

**LOW INCOME
ENERGY EFFICIENCY PROGRAMS
ANNUAL SUMMARY AND
TECHNICAL APPENDIX**

**2007 Results
May 2008**



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Executive Summary

Overview

The Low Income Energy Efficiency¹ (LIEE) program provides income-qualified residential customers with no-cost energy efficiency weatherization services and energy education. Energy education is provided to customers inside their home prior to weatherization. In 2007, Southern California Gas Company (SoCalGas) continued conducting natural gas appliance testing (NGAT) on all homes that received infiltration reduction measures.² The LIEE training staff continued conducting audits of each program contractor. As part of the audit process, SoCalGas randomly selected customer enrollments and income documentation to review for accuracy of information and to validate that participating customers meet the program's eligibility requirements. In 2007, SoCalGas continued its post inspection practice on a sampling of completed weatherization jobs and on 100% of those jobs involving either ceiling insulation work or the repair or replacement of a natural gas appliance.

Program Results

The program year (PY) 2007 LIEE program portfolio design and funding was approved by the California Public Utilities Commission (Commission or CPUC) in Decision (D.) 06-12-038 on December 14, 2006. SoCalGas' total authorized budget for PY2007 was \$46,066,205, which is comprised of \$33,415,541 in 2007 authorized funds, plus \$12,650,664 in unspent funds from PY2006. LIEE program expenditures during 2007 totaled \$27,097,166. Unspent funds from 2007, totaling \$18,969,039 will be carried over and used in SoCalGas' PY2008 LIEE program.

During PY2007, the LIEE program weatherized a total of 42,456 homes, provided in-home energy education to 37,643 customers, repaired 2,821 furnaces, replaced 1,933 furnaces, and replaced 86 water heaters.

Throughout PY2007, SoCalGas' LIEE training staff continued offering training to SoCalGas LIEE contractors. As a result, the training staff conducted 24 initial training classes to 262 students and 29 refresher classes to 520 students during PY2007.

¹ The LIEE program is also known as the Direct Assistance Program (DAP).

² Infiltration reduction measures such as attic insulation, door weatherstripping, and minor home repairs are designed to reduce the uncontrolled flow of air moving into and out of a home.

Low Income Energy Efficiency Program

Program Summary

SoCalGas' LIEE program provides income qualifying residential customers with no-cost energy efficiency and conservation services, including home weatherization and energy education.

The LIEE program is offered to SoCalGas customers who rent or own their homes. Program services include the installation of ceiling insulation, weatherstripping, caulking, low-flow showerheads, water heater blankets, switch and outlet gaskets, faucet aerators, evaporative cooler vent covers, pipe insulation, and building envelope (minor home) repair. In addition to home weatherization services, customers receive in-home energy education which is designed to help customers learn to save energy by modifying their energy-use habits.

Qualified homeowners with furnaces and/or water heaters that fail NGAT are eligible for furnace and/or water heater repair or replacement services.

SoCalGas continues to conduct an LIEE customer satisfaction survey. Each month a sample of program participants are surveyed to measure their satisfaction with the program. The survey focuses on the quality of service provided during each stage of the program (i.e., outreach, installation, and inspections) as well as customers' understanding of the program, level of ease in completing the paperwork, and overall satisfaction with the program.

As reported in Table 1 and Table TA 2, SoCalGas spent a total of \$27,097,166 on the LIEE program. The annual energy savings realized was 891 mTherms. The energy savings from the 2007 LIEE program year will contribute to the Commission's energy savings goals adopted for program year 2006 and beyond as set forth in D.04-09-060.³

PY2007 Low Income Program

Low Income Energy Efficiency Program

During PY2007, SoCalGas weatherized 42,456 homes, provided in-home energy education to 37,643 customers, repaired 2,821 furnaces, replaced 1,933 furnaces, and replaced 86 water heaters. Additionally, SoCalGas leveraged LIEE outreach with Medical Baseline and California

³ Findings of Fact 13.

Alternate Rates for Energy (CARE) outreach activities and at three Bill Clinics held in Los Angeles, San Bernardino and Boyle Heights which were hosted by the CPUC. Other outreach efforts and media campaigns conducted by SoCalGas during 2007 included the following:

- Used census track data and existing CARE participant database information to develop mailings lists used to conduct direct mail campaigns specifically targeting potential LIEE customers in underserved areas.
- Provided program contractors with CARE participant database information for use in conducting outreach.
- Coordinated with community based organizations (CBOs), other utilities, various low-income focused organizations, and officials from various cities to host three neighborhood fairs. Events were held in Ontario, Boyle Heights, and Los Angeles. These neighborhood fairs effectively reached a large population of income-eligible Hispanic customers and spotlighted actual LIEE installations covered by various media sources.
- Used CARE system enrollment information for analysis and identification of households that have a high potential for meeting the LIEE program eligibility criteria.
- Provided LIEE presentations to company field personnel and customer service representatives so they can promote the LIEE program during the normal course of their contact with customers.
- Provided information on all SoCalGas Customer Assistance programs to 211⁴ for distribution throughout the various county 211 offices. SoCalGas LIEE information is provided via telephone by 211 and also on some of the county's web sites.
- Updated LIEE enrollment forms, collateral material and web content to include categorical eligibility and the 2007 income guidelines provided by the Commission and effective June 1st of each year.

⁴ In 2000, the Federal Communication Commission designated 211 as a public access phone number to provide information on various health and human services.

- Worked with the Volunteer Income Tax Association (VITA) and Earned Income Tax Credit (EITC) organization, BroadSpectrum CDC, to promote LIEE and SoCalGas' CARE program at all of their free tax preparation offices.
- Developed and finalized collateral energy education material that discusses the benefits of energy efficiency programs in an effort to reduce greenhouse gases and promote water conservation.

SoCalGas placed LIEE English print advertising in the following publications:

Publication	Circulation
Visalia Times/Tulare Register	31,140
Fresno Bee	37,000
Porterville Recorder	9,500
Bakersfield Californian	61,792
Antelope Valley Press	31,015

- Aired two 60 second radio spots on The Carlos Alvarez Show on KLVE-FM. The pre-recorded radio spots featured the host, Carlos Alvarez, discussing the LIEE program for one minute and were aired Monday-Friday from 3-7 p.m.
- Televised two 80 second pre-recorded interviews that aired October 22nd and 23rd on local Los Angeles Univision affiliate KMEX-TV during their national morning show "Despierta America". The segments focused on no cost weatherization services for SoCalGas' "income qualified customers".

Regulatory Compliance and Oversight, Measurement and Evaluation (M&E) Activities

Regulatory Compliance and Oversight

During 2007, SoCalGas' LIEE program complied with Public Utilities Code (PU Code) Sections 327 and 381.5. Over half of the weatherization contractors participating in SoCalGas' program are able to leverage their LIEE program funding with funding they received under the State of

California Department of Community Services and Development's (CSD) Low Income Home Energy Assistance Program (LIHEAP) weatherization program. Local CBOs and other community organizations also provided LIEE program energy education to customers in conjunction with their other community services offerings.

Section 2790 of the PU Code mandates that the LIEE program provide as many program energy efficiency measures as feasible to eligible customers served in the program. In addition, Section 2790 provides that the Commission will make a determination as to whether the measure is feasible, taking into consideration both cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low income households.

In D.06-12-038, the Commission directed the utilities to collaborate with the Energy Division to revise low income program reporting requirements, conduct public meetings every 90 days to facilitate program improvements, and to include a discussion of the benefits of energy efficiency programs in its energy education materials for reducing greenhouse gases and promoting water conservation. In response to the Commission's direction, the following results were achieved during PY2007:

LIEE Reporting Requirements

- The Energy Division convened a workshop on February 21, 2007 with SoCalGas, Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE) (collectively referred to as the Joint Utilities) and other interested parties to discuss the reporting requirements for the CARE and the LIEE programs monthly, quarterly, and annual reporting. Subsequent to the workshop, the Energy Division held numerous meetings with the utilities to finalize the reporting so that meaningful information can be provided to the Commission and interested parties.

Quarterly Public Meetings

- In D.06-12-038, the Commission directed the utilities to sponsor quarterly public meetings so that interested parties could share ideas and information that would influence improvements to the program elements, processes, and practices. During 2007, the utilities jointly sponsored a meeting in each utilities' respective service territory. Notes of the meetings were distributed to the members of the Low Income Oversight Board,

attendees at the meeting, Energy Division staff, and any other party requesting the meeting notes. The meetings were held on the following dates:

SDG&E Service Territory:	Discuss CARE Program – 3/13/07
SDG&E Service Territory:	Discuss LIEE Program – 3/27/07
PG&E Service Territory:	Discuss CARE Program – 6/11/07
PG&E Service Territory:	Discuss LIEE Program – 6/12/07
SoCalGas Service Territory:	Discuss LIEE and CARE Programs – 9/10/07
SCE Service Territory:	Discuss LIEE and CARE Programs – 12/04/07

Energy Education

- SoCalGas developed and finalized collateral energy education material that discusses the benefits of energy efficiency programs in an effort to reduce greenhouse gases and promote water conservation. The title to SoCalGas' energy education collateral is "Helping the Environment through Energy Efficiency". It provides simple helpful steps that customers can use to save money through reduced energy and water usage and discusses the benefits of reduced carbon dioxide emissions. In 2008, SoCalGas will begin including this collateral material in LIEE customer energy education guides.

LIEE Program Manual Updates

- In PY2007, the Joint Utilities distributed for review and comment recommended changes to the LIEE Statewide Policies and Procedures (P&P) Manual. The recommended changes were developed by the Joint Utilities through an open process. The recommendations were categorized as follows: 1) establish and revise existing policies and procedures to comply with LIEE program measures adopted for program year 2007 and 2008 consistent with D.06-12-038; 2) make minor revisions to refine current policies and procedures; and, 3) make minor language revisions. The proposed changes were distributed for discussion at the Joint Utilities March 27, 2007 public meeting and distributed for review and comment on August 20, 2007 to the service list in R.07-01-042 and the utilities' contractors and agency contacts. SoCalGas plans to file the revised P&P manual with the Commission within the third quarter of 2008 to seek approval for the program changes authorized in 2006, 2007, and 2008 LIEE program cycle.

Measurement and Evaluation (M&E) Activities

Statewide Needs Assessment

- Phase II of the Low Income Needs Assessment Report (Report) conducted by KEMA, Inc., the Commission-hired consultant, was issued on October 12, 2007. The needs assessment was conducted in two phases: Phase I - the scoping study and Phase II – the execution of the assessment. During 2007, SoCalGas attended meetings and responded to data requests from KEMA in an effort to finalize the report. Administrative Law Judge (ALJ) Malcolm issued a Ruling on September 27, 2007 seeking comments on the issues raised in the KEMA report entitled “Final Report on Phase 2 Low Income Needs Assessment”. However, at the time of this filing, the utilities are awaiting Commission action on whether the Report would be adopted.

Energy Savings Methods Used for PY2007

- In Ordering Paragraph 9 of D.05-012-026, the Commission, without adopting or approving the results, authorized the use of the Impact Evaluation of the 2001 Statewide Low Income Energy Efficiency Program for calculating the energy savings for the LIEE program activities on a case by case basis until the Commission can address and resolve Low Income Energy Efficiency-related issues in the 2006 Annual Earnings Assessment Proceeding. To determine the energy savings for PY2007, SoCalGas has utilized several measurement and evaluation methods adopted by the Commission to calculate the measure savings. SoCalGas has used the 2001 LIEE Load Impact study measure evaluation data, the LIEE measure cost effectiveness study, the database for energy efficiency resources (DEER), and the measure assessment conducted by the LIEE Statewide Standardization Project Team.⁵

LIEE Impact Evaluation

- The LIEE program load impact evaluation was scheduled to occur in 2006 for the 2004 program, which would have been consistent with the bi-annual schedule authorized by

⁵ The 2007 LIEE energy savings are based on the following: 1) 2001 Low Income Impact Evaluation Study; 2) D.03-11-020 approved the "LIEE Measure Cost Effectiveness Study" conducted by Itron, Inc. filed on June 2, 2003 for new measure mix effective 1/1/04; 3) D.05-12-026 approved the "Report on the Assessment of Proposed New Year 2006 LIEE Program Measures" conducted by Itron, Inc. filed on May 2, 2005; and 4) the DEER.

D.02-12-019. The Commission, however, granted the utilities' request to conduct the impact evaluation of the 2005 LIEE program, rather than on the 2004 program.⁶ In an effort to enhance the quality of subsequent impact evaluations, PY2005 was the first year in which the collection of additional measure data and improved sampling techniques became available. In PY2007, the utilities attended meetings and responded to various data requests from the consultant, West Hill Energy and Computing, in an effort to complete the 2005 load impact evaluation report. The Impact Evaluation of the 2005 Low Income Energy Efficiency Program – Final Report was issued by West Hill Energy and Computing on December 19, 2007. The energy savings results of this report will be used in computing the projected benefits for the mix of measures offered in the 2009 through 2011 LIEE program cycle as well as other measurement and evaluation methods adopted by the Commission for measures offered in the program post PY2005.

Bill Savings

Table TA 4 reports lifecycle bill savings by measure, by fuel type, and combined for PY2007; Table TA 5 reports the energy rates used for calculating the bill savings; and, Table TA 6 reports the bill savings and the cost ratio for SoCalGas' LIEE programs over the last three years.

Other Program-Related Survey

During PY2007, SoCalGas surveyed 1,158 customers to evaluate their satisfaction with all aspects of the LIEE program, from enrollment to inspection. Additionally, the survey was designed to provide program management with insight into the effectiveness of the program and to identify potential areas for improvement. Portions of the survey were designed to ascertain how the contractors performed in delivering program services, customer satisfaction with the service, and whether participants experienced increased comfort and safety as a result of participating in the program.

The findings of the survey showed that the majority of customers claim to be more comfortable as a result of the program. On average, 83% of customers said they are "more comfortable" as a result of the work done by LIEE, 15% said they are "about the same" and 2% said they are "less

⁶ On February 7, 2005, SCE on behalf of itself, PG&E, SoCalGas, and SDG&E filed a letter to request Commission authorization. On March 17, 2005, the Executive Director of the Commission granted the utilities' request.

comfortable.” Overall the LIEE program received high ratings. During PY2007, overall customer satisfaction with the program was 85%.

CBO, Leveraging and Access to Community Services

In D.01-05-033, the Commission directed utility program administrators to use the funding authorized for LIEE and appliance replacements to leverage the programs provided through DCSD’s network of community-based organizations to customers within their service territories. Per D.01-05-033, the utilities could conduct leveraging utilizing the following three approaches:

- “The utility can purchase equipment and appliances in bulk and have a LIHEAP provider install them in eligible low-income homes within the utility service territory, along with additional weatherization measures provided by LIHEAP.”
- “The utility can contract directly with a LIHEAP provider to deliver the LIEE program, so that LIHEAP provider can use funds from both LIEE and LIHEAP to provide a comprehensive set of services.”
- “The utility can enter into a memorandum of understanding with LIHEAP providers to complete units in a coordinated manner, using LIEE contractors to install measures not provided under LIHEAP.”

In an effort to ensure that the network of community-based providers are fully and effectively utilized, D.01-05-033 also directed the utilities to use LIEE funds to leverage low-income weatherization services provided by non-LIHEAP community service providers, under certain circumstances.

D.01-05-033 states:

“[I]f there are no LIHEAP providers or non-LIHEAP community-based organizations that can, or are willing to, provide weatherization services in a particular geographic area, then utilities also have the option to implement today’s rapid deployment strategy with other types of service providers, including private contractors. We provide the utilities considerable flexibility in deciding which of the three approaches, and in what combination, to employ. In this way, a utility can develop the leveraging strategy that is most compatible with its existing delivery system.

The leveraging approach we adopt today will require a shift in thinking within the utility program infrastructure. Instead of considering the LIEE program as a stand-alone activity that provides referrals to DCSD programs, utility administrators and their contractors also need to view the LIEE program as a leveraging vehicle to rapidly expand and enhance the delivery system in place through DCSD's network of LIHEAP providers. We believe that this shift in thinking is warranted by the dire situation facing low-income customers during the energy crisis, and needed to ensure the efficient and effective deployment of all of the State's resources appropriated for this purpose.”⁷

In accordance with the above provisions set forth in D.01-05-033 to deploy a leveraging vehicle to expand and enhance the delivery system of the LIEE program, SoCalGas has utilized the variety of the leveraging scenarios described by the Commission.

In 2007, SoCalGas used the following leveraging efforts to service LIEE customers:

CBO Participation

All of the weatherization agencies/contractors are classified as either CBOs or are Women, Minority, and Disabled Veteran Business Enterprises (WMDVBE) certified. Over two-thirds of the appliance contractors providing furnace and water heater services in PY2007 also hold either CBO or WMDVBE status.

Leveraging

California LIHEAP Block Grant weatherization and bill assistance efforts are funded by the Federal Department of Health & Human Services (DHHS) and provides the following types of services through the DCSD:

- Financial Assistance to offset the costs of heating and/or cooling dwellings;
- Weatherization measures to improve the energy efficiency of the dwelling; and

⁷ D.01-05-033 at page 5. Also see Conclusions of Law 4 through 7.

- Education to assist the customer in identifying conservation opportunities.

CBOs are eligible to apply for federal funding to install weatherization measures under the LIHEAP Block Grant Program. Over half of SoCalGas' LIEE participating program weatherization contractors are also LIHEAP providers. This affords the opportunity to leverage the services offered by both programs to our customers. The LIHEAP providers, and other LIEE contractors, are committed to providing comprehensive services to each low income household.

Access to Other Low Income Services

LIEE eligible customer information is provided to the CARE staff for automatic enrollment and possible certification and post-enrollment verification for the CARE program. In addition to the weatherization services offered by many participating agencies, other programs and services (from other funding sources) offered to customers include: the Home Energy Assistance Program (HEAP), consumer credit counseling, housing programs, food and clothing referrals, job assistance, child care, transportation services, recycling programs, youth and family services, senior programs, neighborhood beautification, computer labs and vocational training, homeless centers, legal assistance, handyman programs, drug and domestic violence programs and Healthy Family and Head Start Programs as well as other services. When outreached in the community or when applying for specialized assistance, the low income customer is screened for all services that are needed and/or that they qualify for, including SoCalGas' weatherization and appliance assistance.

	A	B	C	D	E	F	G	H	I	J
1	Table 1 LIEE Program Expenses - Southern California Gas Company - PY2007									
2		Authorized Budget			Annual Expenditures			% of Budget Spent		
3	LIEE Program:	Electric	Gas	Elec & Gas	Electric	Gas	Elec & Gas	Electric	Gas	Elec & Gas
4	Energy Efficiency									
5	- Gas Appliances	\$ -	\$ 5,545,241	\$ 5,545,241	\$ -	\$ 4,168,813	\$ 4,168,813	0%	75%	75%
6	- Electric Appliances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
7	- Weatherization	\$ -	\$ 16,866,660	\$ 16,866,660	\$ -	\$ 13,167,029	\$ 13,167,029	0%	78%	78%
8	- Outreach and Assessment	\$ -	\$ 5,026,515	\$ 5,026,515	\$ -	\$ 5,433,697	\$ 5,433,697	0%	108%	108%
9	- In Home Energy Education	\$ -	\$ 447,000	\$ 447,000	\$ -	\$ 497,445	\$ 497,445	0%	111%	111%
10	- Education Workshops	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
11	- Pilot	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
12	- Cool Centers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
13	Energy Efficiency TOTAL	\$ -	\$ 27,885,416	\$ 27,885,416	\$ -	\$ 23,266,984	\$ 23,266,984	0%	83%	83%
14										
15	Training Center	\$ -	\$ 91,538	\$ 91,538	\$ -	\$ 125,952	\$ 125,952	0%	138%	138%
16	Inspections	\$ -	\$ 2,058,676	\$ 2,058,676	\$ -	\$ 1,330,885	\$ 1,330,885	0%	65%	65%
17	Marketing	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ 308,650	\$ 308,650	0%	154%	154%
18	M&E Studies	\$ -	\$ 203,571	\$ 203,571	\$ -	\$ 4,277	\$ 4,277	0%	2%	2%
19	Regulatory Compliance	\$ -	\$ 278,512	\$ 278,512	\$ -	\$ 237,493	\$ 237,493	0%	85%	85%
20	General Administration	\$ -	\$ 2,657,828	\$ 2,657,828	\$ -	\$ 1,798,220	\$ 1,798,220	0%	68%	68%
21	CPUC Energy Division	\$ -	\$ 40,000	\$ 40,000	\$ -	\$ 24,705	\$ 24,705	0%	62%	62%
22										
23	TOTAL PROGRAM COSTS	\$ -	\$ 33,415,541	\$ 33,415,541	\$ -	\$ 27,097,166	\$ 27,097,166	0%	81%	81%
24	Funded Outside of LIEE Program Budget									
25	Indirect Costs				\$ -	\$ 1,159,853	\$ 1,159,853			
26										
27	NGAT Costs				\$ -	\$ 1,160,667	\$ 1,160,667			
28										
29	The PY2007 Authorized Budget does not include carry over funds of \$12,650,664 from PY2006.									

	A	B	C	D	E	F	G
1	Table 2 LIEE Installations & Savings - Southern California Gas Company - PY2007						
2	Measures	Units	Completed & Expensed Installations Year-To-Date				
3			Quantity Installed	kWh (Annual) ¹	kW (Annual)	Therms (Annual)	Expenses
4	Furnaces						
5	- Repair - Gas	Each	2,821	-	-	61,616	\$ 931,183
6	- Replacement - Gas	Each	1,933	-	-	59,723	\$ 3,147,304
7	- Repair - Electric	Each	N/A	-	-	-	\$ -
8	- Replacement - Electric	Each	N/A	-	-	-	\$ -
10	Infiltration & Space Conditioning.						
11	- Outlet cover plate gaskets	Home	34,663	-	-	-	\$ 275,165
12	- Duct Testing	Home	1,872	-	-	-	\$ 184,629
13	- Duct Sealing	Home	355	-	-	7,473	\$ 58,204
14	- Evaporative Coolers	Each	N/A	-	-	-	\$ -
15	- Evaporative Cooler Maintenance	Each	N/A	-	-	-	\$ -
16	- Evaporative Cooler/Air Cond. Covers	Each	2,286	-	-	2,187	\$ 72,565
17	- A/C Replacement - Room	Each	N/A	-	-	-	\$ -
18	- A/C Replacement - Room (landlord)	Each	N/A	-	-	-	\$ -
19	- A/C Replacement - Central	Each	N/A	-	-	-	\$ -
20	- A/C Replacement - Central (landlord)	Each	N/A	-	-	-	\$ -
21	- A/C Tune-up - Central	Each	N/A	-	-	-	\$ -
22	- A/C Services - Central	Each	N/A	-	-	-	\$ -
23	- Heat Pump	Each	N/A	-	-	-	\$ -
25	Weatherization						
26	- Attic Insulation	Home	1,451	-	-	33,567	\$ 1,031,779
27	- Attic Access Weatherization	Home	166	-	-	-	\$ 5,658
28	- Weatherstripping - Door	Home	39,072	-	-	81,288	\$ 2,606,300
29	- Caulking	Home	2,789	-	-	4,579	\$ 21,366
30	- Minor Home Repairs ²	Home	37,258	-	-	148,315	\$ 7,277,017
32	Water Heater Savings						
33	- Water Heater Blanket	Home	3,722	-	-	39,887	\$ 170,817
34	- Low Flow Showerhead	Home	39,490	-	-	309,553	\$ 961,858
35	- Water Heater Replacement - Gas	Each	86	-	-	1,634	\$ 87,890
36	- Water Heater Replacement - Electric	Each	N/A	-	-	-	\$ -
37	- Tankless Water Heater - Gas	Each	1	-	-	28	\$ 2,436
38	- Tankless Water Heater - Electric	Each	N/A	-	-	-	\$ -
39	- Water Heater Pipe Wrap	Home	1,959	-	-	8,288	\$ 33,536
40	- Faucet Aerators	Home	41,160	-	-	133,092	\$ 468,135
42	Lighting Measures						
43	- CFL	Each	N/A	-	-	-	\$ -
44	- Interior Hard wired CFL fixtures	Each	N/A	-	-	-	\$ -
45	- Exterior Hard wired CFL fixtures	Each	N/A	-	-	-	\$ -
46	- Torchiere	Each	N/A	-	-	-	\$ -
48	Refrigerators						
49	Refrigerators (landlord)						
51	Pool Pumps						
53	Pilots						
54	- A/C Tune-up - Central	Each	N/A	-	-	-	\$ -
55	- Interior Hard wired Compact Fluorescent	Each	N/A	-	-	-	\$ -
56	- Ceiling Fans	Each	N/A	-	-	-	\$ -
58	Customer Enrollment						
59	- Outreach & Assessment	Home	44,176	-	-	-	\$ 5,433,697
60	- In-Home Education	Home	37,643	-	-	-	\$ 497,445
61	- Education Workshops	Participants	N/A	-	-	-	\$ -
63	Total Savings						
65	Homes Weatherized ³						
67	Homes Treated						
68	- Single Family Homes Treated	Home	28,170				
69	- Multi-family Homes Treated	Home	13,707				
70	- Mobile Homes Treated	Home	2,299				
71	- Total Number of Homes Treated	Home	44,176				
73	- Master-Metered Homes Treated	Home	5,304				
75	1. Energy savings is based on 1) 2001 Low Income Impact Evaluation Study; 2) Decision 03-11-020 approved the "LIEE Measure Cost Effectiveness Study" conducted by Itron, Inc. filed on June 2, 2003 for new measure mix effective 1/1/04; 3) Decision 05-12-026 approved the "Report on the Assessment of Proposed New Year 2006 LIEE Program Measures" conducted by Itron, Inc. filed on May 2, 2005; and 4) the updated database for energy efficiency resources (DEER).						
76	2. Minor Home Repairs predominately include Door Repair/Replacement, Window Repair/Replacement and Wall Repair.						
77	3. Weatherization consists of Attic Insulation, Attic Access Weatherization, Weatherstripping - Door, Caulking and Minor Home Repairs.						

	A	B	C	D	E	F
Table 3 Summary of LIEE Cost-Effectiveness Southern California Gas Company PY2007						
1						
2 2007 - Recorded						
3 Ratio of Benefits Over Costs						
4	Utility Cost Test	Total Resource Cost Test	Modified Participant Test	Utility Cost Test	Total Resource Cost Test	Modified Participant Test
5	0.28	0.20	0.68	(\$20,985,301)	(\$23,315,525)	(\$9,541,175)
7	The Modified Participant Test (MPT) and the Utility Cost Test (UCT) include non-energy benefits (NEBs) along with energy savings in the numerator.					
9	The MPT was calculated using the Low Income Public Purpose Test (LIPPT) workbook as modified for the PY2003 LIEE measure cost effectiveness testing (the NEBs model).					
11	The UCT was calculated in two stages: first, the NEBs for this ratio were calculated using the NEBs model; second, the avoided cost benefits were calculated using the E3 model for energy efficiency cost effectiveness testing. The Total Resource Test (TRC) was calculated using the E3 calculator. The TRC does not include NEBs.					
13	The MPT is also known as the LIPPT.					

	A	B	C	D
1	Table 4 LIEE Penetration - Southern California Gas Company - PY2007			
2	Year ¹	Homes Treated	Estimated Eligible in Current Year	Current Year Penetration Rate for Homes Treated
3	1998	24,549		
4	1999	28,113		
5	2000	25,613		
6	2001	37,954		
7	2002	49,464		
8	2003	57,179		
9	2004	54,677		
10	2005	40,523		
11	2006	36,870		
12	2007	44,176		
13	Total Homes Treated in 10 Years	399,118	2,046,086	20%
14				
15	1. 10 Years of activity are reported.			

	A	B	C	D	E	F	G
1	Table 5 LIEE Direct Purchase and Installation Contractors Southern California Gas Company - PY2007						
2	Contractor	County	Contractor Type (Check one or more if applicable)				Annual Expenditures
3			Private	CBO	WMDVBE	LIHEAP	
4	- Contractor A	LA, O, Sbe, R	x				\$ 74,623
5	- Contractor B	T, Ki, Ke, F	x				\$ 16,551
6	- Contractor C	LA, O	x				\$ 154,363
7	- Contractor D	ALL	x				\$ (65,366)
8	- Contractor E	LA		x			\$ 4,633,810
9	- Contractor F	LA, O	x		x		\$ 158,810
10	- Contractor G	O		x			\$ 330,882
11	- Contractor H	LA, V, Sbe, R	x		x		\$ 165,312
12	- Contractor I	R, I		x	x	x	\$ 299,611
13	- Contractor J	LA, Sbe		x			\$ 232,505
14	- Contractor K	LA		x			\$ 1,622,871
15	- Contractor L	LA, K		x			\$ 586,913
16	- Contractor M	LA, O, Sbe, R, T, Ki, Ke, F	x		x		\$ 4,922,182
17	- Contractor N	R		x		x	\$ 14,396
18	- Contractor O	LA, R		x			\$ 5,977,863
19	- Contractor P	Sbe		x			\$ 1,629,988
20	- Contractor Q	Sba		x		x	\$ 245,483
21	- Contractor R	LA		x			\$ 338,825
22	- Contractor S	Sba, SLO		x			\$ 286,401
23	- Contractor T	V		x		x	\$ 82,775
24	- Contractor U	LA		x		x	\$ 1,184,425
25	- Contractor V	ALL		x	x		\$ 486,158
26	- Contractor W	ALL	x		x		\$ 1,038,123
27	- Contractor X	T, Ki		x		x	\$ 70,617
28	- Contractor Y	LA, Sbe, R	x				\$ 47,178
29	- Contractor Z	Sbe, R	x		x		\$ 19,415
30	- Contractor AA	LA, K	x				\$ 15,196
31	- Contractor AB	Sbe, R, I	x				\$ 26,880
32	- Contractor AC	LA	x				\$ 1,075
33	Total Contractor Expenditures						\$ 24,597,869
34							
35	County Key						
36	Los Angeles	LA					
37	Orange	O					
38	Ventura	V					
39	San Bernardino	Sbe					
40	Riverside	R					
41	Imperial	I					
42	Tulare	T					
43	Kings	Ki					
44	Kern	Ke					
45	Santa Barbara	Sba					
46	San Luis Obispo	SLO					
47	Fresno	F					

Technical Appendix

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Table TA 1 Installation Costs of LIEE Program Installation Contractors - Southern California Gas Company - PY2007																		
2		Unit of Measure	CBO/WMDVBE						Non-CBO/WMDVBE						Total				
3			Installations		Dwellings		Costs		Installations		Dwellings		Costs		Units Installed	Dwellings	Costs	Cost/ Unit	Cost/ Dwelling
4			Units	%	Units	%	\$	%	Units	%	Units	%	\$	%					
5	Dwellings	Each	43,785	99%	43,785	99%	\$ 23,022,249	99%	391	1%	391	1%	\$ 244,736	1%	44,176	44,176	\$ 23,266,985	\$ 526.69	\$ 526.69
7	Furnaces																		
8	- Repair - Gas	Each	2,549	90%	2,438	90%	\$ 828,179	89%	272	10%	265	10%	\$ 103,004	11%	2,821	2,703	\$ 931,183	\$ 330.09	\$ 344.50
9	- Replacement - Gas	Each	1,883	97%	1,883	97%	\$ 3,057,723	97%	50	3%	50	3%	\$ 89,582	3%	1,933	1,933	\$ 3,147,305	\$ 1,628.20	\$ 1,628.20
10	- Repair - Electric	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
11	- Replacement - Electric	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
13	Infiltration & Space Conditioning.																		
14	- Outlet cover plate gaskets	Home	34,663	100%	34,663	100%	\$ 275,165	100%	0	0%	0	0%	\$ -	0%	34,663	34,663	\$ 275,165	\$ 7.94	\$ 7.94
15	- Duct Testing	Home	1,870	100%	1,870	100%	\$ 184,390	100%	2	0%	2	0%	\$ 239	0%	1,872	1,872	\$ 184,629	\$ 98.63	\$ 98.63
16	- Duct Sealing	Home	355	100%	355	100%	\$ 58,204	100%	0	0%	0	0%	\$ -	0%	355	355	\$ 58,204	\$ 163.95	\$ 163.95
17	- Evaporative Coolers	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
18	- Evaporative Cooler Maintenance	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
19	- Evaporative Cooler/Air Cond. Covers	Each	2,286	100%	1,487	100%	\$ 72,565	100%	0	0%	0	0%	\$ -	0%	2,286	1,487	\$ 72,565	\$ 31.74	\$ 48.80
20	- A/C Replacement - Room	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
21	- A/C Replacement - Room (landlord)	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
22	- A/C Replacement - Central	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
23	- A/C Replacement - Central (landlord)	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
24	- A/C Tune-up - Central	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
25	- A/C Services - Central	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
26	- Heat Pump	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
28	Weatherization																		
29	- Attic Insulation	Home	1,451	100%	1,451	100%	\$ 1,031,779	100%	0	0%	0	0%	\$ -	0%	1,451	1,451	\$ 1,031,779	\$ 711.08	\$ 711.08
30	- Attic Access Weatherization	Home	166	100%	166	100%	\$ 5,658	100%	0	0%	0	0%	\$ -	0%	166	166	\$ 5,658	\$ 34.08	\$ 34.08
31	- Weatherstripping - Door	Home	39,072	100%	39,072	100%	\$ 2,606,300	100%	0	0%	0	0%	\$ -	0%	39,072	39,072	\$ 2,606,300	\$ 66.71	\$ 66.71
32	- Caulking	Home	2,789	100%	2,789	100%	\$ 21,366	100%	0	0%	0	0%	\$ -	0%	2,789	2,789	\$ 21,366	\$ 7.66	\$ 7.66
33	- Minor Home Repairs	Home	37,258	100%	37,258	100%	\$ 7,277,017	100%	0	0%	0	0%	\$ -	0%	37,258	37,258	\$ 7,277,017	\$ 195.31	\$ 195.31
35	Water Heater Savings																		
36	- Water Heater Blanket	Home	3,722	100%	3,722	100%	\$ 170,817	100%	0	0%	0	0%	\$ -	0%	3,722	3,722	\$ 170,817	\$ 45.89	\$ 45.89
37	- Low Flow Showerhead	Home	39,490	100%	39,490	100%	\$ 961,858	100%	0	0%	0	0%	\$ -	0%	39,490	39,490	\$ 961,858	\$ 24.36	\$ 24.36
38	- Water Heater Replacement - Gas	Each	85	99%	85	99%	\$ 87,033	99%	1	1%	1	1%	\$ 857	1%	86	86	\$ 87,890	\$ 1,021.98	\$ 1,021.98
39	- Water Heater Replacement - Electric	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
40	- Tankless Water Heater - Gas	Each	0	0%	0	0%	\$ -	0%	1	100%	1	100%	\$ 2,436	100%	1	1	\$ 2,436	\$ 2,436.00	\$ 2,436.00
41	- Tankless Water Heater - Electric	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
42	- Water Heater Pipe Wrap	Home	1,959	100%	1,959	100%	\$ 33,536	100%	0	0%	0	0%	\$ -	0%	1,959	1,959	\$ 33,536	\$ 17.12	\$ 17.12
43	- Faucet Aerators	Home	41,160	100%	41,160	100%	\$ 468,135	100%	0	0%	0	0%	\$ -	0%	41,160	41,160	\$ 468,135	\$ 11.37	\$ 11.37
45	Lighting Measures																		
46	- CFL	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
47	- Interior Hard wired CFL fixtures	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
48	- Exterior Hard wired CFL fixtures	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
49	- Torchiere	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
51	Refrigerators	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
52	Refrigerators (landlord)	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
54	Pool Pumps	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
56	Pilots																		
57	- A/C Tune-up - Central	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
58	- Interior Hard wired Compact Flourescent	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
59	- Ceiling Fans	Each	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-
61	Customer Enrollment																		
62	- Outreach & Assessment	Home	43,785	99%	43,785	99%	\$ 5,385,604	99%	391	1%	391	1%	\$ 48,093	1%	44,176	44,176	\$ 5,433,697	\$ 123.00	\$ 123.00
63	- In-Home Education	Home	37,608	100%	37,608	100%	\$ 496,920	100%	35	0%	35	0%	\$ 525	0%	37,643	37,643	\$ 497,445	\$ 13.21	\$ 13.21
64	- Education Workshops	Participants	N/A	-	-	-	-	-	N/A	-	-	-	-	-	N/A	-	-	-	-

	A	B	C	D	E
1	Table TA 2 Gas LIEE Cost Elements - Southern California Gas Company - PY2007				
2	Expenditures Recorded by Cost Element				
3	LIEE Program:		Labor	Non-Labor	Contract
4	Energy Efficiency				Total
5	- Gas Appliances	\$ -	\$ -	\$ 4,168,813	\$ 4,168,813
6	- Electric Appliances	\$ -	\$ -	\$ -	\$ -
7	- Weatherization	\$ -	\$ -	\$ 13,167,029	\$ 13,167,029
8	- Outreach and Assessment	\$ -	\$ -	\$ 5,433,697	\$ 5,433,697
9	- In Home Energy Education	\$ -	\$ -	\$ 497,445	\$ 497,445
10	- Education Workshops	\$ -	\$ -	\$ -	\$ -
11	- Pilot	\$ -	\$ -	\$ -	\$ -
12	- Cool Centers	\$ -	\$ -	\$ -	\$ -
13	Energy Efficiency TOTAL	\$ -	\$ -	\$ 23,266,984	\$ 23,266,984
14					
15	Training Center	\$ 106,536	\$ 19,417	\$ -	\$ 125,952
16	Inspections	\$ -	\$ -	\$ 1,330,885	\$ 1,330,885
17	Marketing	\$ -	\$ 308,650	\$ -	\$ 308,650
18	M&E Studies	\$ -	\$ 4,277	\$ -	\$ 4,277
19	Regulatory Compliance	\$ 203,621	\$ 33,872	\$ -	\$ 237,493
20	General Administration	\$ 1,542,669	\$ 255,551	\$ -	\$ 1,798,220
21	CPUC Energy Division	\$ -	\$ 24,705	\$ -	\$ 24,705
22					
23	TOTAL PROGRAM COSTS	\$ 1,852,825	\$ 646,472	\$ 24,597,869	\$ 27,097,166

	A	B	C	D	E
1	Table TA 3 Program Detail by Housing Type and Heating Source Southern California Gas Company - PY2007				
2	Energy Savings		Expenses	Dwellings Treated	
3	(mWh)	(mTherm)			
4	Gas Heat – Own				
5	Single Family	-	417 \$ 10,958,232	17,865	
6	Multi Family	-	2 \$ 148,441	242	
7	Mobile Homes	-	26 \$ 1,275,240	2,079	
8	Sub Total Dwellings Served	-	446 \$ 12,381,913	20,186	
9					
10	Gas Heat – Rent				
11	Single Family	-	269 \$ 6,320,995	10,305	
12	Multi Family	-	167 \$ 8,259,311	13,465	
13	Mobile Homes	-	9 \$ 134,946	220	
14	Sub Total Dwellings Served	-	445 \$ 14,715,253	23,990	
15					
16	Electric Heat – Own				
17	Single Family	-	- \$ -	-	-
18	Multi Family	-	- \$ -	-	-
19	Mobile Homes	-	- \$ -	-	-
20	Sub Total Dwellings Served	-	- \$ -	-	-
21					
22	Electric Heat – Rent				
23	Single Family	-	- \$ -	-	-
24	Multi Family	-	- \$ -	-	-
25	Mobile Homes	-	- \$ -	-	-
26	Sub Total Dwellings Served	-	- \$ -	-	-
27					
28	TOTAL DWELLINGS SERVED	-	891 \$ 27,097,166	44,176	

	A	B	C	D	E	F
1	Table TA 4 Life Cycle Bill Savings - Southern California Gas Company - PY2007					
2	Measure Description	2007 Number Installed	Per Measure Electric Impact - Average (kWh)	Per Measure Gas Impact (Therms)	Effective Useful Life (EUL)	2007 Total Measure Lifecycle Bill Savings
3	Furnaces					
4	- Repair - Gas	2,821	-	23	10	\$ 423,339
5	- Replacement - Gas	1,933	-	31	22	\$ 766,614
6	- Repair - Electric	N/A	-	-	-	\$ -
7	- Replacement - Electric	N/A	-	-	-	\$ -
8						
9	Infiltration & Space Conditioning.					
10	- Outlet cover plate gaskets	34,663	-	-	-	\$ -
11	- Duct Testing	1,872	-	-	-	\$ -
12	- Duct Sealing	355	-	21	5	\$ 34,458
13	- Evaporative Coolers	N/A	-	-	-	\$ -
14	- Evaporative Cooler Maintenance	N/A	-	-	-	\$ -
15	- Evaporative Cooler/Air Cond. Covers	2,286	-	1	3	\$ 6,228
16	- A/C Replacement - Room	N/A	-	-	-	\$ -
17	- A/C Replacement - Room (landlord)	N/A	-	-	-	\$ -
18	- A/C Replacement - Central	N/A	-	-	-	\$ -
19	- A/C Replacement - Central (landlord)	N/A	-	-	-	\$ -
20	- A/C Tune-up - Central	N/A	-	-	-	\$ -
21	- A/C Services - Central	N/A	-	-	-	\$ -
22	- Heat Pump	N/A	-	-	-	\$ -
23						
24	Weatherization					
25	- Attic Insulation	1,451	-	23	25	\$ 588,489
26	- Attic Access Weatherization	166	-	-	-	\$ -
27	- Weatherstripping - Door	39,072	-	2	5	\$ 374,807
28	- Caulking	2,789	-	2	5	\$ 21,112
29	- Minor Home Repairs	37,258	-	4	10	\$ 1,273,760
30						
31	Water Heater Savings					
32	- Water Heater Blanket	3,722	-	11	5	\$ 183,914
33	- Low Flow Showerhead	39,490	-	8	10	\$ 2,658,506
34	- Water Heater Replacement - Gas	86	-	19	13	\$ 17,496
35	- Water Heater Replacement - Electric	N/A	-	-	-	\$ -
36	- Tankless Water Heater - Gas	1	-	28	20	\$ 419
37	- Tankless Water Heater - Electric	N/A	-	-	-	\$ -
38	- Water Heater Pipe Wrap	1,959	-	4	15	\$ 99,619
39	- Faucet Aerators	41,160	-	3	5	\$ 613,667
40						
41	Lighting Measures					
42	- CFL	N/A	-	-	-	\$ -
43	- Interior Hard wired CFL fixtures	N/A	-	-	-	\$ -
44	- Exterior Hard wired CFL fixtures	N/A	-	-	-	\$ -
45	- Torchiere	N/A	-	-	-	\$ -
46						
47	Refrigerators	N/A	-	-	-	\$ -
48	Refrigerators (landlord)	N/A	-	-	-	\$ -
49						
50	Total Lifecycle Bill Savings for All Measures in Program Year					\$ 7,062,428
51	Total Homes Served By the Program					44,176
52	Lifecycle Bill Savings Per Home					\$ 160

	A	B	C
Table TA 5			
Energy Rates Used For Bill Savings Calculations			
Southern California Gas Company - PY2007			
2	Year	\$/kWh	\$/Therm
3	2007	0.1078	1.0068
4	2008	0.1110	1.0370
5	2009	0.1144	1.0681
6	2010	0.1178	1.1002
7	2011	0.1213	1.1332
8	2012	0.1250	1.1672
9	2013	0.1287	1.2022
10	2014	0.1326	1.2382
11	2015	0.1365	1.2754
12	2016	0.1406	1.3136
13	2017	0.1449	1.3530
14	2018	0.1492	1.3936
15	2019	0.1537	1.4354
16	2020	0.1583	1.4785
17	2021	0.1630	1.5229
18	2022	0.1679	1.5686
19	2023	0.1730	1.6156
20	2024	0.1782	1.6641
21	2025	0.1835	1.7140
22	2026	0.1890	1.7654
23	2027	0.1947	1.8184
24	2028	0.2005	1.8729
25	2029	0.2065	1.9291
26	2030	0.2127	1.9870
27	2031	0.2191	2.0466
28			
29	Energy rates used is based on 2005 filed rate of .1016 kWh and 0.949 therm.		
30	The escalation factor is applied at 3 percent annually for the subsequent 24 years.		

	A	B	C	D	E
1	Table TA 6 Bill Savings - Southern California Gas Company - PY2007				
2	Program Year	Program Costs	Program Lifecycle Bill Savings	Program Bill Savings/ Cost Ratio	Per Home Average Lifecycle Bill Savings
3	2005	\$ 28,834,254	\$ 6,652,911	0.23	\$ 164
4	2006	\$ 27,317,476	\$ 7,218,569	0.26	\$ 196
5	2007	\$ 27,097,166	\$ 7,062,428	0.26	\$ 160