

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

2003 Results  
May 2004



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

2003 Results  
May 2004



## Table of Contents

<b>Table of Contents .....</b>	<b>i</b>
<b>Executive Summary .....</b>	<b>1-1</b>
Overview .....	1-1
Program Results.....	1-1
Program Performance Incentive .....	1-1
<b>Low Income Energy Efficiency Programs.....</b>	<b>2-1</b>
Program Summary .....	2-1
Direct Assistance Program .....	2-1
Energy Education for Low Income (EELI) .....	2-3
PY2004 Low- Income Energy Efficiency Program Plans .....	2-4
Regulatory Compliance and Oversight, Measurement and Evaluation (M&E) Activities .....	2-4
Regulatory Compliance and Oversight.....	2-4
Measurement and Evaluation (M&E) Activities .....	2-5
Community Based Organizations, Leveraging and Access to Community Services .....	2-6
CBO Participation.....	2-6
Leveraging .....	2-7
Access to Other Low- Income Services .....	2-7
Performance Incentives for Low Income Energy Efficiency Program Activities.....	2-8

## Executive Summary

### **Overview**

This report on San Diego Gas and Electric's Low Income Energy Efficiency (LIEE) Program provides information on the activities, results, benefits, costs, and obstacles of the program year (PY) 2003 program. SDG&E offers its low-income customer two separate Low Income Energy Efficiency (LIEE) program elements: the Direct Assistance Program (DAP) and the Energy Education for Low Income Program (EELI). DAP provides weatherization services, energy efficient lighting, energy efficient appliances, and energy education at no cost to qualified gas and electric customers. EELI offers energy education providing customers with the knowledge needed to reduce their energy use and exercise more control over their energy bills.

### **Program Results**

During PY2003, DAP served a total of 15,706 homes and weatherized 11,982 homes. SDG&E also installed 4,960 refrigerators, 191 air conditioners, 339 water heaters, and repaired or replaced 1,346 natural gas furnaces. EELI provided energy education to 23,866 SDG&E customers.

Weatherization and appliance installations resulted in first-year energy savings of 5,640 mWh and 220 mTherms. Average per home lifecycle bill savings for the program are \$506. Additionally, the program services improved upon the comfort, health and safety of low-income customers.

The PY2003 LIEE program design and funding was established by the Commission in Decision (D.) 02-12-019. SDG&E's authorized budget for PY2003 was \$13,368,093, exclusive of \$926,859 in unspent funds from the previous year. LIEE program expenditures during 2003 totaled \$12,866,391. Unspent 2003 LIEE program funds will be carried over and used in SDG&E's PY2004 program.

### **Program Performance Incentive**

In 2003, SDG&E exceeded the required program measures savings threshold of 150,921 therms through the installation of basic ("Big Six"<sup>1</sup>) measures to qualify for \$233,713 in program performance incentives (2% multiplied by \$11,685,630<sup>2</sup> in PY2003 program expenditures). SDG&E achieved a total of 153,293 therms. Therefore, SDG&E hereby applies for an LIEE program performance incentive claim totaling \$233,713 for PY2003. This award will be collected in two installments of 50 percent of the total claim; the first year claim is \$116,856 (50% of \$233,713), plus interest from July 1, 2004 through December 31, 2004, and franchise fees and uncollectibles for a total first year claim of \$117,886.

---

<sup>1</sup> The big six LIEE measures are 1) attic insulation, 2) caulking, 3) weatherstripping, 4) low flow showerheads, 5) water heater blankets, and 6) door and building envelope repairs that reduce infiltration.

<sup>2</sup> The expenditures reflected include only the program implementation expenditures.

## Low Income Energy Efficiency Programs

### **Program Summary**

SDG&E offers low-income customers two separate Low Income Energy Efficiency (LIEE) programs: the Direct Assistance Program (DAP) and the Energy Education for Low Income Program (EELI). SDG&E contracts with an outside consultant to manage the field activities of both of its LIEE programs. Under DAP, the consultant also performs outreach to customers, and provides in-home energy education and assessment of the home. The consultant subcontracts the DAP weatherization and a portion of the Heating, Ventilation and Air Conditioning (HVAC) work to licensed contractors and the EELI education workshops to the clients of community based organizations and agencies within the low-income community.

DAP is designed to help low-income residential customers control energy costs by providing no-cost weatherization, energy efficient lighting, appliance services, and energy conservation education. Communities targeted for DAP participation by SDG&E are those where a majority of the households are at or below the income guidelines established by the California Public Utilities Commission (Commission) for the utilities' low-income programs. Customers must meet the program's income eligibility guidelines adopted by the Commission and the program's customer residence structural criteria in order to receive no cost home weatherization, lighting and appliance services.

SDG&E's EELI program is designed to educate low-income residential customers on how to alter and/or change their energy usage by modifying certain household energy consumption patterns and habits. This program offers education in various languages including English, Spanish, African, Arabic, Asian, Eastern European, Laotian, Middle Eastern languages, Russian, and Vietnamese. Outreach for the EELI program is achieved through a continued presence in the low-income community and through education services that are delivered through a network of local agencies that provide services to SDG&E's culturally diverse low-income population.

As reported in Table 2.1.1 and Table 2.3, SDG&E spent a total of \$12,866,391 on its LIEE program. Annual energy savings realized from these expenditures are 5,640 mWh and 220 mTherms. Therm savings resulting from the installation of "Big Six" measures totaled 153 mTherms. The total resource cost ratio of the program is 0.66, the utility cost ratio is 0.47, and the modified participant ratio is 1.01.

### **PY2003 Low Income Energy Efficiency (LIEE) Program**

#### **Direct Assistance Program**

During PY2003, SDG&E treated 15,706 homes and weatherized 11,982 homes. Throughout PY2003, SDG&E combined its LIEE program outreach with its California Alternate Rates for Energy (CARE) program outreach activities in order to provide customers with knowledge of and access to all customer assistance programs. Other outreach efforts and media activities conducted during the year included the following:

- Updated the DAP enrollment forms to include a CARE component which enables customers to enroll in both programs at one time, and allows customer income documentation for both programs to be collected at the same time.

- Identified, qualified, and enrolled customers for LIEE services by SDG&E's primary program field services implementation contractor (Richard Heath and Associates, or RHA, Inc.)
- Used SDG&E's database of prior years LIEE program participants as an outreach tool to identify customers who qualified for additional measures and services authorized under the Commission's Rapid Deployment strategy established by D.01-05-033.
- Used the CARE participant database information by the implementation contractor when conducting LIEE program outreach. The CARE participant database was used by the implementation contractor, Richard Heath & Associates, to identify additional LIEE program outreach opportunities.
- Leveraged LIEE funds with funds provided by the Department of Community Services and Development in order to provide additional energy efficient measures and services to low-income customers.
- Partnered with the Filipino-American Wellness Center to provide information about the LIEE program.
- Leveraged outreach efforts with CARE and other assistance programs with SDG&E's energy efficiency lighting turn-in events.

SDG&E continued to run LIEE program print advertising in local Chinese, Filipino, and Vietnamese language publications. Below is a table showing the print media and circulation associated with these ads.

<u>Language</u>	<u>Circulation</u>	<u>Area Served</u>
<b><u>Chinese</u></b>		
Asian Chinese Times	14,000	San Diego County
We Chinese in America	5,000	San Diego County
<b><u>Filipino</u></b>		
Asian Journal San Diego	35,000	San Diego County
Filipino Press	25,000	San Diego County
<b><u>Vietnamese</u></b>		
Nguoi Viet	6,000	San Diego County
Tieng Viet	6,000	San Diego County and Vicinity

English print ads were placed in the following publications:

- North County Times
- Imperial Beach Eagle Times
- San Diego Voice and Viewpoint
- Alpine Sun
- Chula Vista Star News
- East County Californian
- North Park News
- San Diego Seniors
- Senior Life

An in-language Spanish print ad was developed and placed in the following publications:

- Enlace
- La Prensa
- El Latino

For English radio:

- KFMB
- "KOOL" FM
- KOGO-AM
- KPLN
- KPOP-AM
- KPRZ-AM
- KYXY
- XHRM-FM

For Spanish radio:

- KLVN (K-Love)
- KLQV (La Nueva)
- XLTN-FM (Radio Latina)

### **Energy Education for Low Income (EELI)**

During PY2003, the EELI program element of the LIEE program educated 23,866 low-income residential customers on how to alter and/or change their energy usage by modifying certain household energy consumption patterns and habits at a cost of \$348,724. EELI group education was provided through a network of local community based organizations (CBOs) that serve low income clientele including agencies serving the "underserved" and "hard-to-reach" population in SDG&E's service territory. EELI is offered in various languages (such as English, Spanish, African, Arabic, Asian, Eastern European, Laotian, Middle Eastern, Russian, and Vietnamese) and informs customers on how energy is being consumed in their homes and provides them with methods of reducing energy costs through energy conservation. Other SDG&E assistance programs are discussed with EELI participants including DAP, CARE, Medical Baseline, and Level Pay Plan.

EELI is comprised of the following delivery methods:

The Energy Practices Survey consists of a simple energy-use checklist that, when completed by the customer, provides immediate feedback on the cost of various energy-use practices. The survey is provided in English, Spanish, Somali, Arabic, Russian, Laotian, and Vietnamese.

The Energy Conservation Video reviews energy and money saving information and provides cost information on many day-to-day energy uses.

EELI workshops were also held at senior centers and adult education facilities in an effort to reach seniors and other special interest customers outside of the EELI provider network.

### **PY2004 Low- Income Energy Efficiency Program Plans**

SDG&E filed for continuation of its LIEE DAP program in Application 02-07-001 dated July 1, 2002. The Commission issued D.02-12-019, an Interim Order, on December 5, 2002, directing the utilities to continue the programs and to provide customers all feasible LIEE measures, including the pilot rapid deployment measures authorized in D.01-05-033, until further Commission order. It also authorized SDG&E to utilize \$13,368,093 for its PY2003 program and beyond, in order to maintain the higher level of services to the limited-income customers provided under its rapid deployment strategy.

In 2004, SDG&E plans to continue providing LIEE services to as many qualified customers as possible. The planned LIEE program budget for PY2004 is \$16,916,503, excluding performance incentives, and is comprised of a base budget of \$13,368,093, plus \$3,548,410 in unspent PY2003 LIEE funds. The program goals for PY2004 include providing in-home energy education to 14,000 homes, weatherizing 12,000 units, replacing 8,200 refrigerators, repairing or replacing 755 natural gas furnaces, and serving 24,000 customers through its EELI group education efforts. In order to achieve the Commission's authorized therm savings goal of 150,921 therms, SDG&E has increased the number of homes to weatherize in 2004 by approximately 30 percent from its goal in PY2003. Additionally in 2004, SDG&E will directly oversee the activities of EELI community agency contracts in order to better serve its customers by increasing efficiencies and leveraging of existing relationships.

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

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

SDG&E 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 381.5 states the intent of the Legislature is to strengthen the network of local community service providers. The local CBOs participating in SDG&E's program leverage their LIEE program funding with funding they receive under the State of California Department of Community Services and Development (CSD)'s 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 programs provide as many program energy efficiency measures as feasible to eligible customers served in the program. Consistent with this legislation and Commission statewide policy, SDG&E's program installed all feasible LIEE program measures to all the homes served by DAP during PY2003. Additionally, SDG&E continued to revisit customers who received DAP weatherization services prior to 2001, to provide the new program measures authorized by the Commission under the rapid deployment decision, D.01-05-033.



During PY2003, SDG&E also worked consistently with the other California investor-owned utilities (IOUs) and the Energy Division on several Commission-directed activities. In the low income proceeding R. 01-08-027, 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 Office of Ratepayer Advocates and the interested public, achieved the following results during PY2003:

- The Process Evaluation of the 2001 Statewide Low-Income Energy Efficiency LIEE Program and The Impact Evaluation of the 2001 Statewide Low-Income Energy Efficiency LIEE Program was completed by Xenergy Inc. and filed with the Commission in April 2003.
- The Statewide First Year Load Impact Study of the PY2002 LIEE Programs is currently being conducted by West Hills Energy and Computing, and will be filed during 2004. Following completion of the PY2002 LIEE programs impact evaluation, LIEE program evaluations will return to a bi-annual schedule, as authorized in D.02-12-019. Thus, the next LIEE program load impact evaluation will occur in 2006 for the PY2004 program.
- Equipoise Consulting is currently updating the comparative Joint Utility LIEE Program Costs and Bill Savings Standardization Report. The report will be filed by PG&E on May 3, 2004 on behalf of the four major California IOUs.
- The Final Phase 4 Report on Low Income Weatherization Program Natural Gas Appliance Testing Study Results was completed and a final report was filed with the Commission on May 5, 2003. This was a statewide study of the gas appliance testing policies and procedures under the major IOUs LIEE program.
- The joint utility LIEE program standardization project team and Itron, Inc. completed a cost effectiveness assessment study of all individual LIEE program measures. The final LIEE Measure Cost Effectiveness study was filed with the Commission on June 2, 2003.
- The Commission responded to the Final Phase 4 Report on Low Income Weatherization Program Natural Gas Appliance Testing Study results and the LIEE Measure Cost Effectiveness Study on November 13, 2003 in D.03-11-020.

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

In D.02-12-019, dated December 5, 2002, the Commission ordered the joint utility LIEE programs standardization project team to evaluate and file any significant changes to the cost effectiveness assessment and measure recommendations resulting from the program changes adopted by the Commission in its Decision approving the PY2003 program plans and budgets. The joint utility standardization project team and its consultants completed the cost effectiveness assessment study of all individual LIEE program measures. A final study result was filed with the Commission on June 2, 2003. The Commission adopted the team's recommendations and certified a new set of LIEE program standard measures by adopting D.03-11-020 on November 13, 2003. The new LIEE program standard measure mix was effective January 1, 2004.

In accordance with D.01-06-082, on April 18, 2003, 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>3</sup> The results of the 2001 LIEE programs load impact study will be utilized by SDG&E to calculate measure savings and performance incentive qualification related to its PY2004 LIEE program.

#### Bill Savings

Table TA 3.7 reports lifecycle bill savings by measure, by fuel type, and combined for PY2003; Table TA 3.8 reports the energy rates used for calculating the bill savings; and Table TA 3.9 reports the bill savings and the cost ratio for SDG&E's LIEE programs over the last three years.

#### Other Program-Related Survey

In 2003, SDG&E surveyed approximately 1,200 customers to assess their satisfaction with the program. The purpose of this survey is to evaluate customer satisfaction with various aspects of their experience with DAP. 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 that survey devoted questions to deliverables, customer service, increased comfort and safety. Approximately 1,200 customer records (name, phone number and primary language) with invoice dates during PY2003 were sent to CIC Research for telephone interviews.

Survey findings showed that the majority of customers claim to be more comfortable as a result of the program. While 79% said they are "more comfortable" as a result of the work done by DAP, 20% are "about the same" and 1% said they are "less comfortable". The DAP Program overall received high ratings. Over eight in ten (85%) are very satisfied with the DAP overall, with 51% giving the DAP the highest rating of "Completely Satisfied".

### **Community Based Organizations, Leveraging and Access to Community Services**

#### **CBO Participation**

SDG&E contracts LIEE program field services coordination with Richard Heath & Associates (RHA), a Diverse Business Enterprise (DBE) contractor, to market and manage field services under its PY2003 DAP. RHA subcontracted for weatherization services with two CBOs: (1) Campesinos Unidos, Inc. (CUI) and, (2) Metropolitan Area Advisory Committee (MAAC); and three private companies: (3) Capital State Construction, (4) Rancho Energy Services Co. (RESCO), and (5) Western Insulation. RHA also subcontracted with four licensed HVAC companies, as well as participating themselves, to provide the gas furnace repair and replacement services offered through the DAP. RHA completed all furnace inspections for DAP. The furnace subcontractors participating in PY2003 included: (1) Ameri-Mex, (2) Jade Mechanical, (3) Jerry's Heating and Air Conditioning, and (4) South Bay Mechanical. Tables TA 3.5 and TA 3.6 report on the level of participation by contractor types.

SDG&E also contracted with RHA to manage the EELI program. EELI, through one-on-one energy education sessions and group workshops, enables the low-income customer to make

---

<sup>3</sup> The Notice of Availability was filed with the Commission by Southern California Edison Company on behalf of itself, Pacific Gas and Electric Company, Southern California Gas Company, and San Diego Gas and Electric Company.

informed decisions about his or her energy use habits and reduce household energy costs. RHA subcontracted with a network of local non-profit agencies and CBOs that provided services and assistance to SDG&E's culturally diverse low-income population. Tables TA 3.6 include agency participation levels in EELI for PY2003.

### Leveraging

California's LIHEAP Block Grant weatherization and bill assistance efforts are funded by the Federal Department of Health and Human Services (DHHS) and provides two basic types of service through the CSD:

- Financial assistance to offset the costs of heating and/or cooling dwellings
- Weatherization work to make the dwelling more energy efficient

Community based organizations are eligible to apply for federal leveraged dollars for installed weatherization measures under the LIHEAP Block Grant program. In SDG&E's service territory, CUI and MAAC participated in the LIHEAP Leveraging Incentive Program. These two agencies reported \$1,261,234 in leveraged resources to the CSD and the LIHEAP Block Grant administrator based on their work with SDG&E during 2003. The LIHEAP leveraging reports submitted by CUI and MAAC included the funds they received from SDG&E for the actual costs of materials and labor used to install energy efficient measures through the DAP.

### Access to Other Low- Income Services

In compliance with D.00-07-020, SDG&E continued to use its existing LIEE referral systems to identify the needs of participating low income customers participating in the DAP and refers them to local CBOs and other community agencies. Both RHA and all of its subcontractors continue to identify both the energy needs and non-energy needs of the low-income customer during the structural assessment, application process, energy education, and installation of weatherization measures and appliances, and make appropriate referrals to utility programs, state energy programs, and community agencies. Types of non-energy services provided by the community agencies in SDG&E's LIEE program include:

- Emergency food and clothing
- Shelter and housing
- High school equivalency instruction, English as a second language instruction, and math instruction
- Employment counseling
- Job Training
- Cultural Activities
- Translating Services
- Individual and Family Counseling
- Health Services
- Anger Management

- Substance Abuse Counseling
- Parenting and Money Management Classes
- Assistance Programs Tailored to Children
- Assistance Programs Tailored to Seniors

### **Performance Incentives for Low Income Energy Efficiency Program Activities**

In 2003, SDG&E exceeded the required threshold savings of 150,921 therms through the installation of basic ("Big Six") measures to qualify for \$233,713 in program performance incentives (2 percent multiplied by \$11,685,630 in PY2003 program expenditures). SDG&E achieved a total of 153,293 therms. Therefore, SDG&E is filing for a performance incentive claim totaling \$233,713 for PY2003, which will be collected in two installments of 50 percent of the total claim; the first year claim is \$116,856 (50 percent of \$233,713), plus interest from July 1, 2004 through December 31, 2004, and franchise fees and uncollectibles for a total first year claim of \$117,886.

**Table 2.1.1**  
**Summary of Costs: Low Income - San Diego Gas & Electric**  
**(Electric & Gas Combined)**

LIEE Program	2003		2004
	Budgeted	Recorded	Budgeted
Energy Efficiency			
- Gas Appliances	\$ 1,062,537	\$ 709,349	\$ 1,692,676
- Electric appliances	\$ 5,566,600	\$ 3,995,452	\$ 7,030,494
- Weatherization	\$ 4,837,526	\$ 5,209,991	\$ 5,380,028
- Outreach & Assessment	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 1,177,110	\$ 1,422,113	\$ 1,555,665
- Education Workshops (EELI)	\$ 322,742	\$ 348,724	\$ 331,864
Energy Efficiency Total	\$ 12,966,514	\$ 11,685,630	\$ 15,990,727
Pilots			
- Pilot (Misc)	\$ 120,378	\$ -	\$ -
- RDWP Cool Zones	\$ 79,450	\$ -	\$ -
Total Pilots	\$ 199,828	\$ -	\$ -
Training center	\$ -	\$ -	\$ -
Inspections	\$ 610,064	\$ 636,071	\$ 434,121
Advertising	\$ 300,945	\$ 251,752	\$ 309,451
M&E studies	\$ 54,248	\$ -	\$ 61,890
Regulatory compliance	\$ 106,535	\$ 272,567	\$ 61,890
Other administration	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -
Oversight Costs			
- LIAB Start-Up	\$ -	\$ -	\$ -
- LIAB PY Past Year	\$ -	\$ -	\$ -
- LIAB PY Present Year	\$ 28,409	\$ -	\$ 29,212
- CPUC Energy Division	\$ 28,409	\$ 20,372	\$ 29,212
Total Oversight Costs	\$ 56,818	\$ 20,372	\$ 58,424
Performance Incentives	\$ 259,330	\$ 233,713	\$ 319,815
Total Costs	\$ 14,294,952	\$ 12,866,391	\$ 16,916,503

Table 2.1.2

**Summary of Costs: Low Income - San Diego Gas & Electric  
(Gas)**

	2003		2004
	Budgeted	Recorded	Budgeted
LIEE Program			
Energy Efficiency			
- Gas Appliances	\$ 1,062,537	\$ 709,349	\$ 1,683,172
- Electric appliances	\$ -	\$ -	\$ -
- Weatherization	\$ 4,837,526	\$ 5,209,991	\$ 5,349,820
- Outreach & Assessment	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 588,555	\$ 711,056	\$ 773,465
- Education Workshops (EELI)	\$ 64,548	\$ 41,411	\$ 66,000
Energy Efficiency Total	\$ 6,553,166	\$ 6,671,808	\$ 7,872,458
Pilots			
- Pilot (Misc)	\$ 60,189	\$ -	\$ -
- RDWP Cool Zones	\$ -	\$ -	\$ -
Total Pilots	\$ 60,189	\$ -	\$ -
Training center	\$ -	\$ -	\$ -
Inspections	\$ 305,032	\$ 318,035	\$ 215,841.74
Advertising	\$ 150,473	\$ 125,876	\$ 153,856.67
M&E studies	\$ 27,124	\$ -	\$ 30,771.33
Regulatory compliance	\$ 53,267	\$ 136,284	\$ 30,771.33
Other administration	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -
Oversight Costs			
- LIAB Start-Up	\$ -	\$ -	\$ -
- LIAB PY Past Year	\$ -	\$ -	\$ -
- LIAB PY Present Year	\$ 14,205	\$ -	\$ 14,524
- CPUC Energy Division	\$ 14,205	\$ 10,186	\$ 14,524
Total Oversight Costs	\$ 28,409	\$ 10,186	\$ 29,048.14
Performance Incentives	\$ 131,063	\$ 133,436	\$ 157,449
Total Costs	\$ 7,177,660	\$ 7,262,188	\$ 8,332,747

**Table 2.1.3**  
**Summary of Costs: Low Income - San Diego Gas & Electric**  
**(Electric)**

	2003		2004
	Budgeted	Recorded	Budgeted
LIEE Program			
Energy Efficiency			
- Gas Appliances	\$ -	\$ -	\$ -
- Electric appliances	\$ 5,566,600	\$ 3,995,452	\$ 7,069,243
- Weatherization	\$ -	\$ -	\$ -
- Outreach & Assessment	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 588,555	\$ 711,056	\$ 782,120
- Education Workshops (EELI)	\$ 258,194	\$ 307,314	\$ 266,954
Energy Efficiency Total	\$ 6,413,348	\$ 5,013,822	\$ 8,118,316.80
Pilots			
- Pilot (Misc)	\$ 60,189	\$ -	\$ -
- RDWP Cool Zones	\$ 79,450	\$ -	\$ -
Total Pilots	\$ 139,639	\$ -	\$ -
Training center	\$ -	\$ -	\$ -
Inspections	\$ 305,032	\$ 318,035	\$ 218,257
Advertising	\$ 150,473	\$ 125,876	\$ 155,578
M&E studies	\$ 27,124	\$ -	\$ 31,116
Regulatory compliance	\$ 53,267	\$ 136,284	\$ 31,116
Other administration	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -
Oversight Costs			
- LIAB Start-Up	\$ -	\$ -	\$ -
- LIAB PY Past Year	\$ -	\$ -	\$ -
- LIAB PY Present Year	\$ 14,205	\$ -	\$ 14,687
- CPUC Energy Division	\$ 14,205	\$ 10,186	\$ 14,687
Total Oversight Costs	\$ 28,409	\$ 10,186	\$ 29,373
Performance Incentives	\$ 128,267	\$ 100,276	\$ 162,366
Total Costs	\$ 7,117,292	\$ 5,604,203	\$ 8,583,756

**Table 2.2**  
**Summary of LIEE Program Effects: DAP - San Diego Gas & Electric**  
**Program Year: 2003**  
**(Annual Energy Reductions)**

	2003 (Recorded)	2004 (Planned)
mWh	5640	7268
mTherms	220	310



**Table 2.3**  
**Summary of LIEE Cost-Effectiveness - San Diego Gas & Electric**  
**Program Year: 2003**

(Benefit-Cost Ratios)						
	2003 (Recorded)			2004 (Planned)		
	Utility Cost Test	Total Resouce Cost Test	*Modified Participant Test	Utility Cost Test	Total Resouce Cost Test	*Modified Participant Test
DAP	0.47	0.66	1.01	0.45	0.71	1.00

**Table 2.4**  
**Summary of LIEE Cost-Effectiveness: DAP - San Diego Gas & Electric**  
**Program Year: 2003**  
**(Net Benefits; \$Mil)**

	2003 (Recorded)			2004 (Planned)		
	Utility Cost Test	Total Resouce Cost Test	*Modified Participant Test	Utility Cost Test	Total Resouce Cost Test	*Modified Participant Test
DAP	\$ (6,793,286)	\$ (4,419,991)	\$ 122,456	\$ (9,335,598)	\$ (4,827,895)	(\$5,192)

**Table TA 3.1**  
**LIEE Program Cost Estimates used for Cost-Effectiveness**  
**San Diego Gas & Electric**

Gas and Electric Combined

Program	Utility Costs						
	Program Incentives (Recorded)		Admin	Performance Incentives	Other	Total	IMC
	Actual	Committed					
Dap	\$ 10,728,851	\$ -	\$ 1,788,816	\$ 226,738	\$ -	\$ 12,517,667	\$ -
EELI	\$ 205,704	\$ -	\$ 143,020	\$ 6,974	\$ -	\$ 348,724	\$ -
Total	\$ 10,934,555	\$ -	\$ 1,931,836	\$ 233,713	\$ -	\$ 12,866,391	\$ -

Electric Only

Program	Utility Costs						
	Program Incentives (Recorded)		Admin	Performance Incentives	Other	Total	IMC
	Actual	Committed					
Dap	\$ 4,621,433	\$ -	\$ 675,456	\$ 94,130	\$ -	\$ 5,296,889	\$ -
EELI	\$ 164,564	\$ -	\$ 142,750	\$ 6,146	\$ -	\$ 307,314	\$ -
Total	\$ 4,785,996	\$ -	\$ 818,207	\$ 100,276	\$ -	\$ 5,604,203	\$ -

Gas Only

Program	Utility Costs						
	Program Incentives (Recorded)		Admin	Performance Incentives	Other	Total	IMC
	Actual	Committed					
Dap	\$ 6,107,418	\$ -	\$ 1,113,360	\$ 132,608	\$ -	\$ 7,220,778	\$ -
EELI	\$ 41,141	\$ -	\$ 270	\$ 828	\$ -	\$ 41,411	\$ -
Total	\$ 6,148,559	\$ -	\$ 1,113,629	\$ 133,436	\$ -	\$ 7,262,188	\$ -

**Table TA 3.2.1**  
**LIEE Cost Elements - San Diego Gas & Electric**  
**(Electric & Gas Combined)**

LIEE Program	Expenditures Recorded by Cost Element - 2003			
	Labor	Non-Labor	Contract	Total
Energy Efficiency				
- Gas Appliances	\$ 853	\$ 5,244	\$ 703,253	\$ 709,349
- Electric appliances	\$ -	\$ 26,844	\$ 3,968,607	\$ 3,995,452
- Weatherization	\$ 202,149	\$ 256,503	\$ 4,751,340	\$ 5,209,991
- Outreach & Assessment	\$ -	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 88,087	\$ 382,923	\$ 951,102	\$ 1,422,113
- Education Workshops (EELI)	\$ 79,363.86	\$ 63,656.19	\$ 205,704.42	\$ 348,724
Energy Efficiency Total	\$ 370,452	\$ 735,170	\$ 10,580,007	\$ 11,685,630
Pilots				
Pilot (RDWP COOL ZONES)	\$ -	\$ -	\$ -	\$ -
Total Pilots	\$ -	\$ -	\$ -	\$ -
Training center	\$ -	\$ -	\$ -	\$ -
Inspections	\$ 138,327.00	\$ 143,195.13	\$ 354,548.41	\$ 636,071
Advertising	\$ 961.43	\$ 17,607.74	\$ 233,182.44	\$ 251,752
M&E studies	\$ -	\$ -	\$ -	\$ -
Regulatory compliance	\$ 108,778.94	\$ 118,795.15	\$ 44,993.35	\$ 272,567
Other administration				\$ -
Indirect Costs				\$ -
Oversight Costs				
- LIAB Start-Up				\$ -
- LIAB PY Past Year				\$ -
- LIAB PY Present Year				\$ -
- CPUC Energy Division		\$ 20,372		\$ 20,372
Total Oversight Costs	\$ -	\$ 20,372	\$ -	\$ 20,372
Total Costs	\$ 618,520	\$ 1,035,140	\$ 11,212,731	\$ 12,866,391

**Table TA 3.2.2**  
**LIEE Cost Elements - San Diego Gas & Electric**  
**(Gas)**

LIEE Program	Expenditures Recorded by Cost Element - 2003			
	Labor	Non-Labor	Contract	Total
Energy Efficiency				
- Gas Appliances	\$ 852.95	\$ 5,243.55	\$ 703,252.94	\$ 709,349
- Electric appliances	\$ -	\$ -	\$ -	\$ -
- Weatherization	\$ 202,148.61	\$256,502.84	\$ 4,751,339.89	\$ 5,209,991
- Outreach & Assessment	\$ -	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 44,043.50	\$191,461.71	\$ 475,551.10	\$ 711,056
- Education Workshops (EELI)	\$ -	\$ 269.63	\$ 41,140.89	\$ 41,411
Energy Efficiency Total	\$ 247,045.06	\$453,477.73	\$ 5,971,284.82	\$ 6,671,808
Pilots				
Pilot (A)	\$ -	\$ -	\$ -	\$ -
Total Pilots	\$ -	\$ -	\$ -	\$ -
Training center	\$ -	\$ -	\$ -	\$ -
Inspections	\$ 69,164	\$ 71,598	\$ 177,274	\$ 318,035
Advertising	\$ 481	\$ 8,804	\$ 116,591	\$ 125,876
M&E studies	\$ -	\$ -	\$ -	\$ -
Regulatory compliance	\$ 54,389	\$ 59,398	\$ 22,497	\$ 136,284
Other administration	\$ -	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -	\$ -
Oversight Costs				
- LIAB Start-Up	\$ -	\$ -	\$ -	\$ -
- LIAB PY Past Year	\$ -	\$ -	\$ -	\$ -
- LIAB PY Present Year	\$ -	\$ -	\$ -	\$ -
- CPUC Energy Division	\$ -	\$ 10,186	\$ -	\$ 10,186
Total Oversight Costs	\$ -	\$ 10,186	\$ -	\$ 10,186
Total Costs	\$ 371,079	\$ 603,463	\$ 6,287,647	\$ 7,262,188

**Table TA 3.2.3**  
**LIEE Cost Elements - San Diego Gas & Electric**  
**(Electric)**

LIEE Program	Expenditures Recorded by Cost Element - 2003			
	Labor	Non-Labor	Contract	Total
Energy Efficiency				
- Gas Appliances	\$ -	\$ -	\$ -	\$ -
- Electric appliances	\$ -	\$ 26,844	\$ 3,968,607	\$ 3,995,452
- Weatherization	\$ -	\$ -	\$ -	\$ -
- Outreach & Assessment	\$ -	\$ -	\$ -	\$ -
- In Home Energy Education	\$ 44,043	\$ 191,462	\$ 475,551	\$ 711,056
- Education Workshops (EELI)	\$ 79,364	\$ 63,387	\$ 164,564	\$ 307,314
Energy Efficiency Total	\$ 123,407	\$ 281,693	\$ 4,608,722	\$ 5,013,822
Pilots				
Pilot (A)	\$ -	\$ -	\$ -	\$ -
Total Pilots	\$ -	\$ -	\$ -	\$ -
Training center	\$ -	\$ -	\$ -	\$ -
Inspections	\$ 69,164	\$ 71,598	\$ 177,274	\$ 318,035
Advertising	\$ 481	\$ 8,804	\$ 116,591	\$ 125,876
M&E studies	\$ -	\$ -	\$ -	\$ -
Regulatory compliance	\$ 54,389	\$ 59,398	\$ 22,497	\$ 136,284
Other administration	\$ -	\$ -	\$ -	\$ -
Indirect Costs	\$ -	\$ -	\$ -	\$ -
Oversight Costs				
- LIAB Start-Up	\$ -	\$ -	\$ -	\$ -
- LIAB PY Past Year	\$ -	\$ -	\$ -	\$ -
- LIAB PY Present Year	\$ -	\$ -	\$ -	\$ -
- CPUC Energy Division	\$ -	\$ 10,186	\$ -	\$ 10,186
Total Oversight Costs	\$ -	\$ 10,186	\$ -	\$ 10,186
Total Costs	\$ 247,441	\$ 431,678	\$ 4,925,084	\$ 5,604,203

**Table TA 3.3**  
**Program Detail By Housing Type and Heating source**  
**San Diego Gas & Electric**

	Energy Saved and Program Costs			Number of Dwellings		
	2003 (mWh)	2003 (mTherm)	2003 Expenses	2003 (Planned)	2003 (Actual)	2004 (Planned)
Gas Heat - Own						
- Single Family	537	21	\$ 1,225,064	1333	1495	1333
- Multi Family	603	23	\$ 1,376,322	1498	1680	1498
- Mobile Home	89	3	\$ 203,404	221	248	221
Sub Total Dwellings Served	1229	48	\$ 2,804,790	3052	3424	3052
Gas Heat - Rent						
- Single Family	1557	61	\$ 3,551,704	3865	4336	3865
- Multi Family	1749	68	\$ 3,990,231	4342	4871	4342
- Mobile Home	258	10	\$ 589,707	642	720	642
Sub Total Dwellings Served	3564	139	\$ 8,131,642	8848	9926	8848
Electric Heat - Own						
- Single Family	95	4	\$ 216,188	235	264	235
- Multi Family	106	4	\$ 242,880	264	296	264
- Mobile Home	16	1	\$ 35,895	39	44	39
Sub Total Dwellings Served	217	8	\$ 494,963	539	604	539
Electric Heat - Rent						
- Single Family	275	11	\$ 626,771	682	765	682
- Multi Family	309	12	\$ 704,158	766	860	766
- Mobile Home	46	2	\$ 104,066	113	127	113
Sub Total Dwellings Served	629	24	\$ 1,434,996	1561	1752	1561
Total Dwellings Served	5640	220	\$ 12,866,391	14000	15706	14000

Table TA 3.4  
Program Detail by Measure - San Diego Gas & Electric

	Energy Saved and Program Costs		Number of Dwellings Served	
	2003		2003	
	mWh	mTherm	Expenses	Actual Dwellings Served
<b>Replaces</b>				
- Repair - Gas	0	22	\$ 106,643	1052
- Replacement - Gas	0	24	\$ 655,455	284
- Repair - Electric	0	0	\$ -	0
- Replacement - Electric	0	0	\$ -	0
<b>Infiltration &amp; Space Conditioning</b>				
- Cover Plates/Gaskets	0	0	\$ 62,579	9102
- Evaporative Cooler/Air Cond. Covers	0	0	\$ 2,078	55
- HVAC Air Filter Replacement	0	0	\$ -	0
<b>Weatherstripping</b>				
- Ceiling Insulation R-11 (Gas)	0	0	\$ 27	1
- Ceiling Insulation R-11 (Electric)	0	0	\$ 5	0
- Ceiling Insulation R-19 (Gas)	0	0	\$ 17,847	27
- Ceiling Insulation R-19 (Electric)	0	0	\$ 3,150	5
- Ceiling Insulation R-30 (Gas)	0	5	\$ 274,205	272
- Ceiling Insulation R-30 (Electric)	3	0	\$ 48,389	48
- Water Heater Blanket (Gas)	0	7	\$ 31,284	992
- Water Heater Blanket (Electric)	33	0	\$ 5,521	175
- Low Flow Showerhead (Gas)	0	72	\$ 428,951	9544
- Low Flow Showerhead (Electric)	371	0	\$ 75,697	1684
- Weatherstripping -MF (Gas)	0	10	\$ 346,554	4797
- Weatherstripping -MF (Electric)	4	0	\$ 61,157	846
- Weatherstripping -SF (Gas)	0	13	\$ 568,786	4666
- Weatherstripping -SF (Electric)	5	0	\$ 100,370	823
- Caulking - MF	4	9	\$ 195,338	5361
- Caulking - SF	5	12	\$ 399,266	5522
- Minor Home Repairs	18	26	\$ 600,160	6397
- Attic Access Weatherstripping [1]	0	0	\$ -	0
<b>Water Heater Savings</b>				
- Water Heater Pipe Wrap	7	1	\$ 6,854	364
- Faucet Aerators	76	11	\$ 145,924	11352
<b>Miscellaneous Measures</b>				
- Attic Ventilation	0	0	\$ 7,232	66
- Auto Swoop	0	0	\$ 1,597	25
- Door Replacement	0	0	\$ 350,757	2234
- Door Threshold	0	0	\$ 134,732	2965
- Glass Replacement	0	0	\$ 140,525	1423
- Jamb Replacement	0	0	\$ 5,569	111
- Duct Register Sealing and Repair	1	1	\$ 54,671	500
Portable Evaporative Coolers	0	0	\$ -	0
Permanent Evaporative Coolers	1	0	\$ 3,995	4
Compact Fluorescents (inc. porchlights)	926	0	\$ 656,068	14575
Porchlights (fixture replacement or CFLs)	71	0	\$ 48,295	821
Refrigerators	3190	0	\$ 3,286,894	4948
<b>Load Shed/Reduce Pikes</b>				
- Refrigerators	8	0	\$ 3,798	12
- Air Conditioner Replacement - Room	0	0	\$ -	0
- Air Conditioner Replacement - Central	0	0	\$ -	0
<b>Pikes - Rapid Deployment</b>				
- Air Conditioner Replacement - Room	31	0	\$ 89,231	90
- Air Conditioner Replacement - Central	79	0	\$ 266,259	101
- Duct Sealing and Repair (Electric Heat)	79	0	\$ 16,133	186
- Duct Sealing and Repair (Gas Heat)	8	1	\$ 91,421	33
- Whole House Fans	0	0	\$ -	0
- Water Heater Replacement - Gas	0	7	\$ 245,325	329
- Water Heater Replacement - Electric	0	0	\$ -	0
- Set-back Thermostats (Electric Heat)	0	0	\$ -	0
- Set-back Thermostats (Gas Heat)	0	0	\$ -	0
- Evaporative Cooler Maintenance	14	0	\$ 15,015	86
- New Central Return	0	0	\$ 65,331	87
<b>Energy Education</b>				
- Outreach & Assessment	0	0	\$ 37,702	684
- In-Home Education	706	0	\$ 1,077,457	15022
- Education Workshops (EELI)	0	0	\$ 205,704	23866



Table TA 3.6  
Program Installation  
San Diego Gas & Electric

	Unit of Measure	CBO/WMDVBE			Non-CBO/WMDVBE			Total				
		Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	Cost/Unit	Cost/Dwelling
Dwellings	Each											
Furnaces												
Repair - Gas	Each	969	969	\$ 97,304	93	93	\$ 9,339	1062	1062	\$ 106,643	\$ 100	\$ 101
Replacement - Gas	Each	32	32	\$ 73,854	252	252	\$ 581,601	284	284	\$ 655,455	\$ 2,308	\$ 2,308
Repair - Electric	Each	0	0	\$ -	0	0	\$ -	0	0	\$ -	\$ -	\$ -
Replacement - Electric	Each	0	0	\$ -	0	0	\$ -	0	0	\$ -	\$ -	\$ -
Infiltration & Space Conditioning												
- Ceiling Insulation	Sq. Ft.	214749	203	\$ 191,338	170917	150	\$ 152,284	385666	353	\$ 343,623	\$ 0.89	\$ 973
- Caulking	Linear Ft.	111954	8282	\$ 346,297	80275	4601	\$ 248,307	192228	10883	\$ 594,604	\$ 3.09	\$ 55
- Weather Stripping	Each	9583	6362	\$ 624,910	6918	4770	\$ 451,937	16479	11132	\$ 1,076,847	\$ 65	\$ 87
- Cover Plates/Gaskets	Each	25978	5480	\$ 37,503	17370	3842	\$ 25,076	43348	9102	\$ 82,579	\$ 1.44	\$ 7
- Evaporative Cooler/Air Cond. Covers	Each	22	22	\$ 831	33	33	\$ 1,247	55	55	\$ 2,078	\$ 38	\$ 38
- Air Conditioner Replacement - Room	Each	90	90	\$ 89,231	0	0	\$ -	90	90	\$ 89,231	\$ 991	\$ 991
- Air Conditioner Replacement - Central	Each	0	0	\$ -	101	101	\$ 266,259	101	101	\$ 266,259	\$ 2,636	\$ 2,636
- Duct Sealing and Repair	Each	150	150	\$ 73,667	69	69	\$ 33,887	219	219	\$ 107,554	\$ 491	\$ 491
- Whole House Fans	Each	0	0	\$ -	0	0	\$ -	0	0	\$ -	\$ -	\$ -
- Set-back Thermostats	Each	0	0	\$ -	0	0	\$ -	0	0	\$ -	\$ -	\$ -
- Evaporative Cooler Maintenance	Each	88	88	\$ 15,015	0	0	\$ -	88	88	\$ 15,015	\$ 175	\$ 175
- Attic Ventilation	Home	32.4	18	\$ 2,142	77	48	\$ 5,080	109.4	66	\$ 7,232	\$ 68	\$ 110
- Auto Sweep	Each	22	18	\$ 1,088	10	7	\$ 489	32	25	\$ 1,597	\$ 50	\$ 64
- Door Replacement	Each	1346	1075	\$ 168,795	1451	1159	\$ 181,962	2797	2234	\$ 350,757	\$ 125	\$ 157
- Door Threshold	Each	2227	1551	\$ 73,813	1838	1414	\$ 60,919	4065	2965	\$ 134,732	\$ 33	\$ 45
- Glass Replacement	Sq. Ft.	8065	918	\$ 93,561	4048	505	\$ 46,864	12113	1423	\$ 140,525	\$ 12	\$ 99
- Jamb Replacement	Each	135	92	\$ 4,698	25	19	\$ 870	160	111	\$ 5,569	\$ 35	\$ 50
- New Central Return	Home	16	16	\$ 12,015	71	71	\$ 53,316	87	87	\$ 65,331	\$ 751	\$ 751
Water Heating Savings												
- Water Heater Blanket	Each	788	788	\$ 24,221	399	399	\$ 12,584	1187	1187	\$ 36,805	\$ 32	\$ 32
- Low Flow Showerhead	Each	8237	6851	\$ 305,626	5355	4367	\$ 198,822	13592	11228	\$ 504,649	\$ 37	\$ 45
- Water Heater Pipe Wrap	Linear Ft.	1374	284	\$ 5,258	417	80	\$ 1,596	1790.5	364	\$ 6,854	\$ 4	\$ 19
- Faucet Aerators	Each	13013	6643	\$ 83,067	9847	4709	\$ 82,857	22860	11352	\$ 145,924	\$ 6	\$ 13
- Water Heater Replacement	Each	213	203	\$ 154,142	126	126	\$ 91,183	339	329	\$ 245,325	\$ 724	\$ 746
Miscellaneous Repairs	Home	2629	5846	\$ 342,450	2781	2751	\$ 257,580	5410	8587	\$ 600,030	\$ 93	\$ 84
Miscellaneous Measures	Home	1362	2531	\$ 26,048	1497	247	\$ 28,626	2859	5001	\$ 54,671	\$ 19	\$ 108
Evaporative Coolers	Each	4	4	\$ 3,995	0	0	\$ -	4	4	\$ 3,995	\$ 999	\$ 999
Refrigerators	Each	4960	4960	\$ 1,290,593	0	0	\$ -	4960	4960	\$ 1,290,593	\$ 583	\$ 863
Compact Fluorescents (inc. porchlights)	Each	33414	14575	\$ 658,088	0	0	\$ -	33414	14575	\$ 658,088	\$ 20	\$ 45
Porchlights (fixture replacement)	Each	1028	821	\$ 48,295	0	0	\$ -	1028	821	\$ 48,295	\$ 47	\$ 59
Outreach Education Administration	Home	15706	15706	\$ 1,115,158.92	0	0	\$ -	15706	15706	\$ 1,115,158.92	\$ 71	\$ 71

Note: SDG&E's database tracks dwelling information per measure, but does not have the ability to measure total dwelling information for the program per contractor.

**TABLE TA 3.6  
PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION  
2003**

**San Diego Gas & Electric**

Program	Contractor Classification	Vendor	% Dwellings Served	WMDVBE Certified (Yes or No)
LIEE*	CBO Participants	Contractor C	9%	No
		Contractor D	18%	No
		Subtotal	27%	
	Non-CBO Participants	Contractor A	31%	Yes
		Contractor B	19%	No
		Contractor E	23%	No
		Subtotal	73%	
Furnace Work	CBO Participants	-	0%	-
		Subtotal	0%	
	Non-CBO Participants	Contractor F	4%	No
		Contractor G	7%	No
		Contractor H	4%	Yes
		Contractor I	2%	No
		Contractor J	71%	Yes
		Contractor L	8%	No
		Contractor M	5%	No
		Subtotal	100%	
Refrigerator Replacement	CBO Participants	-	0%	-
		Subtotal	0%	
	Non-CBO Participants	Contractor J	100%	Yes
		Subtotal	100%	
Water Heater Replacement	CBO Participants	-	0%	-
		Subtotal	0%	
	Non-CBO Participants	Contractor F	7%	No
		Contractor G	1%	No
		Contractor H	62%	Yes
		Contractor I	1%	No
		Contractor L	5%	No
		Contractor M	24%	No
		Subtotal	100%	
Central and Wall Air Conditioner Replacement	CBO Participants	-	0%	-
		Subtotal	0%	
	Non-CBO Participants	Contractor F	22%	No
		Contractor G	0.5%	No
		Contractor I	5%	No
		Contractor J	47%	Yes
		Contractor L	8%	No
		Contractor M	17%	No
		Subtotal	100%	
FPLI	CBO Participants	01	19.93%	No
		02	4.70%	No
		03	1.31%	No
		04	2.54%	No
		05	14.72%	No
		06	3.49%	No
		07	7.59%	No
		08	0.41%	No
		09	0.84%	No
		10	0.19%	No
		11	9.68%	No
		12	25.40%	No
		13	3.16%	No
		14	0.19%	No
		15	2.90%	No
		16	2.31%	No
		17	0.63%	No
		Subtotal	100%	
	Non-CBO Participants	-	0%	-
	Subtotal		0%	

**TABLE TA 3.7**  
**LIFE CYCLE BILL SAVINGS**  
**San Diego Gas & Electric**  
**2003**

Measure Description	Number Installed	Per Measure Electric Impact (kWh)	Per Measure Gas Impact (Therms)	EUL (years)	Total Measure Life Cycle Bill Savings (\$)
Attic Ventilation*	66	0.00	0.00	25	\$ -
Auto Sweep*	32	0.00	0.00	5	\$ -
Caulking - MF (Electric)	804	6.00	0.00	5	\$ 3,026
Caulking - MF (Gas)	4,557	2.30	2.00	5	\$ 42,041
Caulking - MH/SF (Electric)	828	7.80	0.00	5	\$ 4,050
Caulking - MH/SF (Gas)	4,694	2.70	2.50	5	\$ 53,616
Ceiling Insulation MF (Electric)	2	34.40	0.00	25	\$ 126
Ceiling Insulation MF (Gas)	10	0.00	11.00	25	\$ 1,421
Ceiling Insulation MH/SF (Electric)	51	93.60	0.00	25	\$ 9,777
Ceiling Insulation MH/SF (Gas)	290	43.50	16.90	25	\$ 87,801
Compact Fluorescents MF	16,559	27.80	0.00	8	\$ 431,118
Compact Fluorescents SF	15,827	24.80	0.00	8	\$ 367,593
Cover Plate/Gaskets MF (Electric)	697	2.94	0.00	15	\$ 3,081
Cover Plate/Gaskets MF (Gas)	3,948	-0.10	0.13	15	\$ 4,195
Cover Plate/Gaskets MH/SF (Electric)	669	5.73	0.00	15	\$ 5,762
Cover Plate/Gaskets MH/SF (Gas)	3,788	0.40	0.23	15	\$ 10,408
Door Replacement*	2,797	0	0	10	\$ -
Door Threshold*	4,065	0	0	5	\$ -
Duct Register Sealing*	500	0	0	5	\$ -
Evaporative Cooler Covers SF (Electric)	8	15.17	0.00	3	\$ 49
Evaporative Cooler Covers SF (Gas)	47	0.00	3.65	3	\$ 418
Evaporative Cooler Replacement SF	4	246.35	0.00	15	\$ 1,482
Porchlights MF	225	41.70	0.00	20	\$ 16,943
Porchlights SF	803	37.10	0.00	20	\$ 53,796
Faucet Aerators MF (Gas)	4,967	0.00	0.80	5	\$ 17,395
Faucet Aerators MF (Electric)	877	41.20	0.00	5	\$ 22,667
Faucet Aerators MH/SF (Gas)	4,682	0.00	1.40	5	\$ 25,507
Faucet Aerators MH/SF (Electric)	826	48.40	0.00	5	\$ 25,060
Furnace repair - Gas MF	398	0.00	16.00	10	\$ 44,196
Furnace repair - Gas MH/SF	664	0.00	23.00	10	\$ 105,992
Furnace Replacement - Gas MF	1	0.00	0.00	22	\$ -
Furnace Replacement - Gas SF	283	0.00	84.30	22	\$ 282,249
Glass Replacement*	1,423	0.00	0.00	10	\$ -
Jamb Replacement*	160	0.00	0.00	5	\$ -
New Central Return*	87	0.00	0.00	18	\$ -
Low Flow Showerhead MF (Electric)	878	203.30	0.00	10	\$ 199,637
Low Flow Showerhead MF (Gas)	4,973	0.00	6.10	10	\$ 210,551
Low Flow Showerhead SF (Electric)	807	239.20	0.00	10	\$ 215,862
Low Flow Showerhead SF (Gas)	4,571	0.00	9.10	10	\$ 288,689
Minor Home Repairs MF (Electric)	359	19.90	0.00	10	\$ 7,996
Minor Home Repairs SF (Electric)	600	26.10	0.00	10	\$ 17,535
Minor Home Repairs SF (Gas)	3,403	8.10	5.50	10	\$ 160,718
Refrigerators	4,948	644.70	0.00	15	\$ 4,797,763
Refrigerators (Co Pay)	12	644.70	0.00	15	\$ 11,636
Water Heater Blanket MF (Electric)	28	163.00	0.00	5	\$ 2,822
Water Heater Blanket MF (Gas)	156	0.00	4.90	5	\$ 2,982
Water Heater Blanket MH/SF (Electric)	147	191.80	0.00	5	\$ 17,742
Water Heater Blanket MH/SF (Gas)	836	0.00	7.30	5	\$ 23,735
Water Heater Pipe Wrap MF (Electric)	8	115.30	0.00	15	\$ 1,301
Water Heater Pipe Wrap MF (Gas)	43	0.00	1.80	15	\$ 714
Water Heater Pipe Wrap MH/SF (Electric)	47	135.60	0.00	15	\$ 9,606
Water Heater Pipe Wrap MH/SF (Gas)	267	0.00	2.70	15	\$ 6,723
Weatherstripping MF (Electric)	846	6.10	0.00	5	\$ 3,239
Weatherstripping MF (Gas)	4,797	2.40	2.00	5	\$ 44,562
Weatherstripping MH/SF (Electric)	823	8.00	0.00	5	\$ 4,132
Weatherstripping MH/SF (Gas)	4,666	2.80	2.70	5	\$ 57,216
Sub-total for Energy Efficiency Measures					\$ 7,774,543
<b>Rapid Deployment Measures</b>					
Air Conditioner Replacement - Central MF	0	628.28	0.00	18	\$ -
Air Conditioner Replacement - Central MH/SF	101	292.85	0.00	18	\$ 50,100
Air Conditioner Replacement - Room MF	82	130.16	0.00	15	\$ 16,053
Air Conditioner Replacement - Room MH/SF	8	426.40	0.00	15	\$ 5,130
Duct Sealing & Testing MF (Electric)	0	116.60	0.00	25	\$ 71
Duct Sealing & Testing MF (Gas)	2	47.98	6.24	25	\$ 301
Duct Sealing & Testing MH/SF (Electric)	33	87.15	0.00	25	\$ 5,793
Duct Sealing & Testing MH/SF (Gas)	184	27.39	11.54	25	\$ 37,281
Evaporative Cooler Maintenance SF	66	76.43	0.00	4	\$ 3,377
Set back Thermostat MF (Electric)	0	116.60	0.00	12	\$ -
Set back Thermostat MF (Gas)	0	77.55	6.78	12	\$ -
Set back Thermostat SF (Electric)	0	149.88	0.00	12	\$ -
Set back Thermostat SF (Gas)	0	95.48	15.00	12	\$ -
Water Heater Replacement MF (Gas)	5	0.00	18.10	13	\$ 764
Water Heater Replacement MH/SF (Gas)	334	0.00	21.60	13	\$ 60,911
Whole House Fans SF	0	63.00	0.00	20	\$ -
Sub-total for Rapid Deployment Measures					\$ 179,781
Total Bill Savings for All Measures in Program Year					\$ 7,954,326
Total Number of Homes Served by the Program during Program Year					15,706
Life Cycle Bill Savings Per Home					\$ 506.45

\*SDG&E has no studies supporting savings for this measure. No Impacts taken during this year.

**TABLE TA 3. 8**  
**ENERGY RATES USED FOR BILL SAVINGS CALCULATIONS**  
**San Diego Gas & Electric**

Year	\$/kWh	\$/Therm
2003	0.1380	0.8560
2004	0.1421	0.8817
2005	0.1464	0.9081
2006	0.1508	0.9354
2007	0.1553	0.9634
2008	0.1600	0.9923
2009	0.1648	1.0221
2010	0.1697	1.0528
2011	0.1748	1.0844
2012	0.1801	1.1169
2013	0.1855	1.1504
2014	0.1910	1.1849
2015	0.1968	1.2205
2016	0.2027	1.2571
2017	0.2087	1.2948
2018	0.2150	1.3336
2019	0.2214	1.3736
2020	0.2281	1.4148
2021	0.2349	1.4573
2022	0.2420	1.5010
2023	0.2492	1.5460
2024	0.2567	1.5924
2025	0.2644	1.6402
2026	0.2724	1.6894
2027	0.2805	1.7401
2028	0.2889	1.7923
2029	0.2976	1.8460
2030	0.3065	1.9014
2031	0.3157	1.9585
2032	0.3252	2.0172

**TABLE TA 3.9**  
**BILL SAVINGS**  
**San Diego Gas & Electric**

Program Year	Program Costs	Program Lifecycle Bill Savings	Program Bill Savings/ Cost Ratio	Per Home Average Lifecycle Bill Savings
2001	\$ 11,515,307	\$ 7,470,049	0.65	\$ 387
2002	\$ 12,358,189	\$ 8,860,750	0.72	\$ 629
2003	\$ 12,866,391	\$ 7,954,325	0.62	\$ 506