

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

2006 Results  
May 2007



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## Executive Summary

### **Overview**

The Low Income Energy Efficiency<sup>1</sup> (LIEE) program provides income-qualified residential customers with no-cost energy efficiency weatherization services and energy education. Energy education is provided to customers either inside their home prior to weatherization or at in-group energy education workshops. In 2006, SoCalGas continued conducting natural gas appliance testing (NGAT) on all homes that received infiltration measures. 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 2006, 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) 2006 LIEE program portfolio design and funding was approved by the California Public Utilities Commission (Commission) in Decision (D.) 05-12-026 on December 15, 2005. D.05-12-026 directed the large investor-owned utilities (IOUs)<sup>2</sup> to file an augmentation of their 2006 LIEE program plans and budgets by April 14, 2006. Additionally, D.05-10-044, issued on October 27, 2005 adopted the IOU's LIEE program proposals, known as the Winter Initiatives, to help low income customers mitigate the expected increase in natural gas winter bills. LIEE Winter Initiatives were offered from November 1, 2005 through April 30, 2006.

During PY2006, the LIEE program weatherized a total of 36,843 homes, provided in-home energy education to 33,995 customers, repaired 3,747 furnaces, replaced 2,203 furnaces, and replaced 59 water heaters. In addition, 20,913 customers received energy education through 907 community workshops. As a result of expanded outreach efforts, which included the implementation of the targeted self certification enrollment process conducted as part of the Winter Initiatives efforts, SoCalGas increased its LIEE program enrollments by approximately 27% from January 2006 through April 2006 compared to the same timeframe in 2005. Throughout PY2006 SoCalGas' LIEE training staff continued offering training to SoCalGas LIEE contractors. As a result, the training staff conducted 12 initial training classes to 114 students and 44 refresher classes to 364 students during PY2006.

SoCalGas' total authorized budget for PY2006 was \$39,968,140, which is comprised of \$33,324,875 in 2006 authorized funds, plus \$6,643,265 in unspent funds from PY2005. LIEE program expenditures during 2006 totaled \$27,317,476. Unspent funds from 2006, totaling \$12,650,664 will be carried over and used in SoCalGas' PY2007 LIEE program.

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

<sup>2</sup> The Investor-Owned Utilities are SoCalGas, San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and Pacific Gas and Electric Company (PG&E).

## **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, weather stripping, 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. Additional energy education is provided through community workshops.

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 administer an LIEE customer satisfaction survey. Each month a sample of customers 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.

## **PY2006 Low Income Program**

### **Low Income Energy Efficiency Program**

During PY2006, SoCalGas weatherized 36,843 homes, provided in-home energy education to 33,995 customers, repaired 3,747 furnaces, replaced 2,203 furnaces, and replaced 59 water heaters. In addition, 20,913 customers received energy education through 907 community workshops.

As reported in Table 1 and Table TA 2, SoCalGas spent a total of \$27,317,476 on the LIEE program. Annual energy savings realized from these expenditures totaled 834 mTherms.

### **2005/2006 Winter Initiative**

On October 6, 2005, the Commission held a Full-Panel Hearing to receive information and to solicit input from interested parties on proposals that would be used to help mitigate the anticipated high costs of natural gas on low income customers' bills during the winter of 2005/2006. On October 18 and 19, 2005, the California IOUs and interested parties provided proposals to the Commission for consideration and approval. On October 20, 2005, the Commission held a workshop on those proposals, which were discussed in detail.

In D.05-10-044, the Commission approved the IOUs proposals for LIEE program revisions that would be offered during the winter period beginning on November 1, 2005 through April 30, 2006. D.05-10-044 adopted certain provisions for the 2005/2006 winter season for qualifying

low income customers under the LIEE program. Specifically, the provisions authorized by the Commission are applicable to SoCalGas' LIEE program include the following:

- Income eligibility was increased from 175% to 200% of the Federal Poverty Guidelines (FPG) for all program participants.<sup>3</sup>
- Simplification of the enrollment process by utilizing targeted census data to identify potential LIEE participants that would be able to self-certify their eligibility for the LIEE program.
- Replacement of natural gas furnaces with an Annual Fuel Utilization Efficiency (AFUE) rating of 65 or lower with models that have an AFUE rating of 80 or 92, depending on the climate zone. During the winter months, replacement of the forced air furnaces was also applicable to renters, where feasible.
- Replacement of leaking or broken water heaters as a measure during the winter months.
- Expansion of Outreach efforts during the winter months to encourage participation in the LIEE program.

The 2005/2006 Winter Initiative created greater opportunities for low income customers to receive weatherization services, energy efficient appliances, and energy conservation education. To simplify the LIEE program enrollment process, SoCalGas utilized the updated 2000 census tract data to identify low income customers in specific areas of SoCalGas' service territory and to allow those customers to enroll in the LIEE program by self certifying their income. Through this new targeted self certification process, SoCalGas successfully increased customer enrollment by approximately 27% from January through April 2006, compared to the same timeframe in 2005. The LIEE program activities authorized in D.05-10-044 expired on April 30, 2006. However, the income eligibility criterion of 200% of the FPG continues to remain in effect until further Commission order.

### **2006 Budget Augmentation**

In an effort to avoid a sudden decrease in LIEE program activity after the 2005/2006 winter season, the Commission, in D.05-12-026, directed the utilities to treat at least 5% to 10% more homes than originally anticipated when the utilities' applications were filed in June 2005. D.05-12-026 also directed the utilities to file a 2006 budget augmentation through an application no later than April 14, 2006.

On April 14, 2006, SoCalGas made a compliance filing, in lieu of an application, proposing to use the authorized budget of \$33.325 million, as adopted in D.05-12-026 and \$6.6 million in carryover funds from previous years, along with the continuation of targeted self certification enrollment process to enable SoCalGas to exceed its original 2006 LIEE program goal. SoCalGas did not need to augment its budget in order to meet the Commission's directive to increase program activity by 5-10%. On August 24, 2006, the Commission issued D.06-08-025,

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<sup>3</sup> Per D.05-10-044, the income eligibility levels are set at 200% for the CARE and LIEE programs.

which approved SoCalGas' April 14, 2006 program request and authorized SoCalGas to resume the use of targeted self certification enrollment for the remainder of PY2006.

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

#### **Regulatory Compliance and Oversight**

SoCalGas complied with Public Utilities Code (PU Code) Sections 327 and 381.5. Section 327(1) directs that utility program funds are to be leveraged with state and federal funds while Section 381.5 states that the intent of the Legislature is to strengthen the network of local community service providers. 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. Consistent with Section 2790 of the PU Code, SoCalGas' LIEE program installed all feasible program measures in all the homes served during PY2006. Additionally, SoCalGas continued to revisit customers who received LIEE weatherization services prior to 2001, to provide the new program measures authorized by the Commission in D.01-05-033.

During PY2006, SoCalGas also worked regularly with the other California IOUs and the Energy Division on several Commission-directed activities. In the low income proceeding R.04-01-006, the Commission directed the utilities to develop standardized statewide measure installation, policy and procedures standardization manuals, update program reporting requirements, develop updated cost-effectiveness tests for LIEE programs, provide comparable bill savings documentation, and recommend methods of comparing programs (including program costs and benefits) across the utilities. In response to the Commission's direction, several inter-utility teams, with guidance from the Energy Division and input from the Division of Ratepayer Advocates and the interested public, achieved the following results during PY2006:

- On June 7, 2005, the Assigned Commissioner issued a Ruling which adopted the amendments to the Phase 5 work plan, schedule, and budget to include the provisions set forth in the Ruling issued on March 25, 2005. During 2005, the LIEE Standardization Team<sup>4</sup> (Standardization Team) developed recommendations for changes to the LIEE Policy and Procedures (P&P) Manual and the Weatherization Installation Standards (WIS) Manual through an open process to solicit public input. On November 1, 2005, the proposed changes to the P&P and WIS manuals were filed with the Commission for approval.

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<sup>4</sup> The LIEE Standardization Team consists of PG&E, SCE, SDG&E, SoCalGas, and the joint utilities technical consultants, with coordination assistance from the Commission's Energy Division and participation by the Division of Ratepayer Advocates.

On February 17, 2006, the Commission convened a workshop to discuss, among other things, the proposed revisions to the LIEE P&P and WIS Manuals, filed on November 1, 2005.

As an outcome of the discussion from the February 17, 2006 Commission workshop, additional revisions were made to the Manuals and were subsequently presented and circulated at the February 28, 2006 Low Income Oversight Board (LIOB) meeting. On March 9, 2006, the proposed revisions to the Manuals were filed with the Commission. By Assigned Commissioners Ruling on March 29, 2006, the Commission adopted the November 1, 2005 Manuals as modified by the March 9, 2006 revisions to the Manuals.

In D.05-12-026, the Commission directed the Standardization Team to not undertake any new activities until authorized. In 2006, there was no further activity by the Standardization Team.

### Measurement and Evaluation (M&E) Activities

- In D.03-11-020, the Commission adopted the “LIEE Measure Cost Effectiveness Study” conducted by Itron, Inc. filed on June 2, 2003 for the new LIEE program standard measure mix effective January 1, 2004 which continued to be the measure mix during PY2006. In addition, D.05-12-026 adopted the “Report on the Assessment of Proposed New Year 2006 LIEE Program Measures” conducted by Itron, Inc., filed on May 2, 2005 which recommended high efficiency central air conditioners and duct testing and sealing as measures for inclusion in LIEE program standard measure mix effective January 1, 2006.
- In accordance with D.01-06-082, the utilities filed a Notice of Availability of the Process Evaluation and First Year Impact Evaluation of the 2001 Statewide Low Income Energy Efficiency Program.<sup>5</sup> In D.05-12-026, the Commission stated that “we will not formally adopt or approve the results of the 2001 load impact report as the utilities request in this proceeding. Instead, we permit the utilities to rely on the study results on a case-by-case basis, as we do today, until we can address and resolve Low Income Energy Efficiency-related issues in the 2006 Annual Earnings Assessment Proceeding.” To determine the energy savings for PY2006, SoCalGas has utilized the 2001 LIEE program load impact study to calculate certain measure savings.
- The LIEE program load impact evaluation was scheduled to occur in 2006 for the PY2004 program, which would have been consistent with the bi-annual schedule authorized by D.02-12-019. The Commission, however, granted the utilities’ request to conduct the impact evaluation on the 2005 LIEE program, rather than on the 2004 program.<sup>6</sup> 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. During PY2006, the utilities responded to various data requests from the consultant, West Hills Energy and Computing, in an effort

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<sup>5</sup> On April 18, 2003, the Notice of Availability was filed with the Commission by SCE on behalf of itself, PG&E, SDG&E and SoCalGas.

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

to complete the 2005 load impact evaluation report which is expected to be completed in the Fall of 2007.

### Bill Savings

Table TA 4 reports lifecycle bill savings by measure, by fuel type, and combined for PY2006; 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 PY2006, SoCalGas surveyed approximately 1,200 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 an 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, 84% of customers said they are "more comfortable" as a result of the work done by LIEE, 15% said they are "about the same" and 1% said they are "less comfortable." Overall the LIEE program received high ratings. During PY2006, overall customer satisfaction with the program climbed to 87%.

## **Community Based Organizations (CBO) Leveraging and Access to Community Services**

### 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 PY2006 also hold either CBO or WMDVBE status.

### Leveraging

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, Head Start Programs, Handyman Programs, Drug and Domestic Violence Programs and Healthy Family Program 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	<b>Table 1</b>									
	<b>LIEE Program Expenses - Southern California Gas Company - PY2006</b>									
2		<b>Authorized Budget</b>			<b>Annual Expenditures</b>			<b>% of Budget Spent</b>		
3	<b>LIEE Program:</b>	<b>Electric</b>	<b>Gas</b>	<b>Elec &amp; Gas</b>	<b>Electric</b>	<b>Gas</b>	<b>Elec &amp; Gas</b>	<b>Electric</b>	<b>Gas</b>	<b>Elec &amp; Gas</b>
4	Energy Efficiency									
5	- Gas Appliances	\$ -	\$ 7,771,713	\$ 7,771,713	\$ -	\$ 5,316,860	\$ 5,316,860	0%	68%	68%
6	- Electric Appliances	\$ -	\$ -	\$ -	\$ -		\$ -	0%	0%	0%
7	- Weatherization	\$ -	\$ 20,213,633	\$ 20,213,633	\$ -	\$ 14,443,908	\$ 14,443,908	0%	71%	71%
8	- Outreach and Assessment	\$ -	\$ 5,505,920	\$ 5,505,920	\$ -	\$ 2,583,769	\$ 2,583,769	0%	47%	47%
9	- In Home Energy Education	\$ -	\$ 480,000	\$ 480,000	\$ -	\$ 359,573	\$ 359,573	0%	75%	75%
10	- Education Workshops	\$ -	\$ 384,360	\$ 384,360	\$ -	\$ 400,317	\$ 400,317	0%	104%	104%
11	- Pilot	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
12	- Cool Centers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	0%	0%
13	<b>Energy Efficiency TOTAL</b>	<b>\$ -</b>	<b>\$ 34,355,626</b>	<b>\$ 34,355,626</b>	<b>\$ -</b>	<b>\$ 23,104,427</b>	<b>\$ 23,104,427</b>	<b>0%</b>	<b>67%</b>	<b>67%</b>
14										
15	Training Center	\$ -	\$ 79,859	\$ 79,859	\$ -	\$ 91,090	\$ 91,090	0%	114%	114%
16	Inspections	\$ -	\$ 2,113,120	\$ 2,113,120	\$ -	\$ 1,621,865	\$ 1,621,865	0%	77%	77%
17	Marketing	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ 404,116	\$ 404,116	0%	202%	202%
18	M&E Studies	\$ -	\$ 207,380	\$ 207,380	\$ -	\$ -	\$ -	0%	0%	0%
19	Regulatory Compliance	\$ -	\$ 110,758	\$ 110,758	\$ -	\$ 270,732	\$ 270,732	0%	244%	244%
20	General Administration	\$ -	\$ 2,861,397	\$ 2,861,397	\$ -	\$ 1,799,650	\$ 1,799,650	0%	63%	63%
21	CPUC Energy Division	\$ -	\$ 40,000	\$ 40,000	\$ -	\$ 25,596	\$ 25,596	0%	64%	64%
22										
23	<b>TOTAL PROGRAM COSTS</b>	<b>\$ -</b>	<b>\$ 39,968,140</b>	<b>\$ 39,968,140</b>	<b>\$ -</b>	<b>\$ 27,317,476</b>	<b>\$ 27,317,476</b>	<b>0%</b>	<b>68%</b>	<b>68%</b>
24	<b>Funded Outside of LIEE Program Budget</b>									
25	Indirect Costs				\$ -	\$ 896,793	\$ 896,793			
26										
27	NGAT Costs				\$ -	\$ 1,005,346	\$ 1,005,346			
28										
29	The 2006 Budget, in the amount of \$39,968,140, reflects the funding level authorized by the Commission in D.05-12-026 and D.06-08-025 of \$33,324,875, plus carry over funds from PY2005 of \$6,643,265.									

	A	B	C	D	E	F	G
1	<b>Table 2</b>						
	<b>LIEE Installations &amp; Savings - Southern California Gas Company - PY2006</b>						
2	<b>Completed &amp; Expensed Installations YTD</b>						
3	<b>Measures</b>	<b>Units</b>	<b>Quantity</b>	<b>kWh (Annual)</b>	<b>kW (Annual)</b>	<b>Therms (Annual)</b>	<b>Expenses</b>
4	<b>Furnaces</b>						
5	- Repair - Gas	Each	3,747	0	0	81,746	\$ 1,304,679
6	- Replacement - Gas	Each	2,203	0	0	69,117	\$ 3,812,836
7	- Repair - Electric	Each	N/A	0	0	0	N/A
8	- Replacement - Electric	Each	N/A	0	0	0	N/A
9							
10	<b>Infiltration &amp; Space Conditioning.</b>						
11	- Outlet cover plate gaskets	Home	29,184	0	0	0	\$ 243,766
12	- Duct Sealing	Home	300	0	0	291	\$ 91,253
13	- Evaporative Coolers	Each	N/A	0	0	0	N/A
14	- Evaporative Cooler/Air Cond. Covers	Each	3,874	0	0	3,571	\$ 129,093
15	- A/C Replacement - Room	Each	N/A	0	0	0	N/A
16	- A/C Replacement - Room (landlord)	Each	N/A	0	0	0	N/A
17	- A/C Replacement - Central	Each	N/A	0	0	0	N/A
18	- A/C Replacement - Central (landlord)	Each	N/A	0	0	0	N/A
19							
20	<b>Weatherization</b>						
21	- Attic Insulation	Home	1,471	0	0	35,053	\$ 1,118,202
22	- Attic Access Weatherization	Home	N/A	0	0	0	N/A
23	- Weatherstripping - Door	Home	33,935	0	0	74,226	\$ 2,923,186
24	- Caulking	Home	1,461	0	0	2,881	\$ 11,505
25	- Minor Home Repairs	Home	32,993	271,719	0	138,895	\$ 8,635,467
26							
27	<b>Water Heater Savings</b>						
28	- Water Heater Blanket	Home	3,347	0	0	36,555	\$ 156,358
29	- Low Flow Showerhead	Home	33,941	0	0	268,129	\$ 833,454
30	- Water Heater Replacement - Gas	Each	59	0	0	1,121	\$ 44,035
31	- Water Heater Replacement - Electric	Each	N/A	0	0		N/A
32	- Water Heater Pipe Wrap	Home	1,438	0	0	6,261	\$ 25,901
33	- Faucet Aerators	Home	35,306	0	0	116,451	\$ 431,034
34							
35	<b>Lighting Measures</b>						
36	- Compact Fluorescents (inc. porchlights)	Each	N/A	0	0	0	N/A
37	- Porchlights fixture replacement	Each	N/A	0	0	0	N/A
38							
39	Refrigerators	Each	N/A	0	0	0	N/A
40	Refrigerators (landlord)	Each	N/A	0	0	0	N/A
41							
42	<b>Pilots</b>						
43	- Pilot		N/A	0	0	0	N/A
44							
45	<b>Customer Enrollment</b>						
46	- Outreach & Assessment	Home	36,870	0	0	0	\$ 2,583,769
47	- In-Home Education	Home	33,995	0	0	0	\$ 359,573
48	- Education Workshops	Participants	20,913		0	0	\$ 400,317
49							
50	Total Savings			271,719	0	834,296	\$ 23,104,427
51							
52	Homes Weatherized	Home	36,843				
53							
54	<b>Homes Treated</b>						
55	- Single Family Homes Treated	Home	25,909				
56	- Multi-family Homes Treated	Home	8,660				
57	- Mobile Homes Treated	Home	2,301				
58	- Total Number of Homes Treated	Home	36,870				
59							
60	- Master-Metered Homes Treated	Home	3,933				
61							
62	Minor Home Repairs expenses includes \$155,310 for costs associated with water heater repairs.						

	A	B	C	D	E	F	G
1	<b>Table 3</b>						
2	<b>Summary of LIEE Cost-Effectiveness - Southern California Gas Company - PY2006</b>						
3		Ratio of Benefits Over Costs			Net Benefits; \$ Millions		
4							
5		Utility Cost Test	Total Resource Cost Test	Modified Participant Test	Utility Cost Test	Total Resource Cost Test	Modified Participant Test
6	Energy Efficiency	0.23	0.20	0.90	(\$21,852,544)	(\$21,456,113)	(\$2,798,151)
7	<p>The UC test and the MP test were calculated using the LIPPT workbook as modified for the PY2003 LIEE measure cost effectiveness testing. For both of these tests, the numerator includes the present value of life-cycle energy and non-energy benefits. The TRC test was calculated using the E3 calculator. For this test, the numerator includes the present value of life-cycle energy benefits; it does not include non-energy benefits.</p>						
8							
9							
10	Note: LIPPT is also known as the Modified Participant Test.						

	A	B	C	D
1	<b>Table 4</b>			
	<b>LIEE Penetration - Southern California Gas Company - PY2006</b>			
2	Year <sup>1</sup>	Homes Treated	Estimated Eligible in Current Year	Current Year Penetration Rate for Homes Treated
3	1997	22,891		
4	1998	24,549		
5	1999	28,113		
6	2000	25,613		
7	2001	37,954		
8	2002	49,464		
9	2003	57,179		
10	2004	54,677		
11	2005	40,523		
12	2006	36,843		
13	Total Homes Treated in 10 Years	377,806	2,039,168	19%
14				
15	1. 10 Years of activity are reported.			

	A	B	C	D	E	F	G
1	<b>Table 5 LIEE Direct Purchase and Installation Contractors Southern California Gas Company - PY2006</b>						
2	<b>Contractor</b>	<b>County</b>	<b>Contractor Type (Check one or more if applicable)</b>				<b>Annual Expenditures</b>
3			<b>Private</b>	<b>CBO</b>	<b>WMDVBE</b>	<b>LIHEAP</b>	
4	- Contractor A	T	x				\$ 4,625
5	- Contractor B	R, Sbe	x				\$ 84,010
6	- Contractor C	Sbe, T		x			\$ 1,349,627
7	- Contractor D	K	x				\$ 26,486
8	- Contractor E	LA	x				\$ 198,159
9	- Contractor F	ALL	x				\$ (149,828)
10	- Contractor G	R	x				\$ 2,595
11	- Contractor H	LA		x			\$ 5,881,911
12	- Contractor I	LA	x		x		\$ 86,408
13	- Contractor J	O		x			\$ 171,036
14	- Contractor K	V, LA, Sbe, R	x		x		\$ 189,180
15	- Contractor L	R, I		x	x	x	\$ 265,990
16	- Contractor M	LA		x			\$ 352,941
17	- Contractor N	LA		x			\$ 1,061,945
18	- Contractor O	LA, Ke		x			\$ 690,029
19	- Contractor P	LA, O, V, Sbe, R, I, T, Ke, Ki, F, SLO	x		x		\$ 4,427,534
20	- Contractor Q	R, O		x		x	\$ 17,491
21	- Contractor R	LA, R		x			\$ 5,738,742
22	- Contractor S	Sba		x			\$ 68,669
23	- Contractor T	Sba		x		x	\$ 188,315
24	- Contractor U	LA		x			\$ 810,951
25	- Contractor V	SLO, Sba		x			\$ 180,579
26	- Contractor W	V, LA		x		x	\$ 87,537
27	- Contractor X	LA		x		x	\$ 1,306,812
28	- Contractor Y	ALL		x	x		\$ 483,270
29	- Contractor Z	ALL	x		x		\$ 1,198,682
30	- Contractor AA	R	x				\$ 240
31	- Contractor AB	T		x		x	\$ 1,755
32	- Contractor AC	R, LA	x				\$ 600
33	<b>Total Contractor Expenditures</b>						<b>\$ 24,726,291</b>
34							
35	<b>County Key</b>						
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	<b>Table TA 1 Installation Costs of LIEE Program Installation Contractors - Southern California Gas Company - PY2006</b>																		
2		<b>Unit of Measure</b>	<b>CBO/WMDVBE</b>						<b>Non-CBO/WMDVBE</b>						<b>Total</b>				
3			<b>Installations</b>		<b>Dwellings</b>		<b>Costs</b>		<b>Installations</b>		<b>Dwellings</b>		<b>Costs</b>		<b>Units Installed</b>	<b>Dwellings</b>	<b>Costs</b>	<b>Cost/ Unit</b>	<b>Cost/ Dwelling</b>
4			<b>Units</b>	<b>%</b>	<b>Units</b>	<b>%</b>	<b>\$</b>	<b>%</b>	<b>Units</b>	<b>%</b>	<b>Units</b>	<b>%</b>	<b>\$</b>	<b>%</b>					
5	Dwellings	Each	36,870	100%	36,870	100%	22,819,138	99%	0	0%	0	0%	285,289	1%	36,870	36,870	\$ 23,104,427	\$ 626.65	\$ 626.65
6	Furnaces																		
7	Furnaces																		
8	- Repair - Gas	Each	3,291	88%	3,171	88%	\$ 1,184,714	91%	456	12%	435	12%	\$ 119,966	9%	3,747	3,606	\$ 1,304,680	\$ 348.19	\$ 361.81
9	- Replacement - Gas	Each	2,108	96%	2,101	96%	\$ 3,648,522	96%	95	4%	93	4%	\$ 164,314	4%	2,203	2,194	\$ 3,812,836	\$ 1,730.75	\$ 1,737.85
10	- Repair - Electric	Each	N/A						N/A						N/A				
11	- Replacement - Electric	Each	N/A						N/A						N/A				
12	Infiltration & Space Conditioning																		
13	Infiltration & Space Conditioning																		
14	- Outlet cover plate gaskets	Home	29,184	100%	29,184	100%	\$ 243,766	100%	0	0%	0	0%	\$ -	0%	29,184	29,184	\$ 243,766	\$ 8.35	\$ 8.35
15	- Duct Sealing	Home	296	99%	296	99%	\$ 90,244	99%	4	1%	4	1%	\$ 1,009	1%	300	300	\$ 91,253	\$ 304.18	\$ 304.18
16	- Evaporative Coolers	Each	N/A						N/A						N/A				
17	- Evaporative Cooler/Air Cond. Covers	Each	3,874	100%	2,479	100%	\$ 129,093	100%	0	0%	0	0%	\$ -	0%	3,874	2,479	\$ 129,093	\$ 33.32	\$ 52.07
18	- A/C Replacement - Room	Each	N/A						N/A						N/A				
19	- A/C Replacement - Room (landlord)	Each	N/A						N/A						N/A				
20	- A/C Replacement - Central	Each	N/A						N/A						N/A				
21	- A/C Replacement - Central (landlord)	Each	N/A						N/A						N/A				
22	Weatherization																		
23	Weatherization																		
24	- Attic Insulation	Home	1,471	100%	1,471	100%	\$ 1,118,202	100%	0	0%	0	0%	\$ -	0%	1,471	1,471	\$ 1,118,202	\$ 760.16	\$ 760.16
25	- Attic Access Weatherization	Home	N/A						N/A						N/A				
26	- Weatherstripping - Door	Home	33,935	100%	33,935	100%	\$ 2,923,186	100%	0	0%	0	0%	\$ -	0%	33,935	33,935	\$ 2,923,186	\$ 86.14	\$ 86.14
27	- Caulking	Home	1,461	100%	1,461	100%	\$ 11,505	100%	0	0%	0	0%	\$ -	0%	1,461	1,461	\$ 11,505	\$ 7.87	\$ 7.87
28	- Minor Home Repairs	Home	32,993	100%	32,993	100%	\$ 8,635,467	100%	0	0%	0	0%	\$ -	0%	32,993	32,993	\$ 8,635,467	\$ 261.74	\$ 261.74
29	Water Heater Savings																		
30	Water Heater Savings																		
31	- Water Heater Blanket	Home	3,347	100%	3,347	100%	\$ 156,358	100%	0	0%	0	0%	\$ -	0%	3,347	3,347	\$ 156,358	\$ 46.72	\$ 46.72
32	- Low Flow Showerhead	Home	33,941	100%	33,941	100%	\$ 833,454	100%	0	0%	0	0%	\$ -	0%	33,941	33,941	\$ 833,454	\$ 24.56	\$ 24.56
33	- Water Heater Replacement - Gas	Each	59	100%	59	100%	\$ 44,035	100%	0	0%	0	0%	\$ -	0%	59	59	\$ 44,035	\$ 746.36	\$ 746.36
34	- Water Heater Replacement - Electric	Each	N/A						N/A						N/A				
35	- Water Heater Pipe Wrap	Home	1,438	100%	1,438	100%	\$ 25,901	100%	0	0%	0	0%	\$ -	0%	1,438	1,438	\$ 25,901	\$ 18.01	\$ 18.01
36	- Faucet Aerators	Home	35,306	100%	35,306	100%	\$ 431,034	100%	0	0%	0	0%	\$ -	0%	35,306	35,306	\$ 431,034	\$ 12.21	\$ 12.21
37	Lighting Measures																		
38	Lighting Measures																		
39	- Compact Fluorescents (inc. porchlights)	Each	N/A						N/A						N/A				
40	- Porchlights fixture replacement	Each	N/A						N/A						N/A				
41	Refrigerators																		
42	Refrigerators	Each	N/A						N/A						N/A				
43	Refrigerators (landlord)	Each	N/A						N/A						N/A				
44	Pilots																		
45	Pilots																		
46	- Pilot		N/A						N/A						N/A				
47	Customer Enrollment																		
48	Customer Enrollment																		
49	- Outreach & Assessment	Home	36,870	100%	36,870	100%	\$ 2,583,769	100%	0	0%	0	0%	\$ -	0%	36,870	36,870	\$ 2,583,769	\$ 70.08	\$ 70.08
50	- In-Home Education	Home	33,995	100%	33,995	100%	\$ 359,573	100%	0	0%	0	0%	\$ -	0%	33,995	33,995	\$ 359,573	\$ 10.58	\$ 10.58
51	- Education Workshops	Participants	20,913	100%	N/A		\$ 400,317	100%	0	0%	N/A		\$ -	0%	20,913	N/A	\$ 400,317	\$ 19.14	

	A	B	C	D	E
1	<b>Table TA 2 Gas</b>				
	<b>LIEE Cost Elements - Southern California Gas Company - PY2006</b>				
2	<b>Expenditures Recorded by Cost Element</b>				
3	<b>LIEE Program:</b>	<b>Labor</b>	<b>Non-Labor</b>	<b>Contract</b>	<b>Total</b>
4	Energy Efficiency				
5	- Gas Appliances	\$ -	\$ -	\$ 5,316,860	\$ 5,316,860
6	- Electric Appliances	\$ -	\$ -	\$ -	\$ -
7	- Weatherization	\$ -	\$ -	\$ 14,443,908	\$ 14,443,908
8	- Outreach and Assessment	\$ -	\$ -	\$ 2,583,769	\$ 2,583,769
9	- In Home Energy Education	\$ -	\$ -	\$ 359,573	\$ 359,573
10	- Education Workshops	\$ -	\$ -	\$ 400,317	\$ 400,317
11	- Pilot	\$ -	\$ -	\$ -	\$ -
12	- Cool Centers	\$ -	\$ -	\$ -	\$ -
13	<b>Energy Efficiency TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 23,104,427</b>	<b>\$ 23,104,427</b>
14					
15	Training Center	\$ 74,183	\$ 16,907	\$ -	\$ 91,090
16	Inspections	\$ -	\$ 17,898	\$ 1,603,966	\$ 1,621,865
17	Marketing	\$ -	\$ 391,671	\$ 12,445	\$ 404,116
18	M&E Studies	\$ -	\$ -	\$ -	\$ -
19	Regulatory Compliance	\$ 180,494	\$ 90,239	\$ -	\$ 270,732
20	General Administration	\$ 1,632,540	\$ 167,110	\$ -	\$ 1,799,650
21	CPUC Energy Division	\$ -	\$ 25,596	\$ -	\$ 25,596
22					
23	<b>TOTAL PROGRAM COSTS</b>	<b>\$ 1,887,217</b>	<b>\$ 709,421</b>	<b>\$ 24,720,838</b>	<b>\$ 27,317,476</b>

	A	B	C	D	E
1	<b>Table TA 3</b>				
2	<b>Program Detail by Housing Type and Heating Source</b>				
3	<b>Southern California Gas Company - PY2006</b>				
4		Energy Savings		Expenses [1]	Dwellings Treated
5		(mWh)	(mTherm)		
6	Gas Heat – Own				
7	Single Family	139	432	\$ 11,910,131	16,314
8	Multi Family	2	3	\$ 182,514	250
9	Mobile Homes	4	34	\$ 1,561,589	2,139
10	Sub Total Dwellings Served	145	469	\$ 13,654,234	18,703
11					
12	Gas Heat – Rent				
13	Single Family	59	254	\$ 7,004,886	9,595
14	Multi Family	7	108	\$ 6,139,770	8,410
15	Mobile Homes	61	3	\$ 118,269	162
16	Sub Total Dwellings Served	126	365	\$ 13,262,925	18,167
17					
18	Electric Heat – Own				
19	Single Family				
20	Multi Family				
21	Mobile Homes				
22	Sub Total Dwellings Served				
23					
24	Electric Heat – Rent				
25	Single Family				
26	Multi Family				
27	Mobile Homes				
28	Sub Total Dwellings Served				
29					
30	<b>TOTAL DWELLINGS SERVED</b>	<b>272</b>	<b>834</b>	<b>\$ 26,917,159</b>	<b>36,870</b>
	[1] - Excluding indirect program costs and NGAT costs.				

	A	B	C	D	E	F
1	<b>Table TA 4 Life Cycle Bill Savings - Southern California Gas Company - PY2006</b>					
2	<b>Measure Description</b>	<b>Number Installed</b>	<b>Per Measure Electric Impact (kWh)</b>	<b>Per Measure Gas Impact (Therms)</b>	<b>Effective Useful Life (EUL)</b>	<b>Total Measure Life Cycle Bill Savings</b>
3						
4	<b>Energy Efficiency Measures</b>					
5						
6	Attic Insulation	1,471	0	24	25	\$596,641
7	Caulking	1,461	0	2	5	\$12,895
8	Duct Sealing	300	0	2	5	\$1,304
9	Evaporative Cooler / Air Cond. Covers	2,479	0	1	3	\$9,875
10	Faucet Aerators	35,306	0	3	5	\$521,310
11	Furnace Repair - Gas	3,606	0	23	10	\$545,299
12	Furnace Replacement - Gas	2,194	0	32	22	\$861,382
13	Low Flow Showerhead	33,941	0	8	10	\$2,235,735
14	Minor Home Repair	32,993	25	4	10	\$1,853,489
15	Water Heater Blanket	3,347	0	11	5	\$163,644
16	Water Heater Pipe Wrap	1,438	0	4	15	\$73,059
17	Water Heater Replacement - Gas	59	0	19	13	\$11,654
18	Weatherstripping - Door	33,935	0	2	5	\$332,283
19	<b>Total Bill Savings for All Measures in Program Year</b>					<b>\$7,218,569</b>
20	<b>Total Number of Homes Served By the Program</b>					<b>36,870</b>
21	<b>Life Cycle Bill Savings Per Home</b>					<b>\$196</b>

	A	B	C
1	<b>Table TA 5 Energy Rates Used For Bill Savings Calculations Southern California Gas Company - PY2006</b>		
2	Year	\$/kWh	\$/Therm
3	2006	0.1046	0.9775
4	2007	0.1078	1.0068
5	2008	0.1110	1.0370
6	2009	0.1144	1.0681
7	2010	0.1178	1.1002
8	2011	0.1213	1.1332
9	2012	0.1250	1.1672
10	2013	0.1287	1.2022
11	2014	0.1326	1.2382
12	2015	0.1365	1.2754
13	2016	0.1406	1.3136
14	2017	0.1449	1.3530
15	2018	0.1492	1.3936
16	2019	0.1537	1.4354
17	2020	0.1583	1.4785
18	2021	0.1630	1.5229
19	2022	0.1679	1.5686
20	2023	0.1730	1.6156
21	2024	0.1782	1.6641
22	2025	0.1835	1.7140
23	2026	0.1890	1.7654
24	2027	0.1947	1.8184
25	2028	0.2005	1.8729
26	2029	0.2065	1.9291
27	2030	0.2127	1.9870
28			
29	Note: Energy rates used is based on 2005 filed rate of .1016 kWh and 0.949 therm.		
30	Escalation factor is applied at 3 percent.		

	A	B	C	D	E
1	<b>Table TA 6</b> <b>Bill Savings - Southern California Gas Company - PY2006</b>				
2	Program Year	Program Costs	Program Lifecycle Bill Savings	Program Bill Savings/ Cost Ratio	Per Home Average Lifecycle Bill Savings
3	2004	\$ 32,595,808	\$ 7,730,493	0.24	\$ 141
4	2005	\$ 28,834,254	\$ 6,652,911	0.23	\$ 164
5	2006	\$ 27,317,476	\$ 7,218,569	0.26	\$ 196