,
12 2005.

13 **D. Day-Ahead Programs**

14 **1. Voluntary CPP**

15 Voluntary CPP is a rate option whereby commodity prices are discounted throughout the
16 year during all non-critical peak period hours. Non-residential bundled utility customers who
17 have a minimum demand of 20 kW or higher, an IDR meter and are served on a time-of-use
18 (TOU) rate are eligible to participate in voluntary CPP. This program is designed for customers
19 who have the ability to modify their business operations and reduce load with one day's notice.

20 Dynamic tariffs such as voluntary CPP are an important component of the demand
21 response portfolio because, as noted by the Commission, they are likely to be the most cost
22 effective. As a result of D.05-04-053, SDG&E will continue offering voluntary CPP to all of its

1 customers with a demand of 20 kW or higher.¹⁴ As required by D.05-04-053, SDG&E will
2 conduct four test events during the course of the 2005 summer months.
3 SDG&E believes that customer participation may continue to be lower than initial
4 expectations because bill savings potential does not provide customers with sufficient incentive
5 to participate. In the non-participant study conducted by Quantum, the majority of respondents
6 indicated they would need greater than a 5% annual bill savings in order to reduce their energy
7 by 5%.¹⁵ Rate analyses conducted by SDG&E show that less than 1% of eligible customers will
8 see that level of bill savings.

9 SDG&E proposes the following modifications to its voluntary CPP program.

10 **a) Allow adjustments to Voluntary CPP trigger as warranted**

11 D.05-04-053 allowed SDG&E to combine its temperature trigger of 84° with an actual
12 system load trigger of 3,620 MW. Due to growth and other considerations, the temperature and
13 system load trigger is likely to need modification from time to time. SDG&E proposes that
14 annual changes to the system load trigger be allowed.

15 **b) Discontinue Bill Protection in 2007**

16 SDG&E proposes that Bill Protection be continued through 2006 but discontinued in
17 2007. The reason to continue Bill Protection into 2007 is that efforts to market to small
18 commercial customers have only just begun in 2005 and this is an important component for early
19 adopters. SDG&E believes that awareness of voluntary CPP will be high enough in this segment
20 to discontinue it in the following years. SDG&E's plan will be to allow new voluntary CPP
21 participants to elect Bill Protection for the first twelve months. SDG&E anticipates that
22 customers who sign up for Voluntary CPP in 2006 will have Bill Protection into 2007 until the

¹⁴ See D. 05-04-053, mimeo at page 57, Ordering Paragraph 12, and SD&E's proposal to expand eligibility to customers 20 KW and greater in "Supplemental Direct Testimony of James Magill, at page JM-4, dated February 11, 2005 in A. 05-01-016 et al.

1 twelve month term is expired. Customers who sign up after January 1, 2007 will be ineligible
2 for Bill Protection.

3 **c) Waive the maximum demand charge during non-CPP periods on a CPP**
4 **event day for the first year of enrollment**

5 The Commission authorized SDG&E in D.05-04-053 to disregard a participant's
6 maximum demand for purposes of calculating the customer's monthly demand charge, if the
7 maximum demand occurs on a CPP event day outside of the CPP period.¹⁵ The intent of this
8 waiver is to protect customers who reenergize their processes too quickly and create an
9 extraordinary in-rush load at the conclusion of the critical peak period. Although SDG&E
10 supports this proposal during this initial period of educating customers on the CPP concept,
11 SDG&E does not believe it should be a permanent program feature. Since the CPP concept is
12 new to customers, especially the smaller business customers, participants should be allowed the
13 opportunity to learn an appropriate start-up strategy without the threat of a penalty imposed by a
14 higher monthly demand charge and that each customer should receive protection for the first 12-
15 months they are enrolled on the rate. SDG&E believes that this protection affords them time to
16 adjust their strategy to optimize their operations. While the process will be similar to the Bill
17 Protection, SDG&E proposes to extend this waiver only through December 31, 2007.

18 **2. DBP**

19 The DBP is a voluntary program whereby participants earn bill credits by reducing a
20 minimum of 10% of their power consumption when contacted by SDG&E. Customers who have
21 a minimum demand of 20 kW, an IDR meter and communications are eligible to participate in
22 DBP. Customers may either be utility bundled or direct access. The program is designed for

¹⁵ Section 8.6, pages 62

1 customers who prefer a voluntary program that does not penalize them should they choose not to
2 respond to a particular event and have the ability to modify their operations with one day's
3 notice.

4 Participants who bid their load reduction into the DBP currently receive an incentive
5 based on the market price + \$0.10¹⁶. SDG&E supports the continuation of this incentive
6 premium through 2008. However, SDG&E believes that participation in DBP will continue to
7 be lower than initial expectations, even with this premium, because of low existing market
8 prices. Studies have consistently shown that customers require high incentives far beyond bill
9 savings in order to participate in demand bidding programs.¹⁷ Lawrence Berkeley National
10 Laboratory found that financial incentives of \$150-200/MWh were the minimum threshold for
11 noticeable customer response.¹⁸ The New York State Energy Resource and Development
12 Authority (NYSERDA) and PG&E attained far greater participation in their programs, up to 40
13 times more megawatts, in their reliability programs in 2001 than their price response programs.¹⁹
14 Spot market prices at that time ranged from \$500 - \$1,000/MWh.

15 SDG&E believes the incentive premium is also necessary in order to overcome an
16 inherent customer reluctance to participate in price-based programs. While not cost effective
17 compared to purchasing power on the spot market, the premium helps to overcome what is
18 generally called a participation or initiation cost incurred by customers. Other programs, such as
19 those run by New York Independent System Operator (NYISO), explicitly recognize this cost
20 and encourage customers to include it within their bid price. Of course, participating customers

¹⁶ See D. 05-01-056, mimeo, at page 25.

¹⁷ Public Utility Commission, *Demand Response Programs for Oregon Utilities*, Prepared by Lisa Schwartz. May 2003. <http://www.nwppcc.org/energy/dr/library/drrptfin.pdf>.

¹⁸ Chuck Goldman, *Framing Paper #1: Price Responsive Load Programs*, Prepared for The New England Demand Response Initiative, <http://nedri.raabassociates.org/Articles/NEDRIPaperPRL3-26-02.doc>.

¹⁹ Dan York, Ph.D. and Martin Kushler, Ph.D., *Exploring the Relationship Between Demand Response and Energy Efficiency: A Review of Experience and Discussion of Key Issues*, Prepared for the American Council for an Energy Efficient Economy, Report U052, March 2005

1 in the New York program compete directly against supply-side resources in the day ahead
2 market and only receive market clearing prices.²⁰
3 SDG&E proposes the following modifications to its DBP program.
4 **a) Eliminate group aggregation**
5 SDG&E proposes to eliminate group aggregation. D.05-01-056 approved SDG&E's
6 proposal to expand DBP to individual customer accounts with a minimum demand of 20kW. As
7 a result, the reason for allowing customer aggregation is now unnecessary.

8 **3. CPA-DRP**

9 The CPA-DRP is a voluntary program whereby participants commit to reduce their
10 power consumption through a Demand Reserves Provider who is under contract with the CPA.
11 An individual customer may contract directly with the CPA if they have a minimum of 5 MW of
12 demand reduction capability. Non-residential customers who have an IDR meter and
13 telecommunications are eligible to participate in CPA DRP. Customers may either be utility
14 bundled or direct access.

15 SDG&E proposes the following modifications to the CPA DRP program.

16 **a) Upon expiration (May 2007), transition to a new similar day-ahead** 17 **program.**

18 With the expected expiration of the California Power Authority Demand Reserve
19 Partnership in May 2007, SDG&E intends to propose a similar program that would be available
20 to bridge customer participation from the CPA DRP without interruption for summer 2007.

21 SDG&E believes that existing participants in the CPA DRP are a valuable resource that
22 should be retained and transitioned into a new program. In addition, SDG&E believes that there
23 is potential for increased participation in its service territory for a program structured similarly to

²⁰ New York Independent System Operator, *Day Ahead Demand Response Program Manual*,
http://www.nyiso.com/services/documents/manuals/pdf/planning_manuals/dadrp_final090903.pdf

1 the CPA-DRP. This new program is envisioned to maintain key elements of the CPA DRP, such
2 as the use of aggregators, allowance of Direct Access participation, a flexible bid process and
3 both energy and capacity incentive payments.

4 Given the fact that the existing program is intact and operating until May 2007, SDG&E
5 believes that it is premature to attempt to structure a new program at this time. Therefore, a
6 specific program design is not being proposed in this Application. Rather, SDG&E proposes to
7 file an implementation plan via Advice Letter by the end of summer 2006 to propose a new
8 program description, anticipated budget impacts, cost recovery and anticipated load reductions.
9 Meanwhile, SDG&E will incorporate the experiences and lessons learned from 2005 and 2006 in
10 the design of a CPA-DRP replacement program. SDG&E will also evaluate the roles of active
11 parties including the CPA, APX, and aggregators to determine the best processes for this new
12 program.

13 In addition, SDG&E proposes that interested parties participate in collaborative statewide
14 workshops to design a replacement program that offers similar operating parameters and
15 products across the state. Initial feedback from customers has indicated that a consistent
16 program across the state is preferred. Notwithstanding that certain operational, implementation
17 and contractual details could remain utility specific. A statewide program concept is anticipated
18 to encourage greater participation and help minimize customer confusion.

19 **4. Commercial/Industrial (C&I) Peak Day 20/20**

20 Approved in D. 05-01-056, C&I Peak Day 20/20 (Peak Day 20/20) is a voluntary
21 program whereby participants have the ability to earn a bill credit of 20% by reducing their
22 power consumption by a minimum of 20% on critical peak days. Participants are notified one
23 day in advance of a peak day event. Bundled utility or direct access customers who have a

1 minimum demand of 20 kW or higher, are on a TOU rate, and have an IDR meter are eligible to
2 participate in Peak Day 20/20.

3 SDG&E supports this design for 20/20 which requires customers to reduce their power
4 consumption only on those days when SDG&E initiates an event. This approach more closely
5 matches the intent of price-based responsive programs and, as noted in the decision, is more
6 effective at targeting demand reduction when needed.

7 SDG&E proposes the following modifications to the program.

8 **a) Extend Peak Day 20/20 through 2008**

9 SDG&E's experience has shown that the 20/20 concept is highly popular with customers
10 and the program is able to generate favorable response rates. Since SDG&E began promoting
11 the program on March 24, 2005, SDG&E has received well over 600 applications from
12 customers interested in participating in the Peak Day 20/20 program. SDG&E believes that
13 having a program that excites customers will stimulate them to develop load reduction strategies
14 and perhaps stimulate investment in demand reduction technologies. With the Advanced
15 Metering Infrastructure (AMI) project beginning in 2007, customer enthusiasm for Peak Day
16 20/20 is expected to intensify.

17 **b) Extend Peak Day 20/20 to customers with AMI technology**

18 With SDG&E's plan to roll-out AMI in 2007, SDG&E proposes to allow all customers
19 (including residential and small commercial) with AMI technology installed to participate in the
20 Peak Day 20/20 program.

21 **E. Day-Of Programs**

22 **1. Emergency Demand Bidding Program (DBP-E)**

23 The Emergency Demand Bidding Program (DBP-E) is a voluntary program whereby
24 participants earn bill credits by reducing a minimum of 10% of their power consumption. This

1 program will be targeted to customers who have the ability to modify their operations with very
2 little notice (60 minutes). Customers who have a minimum demand of 20 kW, an IDR meter and
3 communications are eligible to participate in DBP-E. Customers may either be utility bundled or
4 direct access. Customers must choose between DBP and DBP-E. They cannot participate in
5 both programs.

6 Participating customers would be paid an incentive for load reduced of \$0.50/kWh, or the
7 day-of market price, whichever is higher. This price is the same as what is being offered in the
8 New York Independent System Operator's Emergency Demand Response Program (EDRP).

9 From the standpoint of participation, program experience in New York, California and
10 elsewhere has shown that reliability-based programs can achieve significant load reduction and
11 that actual load reduction rates (versus enrolled) for reliability programs are significantly higher
12 than for economic programs.²¹ NYSERDA was able to enroll 40 times more MWs in their
13 reliability programs in 2001 than their price response programs.²⁴ Spot market prices at that time
14 ranged from \$500 - \$1,000/MWH. Speculatively, this can be attributed to the added value
15 customers place on avoiding an outage when a grid emergency situation exists.

16 SDG&E acknowledges the immediate need from a system perspective for confirmed
17 demand response during reliability (day-of) events. To address this concern, SDG&E proposes
18 three specific requirements that would be unique for DBP-E. First, in order to receive an
19 incentive, customers would be required to achieve their accepted bid load reduction at a
20 minimum, rather than within the +/- 50% range required for DBP. If the bid load reduction or
21 greater amount is not achieved, customers would be ineligible for an incentive. Second,

²¹ Dan York Ph.D. and Martin Kushler, Ph.D., *Exploring the Relationship Between Demand Response and Energy Efficiency*, American Council for an Energy-Efficient Economy (ACEEE), March 2005.

1 participation in the two (2) tests would be required for DBP-E customers. Failure to respond to
2 either one of the tests would result in being removed from the program. Third, participants must
3 respond to at least 50% of the DBP-E events, otherwise, the participant would be removed from
4 the program.

5 A DBP-E event will be activated primarily during a system reliability emergency
6 including a CAISO Warning, a Stage 1 or pre-Stage 2 event, or a local emergency as determined
7 by SDG&E. When conditions apply, participants will be notified that a DBP-E event will be
8 activated in 60 minutes. DBP-E will be available Monday through Friday, excluding holidays.
9 Incentives paid for reduced energy consumption are calculated based on a comparison
10 load and energy usage for the same hours using the three highest usage days from the ten
11 previous days. For an incentive to be paid, a minimum reduction of 10% from the baseline per
12 hour is required. Incentives for a day-of event will only be paid for reduction equal to the
13 accepted bid or greater. Incentives will be paid in the form of a credit to the participating
14 customer's bill.

15 **2. Base Interruptible Program (BIP)**

16 The Base Interruptible Program (BIP) is a voluntary program that offers participants a
17 monthly "capacity" bill credit in exchange for committing to reduce power to a minimum pre-
18 determined level on short notice during emergency situations. BIP imposes a significant penalty
19 for non-performance. Customers who can reduce demand by 15% or a minimum of 100 kW,
20 whichever is higher, have an IDR meter, and have telecommunications are eligible to participate
21 in BIP. Customers may either be utility bundled or direct access. The program is designed for
22 customers who have a firm load reduction plan in place and can reduce load with certainty when
23 requested. There is however a penalty for non-performance that is far greater than the incentive.

1 Research shows that customers believe the risks outweigh the rewards.²² In order to make the
2 program more attractive, SDG&E has previously proposed to limit the penalty to two times the
3 annual incentive.

4 In an effort to improve customer acceptance of BIP, SDG&E proposes the following
5 modifications for the program.

6 **a) Allow aggregators to participate in the program**

7 SDG&E proposes to allow third-party aggregators to participate in the BIP. The
8 aggregators would serve the same purpose as the demand reserve providers in the CPA-DRP. By
9 providing a three-year commitment with a consistent economic structure, SDG&E believes
10 aggregators will have the ability to develop a load reduction portfolio. As demonstrated in the
11 CPA DRP program, aggregators are able to absorb some of the risk associated with the program
12 and offer a more attractive business proposition to participating customers. Both the CPA-DRP
13 and NYSEERDA's Peak Load Reduction Program have demonstrated the advantage of this
14 business model in the marketplace.

15 SDG&E proposes to sign a contract with an aggregator, agreeing to a Firm Service Level
16 and specifying a capacity reservation incentive that will be paid to the aggregator. A minimum
17 of 1 MW in load reduction will be required of aggregators. SDG&E will act as the meter-
18 reading agent for the aggregator. The aggregator will notify SDG&E which customers they have
19 contracts with and provide appropriate data authorization forms. SDG&E will pass all customer
20 data to the aggregator. The aggregator will also have access to kWickview. The aggregator will

²² Quantum Consulting Inc. *Working Group 2 Demand Response Program Evaluation - Non-Participant Market Survey Report*, August 5, 2004.

1 be responsible for any payment arrangements to its customers. At the time of an event, SDG&E
2 will measure the performance of the customers as a group and notify the aggregator of the
3 results. The aggregator will be responsible for any penalty due to non-performance.

4 **3. Emergency Critical Peak Pricing (CPP-E)**

5 Voluntary Emergency Critical Peak Pricing (CPP-E) is a rate option whereby customers
6 receive discounted commodity prices throughout the year in exchange for reducing load when
7 needed during critical peak periods. Energy that is consumed during the critical peak periods is
8 priced higher, reflective of the peak period costs and supplies. This program is targeted to
9 customers who have the ability to modify their business operations with very little notice (30
10 minutes), typically through automated methods. Non-residential customers who have a
11 minimum demand of 300 kW, an IDR meter and telecommunications and are served on a TOU
12 rate are eligible to participate in CPP-E. Customers must be utility bundled. The program was
13 approved by the Commission in D. 05-04-053, and is designed to replace the ALTOU-CP, which
14 was closed in 2005. SDG&E proposes to continue offering CPP-E through 2008.
15 In the long run, SDG&E believes customers will become comfortable with CPP-E.
16 Through the Technical Assistance program and Technology Incentives, customers will have
17 more ability, flexibility and confidence to reduce load in a predictable manner, and subsequently
18 minimize the perceived risk factor.

19 The following modifications for CPP-E are proposed for 2006 - 2008.

- 20 a) **Waive the maximum demand charge during non-CPP periods on a CPP**
21 **event day for the first year of enrollment**

22 The Commission authorized SDG&E in D.05-04-053 to disregard a participant's
23 maximum demand for purposes of calculating the customer's monthly demand charge if the

1 maximum demand occurs on a CPP event days outside of the CPP period.²³ The intent of this
2 waiver is to protect customers who reenergize their processes too quickly and create an
3 extraordinary in-rush load at the conclusion of the critical peak period. Although SDG&E
4 supports this proposal during this initial period of educating customers on the critical peak
5 pricing concept, SDG&E does not believe it should be a permanent program feature. Since the
6 CPP concept is new to customers, participants should be allowed the opportunity to learn an
7 appropriate start-up strategy without the threat of a penalty imposed by a higher monthly demand
8 charge and that each customer should receive protection for the first 12-months they are enrolled
9 on the rate. SDG&E believes that this protection affords them time to adjust their strategy to
10 optimize their operations. While the process will be similar to the Bill Protection, SDG&E
11 proposes to extend this waiver only through December 31, 2007.

12 **4. Residential Smart Thermostat**

13 The Residential Smart Thermostat is a voluntary pilot program originally intended to test
14 the viability of an interactive approach to residential load control and demand response using
15 smart thermostats and the Internet to affect air conditioning use. This program proposes to
16 maintain its existing participants who are residential customers with Smart Thermostats with at
17 least one functioning, packaged air conditioning system.

18 This installed technology allows customers to remotely adjust their air conditioning
19 settings as well as allows the utility to raise the settings during a CA ISO Stage II event, or local
20 system emergency. The pilot is scheduled to close after 2006.

21 Beginning in 2007, smart thermostats will be offered through the Technology Incentives
22 program.

²³ Section 8.6, pages 62

1 **F. Additional Programs**

2 This Application is intended to provide a complete portfolio of SDG&E's demand
3 response programs. The following section includes descriptions of additional programs for
4 informational purposes only, in the interest of representing the complete portfolio of demand
5 reduction products. SDG&E is not proposing any changes or requesting additional funding for
6 the programs listed below.

7 **1. Summer Saver**

8 The Summer Saver Program is a direct load control program available to residential,
9 small business customers (<100kW) and agricultural customers (<200kW) with central air
10 conditioners, water heaters, pool pumps or irrigation pumps. Managed through a third-party,
11 participants' equipment is automatically controlled during times of need. The Commission
12 approved SDG&E's Summer Saver program in D.04-06-011.

13 **2. Clean Gen**

14 The Clean Gen Program is a voluntary program utilizing a customer's back-up generation
15 system. Customers allow SDG&E to access this generation remotely during times of critical
16 need, providing relief on the system within ten minutes. In exchange, customers' systems are
17 upgraded to operate more efficiently. The Commission approved SDG&E's third-party
18 administration arrangement of the Clean Gen program in concept in D.04-06-011. The
19 agreement for third party administration between SDG&E and Celerity was submitted for
20 approval in Advice Letter 1673-E and approved in Resolution E-3926 on April 21, 2005.

21 **3. Peak Gen**

22 The Peak Gen program (formerly known as the Rolling Blackout Reduction Program or
23 RBRP) is a program designed for customers who have an on-site back-up generator and have the
24 ability to reduce their load by at least 15% (minimum of 50kW). Participants receive a bill credit

1 of \$0.35/kWh. Peak Gen is initiated when the CAISO requests firm load curtailments (Stage 3
2 emergency) or when firm load curtailment is imminent.
3 Peak Gen has been SDG&E's most successful demand response program, with over
4 60MW enrolled. Participants have appreciated participating in a program that helps to lessen the
5 impacts of rolling blackouts while minimizing the impacts to their business operations.

6 **4. Optional Binding Mandatory Curtailment (OBMC)**

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

12 **5. Scheduled Load Reduction Program (SLRP)**

13 The SLRP was initially established pursuant to the provisions of California SB5X, dated
14 January 17, 2001. Customers electing to participate in SLRP are required to reduce their electric
15 load during specific time periods of their choosing, and are paid an incentive for that reduction,
16 which must be a minimum reduction of 100 kW or 15% of total load.

17 **G. Technical Assistance and Technology Incentives**

18 SDG&E believes that both the Technical Assistance (TA) and Technology Incentive (TI)
19 programs are an essential strategy through at least 2008 if the load reduction targets adopted by
20 the Commission are to be achieved. There are currently substantial market barriers to overcome
21 before more widespread participation in demand response programs can be achieved. These
22 include the customer perception that load reduction is not possible in their business and the fact
23 that certain enabling technologies are not present in many facilities.

1 Support for TA and TI comes from various research studies that have reported that the
2 majority of customers do not believe they can reduce load. Customers believe that energy
3 management opportunities have been exhausted or that load reduction is painful²⁴, incompatible
4 with business operations or simply not possible.²⁵ Lawrence Berkeley National Laboratory has
5 observed that demand reduction programs require a greater degree of education, customer
6 handholding and energy audits.²⁶ Other reports have concluded that there is a lack of necessary
7 technology at customer locations.²⁷

8 The TA and TI programs, in conjunction with Customer Education, Awareness and
9 Outreach, are intended to help overcome these barriers. These activities will help to build
10 awareness of the technologies and, in the case of the TA, provide customers with a specific
11 recommended course of action on how to reduce load and to facilitate their participation in
12 demand response.

13 SDG&E proposes that a statewide workshop be convened prior to 2006 to further refine
14 the relationship between energy efficiency and demand response technologies. Specifically, both
15 internally and anecdotally with customers, SDG&E has observed that there is confusion about
16 measures that seem to qualify for either or both energy efficiency rebates and demand response
17 incentives.

18 SDG&E notes one example of a measure that crosses the line between the two types of
19 energy measures. A customer who installs a programmable thermostat qualifies for an Express
20 Efficiency rebate. A customer who upgrades from a standard thermostat to a smart thermostat

²⁴ California Energy Commission, *An Action Plan to Develop More Demand Response in California's Electricity Markets*, P400-02-016F p. 37, July 2002.

²⁵ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation – Summary of Phase 1 Research*, April 8, 2004.

²⁶ Charles Goldman, *Price Responsive Load Program – Framing Paper #1*, Prepared for the New England Demand Response Initiative, p. 15, March 2002.

²⁷ U.S. Government Accountability Office, *Electricity Markets: Consumers Could Benefit from Demand Programs, but Challenges Remain*, GAO-04-844. 2004.

1 could be eligible for both an Express Efficiency rebate and a TI incentive. More appropriately,
2 customers who elect to make the additional investment from a programmable thermostat to a
3 smart thermostat should receive an incrementally higher incentive based on the incremental cost
4 difference for upgrading to a smart thermostat. To do this, there needs to be clarity and
5 assurance that the two types of incentives work together in an appropriate manner. The Express
6 Efficiency rebate assumes a certain kWh savings; the TI incentive assumes a certain kW
7 reduction. It is unclear how these relate to the incremental cost of the measure.

8 SDG&E believes that developing a more comprehensive understanding of demand
9 response measures will alleviate confusion and greatly help in the marketing efforts for IDSM. It
10 is anticipated that in time, and with experience, certain demand response measures can receive a
11 straightforward rebate, much like the Express Efficiency program, which will particularly help
12 with the marketing of these programs to small and medium commercial customers.

13 **1. Technical Assistance**

14 The Technical Assistance Program is an energy audit service designed help customers
15 identify methods for reducing energy costs and to encourage greater participation in demand
16 response and energy efficiency programs. Customers who have a minimum demand of 20 kW or
17 higher are eligible to receive TA.

18 The TA Program currently includes two types of services, a cursory energy audit and an
19 in-depth assessment. For customers less familiar with demand response and energy efficiency
20 activities, the TA will provide a general overview of the technical opportunities to help reduce
21 their energy costs. The primary purpose of the cursory audit is to identify the potential areas of
22 opportunity, but not provide a detailed analysis of the cost savings impacts. During the cursory
23 evaluation, the auditor will be looking for both no-cost energy management opportunities,

1 including manual or behavioral tactics, as well as opportunities requiring investment. The results
2 will be discussed with the customer and appropriate next steps will be recommended.

3 From this cursory energy audit, the auditor will determine whether a more in-depth
4 assessment is warranted. For this, a CEC-accredited auditor will perform the assessment at no
5 cost to the customer. Eligible customers may also elect to conduct the assessment with a
6 qualified engineer or firm of their own choosing. The results from the in-depth assessment will
7 include specific recommendations, both no-cost and low-cost, and calculations of kW and kWh
8 savings. The audit will also recommend appropriate Demand Response and Energy Efficiency
9 programs for the customer to participate in.

10 If the customer selects a qualified firm on their own, they may be eligible to receive a
11 financial incentive towards the cost of the assessment. The customer can receive up to \$50/kW
12 for identified demand response activities, not to exceed 100% of the cost of the assessment. Any
13 assessment fees in excess of \$50/kW of identified demand response will be the responsibility of
14 the customer.

15 SDG&E will promote TA through its customer contact personnel, including Account
16 Executives, Program Managers, and Customer Service Representatives. Additionally, SDG&E
17 will contact customers participating in the Peak Day 20/20 program to help assist them with
18 identifying new or additional methods to reduce load during peak periods. SDG&E will also
19 utilize its website to solicit customer interest in TA. SDG&E will also leverage its relationships
20 with other companies including the San Diego Regional Energy Office (SDREO), local
21 engineering consultants, lighting or HVAC contractors, energy management controls
22 manufacturers, Energy Management System (EMS) service contractors and equipment vendors.

1 Small and medium commercial industrial customers will be marketed to as a component
2 of the Community Outreach Program. Participation from this segment is expected to increase
3 greatly as the AMI project is rolled out in 2007.

4 The following modifications to TA are proposed for 2006 - 2008.

5 **a) Continued Integration with Energy Efficiency**

6
7 As described earlier, TA is an integrated approach (IDSM) to helping customers identify
8 ways to lower their energy bills. For SDG&E, the IDSM audit would operate under the umbrella
9 of the TA Program and have the following characteristics:

- 10 ■ Subcontractors will be utilized to provide the audit service;
- 11 ■ Results will be reviewed from an integrated perspective – ensuring that all demand
12 response and energy efficiency opportunities have been identified and that the efforts
13 work in concert and are not conflicting;
- 14 ■ Results will provide the customer with a clear action plan;
- 15 ■ Follow-up meetings with the customer will encourage implementation of the plan
- 16 ■ Ultimately, customers will take advantage of demand response and energy efficiency
17 programs that will help to lower their energy costs and reduce peak demand.

18 **2. Technology Incentives**

19 The TI Program is a financial incentive program intended to encourage customer
20 adoption and installation of demand response measures. TI is designed to help offset the cost for
21 purchasing and installing demand reduction measures by providing a financial incentive. The
22 financial incentive is associated level of energy reduction (kW) the technology can provide.
23 Eligible technologies include, but are not limited to, smart thermostats, energy management
24 systems, remote switches, dual-level lighting, software upgrades and the addition of control

1 points. Upon verification of load reduction, the customer may receive an incentive of up to
2 \$100/kW of verified load reduction, not to exceed the cost of the project.

3 Similar to TA, the TI Program is an integrated approach to help customers identify the
4 best energy management strategies for their sites. As such, the TI program will work in
5 conjunction with existing energy efficiency rebate and incentive programs (Express Efficiency,
6 Small Business Supersaver and Standard Performance Contract) to provide customers with a
7 coordinated package of incentives. That is, although internally, incentives for energy efficiency
8 technologies will come from energy efficiency funding and demand response technologies will
9 come from demand response, customers will receive one incentive highlighting the combined
10 benefits of the integrated measures.

11 All applications for demand response incentives must be submitted with an invoice and
12 supporting documents to SDG&E for evaluation. Upon approval, the customer will be eligible to
13 receive an initial payment of 50% of the actual incentive level. A test event will be scheduled
14 with the customer to measure the actual load shedding capability. Based on the results of this
15 test, the incentive balance will be authorized based on the load shedding achieved.

16 All customers are eligible for TI. SDG&E expects referrals to be generated through the
17 various energy efficiency programs described in the IDSM section and demand response
18 programs. Additionally, customer workshops, trade association meetings, energy industry
19 conferences and seminars will generate interest in TI. Customer contact personnel, including
20 Account Executives, Program Managers and Customer Service Representatives, SDG&E's
21 website and direct mail will be additional sources for customer referrals. SDG&E will also
22 leverage its relationships with engineering consultants, lighting or HVAC contractors, EMS
23 manufacturers and service contractors to generate leads.

24 The following modifications are proposed for 2006 - 2008.

1 **a) Approve a Cascading Scale for Technology Incentives from 2006-2008:**

2 SDG&E has proposed elsewhere in this application that a statewide workshop be
3 convened to look at the cost of demand reduction measures. While there are certain inexpensive
4 measures that can provide limited demand response capability, the real potential for demand
5 response will only be achieved through automated response technologies. This involves the
6 installation of control points, metering, and servers to provide energy decision making logic in
7 customer facilities. In the Quantum study, up to 35% of large and medium customers reported
8 some type of automated controls.²⁸ SDG&E believes that most of these systems would require
9 enhancements to provide the capabilities necessary to respond to price and reliability triggers.

10 In SDG&E's experience, current incentive levels are not adequate to support the
11 necessary technology investment. This is confirmed anecdotally by the experience of SDREO,
12 who administered the CEC's Enhanced Automation Program, as well as local suppliers of EMS
13 systems.

14 SDG&E proposes an incentive structure that decreases each year. By initially setting
15 incentives at \$250/kW for load reduction technologies installed in 2006, SDG&E is hoping to
16 jumpstart participation. The \$250/kW incentive amount is based on the incentives offered by
17 NYSERDA through their Peak Load Reduction Program.²⁹ In the ConEdison service territory,
18 demand reduction measures receive incentives of \$180/kW. For 2007, customer incentives
19 would decrease to \$200/kW and to \$100/kW in 2008.

20 **H. Customer Education, Awareness & Outreach Programs**

21 Customer Education, Awareness and Outreach is designed as a comprehensive

²⁸ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation - Non-Participant Market Survey Report*, April 5, 2004.

²⁹ NYSERDA, Peak Load Reduction Program, Program Opportunity Notice 903, Load Curtailment Shifting Reimbursement Incentives, Table 1, Available through November 1, 2005.

1 communication package that entails a variety of initiatives aimed at increasing customer
2 knowledge and understanding demand response. This effort, while not specifically oriented to
3 any one demand response program, is an important facet of the overall demand response
4 program portfolio. These initiatives will provide the foundation for delivering demand response
5 benefits to customers, and will complement the program marketing efforts to acquire new
6 customers, retain existing customers and encourage participation when called upon. The various
7 general awareness and education initiatives are intended to increase the overall awareness and
8 understanding of: 1) the demand response concept; 2) the benefits demand response delivers to
9 customers; and 3) the importance of demand response programs in the customers energy
10 management mix.

11 Customer Education, Awareness and Outreach will reach across residential,
12 small/medium commercial, large commercial and industrial and direct access customer
13 segments, and will include the following:

14 **1. Customer Education, Awareness and Outreach Umbrella**

15 Unlike traditional demand side management, demand response is driven by specific
16 conditions and is therefore episodic. Consequently, there may be a long delay between a
17 customer's enrollment in a program and an actual need for program participation and load
18 reduction. Implementing an on-going awareness and education campaign, in conjunction with
19 retention efforts, is necessary to continue momentum and insure that SDG&E receives the
20 necessary demand reduction when events are called. As result, customer education must be
21 consistent, continuous and sustainable.

22 While the Customer Education, Awareness and Outreach Umbrella campaign will reach
23 all customers, audience segmentation will be used to determine the appropriate message and
24 tactic. The general emphasis will be on increasing awareness and understanding of demand

1 response, its benefits and how it fits in with the energy management mix among all customer
2 segments utilizing mass communication channels and basic demand response messages. Over
3 time, this broader focus will help to prepare customers for dynamic pricing and the savings
4 opportunities that can be realized through the use of advanced meters and demand side
5 management.

6 Increasing customer awareness of demand response will be accomplished utilizing
7 multiple communication channels including the use of mass media, (e.g. print and broadcast
8 advertising) together with targeted communications, (e.g. direct mail), customer contact
9 personnel and educational resources, (e.g. online tools, audits, seminars, workshops and
10 community events). SDG&E will also provide demand response information to be integrated
11 into one of the energy end-use modules of the successful Builder/Operator Certification
12 Program, the professional development program featuring classroom training and in-facility
13 assignments. For the residential market, SDG&E will create partnerships with large-box retailers
14 to offer mutual benefit workshops and seminars within their seminar schedule.

15 Increased focus will be given to those customers who may be closer to adopting demand
16 response as part of their energy management mix, e.g. customers with IDR meters, customers
17 with demands greater than 200kW, customers with load that can be temporarily turned off, re-
18 scheduled, or suspended, customers with EMS or direct load control devices connected to air
19 conditioning systems, or other load that can be modulated or cycled, and/or customers who have
20 participated in SDG&E's energy efficiency programs. Over time, this segment will increase as
21 the AMI project is implemented throughout the customer base. As more customers are provided
22 with the tools and information to participate in demand response programs, a greater emphasis
23 will be made to raise their level of awareness about demand response and its benefits.

1 Furthermore, online tools or enhancements will be developed to help educate customers
2 by providing an individualized and interactive experience that will illustrate the benefits of
3 demand response to each customer. These include:

- 4 ▪ A demand response module for the "Business Energy Analyzer," the tool that
- 5 currently offers customers a set of personalized energy-efficiency measures,
- 6 ▪ Additional functionality in kWickview to include a channel for customer feedback
- 7 and survey capabilities,
- 8 ▪ A "load shift" calculator to help customers determine their potential savings if they
- 9 take action during peak periods
- 10 ▪ A customer scorecard that will be emailed to customers after an event to show their
- 11 response. This tool helps to continue SDG&E's customer relationship and
- 12 encourages sustainability in demand response programs.

13 SDG&E proposes the following enhancements to its Customer Education, Awareness and
14 Outreach efforts:

15 **a) Create a Customer Relationship Management (CRM) database**

16 CRM is a complete system that provides a means and method to enhance the experience
17 of the customer so they will remain customers, provides technological and functional means of
18 identifying, capturing and retaining customers and provides a unified view of the customer
19 across the enterprise.³⁰

20 Demand reduction events are episodic. In order to keep customers engaged and prepared
21 to participate, and to minimize the number of customers dropping out of programs, SDG&E must
22 maintain an ongoing relationship with its demand response program participants. Customer
23 retention involves regular follow-up, using a series of communications to keep the customer

³⁰ Greenberg, Paul. CRM At The Speed of Light, Osborne/McGraw Hill, 2001

1 informed and engaged. To conduct this activity successfully will require development of a
2 Customer Relationship Management (CRM) database. Currently, SDG&E employs several
3 databases that contain various aspects of customer participation data. SDG&E is proposing to
4 consolidate this information, enabling a more effective and efficient method for maintaining
5 customer information and assuring customer retention in the programs. This is critical to the
6 long-term success of demand response, and is especially important in the small commercial and
7 industrial market, where face-to-face relationships are minimal. The CRM must be relational in
8 both its approach to data and in the customer relationship.

9 This CRM database must have the ability to:

- 10 ■ Maintain database integrity by ensuring no duplication of data
- 11 ■ Allow for unlimited storage of customer data
- 12 ■ Make it easy to retrieve and modify data
- 13 ■ Establish a method for personalizing customer communications
- 14 ■ Include business rules in the database design
- 15 ■ Allow for the development of event driven communications – enrollment status,
16 thank you's, responses to customer surveys
- 17 ■ Effectively support various marketing campaigns and tactics
- 18 ■ Create standard and customized reports for internal reporting

19
20 **2. Flex Your Power NOW! (Statewide)**

21 Flex Your Power NOW! (FYPN) is a statewide awareness campaign that encourages
22 customers to voluntarily reduce energy consumption through conservation during peak periods in
23 the summer identified as critical by the California Independent System Operator (CAISO). The
24 primary goal of FYPN is to reduce peak energy usage during those summer days when the state

1 has concerns about electricity supply. FYPN promotes immediate, voluntary energy
2 conservation and demand reduction, which play a critical role in managing tight energy supplies.
3 The program is modeled after the successful "Spare the Air" campaign, and is implemented in
4 collaboration with the Flex-Your-Power campaign (managed by the Efficiency Partnership), the
5 CAISO, SDG&E, SCE, PG&E, the Governor's office, and other key stakeholders to provide
6 consistent, statewide communication.

7 FYPN builds on and uses the widespread awareness of the Flex Your Power campaign
8 that has been in place since 2001. FYPN was successfully established in the summer of 2004
9 with statewide radio, print advertising and outreach efforts. Those efforts are continuing in
10 2005. SDG&E proposes that the program be approved for 2006-2008 to continue to build
11 momentum and sustain demand response over time.

12 FYPN communication is comprised of two principal components – an
13 awareness/education campaign and a specific "call-to-action" message. Communication
14 channels used for generating awareness include radio and print media, websites, e-mail,
15 brochures, and outreach efforts to educate customers so that when the alert occurs people know
16 what specific actions to take to reduce their peak usage.

17 FYPN's key messages are:

- 18 ▪ Electric reserves could be inadequate this summer, possibly resulting in power
19 emergencies.
- 20 ▪ The prudent use of electricity resources, particularly during periods of hotter than
21 normal summer temperatures will help to alleviate the potential for power
22 emergencies.

1 ▪ Customers can play a significant part in ensuring adequate electricity by doing their
2 part in participating in the Flex Your Power NOW! campaign when supplies are
3 predicted to be tight.
4 SDG&E will incorporate these same messages into its demand response communications
5 strategy. This consistent messaging is imperative to eliminate customer confusion about this
6 new concept of demand response and when load reduction is needed.

7 **3. Emerging Markets Program**

8 The Emerging Markets Program (EMP) is an effort in which SDG&E participates, and
9 co-sponsors demand response research through local, statewide and national studies and
10 technology pilots. The program is aimed at bringing novel technologies to market by partnering
11 with inventors, manufacturers and distributors, of products that have strong potential to reduce
12 power consumption during periods of higher energy prices or tight energy supplies. Through
13 collaborations with trade associations and research organizations, new products and technologies
14 will be identified for evaluation. If deemed an appropriate vehicle to bring a new product to
15 market, this program may incent manufacturers via a “Golden Carrot” opportunity where a set
16 amount of funds are made available to motivate technological progress for a certain end-use.
17 After successful demonstrations, market consultants, manufacturers and distributors or trade
18 groups will be used to develop the target market or niche. As with most new technologies and
19 markets, distribution can be a challenge. SDG&E sees potential for leveraging upstream
20 distribution incentives in the future.

21 The EMP program will embark on technology evaluation and development tracks for all
22 three customer segments; residential, small industrial/commercial and large commercial
23 industrial customers. Wherever technology crossover from one customer segment to another is
24 feasible, it will be evaluated for that segment as well. Through active involvement in the

1 Demand Response Research Center (DRRC), Demand Response Coordinating Council (DRCC),
2 Distributed Energy Financial Group, LLC (DEFG), the Peak Load Management Alliance
3 (PLMA), Advanced Load Control Alliance (ALCA), other energy industry partners and
4 associations, trade associations and technology development organizations, new technologies
5 and products will be identified and evaluated for field demonstration. To maximize impacts on
6 demand response programs, technology demonstrations will be planned in each customer
7 segment. Presently, DRBizNet is being evaluated as a demand response enabling technology for
8 possible field demonstration this year.

9 In addition to these EMP activities, SDG&E will be actively involved in supporting
10 efforts related to statewide codes and standards for demand response. SDG&E believes this is an
11 area with great potential for helping to move the market toward innovative demand response
12 technologies and standards.

13 SDG&E is not recommending changes to EMP for 2006-2008.

14 **4. Community Outreach**

15 The Community Outreach Program will provide direct interaction and communications to
16 local municipalities and business communities within SDG&E's service territory to broaden
17 awareness of demand response. The messaging to small and medium commercial customers will
18 incorporate ways for businesses to help manage energy costs through various SDG&E tools and
19 programs.

20 The program targets specific groups because it is an efficient way to strategically reach
21 broad audiences. Each community reaches out to its own constituents with regularly scheduled
22 meetings. There are also twenty-five (25) incorporated cities in San Diego/Orange County
23 region representing over 90,000 business accounts receiving electric and gas services. Within

1 these geographical boundaries are a number of underserved local municipalities that historically
2 have not actively participated in demand response programs.

3 The Community Outreach program will target these groups through a collaborative
4 communication process. SDG&E will specifically target small to medium size business
5 customers via business associations and trade organizations. Targets include:

- 6 ▪ Economic Development Councils
- 7 ▪ Local chambers and trade associations
- 8 ▪ Smaller local associations such as the Business Improvement Districts
- 9 ▪ Underserved and smaller municipalities and cities within greater San Diego and
10 Orange Counties
- 11 ▪ Small and mid-size businesses
- 12 ▪ Business assistance organizations (Small Business Administration/SCORE)

13 The key underlying message is to proactively position SDG&E as a business energy
14 resource and facilitator for program education and participation. Customer messages will be
15 tailored in a manner that will enable customers to understand and participate in demand response
16 programs. SDG&E will provide information to show how customers can shift and reduce during
17 critical energy periods, and will also include information on how to reduce consumption on an
18 ongoing basis via energy efficiency.

19 **5. Circuit Savers Program**

20 The Circuit Savers Program is a focused customer education program whereby customers
21 who are served from SDG&E's highest growth areas receive additional information regarding
22 demand response programs that are available to them. Circuit Savers objective is to increase the
23 level of demand response participation from customers in the high growth areas. Circuit Savers

1 is one component of a broader effort by SDG&E to increase overall system efficiency through
2 the use of creative and innovative tactics.

3 Until now, the customer segment with the most exposure to and participation in demand
4 response programs has been the large assigned accounts, those with Account Executives actively
5 educating them and promoting the programs. Residential and small commercial customers have
6 had very little exposure to demand response programs. Circuit Savers will use a variety of
7 community outreach efforts such as booth displays at local community events (Earth Day
8 Events; Fiesta del Barrio Fair, Carlsbad; various Cinco de Mayo Festivals; Senior Expos &
9 Health Fairs), advertising in community newspapers and direct mail.

10 Circuit Savers will work in conjunction with the AMI rollout, targeting those customers
11 receiving the AMI technology and located in the high growth areas.

12 **6. kWickview**

13 kWickview is a web-based energy management tool provided free of charge to SDG&E
14 customers with IDR meters installed. kWickview furnishes 15-minute interval data on a daily or
15 monthly basis to help customers better understand and manage their energy usage. By
16 identifying and understanding how they use their energy, customers have the information
17 necessary to explore ways to reduce their energy costs.

18 SDG&E continues to offer kWickview training to interested customers. This training is
19 provided at SDG&E offices. But, for a customer account with several kWickview users,
20 SDG&E offers to provide training at their site. Customer interest and attendance in kWickview
21 training has steadily increased over the past two years. To date, in 2005, every kWickview
22 training class was fully attended. As a result, SDG&E plans to increase the frequency of training
23 classes through 2008 to accommodate the increased interest and deliver the benefits of
24 kWickview to a greater number of customers. During the kWickview training classes, attendees

1 are informed of the various demand response and energy efficiency programs that are available.

2 Attendees are encouraged to attend energy management workshops and to participate in
3 programs that will enable them to help reduce their energy costs.

4 Enhancements to kWickview to increase the value to customers is planned. These
5 enhancements include:

- 6 ▪ modifications to the Curtailment module to make it easier to participate in
7 demand response,
- 8 ▪ Development of a Cost Estimator tool to help customers better understand
9 their energy costs as well as their usage,
- 10 ▪ Real-time pricing module, and
- 11 ▪ On-demand reads that allow customers to download their energy usage data
12 from as recently as the prior fifteen minutes.

13 **7. Nonprofit Outreach Program**

14 The Nonprofit Outreach Program is a new proposal for 2006-2008. The nonprofit
15 industry represents 23 tax-exempt categories of which the largest category is 501(c)(3) or “public
16 benefit” organizations. There are more than 7,000 nonprofit organizations in San Diego County
17 with more than 61,000 employees. Nonprofit organizations nurture and develop a sense of
18 belonging to a community. SDG&E and nonprofits share a common mission to serve and benefit
19 the public. This population is predisposed to provide assistance and service when needed.
20 Nonprofits have inroads to employees, volunteers, board members, and the population at large in
21 their area. These organizations provide a valuable resource to help spread the demand response
22 message the communities they serve.

23 This program will leverage the nonprofits’ electronic community network to optimize the
24 number of people who receive the demand response message, understand the benefits of demand

1 response, and decide to take action when necessary. This effort will tap into the nonprofit
2 infrastructure organizations that have the capability for large electronic distribution. SDG&E
3 will ask them to partner with us in an effort to help the community and ensure efficient use of
4 our resources. SDG&E understands the nonprofits' desire for providing service and enhancing
5 their visibility in the community. This program can prove to be beneficial for all parties, as
6 SDG&E is seeking sustainable energy for the future and nonprofits are seeking a sustainable
7 quality of life for the region.

8 **8. Information Display Pilot (IDP)**

9 The Information Display Pilot (IDP) is a pilot information program that works in
10 conjunction with the Statewide Pilot Program. Customers are provided with an information
11 treatment that includes an electronic newsletter, e-grams and communication devices. These
12 information treatment methods provide a signal to customers that it is time to take action.

13 The IDP pilot has been suspended to new participants, though the rate is open through the
14 end of 2006 to existing customers on the CPP-V and CPP-F rates. The program will operate in a
15 "maintenance" mode through 2006. In 2006, participants will be notified of the end of the pilot
16 and be offered to participate in other demand response programs.

17 **9. PEAK Student Energy Actions Program**

18 The PEAK Student Energy Actions Program is a comprehensive student learning
19 experience intended to teach elementary school children the value of smart energy management.
20 Managed by the Energy Coalition, the overall goal of the PEAK program is to instill an
21 efficiency ethic in students through standards-based lessons, hands-on activities, and real-world
22 application in their homes, schools, and communities. In addition, it is an integrated demand
23 response and energy efficiency education program.

1 PEAK is dedicated to the proposition that the individual actions taken by students
2 produce significant results. These actions instill an ethic of energy consciousness in our youth,
3 their families and their communities. The PEAK program will provide a meaningful way to
4 engage elementary school students living in San Diego County to serve as advocates of smart
5 energy management in their homes, schools, and communities.
6 The potential for energy savings and peak demand response generated by the PEAK
7 program is multifaceted. Each school participating in the PEAK Student Energy Actions
8 program will also benefit from energy savings realized by the actions of PEAK students,
9 teachers, and facility staff through energy awareness, conservation and demand response
10 activities conducted on campus.

11 **10. Water District Partnership**

12 D.05-01-056 authorized SDG&E "...to evaluate whether to encourage (through financial
13 incentives) water districts to install efficient natural gas powered engine systems for water
14 pumping in return for allowing SDG&E to operate those engines during critical peak periods..."
15 (See D.05-01-056, mimeo, at page 55). The decision authorized \$75,000 in funding for 2005 for
16 SDG&E to perform the analysis of this concept, and further directed SDG&E to report on the
17 results of this study in this Application.

18 On May 17, 2005, SDG&E received the final "Water District Partnership Study" (Study),
19 prepared by Boyle Engineering Corporation, as a result of the authorization granted by D.05-01-
20 056. As discussed in the Executive Summary of the Study:

21 This study examines the feasibility and economic impact of installing gas
22 powered equipment at three sample pump station sites within SDG&E's service
23 area...The technologies considered for each station were (1) a natural gas
24 powered generator sized to operate the number of pumps typically needed for
25 peak pumping conditions, and (2) the conversion of existing pumps to hybrid
26 gas/electric units through the addition of a gas engine and gear drive.³¹

³¹ Boyle Engineering Corporation, San Diego, California "Water District Partnership Study," May, 2005, at page 1.

1 The study ultimately found that at the three sample pumping stations studied, "...none of
2 the gas equipment installation scenarios would result in a payback period of less than 20
3 years...However, payback periods of less than 20 years could be achieved by subsidizing part or
4 all of the upfront capital costs." (Study, page 2).

5 Additional study findings were that although peak energy demands could indeed be
6 reduced by utilizing the gas-fired equipment during on-peak or semi-peak hours, it was not
7 economic to operate the equipment during off-peak hours. And, significantly, the study notes
8 that for the three sample sites studied, "potential economic feasibility could only be achieved by
9 utilizing gas equipment during a large percentage of peak hours, and (L)imiting the use of the
10 equipment to the 12 CPP operational days during the year is not feasible from an economic
11 standpoint." (Study, page 2).

12 **a) Energy Efficiency/Demand Response Systems**

13 While a technology such as that explored in the Water District Partnership Study would
14 not necessarily qualify as a demand response program, SDG&E believes that there is a strong
15 potential value to these technologies because they ultimately reduce peak demand. Other
16 technologies such as thermal energy storage and gas-fired cooling seem to fall into this spectrum
17 – somewhere between energy efficiency (permanent load reduction) and demand response
18 (temporary load reduction of approximately 100 hours per year). As such, SDG&E believes that
19 these types of technologies should be further explored.

20 Significant opportunity to reduce peak demand may be lost simply because a technology
21 doesn't fit a specific definition. Systems that reduce peak demand continuously but maybe not
22 permanently, represent an excellent opportunity to impact the long-term peak demand during the
23 entire summer season, not just during the top 100 hours.
24

1 Based on the conclusions of the Water District Partnership study, SDG&E does not
2 propose any continuation of the Water District Partnership Program at this time. However, given
3 the potential that a study exploring these mid-term technologies have been identified, SDG&E
4 will continue to evaluate these alternatives within its existing funding authorizations, and may, at
5 a later date, develop further specific program proposals to present to the Commission.
6 Because the Water District Partnership study document contains confidential and
7 proprietary customer-specific information, SDG&E is not presenting a copy of the full study
8 report with this Application. The document can be provided to the Commission staff, however,
9 with appropriate confidentiality protection.

10 **I. Other Programs**

11 **1. Statewide Pricing Pilot (SPP)**

12 The Statewide Pricing Pilot (SPP) is a pilot program for the residential market designed
13 to study customer reaction to proxy price signals. Customers participating in the pilot were
14 placed on one of two different rates that allowed prices to rise when demand for electricity is
15 high and fall when demand is low. The pilot program was initially set to expire on December 31,
16 2004. On October 29, 2004, an Assigned Commission and Administrative Law Judge Ruling
17 was issued, ordering that the CPP-V and CPP-F rates should remain open to customers through
18 the end of 2006. The program is operating in a maintenance mode through 2006.

19 **2. Automated Demand Response Program (ADRS)**

20 The Automated Demand Response Program (ADRS) is a program for residential
21 customers who are currently participating in the Statewide Pricing Pilot. ADRS provided these
22 customers with a GoodWatts system developed by Invensys which enables web-based control of
23 the thermostat. The program is to be de-commissioned by the end of 2006. Invensys, the
24 subcontractor, will be responsible for removal of all equipment.

1 **3. Competitive Bid**

2 The Demand Response Competitive Bid Program will allow third parties with demand
3 response solutions to propose effective demand response programs to the utility for integration
4 into the utility's demand response program portfolio. This may include currently commercially
5 available solutions or those in development where funds would make a significant difference in
6 commercializing the solution. SDG&E will develop a scope of work and announce a Request for
7 Proposal with the intention of adding new program possibilities in the program portfolio.
8 Proposals will be evaluated against criteria to be established by a Demand Response Project
9 Team. SDG&E will employ a review process, similar to the Procurement Review Group
10 established for its procurement proposals to ensure proper evaluation and processes for selecting
11 the best proposals. SDG&E will seek Commission approval for successful proposals through a
12 separate filing.

13 **VI. ANNUAL PROGRAM MODIFICATIONS / UPDATES**

14 **A. Recommended Annual Process to Modify Programs**

15 SDG&E has proposed herein its recommended portfolio of Demand Response Programs
16 and associated program budgets for the three-year period of 2006 through 2008. As noted in its
17 October 29, 2004 filing with the Commission, in which it proposed Demand Response Programs
18 and budgets for the 2005 through 2008 period,³² SDG&E believes that longer term (i.e., multi-
19 year) programs and funding are critical elements of a Demand Response Program portfolio, and
20 are essential in order to maintain customer participation in these programs. Continuity and
21 stability of programs are important elements in helping to assure the viability and sustainability
22 of program success.

³² "Filing of San Diego Gas & Electric Company to Propose 2005-2008 Reliability Triggered Demand Response Programs" dated October 29, 2004 in R.02-06-001, at page 5.

1 Just as important, however, is the establishment of a process by which SDG&E can
2 propose and seek Commission approval of Demand Response Program changes, including, for
3 example, program and/or budget modifications, elimination or revision of programs or program
4 elements that prove to be unsuccessful, and enhancements or additions to programs that may be
5 developed, either through practical experience, technological developments or customer
6 feedback as programs are implemented over the course of the three year program cycle proposed
7 herein.

8 Particularly over a multi-year program cycle, SDG&E believes that such a mechanism
9 will enable SDG&E to maintain a dynamic portfolio of programs, and will provide customers
10 with the widest array of program and options within which to participate.

11 The Commission recognized the value of multi-year program funding, and addressed
12 several of the uncertainties which support the establishment of a mechanism to facilitate mid-
13 cycle program changes in D.05-01-056, which approved SDG&E's portfolio of Demand
14 Response Programs and funding for 2005:

15 We agree that multi-year program authorization and funding is desirable, but
16 given the newness of these programs, their lack of track record of demonstrated
17 value to ratepayers, and the uncertainty of advanced metering infrastructure
18 deployment...that may affect future customer penetration and program plans...

19 Evaluating these programs under a more rigorous process is appropriate for 2006-
20 2008 program years given the large budgets that are anticipated over the three-
21 year period.³³

22 SDG&E further believes, as the Commission acknowledged in D.05-01-056, that "multi-
23 year funding would provide program stability and align the budget cycles for demand response
24 efforts with those of energy efficiency programs which would promote development and delivery

³³ Decision 05-01-056, mimeo at pages 12-13.

1 of integrated programs and demonstrate stability of program design to potential customers.”
2 (D.05-01-056, mimeo, page 12.) SDG&E believes that the entire framework of the Demand
3 Response Programs portfolio, and customer acceptance and participation, can be further
4 enhanced by the establishment of an annual Advice Letter Process through which Commission
5 approval of program modifications and enhancements can be achieved. SDG&E submits that
6 such a process is superior to waiting for the next multi-year program cycle, in terms of
7 maintaining a sustainable portfolio of programs and enabling those programs to keep pace with
8 changing customer expectations and interests as well as with technological or other changes.

9 **1. Annual Advice Letter Filings**

10 SDG&E proposes that the Commission authorize the annual filing of an Advice Letter,
11 not later than October 15 of each year during the 2006-2008 program cycle (i.e., October 15,
12 2006 and October 1, 2007).³⁴ The primary purpose of each of these annual Advice Letters would
13 be to propose those program changes, as described above, designed to enhance the portfolio of
14 authorized Demand Response Programs for succeeding years. SDG&E notes that the timing of
15 its proposed annual Advice Letter would enable it to consider the results of each just-concluded
16 summer season, analyze the customer participation rates, consider customer feedback, evaluate
17 new or revised technologies that enable customer participation in programs, and any other factors
18 that might warrant revisions to existing programs.

19 In addition, to the extent that this annual evaluation of programs and feedback from
20 customers would identify potential new Demand Response Programs, SDG&E proposes to
21 incorporate such proposals in the annual Advice Letter filing. SDG&E believes that there is a
22 high likelihood that the availability of new technologies during the three-year program cycle will

³⁴ SDG&E would also propose that it retain the right to file an Advice Letter by October 15, 2005, proposing to incorporate any program revisions or enhancements for 2006, based on program experiences and customer feedback with the implementation of its currently-authorized 2005 Demand Response Programs.

1 enable SDG&E to design new programs that are currently not available, or make improvements
2 to existing programs or even cancel programs that show to be ineffective. By the conclusion of
3 each summer Demand Response "season" SDG&E and its participating customers will have
4 gained valuable experience in implementing approved programs, and will have more information
5 with which to identify barriers to broader customer participation, as well as new program
6 opportunities which can be addressed through the annual Advice Letter filing. SDG&E relies on
7 customer feedback as to the effectiveness, or possible limitations of existing program design to
8 help develop improvements to programs. Particularly during the three-year cycle from 2006-
9 2008, SDG&E believes that establishment of the Advice Letter process by which program
10 changes can be implemented will further enhance the portfolio of programs, and will increase the
11 likelihood of matching programs to customer interests and thereby increasing the likelihood of
12 achieving Demand Response Program goals. Use of the annual Advice Letter filing.

13 **2. Approval of Advice Letter Filings**

14 Because of the need for advance planning, customer education, awareness and
15 communications, and the need to insure that supporting infrastructure and systems are in place to
16 enable Demand response Programs, SDG&E requests that the Commission establish a schedule
17 by which the annual Advice Letter filing is approved. SDG&E recommends that the
18 Commission issue the appropriate Resolution or other approval of the annual Advice Letter filing
19 by January 1 of each year during the 2006-2008 program cycle (i.e., January 1, 2007 and
20 January 1, 2008). Approval by January 1 of each year enables SDG&E to communicate with its
21 potential program participants with a lead time sufficient to allow those customers to address
22 their internal issues and processes in advance of the summer Demand Response season, which
23 helps to maximize customer participation. SDG&E's experience has been that the later that
24 Commission approval is received for current year programs, the more difficult it is to effectively

1 package and deliver customer communications and education on programs, and therefore, the
2 more difficult it is to enroll customers.

3 **3. Budgets and Budget Flexibility**

4 In D. 05-01-056, the Commission approved SDG&E's request that it be granted
5 flexibility to shift up to 25 percent of one demand response program's costs into another program
6 within the same program category without prior Commission approval. SDG&E's original
7 proposal, reflected in its October 15, 2004 Price Responsive Demand Response Programs
8 filing,³⁵ was based on the need "to address budget adjustments that result from changing market
9 conditions." SDG&E further proposed in its October 15, 2004 filing that in the event of a fund
10 shift, the corresponding load reduction goals be shifted accordingly from one program to another
11 as long as the aggregated load reduction goal is not changed. Finally, SDG&E proposed that in
12 the event that a budget shift proposal were to exceed 25 percent, and/or the aggregated load
13 reduction goal were to change, SDG&E would file an Advice Letter to address the changes.

14 In approving SDG&E's fund shifting proposal, the Commission stated:

15 The utilities need the flexibility to determine how to allocate demand response
16 funding across the various programs including marketing and many other
17 activities. Because most of these programs are new, to achieve the desired
18 outcome of developing our load reduction capability, we will need to provide
19 flexibility for the utilities to redirect program funds to capture more load
20 reduction capability to successful programs. Approving an overall level of
21 funding and then allowing the utilities the flexibility to manage the allocation of
22 the overall budget will prevent problems associated with over funding or under
23 funding a given area. (D. 05-01-056, mimeo at page 14)

24 Decision 05-01-056 also approved the funding flexibility within the specific program
25 categories of Day-Ahead Programs, Reliability-Triggered Programs, and all other programs, with
26 the 25 percent limitation as SDG&E proposed.

³⁵ See SDG&E's October 15, 2004 "Filing... Establishing Process for Evaluation of Proposed 2005 Price Responsive Demand Programs" at pages 11-12.

1 SDG&E proposes that for program years 2006-2008, the funding flexibility that has been
2 adopted for 2005 programs be continued, with the expansions discussed below, for all the same
3 reasons as addressed in D. 05-01-056. Under the existing authority, SDG&E can shift up to 25%
4 of a program's funds into another program within the same category without prior Commission
5 approval. (The load reduction goals for the programs would shift accordingly). For the 2006-
6 2008 program cycle, SDG&E proposes that the budget shifting and funding flexibility be
7 modified as follows:

8 **a) Fund Shifting Within Program Categories**

9 The existing fund shifting authority granted by D. 05-01-056 limited the flexibility to the
10 shifting of funds between programs within the same program categories of Day-Ahead
11 Programs, Reliability-Triggered (Day-Of) Programs and all other programs. SDG&E proposes
12 that it be granted continued flexibility to shift program funds in this manner without the need for
13 prior Commission approval.

14 **b) Fund Shifting Between Program Categories**

15 SDG&E proposes that it be granted the additional authority to seek the shifting of funds
16 between program categories through the filing of an Advice Letter. SDG&E believes that this
17 proposal, which expands the current fund shifting authority, is necessary and appropriate in
18 allowing SDG&E to respond to programs that may be underachieving, and more appropriately
19 channel authorized funding toward programs that are clearly producing effective energy savings
20 and demand reductions.

21 Particularly because proposed programs and budgets for 2006-2008 are being addressed
22 in this proceeding prior to the completion of program implementation and experience during the
23 summer of 2005, SDG&E believes that the funding flexibility currently in place, as well as the
24 expanded funding flexibility proposed above, takes on added significance and is particularly
25 important to be retained in a multi-year program cycle. By evaluating the experience with the

1 summer 2005 programs, and considering the experiences in implementing the new programs for
2 2006-2008, SDG&E will be better positioned to consider and implement potential program
3 design changes within the expanded funding flexibility guidelines, as well as to propose potential
4 program and funding changes beyond the currently-authorized limitations. This will better enable
5 SDG&E to achieve the objectives that the Commission outlined in approving the funding
6 flexibility proposal in D. 05-01-056 to be met.

7 **c) Fund Shifting Between Program Years**

8 SDG&E further proposes that it be granted authority to shift approved budget funding
9 between program years during the 2006-2008 program cycle and within the authorized aggregate
10 program budget, and that such authority not be subject to prior Commission authorization.
11 SDG&E believes that this additional budget flexibility is necessary and appropriate in order to
12 maintain the flexibility to accelerate or, if need be, delay program expenditures based on the
13 success or failure of programs, and the need to alter or adjust such program components as the
14 timing of communications, the installation of equipment or the changes to infrastructure required
15 to support programs. If, for example, a given program proves to be more successful than initially
16 envisioned, and the authorized budget for that program for a particular year is exhausted,
17 SDG&E believes that it is entirely appropriate to accelerate the budget adopted for the
18 succeeding year to continue that successful program. In the event that additional program
19 funding is necessary, SDG&E would utilize the Advice Letter process described above to
20 propose additional program and/or funding changes.

21 **4. Carryover Funding**

22 SDG&E has developed its demand response program budgets for 2006-2008 without
23 considering, or attempting to forecast, any potential funding carryover or unspent budget funds
24 from the 2005 program year. Rather, the 2006-2008 program budgets reflect SDG&E's

1 anticipated costs to implement the proposed programs, with no adjustment to reflect potential
2 carryover funding.

3 SDG&E believes that this approach makes sense, with the one possible exception noted
4 below, since the authorized 2005 program funding would only be recovered in future rates to the
5 extent that the funds are actually spent and recorded in the appropriate regulatory account(s).

6 Any authorized but unspent 2005 budget funds are not presently reflected in rates, nor would
7 they be reflected in future rates, or be the subject of an overcollection to be returned to
8 ratepayers. Because potential carryover budget funds would simply offset some portion of 2006-
9 2008 program budgets, the ultimate impact on rates is no different under either approach, but
10 SDG&E believes however, the more appropriate treatment is to start the 2006-2008 program and
11 budget cycle with a "clean slate" and project the true, unadjusted program budgets.

12 Additionally, considering unspent, carryover 2005 budget funds in its 2006-2008 budgets
13 would require SDG&E to forecast the potential excess, subsequently requiring true-up and
14 adjustment of approved 2006-2008 budgets. Such an approach would add an unnecessary level
15 of complexity to the process.

16 One possible exception regarding carryover funding is the activities associated with
17 Measurement and Evaluation (M&E) of the various demand response programs. Due to the time
18 involved to gather the relevant data and conduct the follow-up analyses, some M&E activities
19 may not be completed until a subsequent year, resulting in some current year M&E expenses not
20 being incurred until the following year. In the fall of each program year (including the 2005
21 program year) SDG&E will notify the Commission of any such M&E activities that would
22 necessitate carrying over current year funding into the subsequent year.

23 This concludes my prepared direct testimony.

QUALIFICATIONS

1

2

3 My name is Susie E. Sides. My business address is 8306 Century Park Court, Suite

4 42K, San Diego, California, 92123-1569. I am employed by San Diego Gas & Electric

5 Company ("SDG&E") as the Policy and Strategy Manager for Demand Response Programs. In

6 my current position, I am responsible for the design and development of demand response

7 programs ("DRPs").

8

9 I graduated from San Diego State University with a Bachelor of Science degree in

10 Business Management in 1993. I received a Master of Arts degree in Organizational

11 Management from the University of Phoenix in 1997. Initially, I was hired by SDG&E in

12 February 1986 and have held several positions of increasing responsibility until February 2000.

13 Between March 2000 and February 2001, I was employed at the San Diego Regional Energy

14 Office as Assistant Director of Energy Programs. I returned to SDG&E in February 2001. Since

15 then, I have managed SDG&E's Demand Response Programs. I have previously testified before

16 this Commission.

17

Attachment

APPENDIX A

**PROGRAM BUDGETS
AND
ANTICIPATED LOAD REDUCTIONS**

ALBANY COUNTY
OFFICE OF THE
COMPTROLLER

Budget - 2006

| | O&M | Capital | M&E | Incentives | Total |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|
| Day-Ahead | | | | | |
| Voluntary CPP | \$253,897 | \$42,422 | \$82,158 | \$0 | \$378,477 |
| DBP | \$600,881 | \$162,766 | \$82,158 | \$250,000 | \$1,095,806 |
| CPA DRP | \$135,932 | \$0 | \$63,019 | \$0 | \$198,952 |
| Peak Day 20/20 | \$602,526 | \$148,679 | \$82,158 | \$0 | \$833,363 |
| Sub-total: Day-Ahead Programs | \$1,593,236 | \$353,868 | \$309,493 | \$250,000 | \$2,506,597 |
| Day-Of Programs | | | | | |
| DBP-E | \$85,948 | \$0 | \$50,648 | \$150,000 | \$286,596 |
| BIP | \$208,775 | \$0 | \$50,648 | \$168,000 | \$427,424 |
| CPP-E | \$119,884 | \$65,793 | \$50,648 | \$0 | \$236,326 |
| Res Smart Thermostat | \$449,819 | \$484,328 | \$176,687 | \$0 | \$1,110,834 |
| Sub-total: Day-Of Programs | \$864,425 | \$550,122 | \$328,632 | \$318,000 | \$2,061,179 |
| Technical Assistance and Technology Incentives | | | | | |
| Technical Assistance | \$1,162,159 | \$0 | \$37,889 | \$750,000 | \$1,950,049 |
| Technology Incentives | \$451,403 | \$0 | \$44,269 | \$6,179,097 | \$6,674,768 |
| Sub-total: TA and TI | \$1,613,562 | \$0 | \$82,158 | \$6,929,097 | \$8,624,817 |
| Customer Education, Awareness & Outreach | | | | | |
| Customer Education, Awareness & Outreach | \$2,518,960 | \$121,082 | \$164,316 | \$0 | \$2,804,358 |
| Flex Your Power Now! | \$597,089 | \$0 | \$82,158 | \$0 | \$679,247 |
| Emerging Markets | \$657,527 | \$8,484 | \$0 | \$0 | \$666,011 |
| Community Outreach | \$247,805 | \$0 | \$44,269 | \$0 | \$292,073 |
| Circuit Savers | \$351,573 | \$0 | \$44,269 | \$0 | \$395,842 |
| Sub-total: Customers Education, Awareness & Outreach | \$4,372,953 | \$129,567 | \$335,012 | \$0 | \$4,837,531 |
| Other Programs | | | | | |
| Statewide Pricing Pilot (SPP) | \$93,564 | \$0 | \$0 | \$0 | \$93,564 |
| ADRS | \$68,262 | \$0 | \$0 | \$0 | \$68,262 |
| On-Bill Financing | \$139,874 | \$0 | \$0 | \$0 | \$139,874 |
| Competitive Bid | \$149,448 | \$0 | \$0 | \$0 | \$149,448 |
| Sub-total: Other Programs | \$451,147 | \$0 | \$0 | \$0 | \$451,147 |
| Additional Activities | | | | | |
| Cost Benefit Framework | \$0 | \$0 | \$82,158 | \$0 | \$82,158 |
| Annual Report | \$0 | \$0 | \$27,837 | \$0 | \$27,837 |
| Market Research | \$141,431 | \$0 | \$163,848 | \$0 | \$305,279 |
| IT | \$136,709 | \$2,075,306 | \$0 | \$0 | \$2,212,015 |
| Sub-total: Additional Activities | \$278,140 | \$2,075,306 | \$273,843 | \$0 | \$2,627,289 |
| Total: All Programs | \$9,173,464 | \$3,108,862 | \$1,329,138 | \$7,497,097 | \$21,108,560 |

Budget - 2007

| | O&M | Capital | M&E | Incentives | Total |
|---|--------------------|------------|--------------------|--------------------|---------------------|
| Day-Ahead | | | | | |
| Voluntary CPP | \$272,200 | \$0 | \$82,987 | \$0 | \$355,188 |
| DBP | \$525,835 | \$0 | \$82,987 | \$296,000 | \$904,823 |
| CPA DRP | \$0 | \$0 | \$0 | \$0 | \$0 |
| Peak Day 20/20 | \$573,284 | \$0 | \$82,987 | \$0 | \$656,272 |
| Sub-total: Day-Ahead Programs | \$1,371,320 | \$0 | \$248,962 | \$296,000 | \$1,916,282 |
| Day-Of Programs | | | | | |
| DBP-E | \$88,182 | \$0 | \$51,312 | \$300,000 | \$439,494 |
| BIP | \$229,624 | \$0 | \$51,312 | \$336,000 | \$616,936 |
| CPP-E | \$69,864 | \$0 | \$51,312 | \$0 | \$121,176 |
| Res Smart Thermostat | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total: Day-Of Programs | \$387,671 | \$0 | \$153,936 | \$636,000 | \$1,177,606 |
| Technical Assistance and Technology Incentives | | | | | |
| Technical Assistance | \$1,178,758 | \$0 | \$38,221 | \$750,000 | \$1,966,979 |
| Technology Incentives | \$457,882 | \$0 | \$44,766 | \$7,241,254 | \$7,743,902 |
| Sub-total: TA and TI | \$1,636,640 | \$0 | \$82,987 | \$7,991,254 | \$9,710,882 |
| Customer Education, Awareness & Outreach | | | | | |
| Customer Education, Awareness & Outreach | \$3,046,898 | \$0 | \$165,975 | \$0 | \$3,212,873 |
| Flex Your Power Now! | \$597,089 | \$0 | \$82,987 | \$0 | \$680,076 |
| Emerging Markets | \$650,978 | \$0 | \$0 | \$0 | \$650,978 |
| Community Outreach | \$215,883 | \$0 | \$44,766 | \$0 | \$260,650 |
| Circuit Savers | \$353,284 | \$0 | \$44,766 | \$0 | \$398,051 |
| Sub-total: Customers Education, Awareness & Outreach | \$4,864,132 | \$0 | \$338,495 | \$0 | \$5,202,627 |
| Other Programs | | | | | |
| Statewide Pricing Pilot (SPP) | \$1,161 | \$0 | \$0 | \$0 | \$1,161 |
| ADRS | \$0 | \$0 | \$0 | \$0 | \$0 |
| On-Bill Financing | \$139,874 | \$0 | \$0 | \$0 | \$139,874 |
| Competitive Bid | \$152,706 | \$0 | \$0 | \$0 | \$152,706 |
| Sub-total: Other Programs | \$293,740 | \$0 | \$0 | \$0 | \$293,740 |
| Additional Activities | | | | | |
| Cost Benefit Framework | \$0 | \$0 | \$82,987 | \$0 | \$82,987 |
| Annual Report | \$0 | \$0 | \$28,169 | \$0 | \$28,169 |
| Market Research | \$145,108 | \$0 | \$88,458 | \$0 | \$233,566 |
| IT | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total: Additional Activities | \$145,108 | \$0 | \$199,614 | \$0 | \$344,722 |
| Total: All Programs | \$8,698,612 | \$0 | \$1,023,994 | \$8,923,254 | \$18,645,860 |

Budget - 2008

| | O&M | Capital | M&E | Incentives | Total |
|---|--------------------|------------|--------------------|--------------------|---------------------|
| Day-Ahead | | | | | |
| Voluntary CPP | \$277,311 | \$83,808 | \$83,808 | \$0 | \$361,119 |
| DBP | \$530,772 | \$83,808 | \$83,808 | \$328,000 | \$942,580 |
| CPA DRP | \$0 | \$0 | \$0 | \$0 | \$0 |
| Peak Day 20/20 | \$579,698 | \$83,808 | \$83,808 | \$0 | \$663,505 |
| Sub-total: Day-Ahead Programs | \$1,387,781 | \$0 | \$251,423 | \$328,000 | \$1,967,204 |
| Day-Of Programs | | | | | |
| DBP-E | \$90,384 | \$0 | \$51,968 | \$450,000 | \$592,352 |
| BIP | \$232,461 | \$0 | \$51,968 | \$420,000 | \$704,429 |
| CPP-E | \$70,557 | \$0 | \$51,968 | \$0 | \$122,525 |
| Res Smart Thermostat | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total: Day-Of Programs | \$393,402 | \$0 | \$155,904 | \$870,000 | \$1,419,306 |
| Technical Assistance and Technology Incentives | | | | | |
| Technical Assistance | \$1,195,168 | \$0 | \$38,549 | \$750,000 | \$1,983,717 |
| Technology Incentives | \$464,270 | \$0 | \$45,259 | \$4,428,688 | \$4,938,217 |
| Sub-total: TA and TI | \$1,659,438 | \$0 | \$83,808 | \$5,178,688 | \$6,921,934 |
| Customer Education, Awareness & Outreach | | | | | |
| Customer Education, Awareness & Outreach | \$2,757,036 | \$0 | \$167,615 | \$0 | \$2,924,651 |
| Flex Your Power Now! | \$597,089 | \$0 | \$83,808 | \$0 | \$680,896 |
| Emerging Markets | \$651,827 | \$0 | \$0 | \$0 | \$651,827 |
| Community Outreach | \$219,584 | \$0 | \$45,259 | \$0 | \$264,842 |
| Circuit Savers | \$354,972 | \$0 | \$45,259 | \$0 | \$400,231 |
| Sub-total: Customers Education, Awareness & Outreach | \$4,580,508 | \$0 | \$341,940 | \$0 | \$4,922,448 |
| Other Programs | | | | | |
| Statewide Pricing Pilot (SPP) | \$0 | \$0 | \$0 | \$0 | \$0 |
| ADRS | \$0 | \$0 | \$0 | \$0 | \$0 |
| On-Bill Financing | \$139,874 | \$0 | \$0 | \$0 | \$139,874 |
| Competitive Bid | \$155,919 | \$0 | \$0 | \$0 | \$155,919 |
| Sub-total: Other Programs | \$295,792 | \$0 | \$0 | \$0 | \$295,792 |
| Additional Activities | | | | | |
| Cost Benefit Framework | \$0 | \$0 | \$83,808 | \$0 | \$83,808 |
| Annual Report | \$0 | \$0 | \$28,497 | \$0 | \$28,497 |
| Market Research | \$148,736 | \$0 | \$88,458 | \$0 | \$237,193 |
| IT | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sub-total: Additional Activities | \$148,736 | \$0 | \$200,762 | \$0 | \$349,498 |
| Total: All Programs | \$8,465,657 | \$0 | \$1,033,837 | \$6,376,688 | \$15,876,182 |

Estimated Load Reduction (MW)

| | 2005 | 2006* | 2007 | 2008 |
|--|------------|------------|------------|------------|
| Day-Ahead | | | | |
| Voluntary CPP | 20 | 13 | 17 | 21 |
| DBP | 28 | 31 | 37 | 43 |
| CPA DRP | 5 | 5 | 5 | 5 |
| Peak Day 20/20 | 31 | 29 | 37 | 45 |
| Sub-total: Day-Ahead Programs | 84 | 78 | 96 | 114 |
| Day-Of Programs | | | | |
| DBP-E | 0 | 6 | 12 | 18 |
| BIP | 6 | 8 | 10 | 11 |
| CPP-E | 3 | 4 | 5 | 6 |
| Res Smart Thermostat | 2 | 2 | 0 | 0 |
| Summer Saver | 1 | 10 | 19 | 30 |
| Clean Gen | 10 | 25 | 25 | 25 |
| Peak Gen | 60 | 60 | 60 | 60 |
| Sub-total: Day-Of Programs | 82 | 115 | 131 | 150 |
| Technical Assistance and Technology Incentives: | 15 | 50 | 90 | 120 |
| Total: | 181 | 243 | 317 | 384 |

*Assumes Default CPP (>200kW) is implemented beginning in 2006

Attachment B

APPENDIX B

PROGRAM CONCEPT PAPERS

1974-1975
CAME TRAINING (M/1)
1975-1976

IDSMS PROGRAMS

2006-2008 Program Concept Paper

Advanced Home New Construction Program

1. Program Descriptors

| | |
|-------------------------|------------------------------|
| Market Sector: | Residential New Construction |
| Program Classification: | IDSMS |
| Program Status: | Existing |

The Advanced Home - New Construction Program promotes a comprehensive residential new construction with a crosscutting focus to sustainable design and construction, green building practices and emerging technologies. The program encourages efficient heating, cooling, water heating system and building envelope design and installation. Through a combination of education, design assistance and financial support, the program works with the building and related industries to exceed compliance with the California Building Energy Efficiency Standards (Standards), to prepare builders for future changes in the Standards and to create future pathways to go beyond compliance and traditional energy savings objectives. The program will interact on a statewide basis to share best practices but will be implemented locally by the utility.

2. Customer Description

The program will target the design and construction team; architects, energy analysts, HERS raters, trade contractors, and residential builders. Market segment is low-rise and high-rise residential new construction with participation is open to all residential new construction including custom homes, single-family production housing, condominiums, town homes and rental apartments

3. Program Statement

Demand response is a vague concept for builders. The residential new construction market has been recognized as a rich ground for the promotion of new technologies, experimentation and analysis and has been the spawning ground for numerous technologies now considered mainstream in the vast retrofit market. Demand response technologies can join other innovations which have become mainstream such as high performance low-e windows, high performance water heaters and heating, ventilation and air conditioning (HVAC) systems. Builders are open to explore further technologies and innovations in their building designs but require guidance and assistance to prevent lost opportunities. For effective use and maximum performance of demand response technologies, such as direct load control (Smart Thermostats, energy management systems, appliance controls) demand response education must be taken to a higher level requiring building design and construction to incorporate the measures promoted by the program.

4. Program Rationale

There is a need for comprehensive programs that address residential construction by incorporating the best practices in demand response. This program has a long history of mainstreaming technologies. The search for reducing grid and source energy consumption must lead to new approaches like integrated demand side management, such as the coordination with demand response programs, water conservation efforts and the use of construction materials and practices.

The Advanced Home Program will address these needs and the needs of the builder for guidance in the incorporation of technology through training and design assistance. Further, through the use of financial support the builder will be able to explore how the demand response technologies work to provide value to their home buyers. By incorporating products and practices not often seen as mainstream into single and multi-family new home design, opportunities for product suppliers, architects, designers, builders, contractors and others will surface to increase product awareness, utilization and as a result, lower costs. This more targeted approach to specific design solutions offers

an opportunity to focus on technology solutions that are often ignored in performance-based programs. Addressing more specific measures allows the builder to focus their attention on systems that may otherwise be ignored.

5. Program Strategy

The program will target single and multi-family builders whose projects will maximize energy savings and demand and generate significant industry and homebuyer interest.

- Demand response measures: smart appliances, Smart Thermostats, energy management systems and dimmable lighting ballasts
- Sustainable project sites
- Energy efficiency: efficient thermal envelopes, efficient space cooling, heating and water heating systems, alternatives to central air conditioning such as night ventilation, cool roofs, lighting and appliances
- Increased levels of energy performance above the minimum Standards
- Water efficiency
- Materials and resource, waste reduction and efficient use of materials
- Renewable energy such as photovoltaic systems
- Indoor environmental quality
- Operations and maintenance

The Utility will act as program advisor and provide technical assistance to the design team for their projects. Through direct contact with the market actors, architects, energy analysts and the building industry, the program works to incorporate emerging and innovative technologies in the early stages of product design.

The program will also address the heating, cooling and water heating design and installation in residential construction paying particular attention to the opportunities for demand response.

6. Program Objectives

The program objectives are to increase energy efficiency and introduce builders to the integration of demand response measures. The goals of the overall program are to examine a portfolio of energy saving technologies and low-impact construction practices to be incorporated in various demonstration projects. Optimized energy performance above the prerequisite standards will be incorporated in the building design to reduce environmental impacts associated with excessive energy use.

7. Program Implementation

The program is implemented through direct contact with the market actors, architects, mechanical engineers, energy analysts, home energy rating system (HERS) providers, HERS raters and the building industry. The program provides design assistance, education and training to these actors on the changes to the Standards, HVAC system design and methods to meet program requirements. Through design assistance and coordination with the builder and their consultants and contractors, projects will be evaluated for the most suitable approach to increasing energy savings.

7.1. Internal Activities

Education and training courses will support the program concepts and will cover a number of construction and design issues, such as the 2005 Energy Efficiency Standards, Proper HVAC sizing, Ducting System Design, Uniform Mechanical Code, and Standards compliance modeling.

7.2. Subcontractor Activities

The program will coordinate many of the program activities with subcontractors. The education and training courses will be prepared under the utility supervision and presented by key figures in energy efficiency, HVAC systems and Energy Standards implementation. HERS Raters will be

engaged by the utility to provide field verification of measure installation.

7.3. Marketing Activities

The program will be marketed directly to the building industry and the related market actors. Additional marketing activities will be explored through conference presentations and building and other industry meetings.

HERO WHTUOS
CHICT YMEMHUSAY
R381 WOTRO ANOCI

2006-2008 Program Concept Paper Advanced Home Renovations Program

| | |
|-------------------------------|-------------|
| 1. Program Descriptors | |
| Market Sector: | Residential |
| Program Classification: | IDSM, Local |
| Program Status: | New |

The Advanced Home Renovation Program (AHRP) is a local demonstration program to renovate an existing single-family home with the latest in energy efficiency products and equipment. The AHRP project is designed to transform a pre-1978 vintage single family home into a state-of-the-art energy efficient home. The goal will be to demonstrate how little energy a typical San Diego family can use without changing their lifestyle and to increase the awareness of energy efficiency, demand response and technological advances in electric and natural gas end uses.

2. Customer Description

The program targets residential customers looking for ways to reduce their gas and electric bill.

3. Program Objectives

This program objective is to increase the awareness of energy efficiency and technological advances in electric and natural gas end uses. This will also provide an opportunity to do a pre and post analysis of the savings. The information gathered through this project would be used in designing future energy efficient programs.

4. Program Statement

Demand response is a vague concept for residential customers. Customers who are open to explore further technologies and innovations in their home require guidance. For effective use and maximum performance of demand response technologies, demand response education must be taken to a higher level.

5. Program Strategy

All of the electric and natural gas end uses will be completely removed and replaced with the highest efficiency equipment with demand response measures integrated and designs commercially available. The home's heating and cooling system will be controlled via a Smart Thermostat and energy management system. The home's thermal shell R-value will be raised to the highest useful level possible. Trees around the structure will be strategically selected and placed in a manner that reduces the heating and cooling loads. All appliances will be replaced with leading edge technology, including Smart Appliances. The water heating system could be completely re-worked with a solar system with a high-energy factor natural gas-fired instantaneous back-up system or a load controlled electric water heater. The pool will be equipped with a load controlled electric heater. The home electronics (TV, DVD, VCR, etc) will be equipped with 1-Watt stand-by power systems where possible. The home's lighting systems will utilize daylight harvesting, 4-pin hardwired compact fluorescent recessed lighting, dimmable CFL fixtures, LED fixtures, premium T-8 lamps, motion sensors, and other advanced lighting systems. Home-office products will showcase the most energy efficient models. The home would be equipped with a photovoltaic power generation system.

In 2007 and 2008, SDG&E will offer incentives based upon the measures integrated into this home. Direct load control devices on electric pool pumps and electric water heaters as well as other Smart Appliances deemed to have real load reduction potential as well as the energy efficiency measures with energy savings potential will be incentivized through the appropriate post-2006 rebate program.

2006-2008 Program Concept Paper Home Energy Efficiency Survey (HEES)

1. Program Descriptors

Market Sector: Residential
Program Classification: IDSM, Statewide and Local
Program Status: Modified Existing

2. Customer Description

The program targets residential customers looking for ways to reduce their gas and electric bill.

3. Program Statement

Residential customers are often unaware of practices and retrofit opportunities that will help them understand, manage, and reduce their energy demand and use. Energy surveys provide accurate and comprehensive information about such practices and opportunities, and make specific recommendations that are tailored to each participant's energy habits, appliance mix, and billing history. In addition, surveys have proven to be an effective tool to reach customers who otherwise have limited access to reliable efficiency information, including non-English speaking customers.

This survey will integrate a demand response module with specific recommendations to assist customers in understanding demand response as a subject and the opportunities for load reduction available to them.

4. Program Rationale

The Home Energy Efficiency Survey program addresses a lack of customer information about demand response and energy efficiency benefits by providing a comprehensive on-line survey that requires customer participation and ownership for energy usage and behavioral patterns.

The program increases consumer awareness of the benefits of load reduction and energy efficiency opportunities. The surveys will promote demand response programs and services such as residential incentives and programs.

The program minimizes lost opportunities by communicating information in multiple languages to Southern California's diverse population. The HEES program serves a tool to bring energy efficiency, demand response, and water conservation to all customer groups.

The program also helps overcome the barrier of customers not willing to make investments by providing "no-cost" and "low-cost" energy savings recommendations to customers.

5. Program Strategy

The program provides comprehensive multilingual on-line energy surveys at no cost to SDG&E residential customers. For customers with no access to computers, the on-line can be converted into a mail-in audit. SDG&E will coordinate with the City Of San Diego and the San Diego County Water Authority to leverage existing water audits now being offered, and to incorporate energy conservation elements where practical.

- The energy surveys will offer information on incentives, energy-savings tips, programs, and links to other energy-related resources.
- SDG&E plans to make several enhancements to further educate residential customers about energy usage. Customers will be able to compare their home energy usage with similar households in their neighborhood. The tool will utilize data from the US Census Bureau at the block group level (approximately 500 household segments) merged with real estate market data, weather data, and SDG&E billing data.

- The specific demand response module will allow packaging of recommendations and measures.

6. Program Objectives

Provide outreach to residential customers to inform them of comprehensive approaches to improve their energy usage that incorporates demand response into the energy efficiency and renewables opportunities. Additionally, SDG&E seeks to provide customers with new developments in technologies and appliances that will allow them to continue improving their energy usage.

The program increases consumers' awareness of the benefits of energy efficiency and help customers:

- Better manage their home energy cost to save energy and money
- Make informed decisions about demand response technologies, e.g., dimmable ballasts, smart thermostats, controls
- Identify which appliances or equipment are consuming the most energy at peak and allowing for changes to be made that will reduce their energy demand
- Learn about additional resources and programs available to help reduce energy use
- Learn about renewable energy opportunities for the home

7. Program Implementation

The demand response module will integrate directly into the on-line survey, available on SDG&E's website, provides customers with direct access to obtain information on energy efficiency programs and services. The interactive English and Spanish audit takes minutes to complete and allows customers to obtain immediate results by answering specific questions regarding their home energy use. The data that is entered in the profile is saved so that customers can update or review the results in the future. The interactive audits are available in both the short and extensive version, taking minutes to complete. Vietnamese, Chinese and Korean PDF's can be downloaded, completed and mailed to vendor for processing. Customers without internet access can complete an audit by telephone and in the case of the Asian languages, a survey can be mailed to customers upon request.

7.1. Internal Activities

The contractors developing the surveys will be provided with a scope of work.

7.2. Subcontractor Activities

For the on-line audit, sub-contractor is responsible for maintaining and updating the survey.

For the mail-in audit, sub-contractor will be responsible for printing and processing audit and mailing report back to customer.

7.3. Marketing Activities

The program will incorporate a variety of marketing activities already built into the energy efficiency budget to promote the general survey. Activities will include, but are not limited to, on-line marketing, Interactive Voice Response (IVR), community events, bill inserts and coordination with statewide marketing agencies' outreach efforts as part of the energy efficiency.

2006-2008 Program Concept Paper Sustainable Communities Program

1. Program Descriptors

Market Sector: Multi-family and Commercial New Construction
Program Classification: IDSM, Local
Program Status: Existing

2. Customer Description

Building owners, Building contractors, Architects, Engineering firms, Municipalities, Land developers

3. Program Statement

California is a leader in the construction of green buildings. Many cities have adopted or have begun to adopt green building policies. Additionally, the state of California has adopted Leadership in Energy and Environmental Design (LEED®) as a green building standard for its facilities. Although interest and activity continues to grow, sustainable design is still in the infancy stage particularly in the communities served by SDG&E. Further emphasis is needed to optimize energy efficiency and potential load reduction within sustainable building projects through good design practices beyond the current statewide program limitations. Continued growth can be achieved by demonstrating success on local projects representing good sustainable design and construction practices including a demand response component.

4. Program Rationale

The Program responds to the growing interest in sustainable design practices. It emphasizes LEED® due to its significant impact on energy and more holistic approach to building design, construction, performance and site development than the EPA's ENERGY STAR® rating system for buildings. LEED®, created by the US Green Building Council (USGBC), has emerged as the recognized national standard for green building practices. It provides a complete framework for assessing building performance and meeting sustainability goals. LEED® emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. It recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources. The addition of demand response measures based upon analysis and customer success can provide another avenue to sustainability.

California is the leader in pursuing LEED® certified buildings. As of May 2005, there were 306 registered projects in California of the 1921 projects nationally registered for LEED® certification. By contrast, San Diego has been slower to pursue green buildings. As of May 2005, there were less than 25 projects registered with four certified buildings. Despite a slower adoption rate, momentum is growing.

In 2004, the inception year of the Sustainable Communities program, no buildings were registered for LEED® certification within SDG&E's service territory. Project registrations have increased to over 20, within 16 months, demonstrating a significant change in acceptance toward sustainable buildings. An impetus to this growth was a project showcased through the Sustainable Communities program. This award-winning project was the first LEED® Gold building in the San Diego region. It has drawn widespread attention with several tours of the facility per month for SDG&E customers considering green building projects. The 2005 - 2008 program will capitalize on this groundwork to expand adoption of sustainable buildings further.

Many local governments in SDG&E's service territory are now considering the adoption of sustainable building policies, but do not have the experience or expertise to move forward. These jurisdictions have the unique ability to adopt and enforce local policies and statutes to facilitate energy efficiency at

the local level, and can proactively promote programs through various local community based organizations that provide services to local residents. Further, local agencies administer rebate and incentive programs that can be utilized in areas of waste management, water efficiency, transportation and landscape planning.

5. Program Strategy

This local program is a natural extension of the statewide new construction programs that offers a higher tier incentive for sustainable building projects that greatly exceed the state's Energy Code. These projects will incorporate high performance energy efficiency and demand reduction technologies, along with clean on-site generation, water conservation, transportation efficiencies and waste reduction strategies. The program will leverage existing relationships, methodologies, and resources from the statewide new construction programs. A SDG&E representative will participate in design team meetings to provide expertise in sustainable design and ensure program requirements are met. Case studies and fact sheets will be developed and distributed on completed projects to the target market to increase the sustainable building knowledge base locally. Projects with municipalities will be showcased to provide experience and community examples for developing and adopting sustainable building policies.

6. Program Objectives

The goal of the Sustainable Communities program (SCP) is to generate sustainable energy and demand savings by creating a network of sustainable/green building projects in SDG&E's service territory. Its longer-term goal is to help "mainstream" new energy efficient technologies and sustainable design practices by documenting the benefits and lifecycle cost savings achieved by these projects.

7. Program Implementation

The SCP is a performance-based program. All projects funded under the Sustainable Communities program will be required to exceed the 2005 Title 24 energy code, consider the installation of on-site renewable generation and include green building design elements outlined in LEED®. To participate and qualify for incentives under the SCP, applicants must comply with the program requirements described below.

7.1. Program Process and Requirements

Incentive funding will be offered on a first-come, first-served basis. If the project's completion is delayed beyond the final date, the Agreement is voided, but the project may be eligible under the program guidelines in effect at that time. Subsequent eligibility will be considered on a case-by-case basis and will require SDG&E approval and execution of a new Incentive Agreement. Projects failing to meet the requirements of the program may be considered for other new construction program incentive funding.

7.2. Subcontractor Activities

Subcontractors may be employed to provide energy compliance, energy efficiency and load reduction design recommendations. Subcontractors will be employed to develop case studies.

7.3. Marketing Activities

Informational flyers and case studies will be posted on the Sustainable Communities program webpage and distributed to prospective customers and sponsored events. A mailing with program description literature to all design professionals within SDG&E's service territory will be conducted annually. Sponsorships and presentations for specific local green building events will be provided. Display boards will be provided for select projects with educational aspects. Account Executives will conduct cold calls and face-to-face meetings with customers. Cross-marketing activities will be conducted with 3rd party and municipal green building programs.

2006-2008 Program Concept Paper Small Business Super Saver

1. Program Descriptors

Market Sector: Non-Residential
Program Classification: IDSM, Local
Program Status: Existing

The Small Business Super Saver (SBSS) is an existing local program targeting non-residential customers under 100kW of monthly demand. It is a prescriptive rebate program that encourages nonresidential customers to retrofit existing equipment with high efficiency equipment and demand response technologies. Rebates are intended to cover a significant portion of the incremental cost associated with installing this equipment. The program integrates contractor incentives creating a no-cost approach for the very small customer, and On Bill Financing opportunities for the small customers to adopt energy efficient practices.

2. Customer Description

Non-residential customers under 100kW of monthly demand in the SDG&E service territory.

3. Program Statement

The Small Business Super Saver (SBSS) is designed to increase the adoption of energy-efficient and load reduction measures to the hard to reach, very small and small customers who typically rent, have limited capital resources, and lack acceptance of the magnitude of the personal financial benefits of energy efficiency improvements.

4. Program Rationale

The Small Business Super Saver program has been successful with the direct install approach for the very-small, under 20kW, customer outperforming its established incentive budget by delivering savings at a lower incentive cost. With approximately 138,000 commercial meters under 100kW in SDG&E territory, 72% fall under 20kW and 20% are up to 100kW. Clearly the greatest potential for program participation is with the very small customer who will continue to receive the benefits of a no cost program through substantial rebates. For customers over 20kW of monthly demand, the On Bill Financing (see On Bill Financing Program) is an option to address the capital resource barrier. Participants will receive a reduced rebate but with 100% of the balance of project costs, including installation, financed through the OBF program.

5. Program Strategy

The Small Business Super Saver program is a rebate program for nonresidential customers who install prescribed energy-efficient and demand response measures where warranted. The program shall offer significant rebates on an expanded, comprehensive list of measures and participation in Demand Response Programs.

A customer between 20kW and 100kW of monthly demand may be also be eligible to take advantage of the on-bill financing option. Once qualified under the OBF Option (see OBF Program proposal for details), the participating customer would receive a reduced rebate and finance the balance of the cost of a qualified energy efficiency package through the utility. Demand Response measures will also qualify for financing where included as part of the energy efficiency upgrade. Monthly payment on a term loan would be billed as part of the participating customer's monthly utility bill. With this option the customer should not experience an out of pocket expense for the prescribed measures. In addition a financial incentive may be offered to subcontractors where needed to overcome any additional barriers. This approach has three potential advantages:

- Increased energy savings and demand response potential by spreading dollars further

- Financial participation by customers fosters greater investment in the efficient operation of equipment and ownership in lead reduction
- Allows the program to fund more expensive equipment replacements, which brings larger customers and more energy intensive equipment into the range of possible measures.

In addition, the Small Business Super Saver will work with the energy audit team to assist the customer each step of the process. Customers will be directed to the SDG&E website to locate participating contractors and vendors. SDG&E will also incorporate facilitators in to the program. The facilitator will be in the field to assist customers with questions, help to locate a contractor from our participating vendor list. The facilitator will also be able to assist the customer with the On-Bill Financing option, which will allow the customer to participate in a comprehensive retrofit without the burden of the upfront capital cost associated with some measures such as refrigeration and food service equipment. The facilitator will be able to be a representative for the customer.

Furthermore, the SBSS will take a focused approach on industry specific segments such as restaurants and mini markets. An additional focus will be placed on specific measures as well, such as the smart thermostat technology included in Demand Response portfolio.

6. Program Objectives

The objectives are to strategically address the barriers that exist for the small business customer and provide them options to implement cost-effective energy saving measures and demand reductions with little or no out of pocket expense.

7. Program Implementation

In 2006, SDG&E is proposing to enhance the Small Business Energy Efficiency program, now named Small Business Super Saver, from program awarded contractors to a program that offers all qualified installation contractors the opportunity to participate. The Small Business Super Saver will work in conjunction with other programs to cross train contractors on the new programs and services available to customers. Appropriate collateral will be created and distributed including a list of demand response measures to complement the energy efficiency measures available in the program.

Customers will be contacted and educated through face-to-face contact by SDG&E Energy Program Representatives, Community Based Organizations (CBOs), local governments, Chamber of Commerce, and other selected organizations. Once informed, customers will be given a list of participating contractors/vendors to contact for participation. Contractors will market directly to customers as well, and will be trained on program information -- including the addition of demand response measures -- accordingly. A financial incentive will be paid to contractors in conjunction with the customer rebate that will allow a no-cost installation to customers under 20kW monthly demand.

The Small Business Super Saver will work closely with existing Demand Response programs to cross-market where applicable. One area of potential cross marketing is with the newly designed Integrated Demand Side Management audit. In 2006, SDG&E will continue its integrated demand side management (IDSM) audit that supports both energy efficiency and demand reduction. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs. The IDSM audit would operate under the umbrella of the Technical Assistance Program.

7.1. Internal Activities

The Small Business Super Saver will support the outreach and education via an energy audit program. The energy audit program will continue to gather detailed information from the customer and the recommended energy efficient retrofit project. Additionally, the audit team may leverage the financial incentives for comprehensive projects and demand response participation. If needed, the audit team will also encourage participation in the on-bill financing program offered by SDG&E.

Onsite audits may be conducted, or information may be provided through direct mail, email, telephone or other means through the Education, Training and Outreach program. Detailed information will be recorded in our tracking system, including equipment inventories and project recommendations. Recommendations will be followed up periodically to determine implementation status, and whether additional assistance will be required to cause a project to be implemented. If a project is implemented without design or financial assistance, energy savings will be logged into the tracking system, and claimed toward program goals.

Also, in 2006, SDG&E will continue the integrated demand side management (IDSM) audit that supports both energy efficiency and demand reduction. Audits have proven to be an important tool for educating customers about energy management opportunities in their facility, and encouraging their participation in programs. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs.

The IDSM audit would operate under the umbrella of the Technical Assistance Program and have the following characteristics:

- Subcontractors will be utilized to provide the audit service;
- The results will be reviewed by both the energy efficiency and demand response staff;
- The results will provide the customer with a clear action plan;
- A follow-up meeting with the customer will encourage them to implement the plan and participate in available programs.

7.2. Subcontractor Activities

- Energy Efficiency Consultants for energy savings research and documentation
- Energy Efficiency Consultants for industry specific marketing
- Financial Incentives for turnkey approach
- Financial Incentives for Integrated Demand Side Management coordination
- Seminar Consultants for Trade Shows and Education and Training Seminars
- Industry Specific Marketing Consultants

7.3. Marketing Activities

The Small Business Super Saver will market in several ways.

- Direct delivery by SDG&E Energy Program Representatives, Special Investigators, Facilitators and Account Executives.
- Direct delivery from an integrated audit program
- Direct delivery by Community Based Organizations, Faith-Based Organizations, and ethnic organizations.
- Direct delivery by vendors, contractors, and equipment dealers.
- Direct delivery by education and training seminars.

2006-2008 Program Concept Paper SDG&E Community Colleges Partnership Program

Partners – SDG&E, SDREO, Chancellor's Office, Intergy

1. Program Descriptors

Market Sector: Non-Residential
Program Classification: IDSM, Local
Program Status: New

The SDG&E California Community Colleges Partnership program is a new statewide nonresidential program that will be very similar to the existing successful SDG&E UC/CSU Partnership program. The program will offer incentives for retrofit and new construction projects, continuous commissioning, and educational training for the community colleges.

2. Customer Description

The program will be offered to all California Community College campus facilities in the four IOU service areas.

3. Program Statement

The California Community College (CCC) system includes 110 campuses statewide. These facilities consume vast quantities of energy and make up a significant portion of the electric load in the State of California. This is a large, complex organization with a broad set of goals, stakeholders, processes and constituencies. The organization is diverse from a geographic, climate, and operational needs standpoint. But with this size and diversity also comes a considerable opportunity to save energy use, energy demand and cost on a scale that is meaningful to the State of California. The California Community College (CCC) and Investor-Owned Utility (IOU) Energy Efficiency Partnership is designed to meet this challenge.

4. Program Rationale

The CCC/IOU Energy Efficiency Partnership is modeled after the successful UC/CSU/IOU Energy Efficiency Partnership program that was funded in the 2004-2005 CPUC energy efficiency program cycle. This program capitalizes on the vast resources and expertise of Community College system and California IOUs to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission). The new CCC/IOU program will incorporate lessons learned from previous statewide partnership programs in the areas of improved program delivery efficiency and communication between the stakeholders. The timing of the CCC/IOU Partnership is critical; the CCC is embarking on a major construction cycle and needs technical and financial input from the IOUs to ensure that the resulting new buildings are as efficient and effective as possible.

5. Program Strategy

To best meet the need of the CCC system and optimize opportunities for energy savings and load reduction, the CCC/IOU Partnership is comprised of four program elements. These elements will operate on a statewide, integrated basis, providing immediate energy savings and setting the foundation for a long-term program focused on sustainability and best practices. The particular goals include:

- *Energy Efficiency Retrofits and Load Management Projects*
The Energy Efficiency Retrofit and Load Management Retrofit element of the program involves implementation of energy efficiency retrofit projects and retro-commissioning projects that will provide cost-effective energy and demand savings during the 2006-2008 program implementation period. CCC has an existing and extensive inventory of cost-effective energy saving and demand response measures, as well as many new projects to

be developed as part of the 2006-2008 program cycle. Methodology for further screening and selection of eligible project will be standardized as part of the program, based on previous project identification tools the CCC has successfully used in the past. The resulting inventory of potential projects will be reviewed and finalized during the initial stages of the program to develop an overall implementation plan and schedule. Load management will be achieved through retro-commissioning and monitoring-based commissioning (MBCx) projects. These projects will be implemented where there are opportunities to achieve sustainable savings through operational changes. The MBCx projects involved installation of submetering equipment and will be based on best practices as developed during the 2004-2005 UC/CSU Partnership. The project plan assumes that the CCC will co-fund projects, paying for 20% of implementation cost.

- New Construction Assistance

The New Construction Assistance element of the program focuses on the unique needs and opportunities of the CCC as they embark on a major construction cycle associated with bond funding as approved by Proposition 39. There are many demands on the budgets associated with these projects, and the buildings will be built to Title-24 minimum standards for energy efficiency without input from the IOUs that exceeds that available through general new construction programs. The needs of the CCC are both specific and vast and this program capitalizes on a unique window of opportunity to optimize the efficiency of millions of square feet of new building stock that will be added in the State of California over the next five years.

New Construction Assistance will include design review, development of design guidelines and equipment specification standards, and incentivizing of the incremental cost of energy efficiency measure in new construction projects. The program will provide a uniform, statewide approach that will offer the CCC consistency and ease-of-access not available from standard programs like Savings By Design. The program will all directly focus on the CCC system's needs in implement the Governor's Green Building Initiative Executive order and LEED certification.

- Education and Training

The Education and Training focuses on the specific needs of the CCC and is designed to complement existing training programs available to the Campuses including those offered internally, by the IOUs, and by the UC/CSU Partnership. These classes will encompass energy efficiency as well as demand response elements. Training class elements will focus on three primary opportunities:

- Training CCC staff on the identification and implementation of energy efficiency and demand reduction projects and MBCx projects and operation best practices,
- Training project managers on the elements of green building design and energy efficient specification and construction practices by exceeding Title-24,
- Developing and implementing vocational education training curriculum for students and trade technicians, including topics such a refrigeration and HVAC service and installation, duct testing and sealing, energy code compliance, lighting retrofits, and others.

Courses will be held statewide. Where applicable, course offerings, curriculum and content will be based on extensive material and best-practices documentation developed for the UC/CSU program during the 2004-2005 cycle.

- Emerging Technologies Demonstration Program

The Emerging Technologies Demonstration element capitalizes on the unique opportunities associated with the upcoming new construction projects at CCC campuses throughout the state. Along with New Construction Assistance and related training, the Partnership program provides specific opportunities for well planned and highly visible demonstration projects in conjunction with SDG&E's Emerging Markets program.

6. Program Objectives

The Program will adopt the framework and methodology of the UC/CSU/IOU Partnership Program to design and implement a sustainable, long-term, comprehensive energy management program at the CCC campuses served by California's four large IOUs. Demand response technologies will be offered as part of the plethora of recommendations. This program is designed to efficiently accomplish immediate and long-term peak energy and demand savings goals.

The objectives of the program are as follows:

- A. **Immediate, Cost-Effective Energy and Demand Savings**
Retrofit projects will be efficiently implemented to meet or exceed all savings goals as outlined in the program economics.
- B. **On-going Improved Energy Efficient Operations and Maintenance Practices**
Campus energy managers and other staff will be trained on initial and continuous commissioning and will receive tools to reduce energy consumption and peak demand through energy information at the building systems level.
- C. **CCC Facilities Staff and Project Managers Trained To Identify and Implement Energy Efficient and Demand Response Opportunities**
Similarly, this program will fund training campus facilities staff, project managers and other staff in use of a "best practices" methodology for identifying and implementing energy efficiency projects.
- D. **Optimization of the Energy Efficiency of New Construction projects**
The Partnership will provide technical and financial resources and a systematic program approach to ensure that millions of square feet of CCC new construction projects are built to optimal energy efficiency levels, avoiding significant future load growth. The integration of demand response technologies at the start will also be introduced.
- E. **Future savings through Vocational Training and Technology demonstration**
Although it is not quantified, the Partnership will impact future energy and demand savings by helping to train the next generation of building technicians and through the demonstration of emerging technologies.

7. Program Implementation

The CCC/IOU Energy Efficiency Partnership Program will use a similar implementation strategy that was used in the UC/CSU program during the 2004-2005 cycle. A more detailed description of these implementations tasks will be provided in future with comprehensive program descriptions. The implementation plan for this cycle will include:

- A. Coordination with other energy efficiency and demand response programs (such as Technical Assistance) and ongoing campus projects
- B. Energy Efficiency Retrofit and Load Management Project program implementation.
- C. New Construction Assistance program implementation
- D. Education and Training implementation
- E. Emerging technologies Demonstration Program implementation

7.1. Internal Activities

The training and education component of the partnership program involves training of campus facilities staff, project managers, energy managers and others on using best energy practices in the construction, retrofit and monitoring based commissioning of campus buildings and central plant infrastructures. This will continue progress made on the establishment of a statewide approach to training and building operation so that this best energy practices approach can be used for ensuring long-term energy efficiency savings. The training and education component will work hand-in-hand with the other program components.

7.2. Subcontractor Activities

Subcontractors will be used to assist in program administration and management, and in each of the three program elements. This approach was used successfully in the UC/CSU/IOU partnership program in the previous cycle. These consultants will be paid out of the energy efficiency budget versus demand response unless they are working on integrated audits or specific demand response projects.

A consultant will assist in day-to-day coordination and communication among the partners (the colleges and four utilities) and provide staffing to the Management and Administration Team and Program Specific Implementation Teams. Consultant will assist in identifying project tasks, establishing a schedule of deliverables and responsibilities, helping the CCC ensure successful program implementation, and obtaining CCC input and decision-making on key program elements. Consultant will also assist in the four program elements, especially in facilitating coordination and communications with and among campuses, providing analytical assistance to the CCC Chancellor's Office and campuses as needed, provide assistance with successful retention of subcontractors through competitive procurement processes, and helping to track and ensure successful program implementation based on specific deliverables required by the CPUC. Finally, the consultant will assist the IOUs and the CCC in CPUC reporting and regulatory communications. For the third program component, Training and Education, the consultant may assist in development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of the minutes.

DAY-AHEAD PROGRAMS

2006-2008 Demand Reduction Concept Paper Voluntary Critical Peak Pricing Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|------------------|------------------|------------------|
| Operating & Maintenance (Administration) | \$253,897 | \$272,200 | \$277,311 |
| Capital | \$42,422 | \$0 | \$0 |
| Measurement & Evaluation | \$82,158 | \$82,987 | \$83,808 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$378,477 | \$355,188 | \$361,119 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 13* | 17 | 21 |

* Assumes 20 MW's enrolled through 2005; loss of 11 MW's to the Default Critical Peak Pricing tariff in 2006.¹

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Ahead, Statewide
 Program Status: Existing, Modified

Voluntary Critical Peak Pricing (CPP) is a rate option whereby commodity prices are discounted throughout the year during all non-critical-peak pricing period hours. When conditions warrant, customers are contacted by SDG&E and notified that a CPP event will occur on the following day.

4. Customer Description

Non-residential customers who have a minimum demand of 20 kW or higher, an interval data recorder (IDR) and are on a time-of-use (TOU) rate are eligible to participate in CPP. Customers must be utility bundled. The program is designed for customers who prefer a voluntary program that is more closely structured like the time-of-use rate they are familiar with. The specific target markets for CPP include:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
- Customers who have previously participated in SDG&E's energy efficiency programs.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of

¹ Based on Default CPP design filed in A.05-01-017, January 20, 2005

demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

Voluntary CPP is a dynamic tariff that provides the customer with price signals that rise during periods of higher energy market prices or tight energy supplies. The structure of the rate is similar to the existing time-of-use rate structure. In exchange for paying higher prices during CPP event days, commodity prices are discounted the rest of the year. For the customer, this represents a relatively easy concept to understand.

Dynamic tariffs such as CPP are an important component of the demand response portfolio because, as noted by the Commission, they are likely to be the most cost effective. As a result of D.05-04-053, SDG&E will continue offering Voluntary CPP to all of its customers with a demand of 20 kW or higher. Since SDG&E has been directed to file a default CPP proposal for implementation sometime in 2006, we anticipate that the eligibility for Voluntary CPP will also then be changed. At that time, the program will only be offered to customers whose demands are between 20 kW and 200 kW.

As a clarification to D.05-04-053, SDG&E interprets that the decision allows changes to the temperature trigger to occur "semi-monthly," that is two times a month, rather than "bi-monthly" as stated in the decision, which means once every two months. As a practical matter, SDG&E does not envision needing this capability. As part of our effort to achieve the design intent of 12 event days, SDG&E will run four test events during the course of the summer.

SDG&E believes that participation in voluntary CPP will continue to be low because actual bill saving potential does not provide customers with sufficient incentive to participate. In the non-participant study conducted by Quantum, the majority of respondents indicated they would need greater than a 5% annual bill savings in order to reduce their energy by 5%.² Rate analyses conducted by SDG&E show that less than 1% of customers will see that level of bill savings.

SDG&E believes the CI Peak Day 20/20 will likely draw the most new participants, to the detriment of other day-ahead programs. First, Peak Day offers a 20% incentive possibility, the largest potential incentive of any of the programs. Second, it's a voluntary program with no penalty for failing to reduce load.

SDG&E propose the following modifications to its CPP program.

6.1. Allow adjustments to system trigger as warranted

D.05-04-053 allowed SDG&E to combine its temperature trigger of 84° with an actual system load trigger of 3,620 MWs. Due to growth and other considerations, the system load trigger is likely to need modification from time to time. SDG&E proposes that annual changes to the system load trigger be allowed. SDG&E would file an advice letter when circumstances warrant a change.

6.2. Discontinue Bill Protection in 2007

SDG&E proposes that Bill Protection be continued through 2006 but discontinued in 2007. The reason for continuing it is that efforts to market to small commercial customers have only just begun in 2005 and this is an important component for early adopters. We believe that awareness of Voluntary CPP will be high enough in this segment to discontinue it in the following years.

² Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation: Non-Participant Market Survey Report*, August 5, 2004

6.3. Waive the maximum demand charge during non-CPP periods on a CPP event day for the first year of enrollment

The Commission authorized SDG&E in D.05-04-053 to disregard a participant's maximum demand if the maximum demand occurs on a CPP event day outside of the CPP period. The intent of this waiver was to protect customers who re-energized their processes too quickly and create an extraordinary in-rush load. Although SDG&E supports this proposal during this initial period of education customers on the critical peak pricing concept, SDG&E does not believe it should be a permanent program feature. Since the CPP concept is new to customers, especially the smaller business customers, participants should be allowed the opportunity to learn an appropriate start-up strategy without the threat of a penalty and that each customer should receive protection for the first 12-months they are enrolled on the rate. SDG&E believes that this protection affords them time to adjust their strategy to optimize their operations. While the process will be similar to the Bill Protection, SDG&E recommends extending the waiver for customer who sign up prior to January 1, 2008.

7. Program Strategy

CPP allows customers to experience a dynamic tariff option in which they are occasionally subject to higher market prices in exchange for slightly lower prices throughout the remainder of the year. Participating customers will be notified on a day-ahead basis that a CPP event has been activated for the following day. Participants can determine the necessary actions to take to reduce their on-peak energy consumption, thereby gaining the ability to more closely monitor and control their overall energy costs. Participants also have the option of not taking any actions, but they will pay the higher price. As referenced in Section 6 above, we believe participation in a voluntary CPP will continue to be low.

We have one new strategy for increasing participation. The Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to participate in programs such as CPP. We anticipate these programs will help feed customers into CPP in the years 2006 - 2008, increasing both the enrollment and the actual load reduction rates.

8. Program Objectives

The primary objective of CPP is to 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. Participation helps the state as well as the SDG&E community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E will offer the Voluntary CPP program to utility customers who are on a TOU rate with a minimum demand of 20 kW. If a customer does not have the correct metering, a meter and telecommunications will be provided at no cost. Participating customers are also provided access to and training in the use of kWickview, SDG&E's Internet-based energy management tool, at no cost.

On a day-ahead basis, participants will be notified that a CPP event has been activated for the following day. A CPP event will be activated when the forecasted next day temperature at the Miramar Air Station is 84 degrees or greater and the SDG&E actual system load has exceeded 3,620 MW. A CPP event may also be activated during other system emergencies as determined by SDG&E. Up to 12 CPP events will be called during the summer season.

During a CPP event, participants are billed at the higher rate as specified in the CPP rate schedule. If a participant reduces their load, they can manage the impact on their energy costs. If they do not reduce load, their costs will increase, reflecting the higher prices during the CPP event.

9.1. Internal Activities

The following internal activities are planned for this segment:

| Date | Activity |
|------|--|
| 2006 | Billing system currently uses temporary processes to bill customers; Develop, build and test permanent billing system structures to bill program participants |

9.2. Subcontractor Activities

No subcontractor activities are planned.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The TA program is expected to increase participation by this segment in Voluntary CPP.

The following marketing tactics are planned for this segment:

| Date | Activity |
|-----------|--|
| 2006-2008 | Program manager to work closely with A/Es, accompany them to customer meetings |
| 2006-2008 | Program manager to provide analyses for customers who meet criteria |
| 2007-2008 | As a result of Default CPP, Voluntary CPP will only be marketed to customers 20 - 200 kW |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentations, advertising and direct mail. Customers will be informed of load reduction strategies and available programs such as CPP. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

The following market tactics are planned for this segment:

| Date | Activity |
|-----------|---|
| 2006 | Develop small commercial customer enrollment welcome kit |
| Each year | Print Fact sheets; Make available to trade groups through Cust Ed & Outreach |
| 2007 | Have 1 targeted educational mailing, based on rate analyses and geo-targeted based on AMI deployment; |
| | Focused, simple, with prescribed actions, tip sheet |
| 2008 | Have 1 targeted educational mailing, based on rate analyses and geo-targeted based on AMI deployment; |
| | Focused, simple, with prescribed actions, tip sheet |

2006-2008 Demand Reduction Concept Paper Demand Bidding Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|--------------------|------------------|------------------|
| Operating & Maintenance (Administration) | \$600,881 | \$525,835 | \$530,772 |
| Capital | \$162,766 | \$0 | \$0 |
| Measurement & Evaluation | \$82,158 | \$82,987 | \$83,808 |
| Incentive Payments | \$250,000 | \$296,000 | \$328,000 |
| Total Program Budget | \$1,095,806 | \$904,823 | \$942,580 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 31 | 37 | 43 |

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Ahead, Statewide
 Program Status: Existing, Modified

The Demand Bidding Program (DBP) is a voluntary program whereby participants earn bill credits by offering or "bidding" to reduce a minimum of 10% of their power consumption when contacted by SDG&E on the day ahead of an event.

4. Customer Description

Non-residential customers who have a minimum demand of 20 kW or higher, an interval data recorder (IDR) and telecommunications are eligible to participate in DBP. Customers may either be utility bundled or direct access. The program is designed for customers who prefer a voluntary program that does not penalize them should they choose not to respond to a particular event. The specific target markets for DBP include:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
- Customers who have previously participated in SDG&E's energy efficiency programs.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

DBP gives customers a financial incentive to bid their load reduction into the DBP program. The incentive is based on the current market price + \$0.10. SDG&E supports the continuation of this incentive premium through 2008. SDG&E believes that participation in DBP will continue to be low even with this premium because of low existing market prices. Studies have consistently shown that customers require high incentives far beyond bill savings in order to participate in demand bidding programs.³ LBNL found that financial incentives of \$150-200/MWh were the minimum threshold for any noticeable customer response.⁴ NYISERDA and PGE got far greater participation, up to 40 times more MWs, in their reliability programs in 2001 than their price response programs.⁵ Spot market prices at that time ranged from \$500 - \$1,000/MWh.

SDG&E believes the premium is also necessary in order to overcome an inherent customer reluctance to participate in price-based programs. While not cost effective compared to purchasing power on the spot market, the premium helps to overcome what is generally called a participation or initiation cost sustained by customers. We note that other programs, such as those run by NYISO, explicitly recognize this cost and encourage customers to include it within their bid price. Of course, participating customers in the New York program compete directly against supply side resources in the day ahead market and only receive market clearing prices.⁶

SDG&E believes the CI Peak Day 20/20 will likely draw the most new participants, to the detriment of other day-ahead programs. First, Peak Day offers a 20% incentive possibility, the largest potential incentive of any of the programs. Second, it's a voluntary program with no penalty for failing to reduce load. And third, there are no contracts for the customer to sign; customers merely enroll in Peak Day. Anecdotal evidence from customers emphasizes that contracts are a significant stumbling block.

SDG&E proposes the following modifications to its DBP program.

6.1. Eliminate group aggregation

SDG&E proposes to eliminate group aggregation. D.05-01-056 approved SDG&E's proposal to expand DBP to customer accounts with a demand of 20kW or higher. With this, the reason for creating an aggregation has become irrelevant. SDG&E sees no reason to continue this unnecessary option.

7. Program Strategy

DBP allows customers to bid a set load reduction amount to SDG&E as a resource during periods of high market prices. Participating customers will be notified that a DBP event has been activated on a day-ahead basis and may bid both the amount of electric load they can reduce and the hours at which they are willing to reduce this load. As referenced in Section 6 above, studies have shown actual load reduction rates are low given current spot market prices.

We have two main new strategies to increase participation. First, the Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to participate in programs such as DBP. We anticipate these programs will help feed customers into DBP in the years 2006 - 2008, increasing both the enrollment and the actual load reduction rates. We also believe that as customers gain experience with the DBP program and other

³ Oregon Public Utilities Commission, *Demand Response Programs for Oregon Utilities*, Prepared by Lisa Schwartz, May 2003. <http://www.nwppc.org/energy/dr/library/drrptfm.pdf>

⁴ Chuck Goldman, *Framing Paper #1: Price Responsive Load Programs*. Prepared for *The New England Demand Response Initiative*, LBNL. <http://nedri.raabassociates.org/Articles/NEDRIPaperPRL3-26-02.doc>

⁵ Dan York, Ph.D. and Martin Kushler, Ph.D., *Exploring the Relationship Between Demand Response and Energy Efficiency: A Review of Experience and Discussion of Key Issues*, Prepared for the American Council for an Energy Efficient Economy, Report U052, March 2005

⁶ New York Independent System Operator, *Day Ahead Demand Response Program Manual*, http://www.nyiso.com/services/documents/manuals/pdf/planning_manuals/dadrp_final090903.pdf

reliability programs, participation rates will improve. Second, the program was opened up to direct access customers and to medium commercial customers beginning in 2005. This opened up a whole new market for DBP. We will understand the results of these strategies better by the end of 2005.

8. Program Objectives

The primary objective of DBP is to 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. Customers who can provide this capability are a valuable resource to SDG&E. Participation helps the state as well as the SDG&E community by reducing energy costs through the reduction of peak energy demands.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E will offer the DBP program to all customers with a minimum demand of 20 kW. If they do not have an interval data recorder and associated communications, they must pay for these to be installed. Customers must have the ability to reduce their energy consumption by a minimum of 10% for at least two consecutive hours during a DBP event. Participating customers are provided access to and training in the use of kWickview, SDG&E's Internet-based energy management tool, which also serves as the platform for bidding in a DBP event. If a customer's bid is accepted, they must achieve a reduction within the ranges specified in order to receive the incentive.

Bidding occurs Monday through Friday, excluding holidays, and is not dependent on a declared emergency situation. DBP events may occur between noon and 8 pm. Participating customers will be notified the day ahead of the DBP event, and must submit their bid by 5 pm on the day before. The bid must be for a minimum of 2 hours

Incentives paid for reduced energy consumption are calculated based on a comparison load and energy usage for the same hours using the three highest usage days from the ten previous days. For an incentive to be paid, a minimum reduction of 10% per hour is required. Incentives for a day-ahead event will only be paid for reduction within +/- 50% of the accepted bid. Incentives for a day-of event will only be paid for reduction equal to the accepted bid or greater. Incentives will be paid in the form of a credit to the participating customer's bill.

9.1. Internal Activities

The following internal activities are planned:

| Date | Activity |
|------|--|
| 2006 | Billing system currently uses temporary processes to bill customers; Develop, build and test permanent billing system structures to bill program participants |

9.2. Subcontractor Activities

None planned for this program.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of

demand reduction and many of the available programs. Several tactics initiated in 2005 have expanded the market for DBP and are expected to result in greater participation by this segment:

- Opening the program to direct access customers;
- Greater penetration of the TA Program;

The following marketing tactics are planned for this segment:

| Date | Activity |
|-----------|---|
| 2006-2007 | Program manager will work closely with assigned account reps, accompany them to customer meetings |
| 2007 | Default CPP implemented |
| Each year | Have 2 High Impact Mailings |
| Each year | 1 Customer Recognition Newspaper Ad |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Education, Awareness and Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentation, advertising and direct mail. Customers will be informed of load reduction strategies and available programs such as DBP. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

The following market tactics are planned for this segment:

| Date | Activity |
|------------------|---|
| 2006 | Develop customer enrollment kit |
| 2006 | Print Fact sheets; provide material to trade group presentations through Cust Ed & Outreach program |
| 2006 | Targeted mailing of 15,000 |
| 2006, 2007, 2008 | Design customer retention vehicles: DBP update report, DBP "Energy Auction Plan" contests |
| 2007 | Default CPP implemented |
| 2007,2008 | Have 1 High Impact Mailing to targeted customers each year; geographically based on AMI deployment |

2006-2008 Demand Reduction Concept Paper California Power Authority - Demand Reserves Partnership Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|------------------|------------|------------|
| Operating & Maintenance (Administration) | \$135,932 | \$0 | \$0 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$63,019 | \$0 | \$0 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$198,952 | \$0 | \$0 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 5 | 5* | 5 |

*Assumes CPA contract expires in 2007 and is replaced by a similar program.

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Ahead, Statewide
 Program Status: Existing, Modified

The California Power Authority Demand Reserves Program (CPA DRP) is a voluntary program whereby participants commit to reduce their power consumption through a Demand Reserves Provider who is under contract with the CPA. An individual customer may contract directly with the CPA if they have a minimum of 5 MWs of demand reduction capability.

4. Customer Description

Non-residential customers who have an interval data recorder (IDR) and telecommunications are eligible to participate in CPA DRP. Customers may either be utility bundled or direct access. The specific target markets for CPA DRP include:

- Manufacturing plants, commercial firms, agricultural firms, chain accounts and other retailers, and property management firms.
- Government facilities, water agencies, and universities.

In particular, customers should have the capability to adjust air conditioning or reduce lighting through an EMS system, re-schedule electric-intensive processes, or start up a natural gas fired generator.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

The CPA DRP program utilizes third-party aggregators known as Demand Reserve Providers who sign up customers into a load reduction portfolio. The program provides the participant with a year round capacity payment in order to reserve their load reduction capacity. This provides the participant with a revenue stream for having this capability. The aggregator recruits participants, helps them develop demand reduction strategies, handles notifications of load shedding events, and distributes payments. The program also has a non-performance penalty.

The CPA DRP has proven to be an effective business model. The provider has flexibility to customize their offering to individual customers and to diversify the portfolio sufficiently to hedge the risk. Customer contracts can include various elements such as a reservation payment, an energy payment, a penalty, response requirements, etc. that provide a better reward/risk proposition than utilities may be able to offer.

SDG&E proposes the following modifications to the CPA DRP program.

6.1. Upon expiration (May 2007), transition to a new similar day-ahead program.

With the expected expiration of the California Power Authority Demand Reserve Partnership in May 2007, SDG&E intends to propose a similar program that would be available without interruption for summer 2007 participation.

SDG&E believes that there is potential for additional participation in its service territory and that existing participants in the CPA's DRP program are a valuable resource that should be retained and transitioned into a new program. As envisioned, this new program would maintain key elements of the CPA's program, such as the use of aggregators, allowance of Direct Access participation, a flexible bid process and both energy and capacity incentive payments.

Given the fact that the existing program is intact and operating until May 2007, SDG&E believes that it's premature to try and structure this new program at this time and therefore a specific program blueprint is not being included as part of this Application. SDG&E proposes to file an implementation plan via Advice Letter by end of summer 2006 to include a program description, anticipated budget impacts, cost recovery and projected MWs. In preparation, SDG&E will evaluate the roles of active parties including CPA, APX, and aggregators to determine best practices for a new program.

In addition, SDG&E proposes that interested parties participate in collaborative statewide workshops to design a replacement program that offers "similar" operating parameters and products across the state. Initial feedback from customers have indicated that a consistent program that is similar across the IOU service territories is preferred with the understanding that certain operational, implementation and contractual details could remain utility specific. A statewide program concept is anticipated to encourage greater participation and help minimize customer confusion.

7. Program Strategy

Demand Reserve Providers solicit customers to participate in the program. They work with customers to design a control strategy and to install any necessary metering or communications. The providers are able to structure a more attractive contract with participants by providing for example, a lower non-performance penalty. Participants are notified to reduce their load on the day-ahead and when they reduce load, they are able earn a return on their capability.

8. Program Objectives

The primary objective of CPA DRP is to 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. Participation helps the state as well as the SDG&E

community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

SDG&E provides information about the CPA DRP program, at all available opportunities. With the DWR contract expiring, we are not anticipating any significant growth in participation.

9. Program Implementation

The CPA DRP is administered by the CPA and is open to any customer who provides a minimum 5 MWs load reduction. The program offers its participants, usually demand response providers, the flexibility to identify their load reduction amounts and the time periods of reduction. Participants can receive an incentive payment in excess of \$7,700/MW per month for capacity during summer months, and \$56/MW for additional load reduction. The incentives paid to customers will vary depending on the provider and the package of services they offer.

The CPA DRP is open to any commercial, industrial or agricultural customer with an interval meter. Working through a provider, customers choose the call duration that best fits with their operational needs. Curtailment durations are pre-selected by DRP participants and are available in increments of 1-3, 1-5, or 1-8 hours. Customer participation is limited to no more than 24 hours during a calendar month, and never more than 150 hours per year. Curtailment hours are between 11:00 am and 7:00 pm Monday through Friday, and exclude weekends and holidays. Customers may enroll to participate for a limited length of time or for up to four years.

Demand reduction events are triggered by the CALISO due to such events as weather conditions, power plant outages or transmission bottlenecks. The provider handles all communications with its customers. APX, a subcontractor of the CPA, records and monitors the reduction as it occurs and calculates the additional amount each business will be compensated for its actual reductions. Compensation is paid to the customer by the CPA.

9.1. Internal Activities

No internal activities are anticipated.

9.2. Subcontractor Activities

None planned for this program.

9.3. Marketing Activities

SDG&E plans to market this program directly to large customers through the assigned account representatives. This segment is already familiar with the program. Customers will be directed to speak directly with the aggregators for information on program specifics.

The following specific marketing activities are planned.

| Date | Activity |
|------|--------------------------------------|
| 2006 | Conduct 2 Offsite Customer Trainings |
| 2006 | Conduct 2 Onsite Internal Trainings |
| 2006 | Print Fact Sheets |

2006-2008 Demand Reduction Concept Paper Commercial/Industrial Peak Day 20/20 Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|------------------|------------------|------------------|
| Operating & Maintenance (Administration) | \$602,526 | \$573,284 | \$579,698 |
| Capital | \$148,679 | \$0 | \$0 |
| Measurement & Evaluation | \$82,158 | \$82,987 | \$83,808 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$833,363 | \$656,272 | \$663,505 |

2. Projected Program Impacts

| | | | |
|-----|------|------|------|
| | 2006 | 2007 | 2008 |
| MWs | 29* | 37 | 45 |

*Assumes 31 MWs enrolled in 2005; 19 MWs of enrolled Peak Day 20/20 MWs converted to the Default Critical Peak Pricing tariff in 2006.⁷

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Ahead, Local
 Program Status: Existing

Peak Day 20/20 is a voluntary program whereby participants earn a 20% bill credit by reducing their power consumption a minimum of 20% on critical peak days when contacted on a day-ahead basis by SDG&E.

4. Customer Description

Non-residential customers who have a minimum demand of 20 kW or higher, are on a time of use (TOU) rate, and have an interval data recorder (IDR) are eligible to participate in Peak Day 20/20. Customers may either be utility bundled or direct access. The program is designed for customers who prefer a voluntary program that does not penalize them should they choose not to respond to a particular event. The specific target markets include:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
- Customers who have participated in SDG&E's energy efficiency programs.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial

⁷ Based on Default CPP design filed in A.05-01-017, January 20, 2005

considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

Peak Day 20/20 was approved in D.05-01-056 for 2005. Participants who reduce their power by 20% on event days will receive an incentive based on 20% of their on-peak energy and demand charges. Participants are notified on a day-ahead basis that a Peak Day 20/20 event will occur.

SDG&E supports this design for 20/20 which requires customers to reduce their power consumption only on those days when SDG&E initiates an event. This approach more closely matches the intent of price-based responsive programs and, as noted in the decision, is more effective at targeting demand reduction when it's needed. The tradeoff, compared to designs favored by SCE and PG&E, may be lower total enrollments. Experience with Residential 20/20 program has shown that a program based on average usage over an entire summer, will attract customers who hope to earn the incentive without actually modifying their behavior. This is a consequence that SDG&E believes the current design will overcome.

SDG&E proposes the following modifications to the program.

6.1. Extend C/I Peak Day 20/20 through 2008

SDG&E's experience has shown that the 20/20 concept is highly popular with customers and the program is able to generate good response rates. We believe that having a program that excites customers will stimulate customers to develop load reduction strategies and perhaps stimulate investment in demand reduction technologies. With the Advanced Metering Infrastructure (AMI) project beginning in 2007, customer enthusiasm for Peak Day 20/20 should intensify.

We also believe that Peak Day 20/20 will lead customers into other day-ahead programs. Some customers will discover they can't meet the 20% reduction threshold for this program, but through the process of trying, they will become more experienced with load reduction tactics. This experience will help them to participate in other programs such as Demand Bidding (DBP) or Critical Peak Pricing (CPP), which don't require as much load reduction in order to achieve benefits.

6.2. Extend the program to customers with AMI technology

With SDG&E's plan to roll out AMI beginning in 2007, SDG&E proposes to allow all customers (including residential and small commercial) with AMI technology installed to participate in the Peak Day 20/20 program.

7. Program Strategy

Peak Day 20/20 allows customers to earn a 20% incentive if they can reduce their on-peak energy consumption by 20%. Participating customers are notified that a Peak Day 20/20 event has been activated on a day-ahead basis. Previous experience has shown the 20/20 concept to be a popular program with customers, although the day-ahead mechanism may reduce participation as discussed in the previous section. Furthermore, the implementation of a default Critical Peak Pricing rate will erode the available market for Peak Day 20/20.

There are, however, at least two strategies that will help keep Peak Day 20/20 a viable option. First, the Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to participate in demand reduction programs. We expect to see results beginning in 2005. Second, the Advanced Metering Infrastructure (AMI) project will increase the number of IDR meters in the small commercial industrial population in 2007 and 2008, facilitating greater participation in this market.

8. Program Objectives

The primary objective of Peak Day 20/20 is to 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. Participation helps the state as well as the SDG&E community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E will offer the Peak Day 20/20 program to all eligible customers with a minimum demand of 20 kW. If they do not have an interval data recorder, SDG&E will attempt to replace the current meter at no cost to the customer. Customers must enroll in the 20/20 program in order to participate and be eligible to earn bill credits.

A peak energy day is called when the temperature is 84 degrees or higher at Miramar Marine Air Corps Station and SDG&E's electric system load reaches 3,620 MW. It may also be called when warranted by extreme conditions or other emergency situations. On a called peak day, participating customers will be asked to reduce electricity consumption by an average of 20% during the hours of 11 am to 6 pm. A maximum of 15 peak energy days could be called during the May 1 through September 20/20 season.

The 20% reduction is calculated by reviewing current energy consumption against participating customers' on-peak energy consumption for the prior 10 days (excluding weekends and holidays) prior to a peak day. The reduction is based on a comparison of on-peak energy use on the peak day with the average consumption of the three highest days of on-peak electric usage during the previous ten-day period. In addition, participating customers must reduce electric consumption (kWh) by an average of 20% for all peak day events called during a given billing period.

Incentives will be paid in the form of a credit to the participating customer's bill, equal to 20% of the on-peak energy and demand charges for that billing period. If no peak day events are called, or if the average 20% reduction over all designated peak day events is not achieved, no bill credit will be given.

9.1. Internal Activities

The following internal activities are planned:

| Date | Activity |
|------|--|
| 2006 | Billing system currently uses temporary processes to bill customers; Develop, build and test permanent billing system structures to bill program participants |

9.2. Subcontractor Activities

None planned for this program.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The TA and TI programs are expected to improve market participation in all programs including this one. The following specific marketing tactics are planned for this segment:

| Date | Activity |
|-----------|---|
| 2007 | As a result of Default CPP, change program eligibility to customers 20 - 200 kW |
| Each year | 10 Onsite Customer Trainings |
| Each year | 10 Offsite Customer Trainings |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentation, advertising and direct mail. Customers will be informed of load reduction strategies and available programs such as Peak Day 20/20. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities. This will allow customers to monitor daily interval data and make baseline comparisons on event days.

The following specific market tactics are planned for this segment:

| Date | Activity |
|------|---|
| 2006 | Develop customer enrollment kit |
| 2006 | Print 45,000 Fact sheets and 15,000 Brochures; Make available to trade groups through Cust Ed & Outreach |
| 2006 | 1 educational mailing to 15,000; Focused, simple, with prescribed actions, tip sheet |
| 2006 | Follow-up mailing; welcome kit, promotional piece |
| 2006 | 20/20 press release |
| 2007 | As a result of Default CPP, change program eligibility to customers 20 - 200 kW |
| 2007 | 1 educational mailing to 15,000; Focused, simple, with prescribed actions, tip sheet; Additional geographical mailing based on AMI deployment |
| 2007 | Follow-up mailing; welcome kit, promotional gift |
| 2007 | 20/20 press release |
| 2008 | 1 educational mailing to 15,000; Focused, simple, with prescribed actions, tip sheet; Additional geographical mailing based on AMI deployment |
| 2008 | Follow-up mailing; welcome kit, promotional piece |
| 2008 | 20/20 press release |

DAY-OF PROGRAMS

2006-2008 Demand Reduction Concept Paper Emergency Demand Bidding Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|-----------|-----------|-----------|
| Operating & Maintenance (Administration) | \$85,948 | \$88,182 | \$90,384 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$50,648 | \$51,312 | \$51,968 |
| Incentive Payments | \$150,000 | \$300,000 | \$450,000 |
| Total Program Budget | \$286,596 | \$439,494 | \$592,352 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 6 | 12 | 18 |

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Of, Local
 Program Status: New

The Emergency Demand Bidding Program (DBP-E) is a voluntary program whereby participants earn bill credits by offering or "bidding" to reduce a minimum of 10% of their power consumption when contacted by SDG&E on 60-minute notice.

4. Customer Description

Customers who have a minimum demand of 20 kW or higher, an interval data recorder (IDR) and communications are eligible to participate in DBP-E. Customers may either be utility bundled or direct access. The program is designed for customers who prefer a voluntary program that does not penalize them should they choose not to respond to a particular event. The specific target markets for DBP-E include:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
- Customers who have participated in SDG&E's energy efficiency programs.

In particular, key targets for this program are customers who have an automated method to reduce load.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial

considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

SDG&E proposes to offer a day-of component to the Demand Bidding Program beginning in 2006 called DBP-E with hour-ahead notification. Customers who can rapidly reduce load are an important resource to SDG&E during a reliability emergency. Customers would be paid an incentive based on \$0.50/kWh, or the day-of market price, whichever is higher. This price is the same as is offered in the New York Independent System Operator's Emergency Demand Response Program (EDRP).

SDG&E believes that offering a day-of component to Demand Bidding is an important concept that will encourage greater participation in both the day-of and day-ahead programs. Offering different "product lines" under a single program brand name will help marketing efforts by reducing confusion. Customers, who feel more comfortable with the structure of Demand Bidding, shouldn't have to switch to another type of program in order to participate in a day-of program. In addition, studies have shown that some of the most successful programs offer different "product lines" under a single program brand.^{8,9} Examples of this approach include the NYSERDA Peak Load Reduction Program with 4 options, and Cinergy's PowerShare with numerous options for its basic day-of and day-ahead components.

From the standpoint of participation, program experience in New York, California and other places has shown that reliability-based programs can achieve significant load reduction and that actual load reduction rates (versus enrolled) for reliability programs are significantly higher than for economic programs.¹⁰ NYSERDA was able to enroll 40 times more MWs in their reliability programs in 2001 than their price response programs.³ Spot market prices at that time ranged from \$500 - \$1,000/MWH. Speculatively, this can be attributed to the added value customers place on avoiding an outage when a grid emergency situation exists.

SDG&E acknowledges the potential for customers to shop programs. To address this concern, SDG&E proposes three specific requirements that would be unique for DBP-E. First, in order to receive an incentive, customers would be required to achieve their accepted bid load reduction as a minimum, rather than within the +/- 50% range required for DBP. If they do not achieve their bid amount or greater, they would be ineligible for an incentive. Second, participation in the two (2) tests would be mandatory for DBP-E customers. Failure to respond to either one of the tests would result in being cancelled from the program. Third, they must respond to at least 50% of the DBP-E events. If the annual response rate were below 50%, the customer would be cancelled from the program.

7. Program Strategy

DBP-E allows customers to bid a load reduction amount to SDG&E during periods of electricity shortages. Participating customers will be given a 60-minute notice that a DBP-E event will be activated. Participants may bid both the amount of electric load they can reduce during the event, as well as the hours at which they are willing to reduce this load. If a customer's bid is accepted, they must achieve their accepted load reduction or greater in order to receive the incentive.

As an additional strategy to encourage enrollment, the Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to

⁸ Charles Goldman, *Demand Response Programs: Lessons from the Northeast, Mid-Atlantic Demand Response Initiative Meeting*, December 10, 2004

⁹ Lisa Schwartz, *Demand Response Programs for Oregon Utilities*, Prepared for the Oregon Public Utility Commission, May 2003

¹⁰ Dan York Ph.D. and Martin Kushler, Ph.D., *Exploring the Relationship Between Demand Response and Energy Efficiency*, American Council for an Energy-Efficient Economy (ACEEE), March 2005.

participate in this and other demand reduction programs.

8. Program Objectives

The primary objective of DBP-E is to provide an option by which customers can contribute toward reducing peak energy consumption during reliability emergencies. Customers who can provide this capability are a valuable resource to SDG&E. Participation helps the state as well as the SDG&E community by reducing the likelihood of rolling blackouts and rotating outages.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E will offer the DBP-E program to all customers with a minimum demand of 20 kW. If they do not have an interval data recorder and associated communications, they must pay for these to be installed. Customers must choose between DBP and DBP-E. They cannot be on both programs. Customers must be able to reduce their energy consumption by a minimum of 10% for two consecutive hours during a DBP-E event. Participating customers are provided access to and training in the use of kWickview, SDG&E's Internet-based energy management tool, at no cost. Kwickview also serves as the platform for bidding in a DBP-E event.

A DBP-E event will be activated primarily during a system reliability emergency including a CAISO Warning, a Stage 1 or pre-Stage 2 events, or a local emergency as determined by SDG&E. When conditions apply, participants will be notified that a DBP-E event will be activated in 60 minutes. DBP-E will be available Monday through Friday, excluding holidays.

Incentives paid for reduced energy consumption are calculated based on a comparison load and energy usage for the same hours using the three highest usage days from the ten previous days. For an incentive to be paid, a minimum reduction of 10% per hour is required. Incentives for a day-of event will only be paid for reduction equal to the accepted bid or greater. Incentives will be paid in the form of a credit to the participating customer's bill.

9.1. Internal Activities

The following internal activities are planned:

| Date | Activity |
|------|--|
| 2006 | Billing system currently uses temporary processes to bill customers; Develop, build and test permanent billing system structures to bill program participants |

9.2. Subcontractor Activities

None planned for this program.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The TA Program is expected to contribute to greater participation by this segment in all demand response programs.

The following marketing tactics are planned for this segment:

| Date | Activity |
|-----------|---|
| 2006-2007 | Program manager will work closely with assigned account reps, accompany them to customer meetings |
| Each year | Have 2 High Impact Mailings |
| Each year | 1 Customer Recognition Newspaper Ad |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentation, advertising and direct mail. Customers will be informed of load reduction strategies and available programs such as DBP-E. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

The following market tactics are planned for this segment:

| Date | Activity |
|------------------|--|
| 2006 | Develop customer enrollment kit |
| 2006 | Print 22,500 Fact sheets and 7,500 Brochures; provide material to trade group presentations through Cust Ed & Outreach program |
| 2006 | Targeted mailing of 15,000 |
| 2006, 2007, 2008 | Design customer retention vehicles: DBP update report, DBP contests with promotional giveaways |
| 2007 | Default CPP implemented |
| 2007,2008 | Have 1 High Impact Mailing to 2500 customers each year; target customers geographically based on AMI deployment |

2006-2008 Demand Reduction Concept Paper Statewide Base Interruptible Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|------------------|------------------|------------------|
| Operating & Maintenance (Administration) | \$208,775 | \$229,624 | \$232,461 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$50,648 | \$51,312 | \$51,968 |
| Incentive Payments | \$168,000 | \$336,000 | \$420,000 |
| Total Program Budget | \$427,424 | \$616,936 | \$704,429 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 8 | 10 | 11 |

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Of, Statewide
 Program Status: Existing, Modified

The Base Interruptible Program (BIP) is a voluntary program which offers participants a monthly capacity bill credit in exchange for committing to reduce power to a minimum pre-determined level on short notice during emergency situations. BIP also imposes a significant penalty for non-performance.

4. Customer Description

Non-residential customers who can reduce demand by 15% or a minimum of 100 kW, whichever is higher, have an interval data recorder (IDR), and have telecommunications are eligible to participate in BIP. Customers may either be utility bundled or direct access. The program is designed for customers who have a firm load reduction plan in place and can reduce load with absolute certainty when requested. The specific target market for BIP is:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be reduce, modulated or cycled.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

Customers who can commit to reducing load during a reliability emergency are a valuable resource to SDG&E. This program provides the participant with a year round capacity payment in order to reserve the load reduction capacity, irrespective of whether a BIP event is called. This provides the customer with a revenue stream, a way to earn money for having this capability.

There is however a penalty for non-performance that can easily exceed the annual incentive amount. SDG&E understands the reasoning for the penalty, however has been unsuccessful to date in marketing the program. Research shows that customers believe the risks in this program outweigh the rewards.¹¹ In order to make the program more attractive, we have previously proposed to limit the penalty to two times the annual incentive.

We continue to believe that customer load reduction is not yet a mature enough resource to be contractible in the same manner as a supply side resource. We are committed to the BIP concept in the long run, but believe transitional strategies such as the Technical Assistance and Technology Incentive programs must have time to nurture this resource before any significant participation is likely to occur.

SDG&E proposes the following modifications for the program.

6.1. Beginning in 2006, allow aggregators to participate in the program

These entities would serve the same purpose as the demand reserve providers in the California Power Authority's (CPA) program that is being phased out after 2007. By providing a three-year commitment with a consistent economic structure, we believe aggregators will have the ability to develop a load reduction portfolio. As demonstrated in the CPA program, aggregators are able to absorb some of the risk associated with the program and offer a more attractive business proposition to participating customers. Both the CPA and NYSERDA's Peak Load Reduction Program have demonstrated the advantage of this business model in the marketplace.

SDG&E will sign a contract with an aggregator, agreeing to a Firm Service Level and specifying a capacity reservation incentive that will be paid by check to the aggregator. A minimum of a 1 MW load reduction will be required of aggregators. SDG&E will act as the meter-reading agent for the aggregator. The aggregator will notify SDG&E which customers they have contracts with and provide appropriate data authorization forms. SDG&E will pass all customer data to the aggregator. The aggregator will also access to kWickview. The aggregator will be responsible for any payment arrangements to its customers. At the time of an event, SDG&E will measure the performance of the customers as a group and notify the aggregator of the results. The aggregator will be responsible for any penalty due to non-performance.

7. Program Strategy

BIP allows customers to commit a set load reduction amount to SDG&E as a dispatchable resource during periods of electricity shortages. Participants are notified to reduce their load with either 30 minutes notice or 3 hours notice, depending on which notification option they select. The program allows customers to earn a return on their capability, however they are subject to steep penalties if they fail to perform. According to research, customers find this penalty too great a risk to participate in the program.

We have two main strategies to overcome this issue and increase participation. First, the Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to participate in programs such as BIP. We expect to see results beginning in 2005. Second, aggregators should be able to reduce the risk to individual customers by assembling a diverse portfolio of participants. By establishing a 3-year commitment to the aggregator concept, we

¹¹ Quantum Consulting Inc. *Working Group 2 Demand Response Program Evaluation - Non-Participant Market Survey Report*, August 5, 2004

believe we can start seeing results in 2006.

8. Program Objectives

The primary objective of BIP is to provide an option by which customers can contribute toward reducing peak energy consumption during reliability emergencies. Customers who can provide this capability are a valuable resource to SDG&E. Participation helps the state as well as the SDG&E community by reducing the likelihood of rolling blackouts and rotating outages.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E offers the BIP program to customers who can reduce demand by 15% or a minimum of 100 kW, whichever is higher, have an interval data recorder (IDR), and have telecommunications. An aggregator must provide a minimum of 1 MW of load reduction. If a customer does not have an interval data recorder and associated telecommunications, SDG&E will provide it at no cost. Participating customers are also provided access to and training in the use of kWickview, SDG&E's Internet-based energy management tool, at no cost.

There are two options for BIP. For customers participating in Option A of BIP, they will be given a 30-minute notice, calls for load reduction will not exceed four hours on any one day, or ten calls per calendar month, or 120 hours per calendar year. For customers in Option B, there is a 3-hour notice, calls will not exceed three hours for any calendar day, ten events during a calendar month, or ninety hours per calendar year. Participating customers are required to have e-mail, Internet access, a dedicated telephone line and/or an alphanumeric pager to receive BIP event notifications.

On the day of a BIP event, participating customers will be notified in accordance with whichever option they have selected. A BIP event occurs when electricity supplies are low and the California Independent System Operator (CAISO) has directed SDG&E to reduce load. Within either 30 minutes or 3 hours of event notification, participants must reduce load to their designated Firm Service Level.

Participants receive a monthly incentive payment of \$7/kW for committing to drop load with 30 minutes notice or \$3/kW of load reduction with 3 hours notice. Incentives paid for reduced load are paid in the form of a credit to the participating customer's bill, and are paid even if no load reduction is required. The monthly incentive payment is based on the difference from calculating the customer's monthly-recorded average Maximum Demand minus the customer's selected Firm Service Level.

Participants who do not reduce their load during a BIP event are assessed an energy usage penalty of \$6/kWh or \$2.50/kWh, depending on which notification option they select. The penalty is calculated based on the amount of energy in excess of the Firm Service Level during any 15-minute interval of an interruptible period.

9.1. Internal Activities

The following internal activities are planned for BIP:

| Date | Activity |
|-------------|---|
| 2006 | Develop and test billing system capability to accommodate aggregators |
| 2006 | Establish accounting and systems to pay/bill aggregators |
| 2006 | Develop aggregator contract |

9.2. Subcontractor Activities

BIP will allow subcontractors to sign up customers and provide a minimum of 1 MW load reduction based on a contracted Firm Service Level. SDG&E will develop procedures, mechanisms and a contract to support this option. As part of the marketing activities, SDG&E will develop a list and market to companies believed to have aggregation capabilities. Potential subcontractors should have the following capabilities:

- Ability to market to and potentially provide technical auditing or other support to customers.
- Ability to contract with SDG&E and participating customers to provide a minimum 1 MW load reduction capability per the terms of the BIP program.
- Ability to set up payment and billing operations.
- Ability to analyze customer load data.

9.3. Marketing Activities

Large customers will be marketed to primarily through their assigned account representatives. This segment is already familiar with the program. The TA and TI programs are expected to improve market participation in BIP. Aggregators will also be marketing the program and are expected to provide a more favorable economic proposition for customers. The following specific marketing activities are planned.

| Date | Activity |
|-------------|---|
| 2006 - 2008 | TA/TI programs will proactively show customers how to reduce load and participate in programs |
| 2006 | Develop potential aggregator list; develop special information packet for mailing/marketing efforts |
| 2006 | Conduct special training class for aggregators |
| Each year | Conduct 4 Offsite Customer Trainings |
| Each year | Conduct 2 Onsite Customer and Internal Trainings |
| 2006 | Print Fact Sheets |
| Each year | Have 2 targeted mailings to unassigned large customers - approximately 1,000. |
| Each year | 1 Customer Recognition Newspaper Ad |

MEMORANDUM
SUBJECT: MEMORANDUM
DATE: 10/20/06

2006-2008 Demand Reduction Concept Paper Voluntary Emergency Critical Peak Pricing Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|------------------|------------------|------------------|
| Operating & Maintenance (Administration) | \$119,884 | \$69,864 | \$70,557 |
| Capital | \$65,793 | \$0 | \$0 |
| Measurement & Evaluation | \$50,648 | \$51,312 | \$51,968 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$236,326 | \$121,176 | \$122,525 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 4 | 5 | 6 |

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Day-Of, Local
 Program Status: Existing, Modified

Voluntary Emergency Critical Peak Pricing (CPP-E) is a rate option whereby customers receive discounted commodity prices throughout the year in exchange for reducing load on 30-minute notice when contacted by SDG&E. Energy that is consumed during the critical peak periods is priced higher, reflective of the peak period costs and supplies.

4. Customer Description

Non-residential customers who have a minimum demand of 300 kW or higher, an interval data recorder (IDR) and telecommunications, and are on a time-of-use rate are eligible to participate in CPP-E. Customers must be utility bundled. The program is designed to replace the ALTOU-CP, which was closed in 2005. This program is targeted to customers who have the ability to modify their business operations with very little notice (30 minutes), typically through automated methods.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. For the business customer, the decision to reduce power will generally be motivated by direct financial considerations or other indirect tradeoffs, and only if their options are clearly understood, and the risks are within an acceptable range. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

Customers who can rapidly reduce load are an important resource to SDG&E during a reliability emergency. CPP-E is a dynamic tariff with an extremely high price signal during the event period, which serves as an incentive to reduce load. In exchange for risking higher prices during CPP-E event periods, customers receive discounted commodity prices the rest of the year. The structure of the rate is

similar to the existing CPP tariff, however the differentials between event and non-event rates are greater.

Dynamic tariffs such as CPP-E are also an important component of the demand response portfolio because, as noted by the Commission, they are likely to be the most cost effective. The Commission approved CPP-E in D.05-04-053 for 2005. SDG&E proposes to continue offering CPP-E through 2008.

SDG&E believes that participation in CPP-E will be low in the near term. Although participants have the potential for greater bill savings than they might with CPP, the event day rate will also be viewed as a bigger risk. In particular we believe that most customers will find the Peak Day 20/20 a far more attractive option, due to its high incentive and lack of penalty. In the day-of category of programs, we believe customers will also find the DBP-E program more attractive. Although CPP-E participants receive a discount throughout the year (excluding CPP-E event days), they don't value the discount in relation to the penalty. DBP-E has no such "penalty."

In the long run, SDG&E believes customers will become comfortable with CPP-E. The Technical Assistance program will help customers become more ability, flexibility and confidence to reduce load in a predictable manner, and subsequently minimize the perceived risk factor.

The following modifications are proposed for 2006 - 2008.

6.1. During the first year of enrollment, waive the maximum demand charge during non-CPP-E periods on a CPP-E event day

The Commission authorized SDG&E in D.05-04-053 to disregard a participant's maximum demand if the maximum demand occurs on a CPP-E event day outside of the CPP-E period. The intent of this waiver was to protect customers who re-energized their processes too quickly and create an extraordinary in-rush load. Although SDG&E supports this proposal during this initial period of education customers on the critical peak pricing concept, SDG&E does not believe it should be a permanent program feature. Since the CPP-E concept is new to customers, especially the smaller business customers, participants should be allowed the opportunity to learn an appropriate start-up strategy without the threat of a penalty and that each customer should receive protection for the first 12-months they are enrolled on the rate. SDG&E believes that this protection affords them time to adjust their strategy to optimize their operations. While the process will be similar to the Bill Protection, SDG&E recommends extending the waiver for customer who sign up prior to January 1, 2008.

7. Program Strategy

Participating customers will be notified that a CPP-E event will be activated in 30 minutes. Participants can determine the necessary actions to take to reduce their energy consumption, thereby gaining the ability to more closely monitor and control their overall energy costs. Participants also have the option of not taking any actions, but they will pay a very high price. . As referenced in Section 6 above, we believe participation in CPP-E will be low.

We have one new strategy for increasing participation. The Technical Assistance (TA) and Technology Incentive (TI) programs will improve both customer load reduction capability and confidence to participate in programs such as CPP-E. We anticipate these programs will help feed customers into CPP-E in the years 2006 - 2008, increasing both the enrollment and the actual load reduction rates.

8. Program Objectives

The primary objective of CPP-E is to provide an option by which customers can contribute toward reducing peak energy consumption on the utility grid. Participation helps the state as well as the SDG&E community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

The projected program impacts are based on an analysis of the eligible population and take into consideration historical penetration rates and the effect of other programs competing for the same market. Projections about the impact of SDG&E's Customer Education program, the Advanced Metering Infrastructure (AMI) project, and the Technical Assistance program are also included in the analysis.

9. Program Implementation

SDG&E will offer the CPP-E program to utility customers with a minimum demand of 300 kW. A CPP-E event will be activated primarily during a system reliability emergency as determined by SDG&E. This could include a Stage 2 event from CAISO or when local grid operators feel firm load is threatened. Participating customers are also provided access to and training in the use of kWickview, SDG&E's Internet-based energy management tool, at no cost.

On a 30-minute basis, participants will be notified that a CPP event has been activated. Up to 80 hours of CPP-E events will be called during the year. CPP-E events are limited to no more than 6 hours per day, 4 days per week and 40 hours per month.

During a CPP-E event, participants are billed at a higher rate as specified in the CPP-E rate schedule. If a participant reduces their load, they can manage the impact on their energy costs. If they do not reduce their load, their costs will increase, reflecting the higher prices during the CPP-E event.

9.1. Internal Activities

The following internal activities are planned for this segment:

| Date | Activity |
|------|---|
| 2006 | CPP-E Analysis tool being developed |
| 2006 | Billing system currently uses temporary processes to bill customers; Develop, build and test permanent billing system structures to bill program participants |

9.2. Subcontractor Activities

No subcontractor activities are planned.

9.3. Marketing Activities

Large commercial industrial customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The TA program is expected to increase participation by this segment.

The following marketing tactics are planned for this segment:

| Date | Activity |
|-----------|---|
| 2006-2008 | Program manager will work closely and accompany A/Es to customer meetings |
| 2006-2008 | Program manager will provide rate analyses |
| 2006-2008 | Limited mailings to large unassigned customers |
| 2006-2008 | Recognition ad |

2006-2008 Demand Reduction Concept Paper Residential Smart Thermostat Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|-----------------------------|--------------------|------------|------------|
| Overhead & Maintenance | \$449,819 | \$0 | \$0 |
| Capital | \$484,328 | \$0 | \$0 |
| Measurement & Evaluation | \$176,687 | \$0 | \$0 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$1,110,834 | \$0 | \$0 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 2 | 0 | 0 |

3. Program Descriptors

Market Sector: Residential
 Program Classification: Day-Of, Local
 Program Status: Existing, Modified

The Smart Thermostat is a voluntary pilot program originally intended to test the viability of an interactive approach to residential load control and demand response using smart thermostats and the Internet to affect air conditioning use.

4. Customer Description

Existing residential customers with Smart Thermostats with at least one functioning, packaged air conditioning system - especially in areas of the SDG&E territory where customers have considerable electrical usage during the cooling season.

5. Program Statement

Residents cannot remotely and easily manage and shed air conditioning load. Even when it is easy, they manually override so the load shed is variable.

6. Program Rationale

This installed technology allows customers to remotely adjust their air conditioning settings as well as allows the utility to raise the settings during a ISO Stage II event, transmission or distribution emergency. This automation makes managing air conditioning needs easier. The pilot has yielded the information the utility sought and is intended to be closed after 2006.

7. Program Strategy

The original pilot program yielded lessons about the residential customers' capacity for remote ambient temperature fluctuations. The pilot program's customers will be maintained in 2006 and will be absorbed into the AMI roll out in 2007.

8. Program Objectives

The primary objective of the 2006 program is to maintain existing residential customers and encourage load shedding when events are called.

9. Program Implementation

When events are called, a signal will be sent to the preprogrammed smart thermostats. Customers will be encouraged to not manually override. Beginning in 2007, smart thermostats will be offered through the Technology Incentives (TI) program.

9.1. Internal Activities

None

9.2. Subcontractor Activities

Current subcontracting is accomplished through a contract with Carrier

PROGRAM
OBJECTIVES
IMPLEMENTATION

TECHNICAL ASSISTANCE AND TECHNOLOGY INCENTIVES

2006-2008 Demand Reduction Concept Paper Technical Assistance Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|--------------------|--------------------|--------------------|
| Operating & Maintenance (Administration) | \$1,162,159 | \$1,178,758 | \$1,195,168 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$37,889 | \$38,221 | \$38,549 |
| Incentive Payments | \$750,000 | \$750,000 | \$750,000 |
| Total Program Budget | \$1,950,049 | \$1,966,979 | \$1,983,717 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 20 | 35 | 50 |

3. Program Descriptors

Market Sector: Non-Residential
 Program Classification: Cross-Cutting, Statewide
 Program Status: Existing, Modified

The Technical Assistance Program (TA) is an energy audit service designed help customers identify methods for reducing energy costs and to encourage greater participation in demand response and energy efficiency programs. An incentive is available to offset the cost of an in-depth assessment.

4. Customer Description

- Customers who have a minimum demand of 20 kW or higher are eligible to receive TA. Customers may either be utility bundled or direct access. The program is designed to help customers understand the opportunities available to them for managing their energy and energy costs. The specific target markets for TA include:
- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
 - Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
 - Customers who have previously participated in SDG&E's energy efficiency programs.

5. Program Statement

Studies have shown that non-residential customers are uncertain about their ability to participate in current energy efficiency or demand response programs. Participating can require an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies or modifying specific business operations. In addition, the variety of demand reduction and energy efficiency program options can be confusing to the customer. Most customers do not have the time or expertise to assess their energy management capabilities, or to prepare an energy action plan complete with costs and potential benefits. Without this assessment, very

few business customers will seriously consider participating in a program.

6. Program Rationale

SDG&E supports continuing the TA program through 2008. We believe this kind of commitment is necessary to reach the load reduction potential envisioned in the Commission's demand response annual targets. There are currently substantial market barriers to overcome before we can achieve more widespread participation in demand response programs. These include the customer perception that load reduction is not possible in their business and the fact that certain required enabling technologies are not present in many facilities. We believe that both the Technical Assistance and Technology Incentive programs are an essential strategy through at least 2008.

Support for our position comes from various research studies that have reported that the majority of customers don't believe they can reduce load. They perceive that energy management opportunities have been exhausted or that load reduction is painful¹², incompatible with business operations or simply not possible.¹³ Lawrence Berkeley National Laboratory has observed that demand reduction programs require a greater degree of education, customer handholding and energy audits.¹⁴ Other reports have concluded that there is a lack of necessary technology at customer locations.¹⁵

TA has been designed to address these issues. The TA cursory audit will give the customer a general understanding of the types of opportunities available to them. The TA in-depth assessment will provide customers with a specific set of recommendations on energy management opportunities in their business. They will also receive an investment analysis that will describe the programs, incentives and energy cost savings that are available to them.

SDG&E proposes the following modifications for the TA program.

6.1. Continued integration with energy efficiency

In 2005, SDG&E began organizational and coordinating activities designed to develop an integrated demand side management (IDSMD) audit that supports both energy efficiency and demand reduction. Audits have proven to be an important tool for educating customers about energy management opportunities in their facility, and encouraging their participation in programs. The purpose for an IDSMD audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs.

The IDSMD audit would operate under the umbrella of the Technical Assistance Program and have the following characteristics:

- Subcontractors will be utilized to provide the audit service;
- The results will be reviewed by both demand reduction and energy efficiency staff;
- The results will provide the customer with a clear action plan;
- A follow-up meeting with the customer will encourage them to implement the plan and participate in available programs.

There are obvious challenges with this effort due to the significant differences in the scale and scope of energy efficiency versus demand reduction opportunities at any given customer facility. In 2006, we will begin building up the TA program based on the experience gained in 2005.

¹² California Energy Commission, *An Action Plan to Develop More Demand Response in California's Electricity Markets*, P400-02-016F, July 2002

¹³ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation - Summary of Phase 1 Research*, April 8, 2004.

¹⁴ Charles Goldman, *Price Responsive Load Program - Framing Paper #1*, Prepared for the New England Demand Response Initiative, p. 15, March 2002.

¹⁵ U.S. Government Accountability Office, *Electricity Markets: Consumers Could Benefit from Demand Programs, but Challenges Remain*, GAO-04-844, 2004

Energy efficiency will provide funding into the project, scaling its investment as necessary to meet program design and energy efficiency goal considerations. Potential energy efficiency programs involved in this effort could include the Express Efficiency, Standard Performance Contract, and Small Business Super Saver programs.

This effort will be done in conjunction with proposed changes to programs and services offered by SDG&E's Energy Efficiency department in an application filed concurrently with this one.

7. Program Strategy

The TA program will provide customers with the strategies necessary to manage their energy usage and costs. Customers can select from two levels of audit service, which will provide them with either a general overview or a comprehensive analysis of their opportunities. SDG&E staff or a subcontractor hired by SDG&E will provide the cursory audit. The in-depth assessment will be provided by a CEC-certified consultant, or optionally, the customer may select an engineering consultant of their own choosing. An incentive is available to defer the cost of the in-depth assessment, based on \$50/kW of identified demand reduction measures.

8. Program Objectives

TA is seeking to substantially increase the number of enrolled participants in energy efficiency and demand reduction programs. By fostering greater participation in energy programs, TA will help the state and the SDG&E community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

The program is currently designed to conduct enough audits to achieve the MW impacts shown in Section 2 at a minimum. Program experience gained in 2005 will be essential to understanding the level of activities necessary to achieve this goal.

9. Program Implementation

Customer leads for the TA program will rely on referrals from SDG&E Account Executives or customers who proactively request the service through SDG&E's website. The program will also leverage relationships that SDG&E has with other companies including the San Diego Regional Energy Office, local engineering consultants, lighting or HVAC contractors, energy management controls manufacturers, EMS service contractors and equipment vendors. Customers who have previously participated in energy efficiency programs will also be targeted.

All leads will be channeled through the TA Program Manager. Once TA is requested, a cursory audit will be scheduled and conducted. The purpose of this audit is to identify areas of opportunity, but not provide a detailed analysis of the affected equipment. The auditor will be looking for both no-cost energy management opportunities, including manual or behavioral tactics, as well as opportunities requiring investment. The results will be discussed with the customer and appropriate next steps will be recommended.

From this cursory audit, the auditor will determine whether a more in-depth assessment is warranted. For this, SDGE will provide a CEC accredited auditor to perform the assessment at no cost to the customer. Eligible customers may also elect to conduct the assessment with a qualified auditor of their own choosing.

The results from the in-depth audit will include specific recommendations, both no-cost and low-cost, and calculations of kW and kWh savings. The audit will also recommend DRP and Energy Efficiency programs for the customer to participate in.

If the customer elects to hire their own in-depth assessment firm, they may be eligible to receive an incentive towards the cost of the audit. After submitting a copy of the recommendations and an invoice, and upon approval, the customer can receive up to \$50/kW for identified demand reduction activities. Any audit fees in excess of \$50/kW identified demand reduction will be the responsibility of

the customer.

9.1. Internal Activities

The following internal activities are planned:

| Date | Activity |
|-------------------|----------------------------------|
| 2005 - early 2006 | Build a customer tracking system |

9.2. Subcontractor Activities

The TA program will utilize the services of several sub-contractors:

- San Diego Regional Energy Office (SDREO) - program content, seminars, and auditing
- Quality Control - CEC certified engineer
- Auditors - CEC certified auditors.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The following marketing tactics are planned for this segment:

| Date | Activity |
|-------------|-----------------------------------|
| 2006 - 2008 | Develop Facts sheet and Brochures |
| 2006 - 2008 | Targeted direct mailings |
| 2006 - 2008 | Customer workshops |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentation, advertising and direct mail. Customers will be informed of load reduction strategies and available programs such as TA. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

No other specific market tactics are planned for this segment:

2006-2008 Demand Reduction Concept Paper Technology Incentives Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|--|--------------------|--------------------|--------------------|
| Operating & Maintenance (Administration) | \$451,403 | \$457,882 | \$464,270 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$44,269 | \$44,766 | \$45,259 |
| Incentive Payments | \$6,179,097 | \$7,241,254 | \$4,428,688 |
| Total Program Budget | \$6,674,768 | \$7,743,902 | \$4,938,217 |

2. Projected Program Impacts

| | 2006 | 2007 | 2008 |
|-----|------|------|------|
| MWs | 30 | 55 | 70 |

3. Program Descriptors

Market Sector: All Sectors
 Program Classification: Cross-Cutting, Statewide
 Program Status: Existing, Modified

The Technology Incentive Program (TI) is a financial incentive program intended to encourage customer adoption and installation of demand response measures by offsetting the cost of purchase and installation of demand response measures.

4. Customer Description

Any customer is eligible to receive TI. Customers may either be utility bundled or direct access. The specific target markets for TI include:

- Customers with lighting, motor, pumping, process or other load that can be temporarily turned off, re-scheduled, or suspended.
- Commercial, institutional, governmental or other buildings with energy management systems (EMS) connected to air conditioning systems, or other load that can be modulated or cycled.
- Customers who have previously participated in SDG&E's energy efficiency programs.

5. Program Statement

Participating in a demand response program can present numerous challenges for a business customer, requiring an investment in time and resources. Implementing a load shedding strategy may involve installing new load reduction or energy monitoring technologies, creating new or modified tasks for employees during an event, or modifying specific business operations. For the business customer, the decision to reduce power will generally be motivated by financial considerations. A financial incentive, such as the one offered by this program, can be an effective tool to encourage participation.

6. Program Rationale

SDG&E supports continuing the TI program through 2008. We believe this kind of commitment is necessary to reach the load potential envisioned in the goals. There are currently substantial market barriers to overcome before we can achieve more widespread participation in demand reduction programs. These include the customer perception that load reduction is not possible in their business and the fact that certain key enabling technologies are not present in many facilities. We believe that both the Technical Assistance and Technology Incentive programs are an essential strategy through at

least 2008.

Support for our position comes from various research studies that have reported that the majority of customers don't believe they can reduce load. They perceive that energy management opportunities have been exhausted or that load reduction is painful¹⁶, incompatible with business operations or simply not possible.¹⁷ Lawrence Berkeley National Laboratory has observed that demand reduction programs require a greater degree of education, customer handholding and energy audits. Other reports have concluded that there is a lack of necessary technology at customer locations.¹⁸

TI has been designed to work hand in hand with the Technical Assistance (TA) program to address these issues. The TA in-depth assessment will provide customers with a specific set of recommendations on opportunities and an investment plan that will show them the incentives and energy cost savings that are available to them. TI will provide incentives to the customer who installs demand reduction measures.

The TI program will work in conjunction with existing energy efficiency rebate and incentive programs to provide the customer with a coordinated package of incentives. These programs include Express Efficiency, Standard Performance Contract and Customer Energy Savings Bid.

SDG& proposes the following enhancement for the TI program in 2006 - 2008.

6.1. Approve a cascading scale for Technology Incentives from 2006-2008

SDG&E has proposed elsewhere in this application that a statewide workshop should be convened to look at the cost of demand reduction measures. While there are certain inexpensive measures that can provide limited demand response capability, the real potential for demand response will only be achieved through automated response technologies. This involves the installation of control points, metering, and servers to provide energy decisionmaking logic in customer facilities. In the Quantum study, up to 35% of large and medium customers reported some type of automated controls.¹⁹ We believe this self-reported number overstates the capabilities of the respondents, however, even if we accept this number, most of these systems would require enhancements to provide the capabilities necessary to respond to price and reliability triggers.

In SDG&E's experience, current incentive levels are not adequate to support the necessary technology investment. This is confirmed anecdotally by the experience of SDREO, a local company who administered the CEC's Enhanced Automation Program, as well as local suppliers of EMS systems.

We are suggesting an incentive level that decreases each year. By initially setting incentives at \$250/kW, we are hoping to jumpstart participation. The \$250 amount is loosely based on the incentives offered by NYSERDA through their Peak Load Reduction Program. In the ConEd service territory, demand reduction measures have incentives of \$175/kW. This program has been in operation for several years.

7. Program Strategy

The TI program will be marketed through many of the existing programs, as a component of the

¹⁶ California Energy Commission, *An Action Plan to Develop More Demand Response in California's Electricity Markets*, P400-02-016F. July 2002

¹⁷ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation - Summary of Phase 1 Research*, April 8, 2004.

¹⁸ U.S. Government Accountability Office, *Electricity Markets: Consumers Could Benefit from Demand Programs, but Challenges Remain*, GAO-04-844. 2004

¹⁹ Quantum Consulting Inc., *Working Group 2 Demand Response Program Evaluation - Non-Participant Market Survey Report*, April 5, 2004.

Customer Education and Outreach program, and through marketing activities for the Technical Assistance Program. Any customer who installs technologies that enable demand reduction is eligible to apply for an incentive. After submitting an approved invoice showing the cost of the installation, 50% of the incentive. (Based on the kW reduction identified.). After participating in a test event, the remaining incentives will be paid based on the actual test results for measured load reduction. Incentives will be paid in the form of a check.

8. Program Objectives

The primary objective of TI is to substantially increase the number of enrolled participants in all demand reduction programs by encouraging the installation of enabling technology. By fostering greater participation in energy programs, TI will help the state and the SDG&E community by reducing energy costs through the reduction of peak energy demands, as well as reducing the likelihood of rolling blackouts and rotating outages.

Program experience gained in 2005 will be essential to understanding what level of MW impacts TI is capable of achieving.

9. Program Implementation

Applicants for the TI program are expected to come primarily from the Technical Assistance (TA) Program. If a customer is installing measures without going through the TA program, Account Executives may proactively refer them to the program. The program will also take advantage of the partnerships that SDG&E has with other entities including the San Diego Regional Energy Office, local engineering consultants and equipment vendors. Information about the program will also be available on the SDG&E website. Customers can proactively contact the program through the DRP hotline.

All applications for incentives must be submitted with an invoice and supporting documents to the Technology Incentive Program Manager. When approved, the customer will be eligible to receive an initial incentive based on 50% of incentive levels to \$250/kW in 2006, \$200/kW in 2007, \$100/kW in 2008 of identified load reduction capability. A test event will be scheduled with the customer and actual load shedding capability will be measured. Based on the results of this test, the incentive balance will be authorized based on the load shedding achieved.

9.1. Internal Activities

No internal activities are planned:

9.2. Subcontractor Activities

No sub-contractor activities are required.

9.3. Marketing Activities

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already very familiar with the objectives of demand reduction and many of the available programs. The following marketing tactics are planned for this segment:

| Date | Activity |
|-------------|-------------------------------------|
| 2006 - 2008 | Develop brochures and mailers |
| 2006 - 2008 | 3 targeted direct mailings per year |
| 2006 - 2008 | 3 customer workshops per year |

Small / Medium Commercial Industrial: These customers will be marketed to as a component of the Customer Outreach Program. The Outreach Program will use a variety of tactics to reach this segment including presentation, advertising and direct mail. Customers will be informed of

load reduction strategies and available programs such as TI. They can proactively request additional information via the company website or the toll-free DRP hotline.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

No other direct market tactics are planned for this segment.

CUSTOMER EDUCATION, AWARENESS & OUTREACH

2006-2008 Demand Response Concept Paper Customer Education, Awareness and Outreach Initiative

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|---|--------------------|--------------------|--------------------|
| Operating & Maintenance (Administration) | \$4,372,953 | \$4,864,132 | \$4,580,508 |
| Capital | \$129,567 | \$0 | \$0 |
| Measurement & Evaluation | \$335,012 | \$338,495 | \$341,940 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$4,837,531 | \$5,202,627 | \$4,922,448 |

2. Projected Program Impacts

Customer Education, Awareness and Outreach has no direct MW goals.

3. Program Descriptors

Customer Education, Awareness and Outreach is designed as a comprehensive communication effort that entails a variety of initiatives aimed at increasing customer knowledge and understanding demand response. This effort, while not specifically oriented to any one demand response program, is an important facet of the overall demand response program portfolio. These initiatives will provide the foundation for delivering demand response benefits to customers, and will complement the program 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 understanding of 1) the demand response concept; 2) the benefits demand response delivers to customers; and 3) the importance of demand response programs in the customers energy management mix.

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

3.1. Customer Education, Awareness and Outreach Umbrella

The Customer Education, Awareness and Outreach Umbrella aims to educate customers on the concept and benefits of demand response, as well as how demand response fits into the customer's overall energy management mix. This will be accomplished through the use of mass media channels, e.g. print and broadcast advertising together with targeted communications, e.g. direct mail, Account Executive contact and educational resources, e.g. online tools, audits, seminars, workshops and community events.

Unlike traditional demand side management, demand response is driven by specific conditions and is therefore episodic. Consequently, there may be a long delay between enrollment in a program and an actual need for program participation. Implementing an on-going awareness and education campaign, in conjunction with retention efforts, is necessary to continue momentum and insure SDG&E receives the necessary reduction when demand response events are called.

While the Umbrella campaign will reach all customers, audience segmentation will be used to determine the appropriate message and tactic. The general emphasis will be on increasing awareness and understanding of demand response, its benefits and how it fits in with the energy management mix

among all customer segments utilizing mass communication channels and basic demand response messages. Over time, this broader focus will help to prepare customers for dynamic pricing and the savings opportunities that can be realized through the use of advanced meters and demand side management.

Increased focus will be given to those customers that may be closer to adopting demand response as part of their energy management mix e.g. customers with IDR meters, customers with demands greater than 200kW, customers with load that can be temporarily turned off, re-scheduled, or suspended, customers with energy management systems (EMS) or direct load control devices connected to air conditioning systems, or other load that can be modulated or cycled, and/or customers who have participated in SDG&E's energy efficiency programs. Overtime, this segment will increase as AMI is implemented throughout the customer base. As more customers are given the capability to participate a greater emphasis will be made to raise their level of awareness about demand response and its benefits.

Furthermore, online tools or enhancements will be developed to help educate customers by providing an individualized and interactive experience that will illustrate the benefits of demand response to each customer. These include:

- A demand response module for the "Business Energy Analyzer," the tool that currently offers customers a set of personalized energy-efficiency measures, so that demand response opportunities and benefits can be presented to business customers
- Additional functionality to the Website to include a channel for customer feedback and survey capabilities
- A load shift calculator so that customers can view potential savings if they take action during peak periods
- A customer scorecard that will be emailed to customers after an event to show how they did, continuing the dialogue between SDG&E and the customer

SDG&E will also provide demand response information to be integrated into one of the energy end-use modules of the successful Builder Operator Certification Program, the professional development program featuring classroom training and in-facility assignments. For the residential market, SDG&E will create partnerships with large box retailers to offer mutual benefit workshops and seminars within their seminar schedule.

3.2. Flex Your Power NOW! (Statewide)

Statewide, Residential, Non-residential, Existing

Flex Your Power NOW! (FYPN) is a statewide awareness campaign to encourage customers to voluntarily reduce energy consumption through conservation during peak periods in the summer identified as critical by the California Independent System Operator (CAISO). The primary goal of Flex Your Power NOW! is to reduce peak usage during those dire summer days when the state has concerns about the electricity supply. FYPN promotes immediate, voluntary energy conservation and demand reduction, which play a critical role in managing tight energy supplies. The program is modeled after the successful "Spare the Air" campaign, and is implemented in collaboration with the Flex-Your-Power campaign (managed by the Efficiency Partnership), the CAISO, SDG&E, SCE, PG&E, the Governor's office, and other key stakeholders to provide consistent, statewide communication.

FYPN builds on and uses the widespread awareness of the Flex Your Power campaign that has been in place since 2001. FYPN was successfully established in the summer of 2004 with statewide radio, print advertising and outreach efforts. Those efforts are continuing in 2005, and it is recommended that they be approved for 2006-2008 to continue to build momentum.

FYPN communication is comprised of two principal components – an awareness/education campaign and a specific "call-to-action" message. Communication channels used for generating awareness include radio and print media, Web sites, e-mail, brochures, and outreach efforts to educate customers so that when the alert occurs people know what specific actions to take to reduce their peak usage. Key messages FYPN communicates are:

- The CAISO expects that electric reserves could be inadequate in the southern portion of the state this summer, possibly resulting in power emergencies.
- The CEC advises close monitoring and prudent use of electricity resources, particularly during periods of hotter than normal summer temperatures.
- Customers can play a significant part in ensuring adequate electricity by doing their part in participating in the Flex Your Power NOW! campaign when supplies are predicted to be tight.

SDG&E will incorporate these same messages into its DR communications strategy. This consistent messaging is imperative to eliminate customer confusion about this new concept of demand response and when load reduction is needed.

3.3. Emerging Markets Statewide, Other, Modified

The Emerging Markets Program is a technology transfer program whereby short term load reductions are achieved through application and use of new demand system management technologies. This program will target and incent technology inventors, manufacturers and distributors in bringing new technologies to market that reduce load. Through these technologies, non-residential (commercial & industrial) and/or residential customers that have an interval data recorder (IDR) and communications will be able to participate in Demand Response Programs.

The program is aimed at bringing novel technologies to market by partnering with inventors, manufacturers and distributors, of products that have strong potential to reduce demand during periods of higher energy prices or tight energy supplies. Innovative products will be researched and evaluated followed by pilot demonstrations of promising technologies. Working in partnership with customers, statewide codes and standards will be reviewed for the technologies evaluated. Additionally, collaboration through trade associations and other organizations will occur to drive program objectives.

If deemed an appropriate vehicle to bring new product to market, this program may incentivize manufacturers via a "Golden Carrot" opportunity where a set amount of funds are made available to motivate technological progress for a certain end use.

To maximize impact on DR programs, technology demonstrations will be planned in each customer segment over the next 12 months. Presently, DRBizNet is being evaluated as a demand response enabling technology for possible field demonstration this year.

In addition to these EMP activities, SDG&E will be actively involved in supporting efforts related to statewide codes and standards for demand response. SDG&E believes this is an area with great potential for helping to move the market toward innovative demand response technologies and standards.

3.4. Community Outreach Voluntary Day-Ahead, Non-Residential, Statewide, Modified

The Community Outreach Program will provide direct interaction and communications to local municipalities and business communities within SDG&E's service territory to broaden awareness of demand response. The messaging to small and medium commercial customers will incorporate ways for businesses to help manage energy costs through various SDG&E tools and programs.

The program targets specific groups because it's an efficient way to strategically reach broad audiences and hence the audience we seek to inform. Each community reaches out to their own constituents with regularly scheduled meetings. There are also twenty-five (25) incorporated cities in San Diego/Orange County region representing over 90,000 business accounts receiving electric and gas services. Within

these geographical boundaries are a number of underserved local municipalities that historically have not actively participated in load reduction programs.

The program will target these groups through a collaborative communication process. SDG&E will specifically target small to medium size business customers via business associations and trade organizations. Targets include:

- Economic Development Councils
- Local Chamber and trade associations
- Smaller local associations such as the Business Improvement Districts
- Underserved and smaller, lesser known municipalities and cities within greater San Diego and Orange Counties (Santee, Escondido, Oceanside, Vista, El Cajon, Lemon Grove, Poway, San Marcos, La Mesa, Ramona, San Clemente, Dana Point, etc)
- Small and mid-size businesses
- Business assistance organizations (Small Business Administration/SCORE)

The key underlying message is to proactively position SDG&E as a business 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).

3.5. Circuit Saver Program

Residential, Non-Residential, Local, Existing

The Circuit Saver Program is an education program whereby customers who are served from electric distribution circuits in SDG&E's highest growth areas receive additional information regarding load reduction tactics and reliability programs that are available to them. There are currently about 58,000 residential customers, 4,900 commercial industrial customer and 50 pumping customers on the top 20 circuits. By educating these customers about the variety of demand response tactics and programs available to them, Circuit Saver focuses awareness building to those circuits of interest to Electric Distribution Planning. Circuit Saver is one component of a broader effort by SDG&E to increase overall system efficiency through the use of innovative tactics.

Until now, the customer segment with the most exposure to and participation in demand response programs has been the large assigned accounts, those with Account Executives actively educating them and promoting the programs. Residential and small commercial customers have had very little exposure to demand response programs. The Outreach Program will use a variety of tactics to reach this segment including presentations/booth displays at local community events (Earth Day Events; Fiesta del Barrio Fair; Carlsbad; various Cinco de Mayo Festivals; Senior Expos & Health Fairs; advertising in community newspapers and direct mail. SDG&E will also provide a "Tool Kit" of information. This kit will include information on applicable programs and load reduction strategies.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

3.6. kWickview

Non-Residential, Local, Existing

kWickview is a Web-based energy management tool SDG&E provides to customers. kWickview furnishes real-time energy use data to help customers better understand and manage their electric consumption and costs. In addition to accessing real-time energy use data, kWickview training helps customers identify energy use patterns, which leads to exploration of ways to modify or reduce energy use. Any customer with an interval data recorder (IDR) meter is eligible to receive the kWickview tool and training on how to utilize, understand and benefit from the information it provides.

Along with being a learning tool, kWickview is a lead generation tool in addition as it helps prime customers for participation in demand response programs. In 2006 – 2008 we plan to promote kWickview more aggressively. As the promotion of kWickview increases we expect program participation to increase.

kWickview training classes are held on a regular basis. In 2005, kWickview classes have had full attendance and we plan to increase the frequency of classes in 2006 – 2008 to accommodate the increased interest and deliver the benefits of kWickview to a greater number of customers. As more training is conducted and more kWickview user are acquired the associated costs will increase.

Moreover, software enhancements have been planned to increase the benefits to customers, which include:

- Curtailment module,
- Cost estimator,
- Real-time pricing module, and
- On-demand read

The objectives of kWickview and kWickview training are to 1) provide and demonstrate a tool to help customers better understand and manage their electric consumption and costs, 2) encourage customers to take advantage of the benefits of participation in demand response programs.

3.7. Non-Profit Outreach Program Non-Residential, Local, New

The Nonprofit industry represents 23 tax-exempt categories of which the largest category is 501(c)(3) or “public benefit” organizations. There are more than 7,000 nonprofit organizations in San Diego County with more than 61,000 employees. Nonprofit organizations nurture and develop a sense of belonging to a community. SDG&E and nonprofits share a common mission to serve and benefit the public. This population is predisposed to provide assistance and service when needed. Nonprofits have inroads to employees, volunteers, board members, and the populations they serve to spread the demand response message.

This program will leverage their electronic community network to optimize the number of people who hear and understand demand response, understand the benefits of demand response, and decide to take action when necessary. It will tap into the nonprofit infrastructure organizations that have the capability for large electronic distribution. We will ask them to partner with us to help the community in capacity building and ensure efficient use of resources. We understand the nonprofit community’s desire for providing service and gaining visibility for the sector. We believe this program would be beneficial for all parties as SDG&E is seeking a sustainable energy for the future and nonprofits are seeking a sustainable quality of life for the region.

3.8. IDP Residential, Local, Pilot

The Information Display Pilot (IDP) was a pilot information program that worked in conjunction with the Statewide Pilot Program (SPP). Customers are provided with an information treatment that included an electronic newsletter, e-grams and communication devices that provided a signal to take action as prices rise when demand for electricity is high and fall when demand is low.

As of a 10/29/04 ALJ Ruling, the pilot program was suspended to new participants though the rate is open through the end of 2006 to existing customers on the CPP-V and CPP-F rates. The program will operate “as is” to existing customers though they will be alerted to the pilot’s end at the end of 2006. In late 2006, SDG&E will alert customers they will be moved into a different program. The information portion of the pilot was valued by customers and is being moved into this program

3.9. PEAK Student

The PEAK Student Energy Actions Program – managed by the Energy Coalition -- is a comprehensive student learning experience intended to teach elementary school children the value of “smart energy management.” In addition, the program is an integrated demand response and energy efficiency education program. The overall goal of the PEAK program is to instill an efficiency ethic in students through standards-based lessons, hands-on activities, and real-world application in their homes, schools, and communities.

PEAK is dedicated to the proposition that the individual actions taken by students produce significant reductions in overall energy use, save money for the families and schools, and instill an ethic of energy consciousness in our youth and their families. This partnership will provide a meaningful way to engage elementary school students living in San Diego County as advocates of smart energy management in their homes, schools, and communities. Moreover, we recommend that year-round schools and 6 – 6 programs be provided these valuable materials as well.

The potential for energy savings and peak demand response generated by the PEAK program is multifaceted. Each school participating in the PEAK Student Energy Actions program will also benefit from energy savings catalyzed by the actions of PEAK students, teachers, and facility staff as energy awareness is raised on campus.

4. Customer Description

The Customer Education, Awareness and Outreach initiatives will reach all customer segments including residential, small/medium commercial, large commercial and industrial and direct access customers.

5. Program Statement

The awareness of demand response and the benefits it provides, along with the participation in demand response programs is low. The customer segment with the greatest awareness and understanding, as well as participation in demand response programs, is the large assigned accounts. These customers that account for about one percent of the commercial customer base, have an Account Executive. The remaining 99% of SDG&E’s customer base have little or no awareness and understanding of demand response, it’s benefits, and it’s role in the energy management mix. Past demand response participation has been generally low with about 4,000 customers in the Smart Thermostat and about 400 customers participating in all other demand response programs.

6. Program Rationale

There is untapped MW savings potential in the marketplace, however demand reduction is not widely understood, which creates a barrier to program participation. The Customer Education, Awareness and Outreach will help SDG&E acquire MW savings by increasing the overall awareness and understanding of 1) the demand response concept; 2) the benefits demand response delivers to customers; and 3) the importance of demand response programs in the customers energy management mix.

The following change is proposed for 2006 - 2008.

7. Program Strategy

The initiatives detailed above will reach customers with the appropriate demand response messages, along with the incorporation of the portfolio of programs and services that can provide the customer with beneficial energy savings. SDG&E strongly believes that an integrated approach to promoting demand-side management programs will bring the greatest level of awareness and understanding, which will lead to successful program participation.

This approach called Integrated Demand-Side Management (IDSM) involves analyzing a customer’s operation to identify various DSM opportunities, including: conservation, energy efficiency, demand response, self-generation and renewable energy sources. Customers are provided with solutions that best meet their specific needs, taking into account their sensitivities to price and reliability. The

Customer Education, Awareness and Outreach campaign will help to introduce this concept to the marketplace and encourage adoption of an integrated approach to energy savings by customers. Moreover, employing an integrated portfolio sales approach provides potential demand response participants with a variety of products and offerings expected to lead to higher levels of all program participation and increased customer satisfaction. ACEE research supports the idea that customers who have participated in energy efficiency programs are more likely to participate in demand response programs.

It is important to note, however, that while the IDSM approach will be utilized when ever appropriate, the recommendations and requests in this filing are specifically in support of demand response programs.

8. Program Objectives

The objectives of the Customer Education, Awareness and Outreach initiatives are to increase the overall awareness and understanding of 1) the demand response concept; 2) the benefits demand response delivers to customers; and 3) the importance of demand response programs in the customers energy management mix.

9. Program Implementation

The education, awareness and outreach initiatives will be implemented throughout the year in conjunction with the individual demand response programs. Utilizing a variety of outreach efforts and materials, including mass media channels, direct mail, Account Executive contact, SDG&E's website, Web-based learning tools, audits, seminars, workshop and community events, customer segments are educated about the demand response concept, the benefits associated with demand response and how customers can include demand response in their energy management mix.

9.1. Internal Activities

Activities include:

| Date | Activity |
|-------------|---------------------------------|
| 2006 - 2008 | Employee education and training |

9.2. Subcontractor Activities

A third party(ies) will provide SDG&E with support of the kWickview tool as well as consulting services online product, networking and energy orb programming.

9.3. Marketing Activities

The education, awareness and outreach effort will employ a combination of mass media communications channels and targeted communications channels to ensure the messages reach the intended audiences. The marketing may include a mix of print, radio, direct mail, personal contact, trade shows, trade association meetings, customer workshops, energy-related and other community events and partnerships with business and industry organizations.

In addition, online tools will be developed to assist customers in understanding their energy usage and pricing signals, allow for online enrollment, and respond to alerts. The Web will also be used to expand marketing and outreach to our increasingly diverse target audience, improve timely customer contacts by reducing DRP related follow-up calls by providing more complete, accurate, and consistent information, and to quantify results.

The marketing plan for each individual demand response program is also component of education, awareness and outreach and all communication efforts will be complementary.

Large Commercial Industrial: These customers will be primarily marketed to through their assigned account representative. This segment is already familiar with the objectives of demand

response and many of the available programs. The following marketing tactics are planned for this segment:

| Date | Activity |
|-----------|-------------------------------|
| Each Year | kWickview training conducted |
| Each Year | Umbrella campaign and tactics |
| Each Year | Flex Your Power NOW! |
| Each Year | Circuit Savers |

Medium Commercial Industrial: These customers will be marketed to using workshops, seminars, presentations, mass advertising and direct mail. Customers will be informed of load reduction strategies and available programs. They can proactively request additional information via the company website or the toll-free DRP phone number.

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

The following market tactics are planned for this segment:

| Date | Activity |
|-----------|---------------------------------|
| Each Year | kWickview training conducted |
| Each Year | Umbrella campaign and tactics |
| Each Year | Flex Your Power NOW! |
| Each Year | Circuit Savers |
| Each Year | Business Collaborative Outreach |
| Each Year | Nonprofit Program |

Small Commercial Industrial / Residential:

Participation from this segment is expected to increase greatly as the Advanced Metering Infrastructure (AMI) project is rolled out beginning in 2007. AMI will provide these customers with the necessary metering and communications (at no cost) and will further heighten awareness of energy management opportunities.

| Date | Activity |
|-----------|---------------------------------|
| Each Year | Umbrella campaign and tactics |
| Each Year | Flex Your Power NOW! |
| Each Year | Circuit Savers |
| Each Year | Business Collaborative Outreach |
| Each Year | Nonprofit Program |

OTHER PROGRAMS

2006-2008 Demand Reduction Concept Paper

Statewide Pricing Pilot

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|-----------------------------|-----------------|----------------|------------|
| Overhead & Maintenance | \$93,564 | \$1,161 | \$0 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$0 | \$0 | \$0 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$93,564 | \$1,161 | \$0 |

2. Projected Program Impacts

The Statewide Pricing Pilot has no direct MW goals.

3. Program Descriptors

Market Sector: Residential
 Program Classification: Statewide
 Program Status: Existing

The Statewide Pricing Pilot (SPP) is a pilot program for the residential market to study customer reaction to price signals.

4. Customer Description

Residential customers currently on the CCP-V and CCP-F rate schedules.

5. Program Statement

The residential market does not have accurate price signals as a basis for modifying their behavior when using energy.

6. Program Rationale

This pilot program was directed at residential customers in order to study their reaction to proxy price signals. Customers were placed on one of two different rates that allowed prices to rise when demand for electricity is high and fall when demand is low. On 10/29/04, an Assigned Commission and Administrative Law Judge Ruling was issued, ordering that the CPP-V and CPP-F rates should remain open to customers through the end of 2006.

7. Program Strategy

As of the 10/29/04 Assigned Commission and Administrative Law Judge Ruling, the pilot program was suspended to new participants though the rate options are will remain in effect through the end of 2006. The program will operate “as is” to existing customers though they will be alerted to the pilot’s end at the end of 2006.

8. Program Objectives

The original pilot program was expected to encourage residential customers to decrease load during periods of weather-induced high prices. The primary objective of the program is to service the existing customers and move them into the Advanced Metering Infrastructure (AMI) project in 2007. In 2007 the program will be decommissioned.

9. Program Implementation

In 2006, existing CPP-F and CPP-V customers receive event notifications via telephone and other means as specified by the customer (e.g. e-mail, and pager). For CPP-F, this notification is made on the day prior to a Super Peak Pricing event, and for CPP-V customers the notification is made at least 4 hours ahead of an event. This notification requests that customers reduce their electric consumption during the specified Super Peak event hours.

In late 2006, as the program is decommissioned, a customer communication plan will be set in motion. An Extension Package will be sent to SDG&E participants. It will communicate the importance of the customer's participation, to compare energy costs and consumption, to prepare them for removal of any control devices and to provide them with available rate options.

Interval meters, meter data collection devices and end-use control devices can be decommissioned. We will replace the meters with standard kWh meters from existing inventory and not charge SPP.

9.1. Internal Activities

As the program is in maintenance mode, no new internal activities are planned.

9.2. Subcontractor Activities

None

9.3. Marketing Activities

This program is closed to new participants. No marketing is necessary. Any marketing materials required to move customers to another rate will be borne by the new program.

2006-2008 Demand Reduction Concept Paper Automated Demand Response Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|-----------------------------|-----------------|------------|------------|
| Overhead & Maintenance | \$68,262 | \$0 | \$0 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$0 | \$0 | \$0 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$68,262 | \$0 | \$0 |

2. Projected Program Impacts

The Automated Demand Response Program has no direct MW goals.

3. Program Descriptors

Market Sector: Residential
 Program Classification: Statewide
 Program Status: Existing

The Automated Demand Response Program (ADRS) is a technology pilot program for one group of participants in the Statewide Pricing Pilot (SPP) project.

4. Customer Description

Residential customers currently on the CPP-F rate schedules.

5. Program Statement

The residential market does not have accurate price signals as a basis for modifying their behavior when using energy. They also may not have the necessary technology to facilitate this behavior.

6. Program Rationale

This SPP program was directed at residential customers in order to study their reaction to proxy price signals. Customers were placed on one of two different rates that allowed prices to rise when demand for electricity is high and fall when demand is low. Customers on one of the rates, the CPP-F, were provided with a GoodWatts system, that enabled web-based control of the thermostat. On 10/29/04, an Assigned Commission and Administrative Law Judge Ruling was issued, ordering that the CPP-V and CPP-F rates should remain open to customers through the end of 2006.

7. Program Strategy

As of the 10/29/04 Assigned Commission and Administrative Law Judge Ruling, the pilot program was suspended to new participants though the rate options are will remain in effect through the end of 2006. The program will operate "as is" to existing customers though they will be alerted to the pilot's end at the end of 2006.

8. Program Objectives

The primary objective of the 2006 program is to service existing customers. In 2007, the objective is to transition customers to a whole house package within the Advanced Home Renovation program.

9. Program Implementation

In 2006, existing CPP-F customers receive event notification on the day prior to a Super Peak Pricing event. This notification requests that customers reduce their electric consumption during the specified Super Peak event hours.

At the end of the year, customers will be offered the choice to stay on their current rate or select another rate option. If customers opt-out, the utility will bear the cost of decommissioning. This offer will also introduce them to other available demand response programs. The package of information sent will communicate the importance of the customer's participation, compare energy costs and consumption and prepare them for removal of any control devices.

During the decommissioning process, the subcontractor will remove the GoodWatts system from all participating homes leaving the homes as they found it. They will remove all equipment installed at the customer premises and cease back-server support to these locations, including removal of the cable modem in homes where HSD service did not exist and/or customer chooses not to continue with service. The GoodWatts thermostat would be replaced either with the customer's original thermostat, or with a new energy-star rated programmable thermostat at the customer option.

9.1. Internal Activities

| Date | Activity |
|------|---|
| 2006 | Deinstallation |
| 2006 | Cable Removal Costs |
| 2006 | Literature to 24 SDG&E customers |
| 2006 | Customer Service/Deinstallation support |
| 2006 | Customer Care |
| 2006 | Project Management |
| 2006 | Storage and retesting of GW equipment |
| 2006 | Placing programmable t-stat per household |

9.2. Subcontractor Activities

The subcontractor on this program, Invensys, will do this work. It is expected that the decommissioning activities associated with ADRS will span about 4 months. Activities will include:

- Preparing and delivering customer communication on decommissioning
- Managing de-installation process (contact with customer, scheduling of appointment, actual de-installation appointment)
- Coordination with installation firm (DMC Honeywell and respective cable companies)
- Tracking on de-installation progress
- Inventory tracking
- Weekly reporting of decommissioning activities to Utilities' Program Manager, CEC and CPUC
- Customer service and support
- Final report to the utilities

9.3. Marketing Activities

This program is closed to new participants. No marketing is necessary. Any marketing materials required to move customers to another rate will be borne by the new program.

2006-2008 Demand Reduction Concept Paper Competitive Bid Program

1. Projected Program Budget

| | 2006 | 2007 | 2008 |
|-----------------------------|------------------|------------------|------------------|
| Overhead & Maintenance | \$149,448 | \$152,706 | \$155,919 |
| Capital | \$0 | \$0 | \$0 |
| Measurement & Evaluation | \$0 | \$0 | \$0 |
| Incentive Payments | \$0 | \$0 | \$0 |
| Total Program Budget | \$149,448 | \$152,706 | \$155,919 |

2. Projected Program Impacts

The Demand Response Competitive Bid Response Program has no proposed MW goals.

3. Program Descriptors

Market Sector: All
 Program Classification: Local
 Program Status: New

The Demand Response Competitive Bid Program will allow third parties with technology solutions to propose effective demand response programs to the utility for integration into the utility's demand response program portfolio.

4. Customer Description

This program will not be limited by a customer description until the bids are evaluated.

5. Program Statement

It is not possible for the utility to capture all demand response technology solutions and program possibilities.

6. Program Rationale

This program will allow SDGE to offer new ideas which surface from the demand response community of vendors and service providers. This will help to facilitate enhanced load reduction programs. This may include currently commercially available solutions or those in development where funds would make a significant difference in commercializing the solutions.

7. Program Outcomes

At least one new technology solution program idea will be chosen for integration into the utility demand response portfolio.

8. Program Strategy

SDG&E will develop a scope of work and announce a Request for Proposal with the intention of adding new program possibilities in the program portfolio. Once evaluated against criteria to be established by a Demand Response Project Team, at last one vendor will be chosen. Once contracts are negotiated, SDG&E will apply for additional demand response funding for this program (s) through a separate advice filing.

9. Program Implementation

SDG&E will assemble Demand Response Team consisting of personnel from appropriate departments to develop a scope of work, process and criteria for success. Consultants may also be recruited to assist in this process. The team will announce an RFP on its website and to the demand response vendor community.

Once received, the team will evaluate proposals against the published criteria, determine possible programs and notify the respondents. Chosen programs will be submitted to the Commission for approval.

9.1. Non-energy Activities

- 3Q Establish Team, develop scope of work, process and criteria. Announce RFP.
- 4Q Conduct bid conference
- 1Q Evaluate proposals, select programs for submission to the Commission
- 2Q Commission approval. Announce new program

9.2. Subcontractor Activities

Consultants will be used to assist in the development of the scope of work, process and criteria as well as evaluate the proposals.

9.3. Marketing Activities

The RFP will be mailed to known demand response vendors and announced on the website.