**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 | R.13-09-011<br>(Filed September, 2013) |

**COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)**
**IN RESPONSE TO RULEMAKING 13-09-011**


ANN KIM
SHIRLEY A. WOO
MARY A. GANDESBERY

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105
Telephone: (415) 973-2248
Facsimile: (415) 973-5520
E-Mail: saw0@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY


Dated: October 21, 2013

## TABLE OF CONTENTS

**Page**

**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 | R.13-09-011 (Filed September, 2013) |

## COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) IN RESPONSE TO RULEMAKING 13-09-011

## I. INTRODUCTION

Pursuant to the Presiding Administrative Law Judge's ruling on October 22, 2013 directing Pacific Gas and Electric Company (PG&E) to resubmit its October 21, 2013 comments, PG&E respectfully submits its comments and answers to the six questions posed in Rulemaking (R.) 13-09-011, *Order Instituting Rulemaking to Enhance the Role of Demand Response in Meeting the State's Resource Planning Needs and Operational Requirements* (Rulemaking).

## II. PG&E'S RESPONSES TO THE QUESTIONS PRESENTED IN THE RULEMAKING

PG&E submits the following responses to the six question presented on pages 22 to 23 of the Rulemaking. These responses are based on information currently available to PG&E.

### A. BRIDGE FUNDING (Q1)

***Question 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?***

PG&E supports a bridge-funding period to allow time for the Commission to address the issues in this proceeding while ensuring stability in the current programs. These programs enable many types of customers of all sizes and types to participate in DR. Continuing to get value from these programs and to improve them to make them more viable for more customers is extremely important. Since there are many issues raised in the Rulemaking, PG&E believes that it is critical to have a schedule and set milestones to ensure the best use of ratepayer funds. As it laid out in its PHC Statement, PG&E proposed that the Commission (1) approve a bridge-year funding for 2015, (2) allow the IOUs to file an application in January 2015 to continue their retail programs, and (3) implement a process in which the DR market players have the ability to adapt to Commission's Decisions in a timely and cost-effective manner that supports the evolution of DR.[1/]

PG&E requests the following provisions in the bridge-funding decision:

- **Budget and Cost Recovery:** PG&E requests cost recovery for a 2015 DR program budget that is equal to the 2014 DR program budget, including pilot programs. PG&E's 2015 budget may need to be augmented by $2.9 million, which is the amount associated with the associated employee benefits burden for DR that historically has been authorized in the General Rate Case, if the Commission approves a partial settlement agreement among PG&E, the Utility Reform Network, and the Marin Energy Authority filed September 6, 2013 in A.12-11-009 and I.13-03-007. The proposed settlement would increase PG&E's recovery in rates for DR in an amount sufficient to fund employee benefits and burdens for those PG&E employees who work on DR programs, rather than recovering those amounts in the GRC. Maintaining the same level of funding as authorized for 2014 plus the associated benefits burden will ensure that existing programs continue through the bridge period uninterrupted.

  If a bridge period is authorized, it should be treated as a fourth year of the current program cycle, rather than as a stand-alone year. Unspent funds in the current portfolio cycle should continue to be available for use by the utilities in 2015 and any unspent funds should be used to offset the revenue requirements for program years 2016 and beyond. This is appropriate due to the late start on many of PG&E's DR programs from the delay in issuing

1/ The IOUs' next application would presumably be for 2016 through 2018, pending a reassessment by the Commission as the Track 3 issues are resolved.

the 2012-2014 program budget decision, and delays in Energy Division approval of PG&E's pilot programs which have held up program implementation. To the greatest extent possible, pilots should be extended into 2015 and participation would thus be expanded to take advantage of the additional year.

- **Budget Flexibility:** With the many issues to consider during this proceeding, PG&E requests budget flexibility to make it easier to validate various concepts and evaluate potential benefit streams. As such, all fund-shifting rules should be eliminated with the exception of those governing the Special Projects category, which includes DR-HAN Integration and the Permanent Load Shifting (PLS) program. The Commission prohibits fund shifting within the Special Products category and fund shifting from Special Projects to other budget categories.[2/] In D.12-04-045, the Commission argued that this restriction will allow them "to properly monitor pilots and special projects to determine their efficacy and viability as a future full time program".[3/] PG&E agrees with this statement for special projects, but given the Commission's desire to expand the DR Pilots and the impact of moving the benefits burdens from the GRC to the DR revenue requirement, PG&E believes that the fund shifting rules should be relaxed. In fact, greater flexibility should be afforded to better facilitate the DR Pilots should the utilities decide to expand the scope of their DR Pilots.
- **Intermittent Renewables Management 2 Pilot (IRM2):** PG&E would like authorization to record incentive payments for this program in its two-way balancing account within the Demand Response Expense Balancing Account (DREBA). This pilot program represents a high priority for PG&E because it provides third-party DRPs an opportunity to gain experience participating in the wholesale energy market with limited financial and business risk. Having the flexibility to record incentive payments in the two-way account rather than being constrained by a defined incentive budget will allow PG&E the flexibility to work with

2/ D.12-04-045 Ordering Paragraph (OP) 4.

3/ D.12-04-045, Discussion on p. 28.

any DRP interested in participating.

- **Aggregator Managed Portfolio (AMP) Program:** PG&E requests authorization to extend its current AMP contracts through the bridge period. The AMP program provides a significant amount of cost-effective DR and ensures the continued engagement of the associated third-party DRPs. This is a critical part of providing aggregators and customers the certainty needed to maintain these important resources. This extension should not include new features (i.e. fast, flexible, PDR, etc.) that will take more time to fully define and evaluate.
- **Cost Effectiveness:** PG&E requests that no cost effectiveness test be required for 2015. The cost effectiveness of PG&E's 2012-2014 DR programs has already been litigated. Accordingly, any extension of these programs should be based on the Commission's original finding that they are sufficiently cost effective to be approved. PG&E requests that the Commission address the cost effectiveness issues affecting the retail DR programs in time for the utilities' next applications.

## B. PILOTS (Q2 – Q5)

PG&E supports the Commission Staff's general approach to pilots in the Rulemaking. There may well be significant new opportunities for supply–side ("wholesale") DR to convey benefits to customers and the electrical grid just as existing demand–side ("retail") DR currently conveys benefits.[4/] However, creating the opportunities does not ensure that DR market participants will use them, or that they will be cost effective. Further exploration is required around the real value of these DR-related benefits, as well as the ability and willingness of DR market participants (including customers and DRPs) to unlock them. This exploration should happen prior to any investment of significant time and resources in the development of commercial programs and infrastructure designed to enable these benefit streams.

4/ A detailed comparison of these two ways of capturing DR value was presented at the October 16, 2013 DR workshop by PG&E (attached).

PG&E recommends the timely implementation of a focused set of pilots to validate the potential benefits of supply-side DR, along with work to identify and resolve cost-effectiveness methodology and inputs for wholesale DR. A regulatory decision on whether to pursue full-scale implementation would follow. PG&E's IRM2 Pilot is a good example of this approach and is already slated to evaluate how to integrate DR with the CAISO energy markets. The IRM2 Pilot also contemplates an expansion to more advanced resource types, including ones that provide the CAISO with greater flexibility for renewable integration[5/]. Once it has been conclusively determined that there is a sufficient interest and value in a particular pilot to warrant creating a full-scale, cost-effective program, the IOUs can create a full-scale DR program.

In the future, as "supply-side" pilots validate various benefit streams, the DR cost-effectiveness methodology should be updated to reflect these values. Doing so will enable the utilities to incorporate relevant concepts of these pilots and realize the value for the IOU DR programs (e.g., add a program that meets flexible RA requirements).

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

<u>Pilot Proposal for IRM2 Enhancement in Northern California:</u> PG&E supports the continuation of PG&E's Intermittent Renewables Management 2 (IRM 2) Pilot Program. However, as described in the OIR, the changes proposed would appear to simply amount to a capacity payment to Marin Energy Authority (MEA) or any Energy Service Provider (ESP) for any wholesale DR it can provide. By not requiring MEA or other ESPs to use PG&E's infrastructure, PG&E will have no way to confirm that MEA is bidding in a manner consistent with the requirements of the pilot.

That said, the added year will provide PG&E the opportunity to put into action the lessons learned during the 2012-2014 phase of the current version of the pilot, and provide

---

5/ See, PG&E slides from the October 16, 2013 DR workshop on IRM2 pilot for details on how these efforts will advance DR (attached).

valuable experience for customers, aggregators, technology vendors, energy service providers, community choice aggregators and the CAISO in working with wholesale DR. In addition, PG&E would like to add the objective of demonstrating DR services that would help during periods of over-generation (i.e., load-increasing DR) of intermittent renewable resources. To meet this objective, PG&E would instruct customers to consume more energy when certain CAISO market triggers (to be determined) indicating over-generation are met.

While the IRM 2 is a well-thought out "supply-side" pilot, in its October 14, 2013 PHC statement, the CAISO proposed that the Commission develop rules for entities under Commission jurisdiction to participate in a voluntary auction for DR for the 2015 RA year. (CAISO PHC Statement, p. 2) The CAISO proposed pilot is vague and does not address how it would lead to DR being integrated into the wholesale market. Both the IRM 2 and the CAISO proposed pilot use of bundled load, however, would be subject to Rule 24, submitted in a recent advice letter for all three utilities.[6/]

Pilot Proposal for Behavior Programs for Customers on Dynamic Rates: As a general statement, the description of the proposed pilot program will need to be clarified to ensure that the goals and objectives are met. Because PG&E has already transitioned a substantial number of its small and medium business (SMB) customers to default time-of-use (TOU) rates, the Commission should clarify whether the pilot programs in the OIR are applicable to SMB customers transitioning to PDP on a default, opt-out basis, (beginning in November 2014 for PG&E) or to customers on TOU or PDP.

**Goal/Objective 1:** PG&E is supportive of Goal and Objective 1. PG&E is currently working toward this goal and objective as part of the implementation of its TOU and CPP rates. The CPP rates include the SmartRate program for residential customers and Peak Day Pricing (PDP) for

---

6/ To view the Advice Letter, AL 4298-E, et. seq. go to http://www.pge.com/tariffs/ and click on Advice Letter Index from the list, then click on the box for 2013 for Electric, then scroll down and find the advice letter. In the alternative, you can click on this hyperlink: http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC_4298E.pdf commercial and industrial (C&I) customers. PG&E has established metrics and a reporting process to track customer understanding of these programs. (See, D.10-02-032, OP 15.) Additionally, in the 2014 GRC I, PG&E asked for funding for maintenance of PDP customers to support them after they have transitioned to their new dynamic rate as well as the awareness efforts of this transitioned group that are specifically tied to the established metrics noted above.[7/] Any additional funding approved by the Commission in the Bridge Funding Decision could be used to build on existing or add new pilots to discover other ways to help customers who have transitioned to PDP. However, the $750,000 proposed budget would not be sufficient to conduct a meaningful pilot program and study.

**Goal/Objective 2:** PG&E is supportive of Goal and Objective 2. PG&E is currently implementing a two-phase pilot program to test how provision of information as a service will impact awareness of, and selection of PDP rates for SMB customers subject to the November 2014 default date. Phase 1 of the pilot will begin in Q4 of 2013 and is expected to conclude in Q1 of 2014. In Phase 1, PG&E plans to send customized, informational emails to 20,000 – 28,000 SMB customers to invite them to make a decision related to participating in PDP (enroll/opt out). These customized emails will frame the PDP program in terms of the customer's energy costs and introduce program concepts including bill protection, event days, charges and credits and curtailment benefits. Phase 1 will test whether a customized email campaign helps build awareness of the PDP transition and is able to lead customers to a decision regarding their participation in PDP; specifically whether to enroll earlier than November 2014 or opt out of the impending transition. Phase 2 (Q1 2014) of the pilot will support those customers who choose early enrollment in PDP and will experience their first events in the 2014 season. Phase 2 will test whether customized pre-event day information, event-day tips and post-event day feedback delivered via email can provide greater program engagement and

---

7/ The extension of previously authorized funding for outreach and education of small and medium business customers during their initial default to TOU and CPP has been requested in a Petition to Modify D.12-02-032 and D.11-11-008, filed on or about March 13, 2013 in A.09-09-022.

communicate cumulative success for the customer and greater load shed for PG&E. PG&E will use participating customers' 15-minute interval meter data to provide them with a pre-event day email showing the predicted load curve, PDP costs and potential savings from curtailment along with recommended curtailment strategies to employ. Post-event feedback will demonstrate results in both load and costs. This pilot is currently being funded through the Dynamic Pricing budget. The results of the pilot and available funds will help inform communication strategies for those customers who will be transitioned to PDP in November 2014 and experience their first PDP season beginning May 1, 2015.

**Goal/Objective 3:** PG&E is supportive of Goal and Objective 3. In 2012, PG&E initiated the mandatory default to TOU rates of those SMB customers (C&I customers with a peak electric demand of less than 200 kW) with at least 12 months of interval data. In November 2013, the second wave of SMB customers will transition to TOU rates; in November 2014, the remaining SMB customers will make the transition. Starting in November 2014, SMB customers that have been on a TOU rate for at least two years will be defaulted onto the PDP program.

PG&E has identified a need to develop enabling technologies for this group of SMB customers that will move to PDP in order to help them participate in PDP by capturing the benefits that were intended with the dynamic pricing programs. In 2013, PG&E started developing an emerging technologies assessment to test advanced programmable controllable thermostats (PCT) that are designed specifically for SMB customers that will improve their ability to respond to a PDP event. The objectives of this emerging technologies assessment are:

- Identify if SMB customers will find this technology useful in operational efficiency, energy savings and DR;
- Demonstrate that a mid-stream channel (e.g., HVAC contractors) can be a successful way to introduce DR enabling technologies to SMB customers;
- Help SMB customers adapt to TOU and PDP rates by providing a tool that better manages their HVAC energy use; and
- Evaluate if the two-way communicating PCT can provide energy efficiency (EE) and DR benefits, and measure the associated load impact and energy savings.

PG&E will continue to provide updates on this DR emerging technologies assessment to the Commission in the semi-annual Demand Response Emerging Technologies Report and the Peak Day Pricing Semi-Annual Education and Outreach Assessment Report.

***Question 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 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?***

PG&E is unable to accurately assess the staff proposed budget for SCE and SDG&E.

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

PG&E supports the proposed program budget for the Pilot Program for Behavior Programs for Customers on Dynamic Rates. The objectives will probably require both a process evaluation and a load impact evaluation, so if the intention of the pilot is to support customers on PDP in summer 2015 then PG&E will need to access the budget by Q2 2014. This will allow enough lead time to conduct an RFP, select a consultant, and set up the control experiment(s) adequately before the November 2014 default in order to evaluate different methods of communication and customer behavior in the 2015 event season. The specific budget required to implement any pilot will be largely dependent on the size and complexity of the specific pilot. The Rulemaking states that the pilot budgets would exclude any technology or evaluation. (Rulemaking, Attachment A, p.15) PG&E requests clarification on how these aspects of the pilot budgets would be funded, since EM&V is expected to cost up to $450,000.[8/]

As a separate matter, Goal and Objective 3 are being addressed through the DR ET Pilot Program in 2014. Based on the results of this pilot, PG&E plans to roll out this technology to all of its SMB customers using Auto DR program funding in 2015 and beyond. In the event that the

---

8/ Attachment A, Staff Proposals, of the Rulemaking, states at page 15, under New Pilot Budgets for 2015, "Minimum budget of $500,000 per utility, but that would exclude using any kind of technology or evaluation." Consequently the budget authorized needs to be increased to cover evaluation and measurement work for the pilots in the Staff Proposals for behavior programs involving dynamic rates.

CPUC approves Auto DR funding for the bridge year(s), there is no separate funding required for Goal/Objective 3 so that the proposed pilot program budget could be directed to meeting Goal/Objective 1 and Goal/Objective 2.

***Question 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?***

PG&E respectfully declines to respond to this question because it appears to be directed only to Southern California Edison Company and San Diego Gas & Electric Company.

## C. PTR INCENTIVES (Q6)

***Question 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 DR 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?***

PG&E does not currently have a PTR program, but it does not support the Commission staff's idea of using the "expected savings" from the PTR program incentives to fund the pilot activities described in the staff proposal. The PTR incentive is not funded by its own revenue requirement. Therefore, there is no authorized incentive amount being collected in rates that can be used to fund other activities. In essence, the premise of the question is incorrect in assuming that reducing PTR incentives will result in program budget savings that could be used to fund the proposal pilot programs. Moreover, PTR has not been authorized for PG&E in either a default or opt-in form.

The PTR incentive consists of an electric rate discount that applies to participants when they reduce their usage below a defined customer-specific reference level (CRL) during operating hours on event days. The CRL is calculated based on the average of the highest usage on a specified number of previous days prior to the event. PTR credits are earned to the extent the customer's usage is less than the applicable CRL during a specific PTR event. However, it does not matter whether the lower usage 1) simply comes from the customer's normal activities, or 2) results from the customer affirmatively reducing usage below what it would have been in respond to the price signal.

When the customer's usage is below its CRL with normal activities, the customer's PTR incentive is a structural benefit, i.e. it results from the structure of the PTR program, without any customer response. This creates a shortfall in the utility's collection of generation revenue because these incentives resulted in lower revenue accruing to the generation balancing accounts. Through the normal function of generation balancing accounts, this undercollection would be paid by customers through increased rates in the following year. Therefore, if an opt-in PTR program is created, it may result in a smaller undercollection, but in no way results in a surplus of revenue that can be used for other purposes.

Although PG&E made its PTR proposal in the 2010 Rate Design Window proceeding (A.10-02-028), PTR has not been approved for PG&E yet. PG&E has urged that PTR should await the results of the full rollout to SDG&E's customers as well as the Commission's determination on a long-term vision for residential rates in A.10-02-028.[9/] PG&E is still waiting for a proposed decision in this proceeding, which may or may not approve PTR for PG&E.

Question 6 mistakenly assumes that when PTR for SCE and SDG&E customers becomes an opt-in program, instead of a default mandatory program, customers who produce no significant load reductions in response to PTR would not opt in and the incentives they would have received will be saved. PG&E calls PTR customers that do <u>not</u> reduce load during a PTR

9/ See, A.10-02-028, PG&E Reply Brief, filed June 7, 2012.

event "structural savers" and the incentives paid to them "structural savings" because the customers benefit from PTR without actually responding to the pricing signal.

When PTR is an opt-in program, there is nothing to stop structural savers from opting in. Opting in would be especially attractive to structural savers because PTR provides a potential benefit through the incentive, without any risk of an increase in the participating customer's bill if the customer does not respond to the PTR price signal because the PTR rate is designed to be revenue neutral. Regardless of whether PTR is opt-in or default opt-out, there will still be structural savers and structural savings. However, although as noted above, under an opt-in structure they may be fewer and lower than under opt-out PTR.

When PTR incentives for structural savings are paid to structural savers, PG&E does not experience a cost reduction and would instead experience a revenue undercollection (that is, revenue collected is less than cost) in the generation balancing account. As a result rates would be increased in the following year to collect the undercollection. PG&E's testimony in A.10-02-028, (Exhibit PG&E-1, page 2-5, lines 11 to 18) explains how PTR incentives, or bill savings, are handled:

> The credits [PTR incentives] provided to customers will be reflected as reductions to generation charges. Typically, generation revenue is applied to the generation balancing accounts where revenue and cost (or adopted revenue requirement) are compared. Under- or over-collections in these accounts would then be recovered or returned to customers by adjusting generation rates paid by all bundled customers in the following year. PG&E proposes this same treatment for variation in generation revenues and costs that result from demand response efforts undertake in response to PTR events.

In the next paragraph of its testimony, PG&E maintains that such undercollections should be collected only from residential customers.

> Bill savings attributable to structural savings, however, do not generate real cost savings. If managed in the existing system of generation balancing accounts, the cost of bill savings attributable to structural benefit would result in a generation undercollection and be paid by all bundled customers. These costs [structural savings] are more appropriately allocated only to the residential customer class where the PTR program is offered. To remedy this potential inequity, PG&E proposes that the portion of the credit provided to customers representing structural savings be allocated directly to the residential class in the generation component of rates such that non-participating customer classes do not fund this component of the credit.

(*Id.* lines 22 to 31.) If the opt-in residential customers all respond to the PTR price signal by reducing their loads, there should not be any structural savings to estimate (or to put back into residential rates for recovery.) If it is still necessary to estimate structural savings, the burden would fall on the residential class alone. At this point, however, PTR has not been authorized for PG&E's residential customers.

## III. CONCLUSION

Demand response programs rely on the willingness of customers to participate. Customers will only participate if they see a value proposition that is compatible with their ability and desire to reduce load. The pilots and issues in this proceeding should be consistent with that fact. PG&E also believes that the Rulemaking must maintain continuity for the existing DR programs, be based on an evidentiary record, and establish the actual need for fast and flexible DR supply resources on that record.[10/]

Respectfully Submitted,

ANN KIM
SHIRLEY A. WOO
MARY A. GANDESBERY

By: */s/ Shirley A. Woo*
SHIRLEY A. WOO

Pacific Gas and Electric Company
77 Beale Street
San Francisco, CA 94105
Telephone: (415) 973-2248
Facsimile: (415) 973-0516
E-Mail: SAW0@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: October 21, 2013

10/ PG&E also believes that there are other issues that should be included in thescope of this Rulemaking as it explained in its October 14, 2013 Prehearing Conference Statement, which was served, but not filed pursuant to the ALJ's directions