

Application of San Diego Gas & Electric
Company (U-902-M) for Approval of
Demand Response Programs and Budgets
for the Years 2009 through 2011.

Application 08-06-002

AMENDED

CHAPTER I

AMENDED

PREPARED DIRECT TESTIMONY

OF MARK GAINES

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

SEPTEMBER 19, 2008

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**CHAPTER I
PREPARED DIRECT TESTIMONY
OF MARK GAINES**

I. PURPOSE

The purpose of my testimony is to present San Diego Gas & Electric Company's ("SDG&E's") policy perspectives regarding the portfolio of demand response ("DR") programs that SDG&E proposes to offer to its customers during the three-year program cycle of 2009-2011. In testimony following this chapter, SDG&E provides the details of its DR program portfolio, IT enhancement strategy, and program and portfolio cost effectiveness and load impact results.

In developing its DR portfolio, SDG&E was conscious of the Commission's desire for SDG&E to meet its DR targets and promote Integrated Demand Side Management ("IDSM"). In support of these objectives, SDG&E employed the following four guiding principles to develop a cost effective, successful DR portfolio: 1) Simplify DR programs to facilitate customer participation; 2) Be comprehensive to maximize the opportunity for all customers to participate in DR programs and rates; 3) Promote automated controls to maximize customer response and enhance the market value of DR resources; and (4) Enable DR programs to transition to participation in the California Independent System Operator's Market Redesign and Technology Update in the future. The following paragraphs will provide greater detail in how these principles influenced SDG&E's portfolio design.

II. SDG&E'S PORTFOLIO SIMPLIFIES DR PROGRAM PARTICIPATION

DR programs have historically had more limited customer participation than Energy Efficiency (EE) programs for both residential and non-residential customers. There are many suspected reasons for this but SDG&E believes one of the primary causes is that customers are

1 much less familiar with the concept, its value to their operation, its value to SDG&E and its
2 value to the environment. To address this issue, SDG&E has been working to position DR as
3 part of an overall portfolio of options available for customers to better manage their energy use.

4 Specifically, for residential customers SDG&E jointly advertises its air conditioner tune-
5 up and replacement programs from its EE portfolio with SDG&E's Summer Saver (AC cycling)
6 DR program. For non-residential customers SDG&E offers an Energy Saver Bonus program that
7 provides added incentives to customers who implement integrated EE and DR projects at their
8 facilities. This latter effort is not only intended to influence customers to consider DR programs,
9 but to also influence EE contractors and DR aggregators to expand their business models to
10 include both EE and DR solutions for their customers.

11 SDG&E also implemented integrated EE and DR audits and simplified the application
12 process by combining the program applications for EE and DR. Finally, SDG&E integrated all
13 its EE and DR marketing and outreach under the tag line "Go Green. Save Green." to reinforce
14 the economic and environmental benefits of both programs.

15 From a program perspective, SDG&E modified the Summer Saver program last year to
16 provide more options for residential and small commercial customers to participate (30%, 50%
17 or 100% cycling). On the non-residential side, SDG&E launched its Capacity Bidding Program
18 last summer providing customers with flexibility to select both the length of their DR events (2,
19 4 or 8 hours) and the notice lead time (day ahead or 2 hour). Each of these efforts makes it easier
20 for customers to choose a DR program that fits their specific needs.

21 On a go forward basis, SDG&E will further simplify DR participation by integrating the
22 measurement and verification process between EE and DR, further integrate SDG&E's program
23 marketing efforts around market segments (Wholesale/Retail/Offices, Government/Utilities,

1 Hospitality Services, Manufacturing/Process Industries, Institutional, Agriculture/Construction,
2 Other) and further simplify DR programs by phasing out the Demand Bidding Program at the
3 end of 2009 because it competes with the Capacity Bidding Program without adding significant
4 incremental value.

5 Overall, these simplification efforts have helped increase customer participation in DR
6 programs and SDG&E is confident that with the additional changes proposed in this filing
7 SDG&E will continue to see greater acceptance by customers of DR as an energy management
8 solution.

9 **III.SDG&E'S DR PORTFOLIO IS COMPREHENSIVE IN REACH**

10 The overall objective of DR programs is to encourage customers to reduce their usage
11 during peak demand periods. SDG&E believes the best way to achieve this goal is to provide
12 every customer with clear price signals that reflect higher system costs during peak hours and to
13 provide customers with the tools and incentives to analyze their operations and implement
14 changes that minimize their peak demand.

15 With D.08-02-034 and D.07-04-043 SDG&E now has approval to install Smart Meters at
16 all of its customers' premises and to implement time dependant rates for all of its customers. For
17 residential and small commercial customers, the rate will be Peak Time Rebate (PTR). For all
18 other non-residential customers, the rate will be Critical Peak Pricing Default (CPP-D). This
19 comprehensive application of price signals will cause many more customers to adopt EE and DR
20 measures and/or behaviors to reduce their peak electric demand. However, maximizing those
21 peak reduction efforts also requires tools and incentives to assist customers in identifying and
22 implementing their options.

1 From a program perspective, SDG&E will continue to offer a comprehensive set of
2 solutions for customers to consider. For residential customers, SDG&E offers its AC cycling
3 program and will also implement pilot programs to evaluate new technologies and outreach
4 methods to achieve even higher participation. One of the most exciting outcomes of the growth
5 of Smart Meter installations is the development of ancillary equipment and services by various
6 companies that can utilize the detailed customer usage data and the wireless communication link
7 to help customers better manage their energy use. These options include, but are not limited to,
8 smart thermostats, in-home displays, home energy management systems, continuous monitoring
9 systems, sophisticated energy usage comparison tools and on-line presentment tools. At this
10 point in time it is impossible to determine which of these technologies and services will be
11 available, effective and affordable, but SDG&E proposes funding to conduct pilots and field tests
12 to facilitate the rapid introduction of a comprehensive suite of solutions to its customers as these
13 technologies reach the marketplace between 2009 and 2011.

14 For the non-residential segments, SDG&E will continue to offer day-ahead and day-of
15 DR programs for those customers who wish to opt-out of the CPP-D rate but are still interested
16 in reducing their peak demand. In addition, SDG&E offers day-of DR programs that operate in
17 conjunction with CPP-D and provide added value during system emergencies.

18 Complimenting these efforts are the DR aggregators who are becoming more active and
19 more numerous in SDG&E's service territory. SDG&E is working cooperatively with them to
20 make their customer bases as comprehensive as possible.

21 The combination of proper price signals to every SDG&E customer and the availability
22 of a comprehensive suite of program options and incentives is designed to maximize the impact
23 of DR in SDG&E's service territory over the coming years.

1 **IV. SDG&E'S DR PORTFOLIO PROMOTES AUTOMATED CONTROLS**

2 The third principle of SDG&E's DR portfolio design is to maximize the use of automated
3 controls. There are several reasons for this effort. The most important of which is the
4 overwhelming evidence that automation increases DR significantly over non-automated behavior
5 adjustments. The second driver for automation is the shortened reaction time for customers
6 responding to DR events. Third, automation provides greater certainty that customers will
7 respond to a DR event trigger since human intervention is not required. And the final driver is
8 the desire to integrate DR into the CAISO's Market Redesign and Technology Upgrade (MRTU)
9 process expected to be phased in over the next few years. All of these benefits of automation
10 combine to greatly increase the value of DR to SDG&E's grid operations by making DR
11 resources more closely mimic generation resources in reliability and response rates.

12 SDG&E promotes automated controls in its DR portfolio in several ways. For residential
13 customers, the Summer Saver program is an automated control of air conditioners which
14 provides direct incentives for customers to participate. In addition, PTR provides an enhanced
15 rebate for customers that also install approved automated controls in their home. Finally, pilot
16 studies are planned to test new automated controls that will work in conjunction with Smart
17 Meters to more extensively automate home energy management.

18 For non-residential customers, SDG&E proposes to continue its successful Technical
19 Assistance/Technical Incentives (TA/TI) Program with a more comprehensive energy efficiency
20 assessment in the TA audit. This program provides enhanced incentives to customers or
21 aggregators that install automated controls and participate in a DR program or rate. These
22 incentives reinforce the value of automation to SDG&E's customers and enhance the reliability
23 and value of these programs from an operations perspective.

1 Finally, to ensure continued advancement in automation SDG&E is proposing to lead an
2 effort to further develop communication standards for automated DR technologies which will
3 allow for integration into utility billing and reporting systems and enhanced information services
4 to customers. This effort is discussed in Witness Mohn's testimony.

5 Overall, SDG&E submits that automation is the optimal long-term solution for DR
6 because it makes the programs nearly invisible to the customers while maximizing DR's
7 visibility and value as a viable energy resource. SDG&E's DR portfolio is designed to facilitate
8 that solution.

9 **V. SDG&E IS ACTIVELY INVOLVED IN WORKING GROUP EFFORTS WITH**
10 **THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ("CAISO") AND**
11 **OTHER MARKET PARTICIPANTS TO ENABLE ITS DR PROGRAMS TO**
12 **PARTICIPATE MRTU.**

13 SDG&E has long been an active participant in the CAISO's working group to develop its
14 straw proposal for inclusion of DR into the CAISO's wholesale markets. For MRTU Release 1,
15 SDG&E is providing the CAISO with hourly forecasts to allow for SDG&E's DR programs to
16 be immediately accounted for in the CAISO energy markets when DR programs are triggered.

17 With respect to MRTU Release 1A, anticipated for release in April 2009, SDG&E is
18 committed to work with CAISO to ensure optimum participation of its DR programs. SDG&E
19 will redesign as necessary its proposed programs to enable participation. Furthermore, should
20 there be opportunities for new programs to improve its portfolio's participation in MRTU,
21 SDG&E will submit new program proposals for the Commission's consideration for
22 implementation during the 2009-2011 program cycle.

1 **A. Alignment of SDG&E's DR Portfolio with MRTU**

2 **1. Non-Participating Load ("NPL")**

3 Under the CAISO MRTU Release 1, the current software includes limited functionality
4 and ability for DR to participate directly in the CAISO wholesale markets. The current DR
5 portfolio of the California IOUs are not compatible with the CAISO's current Participating Load
6 model. However, recognizing that the existing programs provide valuable demand resources, the
7 MRTU Release 1 Working Group developed a process by which the CAISO can immediately
8 account for the benefits derived from the current IOU DR portfolios in the CAISO energy
9 markets. Under this process, SDG&E's DR programs can participate as Non-Participating Load
10 ("NPL"). NPL is load that is not part of the load resources of a Participating Load and does not
11 participate in the CAISO Real-Time or Ancillary Services markets but can submit energy-only
12 bids.¹

13 The CAISO Demand Response Resource User Guide, Guide to Participation in MRTU
14 Release 1 ("MRTU Manual Release 1.0")² details the procedures for the IOUs to provide their
15 Day-Ahead and Day-Of DR forecasts so that the CAISO can account for these resources
16 appropriately. SDG&E has implemented the procedures outlined in the MRTU Manual
17 Release 1.0.

18 **2. Participating Load ("PL") or Dispatchable Demand Response ("DDR")**

19 Participating Load, as defined by the CAISO, is an entity, including an entity with
20 Pumping Load or Aggregated Participating Load, providing Curtailable Demand, which has
21 undertaken in writing by execution of a Participating Load Agreement to comply with all

¹ CAISO Business Practice Manual for Definitions & Acronyms, Version 5, February 26, 2008.

² CAISO Demand Response Resource User Guide, Guide to Participation in MRTU Release 1, Version 3.0, November 29, 2007.

1 applicable provisions of the CAISO Tariff.³ PL requires CAISO technical certification and is
2 expected to respond to CAISO requirements. PL can participate in the Day-Ahead Market
3 (“DAM”) and Ancillary Services (“AS”), as well as Real Time Energy Imbalance Market
4 (“RTM”).

5 Recognizing that MRTU has not been finalized and that at this time it is not possible to
6 accurately design optimal DR programs under this market, SDG&E is proposing a Participating
7 Load Pilot (PLP) with the intent to provide Non-Spin operating reserves to CAISO. The primary
8 objectives of the PLP are:

- 9 (1) To test the program design that will potentially replace SDG&E’s existing “price
10 responsive” DR programs once MRTU is fully implemented.
- 11 (2) To identify and develop program management and infrastructure requirements
12 prior to full PL implementation.
- 13 (3) To determine the viability of interim telemetry techniques in lieu of the current
14 MRTU telemetry requirements for real-time load visibility.

15 As stated in the first objective, SDG&E intends to eventually modify or replace its
16 existing “price responsive” or “Day Ahead” DR programs, as appropriate, to maximize
17 integration with MRTU PL requirements. The final program designs will incorporate lessons
18 learned from the PLP and incorporate feedback on best practices from customers/Aggregators
19 about other market based DR programs they have participated in. It should be noted that
20 SDG&E’s DR rates (CPP-D and PTR) are not anticipated to qualify as PL because of limitations
21 on their notification requirements. Attached in the Appendix is SDG&E’s proposed
22 modifications to each of its programs to meet MRTU requirements.

³ CAISO Business Practice Manual for Definitions & Acronyms, Version 5, February 26, 2008.

1 The PLP is also intended to address the Commission's direction to either propose a Small
2 Load Aggregation Pilot or discuss ideas regarding the issue. SDG&E's PLP is open to all its
3 nonresidential customers and encourages participation of Aggregators in the program. The
4 participation of Aggregators in the program would enable small commercial customers to
5 provide DR resources.

6 3. Proxy Demand Resource ("PDR")

7 At the July 30, 2008 CAISO-IOU Technical Design Session, the CAISO introduced a
8 new product, Proxy Demand Resource ("PDR") that will serve as an intermediate product to
9 allow the California IOU Price Responsive DR programs to participate in the MRTU. PDR is
10 intended to "act" like a proxy generator. The CAISO has indicated that PDR will be
11 implemented shortly after MRTU Release 1. The CAISO's July 30, 2008 presentation provides
12 an outline of how PDR is envisioned to work. Below are some of the major highlights:

13 a. The DR provider registers its price-responsive DR portion under a separate unique ID
14 as a "proxy generator"

- 15 • Can be at any node(s) within a Local Capacity Area;
- 16 • DR provider can also register Load Reduction Initiation Cost and/or Minimum
17 Load Reduction Cost
- 18 • CAISO has also stated that PDR can not participate as AS.

19 b. Day-Ahead Process

- 20 • LSE Scheduling Coordinator ("SC") will include the DR quantity in default
21 LAP as a price taker segment with PDR bid treated like a generator bid, with
22 start up, minimum load and energy prices.

- 1 • For settlement purposes the cleared PDR quantity is netted out of the cleared
- 2 IFM LAP MW quantity
- 3 • There is no bid cost recovery for the Load Reduction Initiation cost and/or
- 4 Minimum Load Reduction cost.

5 c. Residual Unit Commitment

- 6 • CAISO will reduce the RUC procurement target based on the PDR's cleared
- 7 schedule
- 8 • There is no RUC payment for PDR

9 d. Real-Time Market

- 10 • CAISO will reduce the CAISO's forecast of its demand (referred to as CAISO
- 11 Forecast of CAISO Demand) based on the Day-ahead PDR "award"
- 12 • No PDR specific performance requirements
- 13 • PDR is implicitly settled as part of Real-time Uninstructed Load Deviation.

14 With approval from the Commission, SDG&E believes that once it has set up to
15 implement its proposed PLP that it would not require additional resources to implement PDR to
16 enable its part or all of NPL to transition to PDR.

17 **B. Technical Requirements to Fully Integrate with MRTU**

18 In order for SDG&E to facilitate customer participation in DR programs that will
19 participate in MRTU, AMI meters will need to be installed. The AMI deployment schedule
20 anticipates roll-out to begin in 2009 with completion in 2011.

1 The other technical requirements for SDG&E's current programs to fully integrate with
2 MRTU are identical to the requirements identified for the Participating Load Pilot discussed in
3 the Chapter VII Section IV.

4 **C. Issues and Barriers That Need to be Addressed**

5 **1. CAISO Process for Implementing MRTU**

6 The CAISO is the primary entity responsible for the implementation of MRTU in
7 California. The level of preparedness and timely implementation of the MRTU dictates the level
8 of participation for the IOU DR programs. SDG&E appreciates the efforts and initiatives
9 CAISO has undertaken to facilitate the transition of DR programs so that they can be fully
10 counted in MRTU. Examples are the Working Group MRTU Release 1 and draft Release 1A
11 User Guides and the introduction of PDR. SDG&E looks forward to continuing participation in
12 the coming months as the CAISO works with interested parties to develop user guides for PDR,
13 PL (Release 1 and MAP), updates to the necessary tariffs and any additional updates to the
14 CAISO systems operations necessary for these various DR products to fully participate in the
15 retail markets. These discussions/technical sessions will continue to guide SDG&E in
16 identifying program modifications that are required to comply with MRTU requirements.
17 Timely completion of the CAISO's manuals, system updates and MRTU releases are necessary
18 if the IOU MRTU pilots are to be implemented by Summer 2009.

19 **2. Customer Education and Acceptance**

20 To facilitate customer participation in these programs, SDG&E believes that education
21 and outreach to customers needs to be started before the full implementation of MRTU. A
22 general understanding of how the programs will operate using market price references is
23 necessary in order to engage customers in participating under the MRTU structure. Current

1 triggers, such as high temperatures and local system load constraints, are easier for customer to
2 relate to and justify participation because of corporate citizenship issues, thus improving their
3 willingness to participate and their responsiveness, whereas Market Prices are more abstract,
4 harder to predict frequency and must be justified solely on economic factors. Also the
5 interaction with triggers related to local system load constraints, to the extent they are retained,
6 will need to be explained for the customer to have a full understanding of likelihood of
7 curtailment.

8 Since price triggers could also result in more events being triggered than under current
9 program triggers, it will be important to set both the threshold for triggering the program and the
10 payment structure to ensure continued customer support for these programs. SDG&E anticipates
11 that the various PL pilots and the M&E studies that the utilities are implementing will provide
12 information on both customer acceptance and program design to determine a successful program
13 structure.

14 **3. Telemetry and IT Infrastructure Requirements**

15 As discussed above, SDG&E is endeavoring to find solutions to some of the more
16 stringent telemetry requirements for participation in MRTU through its PLP. However, full
17 implementation of some of the DR program also depends on the timely completion of SDG&E's
18 AMI deployment. Moreover, IT infrastructure changes to meet DR MRTU requirements will
19 have to be prioritized against other company IT initiatives. Finally, SDG&E will review its
20 needs and resources to determine if some of these activities should be outsourced to expedite
21 completion of the necessary infrastructure.

1 **4. Direct Access Customer Participation**

2 Because Direct Access (DA) customers have different Load Serving Entities (LSEs) as
3 compared to the utility’s bundled customers, several items will need to be coordinated including
4 load forecasting, bidding in MRTU and settlements. These items can be managed by a separate
5 Scheduling Coordinator.

6 **5. Availability of Demand Response Programs for Local Reliability**

7 For SDG&E, with its service area being a local area for CAISO planning and resource
8 adequacy, there is a large interest in being able to call DR programs to respond to local system
9 conditions. SDG&E has advocated “soft triggers” in its current DR programs to provide
10 flexibility to call programs in response to local conditions and would like to retain that flexibility
11 in the future. So there is an issue related to how accommodating MRTU protocols will be to
12 retaining this critical aspect of SDG&E’s DR programs.

13 SDG&E recognizes that the Rulemaking Phase 3 addresses the operation of investor-
14 owned utilities’ emergency-triggered Demand Response (“DR”) programs in the future
15 electricity wholesale market. Currently, six of SDG&E’s 2006-2008 DR programs are
16 emergency-based DR programs affected by Phase 3 (BIP, SLRP, Peak Generation, OBMC,
17 Clean Generation and Summer Saver); in fact, only one of the DR programs, BIP, is defined as a
18 demand response program, has participants, and uses an emergency-based CAISO Stage 2 alert
19 as a sole trigger. The SLRP and the OBMC programs have no participants.⁴ The Peak
20 Generation and Clean Generation programs are based on back-up generation and are not
21 considered DR.⁵ The Summer Saver program, SDG&E’s AC Cycling program, is a “day-of”
22 program but has multiple triggers including Stage 1 or Stage 2 and local emergencies at

⁴ The SLRP program remains open only because of legislative requirements.

⁵ D.06-11-049 at page 58.

1 SDG&E's discretion.⁶ The SDG&E BIP program currently has participants with no more than
2 3MW total load signed up. SDG&E's Appendix shows that this program's customers could be
3 transitioned to another PLP once it is in place. While Phase 3 deals with an important issue, it is
4 much less an issue for SDG&E given the small amount of DR solely using an emergency-based
5 trigger.

6 **D. "Following Intermittent Load-Renewables" Pilot**

7 The third pilot area that the Commission required the utility to address is "Following
8 Intermittent Renewable Load." SDG&E believes that a robust DR portfolio should be able to
9 address any intermittent resources, whether it be renewable resources or generation/transmission.
10 Thus, it is unnecessary to propose additional specific DR programs for this purpose. The
11 February 27, 2008 ALJ Ruling (at page 21) proposes that perhaps" intermittent renewable
12 resources can be better integrated to serve load through the use of permanent load shifting
13 ("PLS") techniques such as energy storage." SDG&E, as part of its 2007 DRP enhancements
14 issued an RFP for permanent load shifting projects, selected and will continue to implement
15 continue to implement them through 2009-2011.⁷ SDG&E proposes that as part of the PLS
16 pilots' M&E, SDG&E would assess how PLS can compensate for changes in load due to
17 intermittent renewable resources.

18 The February 27, 2008 ALJ Ruling also provides some background on this issue. The
19 CAISO Integration of Renewable Resources (for example at page 91) discusses the need for new
20 types of energy storage technologies to help mitigate intermittent renewable load. Southern
21 California Edison Company's Testimony (at page 117) proposes a "Home Battery" pilot to

⁶ This answers Scoping Memo question 1.

⁷ Resolution E-4098 approved SDG&E's permanent load shifting pilots.

1 address this need. SDG&E proposes to work with SCE to share in the knowledge obtained from
2 this pilot and based on the results, make a similar proposal if successful.

3 **E. Budgetary Requirements**

4 SDG&E has identified, as part of its proposed PLP pilot, a capital budget that would
5 include IT infrastructure costs that it anticipates will need to meet both the PLP pilot needs and
6 the infrastructure needs for the other DR program modifications identified in the Appendix. The
7 proposed Customer Education, Awareness and Outreach program budget will cover the cost for
8 customer outreach and awareness regarding MRTU. All other program modifications (e.g.,
9 program triggers, notification, etc.) can be accommodated within the proposed 2009-2011
10 program budgets. See Chapter VII for detailed discussion on the budgets requirements.

11 **VI. SDG&E HAS SOLICITED ADDITIONAL DR PROGRAMS THROUGH ITS 2007**
12 **REQUEST FOR OFFERS—NEW LOCAL AND OFF-SYSTEM CAPACITY**

13 On March 9, 2007, SDG&E, as part of a general Request for Offers (“RFO”) for new
14 local and off-system capacity, included a DR component. General DR criteria included in the
15 RFO were: (1) a minimum of 1.0 MW reduction within SDG&E’s service territory; and (2)
16 initial delivery in 2010, 2011 or 2012 running for a total of 15 years. SDG&E is finalizing
17 contract terms with the selected vendors and is anticipating submitting these contracts to the
18 Commission for approval in the Summer of 2008.

19 This concludes my prepared direct testimony.

20 **VII. QUALIFICATIONS**

21 My name is Mark Gaines. My business address is 555 West Fifth Street, Los Angeles
22 California, 90013. I am employed by San Diego Gas & Electric Company (“SDG&E”) as
23 Director Customer Programs in the Customer Programs organization. In my current position, I

1 am responsible for the organization that designs, develops and implements SDG&E's Demand
2 Response Programs; and SDG&E's and Southern California Gas Company's Energy Efficiency
3 Programs.

4 I graduated from University of California, Irvine with a Bachelor of Science degree in
5 Civil and Environmental Engineering. I received a Master of Business Administration (MBA)
6 degree from University of California, Los Angeles. I have been employed by SDG&E and
7 Sempra Energy since 1983 and have held positions of increasing and broadening responsibility
8 in such organizations as Engineering, Public Affairs, Customer Services, Environmental Services
9 and Customer Programs.

10 I have previously testified before this Commission in a variety of proceedings.

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APPENDIX

Appendix--Required DR Program Modifications for MRTU Release 1A

REQUIRED PROGRAM MODIFICATIONS FOR RELEASE 1A		REQUIRED PROGRAM MODIFICATIONS FOR RELEASE 1A		REQUIRED PROGRAM MODIFICATIONS FOR RELEASE 1A		REQUIRED PROGRAM MODIFICATIONS FOR RELEASE 1A		REQUIRED PROGRAM MODIFICATIONS FOR RELEASE 1A	
Programs	Comments	Triggers	Notification	Customer Incentive	Enabling Technology	Participant Requirements	Timeline for Program Integration into MRTU		
Critical Peak Pricing-Default	At present, the program design can not guarantee a response to the 10-minute notification and therefore are not planning to include this as a PL AS but will include this as non-PL product, at the minimum.	Modify trigger to ensure that the load reduction can be activated, with market price, responsive.	Modify Notification to ensure that structure will be reviewed to ensure that it is consistent with market price.	Enabling technology is preferred as this would improve the reliability of the load reduction.	2009-participate in Release 1; 2010-AMI installation deployment to allow for customers to participate in CPP-D; 2011-Program modified to fully participate in MRTU as Non-participating load.				
Critical Peak Pricing - E	Can participate in MRTU Release 1 process.	Currently an emergency program. Will make changes based on Phase 3 findings.							
Peak Time Rebate (PTR)	At present, the program design can not guarantee a response to the 10-minute notification and therefore are not planning to include this as a PL AS but will include this as non-PL product, at the minimum.	Modify trigger to ensure that the load reduction can be activated, with market price, responsive.	Modify Notification to ensure that structure will be reviewed to ensure that it is consistent with market price.	Enabling technology is preferred as this would improve the reliability of the load reduction.	2009-participate in Release 1; 2010-AMI installation deployment to allow for customers to participate in CPP-D; 2011-Program modified to fully participate in MRTU as Non-participating load.				
Capacity Bidding Program	This program's structure is the closest in MRTU PL compatibility. This could be converted to have the same characteristics as the PL P in 2010. However, this could result in reduction in customer participation due to the short 10-minute notification period.	Modify trigger to ensure that the load reduction can be activated, with market price, responsive.	Modify Notification to ensure that structure will be reviewed to ensure that it is consistent with market price.	Enabling technology is preferred as this would improve the reliability of the load reduction.	2009-participate in Release 1; 2010-AMI installation deployment to allow for customers to participate in CPP-D; 2011-Program modified to fully participate in MRTU as Non-participating load.				
Base Interruptible Program	Can participate in MRTU Release 1 process.								
Summer Saver	Can participate in MRTU Release 1 process.								
Residential Automated Controls Technology Program	NA-the primary purpose of this pilot is to test enabling technologies and customer response.								
Optional Binding Mandatory Curtailment	Can participate in MRTU Release 1 process. However, currently no customers enrolled.								SDG&E proposes that this program be discontinued.
Scheduled Load Reduction Program	Can participate in MRTU Release 1 process. However, currently no customers enrolled.								SDG&E proposes that this program be discontinued, however, this is legislatively mandated.
Technical Assistance (TA and TI)	NA-this program provides technical information to customers to identify opportunities to participate in DR programs.								
Technology Incentives	NA-this program provides incentives to install DR enabling technologies after which customers enroll in a DR program.								
Customer Education, Awareness & Outreach (CEAO)	NA-this program is an information program only.								
Flex Alert Network	NA-this program is an information program only.								
Demand Response - Emerging Technologies	NA-this program is an information program only.								
PEAK Student Energy Actions Program	NA-it is expected that the permanent load shift occurs regularly during the DRP months and should already be incorporated in the load forecast.								
Permanent Load Shifting (PLS)	NA-it is expected that the permanent load shift occurs regularly during the DRP months and should already be incorporated in the load forecast.								
Gas A/C - Cypress	NA-it is expected that the permanent load shift occurs regularly during the DRP months and should already be incorporated in the load forecast.								
Refrigerated Zone Module - EPS	NA-it is expected that the permanent load shift occurs regularly during the DRP months and should already be incorporated in the load forecast.								
Additional Activities (AA)	NA-this program supports C&S as it may pertain to DRP.								
Codes and Standards									

Notes

*Triggers: Every program has additional triggers specific to local emergencies. Tariff languages vary to allow SDG&E to activate program events for local transmission and distribution emergencies.

1 This was not an explicit request in SDG&E's testimony but to move forward with MRTU, SDG&E would recommend discontinuing the program.

