Administrative Law Judge Sarah R. Thomas California Public Utilities Commission 505 Van Ness Avenue, Room 5021 San Francisco, CA 94102-3214

Re: Low Income Energy Efficiency Program Annual Report For January 1, 2007 - December 31, 2007 Period

Dear Judge Thomas:

Enclosed is Pacific Gas and Electric Company's 2007 Low Income Energy Efficiency Program Annual Report. This report is submitted to the Commission in compliance with the reporting requirements set forth in Decision 05-10-041. That decision settled all outstanding issues concerning shareholder incentives earned by PG&E for the demand-side management (DSM), energy efficiency, and low income energy efficiency (LIEE) programs for program years 1994 through 2001 as well as all future earnings which could be claimed for various past and future program years related to Annual Earnings Assessment Proceedings. Decision 05-10-041, Ordering Paragraph 2, approved PG&E's April 4, 2005 settlement agreement, but requires PG&E to continue "to provide annual reports on the previous year's energy efficiency and LIEE programs." (Settlement Agreement at page 9).

Should you have any questions concerning this report, please contact me at (415) 973-6646.

Very truly yours,

DANIEL F. COOLEY DFC:pjd

cc: ALJ Maryam Ebke
Thomas W. Thompson (DRA)
Sarita Sarvate

Mariana Campbell Kelly Hymes Donna L. Wagoner Natalie Walsh All Parties of Record in R 07-01-042

Enclosure

LOW INCOME ENERGY EFFICIENCY PROGRAM ANNUAL REPORT FOR 2007

May 2008



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SECTION 1 EXECUTIVE SUMMARY

Low Income Energy Efficiency (LIEE)

PG&E has offered energy efficiency programs to qualified low income customers in its 48 counties since 1983. The Low Income Energy Efficiency (LIEE) program's objective is to help low income customers reduce their energy consumption and costs while increasing their comfort, health and safety. The LIEE program provides free home weatherization, energy-efficient appliances and energy education services to qualified, low income PG&E customers throughout the Company's service area. All housing types are eligible to participate as well as homeowners and renters.

The 2007-2008 LIEE program was very similar to the 2006 LIEE program and was authorized on December 14, 2006 by Decision (D.) 06-12-038. PG&E's authorized annual LIEE program budget for 2007 was \$77.73 million (plus any remaining unspent carryover) per D.06-12-038, Ordering Paragraph 2.

The 2007 LIEE program continued to require installation of all feasible measures offered under the program for which the customer qualified. The 2007 program treated 63,319 homes with a mix of measures and services, including energy education, compact fluorescent lamps (CFLs), refrigerators, and home weatherization.

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Section 2 Low Income Energy Efficiency

Overview

PG&E has offered energy efficiency programs to qualified low income customers in its 48 counties since 1983. The LIEE program's objective is to help low income customers increase their comfort while reducing their energy consumption, costs, and hardship. The LIEE program provides free home weatherization, energy-efficient appliances and energy education services to qualified, low income PG&E customers throughout the Company's service area.

The 2007 program maintained the programs since 2004 with the addition of several new pilot measures. The pilot measures included central air conditioner tune-ups and ceiling fans and light kits.

The authorized 2007 LIEE program measures and installation criteria are listed in Figure 1 below.

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Figure 1: 2007 LIEE Measures

2007 LIEE Measure	Eligibility Criteria
Ceiling Insulation	All Climate Zones and Residence Types
Low Flow Showerheads	All Climate Zones and Residence Types
Water Heater Insulation	All Climate Zones and Residence Types
Weather-Stripping Doors	All Climate Zones and Residence Types
Caulking	All Climate Zones and Residence Types
Outlet Cover Plate Gaskets	All Climate Zones and Residence Types
Faucet Aerators	All Climate Zones and Residence Types
Water Heater Pipe Insulation	All Climate Zones and Residence Types
Evaporative Coolers	Climate zones 10-16 only; single family and
	mobile homes only
Refrigerator Replacements	All Climate Zones and Residence Types
Evaporative Cooler and Air Conditioner Vent	All Climate Zones and Residence Types
Covers	
Hard-Wired Compact Fluorescent Lamp	All climate Zones, but single family homes
Porch Light Fixtures	only
Thread-Based Compact Fluorescent Lamps	All climate Zones and Residence Types
High Efficiency Room (Window/Wall) Air	Climate Zones 10-15 only
Conditioners	
High Efficiency Central Air Conditioners ¹	Climate Zones 14 and 15 only
Duct Testing and Sealing ¹	All Climate Zones for single family and
	mobile homes with gas space heating; only
	Climate Zones 10-16 for homes with
	electric space heating
Minor Home Repairs ²	All Climate Zones and Residence Types
Interior Hard-Wired Compact Fluorescent Lights	All Climate Zones and Residence Types
Ceiling Fans (with Light Kits) (Pilot)	Climate Zones 11 – 14 only and All Residence Types
Central Air Conditioner Tune Ups (Pilot)	Climate Zones 5 – 16 only; single family and mobile homes only

- 1 High efficiency central air conditioners and duct testing and sealing were new measures for 2006, adopted in D.05-12-026, Ordering Paragraphs 15 and 18.
- 2 Multiple sub-measures are included under minor home repairs: Services that reduce infiltration (e.g., window repairs), mitigate a hazardous condition, or accommodate the installation of program measures (e.g., attic venting). Furnace repairs and replacements fall under the category of minor home repairs and are provided only when necessary to mitigate Natural Gas Appliance Test (NGAT) failures and pursuant to the installation of infiltration-reduction measures. Water heater repairs and replacements are also considered minor home repairs and are provided only to mitigate NGAT failures or to replace leaky water heaters. For the purposes of qualifying a home for the program, all minor home repairs (combined) count as a single measure.

Individualized, in-home energy education was provided to all participating customers to help them understand how they used energy and what specific strategies they could employ to reduce their home energy costs.

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The 2007 LIEE program continued to require that customers receive all of the program measures that were feasible to install in their homes. PG&E continued to work with the other investor-owned utilities, the Energy Division and the Division of Ratepayer Advocates (DRA) to standardize LIEE program implementation and reporting statewide.

PG&E continued its program administrator contract with Richard Heath and Associates (RHA) for the 2007 LIEE program. In 2004, PG&E competitively bid the program administrator contract for the 2005-2007 LIEE programs. RHA was the successful bidder. In 2007, RHA contracted out LIEE program implementation work to 17 weatherization contractors and three appliance contractors. Additionally, the LIEE contract administrator was responsible for bidding out further work by county/project areas as needed. PG&E also administered contracts directly with 17 contractors who provided furnaces, central air conditioners and central air conditioner tune-ups. PG&E had additional LIEE contracts with eight Low Income Home Energy Assistance Program (LIHEAP) providers under which PG&E's LIEE program pays for refrigerators to LIHEAP program participants who are also qualified PG&E LIEE customers.

Low Income Energy Efficiency (LIEE) Program

2007 PROGRAM ELEMENTS

PG&E filed its 2007-2008 LIEE Program Application on June 30, 2006. The Commission issued a final decision on this application (D.06-12-038) on December 14, 2006.

Implementation Contracts

PG&E bid its program administration contract in 2004 for the 2005-2007 LIEE programs. Following the competitive bidding process, Richard Heath and Associates (RHA), was awarded the contract. In 2007, RHA continued to contract out LIEE program implementation work with 17 weatherization contractors and three appliance contractors and may bid out further work by county/project areas as needed. PG&E also continued to administer contracts directly with 17 contractors who provided furnaces and, in certain instances, water heaters and central air conditioners. PG&E has additional LIEE leveraging contracts with eight Low Income Home Energy Assistance Program (LIHEAP) providers under which PG&E's LIEE program pays for refrigerators to LIHEAP program participants who are also qualified PG&E LIEE customers.

Implementation Overview

The LIEE program was implemented by a combination of community-based organizations and private contractors who were assigned specific geographic work areas within PG&E's service area. LIEE contractors had specific participation goals defined by the estimated number of LIEE-qualified customers living in their assigned geographic areas and by customer home types (i.e., single family, multifamily or mobile home). LIEE contractors were tasked to target at least 50 percent of existing CARE customers for the LIEE program.

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Energy education and CFL installations were performed during the initial home assessment visit. PG&E's installation contractors installed all feasible LIEE program measures for which a home qualified *except* refrigerators and furnaces. The refrigerators were delivered by appliance contractors after all feasible measures were installed. All furnace work was performed by licensed HVAC contractors.

Energy Education

In 2007, PG&E continued to offer energy education during the first home visit.

The initial home visit by an energy education specialist assisted the customer with a CARE application. The energy education specialist also ensured that low income customers were aware of other low income programs available to help them manage their energy bills. They also informed customers about other utility energy efficiency programs available to PG&E's residential customers.

Additionally, customers received an energy cost calculator (or energy wheel). The energy cost calculator is an easy-to-understand visual tool that helps customers see how much energy the appliances in their homes use so that they can reduce their overall energy use. The energy education specialist showed customers how to determine their current energy expenditures by measure or type of appliance using this calculator.

During the energy education, customers were asked to adopt at least three energy saving practices which would result in overall reduced energy usage and increased comfort.

Appliance Replacement

Refrigerator replacement was restricted to customers whose refrigerators were manufactured before 1993. Several refrigerator sizes were provided ranging from 12 cubic feet to 23 cubic feet and were offered to customers based on existing refrigerator size and the number of refrigerators/freezers removed. Additionally, in the event that a disabled customer needed a specific style of refrigerator, PG&E made special provisions for those requests. The refrigerator replacement service included delivery, installation, removal and environmentally safe recycling of the replaced inefficient units. Refrigerators were available to both homeowners and renters.

Evaporative coolers were provided to customer dwellings where the home had existing air conditioning and the addition of an evaporative cooler could lower the customer's consumption of energy. Evaporative coolers were available to both homeowners and renters.

Room air conditioners were provided to customer dwellings in climate zones 10-15 where the home had existing air conditioning that was over ten years old and met accessibility requirements. Room air conditioning was available to both homeowners and renters.

Furnace repair and replacement were provided to customer-owned homes that failed the natural gas appliance test. Furnace repair and replacement were available only to homeowners, since providing functional heating is a legal responsibility of the landlord.

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Natural Gas Appliance Safety Testing (NGAT)

NGAT was performed on all homes that received infiltration measures and/or furnace repair or replacement.

Targeted Market and/or End-Uses

Low income customers who met CARE income guidelines of 200 percent of the Federal Poverty Guidelines, with income adjustments for family size, were targeted for this program. D.05-10-044 changed the income criteria for both LIEE and CARE. The new income criteria for both programs were raised to 200 percent of the Federal Poverty Guidelines for all households. PG&E began using these new income criteria as of November 1, 2005.

Implementation Strategy

In 2007, low income customers who experienced problems paying their PG&E bills or requested energy efficiency assistance were referred to PG&E's Smarter Energy Line (SEL) for pre-qualification and inclusion in the LIEE program. To increase CARE participation and make customers aware of the services provided by PG&E to low income customers, PG&E required contractors to market the LIEE program to existing CARE customers and customers requesting weatherization services. PG&E provided implementation contractors access to a web-based database that tracks all of the LIEE program work. The database allows specific access to contractors based on their assigned areas. Contractors can tell if a customer is on the CARE rate, and if the customer has been served before. PG&E's contractors ensure that customers are made aware of the CARE program and if needed, assisted customers in filling out a CARE program application.

Additionally, PG&E signed capitation outreach contracts with over 82 service providers to enroll qualified customers in the CARE program. In addition to signing up new CARE customers, capitation outreach contractors told CARE customers about the LIEE program services available at no cost to them and gave them literature about the LIEE program including telephone numbers to call to participate.

Energy Partners Online (EPO)

PG&E's real time Internet application, EPO, launched in May 2003. Energy Partner's prime contractor, RHA, 20 sub-contractors and PG&E staff use EPO to record daily operational and invoicing activities. The application provides information for monthly, quarterly, and annual reporting to the Commission as well as routine operational reports to monitor program performance.

LIEE Outreach

PG&E program staff made hundreds of presentations to community groups and local ethnic media throughout PG&E's service area in 2007. PG&E CARE and LIEE program staff also participated in several ongoing county or area-wide low income agency working groups to share information on PG&E programs with community service providers.

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New Measures and Pilots

Several new or pilot measures were implemented for the 2007 LIEE program. These measures consisted of interior hard-wired compact fluorescent lights, ceiling fans (with light kit), and central air conditioner tune-ups.

Interior Hard-Wired Compact Fluorescent Lights (New Measure)

D.06-12-038 authorized the installation of interior hard-wired compact fluorescent lights as a regular measure. All residence types in all climate zones qualified for this measure if they were feasible.

Ceiling Fans (with Light Kits) (Pilot Measure)

D.06-12-038 authorized the installation of ceiling fans (with light kits) as a pilot measure. This was an alternative to air conditioning adding more efficient lighting. All residence types in climate zones 11 - 14 qualified for this measure if they were feasible.

Central Air Conditioner Tune-Ups (Pilot Measure)

D.06-12-038 authorized central air conditioner tune-up as a pilot measure. Only single family and mobile home residence types in climate zones 5 - 16 qualified for this measure if they were feasible.

Tankless Water Heaters (Pilot Study)

LIEE worked with Community Action Agency of San Mateo (CAA SM) on the Tankless Water Heater pilot project for 2006-2007. In this pilot, CAA SM installed tankless water heaters in qualifying low income homes in the San Mateo area to evaluate the applicability of tankless water heaters for use in the LIEE and CSD low income weatherization programs. Tankless water heaters were studied to determine the feasibility of replacing storage-type water heaters with an on-demand/tankless unit. Current manufacturer product literature indicates that savings estimates of up to 20 percent may be expected from the use of pilotless water heaters, which could result in significant savings amount for a low income household.

CAA SM installed the tankless water heaters in income-qualified single family dwellings. CAA SM monitored and evaluated customer satisfaction and product effectiveness on a monthly basis. However, there were unforeseen venting installation issues at the residences which required multiple visits at customer homes. The cost of the pilot units was \$3,000 each installed, not including administration costs. This was largely due to the pilot tankless water heater selection process. CAA SM selected the Paloma tankless water heater because their weatherization team was already familiar with the brand and its models. Upon completion of the review and data collection, CAA SM submitted a final report to the LIEE team on the feasibility of the tankless water heater pilot project. Due to the excessive installation issues and costs, the final pilot recommendation was to not install tankless water heaters under the LIEE program.

Energy Education Workshops (Pilot Workshops)

D.06-12-038 authorized PG&E to conduct a Group Energy Education pilot to determine the viability of energy education workshops as an energy conservation service. PG&E LIEE contracted with three community based organizations: Glenn County Human

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Services Agency; Redwood Community Action Agency; and Amador-Tuolumne Community Action Agency. In 2007, the education curriculum was developed and training classes were set up. Training classes were held during the first quarter of 2008, and Group Energy Education workshops will be conducted beginning in the second quarter of 2008. The energy education workshops will determine whether or not energy education outreach is a viable energy conservation measure for addition to the LIEE program. The workshops will address customers' energy usage, utility bill assessment and energy saving practices. The pilot objective is to have participants adopt energy saving behaviors which results in lowering their energy bills.

New Rulemaking Opened to Explore Options to Refine the Policies, Rules, and Programs for LIEE

On January 25, 2007, the Commission opened a new Rulemaking (R.) 07-01-042 to refine the policies, rules and programs for the utility LIEE programs. The Commission conducted a public workshop on March 23, 2007 to discuss how to articulate broad objectives and goals, and issued a decision in December 2007 (D.07-12-051) outlining the structure and objectives of utility programs for 2009 through 2011 and beyond. D.07-12-051 along with D.07-10-032 also requested that the utilities more closely integrate CEE, low income, and Demand Response Programs.

LIEE Installation Standards and Policy & Procedures Manuals

Previously, the Joint Utility LIEE Standardization Project Team created the standardized Weatherization Installation Standards Manual (WIS) and the Policy and Procedures (P&P) Manual for the Statewide LIEE program. D.05-12-026, Ordering Paragraph 8, required that the LIEE Standardization Team not undertake any new activities unless directed by the Assigned Commissioner. In 2007, PG&E, SCE, SDG&E, and SoCalGas revised the P&P Manuals to accommodate the LIEE program changes authorized by the Commission for program years 2006, 2007, and 2008.

The proposed P&P Manual revisions were discussed openly at public meetings held by the joint IOUs and distributed for review and comment to the service list in R.07-01-042 and to the IOUs' contractors and agency contacts. The proposed revisions to the P&P Manual were not submitted to the Commission for approval at that time, however. SDG&E plans to file the revised P&P Manual on behalf of the joint IOUs in the third quarter of 2008 to seek approval for the program changes authorized in the 2006, 2007, and 2008 LIEE program cycle. PG&E anticipates that a subsequent filing may also be required to accommodate the program changes proposed in the IOUs' 2009-2011 LIEE program applications.

Bidding the 2008 LIEE Program

D.06-12-038 in R.07-01-042 required PG&E and SDG&E to competitively bid 2008 LIEE program contracts in 2007. On April 10, 2007, PG&E and SDG&E filed a petition to modify that decision to delay bidding on the LIEE program for one year, until 2008. D.07-06-004 approved postponing the bid for one year. PG&E will re-bid its LIEE program administrator in 2008 for the 2009-2011 LIEE program.

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LIEE Awards

In 2007, PG&E won a prestigious award for its successful LIEE program. The American Council for an Energy-Efficient Economy (ACEEE) recognized PG&E's LIEE program as an "exemplary utility low income energy efficiency program." ACEEE previously honored PG&E with this award in 2005 and profiled PG&E's LIEE program in its case study, "Meeting Essential Needs: The Results of a National Search for Exemplary Utility-Funded Low-Income Energy Efficiency Programs."

Major Accomplishments

LIEE program results for 2007 are shown in detail in the Technical Appendix, Tables TA-1, TA-2 and TA-3. Highlights of the completed² accomplishments as noted in Table 2 are as follows:

- Treated³ 63,319 homes;
- Weatherized⁴ 47,311 homes;
- Provided energy education in 63,319 homes;
- Replaced 17,206 primary refrigerators;
- Provided 2,059 evaporative coolers;
- Installed 391,129 compact fluorescent lamps; and
- Repaired or replaced 2,156 furnaces.

2008 PROGRAM ELEMENTS

The 2008 LIEE program elements mirror the 2007 LIEE program and were adopted at the same time as the 2007 program in D.06-12-038. PG&E's authorized annual LIEE program budget for 2008 is \$77.73 million (plus any remaining unspent carryover) per D.06.12-038.

Strategic Plan for LIEE

D.07-12-051 directed the development of a Strategic Plan for LIEE and other energy efficiency programs through 2020, established a three-year program planning cycle for 2009-2011, and required LIEE & CARE Program Applications for 2009-2011 to be filed by May 15, 2008.

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A downloadable copy is available at http://aceee.org/pubs/U053.htm.

² Installations and services are not counted as completed until they have been expensed, per agreement at 11/6/02 and 11/13/02 Reporting Requirements Manual Rapid Deployment Monthly Reporting Compliance meetings attended by the IOUs, Energy Division, and other stakeholders.

³ A treated home is an income-qualified home that has received any measure or service under the LIEE program, including energy education, CFLs, weatherization, and appliances (D.02-12-019). Under the LIEE program, a treated home must receive all feasible measures for which it qualifies.

⁴ Weatherized homes are a subset of treated homes and are defined as income-qualified homes that have received any weatherization measures under the LIEE program (D.02-12-019).

PG&E participated in the Commission's public workshops and held many meetings and focus groups to discuss both the Long-Term Strategic Plan and its 2009-2011 program design between January 1 and May 1, 2008. PG&E conducted a public workshop reviewing the current plans for the 2009-2011 LIEE & CARE programs on March 31, 2008. PG&E considered all input in its program design.

PG&E's 2009-2011 LIEE program follows the policies and guidance given in D.07-12-051. D.07-12-051, page 2, established the following programmatic initiative for LIEE:

[T] o provide all eligible LIEE customers the opportunity to participate in the programs and to offer those who wish to participate all cost-effective energy efficiency measures in their residences by 2020.

D.07-12-051 committed to changing the LIEE program approach by adopting the following policies and guiding principles:

- The complementary objectives of LIEE programs will be to provide an energy resource for California while concurrently providing low income customers with ways to reduce their bills and improve their quality of life;
- LIEE programs should emphasize opportunities to save energy;
- LIEE programs should be designed to take advantage of all cost-effective energy efficiency opportunities;
- LIEE programs should include measures that may not be cost-effective but may promote the quality of life of participating customers;
- LIEE programs should emphasize effective ways to inform customers of the benefits to themselves and their communities of conservation and energy efficiency measures, as well as the way energy efficiency promotes environmental values and reduces greenhouse gases;
- LIEE programs should be integrated with other energy efficiency programs to allow the utilities and customers to take advantage of the resources and experience of energy efficiency programs, promote economies of scale and scope, and improve program effectiveness; and
- LIEE programs should take advantage of other resources, such as federally funded programs, local efforts, the work of businesses and publicly-owned utilities.

Bidding the 2009-2011 LIEE Program

As discussed previously, PG&E is preparing to bid the 2009-2011 programs along with input from Energy Division, as required by D.06-12-038 (modified by D.07-06-004). Per CPUC Decision 07-12-051, the LIEE program is being redesigned and requires the 2009-2011 application and strategic plan to be filed on May 15, 2008. PG&E's Request for Proposal (RFP) will be developed alongside the 2009-2011 application. PG&E requests a timely 2009-2011 LIEE program decision in order to bid out the prime contract, award the bid and negotiate a contract before the start of the 2009-2011 LIEE program. In the event that PG&E's application is radically modified after it has been filed, PG&E may

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need to rescind the RFP for adjustments. In the event that this does occur, the LIEE program may not be ready to implement on January 1, 2009.

Energy Education Workshops (Pilot Workshops)

As discussed previously, PG&E is continuing to work with three community-based organizations (Glenn County Human Services Agency, Redwood Community Action Agency and Amador-Tuolumne Community Action Agency) to pilot Energy Education workshops. These workshops are being performed in 2008. If these are successful, PG&E will work with additional community-based organizations to offer group energy education to more customers in its service area.

High Efficiency Toilets (Pilot Measure)

PG&E is partnering with Santa Clara Valley Water district to pilot High Efficiency Toilets in qualifying single family homes. PG&E will conduct the installations beginning July 1, 2008.

Measurement and Evaluation (M&E) and Regulatory Oversight for Low Income Activities

PG&E conducted studies as directed by the Commission to evaluate the results of LIEE program activities. PG&E also participated on several statewide LIEE teams with the purpose of standardizing LIEE programs and utility reporting to the Commission.

Measurement and Evaluation

PG&E participated with the Energy Division, DRA and SCE, SDG&E, and SoCalGas and the evaluation consulting team that performed the 2002 statewide LIEE impact evaluation filed in December 2004, to complete a Statewide First Year Load Impact Study of the 2005 LIEE programs. This study was completed and filed on December 19, 2007.

Following completion of the 2002 LIEE impact evaluation, LIEE program evaluations were to return to a biannual schedule, as affirmed in D.02-12-019. Thus, the next LIEE program load impact evaluation would normally have occurred in 2006 for the 2004 program. The Evaluation Team felt that they could obtain a better evaluation by working with utility program implementation staff up-front to standardize data collection rather than working solely with the 2004 data that had been collected. SCE filed a letter on February 7, 2005 with the Commission's Executive Director on behalf of the Evaluation Team asking to evaluate the 2005 program year rather than the required 2004 program year. The Commission approved the Evaluation Team's request in its March 17, 2005 letter. On March 13-14, 2006, the Evaluation Team held public workshops in San Francisco and San Diego to invite public discussion on the proposed work plan.

The Team began working with program implementers and utility database staff in December 2004 to specify standardized data collection fields for 2005 and continued to monitor data collection activities throughout 2005, prior to beginning the evaluation in 2006. Data assessment was underway throughout 2006. Billing analysis began in 2007. The evaluation was completed in 2007.

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PG&E will use the results of these studies and reports as appropriate to augment and refine future programs. Specifically, PG&E is using the 2005 evaluation impacts to plan its 2009-2011 LIEE program and will use these impacts to report 2009-2011 program results.

Statewide LIEE Policy and Procedures Manual and Installation Standards Manuals and Quarterly Public Meetings

D.06-12-038, Ordering Paragraph 7, required the utilities to sponsor quarterly public meetings where parties could share ideas and information that could improve program elements, processes and practices. On February 22, 2007, PG&E, SCE, SDG&E and SoCalGas held the first public quarterly meeting to solicit public opinion on the Statewide LIEE Policy and Procedures Manual and Installation Standards Manual. The 2007 manuals needed to be updated to comply with D.06-12-038 program revisions and state codes. PG&E, with SCE, SDG&E, and SoCalGas also held meetings on March 13 and 27, June 11-12, September 11, and December 4, 2007. To date in 2008, one meeting has been held on February 20, and another meeting is scheduled for May 2008.

Reporting Requirements Manual

PG&E also completed and filed 12 Low Income Program Monthly Reports detailing LIEE and CARE program activities, impacts and expenditures through December 31, 2007, as directed in D.01-05-033.

In December 2002, PG&E, SDG&E, SCE, SoCalGas, the Energy Division, and DRA determined that the measure expense data would be the basis for reporting LIEE program activities and expenditures. PG&E continues to comply with this directive.

PG&E participated in the Energy Division workshop on low income reporting held on February 21, 2007 and uses the annual reporting tables discussed and agreed to at that meeting in this annual report. PG&E continues to work with the other utilities, Energy Division and DRA to refine LIEE program reporting requirements.

Cost-Effectiveness Tests

PG&E included results of the Total Resource Cost (TRC) Test, the Utility Cost (UC) Test and the modified Participant Cost (PC_m) Test for 2007 LIEE programs in Table 3. The UC and PCm low income cost-effectiveness tests incorporated non-energy benefits (NEBs) including comfort, health and safety into the cost-effectiveness testing methodology that were developed in 2001 and adopted in D.01-12-020.⁶ The TRC cost-effectiveness test does not include NEBs.

Measure level cost-effectiveness evaluations were performed in 2003 and 2005 (to develop recommendations for the 2006 LIEE program). D.07-12-051 directed the utilities to include measure-level cost-effectiveness analyses as part of their 2009-2011 applications, and three tests directed by the April 1, 2008 "Assigned Commissioner Ruling Providing Guidance for Low-Income Energy Efficiency 2009-2011 Budget Applications" will be performed and filed with PG&E's 2009-2011 LIEE Application.

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⁵ Formerly the Statewide Weatherization Installation Standards Manual, the Installation Standards Manual includes installation standards for all services and measures provided under the LIEE program.

⁶ D.01-12-020 Attachment 4 describes the specific NEBs applied to each cost-effectiveness test.

PG&E will continue to work with the Energy Division, DRA, the LIOB and other interested parties to assess measure cost-effectiveness in order to recommend what measures to retain for future LIEE programs. PG&E is aware that research on non-energy benefits (NEBs) has continued elsewhere in the United States and recommends that the Commission ask the utilities to perform a study to update the NEBs.

Access to Programs Provided by Community-Based Providers

An informal system is in place to identify the needs of LIEE program participants and direct them to community-based organizations (CBOs) and other low income community agencies that can address their needs. The CBOs participating in the LIEE program as contractors or subcontractors are reported in Table 5.

During 2007, PG&E actively pursued leveraging and outreach opportunities with other state and local agencies offering low income services, including the California Department of Community Services and Development (CSD) which provides LIHEAP services in California. PG&E has eight LIEE contracts with LIHEAP providers under which PG&E's LIEE program pays for refrigerators to LIHEAP program participants who are also qualified PG&E LIEE customers. This allows LIHEAP providers to stretch their state and federal funds further to offer low income program assistance to more low income customers.

In addition, PG&E continued to increase outreach within the company by coordinating activities and advertising with other PG&E energy efficiency and rate programs likely to reach low income customers and service providers. PG&E's LIEE contractors were required to inform customers about other programs (such as CARE) for which they may be eligible. LIEE contractors were required to help qualified customers not on the CARE rate to fill out applications.

PG&E employees regularly make presentations about the Company's low income programs to the media and at community events throughout PG&E's service area. These presentations are used to educate customers about energy efficiency and inform them about assistance programs and opportunities available to them through PG&E. PG&E employees made presentations and conducted media initiatives in 2007 about LIEE and CARE in multiple languages, including English, Spanish, Cantonese, Mandarin and Vietnamese.

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LOW INCOME ENERGY EFFICIENCY PROGRAM ANNUAL REPORT FOR YEAR 2007 TECHNICAL APPENDIX

May 2008



TECHNICAL APPENDIX LOW INCOME ENERGY EFFICIENCY

Low Income Energy Efficiency (LIEE)

Reporting Requirements Manual (RRM)

The Assigned Commissioner Ruling dated April 28, 2000 directed the RRM Working Group to file a report to revise the Reporting Requirements Manual (RRM) low income sections to standardize reporting requirements and administrative costs. The RRM Working Group includes PG&E, SDG&E, SCE, SoCalGas, the Energy Division, the Office of Ratepayer Advocates (now the Division of Ratepayer Advocates), and other interested parties. The RRM Working Group filed the Phase 1 RRM Report on October 2, 2000. The RRM Working Group has filed two revisions since filing the first report: the Phase 2 RRM Report on April 9, 2001 incorporated definitions from the Bill Savings Report filed March 15, 2001; and the January 10, 2002 RRM Report revised RRM sections in compliance with the Commission's directives in D.01-12-020, Ordering Paragraph 11. Further revisions to the technical appendix tables were discussed and agreed to at an Energy Division workshop on reporting held on February 21, 2007.

The RRM technical appendix tables are included in this section and describe LIEE program cost estimates used for cost-effectiveness, LIEE cost elements, program detail by housing type and heating source, and program detail by measure.

PY 2007 LIEE Program Achievements

The energy savings for the 2007 LIEE program are based on the results and subsequent analysis of the "Impact Evaluation of the 2001 Statewide Low Income Energy Efficiency (LIEE) Program" completed by KEMA-Xenergy on April 8, 2003, and the "Low Income Energy Efficiency Program Measure Cost Effectiveness Study Final Report" prepared by Itron, Inc., and filed with the Commission on June 2, 2003 on behalf of the Low Income Standardization Team. Additional results come from the Statewide Database for Energy Efficiency Resources (DEER) values. Measure lives come predominantly from the "Energy Efficiency Policy Manual," Version 2, prepared by the Energy Division, August 2003.

The avoided costs were determined using the Commission-approved E3 PG&E Calculator 3c3.

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Low Income Energy Efficiency Annual Report for 2007 Table 1 PROGRAM EXPENSES PACIFIC GAS AND ELECTRIC COMPANY

	Autho	orized Budget	[1], [2]	Ar	nual Expens	es	% of Budget Spent			
LIEE Program:	Electric	Gas	Elec & Gas	Electric	Gas	Elec & Gas	Electric	Gas	Elec & Gas	
Energy Efficiency										
- Gas Appliances	_	7,273,676	7,273,676	-	6,937,378	6,937,378	0%	95.4%	95.4%	
- Electric Appliances	34,271,021	-	34,271,021	28,345,054	-	28,345,054	82.7%	0%	82.7%	
- Weatherization	3,724,290	11,172,871	14,897,161	4,563,552	13,690,656	18,254,208	122.5%	122.5%	122.5%	
- Outreach and Assessment	3,591,638	1,539,274	5,130,912	3,428,677	1,469,433	4,898,110	95.5%	95.5%	95.5%	
- In Home Energy Education	4,243,478	1,818,634	6,062,112	4,340,626	1,860,268	6,200,894	102.3%	102.3%	102.3%	
- Education Workshops	280,000	120,000	400,000	4,361	1,869	6,230	1.6%	1.6%	1.6%	
- Pilot- Tankless Water Heater	-	50,000	50,000	-	41,302	41,302	0%	82.6%	82.6%	
Energy Efficiency TOTAL	46,110,427	21,974,455	68,084,882	40,682,270	24,000,906	64,683,176	88.2%	109.2%	95.0%	
				•	· · · · · ·					
Training Center	259,700	111,300	371,000	216,481	92,778	309,259	83.4%	83.4%	83.4%	
Inspections	2,798,341	1,199,289	3,997,630	2,645,335	1,133,715	3,779,050	94.5%	94.5%	94.5%	
Marketing	-	-	-	-	-	-	0%	0%	0%	
M&E Studies	171,150	73,350	244,500	127,280	54,548	181,828	74.4%	74.4%	74.4%	
Regulatory Compliance	178,500	76,500	255,000	82,414	35,320	117,734	46.2%	46.2%	46.2%	
General Administration	5,387,256	2,308,824	7,696,080	4,368,162	1,872,070	6,240,232	81.1%	81.1%	81.1%	
CPUC Energy Division	39,900	17,100	57,000	17,961	7,698	25,659	45.0%	45.0%	45.0%	
TOTAL PROGRAM COSTS	54,945,274	25,760,818	80,706,092	48,139,903	27,197,035	75,336,938	87.6%	105.6%	93.3%	
			Funded Outsid	e LIEE Program	n Budget					
Indirect Costs				554,774	237,730	792,504				
NGAT Costs	-	2,837,000	2,837,000	-	2,779,035	2,779,035	0%	98.0%	98.0%	

^[1] Total Authorized Budget was adjusted by \$1,424 to reflect minor PY 2007 expense adjustments made in the first quarter of 2008.

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The Authorized budget includes the LIEE budget of \$77.7 million as approved in D. 06-01-038; It also includes net carryover funding of \$2.97 million as approved in AL 2864-G / 3114-E. The allocation of the budget shown here is 68% gas and 32 % electric. The budget recorded in the gas and electric PPPLIBA's is \$55,484,108.21 for electric and \$25,221,983.80 for gas. The electric and gas PPPLIBA recorded budgets are based on the approved 70/30 electric/gas split plus carryover funding as approved in AL 2864-G/3114-E. After adjusting for interest, the carry forward budget for electric is an unspent balance of \$7,782,881.94 and gas has an overspent balance of \$1,830,706.27 for a net unspent balance of \$5,952,175.67.

Low Income Energy Efficiency Annual Report for 2007 Table 2 INSTALLATIONS & SAVINGS PACIFIC GAS AND ELECTRIC COMPANY

		nstallations				
Measures	Units	Quantity Installed	kWh (Annual) ^[1]	kW (Annual) ^[2]	Therms (Annual) ^[1]	Expenses
Furnaces						
- Repair - Gas	Each	1,508	-	-	61,128	\$871,464
- Replacement - Gas	Each	648	-	-	42,310	\$1,667,516
- Repair - Electric	Each					\$0
- Replacement - Electric	Each					\$0
Infiltration & Space Conditioning.						
- Gaskets for Cover Plates	Home	38,895	31,196	6	10,800	\$1,380,988
- Duct Sealing	Home	1,704	4,307	20	10,508	\$1,193,555
- Evaporative Coolers	Each	2,059	785,511	1,218	-	\$1,456,827
- Evaporative Cooler/Air Cond. Covers	Each	3,349	1,592	0	7,845	\$195,943
- A/C Replacement - Room	Each	1,058	251,463	390	-	\$864,645
- A/C Replacement - Room (landlord)	Each	1	302	0	-	\$802
- A/C Replacement - Central	Each	100	30,774	48	-	\$222,718
- A/C Replacement - Central (landlord)	Each					
Weatherization [3]						
- Attic Insulation	Home	3,781	116,937	21	156,842	\$3,458,824
- Attic Access Weatherization	Home	16,421	6,368	1	13,776	\$296,182
- Weather stripping - Door	Home	38,130	87,416	16	86,429	\$5,031,331
- Caulking	Home	39,412	91,162	16	106,778	\$2,340,889
- Minor Home Repairs	Home	40,387	242,333	44	248.875	\$5,550,050
Willion Floride Repaire	Tionic	10,007	2 12,000		2 10,010	φο,οσο,οσο
Water Heater Savings						
- Water Heater Blanket	Home	10,896	51,908	8	114,865	\$475,694
- Low Flow Showerhead	Home	31,565	129,885	20	235,855	\$1,332,256
- Water Heater Replacement - Gas	Each	268	-	-	5,073	\$1,082,412
- Tankless Water Heater	Each	-	-	-	-	\$41,302
- Water Heater Pipe Wrap	Home	957	41,726	6	518	\$12,865
- Faucet Aerators	Home	34,441	64,122	10	106,697	\$426,718
Lighting Measures						
- Compact Fluorescents	Each	391,129	8,431,301	1,005	-	\$3,939,774
- Porch lights fixture replacement	Each	34,348	1,222,743	-	-	\$2,643,465
Defrice retere	Each	47.000	42,002,404	2.057		¢45 505 440
Refrigerators (landlard)	Each	17,206 24	13,003,481 16,481	2,057	-	\$15,585,410 \$12,346
Refrigerators (landlord)	Each	24	10,461	3	-	\$12,340
Pilots						
- AC Tune-up - Central	Home	664	133,978	173	-	\$161,542
- Interior Hard wired CFL Fixtures	Each	40,606	2,809,204	348	-	\$3,128,900
- Ceiling Fans	Each	1,185	-	-	-	\$203,524
Energy Education						
- Outreach & Assessment	Home	63,319				\$4,898,110
- In-Home Education	Home	63,319				\$6,200,894
- Education Workshops	Participants	-				\$6,230
Education Fromonopo	, artioipanto					
Total Savings			27,554,191	5,410	1,208,300	\$64,683,176
Homes Weatherized [3]	Home	47,311				
Homes Treated						
- Single Family Homes Treated [4]	Home	42,239				
- Multi-family Homes Treated [4]	Home	14,820				
- Mobile Homes Treated [4]	Home	6,260				
- Total Number of Homes Treated		63,319				
Master Metered Homes Treet-	Homo	6,707				
- Master-Metered Homes Treated	Home	0,707				

^[1] Energy savings based on the "Impact Evaluation of the 2001 Statewide Low Income Energy Efficiency (LIEE) Program" completed by KEMA-Xenergy on April 8, 2003, and the "Low Income Energy Efficiency Program Measure Cost Effectiveness Study Final Report" prepared by Itron, Inc and filed with the Commission on June 2, 2003 on behalf of the Low Income Standardization Team. Measures not covered in preceding use DEER values.

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^[2] kW based on PG&E historic load shapes.

 $^{^{\}left[3\right] }$ Weatherization consists of measures in rows 21-25.

^[4] Master Metered and Non-Master-Metered

Low Income Energy Efficiency Annual Report for 2007 Table 3 SUMMARY OF COST-EFFECTIVENESS PACIFIC GAS AND ELECTRIC COMPANY

Ratio	2007 - Recorded of Benefits Over	Costs		2007 - Recorded Net Benefits	
Utility Cost Test	Total Resource Cost Test ⁽¹⁾	Modified Participant Test	Utility Cost Test	Total Resource Cost Test ⁽¹⁾	Modified Participant Test
0.46	0.36	0.63	(\$39,901,623)	(\$47,084,748)	\$ (27,535,523)

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⁽¹⁾ TRC benefits exclude non-energy benefits

Low Income Energy Efficiency Annual Report 2007 Table 4 PENETRATION PACIFIC GAS AND ELECTRIC COMPANY

Year ^[1]	Homes Treated	Estimated Eligible in Current Year	Current Year Penetration Rate for Homes Treated
1998	31,744		
1999	40,624		
2000	42,038		
2001	51,080		
2002	70,683		
2003	47,271		
2004	48,456		
2005	57,700		
2006	66,043		
2007	63,319		
Total Homes Treated in 10 Years	518,958	1,868,598	27.77%

^{[1] 10} Years of activity are reported.

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Low Income Energy Efficiency Annual Report for 2007 Table 5 DIRECT PURCHASES AND INSTALLATION CONTRACTORS PACIFIC GAS AND ELECTRIC COMPANY

Contractor	Counties			actor Typ	Annual		
Contractor	Counties	Private	CBO	WMDVBE	LIHEAP	Expenditures [1] [2]	
Weatherization and Appliance							
	Humboldt - Lassen - Marin - Mendocino -						
Atlas Systems Inc.	Napa - Plumas - Sonoma	Х				\$ 2,530,056.21	
•	Alameda - Monterey - Nevada - Santa						
Bo Enterprises	Clara - Santa Cruz - Yuba	Х				\$ 7,756,919.63	
CAA Butte	Butte		Χ		Х	\$ 1,281,692.95	
CAA of San Mateo (Tankless Water							
Heater Pilot Project)	San Mateo		Χ		Х	\$ 41,052.00	
CWES, Inc.	Fresno - Sacramento	Х		Х		\$ 1,117,609.99	
El Concilio of San Mateo County	San Mateo		Х			\$ 782,371.40	
Fresno County EOC	Fresno		Χ		Х	\$ 1,396,499.81	
Glenn Co. Human Res.	Colusa - Glenn		Χ		Х	\$ 159,198.47	
Proteus	Kings - Tulare		Х			\$ 679,152.51	
Quality Conservation Services	Contra Costa - San Francisco	Х				\$ 4,954,021.10	
Renaissance	Fresno - Mariposa - San Joaquin	Х				\$ 4,195,377.92	
Residential Wall Insulation	Lake - Placer - Sutter	Х				\$ 1,708,622.38	
RHA Refrigerator Grounding	All Counties			Х		\$ 942,385.00	
	Monterey - San Luis Obispo - Santa						
San Luis Obispo EOC	Barbara - Santa Cruz		Χ		Χ	\$ 1,276,777.98	
Self Help Home Improvement	Shasta - Tehama		Х		Х	\$ 596,663.01	
	Amador - Butte - Calaveras - Colusa -						
	Contra Costa - Glenn - Humboldt -						
	Lassen - Plumas - Sacramento - San						
	Francisco - San Joaquin - San Mateo -						
	Santa Clara - Shasta - Solano -						
Standards of Excellence	Stanislaus - Tehama - Tuolumne - Yolo	Х				\$ 5,772,665.00	
	Amador - Calaveras - El Dorado -						
Sundowner Insulation	Monterey - San Benito - Tuolumne	Х				\$ 1,640,475.05	
Synergy Companies	Alameda - San Francisco - Stanislaus	Х				\$ 6,687,779.31	
	Fresno - Kern - Kings - Madera -						
	Mariposa - Merced - Monterey - San						
Ventura TV and Video Appliance	Benito - San Luis Obispo - Santa Barbara						
Center, Inc.	- Santa Cruz - Tulare	Х				\$ 4,235,030.00	
	Alameda - El Dorado - Lake - Marin -						
	Mendocino - Napa - Nevada - Placer -						
Western Appliance TV and Stereo	Sonoma - Sutter - Yuba	Х				\$ 3,055,343.00	
	Merced - San Joaquin - Solano -					1	
Western Insulation LP	Stanislaus - Yolo	Х				\$ 3,649,880.60	
Winegard Energy - Bakersfield	Kern	Х		Х		\$ 2,731,933.01	
Winegard Energy - Fresno	Madera - Sacramento	X		Х		\$ 1,301,235.23	
Total - Weatherization and Applia	nce					\$ 58,492,741.56	

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Denetice and Dente are and A/O Trans	- Ll- [0]						
Repair and Replace and A/C Tune							
	Calaveras - Fresno - Madera - Merced -						
	Sacramento - San Joaquin - Stanislaus -					_	
AAA Air Conditioning (R&R)	Yolo	X				\$	500,602.45
	Amador - Placer - Sacramento - San						
Air Tech & Air Conditioning (R&R)	Joaquin - Solano - Stanislaus - Yolo	Χ				\$	285,952.13
	Fresno - Monterey - San Benito - Santa						
AirTec Service (R&R)	Cruz	X				\$	140,230.35
	Alameda - Contra Costa - Marin -						
	Mendocino - Monterey - Napa - San						
	Benito - Santa Clara - Santa Cruz -						
All Bay HVAC (R&R)	Solano - Sonoma	Х				\$	570,596.00
Allied Aire (R&R)	Santa Clara					\$	216,682.66
	Alameda - Contra Costa - San Joaquin -					_	
Barker Mechanical Services (R&R)	Santa Clara	X				\$	179,602.78
Bickley's (R&R)	Glenn - Humboldt - Shasta - Tehama	Х				\$	138,533.60
Enalysis		Χ				\$	24,920.00
						1	007.5-4.4-
Innovative Mechanical (R&R)	San Francisco - San Mateo - Santa Clara	Χ				\$	237,974.17
	Butte - Colusa - Glenn - Humboldt -						
l	Nevada - Placer - Sacramento - Sutter -						
John Brown Heating and Air (R&R)	Tehama - Yolo - Yuba	X				\$	223,857.49
	Alameda - Amador - Calaveras - Contra						
	Costa - El Dorado - Sacramento - San						
Lovotti Air (R&R)	Joaquin - Stanislaus	X				\$	74,314.56
	Alameda - Contra Costa - Fresno - Marin						
	Mendocino - Napa - Sacramento - Solano					_	
Quality Air Control (R&R)	- Sonoma - Yolo	X				\$	517,389.68
R&R Renaissance (R&R)	Fresno	X		.,		\$	17,433.78
R&R Winegard (R&R)	Kern	Χ		Х		\$	9,251.64
Reliable Energy Management, Inc.				.,		_	440.044.74
(R&R)	Kern - Monterey - Santa Clara	Х		Х		\$	419,944.74
On the Own March and all (DOD)	Alameda - Humboldt - Monterey - San	v				Φ.	00 000 07
Santa Cruz Mechanical (R&R)	Benito - Santa Clara - Santa Cruz	X				\$	90,822.27
Thomas Frank Heating & Air (R&R)	Fresno - Kings - Madera - Merced	Х				\$	325,826.01
Total - Repair and Replace						\$	3,973,934.31
Leveraging							
Amador-Tuolumne CAA	Amador - Calaveras - Tuolumne		Х		Х	\$	43,344.00
CAA of San Mateo County, Inc.	San Mateo		Х		Х	\$	87,720.00
Central Coast Energy Services	Monterey - San Benito - Santa Cruz		Х		Х	\$	722,400.00
3, 11						Ė	,
Central Valley Opportunity Center	Madera - Mariposa - Merced - Stanislaus		Х		Х	\$	110,424.00
Community Resource Project	Sutter - Yuba		Х		Х	\$	72,240.00
Project GO	Placer		Х		Х	\$	27,864.00
Redwood Community Action Agency	Humboldt		Х		Х	\$	258,000.00
San Joaquin HRA	San Joaquin		Х		Х	\$	122,808.00
Total - Leveraging					Ī	\$	1,444,800.00
						Ť	.,,555.56
TOTAL Contractor Expenditures	3					\$	63,911,475.87
TO THE CONTRACTOR Expenditures	•					Ψ	JU,J 1 1, T 1 J.U1

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^[1] A total of \$6,087.01 in Workshop Education expenses was excluded[2] These costs do not include administrative allocations that are included in Table 2[3] An expenditure of \$18,339.96 was included even though costs are recovered from the Contractor

Low Income Energy Efficiency Annual Report for 2007 Table TA 1

INSTALLATION COSTS OF PROGRAM INSTALLATION CONTRACTORS PACIFIC GAS AND ELECTRIC COMPANY

	Unit of Measure		(CBO/WMDVB	E				Non-	CBO/WMDVB	=				Total		
		Installations	Dwell	lings [1]	Costs [2]		Instal	lations	Dwel	lings [1]	Costs [2]		Units				Cost/
		Units %	Units	%	\$	%	Units	%	Units	%	\$	%	Installed	Dwellings	Costs [2]	Cost/ Unit	Dwelling
Furnaces																	
- Repair - Gas	Each	58 3.85	57	3.97	35,523	4.56	1,450	96.15	1,379	96.03	743,134	95.44	1,508	1,436	778,657	516.35	542.24
- Replacement - Gas	Each	111 17.13	109	17.00	227,198	13.08	537	82.87	532	83.00	1,509,352	86.92	648	641	1,736,549	2,679.86	2,709.13
- Repair - Electric	Each																
- Replacement - Electric	Each																
Infiltration & Space Conditioning.																	
- Outlet cover plate gaskets	Home	201.119 25.42	9,828	25.27	355,303	26.01	590.121	74.58	29.067	74.73	1.010.710	73.99	791,240	38.895	1,366,013	1.73	35.12
- Duct Testing	Home		,		,		,				.,,		,	,	.,,,		
- Duct Sealing	Home	283 16.62	283	16.61	293,002	24.83	1,420	83.38	1,421	83.39	887,224	75.17	1,703	1,704	1,180,226	693.03	692.62
- Evaporative Coolers	Each	839 40.75	839	40.73	583,707	40.58	1,220	59.25	1,221	59.27	854,700	59.42	2,059	2,060	1,438,407	698.60	698.26
- Evaporative Cooler Maintenance	Each																
- Evaporative Cooler/Air Cond. Covers	Each	2,045 61.06	1,306	58.30	115,144	59.34	1,304	38.94	934	41.70	78,887	40.66	3,349	2,240	194,031	57.94	86.62
- A/C Replacement - Room	Each	466 44.05	458	44.25	350,903	41.10	592	55.95	577	55.75	502,912	58.90	1,058	1,035	853,815	807.01	824.94
- A/C Replacement - Room (landlord)	Each				-	0.00	1	100.00	1	100.00	792	100.00	1	1	792	792.00	792.00
- A/C Replacement - Central	Each	46 46.00	46	46.00	91,071	41.80	54	54.00	54	54.00	126,813	58.20	100	100	217,884	2,178.84	2,178.84
- A/C Replacement - Central (landlord)	Each		 														
- A/C Tune-up - Central	Each		.														
- A/C Services - Central - Heat Pump	Each Each		1														
- Heat Pump	Eacn																
Weatherization																	
- Attic Insulation	Home	685,582 16.65	676	17.88	589,685	17.24	3,432,191	83.35	3,105	82.12	2,830,952	82.76	4,117,773	3,781	3,420,638	0.83	904.69
- Attic Access Weatherization	Home	4,646 26.96	4,461	27.17	75,997	25.98	12,588	73.04	11,960	72.83	216,516	74.02	17,234	16,421	292,513	16.97	17.81
- Weather stripping - Door	Home	18,476 23.87		25.18	1,095,998	22.05	58,915	76.13	28,528	74.82	3,874,407	77.95	77,391	38,130	4,970,405	64.22	130.35
- Caulking	Home	9,803 24.72	9,796	24.86	549,656	23.76	29,855	75.28	29,616	75.14	1,763,814	76.24	39,658	39,412	2,313,470	58.34	58.70
- Minor Home Repairs	Home	10,663 26.40	10,663	26.40	1,648,715	29.88	29,724	73.60	29,724	73.60	3,868,757	70.12	40,387	40,387	5,517,471	136.62	136.62
Water Heater Savings																	
- Water Heater Blanket	Home	1,447 13.22	1,442	13.23	62,676	13.29	9,495	86.78	9,454	86.77	408,786	86.71	10,942	10,896	471,462	43.09	43.27
- Low Flow Showerhead	Home	9.077 21.97	7,278	23.06	271.019	20.08	32,247	78.03	24,287	76.94	1.078.594	79.92	41,324	31,565	1,349,613	32.66	42.76
- Water Heater Replacement - Gas [3]	Each	23 8.58	23	8.58	61,284	5.78	245	91.42	245	91.42	999,604	94.22	268	268	1,060,888	3,958.54	3,958.54
- Water Heater Replacement - Electric	Each																
- Tankless Water Heater - Gas	Each																
- Tankless Water Heater - Electric	Each																
- Water Heater Pipe Wrap	Home	596 16.87	149	15.57	1,782	14.05	2,936	83.13	808	84.43	10,902	85.95	3,532	957	12,684	3.59	13.25
- Faucet Aerators	Home	18,096 25.92	8,931	25.93	109,776	25.85	51,725	74.08	25,510	74.07	314,875	74.15	69,821	34,441	424,650	6.08	12.33
Lighting Measures																	
- CFL	Each	89,804 22.96	12,804	23.62	895,735	22.94	301,325	77.04	41,402	76.38	3,009,355	77.06	391,129	54,206	3,905,089	9.98	72.04
- Interior Hard wired CFL fixtures	Each	27,22.	,_,		230,100		22.,220		,		2,200,000		22.,.20	2.,200	2,200,000	2.00	. 2.01
- Exterior Hard wired CFL fixtures	Each	8,062 23.47	4,547	23.34	613,346	23.43	26,286	76.53	14,932	76.66	2,004,216	76.57	34,348	19,479	2,617,562	76.21	134.38
- Torchiere	Each																
	T =	1,000 5,00	4.000		4 400 001	0.07	45.06:	01.07	45.001	04.05	40.051.005	00.76	47.000	47.000	45.000.000	000.51	000.51
Refrigerators (incls. Home Grounding Amount)	Each Each	1,382 8.03	1,382	8.03	1,426,224	9.27	15,824 24	91.97 100.00	15,821 24	91.95 100.00	13,954,325	90.73	17,206 24	17,206 24	15,380,549 12,192	893.91 508.00	893.91 508.00
Refrigerators (landlord)		- -	- 1	-	-	0.00	24	100.00	24	100.00	12,192	100.00	24	24	12,192	508.00	508.00
Pool Pumps	Each																
Pilots																	
- A/C Tune-up - Central	Home	76 11.45		11.45	11,628	11.45	588	88.55	588	88.55	89,964	88.55	664	664	101,592	153.00	153.00
- Interior Hard wired CFL fixtures	Each	8,993 22.15		17.47	684,647	22.12	31,613	77.85	24,316	59.88	2,410,568	77.88	40,606	40,606	3,095,214	76.23	76.23
- Ceiling Fans	Each	137 11.56	115	9.70	23,100	11.47	1,048	88.44	713	60.17	178,330	88.53	1,185	1,185	201,430	169.98	169.98
Energy Education																	
- Outreach & Assessment	Home		16,700		1,298,625,00				46.619		3,389,350,00			63,319	4.687.975.00		
	Home		16,700		1,684,391,00				46,619		4.442.586.00			63,319	6,126,977.00		
- In-Home Education																	

^[1] Dwellings are interpreted as FINs (Field Identification Numbers]
[2] These costs exclude support costs that are included in Table 2.
[3] Includes costs of water heater repair.

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Low Income Energy Efficiency Annual Report for 2007 Table TA 2a COST ELEMENTS PACIFIC GAS AND ELECTRIC COMPANY Electric

	Expenditures Recorded by Cost Element									
LIEE Program:	Labor	Non-Labor	Contract	Total						
Energy Efficiency										
- Gas Appliances	-	-	_	-						
- Electric Appliances	-	371,933	27,973,121	28,345,054						
- Weatherization	-	56,809	4,506,743	4,563,552						
- Outreach and Assessment	-	42,059	3,386,618	3,428,677						
- In Home Energy Education	-	53,160	4,287,466	4,340,626						
- Education Workshops	-	2,938	1,423	4,361						
- Pilot-Tankless Water Heater	-	-	-	-						
Energy Efficiency TOTAL	-	526,899	40,155,371	40,682,270						
Training Center	63,129	63,311	90,041	216,481						
Inspections	1,828,913	705,423	110,999	2,645,335						
M&E Studies	-	1,280	126,000	127,280						
Regulatory Compliance	57,189	21,207	4,017	82,413						
General Administration	466,278	289,229	3,612,656	4,368,163						
CPUC Energy Division	-	17,961	•	17,961						
TOTAL PROGRAM COSTS	2,415,509	1,625,310	44,099,084	48,139,903						

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Low Income Energy Efficiency Annual Report for 2007 Table TA 2b COST ELEMENTS PACIFIC GAS AND ELECTRIC COMPANY Gas

	Expenditures Recorded by Cost Element									
LIEE Program:	Labor	Non-Labor	Contract	Total						
Energy Efficiency										
- Gas Appliances		85,366	6,852,012	6,937,378						
- Electric Appliances	-	-	-	-						
- Weatherization	-	170,427	13,520,229	13,690,656						
- Outreach and Assessment	-	18,025	1,451,408	1,469,433						
- In Home Energy Education	-	22,783	1,837,485	1,860,268						
- Education Workshops	-	1,259	610	1,869						
- Pilot -Tankless Water Heater	-	-	41,302	41,302						
Energy Efficiency TOTAL	-	297,860	23,703,046	24,000,906						
Training Center	27,055	27,154	38,569	92,778						
Inspections	783,820	302,324	47,571	1,133,715						
M&E Studies	-	549	54,000	54,549						
Regulatory Compliance	24,510	9,088	1,722	35,320						
General Administration	199,833	123,955	1,548,281	1,872,069						
CPUC Energy Division	-	7,698	-	7,698						
TOTAL PROGRAM COSTS	1,035,218	768,628	25,393,189	27,197,035						

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Low Income Energy Efficiency Annual Report for 2007 Table TA 2c COST ELEMENTS PACIFIC GAS AND ELECTRIC COMPANY Electric and Gas

	Expenditures Recorded by Cost Element									
LIEE Program:	Labor	Non-Labor	Contract	Total						
Energy Efficiency										
- Gas Appliances	-	85,366	6,852,012	6,937,378						
- Electric Appliances	-	371,933	27,973,121	28,345,054						
- Weatherization	-	227,236	18,026,972	18,254,208						
- Outreach and Assessment	-	60,084	4,838,026	4,898,110						
- In Home Energy Education	-	75,943	6,124,951	6,200,894						
- Education Workshops	-	4,197	2,033	6,230						
- Pilot-Tankless Water Heater	-	-	41,302	41,302						
Energy Efficiency TOTAL	-	824,759	63,858,417	64,683,176						
Training Center	90,184	90,465	128,610	309,259						
Inspections	2,612,733	1,007,747	158,570	3,779,050						
M&E Studies	-	1,829	180,000	181,829						
Regulatory Compliance	81,699	30,295	5,739	117,733						
General Administration	666,111	413,184	5,160,937	6,240,232						
CPUC Energy Division	-	25,659	-	25,659						
TOTAL PROGRAM COSTS	3,450,727	2,393,938	69,492,273	75,336,938						

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Low Income Energy Efficiency Annual Report for 2007 Table TA 3 DETAIL BY HOUSING TYPE AND HEATING SOURCE PACIFIC GAS AND ELECTRIC COMPANY [1] [2]

	Energy Savings				Dwellings
	(GWH)	(Million Therm)	Expenses [3]		Treated
Gas Heat - Own					
Single Family	10.99	0.69	\$	27,903,187	23,452
Multi Family	0.17	0.01	\$	597,280	502
Mobile Homes	1.56	0.06	\$	5,545,657	4,661
Sub Total Dwellings Served	12.72	0.76	\$	34,046,123	28,615
Gas Heat – Rent					
Single Family	7.15	0.32	\$	18,288,414	15,371
Multi Family	2.30	0.12	\$	12,467,913	10,479
Mobile Homes	0.21	0.00	\$	533,030	448
Sub Total Dwellings Served	9.67	0.45	\$	31,289,357	26,298
Electric Heat – Own					
Single Family	0.79	0.00	\$	1,337,335	1,124
Multi Family	0.09	-	\$	209,405	176
Mobile Homes	0.13	0.00	\$	290,311	244
Sub Total Dwellings Served	1.00	0.00	\$	1,837,051	1,544
Electric Heat – Rent					
Single Family	0.89	-	\$	1,532,462	1,288
Multi Family	1.00	-	\$	4,054,838	3,408
Mobile Homes	0.05	ı	\$	105,892	89
Sub Total Dwellings Served	1.94	-	\$	5,693,192	4,785
TOTAL DWELLINGS					
SERVED	25.33	1.21	\$	72,865,724	61,242

^{[1] -} Dwellings with no PG&E or Other heating source identified (2,077) have been excluded in this table which amounts to: \$ 2,471,214

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^{[2] -} Undefined rent and owned dwellings are assumed owner occupied.

^{[3] -} Excluding NGAT costs

Low Income Energy Efficiency Annual Report for 2007 Table TA 4 LIFE CYCLE BILL SAVINGS PACIFIC GAS AND ELECTRIC COMPANY

Measure Description	Number Installed	Per Measure Electric Impact (kWh)	Per Measure Gas Impact (Therms)	Effective Useful Life (EUL)	Total Measure Life Cycle Bill Savings	
Energy Efficiency Measures						
Furnaces - Repair - Gas	1,508	-	40.54	10	\$ 510,897	
Furnaces - Replacement - Gas	648	-	65.29	18	\$ 545,784	
Gaskets for Cover Plates	38,895	0.80	0.28	15	\$ 156,899	
Duct Sealing	1,704	2.53	6.17	18	\$ 140,884	
Evaporative Coolers	2,059	381.50	-	15	\$ 857,337	
Evaporative Cooler/Air Cond. Covers	3,349	0.48	2.34	3	\$ 23,124	
A/C Replacement - Room	1,058	237.68	-	15	\$ 274,457	
A/C Replacement - Room (landlord)	1	302.12	-	15	\$ 330	
A/C Replacement - Central	100	307.74	-	18	\$ 38,090	
Attic Insulation	3,781	30.93	41.48	20	\$ 2,321,397	
Attic Access Weatherization	16,421	0.39	0.84	5	\$ 66,513	
Weather stripping - Door	38,130	2.29	2.27	5	\$ 438,336	
Caulking	39,412	2.31	2.71	5	\$ 534,074	
Minor Home Repairs	40,387	6.00	6.16	10	\$ 2,274,391	
Water Heater Blanket	10,896	4.76	10.54	5	\$ 554,047	
Low Flow Showerhead	31,565	4.11	7.47	10	\$ 2,075,398	
Water Heater Replacement - Gas	268	-	18.93	13	\$ 51,972	
Tankless Water Heater	0	N/A	N/A	13	\$ -	
Water Heater Pipe Wrap	957	43.60	0.54	15	\$ 51,436	
Faucet Aerators	34,441	1.86	3.10	5	\$ 521,702	
Compact Fluorescents	391,129	21.56	-	8	\$ 5,629,495	
Porch lights fixture replacement	34,348	35.60	=	16	\$ 1,396,728	
Refrigerators	17,206	755.75	=	15	\$ 14,192,501	
Refrigerators (landlord)	24	686.72	=	15	\$ 17,988	
AC Tune-up - Central	664	201.77	-	15		
Interior Hard wired CFL Fixtures	40,606	69.18	=	16	\$ 3,208,927	
Total Number of Homes Served By the Program	63,319					
Life Cycle Bill Savings Per Home	\$ 569.01					

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Low Income Energy Efficiency Annual Report for 2007 Table TA 5 ENERGY RATES USED FOR BILL SAVINGS CALCULATIONS PACIFIC GAS AND ELECTRIC COMPANY

Year	\$/kWh	\$/Therm
2007	0.0964	1.0051
2008	0.0993	1.0353
2009	0.1023	1.0664
2010	0.1054	1.0983
2011	0.1085	1.1313
2012	0.1118	1.1652
2013	0.1152	1.2002
2014	0.1186	1.2362
2015	0.1222	1.2733
2016	0.1258	1.3115
2017	0.1296	1.3508
2018	0.1335	1.3913
2019	0.1375	1.4331
2020	0.1416	1.4761
2021	0.1459	1.5204
2022	0.1503	1.5660
2023	0.1548	1.6130
2024	0.1594	1.6613
2025	0.1642	1.7112
2026	0.1691	1.7625
2027	0.1742	1.8154
2028	0.1794	1.8699
2029	0.1848	1.9259
2030	0.1903	1.9837
2031	0.1960	2.0432

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Low Income Energy Efficiency Annual Report for 2007 Table TA 6 BILL SAVINGS PACIFIC GAS AND ELECTRIC COMPANY

Program Year	Pre	ogram Costs	gram Lifecycle 3ill Savings	Program Savings/ Ratio		Avera	er Home ige Lifecycle I Savings
2005	\$	63,148,667	\$ 35,481,982		0.56	\$	615
2006	\$	88,045,621	\$ 46,414,508		0.53	\$	703
2007	\$	75,336,938	\$ 36,028,935		0.48	\$	569

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