

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)

RESPONSES OF THE UTILITY REFORM NETWORK
TO QUESTIONS CONCERNING 2015 BRIDGE FUNDING AND PILOTS



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TABLE OF CONTENTS

1.ffiTURN Does Not Oppose Bridge Funding for 2015, But the Revenue Requirement Should be Reduced by at Least 50% to Account for Lower Actual Spending in 2012-2013 (QUESTION 1)	1ffi
2.ffiComments Regarding Pilots for 2015 (QUESTION 2)	5ffi
a.ffiThe Proposed IRM2 Enhancement Pilot for PG&E Appears Duplicative and Unnecessary	5ffi
b.ffiTURN Recommends Only One Additional IRM2 Pilot for SCE or SDG&E	7ffi
c.ffiThe Pilot to Test Behavior Strategies Should be Funded from Existing Budgets for Customer Outreach and Education	8ffi
d.ffiThe Commission Should Hold a Workshop and Adopt a Timeline to Explore a Possible Pilot for Mass Market Air Conditioner Demand Response	11ffi
3.ffiAny “Savings” Due to Elimination of the Peak Time Rebate Tariff Represent Purely Cost Shifting, Not Any Additional Funds (Question 6)	14ffi

**RESPONSES OF THE UTILITY REFORM NETWORK
TO QUESTIONS CONCERNING 2015 BRIDGE FUNDING AND PILOTS**

Pursuant to Ordering Paragraph 2 of the Order Instituting this Rulemaking (“OIR”), The Utility Reform Network (“TURN”) submits these responses to the questions in Section 5.4 of the OIR concerning bridge funding and pilot programs for 2015. TURN recommends the following in our responses:

- ffi Revenue requirements in 2015 for bridge funding should be cut by at least 50% to account for much lower than forecast spending.
 - ffi The proposed IRM2 Enhancement pilot is duplicative of existing work and probably unnecessary.
 - ffi It is premature to authorize another IRM2 pilot in Southern California, prior to the evaluation of the existing pilot. In any case, if the Commission authorizes another pilot, it should only authorize a pilot of one of the two Southern California utilities.
 - ffi TURN opposes any incremental funding for the customer outreach and education pilot, as this work should be coordinated with, and funded through, the money previously authorized for such activities.
 - ffi The “savings” from eliminating Peak Time Rebate (“PTR”) tariffs cannot be used to fund pilots. The PTR payments are simply transfer payments from one group of customers to another. They do not represent incremental “funds” available for spending on other purposes.
- 1. ~~TURN Does Not Oppose Bridge Funding for 2015, But the Revenue Requirement Should be Reduced by at Least 50% to Account for Lower Actual Spending in 2012 & 2013 (QUESTION 1)~~**

The Commission asks whether it is reasonable to authorize all the utilities to continue current demand response programs “as is” through 2015. TURN does not oppose one-year bridge funding and continuation of programs in 2015, however, the spending data indicate that existing programs can be adequately funded for 2015 by reducing revenue requirements to at most 50% of presently authorized annual rate collections. TURN has not analyzed program performance and thus our position does not reflect any conclusions regarding the efficacy or reasonableness of continuing existing program designs.

Funding levels for 2012-2014 for DR programs were authorized by the Commission in D.12-04-045, and adjusted in D.13-04-017. The latest Interruptible reports available include spending through August, 2013, which covers 20 months of the 3-year DR period.¹ If spending were roughly even across months, we would expect 56% (e.g. 20/36) of the three-year program funds to be spent by the end of August. Instead, the utilities have spent between 19% and 23% of the authorized funding, as shown in Table 1.

Table 1: DR Authorization (2012-2014) and Spending through August, 2013²

¹ The relevant budget and spending pages from the August 2013 report for each utility are attached as Appendix A to this pleading.

² Source: Monthly Report on Interruptible Load and Demand Response Programs of each utility, covering August, 2013. Table I-3 for PG&E; Table I-2 for SCE; Incremental Cost table for SDG&E. These monthly reports are filed in accordance with D.09-08-027.

	3-year funding (\$000)	Expenditures 20 months through August 2013 (\$000)	% Funding
PG&E	190,336	38,678	20%
SCE	307,738	57,612	19%
SG&E	67,407	15,824	23%

There is no basis for assuming that spending over the remaining sixteen months would be disproportionately higher than the program-to-date spending. In the past, spending levels have been lower at the outset of a program cycle due to: 1) implementation of new programs, 2) delay in spending authorization, and/or 3) seasonal fluctuation in spending. But these factors do not appear to apply in this case.

The 2012-2014 programs are largely a continuation of prior 2009-2011 programs, especially for the major funding categories. And even though final authorization was delayed until April, 2012, the Commission had previously authorized the utilities to continue existing programs without interruption.³

TURN has examined 2013 monthly spending detailed in the August, 2013 interruptible reports. TURN does not see any consistent trends that would indicate some expectation of much higher spending in the remaining months of 2013 and in 2014. Indeed, while some programs reflect seasonal spending,⁴ the

³ See, A.11-03-001, Assigned Commissioner's Ruling, December 28, 2011; See, also, D.12-04-045, p. 6.

⁴ Certain demand response programs are generally funded at higher levels during the summer months, reflecting, for example, performance payments.

data through August 2013 already include most of the first two summers of program activity and spending.

Some might argue that underspending reflects poor program design or execution, and should be immediately rectified to increase spending. The fact that spending has been much lower than forecast should be examined in making changes for post-2015 programs. However, while it may reflect some program design and/or utility marketing problems, it may also reflect the continuing dilemma that demand response is not an attractive proposition to most customers, given the relative costs and benefits of investing in technology and curtailing energy use for a limited number of hours. The more appropriate conclusion for 2015 is that the adopted budgets are much higher than necessary to support existing programs and existing customer participation.

Regardless of the reasons for the low actual spending to date, there is no need to continue collecting money in rates in 2015 at presently authorized levels. TURN has not completely examined the cost recovery mechanisms for all demand response programs, so we are unsure how much of the funding is subject to balancing accounts that will be adjusted due to over/under collections. However, regardless of the cost recovery mechanisms, the Commission should order that any actual rate collection for 2015 demand response programs be significantly reduced, resulting in actual collection of at most 50% of the authorized annual revenue requirements for 2012-2014. Such a reduction will provide an immediate ratepayer benefit without impacting program delivery.

2. ~~Comments Regarding Pilots for 2015 (QUESTION 2)~~

Staff proposes two pilot programs for 2015, as described in Attachment A to the OIR.⁵

~~a. The Proposed IRM2 Enhancement Pilot for PG&E Appears Duplicative and Unnecessary~~

The staff proposes a pilot “IRM2 enhancement” project that “continues the progress towards” involving utilities and their customers in wholesale DR competition. The goal of the pilot is to enhance the ability of a few third party participants in the CAISO Proxy Demand Response (“PDR”) market.

While on the surface this project appears a worthwhile attempt to promote integration of DR resources with the CAISO’s wholesale markets, the specific budget and activity proposal for 2015 appears duplicative of PG&E’s existing IRM2 project. Moreover, if the goal is to advance the independent ability of “one or more large DA” or CCA customers to participate directly in the CAISO PDR, such an objective could be accomplished by a less expensive targeted education program.

The Staff Proposal explains that “PG&E requested and received funding to conduct a pilot called the IRM2” in the 2012-2014 demand response application.⁶ The Energy Division approved the IRM2 program by letter dated April 2, 2013. The IRM2 budget and work scope called for activities in 2013-2014, with a total

⁵ Attachment A is hereinafter referred to as “Staff Proposal.”

⁶ OIR 13-09-011, Attachment A, p. 7.

authorized budget of \$2.458 million.⁷ To TURN's knowledge, the program is ongoing and there has been no evaluation of activities to date.

The staff proposal completely replicates the existing 2013-2014 IRM2 budget and work scope, though the funding would cover just one year instead of two years. A comparison of the budget tables shows that the IRM2 Enhancement project includes exactly the same work scope activities at almost the same level of funding.⁸

If the goal is to develop the capabilities for a very few DA or CCA customers, who already have Scheduling Coordinator capabilities to trade in the CAISO market, to participate directly in the PDR market, then such a goal should be addressed by a more limited and targeted program to educate a limited number of non-bundled large customers. The existing IRM2 pilot could likely be enhanced by \$50,000 to \$100,000 to offer training to DA or CCA customers using the platform and systems being developed through the IRM2. There is no basis for duplicating these systems and platforms just to "potentially" benefit a very few DA customer or the Marin Energy Authority.

Given that Rule 24 has not been finalized, there is not even any demonstrated need for this pilot. There is no apparent need to duplicate the platform and mechanisms being tested through IRM2. However, even assuming that DRPs may need assistance to develop capabilities to bid PDR products into

⁷ See, PG&E AL 4077-E-B, Attachment 1. The IRM2 total budget is reproduced on p. 10 of Attachment A to the OIR.

⁸ Compare Budget Table on p. 5 and p. 10 of the Staff Proposal.

the market, TURN suggests that a more cost-effective alternative would be to provide direct education and support on an existing platform rather than duplicate IRM2 capabilities. The existing IRM2 could even be expanded to include such training.

b. TURN Recommends Only One Additional IRM2 Pilot for SCE or SDG&E
Staff appears to recommend that both SDG&E and SCE implement an IRM2 pilot for their service territories. While the Staff Proposal states that funding “should ideally be at least 75-80% of the budget of PG&E’s IRM2,”⁹ the detailed table “based on available bridge funding” shows funding levels of about 20% of PG&E’s IRM2.

The record is unclear whether SCE and SDG&E require this pilot in order to develop the necessary capability to bid DR into the CAISO market. At a minimum, TURN questions why all three utilities need to perform the same pilot. A more reasonable solution is to await the results of the IRM2 evaluation by LBNL. If the IRM2 pilot provides useful information regarding technological or market methods and processes, such information should be used as part of developing pilots and programs for the next (post-2015) program cycle. It seems duplicative and non-productive to simply replicate the same pilot, apparently based on the assumption that the pilot is actually providing the proper implementation tools.

⁹ Staff Proposal, p. 9.
TURN Response
October 21, 2013

At most, if the Commission seeks to enhance future DR response in Southern California, the IRM2 pilot should be conducted by only one of the two Southern California utilities.

c. ~~The Pilot to Test Behavior Strategies Should be Funded from Existing Budgets for Customer Outreach and Education~~

This pilot proposes \$2.25 million in funding to educate, motivate and engage non-residential customers and test “which behavior-related strategies work for small business segments,” so that small commercial customers can take be more “successful” on time-variant pricing tariffs.¹⁰

TURN does not oppose the objectives of this pilot; however, we question whether there is need for incremental funding to support these activities, which should be funded through the various existing funding streams for customer outreach and education.

The Commission has funded a number of Marketing, Education and Outreach (ME&O) activities for demand response over the past several years. For example, for the 2012-2014 programs the Commission authorized over \$40 million for marketing, education, and outreach for demand response.

Table 2: DR Authorization for Category 7, Marketing, Education and Outreach, 2012-2014¹¹

¹⁰ Staff Proposal, p. 12-13.

¹¹ See, D.12-04-045, p. 193-197.

	DR Authorization for Category 7, 2012- 2014 (\$000)
PG&E	17,272
SCE	17,900
SDG&E	6,750

But this funding represents only a portion of the customer education funding related to time-variant pricing and demand response. For example:

- ffi The Commission has over the past five years authorized literally hundreds of millions of dollars for various education, marketing and outreach activities associated with AMI rollout and time-variant pricing tariffs.¹²
- ffi D.10-02-32 approved PG&E's mandatory default to PDP for Small Agriculture and SMB customers, and approved over \$30 million for PG&E's outreach and education activities for 2009-2010, which were intended to prepare customers for the new rates.¹³ The Commission also ordered PG&E to evaluate its outreach and education efforts to small and medium business customers in 2012.¹⁴
- ffi D.12-12-004 ordered SDG&E to offer optional TOU and CPP rates for residential and small commercial customers on November 1, 2013, and mandatory TOU and default CPP for small commercial in November 2014, and mandatory TOU and optional CPP for small and medium agricultural customers in November 2014. The Commission approved \$92.7 million for implementation of the dynamic rates, including outreach and education activities to these groups.¹⁵ The decision specifically noted that the requested outreach and education costs might be duplicative of

¹² See, for example, D.10-02-032, Sec. 19, p. 89.

¹³ D.10-02-032, p. 132, Table 1.

¹⁴ D.10-02-032 p. 91.

¹⁵ D.12-12-004, p. 49.

similar activities approved through the GRC.¹⁶ In AL 2447-E SDG&E stated that, following the direction of D.12-12-004, \$513,000 in capital and \$22 million in expense would be devoted to outreach and education. In the supplemental AL 2466-E-B, SDG&E clarified that its budget for customer education and outreach to enable Smart pricing would be limited to \$5 million for the residential class. Thus we conclude that roughly \$17 million would be available for outreach and education to the small commercial and agricultural classes.¹⁷

The Commission has expressed a strong desire for coordinating these various education and outreach activities.¹⁸ The Commission concluded that marketing the concepts of dynamic rates should be included in the Statewide ME&O Application.¹⁹ The utilities submitted requests for about \$58 million for 2013-2014 activities to promote branding and market awareness.²⁰

TURN is extremely concerned about the potential for wasting ratepayer funds on additional uncoordinated outreach and education activities. This does not mean that we oppose the specific ideas suggested by Staff. However, we are extremely concerned that these objectives duplicate other activities. For example, the goals and objectives of the pilot are to increase “customer awareness when peak hours are occurring” and to help customers “make adjustments to business practices during peak hours to use less energy.”²¹ These are worthy objectives,

¹⁶ D.12-04-045, p. 48.

¹⁷ Calculated as \$(22-5) million

¹⁸ D.12-04-045, p. 77.

¹⁹ D.12-04-045, p. 92.

²⁰ Applications 12-08-007 et al.

²¹ Staff Proposal, p. 14.

but TURN cannot help but imagine that these objectives are common to other educational activities concerning time-variant pricing.

The staff proposal makes a number of specific suggestions that sound extremely useful. For example, the proposal calls for testing “different methods of communication” and for interviewing “customers with the best load profile to understand how they achieve it and see if like business follow these best practices.”²² TURN cannot tell whether these specific activities have been conducted as part of past outreach and education programs. TURN suggests that if staff believes these activities are not being conducted presently, it should work with utilities and stakeholders to identify changes to existing education and outreach programs to incorporate these valuable suggestions.

The approval of separate and uncoordinated ME&O funding, as suggested by the Staff pilot 2, appears contrary to the Commission’s desire for coordination. Furthermore, providing additional funding for education, as the Staff pilot proposes, appears to exceed the scope of this proceeding.²³ Rather, the emphasis of this proceeding should be on collaborating and coordinating with other Commission proceedings.

~~d. The Commission Should Hold a Workshop and Adopt a Timeline to Explore a Possible Pilot for Mass Market Air Conditioner Demand Response~~

The Commission should hold a workshop and allow for future suggestions for a potential pilot, if deemed necessary, to address any barriers to

²² Staff Proposal, p. 15.

²³ R.13-09-011 OIR, p. 2.

the development of large-scale demand response from residential air conditioner load.

TURN has long supported utility air conditioner cycling (“ACC”) programs as an effective demand response strategy for reliability, including system and local distribution reliability problems. However, many decision makers and demand response proponents have criticized “command and control” ACC, and have promoted customer-centric demand response enabled by smart thermostats. There is a perception that thermostat adjustments can be more effective to enroll residential customers since they allow greater customer control and can minimize discomfort based on customer preference.²⁴ Some of these parties see smart thermostat-driven demand response as the key to unlocking the promise of using millions of residential air conditioners for rapid cycling to promote renewable integration.

Nevertheless, there is realization that for pure “price-responsive” smart thermostat cycling can shift load, but cannot provide reliable and rapid DR of the type necessary to bid into CAISO markets or provide renewable integration benefits. As a result, there has been considerable interest in using utility signals, in response to price or reliability triggers, to automatically change the set points of smart thermostats, ideally in conjunction with customer pre-set response patterns. This Commission has funded several pilot programs to test the efficacy

²⁴ See, for example, D.13-07-003, p. 31. The Commission authorized a 2013-2014 SCE pilot to test AutoDR with residential PCTs. D.13-04-017, p. 26.

of using the HAN signal from the \$5 billion investment in smart meters to control thermostats.²⁵ Similarly, SMUD has used an OpenADR communication platform to trigger thermostat settings according to customer preferences.²⁶ TURN has heard conflicting accounts about the relative benefits and costs of using the HAN versus OpenADR as the communications platform.

As with most DR, the underlying issue is whether the costs of any necessary technology investments and customer aggregation are outweighed by system and customer benefits so as to motivate massive market penetration.

The HAN pilots are ongoing in 2012-2013, and TURN has not analyzed the results of these pilots to determine whether there are any specific market or policy barriers that could be addressed by a potential pilot for 2015. TURN suggests that if the Commission or staff believe that such barriers might exist, the Commission should order a workshop to discuss the potential barriers and possible solutions. Such a workshop should include presentations concerning the results of existing HAN pilots, presentations by aggregators involved in the residential markets,²⁷ and presentations by providers of smart thermostat hardware and software technology. The primary goal of the workshop should be

²⁵ D.11-07-056, OP 11. See, also, Resolution E-4527, September 27, 2012. The HAN pilots include testing communication with Programmable Communicating Thermostats. See, for example, SCE AL 2662-E-A, October 29, 2012, Attachment A, p. 9.

²⁶ Herter Energy Research Solutions, "SMUD's Residential Summer Solutions Study 2011-2012," August 2013.

²⁷ For example, Comverge has operated a residential load control program for SDG&E for several years.

to identify any potential market or technology barriers that might benefit from an additional utility pilot program in 2015.

Fortunately, the Commission is starting consideration of 2015 pilot programs with adequate time to consider and refine proposals. TURN recommends that the Commission hold a workshop in the next three months, and authorize parties to submit potential proposals for additional pilots addressing air conditioner load control by March 2014.

3. ~~Any "Savings" Due to Elimination of the Peak Time Rebate Tariff Represent Purely Cost Shifting, Not Any Additional Funds (Question 6)~~

In D.13-07-003 the Commission directed SCE and SDG&E to make their Peak Time Rebate (PTR) programs be opt-in effective May 2014. The basis for the change is to avoid incentives to free riders, as reported in the Energy Division's May 1, 2013 DR Lessons Learned Report. In Question 6 parties are invited to opine on the wisdom of using the expected savings from PTR incentives to fund the pilot activities described in the staff proposal.

TURN is adamantly opposed to using these funds for pilot programs. The PTR incentives are transfer payments from one set of customers (those who do not drop load) to those who do (abstracting from measurement and free ridership issues). By minimizing erroneous incentive payments, the transfer payments will decrease and the burden of higher rates diminish. These are not funds that are available for spending on other purposes, such as pilots.

See TURN's comments under question 2 above regarding the wisdom of investing in the pilots themselves. Regardless of the status of the pilots, the PTR incentives avoided are not available for re-purposing.

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Respectfully submitted,

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Appendix A

Budget Tables from August 2013 Interruptible Reports

SOE Demand and Response Programs and Activities
 FY2013 Budget
 2013 Summary

Year-to-Date Program Expenditures	2013 Expenditures												Program-to-Date Total Expenditures	3-Year Funding	Funds/FAA Appropriations (\$)	Percent Funding			
	January	February	March	April	May	June	July	August	September	October	November	December							
Category 1: Availability Programs																			
Basic Initiative Program (BIP)	\$470,302	\$4,471	\$4,080	\$10,518	\$18,110	\$14,830	\$26,168	\$8,722	\$29,884	\$0	\$0	\$0	\$0	\$13,622	\$584,124	\$2,714,387	\$1,500,000	20.4%	
Budget Category 1 Total	\$470,302	\$4,471	\$4,080	\$10,518	\$18,110	\$14,830	\$26,168	\$8,722	\$29,884	\$0	\$0	\$0	\$0	\$13,622	\$584,124	\$2,714,387	\$1,500,000	20.4%	
Category 2: Price Responsive Programs																			
Cashless Billing Program (CBP)	\$1,760,746	\$42,655	\$19,256	\$42,076	\$3,591	\$20,447	\$102,006	\$17,126	\$170,081	\$0	\$0	\$0	\$0	\$468,744	\$2,208,460	\$5,389,000	\$6,400,000	42.7%	
Smart Card Program (SCP)	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0%
Budget Category 2 Total	\$2,760,746	\$42,655	\$19,256	\$42,076	\$3,591	\$20,447	\$102,006	\$17,126	\$170,081	\$0	\$0	\$0	\$0	\$468,744	\$2,208,460	\$5,389,000	\$6,400,000	42.7%	
Category 3: Training & Recruiting Technologies																			
Emerging Technologies (ET)	\$825,829	\$69,081	\$50,250	\$17,207	\$90,658	\$25,649	\$69,022	\$17,815	\$48,311	\$0	\$0	\$0	\$0	\$523,073	\$958,932	\$2,111,000	\$2,111,000	45.4%	
Smart Customer Technology Investments (SCTI)	\$48,482	\$5,797	\$4,289	\$7,383	\$18,554	\$10,628	\$48,853	\$7,382	\$27,937	\$0	\$0	\$0	\$0	\$195,864	\$229,159	\$5,684,107	\$5,684,107	2.4%	
Budget Category 3 Total	\$874,311	\$74,878	\$54,539	\$24,590	\$109,212	\$36,273	\$117,875	\$25,197	\$76,248	\$0	\$0	\$0	\$0	\$718,937	\$1,188,091	\$7,795,107	\$7,795,107	8.8%	
Category 4: Process																			
Localized DR	\$1,689	\$259	\$291	\$330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$278	\$2,118	\$488,000	\$488,000	0.0%	
Business Continuity & E-Plan	\$24,183	\$5,387	\$5,834	\$1,788	\$5,229	\$27,806	\$14,877	\$3,719	\$3,702	\$0	\$0	\$0	\$0	\$47,583	\$71,628	\$1,582,000	\$1,582,000	7.5%	
Budget Category 4 Total	\$25,872	\$6,046	\$6,125	\$1,918	\$5,229	\$27,806	\$14,877	\$3,719	\$3,702	\$0	\$0	\$0	\$0	\$480,361	\$73,256	\$1,589,500	\$1,589,500	7.5%	
Category 5: Evaluation, Measurement & Performance																			
EMREC	\$465,005	\$165,811	\$187,041	\$263,050	\$78,418	\$46,222	\$167,700	\$18,107	\$18,107	\$0	\$0	\$0	\$0	\$7,207,461	\$7,158,468	\$5,116,000	\$5,116,000	42.7%	
Research	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	\$5,280	0.0%
Budget Category 5 Total	\$470,285	\$171,091	\$192,321	\$268,330	\$83,698	\$51,502	\$172,900	\$23,387	\$23,387	\$0	\$0	\$0	\$0	\$7,214,741	\$7,163,748	\$5,121,280	\$5,121,280	42.7%	
Category 6: Technology Evaluation & Outreach																			
Customer Education, Awareness & Outreach	\$965,477	\$31,950	\$582,877	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,403	\$946,327	\$1,000,000	\$1,000,000	3.1%	
Business Continuity & E-Plan	\$7,381,844	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	\$1,481,510	23.8%	
Budget Category 6 Total	\$8,347,321	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	\$1,513,460	26.9%	
Category 7: Regulatory Policy & Program Support																			
Regulatory Policy & Program Support	\$807,482	\$68,731	\$134,867	\$46,605	\$59,851	\$79,203	\$80,731	\$37,427	\$55,685	\$0	\$0	\$0	\$0	\$354,240	\$1,225,640	\$2,231,000	\$2,231,000	54.9%	
Regulatory Policy & Program Support	\$765,459	\$15,846	\$23,502	\$16,803	\$17,234	\$12,337	\$65,477	\$44,535	\$44,535	\$0	\$0	\$0	\$0	\$278,639	\$1,006,075	\$5,415,000	\$5,415,000	19.8%	
Budget Category 7 Total	\$1,572,941	\$84,577	\$158,369	\$63,408	\$77,085	\$91,540	\$146,204	\$81,962	\$100,220	\$0	\$0	\$0	\$0	\$632,879	\$1,231,715	\$7,646,000	\$7,646,000	19.7%	
Category 8: Integration Programs and Activities																			
Customer Education, Awareness & Outreach	\$1,681,562	\$74,188	\$14,474	\$38,873	\$4,960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,488	\$1,652,070	\$3,321,000	\$3,321,000	49.3%	
Customer Education, Awareness & Outreach - ES&M	\$2,287,455	\$113,283	\$44,367	\$87,799	\$255,263	\$70,311	\$24,983	\$270,025	\$39,406	\$0	\$0	\$0	\$0	\$487,859	\$1,191,877	\$984,500	\$984,500	118.0%	
Budget Category 8 Total	\$3,969,017	\$187,471	\$58,841	\$126,666	\$280,224	\$95,271	\$249,808	\$109,425	\$138,811	\$0	\$0	\$0	\$0	\$554,347	\$1,843,947	\$4,305,500	\$4,305,500	157.3%	
Category 9: Special Projects																			
Special Projects	\$108,111	\$7,865	\$8,595	\$8,427	\$13,648	\$8,239	\$10,815	\$8,190	\$11,208	\$0	\$0	\$0	\$0	\$78,318	\$146,124	\$3,000,000	\$3,000,000	8.7%	
Budget Category 9 Total	\$108,111	\$7,865	\$8,595	\$8,427	\$13,648	\$8,239	\$10,815	\$8,190	\$11,208	\$0	\$0	\$0	\$0	\$78,318	\$146,124	\$3,000,000	\$3,000,000	8.7%	
Total Expenditures	\$17,702,832	\$548,172	\$534,254	\$522,408	\$1,560,205	\$567,209	\$240,305	\$653,769	\$474,048	\$0	\$0	\$0	\$0	\$4,033,603	\$15,824,236	\$36,806,703	\$36,806,703	24.0%	

See "Funds" Tab for expenditures.
 FY13 - Actuals reported for expenditures (12/31/13).
 FY12 - Actuals reported for expenditures (12/31/12).
 Negative values in February are due to an accrual reversal. (S) denoting actual income for payment.

**Table I-3
Pacific Gas and Electric Company
Demand Response Programs and Activities
2012-2014 Incremental Cost Funding
August 2013**

2012-2014 Program Expenditures

Cost Item	2012 Expenditures	2013 Expenditures												Year-to-Date 2013 Expenditures	Program-to-Date Total Expenditures 2012-2014	3-Year Funding	Fundshift Adjustments ⁽¹⁾	Percent Funding
		January	February	March	April	May	June	July	August	September	October	November	December					
Category 1: Reliability Programs																		
Base Interruptible Program (BIP)	\$201,272	\$22,842	\$37,077	\$20,387	\$16,361	\$21,979	\$20,227	\$19,590	\$24,036					\$182,500	\$383,771	\$666,349		57.6%
Optional Bidding Mandatory Curtailment / Scheduled Load Reduction (OBMC / SLRP)	\$85,998	\$6,803	\$10,484	\$10,363	\$6,084	\$12,568	\$6,897	\$5,745	\$4,954					\$63,898	\$149,896	\$413,532		36.2%
Budget Category 1 Total	\$287,269	\$29,645	\$47,562	\$30,751	\$22,445	\$34,546	\$27,124	\$25,335	\$28,990	\$0	\$0	\$0	\$0	\$246,398	\$533,667	\$1,079,881	\$0	49.4%
Category 2: Price-Responsive Programs																		
Demand Bidding Program (DBP)	\$259,533	\$14,794	\$67,515	\$16,982	\$19,126	\$26,739	\$17,002	\$17,587	\$11,977					\$191,722	\$451,255	\$3,216,000		14.0%
Capacity Bidding Program (CBP)	\$363,759	\$19,033	\$208,734	(\$167,842)	\$24,305	\$41,286	\$27,914	\$28,339	\$23,349					\$205,017	\$668,777	\$1,563,485		4.9%
Peak Choice ⁽¹⁾	\$612,656	\$222,376	\$7,820	(\$1,837)	\$935	\$20	\$181	\$215	\$242					\$229,951	\$842,607	\$1,750,000		48.1%
Smart AC	\$3,141,763	(\$28,082)	\$447,683	\$269,003	\$240,126	\$316,698	\$427,922	\$381,199	\$397,516					\$2,462,065	\$5,603,828	\$19,353,335		29.0%
Budget Category 2 Total	\$4,377,711	\$228,121	\$731,751	\$116,206	\$284,492	\$384,743	\$473,019	\$437,340	\$433,084	\$0	\$0	\$0	\$0	\$3,088,736	\$7,466,467	\$35,882,820	\$0	20.8%
Category 3: DR Provider/Aggregator Managed Programs																		
Aggregator Managed Portfolio (AMP)	\$315,887	\$22,029	\$209,398	(\$163,795)	\$26,026	\$42,433	\$28,840	\$29,116	\$26,074					\$220,121	\$536,008	\$1,187,700		45.1%
Budget Category 3 Total	\$315,887	\$22,029	\$209,398	(\$163,795)	\$26,026	\$42,433	\$28,840	\$29,116	\$26,074	\$0	\$0	\$0	\$0	\$220,121	\$536,008	\$1,187,700	\$0	45.1%
Category 4: Emerging & Enabling Programs																		
Auto DR	\$1,224,635	\$174,706	\$242,004	\$128,888	\$240,457	\$189,448	\$190,712	\$189,383	\$196,593					\$1,552,192	\$2,776,827	\$26,297,459		10.6%
DR Emerging Technology	\$114,274	\$20,516	\$18,431	\$17,565	\$17,866	\$16,508	\$5,061	\$18,756	\$19,303					\$184,005	\$298,280	\$3,749,238		8.0%
Budget Category 4 Total	\$1,338,910	\$195,222	\$260,435	\$146,453	\$258,323	\$205,956	\$245,774	\$208,139	\$215,896	\$0	\$0	\$0	\$0	\$1,736,197	\$3,075,107	\$30,046,697	\$0	10.2%
Category 5: Pilots																		
IRR Phase 2	\$53,200	\$9,525	\$5,554	\$8,739	\$11,239	\$7,356	\$6,841	\$8,365	\$8,106					\$65,725	\$118,925	\$2,458,336		4.8%
T&D DR	\$48,436	\$348	\$4,848	\$7,731	\$2,664	\$6,515	\$6,404	\$7,607	\$8,011					\$44,128	\$62,564	\$2,458,336		3.8%
Plug-in Hybrid EV/EV (incl. HAN-EV)	\$45,548	\$2,955	\$2,625	\$1,082	\$3,788	\$9,723	\$7,717	\$9,937	\$7,868					\$45,594	\$91,143	\$3,000,000		3.0%
Budget Category 5 Total	\$147,184	\$12,827	\$12,927	\$17,552	\$17,690	\$23,594	\$20,963	\$25,909	\$23,984	\$0	\$0	\$0	\$0	\$155,447	\$302,631	\$11,916,672	\$0	3.8%
Category 6: Evaluation, Measurement and Verification																		
DRMEC	\$774,401	\$142,377	\$295,832	\$410,665	\$91,550	\$121,500	\$160,164	\$125,995	\$620,224					\$1,968,307	\$2,742,708	\$14,520,981		18.9%
DR Research Studies	-	-	-	-	-	-	-	-	-					-	-	\$1,200,000		0.0%
Budget Category 6 Total	\$774,401	\$142,377	\$295,832	\$410,665	\$91,550	\$121,500	\$160,164	\$125,995	\$620,224	\$0	\$0	\$0	\$0	\$1,968,307	\$2,742,708	\$15,720,981	\$0	17.4%
Category 7: Marketing, Education and Outreach																		
Statewide Marketing ⁽¹⁾	\$3,360,000	-	-	\$140,000	-	-	(\$140,000)	-	\$0					-	\$3,360,000	\$3,500,000		96.0%
DR Core Marketing and Outreach ⁽²⁾	\$1,065,822	\$100,962.85	\$59,996	\$45,450	\$54,021	\$54,492	\$53,164	\$83,230	\$53,840					\$505,155	\$1,590,977	\$13,000,000		38.4%
SmartAC ME&O ⁽³⁾	\$2,073,420	(288.05)	\$28,291	\$64,204	\$202,136	\$540,836	\$288,400	\$77,744	\$12,832					\$1,324,156	\$3,397,576	\$0		
Education and Training	\$78,720	\$,667.41	\$2,731	\$17,841	\$6,345	\$3,117	\$4,366	\$4,668	\$4,689					\$49,425	\$128,146	\$771,993		16.6%
Budget Category 7 Total	\$6,597,962	\$106,342	\$91,017	\$267,496	\$262,502	\$598,445	\$215,931	\$165,632	\$171,731	\$0	\$0	\$0	\$0	\$1,878,736	\$8,476,699	\$17,271,993	\$0	49.1%
Category 8: DR System Support Activities																		
InterAct / DR Forecasting Tool	\$3,474,597	\$956,854	(\$35,069)	\$249,682	\$234,325	\$235,145	\$246,169	\$251,939	\$238,023					\$2,377,068	\$5,851,665	\$14,407,887		40.6%
DR Enrollment & Support	\$1,400,624	\$129,923	\$212,355	\$681,498	\$202,802	\$23,740	\$194,214	\$228,730	\$213,389					\$1,886,652	\$3,287,276	\$15,787,400		20.8%
Notifications	\$248,316	\$2,038	\$2,867	\$3,522	\$9,206	\$5,618	\$7,272	\$152,030	\$46,230					\$228,784	\$477,100	\$7,427,715		6.4%
DR Integration Policy & Planning	\$262,745	\$42,124	\$44,379	\$56,115	\$57,927	\$58,878	\$95,572	\$99,492	\$126,028					\$580,516	\$843,261	\$3,893,342		21.7%
Budget Category 8 Total	\$5,386,281	\$1,130,939	\$224,532	\$990,817	\$504,260	\$323,381	\$543,228	\$732,192	\$623,670	\$0	\$0	\$0	\$0	\$5,073,020	\$10,459,301	\$41,516,344	\$0	25.2%
Category 9: Integrated Programs and Activities (Including Technical Assistance)																		
Technology Incentives - IDSM ⁽⁴⁾	\$326,769	\$25,594	\$76,437	\$6,707	\$29,706	\$41,424	\$40,237	\$41,601	\$37,382					\$299,089	\$625,858	\$7,538,000		8.3%
PEAK ⁽¹⁾	\$542,611	-	(\$918)	(\$45)	-	-	-	-	\$0					(\$962)	\$541,648	\$560,000		96.7%
Integrated Marketing & Outreach ⁽⁵⁾	\$377,386	\$7,412	(\$40,928)	(\$504)	\$3,123	\$7,246	(\$1,721)	\$1,632	\$2,557					(\$21,183)	\$356,203	\$377,500	\$73,000	94.4%
Integrated Education & Training ⁽¹⁾	\$14,895	\$1,223	\$46	(\$1,366)	\$50	\$51	\$36	\$41	\$41					\$121	\$15,017	\$61,000		24.6%
Integrated Sales Training ⁽¹⁾	\$14,744	\$1,177	-	(\$1,415)	-	-	-	-	-					(\$237)	\$14,507	\$76,000		19.1%
Integrated Energy Audits ⁽⁶⁾	\$486,187	\$15,221	\$9,407	\$13,191	\$3,333	\$9,774	\$14,870	\$36,428	\$29,553					\$134,768	\$630,954	\$3,719,000	(\$73,000)	17.0%
Integrated Emerging Technology ⁽⁷⁾	\$115,076	\$3,166	\$13,065	\$29,955	(\$30,361)	\$85,629	\$48,960	\$31,413	\$15,291					\$206,117	\$322,093	\$440,000		73.2%
Budget Category 9 Total	\$1,888,568	\$67,794	\$56,109	\$45,513	\$15,852	\$144,124	\$102,382	\$111,115	\$84,824	\$0	\$0	\$0	\$0	\$817,713	\$2,506,281	\$12,771,500	\$0	19.6%
Category 10: Special Projects																		
DR-HAN Integration (excl. HAN-EV) ⁽⁸⁾	-	-	-	-	-	-	-	-	-					-	-	\$3,846,000		0.0%
HAN Integration Expense	-	-	-	-	-	\$267	\$103,262	\$148,706	\$539,127					-	-	\$8,095,000		9.8%
HAN Integration Capital ⁽⁹⁾	-	-	-	-	-	-	-	-	-					-	-	\$15,000,000		2.5%
Permanent Load Shifting	\$211,929	\$17,018	\$18,378	\$16,876	\$15,950	\$21,065	\$19,966	\$24,008	\$25,991					\$791,362	\$791,362	\$3,711,811		4.3%
Budget Category 10 Total	\$211,929	\$17,018	\$18,378	\$16,876	\$15,950	\$21,331	\$123,229	\$172,715	\$565,118	\$0	\$0	\$0	\$0	\$950,615	\$1,162,544	\$26,941,000	\$0	4.3%
Recovery of Capital Costs Authorized Prior to 2009	\$882,402	\$67,711	\$67,490	\$67,269	\$67,048	\$66,827	\$66,606	\$65,553	\$65,332					\$633,836	\$1,416,238	\$0		N/A
Total Incremental Cost⁽¹⁾	\$22,208,505	\$2,010,025	\$2,015,430	\$1,945,802	\$1,566,139	\$1,966,880	\$2,007,280	\$2,099,042	\$2,858,568	\$0	\$0	\$0	\$0	\$16,469,146	\$38,677,651	\$190,335,588	\$0	20.3%

Technical Assistance & Technology Incentives (TA&TI) identified as of AUGUST 2013.

⁽¹⁾ Authorized funding for 2012 only.
⁽²⁾ The expenditures listed are in support of PG&E's DR programs for large commercial, industrial and agricultural customers, excluding the aggregator-managed programs. Disclosure complies with OP 24 of D.12-04-045. The 2012-14 approved budget for DR Core Marketing and Outreach includes funding for
⁽³⁾ The budget for SmartAC marketing, education, and outreach costs are included in the 2012-14 approved budget for DR Core Marketing and Outreach; however, the expenses are separated to differentiate the ME&O efforts targeting residential and small commercial customers. SmartAC is now closed to non
⁽⁴⁾ See the Fund Shift Log 2012-14 for explanations.
⁽⁵⁾ Additional funding for Technology Incentives and Integrated Energy Audits was approved in Energy Efficiency Decision 12-11-015 for 2013 and 2014.
⁽⁶⁾ The CPUC authorized the HAN Integration Project in the amount of \$11,941,000 (\$3,846,000 expense and \$8,095,000 capital) on April 8, 2013 per Advice Letter 4119-EE-A.
⁽⁷⁾ Total Incremental Cost excludes incentives. Incentives are reported on Table I-5.
⁽⁸⁾ The HAN Integration capital expenditures are for informational purpose only, that is, the capital revenue requirement will not be recorded in DREBA until the assets are operational.
⁽⁹⁾ The total incremental cost for May through July have been updated for the HAN capital expenditures reported in Category 10.

項目	内容	単位	数量	金額	備考
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
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