

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

Application of Pacific Gas and Electric Company for Approval of the 2012-2014 Energy Savings Assistance and California Alternative Rates for Energy and Programs and Budget (U 39 M).	Application 11-05-____ (Filed May 16)
Application of San Diego Gas & Electric Company (U 902 M) for Approval of Low-Income Assistance Programs for Program Years 2012-2014.	Application 11-05-____ (Filed May 16)
Application of Southern California Gas Company (U 904 G) for Approval of Low-Income Assistance Programs and Budgets for Program Years 2012-2014.	Application 11-05-____ (Filed May 16)
Application of Southern California Edison Company (U 388-E) for Approval of its 2012-2014 California Alternative Rates for Energy and Energy Savings Assistance Programs and Budgets .	Application 11-05-____ (Filed May 16)

**The Opening Comments of Synergy Companies regarding the Applications of Pacific Gas and Electric Company (U 39 M), San Diego Gas & Electric Company (U 902E), Southern California Gas Company (U 904G) and Southern California Edison Company (U 388-E) for Approval of their 2012–2014 Energy Savings Assistance and California Alternative Rates for Energy Programs and Budgets.**

Synergy Companies hereby submits opening comments for the Applications of Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, and Southern California Edison Company (the Joint Utilities) for Approval of their 2012–2014 Energy Savings Assistance Program (ESAP) and California Alternative Rates for Energy (CARE) Programs and Budgets.

Synergy Companies is an Energy Service Company (ESCO) and is a member of the Board of Directors of the National Association of Energy Service Companies (NAESCO), the leading industry association advocating energy efficiency. Synergy Companies has participated for over 30 years in energy efficiency programs in California—including the ESAP and CARE programs.

Synergy's opening comments briefly highlight some key issues we believe need to be properly reviewed, including evidentiary hearings, in the applications of the Joint Utilities. These issues include, but are not limited to the following three (3) areas:

**(1) Cost Effectiveness and Energy Savings of the overall ESAP Program**

This issue is broken into three (3) areas likely to cause problems in calculating program and measure energy savings for the overall ESAP program: (1) It is important to calculate cost-effectiveness using a whole house approach providing comprehensive retrofits to the end user; rather than eliminating beneficial key measures if addressed on an individual basis and leaving gaping holes in the program's delivered measures; (2) Methods of calculating energy savings need to be reviewed as they are currently leaving unclaimed measure and program savings unaccounted for affecting cost-effectiveness; and (3) the method of verifying energy savings for certain measures is currently under scrutiny and any decision of eliminating these measures should be delayed until the energy savings are accurately confirmed.

**(2) NGAT Costs—Budget Review and Missing Budget Figures**

Funding for NGAT is completely missing in PG&E's filing and needs addressing in the other Utility filings. These figures are either missing or seriously underestimated resulting in faulty budgeting for the program's funding.

**(3) Inclusion of Labor and Material Cost Increases**

With budget goals fluctuating annually, it is imperative that the program allow for increasing material and labor costs. Recent goals and budget provide little or no room for increase in labor or material costs. Neglecting this information will directly affect the state workforce as wages and similar costs will be the only areas that contractors can adjust during program implementation.

**Cost Effectiveness and Energy Savings of the overall ESAP Program**

**(1) Cost Effectiveness of Whole House Approach**

In an evidentiary hearing we would produce evidence concerning the following issues.

The Commission's Strategic Plan Goal to deliver—increasingly cost-effective and longer-term savings,|| is directly affected when approached looking at each measure as an *a la carte* method. While an individual measures may be rated at the .25 level, the program savings as a whole virtually triples when the program views the cost effectiveness at a program level. Now is not the time to chip away at the energy savings we can achieve in a low-income residence. In addition, SCG should be required to add back infiltration measures in climate zones where the measure did not rate high enough on the cost effectiveness tests in multi-family dwellings.

Though cost effectiveness results are not the only factor considered when the Commission decides which measures are allowed or disallowed to be installed in the

ESAP, it carries the most weight. The decision to allow or disallow certain measures has a direct effect on the number of units that are eligible to be served in various parts of California and has a ripple effect which determines the number of workers to be hired to deliver program services and the pay scale for those workers hired.

We understand the importance and directive of creating a more cost-effective program however; we should not lose sight of the customers we serve and their need for our service. One could argue the program only saves the customer a few dollars per month and we should remove program measures to make the program more cost-effective. We can assure you that most customers rely on the savings they receive each month to purchase food and medicine and the importance of this should not be understated.

### **Measure Portfolio Composition**

Section A, item 2 (i), PG&E writes:

*In addition to the non-energy benefits they provide, these measures (especially attic insulation) also increase the potential for long-term energy savings.*

In PG&E's opening introduction, Section A, item 1, PG&E states:

*The ESA program, utilizes a "whole house" approach to provide free home weatherization, energy-efficient appliances and energy education services to income-qualified PG&E customers throughout the Company's service area.*

Under section C. Program Goals, item (b), PG&E writes:

*Many of the measures offered are fairly low-cost*

*weatherization measures that have traditionally been the foundation of low-income energy programs in the United States (U.S.). Individually, these measures produce small energy impacts, and most of their effect is achieved together as a package producing both energy savings and less tangible, comfort, health, and safety benefits when measures in a whole-house context.*

We strongly agree with PG&E's statements here that the program measures have been the foundation of low-income energy programs in the United States and that individually, these measures produce small energy impacts, and most of their effect is achieved together as a package. That is why it is so important to view the program cost-effectiveness as a whole and not remove individual measures.

#### **Attic Insulation**

PG&E indicates that attic insulation did not pass the cost effectiveness tests however, they proposes that attic insulation remain as a measure in the program. Attic insulation did however pass for SDG&E and SCG, which again brings into question the accuracy of the Impact Evaluation Study. While we support attic insulation as a measure, we also support increasing the levels of both the minimum required to receive attic insulation and the maximum allowed to be installed under the program. Currently, the program requires contractors to walk away from homes with an existing R-value of 12 or higher (existing home insulation level is R11). We have completed some initial research and can find no programs where the recommended level of ceiling insulation is adequate at R11. In fact, most programs require the home to be insulated to an R-value of 38 to receive a rebate or

performance payment<sup>1</sup>. Therefore, our recommendation is to bring levels of insulation up to a minimum of R38, from R19 for the 2012-2014 program cycle and to re-evaluate the results of the impact study.

PG&E also notes under section G 4, that in the past 2009-2011 program, attic insulation *did* meet the minimum energy savings threshold, offering the largest therm savings of the gas measures. We would question how this measure went from offering the largest therm savings to one of the lowest in just one program cycle and would suggest that before we make any major program changes based on the impact evaluation study, this measure be re-evaluated. As well, we want to point out that in the same section PG&E goes on to write, —however, even in the 2009-2011 ESA Program, it [attic insulation] was installed much less frequently than in the past, as most homes already have adequate insulation levels. We would again point out that R11 is not considered an adequate level of insulation by the CEC, DOE standards or in the insulation and energy conservation industry.

We would also point out that while PG&E is requesting this measure remain in the program, the new measure evaluated Attic Insulation-R19, which adds insulation up to R30 from the R19 level, passed the cost-effectiveness tests at the same level or higher as the standard attic insulation measure in many climate zones<sup>2</sup>.

### **Air Sealing and Envelope Measures**

Another measure that is the foundation of energy savings for any home and should be viewed as part of an overall package of measures. Many homes we service have large holes in the walls, doors and around windows and would not be corrected were it not for

---

<sup>1</sup> See IOU rebate programs and Energy Upgrade California

<sup>2</sup> PG&E ESAP Applications 2012-2014, Attachment A-6

this program. PG&E notes that this measure is often the only viable measures available to customers residing in multi-family units. Synergy Companies strongly supports the inclusion of this measure for all housing types, including multi-family and suggests the Commission require all Utilities to add this measure back in any climate zones where it was removed in the 2009-2011 cycle. This measure alone will significantly increase the number of multi-family units served under this program.

### **Water Conservation Measures**

As PG&E points out, this is another low-cost measure that provides a significant benefit to residences. Synergy Companies suggests ensuring this measure is available to all housing types, including multi-family homes where the measure may not have passed the minimum cost-effectiveness threshold. This is another measure group that if available, will significantly increase multi-family participation in the program.

### **Retired Measures**

Synergy Companies opposes the retirement of duct test and seal (DTS). This is a measure required by the CEC to be Title 24 compliant when installing a new furnace and the Utilities need to be able to capture and report the savings. As well, there have been many statements throughout the application where the Utility believes a comprehensive approach best serves the program and our communities and we support those statements. Every measure helps support the long-term energy savings goal of the program and we would caution against the removal of any measures.

The Utilities are proposing to retire Duct Test and Seal (DTS), Central Air Conditioning and Room Air Conditioning. We believe additional discussion is warranted here for several reasons. First, DTS is a measure required by the CEC to be Title 24

compliant when installing a new furnace. Therefore, either the Utilities will have to log all DTS under the furnace repair and replacement program and not capture the energy savings for this measure or list the measure separately and capture those savings. If the measure is going to be listed as a separate measure so the utilities can capture and report the energy savings, then DTS needs to be a measure in the program. We will assume the Utilities want to claim the savings for the measures completed.

Secondly, virtually all programs, whether rebate or performance based, require the ducts to be tested and sealed if necessary in order for participants to receive the rebate or performance payment. This is true with the Utility rebate programs as well as Energy Upgrade California. In fact, you cannot participate in the Basic Path of the Energy Upgrade California program unless you have a central heating system where ducts exist<sup>3</sup>, that is how important the savings for DTS are to comprehensive energy retrofit. A comprehensive approach to energy conservation is imperative to meet the energy savings demands of California.

Central Air Conditioning and Room air Conditioning are just as important and speak to our ability to provide a comprehensive energy retrofit. Just as PG&E is asking to ensure infiltration measures are included for all climate zones we should make sure we are taking advantage of all available opportunities for energy savings when we are at the customers home. We recognize there are many measures, when looked at individually, do not provide as much energy savings as we would like but it is important to view the savings per home, not per measure. This is apparent when we review the Program Cost

---

<sup>3</sup> <https://energyupgradeca.org/overview>



Effectiveness tables the Utilities have submitted in their applications<sup>4</sup>. While an individual measure may be rated at the .25 level, the program savings as a whole virtually triples when the program views the cost effectiveness at a program level. Now is not the time to chip away at the energy savings we can achieve in a low-income residence. In addition, SCG should be required to add back infiltration measures in climate zones where the measure did not rate high enough on the cost effectiveness tests in multi-family dwellings.

## **(2) Energy Saving Issues when Calculating Cost-Effectiveness**

Aside from our other concerns, policy-makers are not including all relevant savings.

There is a serious underestimate of electric savings resulting from insulation and other weatherization activities paid for by the gas companies. The problem is bigger for SCG than for PG&E (a dual fuel utility) but affects both. In neither the 2005 nor the 2009 evaluation studies did the analysts consider electric savings resulting from insulation and other weatherization activities paid for by SCG. The bulk of the electricity savings will be reaped by Edison, but considerable amounts will accrue to Southern California municipal utilities and a small amount by PG&E (in parts of Santa Barbara and San Luis Obispo Counties). Similarly, PG&E and the analysts are ignoring electric savings accruing to SMUD and other municipal utilities that arise from PG&E's gas weatherization programs. As a result, statewide savings from weatherization are being underestimated; these programs appear less cost-effective than they really are; and it is affecting program design.

---

<sup>4</sup> PG&E ESAP Applications 2012-2014, Attachment A-5

Water savings from Domestic Hot Water measures (and their embedded electricity) are not included. With all the work being done on trying to measure embedded electricity savings in water, leaving water savings out of LIEE DHW programs is not reasonable.

### **(3) Impact Evaluation Study**

Many parties have raised concerns about the Impact Evaluation Study Draft results and we believe it is pre-mature to base the next three years on a study with so much controversy surrounding it. Of particular concern is the study's assessment and implication that some measures such as evaporative coolers and furnaces are used only because we provided new ones to the customers. While that may be the case in some instances, we are working with the elderly, neediest, and the general low-income population. As a result we should be touting the success of providing such services to the most needy, not removing measures from the program and walking away from those who need our service most.

In addition, we are concerned the study implies single individual measure evaluation is the way to evaluate measures. Many programs suggest the whole house should be serviced for a more comprehensive final retrofit.

It is apparent that one of the major recommendations in the program should be to find procedures to further encourage the inclusion and expansion in the use of attic insulation and duct testing to assure a comprehensive savings package for low-income customers. To allow for this, the Draft should include the importance of attic insulation and duct testing in a comprehensive LIEE effort and of the importance of considering lifecycle savings, even if this is not a direct function of the requested impact evaluation.

Synergy Companies agree that the issues associated with LIEE deserve an extensive review and support a year of bridge funding and the overall schedule with testimony and hearings in the fall and early winter. We are concerned with the 2009 Impact Evaluation Study as well as with other material that was not available to utilities when they prepared their applications, such as the LIEE Process Evaluation Report. Such studies, pilots, and audits include:

- (1) Impact Evaluation - Final not yet issued
- (2) Process Evaluation - Final issued 6/13/2011
- (3) Workforce Education and Training Pilot - Final issued 5/9/2011
- (4) High Usage Needs Assessment (HUNA) Segmentation Study - Final not yet issued
- (5) Non-Energy Benefits Study Phase 1 - Phase 2 cancelled.
- (6) PG&E CARE Recertification Study - Final not publicly issued
- (7) Refrigerator Degradation Study - Final not publicly issued
- (8) Pilot Project Evaluations
  - a. Microwave (PG&E) - Final not yet issued
  - b. High Efficiency Clothes Washers (PG&E) - Final not yet issued
  - c. High Efficiency Force Air Units (SoCalGas) - Final issued. SCG said the pilot showed the new units are successful but SCG chooses not to add these units to program for reasons which should be examined.

### **NGAT Costs—Budget Review and Missing Budget Figures**

In an evidentiary hearing we would produce evidence concerning the following issues.

The most limiting budget number is not included in PG&E's filing – the NGAT budget. While NGAT budgets are not listed in the PG&E application because NGAT funding comes from sources outside of the ESAP budget, the ability to pay for NGAT certainly affects the Utilities ability to complete the ESAP work. Sempra filed a PTM last

year indicating they did not have enough NGAT money budgeted and asked to be able to track those expenses; PG&E has also indicated they will run close to maxing out on NGAT budget in PY2011. Therefore, it would appear the NGAT budget is very much a part of this application process and we request PG&E make those numbers available.

Not only is understanding the total NGAT budget necessary but a discussion on the reimbursement rate for NGAT needs to take place. SCG has indicated they expect NGAT costs to be about \$4,200,000 each of the three years<sup>5</sup>. Because PG&E has not indicated their expected NGAT costs, we look to PY2011 for a comparison and it is our understanding PG&E budgeted \$2,500,000 for the 133,000 homes they expect to serve.

Both Utility numbers estimate contractors will receive between \$34 and \$38 over the three years to perform NGAT services which not only can take well over an hour to perform but the \$34 to \$38 level is meant to cover the cost of insurance and the level of responsibility contractors take on once they perform an NGAT. These levels may be acceptable when the Utility performs their own in-house NGAT because the Utility can absorb a much higher level of liability than the contractors can. However, when the cost and liability are passed on to a small CBO or contractor, these organizations are placed at a serious disadvantage while exposing their organizations to significant litigation risks and costs. Moreover, our research of the industry standard for the NGAT service is between \$125 to \$250 per job. While we understand economies of scale for contractors, there is a significant difference between \$38 and \$125 for this service, especially when liability is taken into consideration and we respectfully request this be discussed moving forward.

---

<sup>5</sup> PG&E ESAP Applications 2012-2014, Attachment A-1b

In 2011, PG&E contractors are on their way to completing NGAT in 55% of the homes. A small shift in the next budget cycle outside of the historical norms of only a 2% to 4% increase in additional NGATs being completed will significantly affect PG&E's ability to meet their unit goal. The Utilities and Commission should recognize the potential need for mid-cycle budget changes and incorporate the ability to make these mid-cycle changes without interruption of service to customers.

### **Material and Labor Increases Need to be Addressed**

In an evidentiary hearing we would produce evidence concerning the following issues.

These programs are an excellent opportunity to provide living wage jobs and provide a stimulus to a dragging economy. If we continue to drive the cost of the program down, contractors will not be able to provide living wages jobs, benefits and cost of living pay increases. In order to deliver the program, contractors must purchase material where the costs for these materials are driven by the industry and economy. The cost of material, metal, insurance and fuel have risen dramatically over the past three years and the program has not kept pace with those increases causing contractors to drive down the only cost they can control; labor. The program needs a budget that is sufficient to provide the stimulus and jobs California needs.

There also appear to be conflicts between living wage concerns and unit costs allowed by the utilities over the three-year period. Costs per unit have increased from the last period to the current period, largely due to increases in costs of materials (e.g., insulation). Yet, the utilities (except possibly SoCal) are proposing unit costs that rise by less than inflation over the three year period. Such limited increases are not proposed by utilities for their own costs.

Escalation Rates (Costs per Unit Served) 2011-2013

escalation	PG&E	SoCal	SDG&E	SCE
2011-2012	0.85%	5.86%	1.89%	-0.99%
2012-2013	3.52%	2.51%	1.65%	0.55%
2011-2013	2.18%	4.17%	1.77%	-0.22%

As shown below, the Joint Utilities have goals that vary over time. For example, PG&E estimates that it will complete 133,329 units in 2011, but reduces its 2012 goal to 110,000, followed by an increase to 132,500 for 2013 and 2014. SoCalGas fell behind in the 2009 - 2011 cycle and so is carrying over 28,875 units into 2012, resulting in a 2012 goal of 129,106 units. But it then drops its goal to 100,249 in 2013 and 2014. The maintenance of a stable contractor workforce becomes difficult when goals fluctuate from year to year. We would propose to have goals stable or rising slowly rather than moving up and down, creating the possible need to hire and then lay off workers.

Utility ESAP Goals 2012 - 2014									
	Program Year	2012		2013		2014		Totals	
SoCalGas	Single Family	91,626	71%	71,145	71%	71,145	71%	233,916	71%
	Multifamily	28,814	22%	22,373	22%	22,373	22%	73,560	22%
	Mobile Homes	8,666	7%	6,730	7%	6,730	7%	22,126	7%
	Total	129,106	100%	100,248	100%	100,248	100%	329,602	100%
PG&E	Single Family	85,545	78%	103,044	78%	103,044	78%	291,633	78%
	Multifamily	18,004	16%	21,686	16%	21,686	16%	61,376	16%
	Mobile Homes	6,451	6%	7,770	6%	7,770	6%	21,991	6%
	Total	110,000	100%	132,500	100%	132,500	100%	375,000	100%
SDG&E	Single Family	10,235	51%	10,235	51%	10,235	51%	30,705	51%
	Multifamily	8,243	41%	8,243	41%	8,243	41%	24,729	41%
	Mobile Homes	1,522	8%	1,522	8%	1,522	8%	4,563	8%
	Total	20,000	100%	20,000	100%	20,000	100%	60,000	100%
SCE	Single Family	43,046	63%	48,601	63%	47,212	63%	138,859	63%
	Multifamily	19,474	29%	21,987	29%	21,359	29%	62,820	29%
	Mobile Homes	5,680	8%	6,412	8%	6,229	8%	18,321	8%
	Total	68,200	100%	77,000	100%	74,800	100%	220,000	100%
Totals	Single Family	230,452	70%	233,025	71%	231,636	71%	695,113	71%
	Multifamily	74,535	23%	74,289	23%	73,661	22%	222,485	23%
	Mobile Homes	22,319	7%	22,434	7%	22,251	7%	67,001	7%
	Total	327,306	100%	329,748	100%	327,548	100%	984,599	100%

## **Conclusion**

Several issues need further review and hearings to achieve significant savings while serving this vulnerable population.

The utilities' proposals certainly should not be rubber-stamped without hearings.

Respectfully submitted,

June 20, 2011

A handwritten signature in black ink, appearing to read "Steven R. Shallenberger". The signature is fluid and cursive, with a large, stylized initial "S".

Steven Shallenberger, President  
Synergy Companies

28436 Satellite Street  
Hayward, CA 94545  
(951) 259-8800 voice  
(801) 802-0887 fax  
steve@synergycompanies.org