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Exhibit No.: SDG&E
Witness: Michelle Costello

Application of San Diego Gas & Electric Company (U-902-M) for Approval of Demand Response Program Augmentations and Associated Funding for the Years 2013 through 2014.	Application 12-12-XXX (Filed December 21, 2012)

PREPARED DIRECT TESTIMONY OF

MICHELLE COSTELLO

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

December 21, 2012

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I.
EXECUTIVE SUMMARY

By this application, San Diego Gas & Electric Company ("SDG&E") seeks Commission approval of the following proposals to augment its 2012 – 2014 Demand Response Programs ("DRP") portfolio and associated budgets, as described more fully herein:

1. Approve an increase to SDG&E's approved 2012-2014 DRP budget by an incremental amount of $1,631,108, to fund its Demand Bidding Program ("DBP") and Customer Education, Awareness and Outreach ("CEAO") program proposals.
2. Approve the fund shift of $4,983,649 of unspent authorized budget from Peak Time Rebate ("PTR") program back to its Capacity Bidding Program ("CBP").
3. Authorize the continuation of SDG&E's DBP approved by Resolution E-4511, with revisions, most notably, the establishment of a new, day-of, 30-minute notice product. DBP would be funded through the budget fund-shift authorized by Resolution E-4511.
4. Authorize SDG&E to issue a Request for Proposals ("RFP") solicitation, to seek proposals from third-party vendors for new programs and technologies to implement load control programs intended to augment and expand existing technologies and programs within SDG&E's service territory.
5. Authorize SDG&E's proposed Community Partners initiative element of its CEAO program to continue and expand to include south Orange County CBOs.
6. Authorize SDG&E's proposed revisions to the tariff language for Schedules DBP and PTR that incorporate the proposed program enhancements.

II.
PURPOSE

This Application is filed in accordance with the authority established by D. 12-04-045, dated April 19, 2012, and modified by D. 12-08-023, dated August 20, 2012, as well as pursuant to the direction reflected in the November 16, 2012 letter from Mr. Edward Randolph, Director, Energy Division "November Letter"). The purpose of my testimony is to propose specific revisions to SDG&E's Demand Response Programs ("DRP") and augmentations budgets for the years 2013 and 2014 described more fully below. The proposals herein are intended to revise and supplement SDG&E's 2012 – 2014 DRP portfolio and budgets as previously adopted by D. 12-04045 and D. 12-08-023.

A. Background

In early 2012, Units 2 and 3 of the San Onofre Nuclear Generating Station ("SONGS") were taken out of service as a result of various operational concerns. Those units have remained out of service throughout 2012 (although SONGS operator Southern California Edison Company [SCE] has submitted a proposed plan for partial restart of Unit 2 to the Nuclear Regulatory Commission), and at the present time their return to service is unknown.

As a result of the anticipated outage of SONGS Units 2 and 3 during the summer months of 2012, on April 25, 2012, Mr. Edward Randolph, Director, Energy Division, directed that SCE and SDG&E "…submit Tier 3 advice letters ("ALs") proposing [DR] program augmentations and improvements…" and that "…SCE and SDG&E should focus their efforts on areas potentially affected by the SONGS outage…with programs to be effective no later than July 1, 2012." ("April Letter") Mr. Randolph's direction further provided that, in order to address the potential reliability issues that may arise during the summer months of 2012 as a result of the

SONGS outage, and because of the shortened time frame and expedited nature of the request, the advice letters be submitted by April 30, 2012, with protests due on May 3 and replies due on May 4.

While receipt of the Energy Division April Letter on April 27, 2012 did not allow for an extended period of time to develop and evaluate a variety of program augmentation and enhancement proposals, SDG&E nevertheless filed its AL 2351-E on April 30, 2012. This was done following collaboration between SDG&E and stakeholders, as well as consultation with Energy Division staff. AL 2351-E proposed modifications to its existing PTR program and the establishment of a new SummerGen 2012 program, utilizing on-site, customer-owned generation facilities. The proposed modifications to PTR sought to expand the program's applicability (previously approved for residential customers only) to include SDG&E's small Commercial and Industrial customer segments. SDG&E also proposed funding its proposed revisions through budget fund-shifting guidelines established by D. 12-04-045. SDG&E's proposed revisions to PTR, and the associated funding, were approved by Commission Resolution E-4502 on May 24, 2012. SDG&E's proposed SummerGen 2012 program was deferred for separate consideration, and due to concerns over required San Diego County Air Pollution Control District permit modifications, dispatch protocols and other operating provisions, SDG&E subsequently withdrew the SummerGen 2012 proposal by letter dated June 7, 2012.

SDG&E filed AL 2370-E on June 1, 2012, proposing the Demand Bidding 2012 ("DBP") program following direction from Energy Division staff and discussions among SDG&E, stakeholders, some SDG&E's larger customers. The proposed DBP program would offer incentives to non-residential customers for reducing energy consumption and demand during a program event, and would be available to those customers capable of providing at least 5 MW of load reduction. SDG&E also proposed funding 2012 DBP through budget fund-shifting as established by D. 12-04-045. The Commission approved AL 2370-E through Resolution E-4511, dated July 12, 2012. SDG&E subsequently filed the DBP 2012 customer contract form to implement DBP 2012 by AL 2386-E, dated July 20, 2012.

On June 14, 2012, SDG&E filed its AL 2373-E, submitting certain tariff revisions in compliance with D. 12-04-045, which adopted SDG&E's 2012 – 2014 DRP portfolio and budgets. Among the DRP portfolio revisions adopted by D. 12-04-045 was SDG&E's proposal to terminate its then-existing Critical Peak Pricing-Emergency ("CPP-E") program. SDG&E has proposed elimination of CPP-E for a variety of reasons, including the small number of participating customers and the desire to transition those customers onto other DR programs. Although D. 12-04-045 adopted SDG&E's proposal to eliminate CPP-E, it did delegate to Energy Division staff the authority to "…enable program changes to go into effect starting in 2013 and to continue to 2012, leaving 2012 unmodified if needed." (see D. 12-04-045, pages 132-133, and SDG&E's AL 2373-E, page 2). Following discussions with Energy Division staff, and in light of the SONGS outage, SDG&E proposed in AL 2373-E to defer closure of CPP-E until December 31, 2012, thereby preserving the availability of the program through 2012 This would allow SDG&E to take advantage of the available load reduction potential from CPP-E. AL 2373-E was subsequently approved as a Tier 1 compliance filing, effective June 24, 2012.

These DR program augmentations and enhancements, as well as the associated funding proposals reflected in SDG&E's ALs 2351-E, 2370-E and 2386-E reflected program revisions and funding, and approved by Resolutions E-4502 and E-4511 are effective only for 2012.

B. 2013-2014 Outlook

SDG&E has undertaken a look at the resources and outlook for the summer of 2013. As a result, and given the outlook for generation, transmission, and anticipated customer loads, SDG&E concluded that based on ongoing efforts of SDG&E, SCE and the CAISO that SDG&E will be able to meet loads even under transmission contingency situations in 2013. Only in the case involving the AES Huntington Beach Units 3 and 4 synchronous condenser project not being placed in service by mid-2013 did SDG&E see shortages in meeting planning criteria. Furthermore, the results of SDG&E's program augmentations for Summer 2012 confirmed that there should not be any significant reliance on short-term incremental load reductions through Demand Response Programs to offset the Huntington Beach synchronous condenser project. In this scenario incremental load reductions would be so small as to be insignificant to mitigate the overall consequences should this synchronous condenser project not go forward. In the November Letter, Mr. Randolph expressed his concern over the ongoing outage of SONGS and indicated that he is: "…initiating further commission consideration of utility demand response (DR) programs in the SCE and SDG&E service territories for the summers of 2013 and 2014." He further indicated that: "…SDG&E should submit Application(s) proposing program improvements and augmentations to (their) existing demand response (DR) program portfolios." Accordingly, SDG&E hereby submits the following proposals described herein with the program implementation plans detailed in Attachment B.

III.
2013-2014 DRP PROPOSALS

A. Continuation of Demand Bidding Program ("DBP")

Following the experience gained during the summer of 2012 with the implementation of DBP, SDG&E proposes that this program be continued into 2013 ad 2014, with one proposed modification. SDG&E proposes that the day-ahead product that was available for 2012 be modified to a day-of, 30-minute trigger product. We believe this to be in alignment with the guiding principles set forth in the November Letter from Mr. Randolph, which states that: "…programs that can provide demand response within 30 minutes are preferable as quick response capability is the most useful for addressing the contingency situations identified by the CAISO for summer 2012 planning." Attachment B includes the program implementation plan for DBP.

As set forth in Attachment A hereto, Proposed Budgets for 2013 and 2014 DR Program Augmentations and Enhancements, SDG&E's proposed budget to fund DBP for 2013 and 2014 is $1,755,808. Of the $1.8 million adopted budget for Demand Bidding 2012, which was funded through the shifting of authorized budget funds from SDG&E's Base Interruptible Program ("BIP"), and approved by Resolution E-4502, SDG&E projects that approximately $44,192 will have been spent through 2012, leaving a remaining authorized budget of $1,755,808. SDG&E proposes that this remaining budget authorization be carried forward into 2013 and 2014 to fund the continuation of DBP.

B. New Request for Proposals ("RFP") For Load Control Product(s)

SDG&E requests Commission authorization to issue a new RFP with the objective of seeking new, innovative and aggressive technologies for load control programs, to modify, enhance or replace the existing and simplistic technologies that are currently in use today.

As noted in D.12-04-045 (at page 76),

"… PG&E, SCE and SDG&E are all encouraged to procure additional third party cost-effective MWs of DR through competitive solicitations, above current minimum levels."

Currently, SDG&E's Summer Saver program is the sole residential demand response program based on central air conditioner ("CAC") direct load control. It is implemented through an agreement between SDG&E and its third party vendor, and is currently scheduled to continue through 2016.

Through an RFP, SDGE would seek cost-effective proposals for improving and expanding the use of load control technologies which would bring incremental load reductions. SDG&E would seek to identify new, innovative ways to implement various load control programs utilizing the latest and most efficient devices available in the market today. The areas of interest can include, but are not limited to, additional A/C cycling and control devices, pool pump cycling and control technologies as well as electric water heater cycling technologies. SDG&E believes this to be in alignment with the guiding principles identified in the November Letter which asks the utilities to consider: "…new sources of load that can be reduced (pool pumps for example) or incenting participation by customer segments who have been under-utilized." These potential Load Control Programs would be considered separate and distinct.

SDG&E proposes the following schedule for this process.

Request CPUC approval to issue an RFP	Filed 12/21/12
Receive CPUC approval to issue an RFP	03/01/13 (estimated)
Issue RFP	30 days after receipt of CPUC approval
Proposals Due	45 days after issuance of RFP

Evaluate Proposals	75 days after receipt of proposals
Selections	30 days after evaluations of proposals
Advice Letter Filing	10 days after selections
Award contracts to winner (s)	60 days after approval of advice letter
Program Implementation	In place for Summer 2014

C. Customer Education, Awareness and Outreach ("CEAO")

SDG&E proposes to continue its Community Partners initiative under its Customer Education, Awareness and Outreach ("CEAO"). In the summer of 2012, SDG&E worked with 36 Community-Based Organizations ("CBOs") which promoted education regarding conservation during summer, including Flex Alerts and RYU to hard-to-reach communities. SDG&E provided training, flyers, videos to assist them in their own outreach efforts that included contests, children games, social media outreach, education for disabled adults and other grassroots efforts. CBOs used their own extensive social networks to tweet and post messages related to event days. SDG&E awarded a total of $91,000 in grants to participating CBOs. SDG&E proposes to increase funding for its Community Partners initiative to $200,000 for 2013 and 2014. With this additional funding, SDG&E will continue to work with San Diego-based CBOs. In addition, SDG&E will seek CBOs in South Orange County to expand its network of Community Partners.

If authorized in this application, the proposals currently pending in A.12-08-009 will be reduced by the requested amount. The Program Implementation Plan ("PIP") for CEAO has been revised and included in Attachment B.

D. Discontinue Peak Time Rebate Small Commercial Customer Component ("PTR_A") for Summers 2013 and 2014

SDG&E's Peak Time Rebate Program product for small commercial customers, PTR-A, was authorized for 2012 by Commission Resolution E-4502 and will conclude on December 31, 2012. SDG&E will not continue this PTR-A into 2013 and 2014, due to the very low MW reduction, low customer participation in optional alerts, and high cost of this program.

In the 2012 Demand Response season, small commercial customers opted into alerts at a much lower rate than residential customers, 0.4 percent as compared to 4.3 percent for residential customers. Additional customer surveys will be completed in early 2013 to evaluate all customers' program response, as well possible reasons for the low participation.

The commercial customers also produced a smaller level of reduction as a percentage of their overall load. Preliminary estimates suggest that small commercial customers who opted into alerts reduced their energy use by approximately 2 percent to 4 percent compared to residential opt-in alert customer customers who reduced their energy use by approximately 6 to 11 percent. With these early low load reduction estimates, SDG&E will not offer this product in 2013 and 2014.

E. Incremental DRP Portfolio Budget Authorizations

As a result of the budget fund-shifting authorized for 2012 by Resolutions E-4502 and E-4511, SDG&E has determined that some of its existing DR programs are likely to be under-funded for the remainder of the 2012 – 2014 program cycle. Pursuant to the requirements established by D. 12-04-045, SDG&E hereby requests approval for the following budget augmentation and fund shifts for these programs in order to restore the budgets back to the originally authorized levels and ensure adequate funding into 2013 and 2014.

1. Capacity Bidding Program ("CBP")

- D.12-04-045 approved $11,789,000 for CBP operation. As authorized by Resolution E-4502 (approving AL 2351- E), $ 6,414,757 of this authorized budget was shifted from CBP to create and fund the PTR-A product.
- Through this application, SDG&E is requesting to fund shift $4,983,649 of unspent authorized budget from PTR-A back to CBP. Additionally, SDG&E seeks Commission approval of an additional budget authorization of $1,431,108 to restore the authorized CBP budget back to the level initially authorized by D. 12-04-045.

2. Customer Education, Awareness and Outreach ("CEAO")

- SDG&E requests Commission authorization of its proposed $200,000 incremental budget to fund its proposed Community Partners initiative element of CEAO program to continue the initiative and expand to include south Orange County CBOs.

F. Additional Tariff Language Changes

SDG&E proposes several minor revisions to specific portions of the tariff language for Schedules DBP and PTR (refer to Appendices C, D and E) to reflect the proposed implementation of the program enhancements for 2013 and 2014 described above.

1. SDG&E requests authorization to extend the Demand Bidding Program into 2013 and 2014. The proposed tariff modifications will include the replacement of the day-ahead product with a day-of, 30-minute product.

2. SDG&E will not continue its small commercial product for PTR ("PTR-A") into 2013 and 2014 as described above. SDG&E is also proposing the addition of the experimental EV rates (EPEV-L, EPEV-M and EPEV-H) as rates which are eligible for PTR. This will include the elimination of Schedule PTR's special condition 19 – the exclusion of these rates which was scheduled to expire December 31, 2012. Customers on these rates will be subject to all existing eligibility criteria.
3. SDG&E also proposes the inclusion of in-home display units ("IHDs") as an enabling technology under special condition 8, due to the success of the IHD pilot in 2012. IHDs were addressed in approved AL 2351-E, but were not officially added to the list of technologies.

IV.
COST-EFFECTIVENESS ANALYSIS

The cost-effectiveness analysis for SDG&E's DBP program was conducted using the Demand Response Reporting Template created by Energy and Environmental Economics ("E3") and approved by the Commission for the 2012-2014 Demand Response Applications in A. 11-03-001, *et. al*. The E3 Template utilizes the approved avoided costs, energy prices and discount factors used in the analysis. This chapter provides results for four cost-effectiveness tests: the Total Resource Cost ("TRC") test, the Program Administrator Cost ("PAC") test, the Ratepayer Impact Measure ("RIM") test, and the Participant Cost Test ("PCT").

In order to complete the analysis, the program budget for administrative costs, capital, and incentives for 2013 to 2014 was estimated. In addition, the following inputs and assumptions were used:

- Energy incentive of $500 per MWh
- Estimated nine events per year lasting six hours each
- Estimated ex ante load impacts of five MW per year
- Values for Factors A through E, explained below.

The E3 Template allows capacity benefits to be adjusted according to the availability of the program (Factor A). Commission guidance directed the IOUs to use the E3 methodology consisting of the top 250 load hours from 2006 to 2009 to calculate Factor A. Using this methodology, SDG&E estimated a value for Factor A of 91.4%. Further consistent with Commission guidance, the value used for Factor B (adjustment for notification time) was 100% as the program requires only a 30-minute notification. The value used for Factor C (adjustment for trigger) was 100% as SDG&E may call the program for a local emergency. The value used for Factor D (distribution benefits) was zero since the program does not provide or require Auto-DR or enabling technology that would result in long-term benefits to the distribution system. Finally, the Commission directed value of 140% was used for Factor E (energy price adjustment).

The approved budget for program and system support was allocated to all programs within the SDG&E demand response portfolio. The allocated amount was determined by the ratio of total program budget to portfolio budget. For DBP, the ratio is three percent; therefore, the DBP program received three percent of the program and system support costs. In addition, three percent of the budget for marketing and education and for non-program-specific measurement and evaluation costs was allocated to the program.

Revenue reductions (aka customer bill savings) were computed using an estimated average rate for medium and large commercial and industrial customers of $0.147 per kWh for 2013 and $0.152 per kWh for 2014, representing estimated average rates for the purpose of this analysis.

The E3 Template includes a proxy for participant costs equal to 75% of the sum of incentives and customer bill savings. No additional participant benefits or costs were quantified for the analysis; however, in accordance with Commission guidance, SDG&E identified other qualitative customer benefits. The foremost qualitative benefit is that the program may potentially provide some system reliability benefits due to potential generation shortfalls related to the ongoing outage of the San Onofre Nuclear Generating Station ("SONGS"). In addition, by utilizing demand response programs instead of increased generation, the reduction in greenhouse gases may provide a societal health benefit; in particular, reduced air pollution can potentially lead to fewer illnesses and deaths. Furthermore, program participants may realize additional benefits that are difficult to measure or quantify such as increased ability to manage their energy usage and bills, the feeling of being a good citizen by helping to reduce outages, and an improved public image for lessening their impact on the environment. It is important to note that participants may also realize certain qualitative costs such as discomfort due to delayed use of air conditioning, inconvenience, and delayed production.

The results of the analysis are presented in below. As shown, all four tests result in a benefit cost ratio greater than one, indicating the program is cost-effective.

Results of Cost-Effectiveness Tests for DBP

2012 Dollars	Benefits	Costs	Net Benefits	Net $/kW-Yr	Ratio
TRC	$1,532,363	$534,146	$998,217	$119	2.87
PAC		$540,368	$991,995	$118	2.84
RIM		$613,084	$919,278	$110	2.50
PCT	$315,754	$236,816	$78,939	$9	1.33

V.
COST RECOVERY MECHANISM

Consistent with D.12-04-045 and its testimony in A.11-03-002, the regulatory accounting and cost recovery treatment for the requested augmented budget in this application is described below.

- SDG&E currently records all program costs associated with its existing demand response programs and its current and future DRP bilateral contracts[1] in its Advanced Metering and Demand Response Memorandum Account ("AMDRA"). SDG&E will continue then transfer the existing disposition of the AMDRA balances to SDG&E's Rewards and Penalties Balancing Account (RPBA") on an annual basis for amortization in SDG&E's electric distribution rates over 12 months, effective on January 1st of each year, consistent with SDG&E's adopted tariffs.

- SDG&E will continue to record in AMDRA authorized demand response program costs related to DR Operation and Maintenance ("O&M") expenses, capital related costs (i.e., depreciation, return and taxes), customer capacity incentive payments, and all other costs, not recovered through SDG&E's General Rate Case ("GRC").

- The one exception to the way SDG&E records demand response programs costs in AMDRA is the recording of the energy component of the DRP customer incentive payments in its Energy Resource Recovery Account ("ERRA").

[1] SDG&E's existing bilateral contract is its Summer Saver program.

VI.
QUALIFICATIONS

My name is Michelle Costello. My business address is 8335 Century Park Court, San Diego, California, 92123. I am employed by San Diego Gas & Electric as Demand Response Manager in the Customer Programs and Projects Department. Currently, my responsibilities include the design and implementation of demand response programs for San Diego Gas & Electric. I have been employed by San Diego Gas & Electric since 1997 and over the past 15 years have held positions of increasing responsibility within the company that have included managing customer demand response programs.

I graduated from University of Phoenix with a Bachelors of Science degree in Business, Marketing.

I have not previously testified before the Commission.

ATTACHMENT A
PROPOSED BUDGETS FOR 2013 AND 2014 DR PROGRAM AUGMENTATION AND ENHANCEMENT

ATTACHMENT B
PROPOSED 2013 AND 2014 DEMAND RESPONSE PROGRAM IMPLEMENTATION PLANS (PIPS)

ATTACHMENT C
SCHEDULE DBP 2013-2014 TARIFF CHANGES

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FORM 142-05218 (DBP CONTRACT)

ATTACHMENT E
SCHEDULE PTR TARIFF CHANGES

ATTACHMENT F
COST EFFECTIVENESS WORKBOOK

(CD enclosed since it is a live Excel workbook)