BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements.	Rulemaking 13-09-011 (Filed September 19, 2013)

REVISED RESPONSE OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) TO QUESTIONS ON STAFF PROPOSAL

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I. INTRODUCTION

San Diego Gas & Electric Company ("SDG&E") respectfully submits its Responses to Questions on Staff Proposal in this proceeding. Included with this response are two proposed alternative pilot projects for SDG&E that would avoid redundancy and unnecessary duplication, thereby maximizing effective use of limited Demand Response funding (see, Appendix A). SDG&E looks forward to providing its input on the longer-term roadmap issues raised by the Commission in future phases of this proceeding.

II. ANSWERS TO QUESTIONS POSED BY THE COMMISSION

1. Do you find it reasonable for the Commission to authorize SCE, SDG&E, and PG&E a one-year bridge funding to allow current demand response programs to continue, as is, through 2015 while the Commission contemplates changes to the structure of the overall demand response program?

<u>SDG&E Response</u>:

SDG&E fully supports the authorization of bridge funding to allow current demand response programs to continue, as is, while the Commission contemplates changes to the structure of the overall demand response portfolio. However, SDG&E cautions that, with the variety and complexity of the issues before the Commission and the parties, a one-year bridge may be insufficient, and urges the Commission to consider a lengthier bridge period, should it be determined that one year is inadequate.

SDG&E respectfully urges the Commission to clarify the nature and extent of any adopted bridge year, and to authorize an additional year of funding for 2015 equivalent to one-third of the authorized funding for the 2012 – 2014 program cycle. And if the bridge funding is to exceed one year, the additional time period should reflect a similar level of funding.

Some additional issues also need to be addressed:

- Will the bridge year funding include any remaining, un-spent funding previously authorized for the 2012 – 2014 demand response program cycle? If so, what mechanism would the IOU's be required to utilize to seek additional funding to carry into the bridge year(s)?
- Will the Commission modify or relax existing budget fund-shifting rules established by D.12-04-045 to apply during the bridge year(s)?

R.13-09-011 raises a host of ambitious and likely controversial issues and activities to be addressed in the coming months, and the preliminary schedule only establishes an expected due date for the Bridge Funding Decision as "2nd Quarter 2014." With the Pre-Hearing Conference set for October 24, 2013, and workshops to be held in the coming weeks and months, there is currently a great deal of uncertainty as to the timing and the manner by which the issues raised will be addressed and resolved.

In addition to the issues raised by R. 13-09-011, SDG&E notes that other significant issues are still pending before the Commission which will have an impact on the structure and potential funding of future demand response programs. These issues include pending revisions to the cost-effectiveness protocols utilized to evaluate proposed demand response programs; resolution of pending issues associated with the establishment of Rule 24 governing the participation of third-party demand response providers in the CAISO wholesale market; adequate implementation time following the Commission's adoption of the final version of Rule 24; and the actual implementation of the CAISO's wholesale market. There is a reasonable likelihood that these issues will not be fully resolved in time for the next DR program cycle application to be filed with just a one-year bridge period.

It is critical to the success of the demand response program portfolio that programs continue uninterrupted during a period of transition, in order to maintain customer enrollment and engagement. Breaks in program funding, uncertainty as to the availability of funding, concerns over the structure of the demand response portfolio, or other types of program and/or funding uncertainties, would create a heightened risk of losing existing levels of customer enrollment and DR performance. Critical demand response program activities such as customer awareness, education and outreach, along with program evaluation, measurement and verification should continue to assure the viability of the demand response program portfolio, and also to evaluate program successes.

D.12-04-045, Ordering Paragraph 85, establishes the timing and requirements for the IOU's to file their upcoming 2015 – 2017 DR Program and Budget Applications. Pursuant to that decision, these Applications would be due no later than January 31, 2014; the IOU's joint request for a 6-month extension of the required January 31, 2014 filing date was granted by letter dated September 18, 2013, from the Commission's executive Director, Paul Clanon. Furthermore, Ordering Paragraph 85 requires the IOU's to meet with Commission Staff no later than March 30, 2013 to discuss the 2015 – 2017 DR Program and Budget Applications (SDG&E staff met with Energy Division staff on March 15, 2013), and that Commission Staff provide a guidance document to the IOU's and other stakeholders no later than September 1, 2013 "…to assist the Utilities in developing improved and thorough 2015-2017 DR Program and Budget applications." SDG&E respectfully urges the Commission to adopt appropriate modifications to these requirements when it issues the anticipated Bridge Funding decision in the 2nd Quarter of

2014, and reiterates again the concerns that not all the issues may be addressed and resolved in time to render a one-year bridge adequate.

2. Do you support the objectives of the staff proposed pilots? Please provide alternative suggestions for Utility pilots in 2015 if you do not.

SDG&E Response:

Although SDG&E strongly supports the objectives of the staff proposal for demand response pilots for 2015, we believe duplicating the IRM2 pilot would prove to be redundant. To eliminate the duplication of effort, SDG&E suggests a lessons learned sharing mechanism between SDG&E and PG&E after the pilot period. Additionally, SDG&E believes that the some of the objectives of the IRM2 pilot, including the building of third party capabilities to bid into the CAISO PDR will be best addressed as part of the ongoing Rule 24 proceedings. In addition to the proposal for a Pilot to increase customer responsiveness to dynamic electricity rates, SDG&E respectfully suggests additional alternatives to meet the objectives of IRM2 in our territory:

- Bidding a portion of the Capacity Bidding Program as a PDR into the CAISO market in 2015.
- Test the feasibility of using behind the meter storage for demand response.

3. In Section II.C.4 of the staff proposal, Energy Division staff recommends that SCE and SDG&E will both need budgets that are 75-80 percent of PG&E's current Intermittent Resource Management Phase 2 (IRM2) budget ($2.458 million) to be able to effectively replicate the IRM2 pilot in their territories. Do you agree with that assessment? If not, what would be an appropriate budget for SCE and SDG&E to replicate the IRM2 pilot in their territories? Are there ways to modify the allocation of specific costs of the pilot such that SDG&E and SCE will not need as much as 75-80 percent of PG&E's budget?

SDG&E Response:

As suggested in the answer to question #2 above, SDG&E proposes a different approach. We believe that bidding a portion of Capacity Bidding Program into the CASIO market as a PDR can be funded with the budget allocated for the program plus an additional allocation of $200,000.

We are seeking $810,000 to fund a behind the meter storage pilot (Attachment A). Additionally we are seeking $1 MM to fund our proposed behavior program pilot (Attachment A). Furthermore, we suggest that all pilots and programs designed to further the wholesale market participation in California be placed under the same program category to ease fund shifting process as they arise.

4. Do you agree with the proposed budgets for the other pilots in the attached staff proposal?

SDG&E Response:

San Diego Gas & Electric proposes a different approach with different budget allocations as described in the answer to question #3.

5. In D. 13-04-017, the Commission authorized SCE to shift $8.7 million in unspent funds from its Air Conditioner (AC) Cycling Program to fund various improvements to its Demand Response portfolio. It is Energy Division's understanding that SCE has approximately $8 million in unspent funds in its AC Cycling Program. Do you support shifting remaining unspent funds from SCE's AC Cycling Program to support the pilots described in the staff proposal? The same decision authorized SDG&E to shift $1.7 million from its 2012-2014 demand response portfolio to fund various improvements to its Demand Response programs. Do you support additional fund shifting from SDG&E's 2012-2014 demand response portfolio to fund the pilots described in the staff proposal?

SDG&E Response:

The question assumes that the current adopted program budgets will have excess funds remaining at the end of the 2012 – 2014 program cycle to be carried forward into a bridge year and then those funds can be shifted from an existing program budget(s) to fund the pilots described in the staff proposal. The conclusion that there will be excess funds has yet to be validated. With that qualification, SDG&E responds as follows:

SDG&E supports the concept of additional budget fund-shifting when and where that process will work. However, the existing limitations and restrictions that govern budget fund-shifting adopted by D. 12-04-045 would seem to limit budget-shifting. With clarifications and/or possible modifications to the budget fund-shifting guidelines, SDG&E believes that additional budget fund-shifting could be a potential source of funding for the pilots described in the staff proposal or the alternatives suggested by SDG&E herein.

As noted above in the response to Question 1, the Commission must first define the nature of the bridge-year funding, and clarify whether or not the funding available in a 2015 (and perhaps beyond) bridge year amounts to an additional year of authorized funding, is limited to only the remaining authorized but unspent funding, or some other definition. Determining the precise nature and amount of funds to be made available during a bridge year is of paramount importance to the determination of whether additional budget fund-shifting may be a source of funding for the pilots described in the staff proposal.

D. 12-04-045 adopted a total 2012 – 2014 DR program portfolio budget for SDG&E of $65.8 million (see D. 12-04-045, page 195 - - note that the figure shown for SDG&E's total budget of $61.8 million was corrected by D.12-08-023 to the correct figure of $65.8 million, which aligns with that same figure as set forth on page 2 of D.12-04-045). SDG&E's total budget was broken out into the 10 distinct budget categories adopted by D. 12-04-045, with these categories each containing a limited number of adopted programs and budgets - - some categories containing just a single program, with no categories containing more than three programs. SDG&E presumes that, if the Commission adopts and directs the implementation of any of the pilots described in the staff proposal, those programs would be inserted into Budget Category 5—Pilots. If that is to be the case, SDG&E's Budget Category 5—Pilots, already reflects the two pilots adopted by D.12-04-045, with a combined 2012 – 2014 program cycle budget of $1.6 million. SDG&E has not yet completed either of the two adopted pilots, so any consideration of whether or not any portion of those adopted budgets might be available to fund the pilots described in the staff proposal is premature. Furthermore, remaining budget funds will be significantly less than the total adopted budget of $1.6 million, an insufficient level of budget funds to shift.

The availability of remaining funds within other budget categories to shift to fund the pilots described in the staff proposal would be subject to several considerations, including the fact that D. 13-04-017 authorized a budget fund-shift of $1.7 million for SDG&E to fund the adopted program augmentations for 2013 – 2014, and authorized $1.6 in new funding to restore portions of budget fund-shifts that had previously been authorized by Resolution 4502-E to fund certain DR program enhancements in response to the San Onofre Nuclear Generating Station (SONGS) outage. In addition, both Resolution 4502-E and 4511-E authorized budget fund-shifting during 2012. As a result, the flexibility that may exist, or that had during 2012 and 2013 existed to potentially fund future pilots, has been utilized to a great extent already so no funds may be available in 2015.

Subject to the availability of potential additional funds to be shifted, D.12-04-045 previously adopted the following general guidelines governing budget fund-shifting (see D.12-04-045, pages 26 – 28):

a. Adopted DR programs are organized into the specific 10 budget categories set forth in the decision;
b. Utilities may shift funds authorized in D.12-04-045 within a budget category but shall not shift the funds between the 10 categories. (SDG&E was granted a

limited exception to this provision, applicable to DR program customer incentives, and permitted to shift incentive funds between budget categories through the submittal of a Tier 2 Advice Letter. As noted in response to Question 6 below, all of the customer incentives associated with SDG&E's DR programs are not contained within the budgets adopted by D.12-04-045; in particular, the customer incentives for the Peak Time Rebate Program are not included in these budgets).

c. Utilities may shift up to 50 percent of a program's funds to another program within the same budget category, with proper monthly reporting. Utilities are required to submit a Tier 2 Advice Letter before shifting more than 50 percent of a program's funds to a different program within the same budget category.

d. If a shift of more than 50 percent of a program's funds is necessary as part of the implementation of a new program, the fund shift should be included in the application for approval of the new program.

e. Utilities may not shift funds within the "Pilots" or "Special Projects" category without a Tier 2 Advice Letter submission.

The existence of these budget fund-shifting guidelines limits the flexibility and capability for additional budget fund-shifting to be utilized as a source to fund the pilots described in the staff proposal, absent changes, modifications or exceptions granted by the Commission.

6. In D. 13-07-003, the Commission directed SCE and SDG&E to transition their Peak Time Rebate (PTR) programs to be an opt-in program (in order for participants to be paid a monetary incentive for load reductions) by May 2014. This transition will enable both utilities to save significant incentive funds for the program. Energy Division's May 1, 2013 Lessons Learned Report estimated that SDG&E paid $10.1 million in 2012 PTR incentives to its residential customers, yet 94 percent of the incentives paid yielded no significant load reductions. SCE paid $27 million in 2012 PTR incentives, and 95 percent of incentives were paid to customers who were not

expected to or did not reduce load significantly. Do you support the Commission using the expected savings from the PTR program incentives to fund the pilot activities described in the staff proposal?

SDG&E Response:

Unfortunately, this question is premised on a faulty assumption. While the references to D. 13-07-003, and the upcoming transition of the PTR program to an opt-in program are accurate, the assumption that reduced spending on PTR program incentives would free up funds that could be used to fund pilot activities is not accurate. For SDG&E, there are no adopted PTR program incentives reflected in any of the DR program budget categories adopted by D.12-04-045 for the 2012 – 2014 DR program cycle. As such, there are not any "expected savings from PTR program incentives" available through any adopted DR program budget that could be used to fund pilot activities.

SDG&E's PTR program was first authorized and approved by the Commission in D.08-02-034, in SDG&E's 2008 General Rate Case. The design and funding of the PTR program incentives are a rate design issue and part of the revenue requirement and rate design addressed through the General Rate Case, and the incentive dollars are NOT included within any of SDG&E's proposed demand response program budgets addressed in its demand response programs and budget applications.

D.12-04-045 most recently adopted SDG&E's demand response programs and budgets for the 2012 – 2014 program cycle. As set forth in the adopted SDG&E budget table on page 194 of D.12-04-045, in Budget Category 2, the total adopted DR program budget for the PTR program is $485,000. This figure clearly does NOT include any provision for PTR program incentives. The discussion set forth at pages 90 through 95 of D.12-04-045 with respect to the PTR program is focused on the appropriate level of marketing and outreach for the PTR program, and in the discussion on page 131, D.12-04-045 the Commission states: "We approve

SDG&E's Peak Time Rebate Program and authorize a budget of $0.485 million to administer the program."

III. CONCLUSION

SDG&E appreciates the opportunity to submit responses to the questions the Commission has posed in this proceeding and looks forward to providing input on the other issues the Commission has raised in future phases of this proceeding.

Respectfully submitted

By *__/s/ Thomas R. Brill__*

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ATTACHMENT A

SDG&E PROPOSED PILOTS FOR 2015

<u>Pilot 1: Behind the meter storage</u>

Program Design: Provide incentives for advanced, auto DR enabled, dispatchable behind the meter battery storage. The Battery capacity will be divided into two customizable customer specific portions to serve:

- Deliver demand charge savings for the customer
- Reliable Demand Response resource for the utility

The customer can leverage the existing SGIP to lower the cost of the battery. SDG&E will provide incentives based on the amount of battery capacity the customer is willing to serve as a "must offer" to the utility year round.

Customer will receive TBD capacity payments on a monthly basis and be entitled to TBD energy prices when their batteries are dispatched.

SDG&E will leverage existing Auto DR functionality to dispatch the resources as needed. For the purpose of the pilot, up to 30 customer sites will be selected.

Objectives:

The project aim is to meet some of the objectives stated in the 2013 DR OIR:

- *Provide additional capacity to the SONGS affected areas*
- *Development of a flexible demand resource*
    - *Technology to enable DR to act as a flexible resource*
    - *Accurate forecasting of load curtailment*
    - *Develop accurate load control strategies*
- Enable development of a DR portfolio that can provide flexible capacity to the CAISO

Budget

The proposed budget is based on a total of 1 MW hour of battery capacity based on an X-hour daily must-offer during the year.

	2015	
Incentives		
	Battery cost ($200/kW)	*$200,000*
	Capacity Payments ($360/kW year)	*$360,000*
Third party contracts		*$75,000*
Program Administration		*$100,000*
Systems		*$75,000*
Total		*$810,000*

Evaluation, Measurement and Verification plan

Although the EM&V plan still could benefit from fine tuning, at a high level, participants will be evaluated on the following:

- Ability to provide fast acting, reliable demand response
- Feasibility of bidding advanced storage into CAISO markets
- Viability of dual purpose advanced storage system
- Feasibility of using Open ADR for utility controlled load

Pilot 2: Proposal for behavior programs for customer on dynamic rates

Goal Per Order Institute Rulemaking: Pair a behavior pilot with TOU and CPP rates to identify the mix of strategies that enable small commercial customers to be successful on the rates so that a greater number of customers stay on CPP, save money by being on it and reduce load when CPP events are called.

Specific objectives and goals for the pilot as noted in the OIR Attachment A.

Target: customers on TOU and CPP

Goal 1: customers know when they are in a peak period and know that they are paying (much) more for electricity than they would during off peak or partial peak hours

Objective 1: Increasing customer awareness when peak hours are occurring. For example,

 Test different methods of communication to remind customers when a higher price period starts and ends.

 Commission decision should allow for flexibility so that pilots can be adapted to use the best communication channels to reach customers in 2015 (for example- maybe smart phone apps will be a great tool for communicating, but maybe there will be something else by 2015)

Goal 2: customer make adjustments to business practices during peak hours to use less energy

Objective 2: Use feedback and social norms to encourage behavior change. For example,

- Provide feedback loops for customers so they understand how they did during a CPP ev
- Identify discretionary load that customers can shift into off-peak
- Interview customers with the best load profile to understand how they achieve it and se practices
- Consider a rewards program for customers doing well

For customers on CPP

Goal 3: Identify types of businesses that could most utilize and benefit from automated technologies, or test methods to encourage adoption and installation of devices

Objective 3: Introduce automated technologies that shift or reduce load during peak hours, and identify how Objective 1 and Objective 2 work in concert with customers that have enabling technologies installed at their business

- There may be opportunities for utilities to pair Objective 1 & Objective 2 with technolo for some small businesses
- SDG&E- will deploy Programmable Communicating Thermostats in 2014

The *small commercial customers on dynamic rates pilot* will target small commercial customers on TOU or CPP rates. Even though this target has not been a focus in the past, it is recognized the small commercial customers collectively could contribute to peak load reductions worth pursuing. Planned marketing campaigns for small commercials customers switching to new rates will address short-term outcomes. This pilot will attempt to expand on the short-term strategies and encourage long-term behavior change for targeted customers.

Goals:

1. Make customers aware of when they are in peak periods and paying more for electricity

2. Communicate to customers to make adjustments to business practices during peak hours to use less energy

3. Customers on CPP: identify types of businesses that could most utilize and benefit from automated technologies, or test methods to encourage adoption and installation of devices.

The Smart Pricing Program team will already be reaching out to small commercial customers in 2013-2014 as outlined in their General and Targeted Communications efforts. As part of this pilot SDG&E will leverage from their plan to complement communication between SDG&E and customer.

The Pilot will primarily focus on communication methods that clearly articulate when customers are paying higher electricity costs and are in peak periods, timely feedback when responding to called events and adoption of technology devices. This may include, but is not be limited to Programmable Communicating Thermostats, devices that display energy use, SmartPhones/Tablets, Automated Devices, SDG&E's My Account, Radio or TV ads. SDG&E will segment the small commercial customers into sub segments that are most impacted by the transition.

Objectives:

- Increase awareness when peak hours are occurring
- Use feedback and social norms to encourage behavior change
- Introduce automated technologies that shift or reduce load during peak hours

To accomplish these objectives SDG&E proposes to utilize several test groups below.

<u>Group A:</u> Install Programmable Communicating Thermostats with built in displays into at least 600 small businesses

<u>Group B:</u> Install automated devices such as A/C cycling, pool pump automated shut-offs, lighting control devices into at least 700 businesses. (May have sub groups that display data real-time, 24 hours late, 48 hours later and no data at all.)

<u>Group C:</u> Comparison reports of usage for business with normal usage and personal usage. Recruit at least 10,000 businesses.

SDG&E will have several pilots including behavior and enabling technologies lessons learned by end of 2014 to improve from for this pilot to start in 2015. Costs and impacts of this pilot will be tracked to understand feasibility of deploying on a larger scale. All lessons learned will be discussed and documented.

Specific methodologies to test the cost-effectiveness of the pilot and the EM&V plan is to be determined.

Budget: $1.58 million to fund this pilot that will include automated devices for 2015.

Group A: Recruit and install Programmable Communicating thermostats with built-in displays for 600 customers. Estimated cost of two devices per customer $450, install $180, recruit customer $115. **Estimated cost $447,500.**

Group B: Install automated devices with shut off capability including A/C cycling, pool pump automated shut-offs, lighting control devices. A/C device $60; pool pump w/ built in device $1,500; lighting control devices (two per customer $100). Install and recruit $400. Total of 500 customers at $2,060 cost per customer for all three devices **$1,003,000.**

Group C: Estimated cost to recruit and send reports to 10,000 customers **is $108,000**. (based off residential behavior program).