ENERGY EFFICIENCY PROGRAMS
ANNUAL SUMMARY AND
TECHNICAL APPENDIX

2005 Results
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A Sempra Energy utility™

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Executive Summary of Accomplishments

Overview

SoCalGas submitted its 2004—2005 program proposals on September 23, 2003, requesting approval of its 2004-05 Energy Efficiency program plans and budgets as directed by D. 03-08-067. D.03-12-60, issued by the CPUC on December 18, 2003, approved funding for the majority of the statewide and local utility and non-utility 2004-05 energy efficiency program budgets and goals. This decision also authorized bridge funding for specific program proposals. The utilities were directed to provide discussion on the relevancy of programs not funded and justification for funding them in 2004-05. On February 26, 2004, in D.04-02-059, the CPUC approved funding for additional utility and non-utility energy efficiency programs for 2004-05.

On October 7, 2004, SoCalGas filed a joint petition with PG&E and SDG&E seeking authority for each utility to increase spending on natural gas energy efficiency programs. D.04-12-019 authorized SoCalGas to increase its natural gas energy efficiency budget, authorized in D.03-12-060, and the corresponding increase in the 2004-05 natural gas savings goals.

SoCalGas continued the implementation of its programs through 2005. The results for 2005 are as follows: SoCalGas' expenditures (actual and commitments) for its 2005 Energy Efficiency programs totaled $42.3 million and achieved a total of 29,734 megawatthours (MWh) in energy savings, 10.2 megawatts (MW) in demand savings and 15,384,279 therms in gas savings.

The cumulative results for the program cycle 2004-2005 are as follows: SoCalGas' expenditures (actual and commitments) for its 2005 Energy Efficiency programs totaled $60.5 million and achieved a total of 53,927 megawatthours (MWh) in energy savings, 17.5 megawatts (MW) in demand savings and 26,330,316

Residential Energy Efficiency Programs

The 2004-2005 energy efficiency Residential Program Area included statewide efforts that were designed to encourage customers to improve energy efficiency behaviors and to increase the installation of energy efficient products and appliances. These programs, which were designed to provide more energy efficiency options to residential customers, also coordinated efforts with other key market players to offer customers the largest selection of energy efficiency options.

The Statewide Home Energy Efficiency Survey program (HEES) is a comprehensive multi-lingual program designed to reach a wide range of customers by offering three types of survey options: Mail-In, On-Line, and In-Home. HEES exceeded its mail-in and in-home survey and hard-to-reach (HTR) goals for 2004-2005. Marketing efforts included letters, flyers, website banners, newspaper articles and advertisements, bill inserts, radio and a Statewide Spanish television energy efficiency marketing campaign.

The Single Family Rebate program is a comprehensive program targeting all market actors in the residential efficient retrofit and renovation product supply chain to increase the availability and market penetration of these products. The program contains three core components: (1) customer incentives; (2) customer information and education; and (3) marketing and outreach to trade allies including manufacturers, retailers and distributors. In 2004-2005, SoCalGas' Single Family Rebate program continued to be very popular. Marketing and outreach efforts included a marketing campaign using radio spots, newspaper ads and collateral materials for contractors and

retailers; retailer management comprised of training retailers about the program, site visit to retailers, distribution and display of collateral materials and on going communications; available on the SoCalGas Website and disseminated at community events and through community based organizations, in combination with other outreach programs. The program processed over 100,000 applications during the 2004-2005 program cycle.

The statewide Multifamily Energy Efficiency Rebate (MFEER) program promotes energy savings by providing cash rebates for the installation of qualified energy-efficiency products in apartment dwelling units and in the common areas of apartment and condominium complexes and mobile home parks. In 2004-2005, the SoCalGas' Statewide Multifamily rebate program received a tremendous response from multifamily property owners and managers in SoCalGas' service area. The program exceeded program targets for therm savings and HTR goals. SoCalGas increased the program participation level to well over 700 customers in 2004, and another 800 customers participated in the program in 2005.

Nonresidential Energy Efficiency Programs

SoCalGas' Nonresidential Program Area continued to provide energy education, promote energy efficiency improvements, offered rebates and incentives, and offered training seminars and participated in numerous trade show and community events.

The Building Operator Certification program is a seven-module course. It is designed to train and certify facility managers of their professional competence in energy efficient building operations and maintenance. In 2004, SoCalGas offered one BOC Level I course. In 2005 a BOC Level II course was offered.

In 2004-2005, SoCalGas continued to offer the Nonresidential Energy Audits program through on-line, on-site, phone, CD-ROM and mail-in audits to all nonresidential customer sectors. SoCalGas used various resources and methods to reach the hard-to-reach customer segment. A total of 12,586 audits were completed and 916 of these audits were in the HTR customer segment.

The statewide Express Efficiency program targets small-and medium-sized nonresidential customers. The program offers prescriptive rebates on selected gas measures. These measures include clothes washers, greenhouse curtains, boilers, water and space heaters, pipe and tank insulation and various cooking equipment. SoCalGas' marketing efforts included trade shows, seminars, community based organization (CBO) outreach, various program brochures, bill inserts, and online at the SoCalGas website. SoCalGas met its 2004-2005 program goals.

The Nonresidential Financial Incentives Program (NRFIP) is a local program focusing on small to medium nonresidential (commercial and industrial) gas customers. The program incorporates technical support, education, training, outreach, contractor referral, prescriptive rebates and incentives. SoCalGas marketing efforts included trade shows, seminars, community based organization (CBO) outreach, program brochures, bill inserts, and online at the SoCalGas website. SoCalGas met its 2004-2005 program goals.

New Construction Energy Efficiency Programs

SoCalGas' New Construction Program Area provides design assistance services aimed at identifying and capturing energy savings opportunities in new construction projects. New

construction programs also offered incentives to encourage the installation of energy efficient design and equipment that exceed Title 24 energy standards which changed it October 2005.

The statewide California ENERGY STAR® New Homes Program (CESNHP) is designed to influence the design and construction of single family and multifamily residential new construction. Working together with single and multifamily builders, architects, energy analysts and other building industry professionals, the program will increase energy efficiency through a combination of education, design assistance and financial incentives. In 2004-2005, SoCalGas continued an aggressive marketing and design assistance program to the building industry to promote the program. As a result, 85 projects were accepted into the program in 2004-2005 totaling 12,042 dwelling units for both single and multifamily.

The statewide Savings By Design (SBD) is an energy efficiency program for the nonresidential new construction industry to provide statewide consistency, program stability, and savings persistence to the new construction market. The program promotes integrated design and emphasizes early design involvement by offering building owners and their design teams a wide range of services including education, design assistance, and owner incentives as well as design team incentives. In 2004-2005, the program continued to offer on-site training and project-specific design assistance to the nonresidential new construction market. Over 73 design assistance/training sessions were presented to the market. The SBD program posted excellent progress towards the 2004-2005 energy savings goal.

Cross Cutting Programs

The Statewide Energy Efficiency Education and Training Program promotes energy efficiency to a variety of customers segments through energy centers (physical and virtual) and other informational programs. In 2004-2005, SoCalGas delivered 347 seminars/workshops and 255 events were provided for the HTR market. SoCalGas exceeded its 2004-2005 goal.

The Statewide Emerging Technologies (ET) program is an information-only program that seeks to accelerate the commercial introduction of energy-efficient technologies, applications, and analytical tools that are not widely adopted in California. In 2004-2005, SoCalGas initiated 12 Emerging Technology application assessments. The Emerging Technologies Coordinating Council (ETCC) helped the California Energy Commission to bridge the gap between emerging energy-efficient products and “the market”.

The Statewide Codes and Standards (C&S) program is an information-only program that advocates upgrades and enhancements in energy efficiency standards and codes. Program activities are conducted over long-term code upgrade cycles. Additionally, the program supports implementation of energy efficiency standards through strategic initiatives or training. In 2004-2005, SoCalGas participated in a number of various workshops, meetings, code adoptions and CASE studies in 2004. SoCalGas prepared and reported six CASE studies in 2004-2005.

IOU Partnership Programs

The Commission approved funding for six SoCalGas Partnership programs in D. 03-12-060 and D. 04-02-059. The partnership programs included the IOU/UC/CSU Partnership, South Bay Cities Energy Efficiency Center, Bakersfield/Kern Energy Watch, LA County/SCE/SCG Partnership, The Energy Coalition, and the Ventura County Regional Energy Efficiency Center and Comprehensive Public Sector Program.

Statewide Marketing

The Commission also selected the Flex Your Power Campaign, Runyon Saltzman & Einhorn, and the Univision Television Group to implement the statewide marketing efforts in D. 03-12-060. SCE and the other IOUs worked closely with these organizations to ensure coordinated, statewide energy efficiency messages in support of the statewide programs.

Non-IOU Programs

The Commission awarded non-utility programs to be implemented by third parties for 2004-2005 and designated the IOUs to administer each program in D. 03-12-060 and D. 04-02-059. SoCalGas was designated to administer four of the non-utility programs operating in the SoCalGas service area. Program implementation began after the contracts were signed between the non-IOUs and SoCalGas.

Market Assessment & Evaluation

The PY 2004-05 MA&E Studies were designed primarily to support energy savings estimates of various technologies. The studies were begun and funded in 2004.

TABLE 1.1
SUMMARY OF COSTS

Natural Gas						
	PY 2005		PY 2005		Cumulative PY 2004-05	
	PGC	PGC	Procurement	Procurement	PGC	PGC
	Budgeted	Recorded	Budgeted	Recorded	Budgeted	Recorded
Residential	$8,538,890	$11,944,653	$0	$0	$17,077,780	$17,905,769
Nonresidential	$7,605,010	$8,755,940	$0	$0	$15,210,019	$14,473,216
New Construction	$4,164,000	$6,913,033	$0	$0	$8,328,000	$8,606,740
Crosscutting	$2,694,657	$2,973,179	$0	$0	$5,389,314	$5,195,560
IOU Partnership Programs	$2,419,847	$4,427,335	$0	$0	$4,839,693	$4,663,161
Total IOU Programs	$25,422,403	$35,014,140	$0	$0	$50,844,806	$50,844,445
Statewide Marketing	$2,015,048	$3,193,068	$0	$0	$4,026,086	$3,193,068
Non-IOU Programs	$4,401,269	$3,194,304	$0	$0	$8,802,538	$4,602,508
Total Non-IOU Programs	$6,416,317	$6,387,372	$0	$0	$12,828,624	$7,795,576
Utility Adm. Of Non-IOU Programs	$189,868	$4,170	$0	$0	$189,868	$12,603
MA&E & Reg Oversight	$909,245	$909,245	$0	$0	$1,818,489	$1,818,489
Shareholder Incentives	$0	$0	$0	$0	$0	$0
EE Total	$32,937,833	$42,314,926	$0	$0	$65,681,787	$60,471,114

Notes:
1. All Recorded amounts include payments in 2004 and 2005 and amounts committed to projects in 2005. Committed amounts may not be fully realized.
2. All Non-IOU Program data were provided by the Non-IOU Program Implementers.
3. The Non-IOU Recorded Amount does not include the SESCO-Gas Only Multi-Family Program (Program ID 1338-04) since SoCalGas does not have a signed contract for this non-IOU program.

TABLE 1.2a
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS
Annual and Lifecycle Energy Reductions, Electric, MWH

	PY 2005 (Recorded)					
	PGC		Procurement		Total	
	Annual	Life Cycle	Annual	Life Cycle	Annual	Life Cycle
Residential	17,747	234,660	-	-	17,747	234,660
Nonresidential	37	407	-	-	37	407
New Construction	9,201	142,909	-	-	9,201	142,909
Crosscutting	-	-	-	-	-	-
IOU Partnership Programs	-	-	-	-	-	-
Non-IOU Programs[1]	2,748	36,306	-	-	2,748	36,306
Total EE Portfolio	**29,734**	**414,282**	**-**	**-**	**29,734**	**414,282**

TABLE 1.2b
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS
Annual and Lifecycle Energy Reductions, Electric, MWH

	Cumulative PY 2004-05 (Recorded)					
	PGC		Procurement		Total	
	Annual	Life Cycle	Annual	Life Cycle	Annual	Life Cycle
Residential	28,049	361,815	-	-	28,049	361,815
Nonresidential	109	1,198	-	-	109	1,198
New Construction	22,054	342,529	-	-	22,054	342,529
Crosscutting	-	-	-	-	-	-
IOU Partnership Programs	-	-	-	-	-	-
Non-IOU Programs[1]	3,715	44,267	-	-	3,715	44,267
Total EE Portfolio	**53,927**	**749,809**	**-**	**-**	**53,927**	**749,809**

[1] All data were provided by the Non-IOU Program Implementers.

TABLE 1.2c
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS
Annual Demand Reductions, Electric, MW

	PY 2005 (Recorded)			PY 2004-05 (Recorded)		
	PGC	Procurement	Total	PGC	Procurement	Total
Residential	3.56	-	3.56	4.55	-	4.55
Nonresidential	-	-	-	-	-	-
New Construction	3.75	-	3.75	9.17	-	9.17
Crosscutting	-	-	-	-	-	-
IOU Partnership Programs	-	-	-	-	-	-
Non-IOU Programs[1]	2.89	-	2.89	3.75	-	3.75
Total EE Portfolio	10.21	-	10.21	17.46	-	17.46

[1] All data were provided by the Non-IOU Program Implementers.

TABLE 1.2d
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS
Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 (Recorded)					
	PGC		Procurement		Total	
	Annual	Life Cycle	Annual	Life Cycle	Annual	Life Cycle
Residential	5,347	71,378	-	-	5,347	71,378
Nonresidential	5,327	72,169	-	-	5,327	72,169
New Construction	285	4,678	-	-	285	4,678
Crosscutting	-	-	-	-	-	-
IOU Partnership Programs	875	8,129	-	-	875	8,129
Non-IOU Programs[1]	3,550	26,013	-	-	3,550	26,013
Total EE Portfolio	**15,384**	**182,367**	**-**	**-**	**15,384**	**182,367**

TABLE 1.2e
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS
Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	Cumulative 2004-05 (Recorded)					
	PGC		Procurement		Total	
	Annual	Life Cycle	Annual	Life Cycle	Annual	Life Cycle
Residential	8,152	105,872	-	-	8,152	105,872
Nonresidential	11,437	155,877	-	-	11,437	155,877
New Construction	636	10,570	-	-	636	10,570
Crosscutting	-	-	-	-	-	-
IOU Partnership Programs	1,276	10,136	-	-	1,276	10,136
Non-IOU Programs[1]	4,830	44,313	-	-	4,830	44,313
Total EE Portfolio	**26,330**	**326,768**	**-**	**-**	**26,330**	**326,768**

[1] All data were provided by the Non-IOU Program Implementers.

TABLE 1.3a
SUMMARY OF COST-EFFECTIVENESS
Benefit-Cost Ratios

	PY 2005 (Recorded)								
	PGC				Procurement				
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[1]	Levelized Cost ¢/(Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[1]	Levelized Cost ¢/(Therm)[1]	Total (PGC+ Proc) TRC Test
Residential	2.83	1.47	4.38	30.07	N/A	N/A	N/A	N/A	1.47
Nonresidential	2.56	2.32	2.93	20.71	N/A	N/A	N/A	N/A	2.32
New Construction	1.14	2.19	2.79	19.30	N/A	N/A	N/A	N/A	2.19
Crosscutting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IOU Partnership Programs	0.62	0.43		99.64	N/A	N/A	N/A	N/A	0.43
Non-IOU Programs[3]	3.35	2.76	12.69	17.78	N/A	N/A	N/A	N/A	2.76
Total EE Portfolio	**2.03**	**1.57**	**3.67**	**31.85**	**N/A**	**N/A**	**N/A**	**N/A**	**1.57**

TABLE 1.3b
SUMMARY OF COST-EFFECTIVENESS
Benefit-Cost Ratios

	Cumulative 2004-05 (Recorded)								
	PGC				Procurement				
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[2]	Levelized Cost ¢/(Therm)[2]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[2]	Levelized Cost ¢/(Therm)[2]	Total (PGC+ Proc) TRC Test
Residential	2.87	1.58	4.06	27.89	N/A	N/A	N/A	N/A	1.58
Nonresidential	3.35	2.59	2.62	18.25	N/A	N/A	N/A	N/A	2.59
New Construction	2.17	2.53	2.42	16.73	N/A	N/A	N/A	N/A	2.53
Crosscutting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IOU Partnership Programs	0.76	0.49		84.94	N/A	N/A	N/A	N/A	0.49
Non-IOU Programs[3]	2.77	2.83	179.11	15.57	N/A	N/A	N/A	N/A	2.83
Total EE Portfolio	**2.43**	**1.78**	**3.27**	**27.25**	**N/A**	**N/A**	**N/A**	**N/A**	**1.78**

TABLE 1.4
SUMMARY OF COST-EFFECTIVENESS

TRC Net Benefits, $MILL

	PY 2005 TRC (Recorded)		Cumulative PY 2004-05 TRC (Recorded)	
	PGC	Procurement	PGC	Procurement
Residential	$ 10.88	N/A	$ 18.88	N/A
Nonresidential	$ 12.74	N/A	$ 29.73	N/A
New Construction	$ 4.28	N/A	$ 11.28	N/A
Crosscutting	$ (2.97)	N/A	$ (5.20)	N/A
IOU Partnership Programs	$ (3.64)	N/A	$ (3.72)	N/A
Non-IOU Programs[1]	$ 6.82	N/A	$ 8.23	N/A
Total EE Portfolio	**$ 28.11**	N/A	**$ 59.21**	N/A

Net Benefits = RBn - Net Costs

[1] All data were provided by the Non-IOU Program Implementers.

Residential Program Area Accomplishments

Energy Management Services

Statewide Residential Home Energy Efficiency Survey Program

Program Description:

The Statewide Home Energy Efficiency Survey (HEES) program is a comprehensive multi-lingual program designed to reach a wide range of customers by offering three types of energy survey options: Mail-In, On-Line, and In-Home. HEES provides practical information that customers can use to better understand energy use in their homes and to empower them to make educated decisions related to energy efficiency and equipment upgrades. This multifaceted approach recognizes that customers have distinct needs that may make one type of delivery channel more appealing than another. As a result, the HEES program is positioned to reach the largest number of customers possible by providing more options for customer participation, including hard-to-reach customers who in the past have had less access and fewer program alternatives. All delivery channels help customers understand how their behavior can affect energy costs, how to improve their homes' energy efficiency and what additional resources and programs are available to help reduce energy use.

2004-2005 Results and Achievements:

In 2004 and 2005, SoCalGas mailed out 39,575 Home Energy Efficiency Surveys to Hard-to-Reach (HTR) customers. Asian language survey forms were developed in 2004 and included Chinese, Vietnamese, and Korean that were made available to customers. English and Spanish surveys could be received either through direct mail, contacting their local utility, or by printing a hardcopy of the online survey. The combined total of completed Asian, English, and Spanish language mail-in surveys results exceeded the 2004-2005 goals.

The 2004-2005 HEES Program provided customers the option of taking the energy survey online via SoCalGas' Website. The interactive feature allows customers to obtain immediate results by answering specific questions regarding their home energy use online in just few minutes. The survey is available in English and Spanish. SoCalGas exceeded its goals for the online survey.

During 2004-2005, SoCalGas worked jointly with SCE on the in-home survey option and mailed promotional materials to customers who are both SoCalGas and SCE customers in the SCE service territory. The mailer directed the customer to the contracted third party auditor, to set up an appointment for a free in-home audit. In addition, SoCalGas mailed its own promotional materials to SoCalGas customers in non-SCE areas. The in-home survey was yet another option provided for SoCalGas' HTR customers who often do not participate in the online or mail-in survey options. SoCalGas exceeded its in-home audit goal.

Energy Efficient Incentives

Statewide Residential Single Family Energy Efficiency Rebates Program

Program Description:

The Single Family Home Energy Efficiency Rebate (SFEER) program incorporates three core components: (1) customer incentives; (2) customer information and education; and (3) marketing and outreach to trade allies including manufacturers, retailers and distributors. The program targets energy usage in existing residential homes including single-family dwellings up to four units, condominiums, and mobile homes, and covers ENERGY STAR® appliances, ENERGY STAR® Lighting, home improvement, heating, ventilation and air conditioning (HVAC) and pools.

2004 - 2005 Results and Achievements:

SoCalGas was successful in achieving each of the energy savings targets established for 2004 and 2005. In addition, per D. 04-12-019 SFR received additional funding to extend the availability of rebates for measures that generate natural gas savings through the winter months,

During 2004 and 2005, the program again coordinated with the Flex Your Power campaign to deliver point-of-purchase materials into retail stores, develop broadcast and radio productions to promote energy efficiency. The statewide Investor-Owned Utilities implemented point-of-purchase instant rebate program with the help of several major retailers. Through 2004 and 2005, the campaign has been instrumental in the rebate of thousands of programmable thermostats at Home Depot and Lowe's.

The program printed and distributed over 75,000 applications through its Customer Call Center and Energy Information Center. The program processed over 100,000 applications during the 2004 - 2005 campaign. Other marketing efforts included on-going personal visits to deliver collateral material and applications to retailers by way of our retail management consultant, extensive communication such as press releases to local media outlets, consumer events such as the Los Angeles City Marathon, customer bill inserts and the utility newsletter distributed to over 3 million residential customers. To expand hard-to-reach efforts, SoCalGas created a page on its Spanish readers website to promote the program. SoCalGas increased in-house resources to better serve non-English speaking customers when the program application was converted into Spanish.

Statewide Residential Multifamily Energy Efficiency Rebates Program

Program Description:

The statewide Multifamily Energy Efficiency Rebate (MFEER) program is offered in the service areas of Pacific Gas & Electric (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E) and Southern California Gas (SoCalGas). The program promotes energy savings by providing cash rebates for the installation of qualified energy-efficiency products in apartment dwelling units and in the common areas of apartment and condominium complexes and mobile home parks. Property owners (and property managers, as authorized agents for property owners) of existing residential multi-family complexes with five or more dwelling units

may qualify for rebates for installing a variety of energy efficiency measures. In the SCG service territory, these include apartment improvements, clothes washers, programmable thermostats, shower heads, aerators, natural gas storage water heaters and dishwashers), common-area improvements central system natural gas water heaters and coin operated clothes washers), and mechanical improvements (e.g., central system natural gas boilers and controllers and high-efficiency heating equipment.

2004 – 2005 Results and Achievements:

The Multifamily Rebate Program for SoCalGas was very successful during the 2004-2005 program years. The program exceeded program targets for therm savings and HTR goals, and met the incentive budget goals.

SoCalGas increased the program participation level to well over 700 customers in 2004, and another 800 customers participated in the program in 2005. SoCalGas used a combination of participation in customer (multifamily property owner) events, advertisement and marketing to increase awareness and participation in the program during 2004 and 2005. In addition, per D. 04-12-019, MFR received additional funding to extend the availability of rebates for measures that generated natural gas savings through the winter months; October through December 2005. During the two year period, the statewide IOUs teamed to advertise in a statewide publication, 'Multifamily Trends' to demonstrate statewide coordination with industry and trade groups. Additionally, each of the IOUs participated in trade fair events and meetings with market agents of the program to discuss implementation improvement to the program. The statewide team held annual contractor's meetings in 2004 and 2005 to promote the program and educate participants to ensure program success. .

TABLE 2.1
SUMMARY OF COSTS:
RESIDENTIAL PROGRAM AREA

Natural Gas

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
	Budgeted	Recorded	Budgeted	Recorded
Information	$274,000	$399,875	$548,000	$633,756
EMS	$0	$0	$0	$0
EEI	$0	$0	$0	$0
SPCs	$0	$0	$0	$0
Rebates	$8,264,890	$11,544,778	$16,529,780	$17,272,013
Loans	$0	$0	$0	$0
Other	$0	$0	$0	$0
Upstream				
Information	$0	$0	$0	$0
Financial Assistance	$0	$0	$0	$0
Total	$8,538,890	$11,944,653	$17,077,780	$17,905,769

TABLE 2.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
RESIDENTIAL PROGRAM AREA

Annual and Lifecycle Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS	N/A	N/A	N/A	N/A
EEI				
SPC	N/A	N/A	N/A	N/A
Rebates	17,747	234,660	28,049	361,815
Loans	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	**17,747**	**234,660**	**28,049**	**361,815**

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
Information	N/A	N/A
EMS	N/A	N/A
EEI		
SPC	N/A	N/A
Rebates	3.56	4.55
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	**3.56**	**4.55**

Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS	N/A	N/A	N/A	N/A
EEI				
SPC	N/A	N/A	N/A	N/A
Rebates	5,347	71,378	8,152	105,872
Loans	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	**5,347**	**71,378**	**8,152**	**105,872**

TABLE 2.3
SUMMARY OF COST-EFFECTIVENESS:
RESIDENTIAL PROGRAM AREA

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EMS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EEI								
SPCs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rebates	2.93	1.50	4.30	29.55	2.97	1.61	3.98	27.35
Loans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upstream Programs								
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

TABLE 2.4
SUMMARY OF COST-EFFECTIVENESS:
RESIDENTIAL PROGRAM AREA

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
Information	$ (0.40)	$ (0.63)
EMS	N/A	N/A
EEI		
SPCs	N/A	N/A
Rebates	$ 11.27	$ 19.51
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	**$ 10.88**	**$ 18.88**

Nonresidential Program Area Accomplishments

Nonresidential Information

Statewide Nonresidential Building Operator Certification Program

Program Description

The Building Operator Certification (BOC) and training Program offered by Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas and Electric 9SDG&E) and Southern California Gas Company is a continuation of the uniform Statewide building operator training and certification program that began in 2002. Operators of medium and large commercial buildings (including governmental and institutional buildings and complexes) are the primary target group for this program. The program content trains operators of these buildings to identify and implement long term annual energy savings and electric peak demand reduction opportunities as an integral part of their operations and maintenance activities. As a certification program, BOC seeks to establish a recognized professional credential for building operators.

2004/2005 SoCal Gas Results & Achievements:

SoCal Gas offered one BOC Level I training course in 2004 with 27 students. In 2005, a Level II course with 19 students was offered in lieu of repeating the Level I series as recommended by the Northwest Energy Efficiency Council (NEEC) which implements the BOC program.

Energy Management Services

Statewide Nonresidential Energy Audit Program

Program Description

The Statewide Nonresidential Energy Audit program provides customers with an assessment of their current energy use and recommendations regarding ways to improve their performance, reduce their energy consumption, and save money. The Audit program is offered by the four investor-owned utilities (IOUs), Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), San Diego Gas and Electric (SDG&E) and Southern California Gas Company (SoCalGas). It includes a full range of professional technical assistance to educate customers on how to implement no-cost and low-cost measures and cost-effective energy efficiency retrofits in their buildings enabling them to reduce energy consumption and lower their energy bills. The program provides direct support and coordination with many of the IOUs' other programs.

2004 - 2005 Results and Achievements

During 2004 - 2005, the IOUs continued to offer audit services to all nonresidential customers. Each IOU rolled out their program, designed and printed marketing materials, and updated their web tools. The SoCalGas Audit program was devised to allow customers a variety of options. All methods of audits have been used at or above expectations during the program cycle.

The Non-Residential Audit program exceeded program goals for 2004 - 2005. The program goals for the Hard-to-Reach (HTR) customer segment also surpassed expectations. The high response was partially due to a marketing campaign using this program as a vehicle to explain methods customers could use to help reduce energy usage at their facilities as gas costs continued to rise. The range of methods started with no-cost / low-cost examples and ran the gamut of referrals including changing out equipment if unit change outs were deemed appropriate. In an effort to further disseminate audit information to HTR customers, an on-line Chinese version was added in 2004. This version complemented the existing Spanish version. The SoCalGas Non-Residential Audit program also designed an audit seminar for SoCalGas customers showing them how to conduct an audit of their own facility.

Energy Efficiency Incentives

Statewide Nonresidential Express Efficiency Program

Program Description

Express Efficiency is a statewide rebate program that is targeted to all investor-owned utility (IOU) small-and medium-sized nonresidential customers. The design prescribes what measures may be installed in a very straightforward and customer-friendly design that helps ensure that the smallest customers have a hassle-free, reliable means to decrease their utility bill and make their business more energy efficient. One of the program's goals is to place a major emphasis on customers who are described as hard-to-reach (HTR) and who deserve access to energy efficiency technologies that had previously been more available to larger customers.

2004 - 2005 Results and Achievements

SoCalGas' 2004 - 2005 Express Efficiency Program applications were translated into Spanish, Chinese, Korean and Vietnamese. SoCalGas also offered these applications online.

SoCalGas promoted the 2004 – 2005 Express Efficiency program in various ways. Program promotional and delivery vehicles included participation in trade shows, seminars, community based organization (CBO) outreach, various program brochures, bill inserts, and also online at the SoCalGas website. SoCalGas used their various resources to contact manufacturers, vendors, distributors and key sales personnel to inform them about the program and encourage them to promote the program to their customers. SoCalGas utilized their Commercial and Industrial Field Technicians, as well as their Account Executives to further provide program information to their customers.

SoCalGas achieved the 2004 - 2005 therm and kWh savings goals within the allocated program budget. SoCalGas exceeded its hard to reach (HTR) goal of 43% of closed applications, and 20% of closed applications linked to a SoCalGas audit. Per D. 04-12-019, issued in December 2004, the SoCalGas Express Efficiency program budget and therm goal was increased to encourage customer participation of natural gas savings measures through the winter months. SoCalGas exceeded these additional goals within budget.

Local Nonresidential Financial Incentive Program

Program Description

The Nonresidential Financial Incentives Program (NRFIP) is a local program focusing on small to medium nonresidential (commercial and industrial) gas customers served under core rate schedules. The program incorporates technical support, education, training, outreach, contractor referral, bulk procurement, prescriptive rebates and equitable financial incentives through three program elements. The "Commercial Food Service Rebate" program provides a list of approved products eligible for rebates. The "Nonresidential Equipment Replacement "program (NRER) provides incentives for "kind-for-kind" replacement of old, inefficient commercial or industrial end-use gas-fired technology with higher efficiency alternatives. The "Nonresidential Energy Conservation" (NREC) incentive element provides qualified customers with a financial incentive to implement comprehensive energy saving commercial building envelope or industrial process modernizations.

2004-2005 Results and Achievements

SoCalGas relied on the SoCalGas Account Executives and Commercial and Industrial Field Technicians to promote these programs to nonresidential customers. Other promotional and delivery vehicles included participation in trade shows, seminars, community based organization (CBO) outreach, with program brochures, bill inserts, and on the SoCalGas website. A Spring Commercial Food Service Sprint campaign, along with Point-of-Purchase brochure and application displays were used to contact food service equipment manufacturers, vendors, distributors and key sales personnel to inform them about the "Commercial Food Service Equipment" program and encourage them to promote the program to their customers. SoCalGas' NRFIP and Nonresidential Audit programs continued to closely coordinate activities to increase customer participation in both programs.

SoCalGas achieved the 2004-2005 NRFIP therm savings goals within the authorized program budget. SoCalGas met its goal to have 20% of closed applications directly linked to a SoCalGas audit. Per D. 04-12-019, issued in December 2004, the SoCalGas NRFIP program budget and therm goal was increased to encourage customer participation of natural gas savings measures through the winter months.

TABLE 3.1
SUMMARY OF COSTS:
NONRESIDENTIAL PROGRAM AREA

Natural Gas

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
	Budgeted	Recorded	Budgeted	Recorded
Information	$1,098,093	$813,037	$2,196,186	$1,543,458
EMS				
Large	$0	$0	$0	$0
Small/Medium	$0	$0	$0	$0
EEI: Custom Rebates				
Large	$0	$0	$0	$0
Small/Medium	$0	$0	$0	$0
EEI: Pres Rebates				
Large	$0	$0	$0	$0
Small/Medium	$6,506,917	$7,942,903	$13,013,833	$12,929,758
EEI: SPCs				
Large	$0	$0	$0	$0
Small/Medium	$0	$0	$0	$0
Upstream Programs				
Financial	$0	$0	$0	$0
Total	$7,605,010	$8,755,940	$15,210,019	$14,473,216

TABLE 3.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
NONRESIDENTIAL PROGRAM AREA

Annual and Lifecycle Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
EEI: Customized Rebates				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
EEI: Prescriptive Rebates				
Large	N/A	N/A	N/A	N/A
Small/Medium	37	407	109	1,198
EEI: SPCs				
Large				
Small/Medium	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	**37**	**407**	**109**	**1,198**

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Prescriptive Rebates		
Large	N/A	N/A
Small/Medium	0.00	0.00
EEI: SPCs		
Large		
Small/Medium	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	**-**	**-**

Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
EEI: Customized Rebates				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
EEI: Prescriptive Rebates				
Large	N/A	N/A	N/A	N/A
Small/Medium	5,327	72,169	11,437	155,877
EEI: SPCs				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	**5,327**	**72,169**	**11,437**	**155,877**

TABLE 3.3
SUMMARY OF COST-EFFECTIVENESS:
NONRESIDENTIAL PROGRAM AREA

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EMS								
Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EEI: Customized Rebates								
Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EEI: Prescriptive Rebates								
Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small/Medium	2.82	2.53	2.68	18.97	3.75	2.82	2.40	16.74
EEI: SPCs								
Large	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upstream Programs								
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

TABLE 3.4
SUMMARY OF COST-EFFECTIVENESS:
NONRESIDENTIAL PROGRAM AREA

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
Information	$ (0.12)	$ (0.20)
EMS		
Large	N/A	N/A
Small/Medium	$ (0.69)	$ (1.34)
EEI: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Prescriptive Rebates		
Large	N/A	N/A
Small/Medium	$ 13.55	$ 31.28
EEI: SPCs	N/A	N/A
Large	N/A	N/A
Small/Medium	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	$ 12.74	$ 29.73

New Construction Program Area Accomplishments

Residential

California ENERGY STAR® *New Homes Program*

Program Description:

The California ENERGY STAR® New Homes Program (CESNHP) is offered by the four California investor owned utilities (IOUs): Pacific Gas and Electric (PG&E), San Diego Gas and Electric (SDG&E), Southern California Edison (SCE) and Southern California Gas (SoCalGas). Program participation is available on a statewide basis, managed locally by each utility. All applications, procedures and program requirements are consistent across all utility service territories. The program will influence the design and construction of single family and multifamily residential new construction. Working together with single and multifamily builders, architects, energy analysts and other building industry professionals, the program will increase energy efficiency through a combination of education, design assistance and financial incentives. Single family and low rise multifamily building projects meeting the program requirements will additionally meet the requirements of the U. S. Environmental Protection Agency (EPA) ENERGY STAR® Homes Program.

2004-2005 Results and Achievements:

Building on the momentum and interest generated during the first year of the program, SoCalGas continues an aggressive marketing and design assistance program to the building industry to promote the California ENERGY STAR New Homes Program. Through the field contact team and program management team, the design assistance offered by the utility has been very effective in educating the builder, design and mechanical community in methods that will increase the energy efficiency of residential new construction. SoCalGas placed a special focus on the multifamily market. This market segment has been an area of increased activity in residential new construction. Through the design assistance offered, numerous projects have been able to qualify for the California ENERGY STAR New Homes Program. This success is reflected in the 85 projects accepted into the program totaling 12,042 dwelling units for both single and multifamily.

Throughout the year, CESNHP program staff participated in state, regional and local business industry associations' meetings, conferences and trade shows, promoting the program and related training opportunities. An electronic mailbox was created to support CESNHP, allowing interested parties to request CESNHP applications, seek design assistance and allow program participants to submit their documents electronically.

In addition, during 2004-2005 program cycle, the California ENERGY STAR New Homes Program presented to the construction industry 90 energy efficiency training classes attended by over 1,872 industry professionals. Feedback received from attendees indicated information received through the classes has helped them to become aware of how energy efficiency measures and opportunities can be utilized in new home design and construction.

The success of the 2004 California ENERGY STAR New Homes program's accomplishments were recognized by the Environmental Protection Agency in 2005 through the ENERGY STAR

Award for "Regional, State and Community Leadership in Energy Efficiency." The 2005 program's accomplishments were again recognized through the 2006 ENERGY STAR Award for "Sustained Excellence in Energy Efficiency Program Delivery."

Per D. 04-12-019, issued in December 2004, the SoCalGas CESNHP program budget and therm goal was increased to encourage customer participation of natural gas savings measures through the winter months.

Nonresidential

Savings By Design

Program Description:

Southern California Gas Company's (SoCalGas) Savings By Design (SBD) is an energy efficiency program for the nonresidential new construction industry started by the investor-owned utilities (IOUs) in 1999 to provide statewide consistency, program stability, and savings persistence to the new construction market. SBD builds on the best elements of successful new construction programs run by the IOUs since the early 1990's. The program promotes integrated design and emphasizes early design involvement by offering building owners and their design teams a wide range of services including education, design assistance, and owner incentives as well as design team incentives.

2004-2005 Results and Achievements:

The 2004-05 Program was introduced on January 1, 2004. Only slight changes were incorporated into this on-going, statewide, consistent program. These changes were limited to: increasing the incentive offered to process and industrial energy efficiency measures from $0.03/kWh to $0.10/kWh; aligning the program rules with Federal Air Conditioning and Water Heating Standards baselines; promoting SBD standards across previously unregulated building types and investigating the appropriateness of introducing Exterior Lighting measures, both with the intention of helping to prepare the market for the Title 24 code changes that became effective October 2005.

Throughout the program cycle, on-site trainings and project-specific design assistance was offered to the nonresidential new construction market. Over 73 design assistance/training sessions were presented to the market. Over 3,000 attendees were provided with up-to-date energy efficiency information and their completed surveys indicate they found the seminars' content valuable and influential upon their daily design practice.

SBD also supported and sponsored many events. For the sixth year, the program co-sponsored the SBD Energy Efficiency Integration Awards with the American Institute of Architects California Council and presented awards to outstanding examples of excellent design and energy efficiency at the AIACC Monterey Design Conference. The program also supports the Collaborative for High Performance Schools (CHPS) and other trade organizations - such as the local chapters of The American Institute of Architects (AIA), The American Society of Heating, Refrigeration, and Air-conditioning (ASHRAE), and the U S Green Building Council (USGBC)

– who share an interest in promoting energy efficiency in nonresidential new construction. The SBD team at SoCalGas posted excellent progress towards the 2004-2005 energy savings goal.

The Energy Design Resources component of SBD was expanded with additional free information posted on the statewide website, and a dedicated brochure designed and distributed to promote this effort.

TABLE 4.1
SUMMARY OF COSTS:
NEW CONSTRUCTION PROGRAM AREA

Natural Gas

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
	Budgeted	Recorded	Budgeted	Recorded
Residential	$1,930,000	$3,050,090	$3,860,000	$3,759,430
Nonresidential	$2,234,000	$3,862,943	$4,468,000	$4,847,310
Other	$0	$0	$0	$0
Total	$4,164,000	$6,913,033	$8,328,000	$8,606,740

TABLE 4.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
NEW CONSTRUCTION PROGRAM AREA

Annual and Lifecycle Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Residential	1,630	29,338	3,907	70,323
Nonresidential	7,571	113,572	18,147	272,206
Total	**9,201**	**142,909**	**22,054**	**342,529**

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
Residential	2.24	5.38
Nonresidential	1.51	3.79
Total	**3.75**	**9.17**

Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Residential	133	2,402	342	6,153
Nonresidential	152	2,276	294	4,417
Total	**285**	**4,678**	**636**	**10,570**

TABLE 4.3
SUMMARY OF COST-EFFECTIVENESS:
NEW CONSTRUCTION PROGRAM AREA

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]
Residential	0.65	1.43	4.33	29.69	1.29	1.87	3.32	22.72
Nonresidential	1.52	2.67	2.29	15.78	2.84	2.89	2.11	14.58

[1] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

TABLE 4.4
SUMMARY OF COST-EFFECTIVENESS:
NEW CONSTRUCTION PROGRAM AREA

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
Residential	$ 0.60	$ 2.26
Nonresidential	$ 3.69	$ 9.02
Total	**$ 4.28**	**$ 11.28**

Crosscutting Program Area Accomplishments

Information

Energy Efficiency Education and Training Program

Program Description:

The Statewide Energy Efficiency Education and Training Program is offered in the service territories of Pacific Gas & Electric (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), and Southern California Gas Company (SoCal Gas).

Overall, the program promotes energy efficiency to a variety of customer segments through energy centers (physical and virtual) and other informational programs. The objective is to: 1) disseminate information about energy-efficient technology and practices to utility customers to help them reduce energy usage, lower their bills, reduce operational and maintenance cost, increase their productivity; and 2) provide services to a variety of market actors; architects, engineers, distributors, and contractors who use information and tools to design more efficient buildings, or processes and to conduct energy efficiency retrofits and renovations.

2004-2005 Results and Achievements:

The SoCal Gas Education and Training Program delivered a combined total of 347 seminars/workshops during the 2004-2005 program cycle which exceeded the E&T program cycle goal of 274. Several of the 2004-2005 seminar/workshops were joint curricula offered by all of the IOU's.

The SoCal Gas Education and Training planned to target 80 of the 247 seminar/workshops goal to HTR customers during 2004-2005. Two hundred fifty-five of the 347 seminars/workshops offered during 2004-2005 were provided for the HTR markets.

Emerging Technologies Program

Program Description:

Southern California Gas Company's (SoCalGas) Statewide Emerging Technologies (ET) program is an information-only program that seeks to accelerate the commercial introduction of energy-efficient technologies, applications, and analytical tools that are not widely adopted in California. There is a daunting array of market hurdles any new energy-efficient product must overcome to gain sufficient acceptance in a competitive market to survive. Chief among them are performance uncertainties, information/search costs, hassle and transaction costs, and organizational practices or customs. The typical product life cycle, during the initial marketing efforts, products accepted by "innovators" may fail to gain wider acceptance with more risk adverse customers, and the product's adoption rate may fall-off into "the chasm." The intent of SoCalGas' ET program is to help identify and characterize hurdles specific to each technology, explore tactics to reduce them and accelerate a product's market acceptance through a variety of approaches, but mainly by reducing the performance uncertainties associated with them and related applications. SoCalGas' ET program attempts to connect manufacturers of new and improved products, controls, and processes claiming energy efficient performance with

customers who are willing to risk applying them to their enterprises. The utility seeks to develop enough information from the demonstration and showcasing during each project to gain insights about benefits and costs, as well as likelihood of market success.

2004-05 Results and Achievements:

SoCalGas initiated twelve ET application assessments during 2004-2005 that included.

(1) *Industrial CHP assessment at a brick manufacturer: 3 Bowman microturbines with heat recovery to the brick kiln (collaboration with DOE). Installation is complete One microturbine failed and was replaced in August. Data is now being collected and analyzed, but the operation (choice by owner) is not consistent or routine yet. Analysis will likely extend into next year.*

(2) *A beverage company refrigeration unit: Heat recovery from engines to displace boiler load. Installation is complete. Assessment of performance is underway.*

(3) *A BCHP system at a credit union: Combination of Capstone microturbines generating facility power and heat recovery to a Broad Chiller for space comfort, displacing a portion of the electric chiller load. Installation complete. Data collection almost complete for initial review of system performance.*

(4) *A heat recovered engine driven air compressor system at a manufacturer of plastic containers: Heat recovery to process replacing boiler load. Installation complete; data being collected.*

(5) *A thermal/solar boiler system analysis at a city pool: conventional gas boiler heating pool is now assisted by a thermal solar collection system by SunTrek. Installation is complete; data collection will begin following installation of critical metering equipment.*

(6) *A new application of the Johnston FIR burner at a toxic waste processing facility: the "forced" internal recirculation ultra low-NOx burner has been proven in several sizes of fire-tube boilers. This unique application in a 350hp thermal fluid (oil) heater had many challenges, but eventually stabilized and seems to be performing at the required levels of emissions. We will continue to take data and review burner modulation for another year. Efficiency also is better than other proposed alternatives.*

(7) *An engine-driven chiller at one of the UC's with heat recovery: A part of UCSB's central plant includes an I-C engine driven chiller with heat recovery to displace boiler load. Installation delayed by other proirities at the Santa Barbara campus. Completion and commissioning expected by year end. Data collection will continue in 2006.*

(8) A boiler control system by Autoflame at a food processor: Multiple large boilers at this food processor are being "coordinated" by the Autoflame System controllers. Installation is completed; data is being collected and will continue in 2006.

(9) A commissioning (Cx) process assessment at a CHPS school site: ES#1 in Los Angeles is the first elementary school to be "commissioned" against a new specification. EE goals are best accomplished with accountability built into the process. School building commissioning according to CHPS guidance is an "emerging" practice. This project is underway to insure cost effective and "best practices" result. With LAUSD, both SCE and SCG are attempting to create a new standard of performance for next generation k-12 structures. Delays in construction will extend the commissioning activities and the resultant process assessment well into 2006.

(10) A product evaluation of a condensing boiler for commercial laundry application: Two deployments of the EVO-99 condensing boiler are being evaluated in this effort. Installation is completed; data collection has begun at both sites. Water measurement incertainties and controller problems currently plague one site. We are hoping to fix the problems and continue data reduction in 2006.

(11) A control scheme to improve the efficiency for an Alzeta ultra-low NOx burner system for boilers: this strategy improves on efficiency performance of a low NOx burner system for a boiler by optimizing fan power consumption with careful control of flue gas recirculation and combustion air control. Installation completed in late 2005, Data analysis and reporting will take place though 2006.

(12) An assessment of a tankless water heater system (substituting for a hot water supply boiler) at a fitness complex: Collaboration with several Canadian gas utilities also interested in performance evaluation of tankless water heating products in several market segments. System under construction; contracts have been executed among all parties for support funds. Data and reporting will be completed in 2006.

SoCalGas ET staff continues to work to identify and initiate additional assessment projects moving into 2006 in the following emerging technologies areas:

- Advanced engine controls for pollution control and efficiency improvements,
- New 'lean burn' engines demonstrating 40% shaft efficiency,
- New prime movers coming to market such as stirling engines, and fuel cells
- Additional low NOx, high efficiency boiler burner alternatives,
- Opportunities to study new software and sensors to accomplish continuous building energy monitoring and diagnostics,
- Advanced water heating and distribution systems for homes
- Technologies related to "Zero Energy" new homes

- "Cool Roof" products

The ETCC functioned extraordinarily well as intended to help the CEC begin to bridge the chasm to the market in several emerging products. Face-to-face meetings were held quarterly.

Codes & Standards Advocacy Program

Program Description:

The Statewide Codes and Standards (C&S) program is an information-only program that advocates upgrades and enhancements in energy efficiency standards and codes. Program activities are conducted over long-term code upgrade cycles. For example, building code cycles may require four years of continuous support. Codes and Standards Enhancement (CASE) studies for energy efficiency improvements are performed for promising design practices and technologies and are presented to standards and code-setting bodies. Since many stakeholders who typically oppose improvements to building and appliance standards participate in public workshops and hearings, the Statewide Codes and Standards program provides expert testimony to promote standards that approach best practice in energy efficiency. Additionally, the program supports implementation of energy efficiency standards through strategic initiatives or training. The program targets all market segments.

2004-2005 Results and Achievements:

SoCalGas participated in a number of workshops, meetings, code adoptions and CASE studies in 2004-2005. Workshops included 2005 and 2008 Title24 Building Efficiency Standards and AB 549. CEC Business Meetings were attended on a regular basis in addition to meetings on residential and non-residential building standards. SoCalGas participated and organized Investor Owned Utility (IOU) Coordination meetings. SoCalGas initiated six CASE studies in 2004 and four of them were co-funded with PG&E and SCE:

1. Residential Evaporative Cooling
2. Evaluation of Combined Hydronic System utilizing tankless water heater
3. Indoor Lighting
4. Outdoor Lighting
5. Integration of Demand Response into Title-24
6. Whole-Building Energy Analysis Software Tool Review

TABLE 5.1
SUMMARY OF COSTS:
CROSSCUTTING PROGRAM AREA

Natural Gas

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
	Budgeted	Recorded	Budgeted	Recorded
Information	$2,694,657	$2,973,179	$5,389,314	$5,195,560
EMS	$0	$0	$0	$0
EEI				
SPCs	$0	$0	$0	$0
Rebates	$0	$0	$0	$0
Loans	$0	$0	$0	$0
Other	$0	$0	$0	$0
Upstream				
Information	$0	$0	$0	$0
Financial Assistance	$0	$0	$0	$0
Total	$2,694,657	$2,973,179	$5,389,314	$5,195,560

TABLE 5.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
CROSSCUTTING PROGRAM AREA

Annual and Lifecycle Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS	N/A	N/A	N/A	N/A
EEI				
SPCs	N/A	N/A	N/A	N/A
Rebates	N/A	N/A	N/A	N/A
Loans	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
Information	N/A	N/A
EMS	N/A	N/A
EEI		
SPCs	N/A	N/A
Rebates	N/A	N/A
Loans	N/A	N/A
Other		
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	N/A	N/A

Annual and Lifecycle Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
Information	N/A	N/A	N/A	N/A
EMS	N/A	N/A	N/A	N/A
EEI				
SPCs	N/A	N/A	N/A	N/A
Rebates	N/A	N/A	N/A	N/A
Loans	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A

TABLE 5.3
SUMMARY OF COST-EFFECTIVENESS:
CROSSCUTTING PROGRAM AREA

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[1]	Levelized Cost ¢(/Therm)[1]
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EMS								
EEI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SPCs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rebates	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Loans	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upstream Programs								
Information	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financial Assistance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

TABLE 5.4
SUMMARY OF COST-EFFECTIVENESS:
CROSSCUTTING PROGRAM AREA

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
Information	$ (2.97)	$ (5.20)
EMS		
EEI	N/A	N/A
SPCs	N/A	N/A
Rebates		
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	N/A	N/A
Total	$ (2.97)	$ (5.20)

Market Assessment & Evaluation and Regulatory Oversight

Program Description

Market Assessment & Evaluation (MA&E) is the set of activities needed to provide market, program, and product assessment studies and analyses useful to energy efficiency program planners and policy makers. Within this broad category, Evaluation, Measurement & Verification (EM&V) is the subset of activities that: (1) independently assess how and whether energy efficiency programs met their stated goals; (2) use program–specific data and measurements, available secondary data, and appropriate sampling and modeling processes to produce reliable estimates of the energy savings achieved by a program; and (3) assess how well the program operated in terms of effectiveness and efficiency in meeting program goals.

Monthly summary reports on the progress of all program evaluation studies are provided to the Commission as part of the utilities' monthly reports on their energy efficiency programs. In addition, a table of the status of all studies currently under way is periodically posted on the CALMAC website, www.calmac.org.

Beginning in 2002, the Commission mandated two types of energy efficiency programs, statewide and local. EM&V studies for local programs are funded from the individual program budgets. However, work on these studies is summarized here and completed studies have been posted on the CALMAC website. They are also listed in the Annotated Bibliography.

2005 Results and Achievements

The studies that were worked on during 2005 were begun and funded in 2003 and 2004- 2005. SCE, PG&E and SDG&E/SoCalGas each manage some of the various statewide Market Assessment and Evaluation studies. These studies can be broken down into two subcategories, Overarching Studies and Utility Statewide Program EM&V Studies, and are described in Section A below. EM&V studies of utility local programs form a third category of utility-managed studies. They are funded from the specific program budgets rather than from MA&E budgets and are described in Section B below.

Statewide Studies

The utilities filed market assessment and evaluation plans with their 2004-5 program plan filings in September 2003. The CPUC approved a final budget and list of studies for 2004-5 MA&E funding in D.04-02-059 in February 2004, and the utilities filed revised and more detailed study plans on March 17, 2004. The CPUC decided that it would not approve the program plans at that point, but at the point when the selected evaluation consultant for each study provided a detailed research plan. The projects, status, and the lead organization for the statewide MA&E studies authorized for 2004-5 funding are shown in the following tables. Brief descriptions of these studies and of all earlier studies worked on during 2005 follow the tables. Many of the studies that were initiated or completed during 2005 were authorized and funded in earlier program years. The Program Year (PY) designation identifies the funding year.

2004-2005-FUNDED EM&V PROJECT STATUS

Lead	2004-2005 Project	2005 Year-end Status
	OVERARCHING STUDIES	
PG&E	CALMAC Website, Workshops and Meetings	Ongoing
SCE	Evaluation Framework Supplementary Work	Project planning
PG&E	Energy Efficiency Potential Study	Study planning
PG&E	Industrial Energy Use Survey	Study planning
SDG&E/SCG	Residential Lighting & Appliance Saturation & Efficiency	Completed
SCE	Database for Energy Efficiency Resources	Completed
PG&E	Best Practices Database	Underway
SCE	Market Share Tracking Study	In progress
SCE	Nonresidential New Construction Technology Trends	Contractor selection
CEC	Retrofit Upgrade Opportunities Study	Completed
PG&E	Demand Response/Energy Efficiency Interaction Study	Completed
	EM&V FOR 2004-5 STATEWIDE PROGRAMS	
	Residential Retrofit Programs	
PG&E	Single-Family Rebates and Lighting Programs	Contract Awarded
SDG&E/SCG	Multi-Family Rebates Program	In progress
SCE	Home Energy Efficiency Surveys	In progress
SCE	Refrigerator Recycling Program	In progress
	Nonresidential Retrofit Programs	
SCE	Standard Performance Contracting Program	Study planning
PG&E	Express Efficiency/Upstream Motors & HVAC Programs	Study planning
PG&E	Nonresidential On-Site Audits Program	Study planning
PG&E	Building Operator Certification Program	In progress
	New Construction Programs	
SCE	Savings By Design Building Efficiency Assessment	Contractor selection
SCE	Savings By Design Market & Program Tracking	In progress
PG&E	Residential New Construction Program	In progress
	Cross-Cutting Statewide Programs	
SCE	Education & Training Services	In progress
SCE	Emerging Technologies	Study planning

Lead	2004-2005 Project	2005 Year-end Status
SCE	Codes & Standards Advocacy	Study planning

Overarching Studies, Statewide Program EM&V Studies, and EM&V Studies of Utility Local Programs

Overarching Studies

CALMAC Website Maintenance, Workshops, and Meetings

MA&E funding allowed CALMAC to hold several regular meetings during 2005, as well as workshops presenting and soliciting public input on MA&E study results or plans. During 2005, funding for the CALMAC website was used to maintain and enhance its capabilities to provide information on CALMAC activities and energy efficiency program evaluation studies. The website project objectives include: (1) keep website information current; (2) maintain upload and listserv systems; (3) identify website issues and repair software to keep site operational; (4) as requested by the CALMAC Website Committee, identify and implement enhancements to the design, structure and operation of the website; and 5) assure that all relevant reports are being added to the CALMAC Searchable Database. Posting of evaluation reports to the CALMAC Searchable Database upon completion of the study is now a CPUC requirement.

PY2002 Master Evaluation Contract and Evaluation Framework

The master contract for coordination was a 2002-funded project that involved monitoring, providing advice, and reviewing all of the EM&V studies of 2002 and 2003 energy efficiency programs. In 2005, with all studies of individual programs completed, the final part of this project was completed: a summary study, or meta-evaluation, of all the 2002-2003 EM&V studies. This report summarizes the evaluation methodologies used, assesses strengths and weaknesses, and provides a study-based assessment of program and portfolio cost-effectiveness. It is posted on the CALMAC website.

PY2004-2005 Evaluation Framework Supplementary Work

The start of this project was deferred into late 2005 and the first part of 2006 to allow the work to be done to complement the Commission's work on the development of evaluation protocols. The final scope is being determined by consultation with Energy Division staff.

PY2003 Statewide Energy Savings Potential Study

This project was conducted as three separate studies. Results from these studies will assist policymakers and program planners in designing the most efficient and effective energy efficiency programs and program portfolios for the state. The purposes of this work are to: 1) extend existing research on energy efficiency as a cost-effective resource in an integrated portfolio; 2) prepare action plans highlighting the implications of these studies for program designers and implementers for capturing the forecast savings; 3) continue enhancement and

updating of existing studies in the energy efficiency potential series; and 4) develop energy efficiency potential estimates for emerging technologies to complement the existing studies, which are focused on the retrofit market. The scope of work includes the following activities: collect secondary data to conduct the market potential studies; analyze the data to provide market potential results for different sectors; develop emerging technologies forecasts; prepare action plans; assess cost-effectiveness issues related to the overall program portfolio and/or its constituent parts; hold public workshops as appropriate to obtain public input and disseminate results.

The outputs will include: 1) updated market potential studies for each sector, including an overarching summary study; 2) inclusion of emerging technologies in the energy efficiency potential models and studies; 3) action plans for program planners and implementers; and 4) updated analyses and reports pertinent to portfolio planning and risk mitigation.

PY2004-2005 Industrial Energy Use Survey

The Industrial Energy Use Survey (IEUS) is one of a set of studies (residential, commercial, and industrial saturation surveys) that utilities are required by title 20 of the California Code of Regulations to conduct and provide to the California Energy Commission. The IEUS gathers detailed information from a representative sample of industrial electricity and gas customers about their facility/building characteristics, basic business information, equipment holdings and usage patterns, and energy usage by end use. The purpose of the study is to provide information about the distribution of energy use among types of industrial customers and their end uses of energy. A better understanding of their energy use will inform CEC and utility energy demand forecasting to ensure adequate energy supplies. The study is traditionally funded with energy efficiency funds because enhanced knowledge of the industrial end-use energy distribution will enable further refinement to estimates of energy efficiency potential and programs for these customers, and optimization of an integrated portfolio of energy system investment needs.

The four utilities and the Los Angeles Department of Water and Power formed an IEUS Project Advisory Group, developed an initial scope of work for the study, and conducted a competitive bidding process during 2005. The selected consulting team will develop alternative sample designs and survey approaches in early 2006. The final scope of work will be determined in consultation with the CEC. The study is planned to be completed in 2007.

2004-2005 California Statewide Residential Lighting and Appliance Saturation and Efficiency Study

This study is an update to the 1999-2000 California Statewide Residential Lighting and Appliance Saturation and Efficiency Study. The 1999-2000 study was undertaken to collect baseline efficiency data on the saturation of lighting and major appliances in the residential sector in the state of California. Since that study, there has been a tremendous allocation of energy efficiency funding to the residential sector in the form of technology rebates, information programs and advertisement/public awareness campaigns. In addition, shortly after the study was complete the state was exposed to power outages, utility rate increases, and general consumer uncertainty. As a result of these unpredicted market forces, there was a great emphasis put on energy conservation and energy efficiency through public awareness campaigns and programs. To assess the success of the energy efficiency funding and the crisis efforts, and to

guide public policy and program planning, this study was conducted as a follow-up study to the widely used and accepted 1999-2000 study. The 1999-2000 study was conducted previous to California's energy crisis. This study is a key update to the effectiveness of those programs and campaigns that were designed to change consumer purchasing practices (e.g., compact fluorescent versus incandescent) and behavior (e.g., thermostat set points) related to energy conservation.

This study provides program planners with the data and tools necessary to understand residential appliance saturation by fuel type and efficiency, a level of detail not provided by any other California statewide study. Major household equipment and appliances are the focus of the study, including heating and cooling equipment, water heating equipment, refrigerators, freezers, dishwashers, cooking equipment, clothes washers and dryers. The study also assesses saturation of lighting technologies used in the residential sector by gathering data on lamp type and fixture types for each room in the home.

Data was collected for the study via on-site surveys for a representative sample of single family and multifamily homes (excluding master metered dwellings). While a report of the key findings is available at the statewide and IOU service level, a web-based database tool (http://www.calresest.com/) enable program planners the ability to conduct their own "what-if" analysis on the lighting and appliance efficiency data.

PY2004-2005 Database For Energy Efficiency Resources (DEER)

The 2004-05 enhancements to the DEER are a continuation from the first phase of updates that were initiated in 2002/03. The 2004-05 DEER project schedule was dictated by the need to have the new data needed for 2006-08 program planning. By the end of first quarter of 2005, updates to the unit energy savings and cost estimates for non-weather sensitive measures were completed. The updates to weather sensitive measure savings and cost data continue to be made available on a prioritized list basis and were completed on schedule in August, 2005. All savings estimates are now being expressed at two levels, if applicable: energy savings when changing from an existing measure to a new high-efficiency measure, and energy savings created by the choice of a new high-efficiency measure versus a standard code compliant efficiency new measure. Similarly, the cost data are available as both the incremental cost and installed cost. Another important aspect of the DEER update has been to build a searchable web-based data for ease of access and use of the DEER. The database can be directly accessed from a designated webpage on the CPUC website (http://www.energy.ca.gov/deer/). The report describing how the databases were updated is also available there.

PY2001 Database For Energy Efficiency Resources (DEER)- Measure Cost Study

In PY2001, the CPUC authorized funds for an update of the portion of DEER that provides the costs of high-efficiency measures promoted by energy efficiency programs and of their standard-efficiency alternatives. These costs are used in cost-effectiveness analysis and in developing appropriate rebate levels for specific efficiency measures. The CEC was to conduct this study. Due to delays in funding approval and the CEC's ultimate loss of ability to direct a contract award without competitive bidding, the CEC was unable to complete the study. The funds reverted to the utilities, and the study was initiated in Fall 2004, under the management of PG&E. The study was completed in 2005 and the measure cost data were added to the DEER database.

PY 2004-05 Measure Cost Study

The 2005 Measure Cost Study was conducted to update the costs of standard-efficiency and high-efficiency measures included in the Database for Energy Efficiency Resources (DEER). The full results are available online at the DEER website (http://www.energy.ca.gov/deer/). The results provide cost information on the complete list of three hundred forty-one measures included in the 2005 DEER update. They were developed in four categories: non-weather-sensitive measures, residential weather-sensitive measures, nonresidential weather-sensitive measures, and refrigeration measures.

Measure cost data are available in three different forms. First, the data are available as part of the measure detail from the DEER website. These data are specific to each measure configuration on the website. Second, the data are available as a supplemental downloadable file under Supporting Documents from the website. These data contain more information and measure variations than the pricing included in the measure detail. Finally, the measure cost data are provided in hard copy as part of the final project report.

The measure cost data include installed and incremental cost estimates as appropriate for each of the measures included in the update, and cost detail for a range of sizes, efficiencies, and features.

PY2004-05 Best Practices Study for Energy Efficiency Programs

The Best Practices Website was launched in 2004 at www.eebestpractices.com, developed using 2002 and 2003 funding. 2004-5 funding will be used in 2006 to expand the coverage of programs and update the database.

PY2004-2005 Statewide Market Share Tracking Study

Market data for total sales of selected equipment and the portion of those that were high-efficiency measures have been gathered for the latter half of 2004 and the first half of 2005. The equipment covered includes clothes washers, dishwashers, refrigerators, room air conditioners, central air conditioners, heating pumps, central gas furnaces, and compact fluorescent lamps (CFLs) as well as halogen and incandescent light bulbs. The following reports analyzing the data and showing the market share trends over time were completed during the year: the California Residential Efficiency Market Share Tracking—Appliances 2004, which tracks the average efficiencies and sales of high-efficiency equipment; the 2004 California Lamp Report, which tracks sales penetration of compact fluorescent lamps (CFLs), halogen and incandescent light bulbs; and California Residential Efficiency Market Share Tracking—HVAC 2004, which summarizes the average efficiencies and market shares of high-efficiency heating, ventilating, and air conditioning equipment.

PY2004-2005 Nonresidential New Construction Technology Trends Study

The focus of the study is to identify the frequency with which various technologies and systems are being used to meet or exceed Title 24 building standards efficiency requirements. The data it will provide will support 2006-7 program implementation. This study has been included as a task within the 2004-5 Building Efficiency Assessment Study, a part of the Savings By Design program evaluation work that will be completed in 2006.

PY2004-5 Retrofit Upgrade Opportunities Study

The Retrofit Upgrade Opportunities Study was conducted to support Assembly Bill 549 (Statutes of 2001, Chapter 905, Longville) which directed the California Energy Commission (CEC) to "investigate options and develop a plan to decrease wasteful peak load energy consumption in existing residential and nonresidential buildings" and report its findings to the legislature. Funding for the study was removed when the bill was signed into law. It was included in 2004-5 energy efficiency overarching studies funding because of its potential value to portfolio planning. The study recommended a combination of regulatory and market-based strategies to increase adoption rates of energy efficiency in existing buildings. The study was completed in mid-2005. The CEC held workshops and provided opportunities for comments on study recommendations. CEC staff then used the study as the foundation of their December 2005 staff report to the legislature to fulfill the requirements of AB 549.

PY2004-5 Demand Response/Energy Efficiency Interaction Study

The American Council for an Energy-Efficient Economy (ACEEE) proposed a multi-sponsor study for which the 2004-2005 MA&E budget has provided a share of the funding. The study aims to examine the experience to date around the nation regarding demand response programs and to discuss how such programs might be best integrated into an effective overall demand-side resource strategy. During 2004, ACEEE formed an advisory group composed of representatives of the study funders and initiated the study. ACEEE completed the draft report in December and requested review by the advisory group. The final report was completed in early March 2005 and posted on the ACEEE and CALMAC websites.

PY2003 Hard-To-Reach Customer Analysis Study

This study, building on the similar 2002 study, assessed the needs of program management for additional information about hard-to-reach customers, then collected and presented this information. It was completed in early 2005.

Utility Statewide Program EM&V Studies

PY2004-5 Single-Family Energy Efficiency Rebates Program

The Single Family Home Energy Efficiency Rebates program is a statewide program administered by the four California investor-owned utilities that provides rebates on various home improvement products including windows, insulation, heating, ventilation and cooling equipment, appliances, and residential pool equipment. The 2004-5 evaluation is building upon the evaluation of the 2003 and has the following objectives:

- Verification of installed measures, reported savings and hard-to-reach (HTR) accomplishments
- Estimation of ex-post savings, net-to-gross analyses and ex-ante / ex-post comparisons
- In-depth customer behavior assessment (participation trends, program reach, awareness, and influence)
- Process evaluation of delivery channels, marketing, and satisfaction.

PY2003 Multi-family Energy Efficiency Rebate Program

The statewide PY2003 Multi-Family Energy Efficient Rebate Program built upon the evaluation of the PY2002 program. Program changes from 2002 that were included in the 2003 evaluation include increases and/or decreases in rebate levels and the addition and/or deletion of certain measures. Additionally, the PY2003 Program incorporated a reservation system to assist in the control and systematic distribution of program funding.

The evaluation of the 2003 program was completed in early 2005 and has the following components:

- Verification of the number of measures installed in program year 2003
- Verification of the achievements in the Hard-to-Reach markets
- Measure customer behavior and response for both the HTR and non-HTR customers
- Analysis of the program efficiency
- Determined the *ex post* energy savings for the measures in the program

PY2004-2005 Multi-family Energy Efficiency Rebate Program

The California Statewide Multifamily Rebate Program is offered by all four utilities. It promotes energy savings in apartment dwelling units and in the common areas of apartment and condominium complexes and mobile home parks. Property owners (and property managers, as authorized agents for property owners) of existing residential multi-family complexes with five or more dwelling units may qualify for rebates for installing a variety of energy efficiency measures. These include:

- Apartment improvement measures (e.g., interior and exterior hardwired fixtures, ceiling fans, compact fluorescent lights (CFLs), clothes washers, and dishwashers)
- Common-area improvement measures (e.g., exit signs, occupancy sensors, photocells, high-performance dual-paned windows)
- Mechanical improvement measures
- High-efficiency heating and cooling equipment.

The electric measures, such as lamps, fixtures and appliances, have made up most of the savings attributed to the program. Gas measures have been much more challenging to sell to both contractors and property managers.

Key objectives for the evaluation of the 2004-05 program include:

- Measurement and verification of energy and peak demand savings through development of ex post savings and verification of measure installations
- Process evaluation to assess overall levels of performance and success of the program processes
- Market assessment of response to program interventions

PY2003 and PY2004-5 Statewide Home Energy Efficiency Survey Program

The Statewide Home Energy Efficiency Survey (HEES) Program involves the use of three energy survey types (mail-in, in-home and on-line) to increase homeowner awareness of

opportunities in order to achieve energy efficiency and cost savings. The design for the 2004-2005 evaluation study was developed and the Request for Proposals was issued in November 2004, with the contract awarded in January 2005. The final research plan has been reviewed and approved by the ALJ, the CPUC Energy Division staff and their consultants. It will include a rigorous impact evaluation as well as a program theory-driven process evaluation that will focus on recommendations for increasing program effectiveness. The impact evaluation will provide a better estimate of energy savings that can be attributed to customer participation in HEES, and the process evaluation will help show how HEES serves as a marketing partner to draw customers to the IOU's administered energy efficiency rebate programs. In 2005, the evaluation contractor completed the planned in-depth interviews and helped the program managers refine the program theory. They also completed the initial waves of telephone surveys for the process evaluation. This evaluation study is expected to be completed earlier than their planned date of Dec. 15, 2006.

PY2002, 2003 And 2004-2005 Residential Appliance Recycling Program

A detailed study plan was developed for the 2004-05 statewide program evaluation in the fall of 2005, including impact evaluation, process evaluation, and market assessment.

The impact evaluation will continue to utilize the DOE protocol metered data to develop energy usage estimates while incorporating the estimated relationship between on site and lab metering data using several levels of analysis. An adjustment factor that includes program attribution (a net-to-gross ratio) and part-use factors will be applied to the gross savings estimates. In the 2004-05 study, the net-to-gross analysis will provide a variety of summary evidence on how the net-to-gross estimation approach can be improved from previous evaluations using better samples and different data, and a clear delineation of how the net-to-gross ratio decomposes into components that the consumer may or may not consider to be related to the net influence of the program.

The approaches for the process evaluation and market assessment will provide information to support any contemplated program changes for 2006. Specifically, analysis will be conducted to identify gaps in program design and operation, both retrospectively and prospectively and tools will be provided for assessing the impact of a given set of program design changes.

Finally, market assessment will be conducted to examine the market context in which the program operates in enough detail so that both market influences on the program and the program’s influences on the market can be identified. In addition, Changes and trends will be identified that will affect the savings potential for the program, the operation of the program, and its ability to achieve goals.

PY2002, PY2003, and PY2004-05 Nonresidential Standard Performance Contract Program

The Nonresidential Standard Performance Contract (SPC) program offers rebates for large energy efficiency retrofit projects. Rebate payments are based on estimated energy savings achieved, with different rebate levels for savings from different energy end uses. Projects may be proposed either by energy efficiency services providers or customers. The studies of this program verify what energy savings were achieved. They also provide process evaluations to assess the efficiency and effectiveness of program operations and procedures and to make recommendations for program improvements.

Both the 2002 and 2003 program evaluations were in progress during 2005.

The evaluation of the PY2003 NSPC Program has the following objectives:

- verify the reported energy savings results of the programs, including verification that equipment was installed as reported and a review of the energy savings estimates for a sample of projects and for the program as a whole;
- determine whether the PY2003 program was successfully implemented as designed, and whether program changes have had the desired effects on the operation of and participant satisfaction with the program;
- examine key features of the program for their impact on the program; and
- recommend any needed program modifications to program planners.

The study was completed in first quarter 2006.

The evaluation of the PY2002 NSPC Program had similar objectives, plus it included an investigation of "unsuccessful" SPC projects that were started but never finished. Hardware installations under the PY2002 program were delayed; in some cases, projects were granted extensions of up to a year beyond the program deadline. Consequently, the impact evaluation was delayed for over a year, and it was completed in 2005.

Initial planning for the 2004-5 program evaluation is completed and an RFP is expected in second quarter 2006.

PY2003 Express Efficiency Program

The Express Efficiency program is a statewide program that provides financial incentives to small and medium sized nonresidential customers for installing specific proven gas and electric energy efficiency measures. The evaluation of the 2003 program was completed in March 2005. It includes: 1) analysis of 2003 program accomplishments; 2) review of energy and demand savings estimates; 3) comparisons between program characteristics in 2002 versus 2003 that may result in differences in effectiveness of program design, delivery and implementation; 4) an assessment of program targeting and customer satisfaction with special emphasis on statewide coordination and outreach to hard-to-reach customers; 5) an analysis of incentive levels and options; and 6) sample on-site verifications of installed measures.

PY2004-05 Statewide Express Efficiency Program and Upstream HVAC/Motors Evaluation

The downstream Express Efficiency component of the program pays rebates to distributors and small to medium sized non-residential customers for equipping facilities with selected energy efficiency measures. The Upstream motors component paid rebates to distributors of HVAC systems and motors who sell energy efficient equipment to customers. This incentive will only be paid after the equipment has been installed.

The scope of work for the combined evaluation of these two programs was developed in 2004-05. It will include 1) verification of program accomplishments, including on-site verification on a sampling basis; 2) review of energy and demand savings estimates; 3) ex post impact analysis for measures determined to need updated energy and demand savings estimates; 4) process evaluation, including an assessment of program targeting, customer satisfaction, participation of hard-to-reach customers, and differences in participation rates from earlier years; and 4) an analysis of incentive levels and options. The study will review the reporting of energy and demand savings to ensure that Program accomplishments are being reported properly. An

assessment of the verification and inspection process will be undertaken to ensure sampling validity and overall appropriateness of the approach of the Study.

The study, scheduled for completion in third quarter 2006, will meet the following objectives:

- Obtain credible estimates of savings, both ex-ante and ex-post
- Describe methods and procedures to answer design and implementation questions
- Analyze the goals to increase Hard to Reach participation
- Provide and analysis of the overall purpose of the evaluation plan
- Analyze the limitations on the resources available for the evaluation effort and efficiency of the program
- Analyze the program's effectiveness in aligning with the CPUC requirements
- Provide guidance on how to maximize the cost effectiveness of marketing and outreach

PY2003 Nonresidential Energy Audits Program

This study, completed in March 2005, is an impact and process evaluation of the 2003 Statewide Nonresidential Audit Program. In that year, the program offered mail, CD Rom, online, telephone and on-site audits. Almost thirty thousand audits (slighter over half to hard-to-reach customers) were carried out. The impact assessment has two distinct components: 1. A first year program impact assessment focused on very small and small customers; and 2. A second year program impact assessment for medium and large customers (to ascertain process-level adoption of energy efficiency post-audit). The process assessment included a tracking system assessment and implementation related program elements (participant satisfaction, reasons for participation, and usefulness and practical roles of the Audit). A best practices assessment was done by reviewing the 2004 on-site audit tools and reports. Overall, nonresidential audits were shown to lead to significant energy savings.

PY2004-2005 Nonresidential Energy Audits Program

In 2004-2005, the program basically had the same elements as in 2003. PG&E also offered a local program that integrated demand response and self-generation opportunities into the energy efficiency audits. Audits are an information program that can move customers to take energy efficiency actions. However, it may take some time before customers take action. Given the waning impact of the energy crisis of 2000-2001, the IOUs want to continue to examine the ongoing impact audits have over time on customers' behaviors, attitudes and adoption of EEMs. Therefore, the IOUs will conduct surveys for both 2004-2005 audit participants and past participants, to determine how and when audits result in customer adoption of energy efficiency, and better determine the frequency necessary for auditing customer facilities, as well as gathering data from similar nonparticipating customers to contrast the adoption of energy efficiency between the two groups. Identifying these actions and how customers tap into other energy efficiency programs allows for continuous enhancement of integration among programs. The study will also examine customer satisfaction and actions taken post-audit for the PG&E specific, integrated audits. A cross-program study (similar to the one done in 2003) will be done to ascertain the impacts of the non-residential programs on the other non-residential offerings.

The study design for the evaluation of the 2004-05 Statewide Nonresidential Energy Audits Program was developed in 2005, and the contract is being signed in early 2006. The study should get underway second quarter 2006. It has the following objectives:

- Document energy efficiency actions and savings taken by audit program participants over time compared to actions taken by non-participants;
- Document participant satisfaction with the various audit options and marketing strategies;
- Assess current and pilot delivery vehicles and marketing mechanisms to ensure ongoing improvement of program delivery; and
- Estimate energy and/or peak load savings accruing from participation in the audit program over time.
- Estimate the impacts of the Non-residential Audits program on Express Efficiency and SPC as well as of these programs on the others.

PY2004-5 Building Operator Certification and Training Program (BOCT)

A study is underway for the program years 2004-05. Building operator certification and training programs educate operators of large and medium commercial buildings, including public buildings, on short and long-term peak demand and energy savings strategies for their buildings. There have been minor modifications to training content since 2002.

The study has the following objectives:

- Examine satisfaction of participants and participants' employers with program process and content of training;
- Gather participants' and non-participants' recommendations for enhancements to program process and content;
- Understand barriers to participation;
- Understand how to better market the program to non-participants;
- Provide feedback and guidance that will be used to improve future program design and implementation;
- Document participant post-training adoption of energy efficiency actions and possible energy and peak savings that are associated with the actions.

PY2003 and PY2004-5 Nonresidential New Construction Building Efficiency Assessment (BEA) Study

The 2003 and 2004-5 studies quantify the whole-building and end-use energy savings and efficiencies of both participant and non-participant buildings through detailed data collection and DOE-2 simulations. This study also tracks program participant attitudes and responses to the program and its components, including design assistance services. The approach to developing these data has been used for evaluating statewide nonresidential new construction since 1999 and the results can be referenced back to previous data to develop on-going trends. The results provide timely feedback to program managers and policymakers and should facilitate

incremental improvements to program process and operations. The results will also identify changes in design practices as a result of program operation.

The 2003 BEA Study was completed in July 2005 and provides gross and net program impacts. The net-to-gross analysis estimates the portion of the savings that can be directly credited to the program using a refined self-report analytical approach.

For the 2004-5 study, the study advisory group first commissioned a white paper on alternative approaches to net-to-gross analysis, to be completed in early 2005. The white paper concluded that the best option for assessing net savings of the 2004-5 program was to conduct a market effects study. Acting on this recommendation, the advisory group began work on a Building Efficiency Assessment study to estimate gross savings of the program and to identify the frequency with which various technologies and systems are being used to meet or exceed Title 24 building standards efficiency requirements among both participants and non-participants. This study will be completed in 2006, and the market effects study will be initiated in 2006.

PY2004 Market Characterization and Program Activity Tracking (MCPAT) Study

The on-going statewide Market Characterization and Program Activity Tracking (MCPAT) Study tracks trends in the nonresidential new construction (NRNC) market, as well as participation in the Savings By Design statewide NRNC Program. The publication of results, on an ongoing basis, allows program designers, implementers, evaluators, and market participants to determine the extent to which the NRNC Market changes over a given period of time, and if necessary, modify the SBD Program to most effectively enhance energy efficiency practices in the new construction market. This report, published in May 2005, summarizes the NRNC Market and SBD Program Tracking and penetration results in PY2004.

Technical Support for the 2003-2005 Nonresidential New Construction Program Area

As part of its NRNC MA&E Program Area duties, Southern California Edison (SCE) contracts with a consultant to provide technical expertise for the management of NRNC MA&E studies. This work includes RFP development, proposal review, and review of contractor work and deliverables, as well as planning and participation in the statewide NRNC program and MA&E activities. It is necessary for the thoughtful and responsible administration of the MA&E activity.

PY2003 and PY2004-2005 California Energy Star® New Homes Program

The California Energy Star® New Homes Program is designed to encourage single-family and multifamily builders to construct units that reduce energy usage through a combination of financial incentives, design assistance and education. Program activities have been enhanced since 2002 to encourage increase participation by multifamily builders.

The study of the PY 2003 program is scheduled for completion in the first half of 2006. The study will:

- Document energy savings and compare energy savings estimates for the PY 2003 program with the energy savings estimates from the PY 2002 program;
- Determine if there have been any changes in the building characteristics of program participants between the PY 2002 and PY 2003 programs;

- Investigate builders' perceptions of the California Energy Star® New Homes Program;
- Evaluate the effectiveness of program modifications made in PY 2003; and
- Recommend additional program modifications if warranted.

The evaluation of the 2004-05 program was initiated in 2004 and is scheduled for completion in third quarter 2006.

PY2003 and PY2004-5 Education and Training Services Program

The Statewide Education and Training Services Program promotes energy efficiency to a broad spectrum of market actors including customers, midstream actors such as design, engineering, and contract communities, and upstream market actors. The energy centers offer energy efficiency classes to customers provide displays and equipment demonstrations, and contact customers in a variety of venues, including trade shows and community meetings.

The evaluation studies entail a needs assessment to determine how best the energy centers can improve current services and expand their reach to serve a larger market. The PY 2003 study, completed in June 2005, provided process evaluations and case studies for each of the five statewide energy centers: PG&E's Energy Training Center (ETC), SCE's Customer Technology Application Center (CTAC), SCE's Agricultural Technology Application Center (AgTAC), SCG's Energy Resource Center (ERC), andSDG&E's education and training seminars. The locally-funded PG&E Pacific Energy Center (PEC) was also included in this evaluation study. Case studies focused on specific challenges that each energy center was facing, providing requested information for center staff. Specifically, the PY2003 study conducted a customer segmentation analysis of each energy center's primary target population(s) (e.g., commercial and industrial customers, residential customers, or midstream/upstream market actors), exploring barriers to participation in energy center activities (such as distance and time), and developing recommendations for improving the promotion and targeting of existing services as well as new programs and services that focus on the needs and barriers not currently or effectively addressed by the energy centers. Best practices in adult education were also surveyed and presented. Recommendations were made for further improvements

To prepare for 2006 program needs, SCE added a small case study project to the 2003 evaluation that will document the energy savings achieved by participants in a small group of SCE Customer Technology Application Center courses. The full evaluation report and the case study report are expected to be completed in second quarter 2005.

The basic design for the PY2004-5 study was developed in 2004, building on areas already covered by previous evaluations. The design was completed and the Request for Proposals was issued in March 2005. The study is slated for completion in the second half of 2006.

PY2003 and PY2004-5 Emerging Technologies Program

The Statewide Emerging Technologies Program (ETP) seeks to accelerate the introduction of energy-efficient technologies, applications, and analytical tools that are not widely adopted in California. The program primarily targets nonresidential customers and is composed of two parts: 1) projects that demonstrate/assess field performance of emerging technologies and the dissemination of assessment results, and 2) project coordination with the statewide IOUs and the CEC-PIER (Public Interest Energy Research) group through the Emerging Technologies

Coordinating Council (ETCC). The evaluation of the PY2003 ETP was completed in August, 2005. The design for the 2004-2005 evaluation study was developed and the Request for Proposals was issued in December, 2005, after soliciting a pre-submission review by the CPUC's Master Evaluation Contractor. Because the ETP is an information-only program that straddles the gap between R&D and commercialization, its effectiveness cannot be evaluated using methods that are normally appropriate for either R&D or commercialization. The study's scope of work include 1) refining and capturing the ET program theory, 2) evaluating program processes for future improvement, and 3) creating case studies on specific technologies to assess the suitability of a variety of evaluation methods for capturing the full value of the ETP. The contract was awarded in March, 2006 after the consultant was approved by the CPUC administrative law judge.

PY2004-5 Codes and Standards Advocacy Studies

The statewide Codes and Standards Program supports upgrades and enhancements in energy efficiency standards and codes, develops protocols for high-efficiency processes not subject to code, and provides training for code enforcement officials. Codes and Standards Enhancement (CASE) studies for energy efficiency improvements are performed for promising design practices and technologies and are presented to standards and code-setting bodies.

During 2005, the study advisory group commissioned a white paper describing recommended methods to determine the energy savings created through code and standard changes attributable to the Codes and Standards Program. This was followed by a paper that estimated the energy savings from Fall 2005 and 2006 code and standards changes that were attributable to the earlier work of the utility Codes and Standards Programs.

The plan for the evaluation of the 2004-5 program was developed in late 2005, and the Request for Proposals to conduct the study was issued in early 2006. The study is planned for completion in late 2006.

Utility Specific 2004 & 2005 Local Program MA&E Studies

SoCalGas has contracted evaluations underway for its 2004-5 local program:

2004-2005 SOCALGAS NONRESIDENTIAL FINANCIAL INCENTIVES PROGRAM

The Nonresidential Financial Incentives program (NRFIP) is a local program focusing on small to medium nonresidential (commercial and industrial) gas customers served under core rate schedules. The program incorporates technical support, education, training, outreach, contractor referral, bulk procurement, prescriptive rebates and equitable financial incentives through three program elements. The “Purchase-Apply-Receive Rebate” (PARR) provides a list of approved products eligible for rebates. The “Nonresidential Equipment Replacement“(NRER) provides incentives for “kind-for-kind” replacement of old, inefficient commercial or industrial end-use gas-fired technology with higher efficiency alternatives. The “Nonresidential Energy Conservation” (NREC) incentive element provides qualified customers with a financial incentive to implement comprehensive energy saving commercial building envelope or industrial process modernizations.

The Evaluation, Measurement and Verification (EM&V) Study for this program therefore, will have the following objectives: 1) Verify the number of measures installed and calculate estimates

of energy savings and demand reduction; 2) Analyze the success in implementing the program as designed; and 3) Determine customers' satisfaction with the programs and the degree to which the programs influenced their energy-efficiency actions. This plan will comply with the Evaluation, Measurement & Verification Requirements identified in the CPUC Energy Efficiency Policy Manual, Version 2, August 2003.

Regulatory Oversight

Regulatory Compliance and Reporting

Regulatory Compliance and Reporting is designed to capture activities that are undertaken to meet regulatory reporting oversight, and other obligations that are not included in Market Assessment & Evaluation activities. It consists of those activities needed to verify, collect, and report descriptive and technical information related to the achievements and scope of all authorized energy efficiency programs. Examples are advice letter filings, annual energy efficiency reports, filings for performance incentives, and other energy efficiency proceedings including attendance at Energy Division (ED) meetings, workshop participation, testimony, hearings, and data requests and responses.

ED Oversight Costs

Oversight costs include SoCalGas' allocation for the Energy Division (ED) expenditures and Commission-managed studies. In 2005, SoCalGas paid $45,501 for the ED's expenditures.

TABLE 6.1
MARKET ASSESSMENT & EVALUATION BUDGET (MA&E)
(Gas)

Study / Project (costs in $000's)	2-Year Statewide Budget	2-Year Statewide Recorded	2-Year Utility Budget	2-Year Utility Recorded
UTILITY STATEWIDE PROGRAM EM&V				
Residential Retrofit				
Single Family Rebates	174	174	174	174
Multi-Family Rebates	76	76	76	76
Residential Audits	54	54	54	54
Appliance Recycling	0	0	0	0
Nonresidential Retrofit				
Standard Performance Ct.	0	0	0	0
Express Efficiency	147	147	147	147
Nonresidential Audits	122	122	122	122
Bldg. Operator Cert.	24	24	24	24
New Construction				
Energy Star Homes	112	112	112	112
Nonres. New Construction	181	181	181	181
Cross-Cutting				
Education & Training	100	100	100	100
Emerging Tech. Demo.	32	32	32	32
Codes & Standards	30	30	30	30
Subtotal	**1,051**	**1,051**	**1,051**	**1,051**
CPUC ENERGY DIVISION OVERARCHING STUDIES				
CALMAC and Website	23	23	23	23
Organizations/Conferences	38	38	38	38
Evaluation Framework Rev.	11	11	11	11
Industrial Energy Use Surv.	162	162	162	162
Res.EE Onsite Survey	49	49	49	49
Mkt Share Tracking Study	49	49	49	49
NRNC Tech Trends	9	9	9	9
EE Potential Updates	51	51	51	51
2004-5 Summary Study	16	16	16	16
DEER Enhancements	51	51	51	51
Retrofit Upgrade Opps.	46	46	46	46
Best Practices	46	46	46	46
DR/EE Interaction-ACEEE	5	5	5	5
CALMAC Study Reserve	15	15	15	15
Subtotal	**570**	**570**	**570**	**570**
CPUC ENERGY DIVISION OPERATING COSTS				
Special Projects	132	132	132	132
Energy Division Staffing	65	65	65	65
Subtotal	**197**	**197**	**197**	**197**
OTHER EM&V STUDIES				
Subtotal				
STATEWIDE MA&E TOTAL	**1,818**	**1,818**	**1,818**	**1,818**

Shareholder Performance Incentives

This section is not applicable for the 2005 Energy Efficiency Program Year.

IOU Partnership Program Accomplishments

Bay Cities Council of Governments (SBCCOG), Southern California Edison (SCE) and Southern California Gas Co. (SCG). This partnership formed an Energy Efficiency Resource Center, which serves the region's constituents as the central clearing house for energy efficiency information and resources. In 2004-05, activities included opening the Energy Efficiency Resource Center, launching and maintaining a website, member city distribution of energy efficiency information and co-sponsoring events, providing energy efficiency workshops, and handling community inquiries.

The Bakersfield/Kern Energy Watch Partnership program partners are Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SoCalGas), the City of Bakersfield (City), the County of Kern (County), and Staples/Hutchinson and Associates, Inc. (Staples/Hutchinson). The partnership made significant progrsss to meet the goal to reduce energy use by providing energy efficiency information and direct installation of energy efficient equipment to the City and County's local community. In 2004-05, the Bakersfield Energy Watch program also made great progress outreaching to residential and small commercial customers throughout the Kern county area. This program was promoted through various marketing efforts in the PG&E, SCE and SoCalGas service territories.

The LA County Partnership program (County of Los Angeles, Southern California Edison Company, and Southern California Gas) implemented energy efficiency projects in existing County facilities and leveraged the County's existing energy management infrastructure. Through the effort of The LA County ISD, SCE, and SCG the Partnership program was able to provide significant energy savings to the County of Los Angeles residents. The County's energy management organization maintains relationships with all 38 County departments, other County affiliated agencies (including the Office of Education, Public Housing, Metropolitan Transit Authority, Office of Small Business), and other local governments. In 2004-05, the LA County Partnership was comprised of various components. These components included Retro-Commissioning, Retrofit, Public Agency Feasibility Study and Technology Transfer Element, and Public Housing, Multi Family Metering Element. By the end of 2005 The LA County Partnership had met it's energy savings goals.

The Energy Coalition Community Energy Partnership partners include Southern California Edison, Southern California Gas, The Energy Coalition, and ten southern California cities representing their constituents as participants. The program involved the entire community to raise awareness and installation of energy efficiency. The Energy Coalition Community Energy Partnership achieved the two-year program goals. Program elements included the following: Training PEAK Students in most of the partnership member cities, Holding Municipal Energy Actions, completing Mobile Home Tune-Ups, Rental Apartment Tune-Ups, Owner-Occupied Apartment Tune-Ups, and Small Business Tune-Ups.

The Ventura County Regional Energy Alliance (VCREA) partnered with Southern California Edison (SCE) and the Southern California Gas Company to build on the VCREA past progress to date to further develop its core capabilities, to complete the development of its Energy Resource Center capability, and to implement a targeted Public Sector Program for public agencies throughout the Ventura County region. In 2004-05, VCREA worked to improve energy efficiency information to residential customers, and small commercial customers. Activities

included opening the VCREA Energy Resource Center, member city distribution of energy efficiency information and co-sponsoring events, handling community inquiries and attending community events. In addition the VCREA also enabled energy efficiency projects that may not have been otherwise completed.

TABLE 8.1
SUMMARY OF COSTS:
IOU Partnership Programs

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
IOU Partnership Programs	Budgeted	Recorded	Budgeted	Recorded
UC/CSU - Statewide Partnership	$ 989,328	$ 1,620,867	$ 1,978,655	$ 1,811,440
Energy Coalition ("Twelve Cities Project")	$ 591,500	$ 1,167,551	$ 1,183,000	$ 1,174,895
Ventura REA	$ 181,492	$ 294,977	$ 362,984	$ 304,561
South Bay Cities Council of Governments	$ 87,877	$ 165,300	$ 175,754	$ 175,412
Bakersfield/Kern Energy Watch Partnership	$ 250,000	$ 499,004	$ 500,000	$ 500,000
LA County	$ 319,650	$ 679,636	$ 639,300	$ 696,852
Total IOU Partnership Programs	$2,419,847	$4,427,335	$4,839,693	$4,663,161

TABLE 8.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
IOU Partnership Programs

Annual Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
UC/CSU - Statewide Partnership	0	0	0	0
Energy Coalition ("Twelve Cities Project")	0	0	0	0
Ventura REA	0	0	0	0
South Bay Cities Council of Governments[1]	0	0	0	0
Bakersfield/Kern Energy Watch Partnership[1]	0	0	0	0
LA County	0	0	0	0
Total IOU Partnership Programs	**0**	**0**	**0**	**0**

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
UC/CSU - Statewide Partnership	0	0
Energy Coalition ("Twelve Cities Project")	0	0
Ventura REA	0	0
South Bay Cities Council of Governments[1]	0	0
Bakersfield/Kern Energy Watch Partnership[1]	0	0
LA County	0	0
Total IOU Partnership Programs	**0**	**0**

Annual Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
UC/CSU - Statewide Partnership	342	5,464	490	6,207
Energy Coalition ("Twelve Cities Project")	516	2,578	768	3,842
Ventura REA	17	87	17	87
South Bay Cities Council of Governments[1]	0	0	0	0
Bakersfield/Kern Energy Watch Partnership[1]	0	0	0	0
LA County	0	0	0	0
Total IOU Partnership Programs	**875**	**8,129**	**1,276**	**10,136**

[1] This is an information only program.

TABLE 8.3
SUMMARY OF COST-EFFECTIVENESS:
IOU Partnership Programs

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[1]	Levelized Cost ¢/(Therm)[1]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢/(kWh)[1]	Levelized Cost ¢/(Therm)[1]
UC/CSU - Statewide Partnership	1.04	0.55	0.00	86.61	1.09	0.54	0.00	84.24
Energy Coalition ("Twelve Cities Project")	0.88	0.63	0.00	59.62	1.31	0.81	0.00	46.33
Ventura REA	0.12	0.11	0.00	337.23	0.11	0.11	0.00	347.45
South Bay Cities Council of Governments[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield/Kern Energy Watch Partnership[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LA County	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

[1] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).
[2] This is an information only program.

TABLE 8.4
SUMMARY OF COST-EFFECTIVENESS:
IOU Partnership Programs

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
UC/CSU - Statewide Partnership	$ (1.40)	$ (1.69)
Energy Coalition ("Twelve Cities Project")	$ (0.61)	$ (0.37)
Ventura REA	$ (0.28)	$ (0.29)
South Bay Cities Council of Governments[1]	$ (0.17)	$ (0.18)
Bakersfield/Kern Energy Watch Partnership[1]	$ (0.50)	$ (0.50)
LA County	$ (0.68)	$ (0.70)
Total	**$ (3.64)**	**$ (3.72)**

[1] This is an information only program.

Non-IOU Program Accomplishments

Nonresidential Fenestration Certification Initiative (NFCI)

Program Sponsor: Cal State University, Chico

Program Number: PG&E 1227-04; SCE 1496-04; SCG 1497-04; SDG&E 1498-04

This is a two-year (2004-2005) information only codes and standards support project designed to facilitate and encourage conformance with the California Energy Commission (CEC) emergency Title 24 standards (of 2001 and 2005) through a comprehensive program of outreach, tailored trainings, and precision technical assistance efforts. Recent changes in Title 24 specify that site-built fenestration units in large commercial buildings (over 10,000 sq. ft) be certified and be National Fenestration Rating Council (NFRC) labeled. The purpose of this program is to bridge the current information gap that exists by identifying key actors in the nonresidential fenestration industry and in code enforcement agencies and provide them with meaningful information, training and technical assistance.

As a result of careful management and implementation, the NFCI Program achieved and exceeded its program goals and objectives by an average of 200% (illustrated in Figure 1 below), while utilizing only 49% of its budget. Interest in training participation intensified over the course of the program, encouraging program administrators to increase the total number of informational meetings from 254 to 275 (an increase of 8.3% over the original goal), and thereby reaching 1,609 industry actors instead of the originally-proposed 1,097 (an increase of 46.7%). Through prudent application of the NFCI budget for the two-year period, 49% of the $882,635 budget was expended in order to meet the program goals.

Building officials and each group of industry actors that received NFCI training increased their knowledge of the Title 24 site-built certification requirements, as evidenced by the substantial increase in test scores (pre/post test gain scores). The program goal desired was a 25% increase between pre and post test scores but the actual increase ranged from a low of 330% (from a pre test average of 2.044 to a post test average of 6.024) to a high of 732% (from a pre test average score of 1.471 to a average post test score of 7.625

Agricultural Pumping Efficiency

Program Sponsor: Center for Irrigation Technology, California State University at Fresno

Program Number: SCE 1434-04, SCG 1428-04, PG&E 1418-04

This is an incentive-based program that been run for many years by the program implementer under the auspices of a number of program administrators. This program provides technical support and financial assistance to encourage the agricultural industry to adopt more energy efficient pumping systems, maintenance and operation. Incentives will be provided for equipment testing, repair and retrofitting.

The rebate is based on an estimate of the first year expected kWh savings at the rate of $.10/kwh. Rebate amounts will vary depending on the annual energy use of the pumping plant and in some cases, the actual improvement in pump efficiency. The current average rebate for the currently operating program is $3,336. This represents about 26% of the average project cost.

This is the continuation of a successful PY2002 and 2003 program. It is the only statewide comprehensive agricultural energy efficiency program of this nature offered this year. Other authorized programs target small organic farmers in PG&E territory, dairy farmers, and pump testing while this program targets agricultural pump efficiency. California State University's, Fresno Foundation has run this program successfully for a number of years.

2006 Achievements

APEP presented one educational seminar for SCG in 2006. This made a total of four, which was the overall goal.

APEP funded no pump tests in SCG in 2006.

APEP provided one incentive rebate for a pump retrofit/repair in SCG in 2006. Pump retrofit/repair projects have resulted in 28,705 net therm savings towards a goal of 43,875 net therms.

Comprehensive Hard-to-Reach Mobile Home Program

Program Sponsor: American Synergy Corporation

Program Number: SCE 1275-04, SCG 1276-04

This is a continuation of the program funded in 2002-2003. This comprehensive program provides education and no cost installation of the following measures to hard-to-reach residential customers in mobile homes: (a) air conditioning tune-ups; (b) compact fluorescent lamps (CFLs) and hard wired CFL fixtures; (c) low flow showerheads, aerators, and water heater temperature setback; (d) set back thermostats; (e) water heater timers; and (f) enhanced duct sealing. The measures are estimated to provide sustainable energy savings from eight (8) to twenty (20) years.

Program Overview:

This has been an exceptional program that has met or exceeded the program objectives while serving over 4,500 Mobile Home SCG customers. The energy savings achieved during this program was 499,588 annual therms and lifecycle therms saved of 7,904,446.

According to EM&V studies, the customer satisfaction rate is in the range of 97%. There were few complaints from this program, but many letters and calls of satisfaction and gratitude for the service.

This program serves a segment of the market among others, that especially benefits from these energy savings as a large share of the mobile home customers are older, fixed-income individuals, who often live alone and are least likely to take advantage of energy efficiency programs.

All installations for this program are now complete and the EM&V field work is being completed. The work was completed on time as outlined in the original proposal.

The narrative reports and EEGA worksheets have been filed monthly on a timely and consistent basis throughout the program. American Synergy Corporation has appreciated the opportunity to work with Southern California GAS and it's customers on the Comprehensive Mobile Home Program.

Chinese Language Efficiency Outreach (CLEO)

Program Sponsor: Global Energy Services, Inc. (GES)

Program Number: SCE 1366-04, PG&E 1494-04, SCG 1495-04

This is an informational program, targeting the 'Hard-To-Reach' Chinese residential and non-residential consumers. The program elements consist of but not limited to, the following:

(1) Professionally produced television Spots with energy efficiency message as backdrop;

(2) Radio and newspaper campaign;

(3) Toll-free hotline number for energy efficiency audits and provide program and rebate information;

(4) In-language targeted energy efficiency workshops providing low and no cost energy efficiency information, State, utility, and 3rd party energy efficiency programs

(5) Participation in community events to create a community energy efficiency presence.

(6) Dedicated Chinese language energy efficiency website.

(7) Coordination with local schools to produce energy efficiency drama to be presented in community events.

Chinese Language Efficiency Outreach – PY 2004-05 Results and Achievements in Los Angeles (SCE & SCG service areas)

CLEO (Chinese Language Efficiency Outreach) program built upon the popularity and success of the program in 2002-2003 and continues to deliver a value added 100% in-language efficiency 'Information and Outreach' program for PY 2004-2005.

In PY 2004-2005, CLEO sustained the efficiency outreach momentum by strengthening community bonds and building efficiency brand identification. An aggressive marketing campaign on Chinese Media (Television, Radio and Newspaper) extolled the virtue of energy saving and encouraged customers to call the CLEO toll free hotline to enroll in free energy efficiency workshops. CLEO targeted around 1,500,000 Chinese customers with its statewide advertising campaign. Significantly more people than this were actually exposed to CLEO advertising. In SCE and SCG service areas, CLEO delivered 115 focused professionally produced television advertisement that were instructional as well as informational. Program goals were 100 television advertisements. The program provided 300 radio advertisements 75 half-page newspaper ads were published as intended.

CLEO held seminars in the Chinese language that provided information about investor owned utility energy efficiency rebate programs. CLEO intended to provide energy efficiency and audit training in 30 classroom settings and 5 community events. CLEO provided 31 such classroom type seminars serving over 1,000 participants as well as 5 community events such as the Chinese New Year and Moon festivals. As a follow up of these seminars CLEO conducted 205 free energy audits and 112 Phone audits. CLEO also set-up a toll free number to provide Chinese language Utility program assistance. The program has found synergies with other existing or adopted Local, Utility or Statewide residential and small commercial efficiency programs. In addition CLEO conducted a Chinese schools efficiency campaign with an 'Energy Artist' schools contest in San Gabriel Valley.

CLEO has created excellent brand recognition within the Chinese community as Utility efficiency partners. CLEO has also met or exceeded its intended program goals within budget and on schedule.

Mobile Energy Clinic

Program Sponsor: ADM Associates, Inc.

Program Number: SDG&E 1105-04, SCE 1106-04, SCG 1487-04

This is a direct install program targeted at owners/operators of small commercial businesses occupying buildings of less than 5,000 square feet of floor area, with focus on strip malls, small convenience stores, laundromats and non-chain restaurants. It is modeled on the 2002-2003 PGC-funded programs operating in SCE and SoCalGas service territories. It focuses on improving energy efficiency for small HTR businesses by (1) implementing no-cost/low-cost measures and (2) providing diagnostics of energy–using equipment. ADM also tests the performance of HVAC equipment and checks that lighting systems and other energy-using equipment (e.g. water heaters, compressors and process equipment) are being properly used. Owners/mangers will be given a checklist of energy efficiency actions that they can take and are provided assistance in locating financing for such actions.

Brief description of the program

The Mobile Energy Clinic Program was focused on improving energy efficiency for small businesses by implementing no-cost/low-cost measures to improve energy efficiency, and by providing diagnostics of energy-using equipment for small businesses. For small businesses that participated in the program, actual no-cost/low-cost improvements were made to their energy using equipment. The performance of their HVAC system, lighting systems, and other energy using equipment such as water heaters, compressors and process equipment was checked. Owners/managers were given a checklist of other energy efficiency actions that they may implement.

The Mobile Energy Clinic teams visited individual businesses for face-to-face marketing. These visits allowed information about lighting, HVAC, and refrigeration measures to be customized to each particular facility, thereby increasing the probability that the owner/operator would have the information and motivation necessary to follow up and to participate in other programs (e.g., Express Efficiency).

For the walk-through evaluation of energy efficiency opportunities, a checklist was developed, based on established energy-auditing procedures, to assess energy efficiency improvements and to perform diagnostics on energy-using equipment. After the walk-through evaluation, the business owners were given checklists showing other energy efficiency actions that they can take. Recommendations regarding energy efficiency improvements were made based on equipment observed at the time of service. Worksheets were completed for the recommended improvements, estimating the potential energy savings and payback periods. Presentation and explanation of the worksheets provided an opportunity to introduce business owners to energy efficiency products and services offered through other programs (e.g., Express Efficiency).

Program Objectives

The Mobile Energy Clinic Program was aimed to achieve the following objectives to satisfy various criteria that the CPUC has specified for local efficiency programs.

1. The Mobile Energy Clinic Program provided long-term annual energy (gas and electric) savings and electric peak demand reductions by performing no-cost/low-cost energy efficiency improvements, by identifying measures that owners/operators of small businesses can implement to improve the energy efficiency of their operations, and by following up with the owners/operators to encourage them to make the improvements. It also educated small business owners on energy efficiency by having them see what was being done to improve energy efficiency.
2. The Mobile Energy Clinic Program addressed major market barriers for improving energy efficiency in small businesses. These barriers included the lack of information about energy efficiency among owners/operators of these facilities and their usually constrained financial circumstances. The program overcame these barriers by using a direct marketing approach with site visits and by providing energy efficiency services free of charge to the small businesses visited.
3. The Mobile Energy Clinic Program had strong equity considerations in that it was targeted toward small businesses, a segment of the market that has traditionally been hard to reach with other programs.
4. The Mobile Energy Clinic Program had synergies with programs run by utilities and other entities, in that it provided a vehicle for directing owners/operators of small businesses to programs that can provide them further assistance or financial incentives (e.g., Express Efficiency).

Energy Savings and Demand Reduction

The Mobile Energy Clinic Program provided long-term annual energy (gas and electric) savings and electric peak demand reductions by performing no-cost/low-cost energy efficiency improvements. It also educated small business owners on energy efficiency by having them see what is to done to improve energy efficiency. A total of 1,196 small hard-to-reach businesses were served in Southern California Gas Company's territory under this program. The following table summarizes savings associated with the no cost/low-cost implementations done in Southern California Gas Company's territory under 2004-2005 Mobile Energy Clinic Program.

In addition to the energy and demand savings associated with the no cost/ low cost implementations, there are savings from adopting the recommended measures. These savings are being quantified and will be included in the final report.

Pre-rinse Spray Head Installation Program for the Food Service Industry

Program Sponsor: California Urban Water Conservation Council

Program Number: PG&E 1198-04, SoCalGas 1200-04

This is a continuation of a program that was approved by the Commission for the 2002-2003 program years. It is a direct-install incentive-based program replaces high water use pre-rinse spray valves with more efficient models at food service facilities: restaurants, cafeterias, institutional kitchens and food preparation companies. There will be no cost to the participants and water utilities throughout the state will contribute a portion of the funds for program implementation. This program targets hard-to-reach customer in both urban and rural settings.

Residential Duct Services

Program Sponsor: Energy Analysis Technologies (EAT)

Program Number: SCE 1311-04, SCG 1327-04

The Energy Analysis Technologies (EAT) Residential Duct Services Program (RDS) offers incentives to consumers in inland areas of the SCE and SoCalGas service territories for duct sealing, as well as basic and advanced HVAC tune-ups. The program's primary objective involves having residential and small commercial customers make repairs to their HVAC systems, which they would not otherwise make due to lack of information, cost concerns, or lack of access to appropriately skilled contractors. The program uses monetary incentives to encourage contractors and their customers to make repairs that will create significant savings on customer energy usage. RDS concentrates on the most cost-effective building vintages and climate zones for measure implementation. Customers who participate in the RDS will receive, as an added benefit, a low flow showerhead and a three pack of compact fluorescent light bulbs.

This program is a continuation of a successful 2002-2003 program effort. EAT assembled a duct services contractor infrastructure for its 2002-2003 RDS program and will leverage these resources in continuing to offer these services in 2004-2005.

The RDS program has met or exceeded all of its goals. The program has reached over 3,500 customers and been successful at all levels. EAT has provided through its contractors duct sealing and HVAC tune-ups to many customers who would not have considered this sort of work. In addition to the benefits of the work on their HVAC systems, customers have been educated on ways they can reduce their energy usage, and how they can best use their HVAC system to achieve maximum comfort at the least cost to them.

Given that the RDS program to not begin until late August of 2004, EAT is pleased with the performance of the program. Not only did the customers receive the energy savings benefits, but HVAC contractors have been provided training they can use with all their future jobs.

Designed for Comfort, Efficient Affordable Housing (EAH)

Program Sponsor: Heschong Mahone Group, Inc

Program Number: PG&E 1146-04, SCE 1147-04, SCG 1148-04, SDG&E 1149-04

This is a statewide, local government program that will target housing authorities and the existing residential affordable housing building stock. The proposed program is based on the current CPUC-funded third-party program called "Efficient Affordable Housing," 0255-02. Heschong Mahone has proposed a number of design and implementation changes based upon their experience with the current program. The primary target of the energy efficiency direct incentives is affordable-qualified buildings, including those with at least 10% occupancy by

Section 8 housing voucher tenants, Section 202-funded (and other HUD-financed) apartment buildings, and projects previously constructed or rehabilitated using Tax Credit and Bond financing. The targeted participants will have the following characteristics: multifamily buildings, renters, and a large percentage of the projects and housing authorities will be in rural areas. As a new requirement for this year's program, only projects within the jurisdictions of housing authorities that have adopted or are intending to adopt a second tier utility allowance schedule will be allowed to participate.

Program Participation

Multifamily Units, Energy Consultants, and HERS Rater Participation

HMG exceeded its program participation goal of 115 multifamily units by 44% with a total of 144 units. Through this program HMG engaged energy consultants and HERS raters into the retrofit market enabling projects to take a thoughtful and strategic approach to improving energy efficiency by a minimum of 20% in their existing multifamily projects.

Voluntary Rehab Organization Participation

This program element was geared toward replacing heating, cooling, and water heating equipment in homes owned by income-qualified homeowners participating in a voluntary rehab program, such as Rebuilding Together or a local county/city rehabilitation program. However, the Rebuilding Together affiliates in Southern California were reluctant to use the funds unless they were compensated for their administrative time to coordinate the installation of such equipment, pay for it upfront and invoice HMG. While this program element was oversubscribed in PG&E's service territory, the Southern California Diego Rebuilding Together affiliates were slow to recognize the benefits to their homeowners and wanted to use funds after the program ended. However, we were able to assist three (2) homeowners, through Rebuilding Together affiliates in the end. We recognized this early on and requested and got CPUC approval to apply these incentive funds to the additional multifamily units described above. HMG suggests that the utilities consider this market in their low income programs.

Tenant Outreach

Through these projects, HMG and the property owners engaged tenants to participate in the planning or execution of the property energy efficiency rehabilitation as well as a tenant workshop at project completion. The tenant workshops served to present the energy efficiency upgrades made to their units and to encourage them to further conserve. Each tenant/unit received an EnergySmart Pak containing 2 CFLs, a low flow shower head, and a faucet aerator along with tips to save energy. The property managers installed the EnergySmart Pak contents in each unit ensuring a high level of installation.

Housing Authority Adoption of an Energy Efficiency-Based Utility Allowance (EEBUA) Schedule

HMG achieved its goal of one EEBUA policy adoption by the Long Beach Housing Authority. However, several more housing authorities are committed to adopting EEBUA in 2006. One of the major barriers to housing authorities' adoption of EEBUA is getting HUD's blessing. While it took two years, HUD finally wrote letters of

approval to housing authorities to adopt EEBUA. HUD also agreed to go through the rule-making process to change their guidance on establishing utility allowances to include an energy efficiency category. This will have a national impact.

Energy Smart Paks

HMG successfully distributed 100% of the 200 EnergySmart Paks – most of which were installed in units of participating projects. The remaining were distributed to the affordable housing owner-developer and housing authorities as a marketing tool to get their attention about the program and to encourage them to save energy in their own homes.

Energy Savings

According to the CPUC workbook, HMG has exceeded it energy savings goals in every category by between 15 and 20 percent:

Other Marketing Activities

Marketing Materials

HMG created a set of marketing materials including a Web site, a folder containing a description of, how to qualify for, and how to apply for the Designed for Comfort program, an exhibit for conferences, an EnergySmart Pak with a booklet on how to use the contents of the Pak and how to further conserve energy, as well as numerous presentations tailored to each audience.

Published Articles

HMG exceeded its goal of publishing 1 article in industry publications by achieving two publications including articles in the Southern California Association of Non-Profit Housing and the California Redevelopment Association. HMG also had articles published in Home Energy Magazine, and the Local Government Commission's "Currents" newsletter.

Marketing and Outreach

HMG exceeded its goal of marketing and outreach through conferences, exhibits, and workshops to recruit program participation. HMG presented or exhibited at the following conferences: Housing California (2), Southern California Association of Non-Profit Housing (2), California Redevelopment Association (2), Affordable Housing Management Association (1), California Housing Finance Association (1), Enterprise Foundation/HUD Workshop (1), and the Kennedy Commission (1).

Comprehensive Hard-to-Reach Mobile Home Program

Program Sponsor: American Synergy Corporation

Program Number: SCE 1275-04, SCG 1276-04

This is a continuation of the program funded in 2002-2003. This comprehensive program provides education and no cost installation of the following measures to hard-to-reach residential customers in mobile homes: (a) air conditioning tune-ups; (b) compact fluorescent lamps (CFLs)

and hard wired CFL fixtures; (c) low flow showerheads, aerators, and water heater temperature setback; (d) set back thermostats; (e) water heater timers; and (f) enhanced duct sealing. The measures are estimated to provide sustainable energy savings from eight (8) to twenty (20) years.

Program Overview:

This has been an exceptional program that has met or exceeded the program objectives while serving over 4,500 Mobile Home SCG customers. The energy savings achieved during this program was 499,588 annual therms and lifecycle therms saved of 7,904,446.

According to EM&V studies, the customer satisfaction rate is in the range of 97%. There were few complaints from this program, but many letters and calls of satisfaction and gratitude for the service.

This program serves a segment of the market among others, that especially benefits from these energy savings as a large share of the mobile home customers are older, fixed-income individuals, who often live alone and are least likely to take advantage of energy efficiency programs.

All installations for this program are now complete and the EM&V field work is being completed. The work was completed on time as outlined in the original proposal.

The narrative reports and EEGA worksheets have been filed monthly on a timely and consistent basis throughout the program. American Synergy Corporation has appreciated the opportunity to work with Southern California GAS and it's customers on the Comprehensive Mobile Home Program.

Summary of Budget and Energy Savings (From EEGA Workbook Summary)

Budget and Expenditures	Program Budget	Actual Cumulative	% of Bdgt	Cumulative & Committed	% of Bdgt	Unspent
Total	$1,274,222	$1,244,060	98%	$1,244,060	98%	$30,161

Energy Effects	Program Goals	Actual Cumulative	% of Goals	Cumulative & Committed	% of Goals	Goals Minus Cumulative (+ =Exceeded Plan)
Annual Therms	481,401	499,588	104%	499,588	104%	+18,187
Lifecycle Therms	7,593,480	7,904,446	104%	7,904,446	104%	+310,966

TABLE 9.1
SUMMARY OF COSTS:
Non-IOU Programs

	2005		Cumulative 2004-05	
	PGC & Procurement	PGC & Procurement	PGC & Procurement	PGC & Procurement
Non-IOU Programs[1]	Budgeted	Recorded	Budgeted	Recorded
CA UWCC - (Calif. Urban Water Conservation Council)	$ 1,127,081	$ 964,613	$ 2,254,162	$ 1,216,316
Energy Analysis Technologies	$ 364,491	$ 525,876	$ 728,982	$ 587,096
Heschong Mahone Group, Inc.	$ 128,947	$ 162,498	$ 257,894	$ 213,621
SESCO, Inc.	$ 1,236,322	$ -	$ 2,472,643	$ -
ADM	$ 492,230	$ 691,071	$ 984,460	$ 924,301
ASC	$ 767,415	$ 622,030	$ 1,534,830	$ 1,244,060
CSU Chico	$ 46,243	$ 111,311	$ 92,486	$ 206,652
CSU Fresno	$ 167,620	$ 59,472	$ 335,240	$ 82,720
GES (Global Energy Services)	$ 70,921	$ 57,433	$ 141,841	$ 127,742
Total Non-IOU Programs	$ 4,401,269	$ 3,194,304	$ 8,802,538	$ 4,602,508

[1] All Non-IOU Program data were provided by the Non-IOU Program Implementers.

TABLE 9.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
Non-IOU Programs[1]

Annual Energy Reductions, Electric, MWH

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
CSU Chico-Nonresidential Fenestration Certification Initiative (NFCI)	-	-	-	-
CSU Fresno-Agricultural Pumping Efficiency Program	-	-	-	-
ASC	-	-	-	-
GES (Global Energy Services)-Chinese Language Efficiency Outreach (CLEO)				
ADM-Mobile Energy Clinic Program	1,358	10,867	2,196	16,728
CA UWCC - (Calif. Urban Water Conservation Council)-Pre-rinse Spray Head Installation Program	-	-	-	-
Energy Analysis Technologies-Energy Analysis Technologies	1,280	23,245	1,408	25,312
Heschong Mahone Group, Inc. -Efficient Affordable Housing: Designed for Comfort	110	2,194	111	2,227
SESCO, Inc	-	-	-	-
Total Non-IOU Programs	**2,748**	**36,306**	**3,715**	**44,267**

Demand Reductions, Electric, MW

	PY 2005 Annual Recorded	PY 2004-05 Annual Recorded
CSU Chico-Nonresidential Fenestration Certification Initiative (NFCI)	-	-
CSU Fresno-Agricultural Pumping Efficiency Program	-	-
ASC	-	-
GES (Global Energy Services)-Chinese Language Efficiency Outreach (CLEO)	-	-
ADM-Mobile Energy Clinic Program	1.32	2.03
CA UWCC - (Calif. Urban Water Conservation Council)-Pre-rinse Spray Head Installation Program	-	-
Energy Analysis Technologies-Energy Analysis Technologies	1.44	1.59
Heschong Mahone Group, Inc. -Efficient Affordable Housing: Designed for Comfort	0.13	0.13
SESCO, Inc	-	-
Total Non-IOU Programs	**2.89**	**3.75**

Annual Energy Reductions, Natural Gas, Therms, 000's

	PY 2005 Annual Recorded	PY 2005 Life Cycle Recorded	PY 2004-05 Annual Recorded	PY 2004-05 Life Cycle Recorded
CSU Chico-Nonresidential Fenestration Certification Initiative (NFCI)	-	-	-	-
CSU Fresno-Agricultural Pumping Efficiency Program	-	-	2	24
ASC	481	7,593	963	22,299
GES (Global Energy Services)-Chinese Language Efficiency Outreach (CLEO)				
ADM-Mobile Energy Clinic Program	359	3,547	370	3,720
CA UWCC - (Calif. Urban Water Conservation Council)-Pre-rinse Spray Head Installation Program	2,617	13,087	3,395	16,196
Energy Analysis Technologies-Energy Analysis Technologies	84	1,611	91	1,899
Heschong Mahone Group, Inc. -Efficient Affordable Housing: Designed for Comfort	9	176	9	176
SESCO, Inc	-	-	-	-
Total Non-IOU Programs	**3,550**	**26,013**	**4,830**	**44,313**

[1] All data were provided by the Non-IOU Program Implementers.

TABLE 9.3
SUMMARY OF COST-EFFECTIVENESS:
Non-IOU Programs[1]

Benefit-Cost Ratios

	PY 2005 Recorded				Cumulative PY 2004-05 Recorded			
	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[2]	Levelized Cost ¢(/Therm)[2]	Program Administration Cost Test	Total Resource Cost Test	Levelized Cost ¢(/kWh)[2]	Levelized Cost ¢(/Therm)[2]
CSU Chico-Nonresidential Fenestration Certification Initiative (NFCI)	-	-	-	-	-	-	-	-
CSU Fresno-Agricultural Pumping Efficiency Program	-	-	-	-	0.10	0.09	-	573.00
ASC	3.88	2.51		21.62	1.94	2.51		21.62
GES (Global Energy Services)-Chinese Language Efficiency Outreach (CLEO)	-	-	-	-	-	-	-	-
ADM-Mobile Energy Clinic Program	2.12	2.55	4.41	25.88	1.96	2.35	5.90	34.65
CA UWCC - (Calif. Urban Water Conservation Council)-Pre-rinse Spray Head Installation Program	5.43	5.43	-	7.37	5.58	5.58	-	7.17
Energy Analysis Technologies-Energy Analysis Technologies	2.76	1.46	5.39	108.79	2.70	1.71	5.04	101.71
Heschong Mahone Group, Inc. -Efficient Affordable Housing: Designed for Comfort	0.79	0.84	22.68	264.88	0.64	0.65	22.68	264.88
SESCO, Inc	-	-	-	-	-	-	-	-

[1] All data were provided by the Non-IOU Program Implementers.

[2] Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

TABLE 9.4
SUMMARY OF COST-EFFECTIVENESS:
Non-IOU Programs[1]

TRC Net Benefits, $MILL

	PY 2005 Recorded	Cumulative PY 2004-05 Recorded
CSU Chico-Nonresidential Fenestration Certification Initiative (NFCI)	$ (0.11)	$ (0.21)
CSU Fresno-Agricultural Pumping Efficiency Program	$ (0.06)	$ (0.08)
ASC [2]	$ 1.45	$ 1.45
GES (Global Energy Services)-Chinese Language Efficiency Outreach (CLEO)	$ (0.06)	$ (0.13)
ADM-Mobile Energy Clinic Program	$ 0.89	$ 1.04
CA UWCC - (Calif. Urban Water Conservation Council)-Pre-rinse Spray Head Installation Program	$ 4.27	$ 5.57
Energy Analysis Technologies-Energy Analysis Technologies	$ 0.46	$ 0.66
Heschong Mahone Group, Inc. -Efficient Affordable Housing: Designed for Comfort	$ (0.02)	$ (0.07)
SESCO, Inc	-	-
Total	**$ 6.82**	**$ 8.23**

[2]The program committed $1,000,000 - no savings are recorded

2005 ENERGY EFFICIENCY PROGRAMS—TECHNICAL APPENDIX

EXECUTIVE SUMMARY

This Technical Appendix provides additional supporting documentation for SoCalGas's "Annual Summary of Energy Efficiency Programs," dated May 2006, which reviews the progress of activities during 2005. SoCalGas is reporting these results using the Energy Efficiency Programs Reporting Requirements Manual 2, draft dated January 2005, and updated and agreed to in December 2005 by the utilities, Division of Ratepayer Advocates and the Energy Division of the California Public Utilities Commission.

SoCalGas's 2004-2005 Energy Efficiency Program plans were filed on September 23, 2003. The Commission issued D.03-04-055 approving the utilities' 2004-2005 statewide energy efficiency programs and budgets with modifications to program design, budgets and program performance

All incremental measure costs, energy savings, and measure lives are documented in SoCalGas's September 23, 2003 Request for Approval of 2004 - 2005 Energy Efficiency

Table TA 1.1
Avoided Costs

PGC Funded Program Year 2004-2005 Avoided Costs (Cumulative and Discounted)

Year	Electric $/MWh	Gas $/Therm
2004	66.190	0.430
2005	128.797	0.837
2006	182.840	1.239
2007	234.738	1.626
2008	284.334	1.999
2009	331.834	2.357
2010	377.305	2.701
2011	420.736	2.990
2012	462.498	3.268
2013	502.707	3.534
2014	541.427	3.786
2015	578.791	4.031
2016	614.831	4.269
2017	649.669	4.496
2018	683.363	4.717
2019	715.979	4.930
2020	747.414	5.135
2021	777.862	5.331
2022	807.788	5.516
2023	836.249	5.699

TABLE TA 2.1
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (RESIDENTIAL)
NATURAL GAS

PROGRAM	UTILITY COSTS							
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total	IMC
	Actual	Committed	Actual	Committed				
Information								
Home Energy Efficiency Survey	$ 4,633	$ -	$ 395,242	$ -	$ -	$ -	$ 399,875	$ -
Total Information	**$ 4,633**		**$ 395,242**	**$ -**	**$ -**	**$ -**	**$ 399,875**	**$ -**
EMS								
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total EMS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
EEI								
SPC								
Rebates								
Multifamily Rebates Program	$ 2,725,823	$ -	$ 648,152	$ -	$ -	$ -	$ 3,373,975	$ 4,068,052
Single Family Energy Efficiency Rebates Program	$ 5,655,770	$ -	$ 2,515,033	$ -	$ -	$ -	$ 8,170,803	$ 15,354,722
Total EEI	**$ 8,381,592**	**$ -**	**$ 3,163,186**	**$ -**	**$ -**	**$ -**	**$ 11,544,778**	**$ 19,422,774**
Upstream Programs								
Financial Assistance								
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Upstream	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Residential	**$ 8,386,225**	**$ -**	**$ 3,558,428**	**$ -**	**$ -**	**$ -**	**$ 11,944,653**	**$ 19,422,774**

TABLE TA 2.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS
RESIDENTIAL NATURAL GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Home Energy Efficiency Survey	$ 16,001	$ 371,670	$ -	$ 7,571	$ 395,242
Total Information	**$ 16,001**	**$ 371,670**	**$ -**	**$ 7,571**	**$ 395,242**
EMS					
	$ -	$ -	$ -	$ -	$ -
Total EMS	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
EEI					
SPC	$ -	$ -	$ -	$ -	$ -
Rebates					
Multifamily Rebates Program	$ 177,370	$ 419,615	$ -	$ 51,167	$ 648,152
Single Family Energy Efficiency Rebates Program	$ 559,153	$ 1,822,874	$ -	$ 133,006	$ 2,515,033
Loans					
Total EEI	**$ 736,523**	**$ 2,242,490**	**$ -**	**$ 184,173**	**$ 3,163,186**
Upstream Programs					
Financial Assistance					
	$ -	$ -	$ -	$ -	$ -
Total Upstream	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Residential	**$ 752,524**	**$ 2,614,160**	**$ -**	**$ 191,744**	**$ 3,558,428**

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Statewide Single Family Rebates
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2005	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2006	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2007	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2008	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2009	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2010	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2011	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2012	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2013	3,893	6,867,192	2,781,697					2,538,080	1,712,224
2014	3,893	6,867,192	2,781,697						61,490
2015	3,893	3,910,829	1,165,155						61,490
2016	3,893	3,910,829	1,165,155						61,490
2017	3,893	3,910,829	1,165,155						61,490
2018	3,893	3,910,829	1,165,155						61,490
2019	3,893	3,910,829	1,165,155						
2020	3,893	3,910,829	1,165,155						
2021	3,893	3,910,829	1,165,155						
2022	3,893	3,910,829	1,165,155						
2023	3,893	3,910,829	1,165,155						
SUM (Lifecycle)	3,893	110,736,577	41,085,055				-	25,380,800	17,429,690

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Statewide Multifamily Rebates
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004	111	10,788,201	938,348					4,344	745,472
2005	111	10,788,201	938,348					4,344	745,472
2006	111	10,788,201	938,348					4,344	745,472
2007	111	10,788,201	938,348					4,344	745,472
2008	111	10,788,201	938,348					4,344	745,472
2009	111	10,788,201	938,348					4,344	745,472
2010	111	10,788,201	938,348					4,344	745,472
2011	111	10,788,201	938,348					4,344	745,472
2012	111	10,788,201	938,348					4,344	745,472
2013	111	10,788,201	938,348					4,344	745,472
2014	111	10,788,201	938,348						717,050
2015	111	10,788,201	938,348						717,050
2016	111	76,802	6,922						717,050
2017	111	76,802	6,922						717,050
2018	111	76,802	6,922						717,050
2019	111	76,802	6,922						205,500
2020	111	76,802	6,922						205,500
2021	111	76,802	6,922						205,500
2022	111	76,802	6,922						205,500
2023	111	76,802	6,922						205,500
SUM (Lifecycle)	111	130,072,830	11,315,549				-	43,440	12,067,468

Table TA 2.4
Measure Detail: Residential Program Area
Statewide Single Family Rebates
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
HVAC	50000-Programmable Thermostat	17,514	$ 798,645	$1,015,812.00	1,424,512	5,446,353	11	3.52	6.45
HVAC	50002-Central Gas Furnace >= 90% AFUE	3,503	$ 67,127	$ 2,396,052	-	577,505	20		5.67
HVAC	50004-Attic Insulation	6,751,787	$ 678,477	$ 3,375,894	2,354,622	3,482,426	20	2.04	9.41
HVAC	50005-Wall Insulation	2,878,388	$ 279,620	$ 2,590,549	555,887	1,849,728	20	3.56	7.30
Misc	50001-Gas Storage Water Heater (EF>= 0.62)	4,730	$ 30,003	$ 260,150	-	258,124	15		5.33
Misc	50010-Energy Star Labeled Dishwasher	18,760	$ 144,249	$ 1,913,520	392,315	848,685	10	2.05	6.67
Misc	50011-Clothes Washer Tier I	5,572	$ 59,862	$ 975,100	89,633	425,372	10	3.73	5.53
Misc	50012-Clothes Washer Tier II	27,910	$ 457,049	$ 5,582,000	538,766	3,393,298	10	4.73	5.29

Table TA 2.4
Measure Detail: Residential Program Area
Statewide Multifamily Rebates
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs (3)	
End Use	Measure Description	Recorded Qty	Administrative Cost (1)	Incremental Measure Cost (2)	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
HVAC	51000-Programmable Thermostat	28,055	$ 469,766	$ 1,627,190	5,517,784	3,341,186	12	0.54	6.24
HVAC	51002-Central Gas Furnace >= 90% AFUE	5	$ 22	$ 27,650	-	423	20		634.31
HVAC	51004-Attic Insulation	39,418	$ 4,710	$ 19,709	56,776	32,047	20	0.59	7.10
HVAC	51005-Wall Insulation	6,824	$ 160	$ 6,142	381	2,637	20	2.98	2.95
Misc	51001-Natural Gas Storage Water Heater (EF>= 0.6	31	$ 97	$ 1,705	-	1,822	15		3.81
Misc	51007-Low-Flow Showerhead	61	$ 122	$ 563	-	2,305	15		2.61
Misc	51008-Central System Natural Gas Water Heater	227	$ 12,986	$ 908,000	-	244,897	15		3.17
Misc	51009-Central System Gas Boiler: Water Heating O	274	$ 55,270	$ 1,112,440	-	1,042,295	20		2.75
Misc	51011-Water Heater Controller	9	$ 1,803	$ 31,500	-	34,002	15		7.14
Misc	51014-Energy Star Dishwasher	248	$ 692	$ 25,296	-	13,042	10		2.39
Misc	51015-Gas Wtr Htr and/or Boiler Controller (< 20	82	$ 10,112	$ 123,000	-	190,699	15		2.79
Misc	51016-Energy Star Coin-Op Clothes Washer (In Com	160	$ 3,640	$ 28,000	1,689	66,954	10	12.04	2.23
Misc	51018-Gas Wtr Htr and/or Boiler Controller Digit	443	$ 88,750	$ 664,500	-	1,673,673	15		2.47
Misc	51020-Tier II Clothes Washer (In Coin-Op Laundry	3	$ 22	$ 600	58	365	10	4.80	20.97

TABLE TA 3.1
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NONRESIDENTIAL)
NATURAL GAS

PROGRAM	UTILITY COSTS							
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total	IMC
	Actual	Committed	Actual	Committed				
Information								
Building Operator Certification Program	$ -	$ -	$ 123,415	$ -	$ -	$ -	$ 123,415	$ -
Total Information	**$ -**	**$ -**	**$ 123,415**	**$ -**	**$ -**	**$ -**	**$ 123,415**	**$ -**
EMS								
Large								
Small/ Medium								
Energy Audit Program	$ -	$ -	$ 689,622	$ -	$ -	$ -	$ 689,622	$ -
Total EMS	**$ -**	**$ -**	**$ 689,622**	**$ -**	**$ -**	**$ -**	**$ 689,622**	**$ -**
EEI Cutomized Rebates								
Large	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Small/Medium	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
EEI Prescriptive Rebates								
Large	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Small								
Express Efficiency Program	$ 2,773,166	$ -	$ 1,982,878	$ -	$ -	$ -	$ 4,756,044	$ 3,652,999
Non-Residential Financial Incentives	$ 1,819,801	$ -	$ 1,367,058	$ -	$ -	$ -	$ 3,186,859	$ 1,852,751
EEI SPCs								
Large	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Small	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total EEI	**$ 4,592,967**	**$ -**	**$ 3,349,936**	**$ -**	**$ -**	**$ -**	**$ 7,942,903**	**$ 5,505,750**
Upstream Programs								
Financial Assistance	$ -	$ -	$ -		$ -	$ -	$ -	$ -
Total Upstream	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Nonresidential	**$ 4,592,967**	**$ -**	**$ 4,162,973**	**$ -**	**$ -**	**$ -**	**$ 8,755,940**	**$ 5,505,750**

TABLE TA 3.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS
NONRESIDENTIAL NATURAL GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Building Operator Certification Program	$ 66,376	$ 54,301	$ -	$ 2,738	$ 123,415
Total Information	**$ 66,376**	**$ 54,301**	**$ -**	**$ 2,738**	**$ 123,415**
EMS					
Large					
Small/ Medium					
Energy Audit Program	$ 455,071	$ 222,773	$ -	$ 11,778	$ 689,622
Total EMS	**$ 455,071**	**$ 222,773**	**$ -**	**$ 11,778**	**$ 689,622**
EEI Cutomized Rebates					
Large	$ -	$ -	$ -	$ -	$ -
Small/Medium	$ -	$ -	$ -	$ -	$ -
EEI Prescriptive Rebates					
Large	$ -	$ -	$ -	$ -	$ -
Small					
Express Efficiency Program	$1,503,561	$ 404,293	$ -	$ 75,024	$1,982,878
Non-Residential Financial Incentives	$1,034,120	$ 272,524	$ -	$ 60,414	$1,367,058
EEI SPCs	$ -	$ -	$ -	$ -	$ -
Total EEI	**$2,537,681**	**$ 676,817**	**$ -**	**$135,438**	**$3,349,936**
Upstream Programs					
Financial Assistance	$ -	$ -	$ -	$ -	$ -
Total Upstream	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Nonresidential	**$3,059,128**	**$ 953,891**	**$ -**	**$149,954**	**$4,162,973**

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Statewide Express Efficiency-Rebates
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004		38,586	324,466						2,940,774
2005		38,586	324,466						2,940,774
2006		38,586	324,466						2,940,774
2007		38,586	324,466						2,940,774
2008		38,586	324,466						2,891,877
2009		38,586	324,466						1,542,569
2010		38,586	324,466						1,542,569
2011		38,586	324,466						1,542,569
2012		38,586	324,466						1,542,569
2013		38,586	324,466						1,542,569
2014		38,586	324,466						1,243,578
2015									1,243,578
2016									1,243,578
2017									1,229,010
2018									1,229,010
2019									1,072,853
2020									1,072,853
2021									1,072,853
2022									1,072,853
2023									1,072,853
SUM (Lifecycle)	-	424,446	3,569,128	-	-	-	-	-	33,920,835

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Local Nonresidential Financial Incentives
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004									2,035,787
2005									2,035,787
2006									2,035,787
2007									2,035,787
2008									2,035,787
2009									2,035,787
2010									2,035,787
2011									2,035,787
2012									2,035,787
2013									1,980,851
2014									1,980,851
2015									1,980,851
2016									1,124,565
2017									1,124,565
2018									1,124,565
2019									1,068,876
2020									1,068,876
2021									1,068,876
2022									1,068,876
2023									1,068,876
SUM (Lifecycle)	-	-	-	-	-	-	-	-	32,982,715

Table TA 3.4
Measure Detail: Residential Program Area
Statewide Express Efficiency-Rebates
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
HVAC	53021-Programmable Thermostat	118	$ 84,309	$ 6,844	20,055	469,565	11	28.51	8.52
HVAC	53050-Programmable Thermostat - Hotel Room	674	$ 5,820	$ 39,092	-	33,802	11		8.25
HVAC	53051-Programmable Thermostat - Classroom	805	$ 116,366	$ 46,690	-	675,784	11		8.17
Misc	53000-CML H-axis Clothes Washer	2,008	$ 174,683	$ 817,256	-	1,014,456	10		8.12
Misc	53001-Greenhouse Heat Curtain	3,221,596	$ 415,144	$ 1,578,582	-	2,410,915	5		7.68
Misc	53010-Tank Insulation	2,420	$ 10,280	$ 9,849	-	59,702	13		8.33
Misc	53012-Storage Water Heaters (LRG >75 MBTUH)	42,663	$ 54,553	$ 174,449	-	316,811	15		8.50
Misc	53013-Storage Water Heaters (SML <= 75 MBTUH)	941	$ 484	$ 2,531	-	2,812	15		8.55
Misc	53014-Instantaneous Water Heaters (>= 200 MBTUH)	48,553	$ 53,377	$ (64,090)	-	309,985	15		8.50
Misc	53015-Instantaneous Water Heaters (< 200 MBTUH)	12,134	$ 13,340	$ (94,281)	-	77,469	15		8.49
Misc	53022-Infrared Film for Greenhouses	857,840	$ 13,143	$ 25,735	-	76,328	4		7.53
Misc	53023-Low-Flow Pre-Rinse Spray Valve	1	$ 188	$ 60	-	1,094	5		10.13
Misc	53025-Space Heating Boiler - Steam	157,666	$ 95,275	$ 353,471	-	553,300	20		8.97
Misc	53028-Commercial Boiler (Non-Space Heat, Non-Pro	217,675	$ 617,077	$ 372,681	-	3,583,627	20		8.97
Misc	53029-Process Boiler - Steam	138,466	$ 298,336	$ 300,125	-	1,732,560	20		8.97
Misc	53030-Water Heating -Commercial Pool Heater	38,305	$ 30,503	$ 76,610	-	177,141	5		7.68

Table TA 3.4
Measure Detail: Residential Program Area
Local Nonresidential Financial Incentives
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
Misc	55000-PARR Convection Oven	15,071	$ 41,133	$ 148,095	-	262,192	12		7.82
Misc	55001-PARR Under-fired broiler	47,849	$ 168,803	$ 123,800	-	1,076,001	12		7.82
Misc	55002-PARR Griddle	12,636	$ 35,662	$ 82,585	-	227,319	12		7.82
Misc	55003-PARR Rotating Rack Oven	8,879	$ 64,163	$ 89,993	-	408,997	12		7.82
Misc	55005-PARR Fryer - High Effic. Unit	29,007	$ 107,032	$ 272,080	-	682,255	12		7.82
Misc	55006-PARR Fryer - Unit with Electr. Ignition	6,510	$ 9,010	$ 23,364	-	57,434	12		7.82
Misc	55007-NRER Furnace Replacement	116,613	$ 83,405	$ 66,656	-	531,650	20		6.81
Misc	55008-NRER Kiln Replacement	1,389	$ 993	$ 737	-	6,333	20		6.81
Misc	55009-NRER Oven Replacement	140,262	$ 100,320	$ 147,864	-	639,468	20		6.81
Misc	55010-NREC Heat Recovery	46,735	$ 33,426	$ 43,118	-	213,069	20		6.81
Misc	55011-NRER Misc. Process Equip. Replacement	313,567	$ 224,273	$ 120,598	-	1,429,583	20		6.81
Misc	55012-NREC Equip. Modernization	450,310	$ 322,076	$ 331,428	-	2,053,007	20		6.81
Misc	55013-NRER Engine Rebuild/Replacement	21,118	$ 12,501	$ 28,896	-	79,685	15		6.45
Misc	55014-NRER Pump Rebuild/Replacement	34,571	$ 20,465	$ 56,468	-	130,448	15		6.45
Misc	55015-PARR Combination Oven	7,557	$ 56,004	$ 175,039	-	356,985	12		7.82
Misc	55016-PARR Deck Oven	580	$ 1,328	$ 5,285	-	8,463	12		7.87
Misc	55017-PARR Over-Fired Charbroiler	1,553	$ 9,248	$ 19,430	-	58,950	12		7.83
Misc	55018-PARR Cheesemelter	1,285	$ 8,902	$ 10,764	-	56,743	12		7.83
Misc	55019-PARR Salamander	503	$ 2,513	$ 4,925	-	16,020	12		7.85
Misc	55020-PARR Steam Kettle	2,574	$ 25,174	$ 54,496	-	160,468	12		7.83
Misc	55021-PARR Braising Pan	797	$ 2,685	$ 11,584	-	17,117	12		7.86
Misc	55022-PARR Cabinet Steamer	2,728	$ 9,780	$ 25,634	-	62,343	12		7.83
Misc	55025-PARR Conveyor Oven	8,054	$ 20,808	$ 129,508	-	132,636	9		7.64
Misc	55026-PARR Rotisserie Oven	1,839	$ 7,353	$ 39,557	-	46,870	9		7.66

TABLE TA 4.1
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NEW CONSTRUCTION)
NATURAL GAS

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total	IMC
	Actual	Committed	Actual	Committed				
Res New Construction								
California Energy Star New Homes Program	$ 393,050	$ 1,779,850	$ 877,190	$ -	$ -	$ -	$ 3,050,090	$ 505,018
Total Residential	**$ 393,050**	**$ 1,779,850**	**$ 877,190**	**$ -**	**$ -**	**$ -**	**$ 3,050,090**	**$ 505,018**
Nonresidential New Construction								
Savings by Design Program	$ 301,140	$ 2,786,120	$ 775,683	$ -	$ -	$ -	$ 3,862,943	$1,428,867
Total Nonresidential	**$ 301,140**	**$ 2,786,120**	**$ 775,683**	**$ -**	**$ -**	**$ -**	**$ 3,862,943**	**$1,428,867**
Other								
Total Other	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total New Construction	**$ 694,190**	**$ 4,565,970**	**$ 1,652,873**	**$ -**	**$ -**	**$ -**	**$ 6,913,033**	**$1,933,885**

TABLE TA 4.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS (NEW CONSTRUCTION)
NATURAL GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Res New Construction					
California Energy Star New Homes Program	$ 608,099	$ 238,943	$ -	$ 30,148	$ 877,190
Total Residential	**$ 608,099**	**$ 238,943**	**$ -**	**$ 30,148**	**$ 877,190**
Nonresidential New Construction					
Savings by Design Program	$ 467,174	$ 269,725	$ -	$ 38,784	$ 775,683
Total NonResidential	**$ 467,174**	**$ 269,725**	**$ -**	**$ 38,784**	**$ 775,683**
Other					
	$ -	$ -	$ -	$ -	$ -
Total Other	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total New Construction	**$ 1,075,273**	**$ 508,668**	**$ -**	**$ 68,932**	**$ 1,652,873**

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Statewide Res New Construction Energy Star Program--Single Family and Multifamily
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004	2,804	2,037,333	166,797						
2005	2,804	2,037,333	166,797						
2006	2,804	2,037,333	166,797						
2007	2,804	2,037,333	166,797						
2008	2,804	2,037,333	166,797						
2009	2,804	2,037,333	166,797						
2010	2,804	2,037,333	166,797						
2011	2,804	2,037,333	166,797						
2012	2,804	2,037,333	166,797						
2013	2,804	2,037,333	166,797						
2014	2,804	2,037,333	166,797						
2015	2,804	2,037,333	166,797						
2016	2,804	2,037,333	166,797						
2017	2,804	2,037,333	166,797						
2018	2,804	2,037,333	166,797						
2019	2,804	2,037,333	166,797						
2020	2,804	2,037,333	166,797						
2021	2,804	2,037,333	166,797						
2022									
2023									
SUM (Lifecycle)	2,804	36,671,994	3,002,342				-	-	-

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Statewide Nonres New Construction Savings by Design
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2005	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2006	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2007	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2008	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2009	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2010	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2011	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2012	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2013	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2014	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2015	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2016	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2017	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2018	1,449	6,539,442	74,553	227	795,419		165	1,899,983	110,502
2019									
2020									
2021									
2022									
2023									
SUM (Lifecycle)	1,449	98,091,630	1,118,295	227	11,931,285	-	165	28,499,745	1,657,530

Table TA 4.4
Measure Detail: New Construction Projected Annual Program Energy Reductions
Statewide Res New Construction Energy Star Program--Single Family and Multifamily
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
HVAC	52006-Single Family Inland 15% Above AB970	623	$ 162,094	$ 418,195	313,654	52,072	18	3.22	132.41
HVAC	52007-Multifamily 15% Above AB970	4,178	$ 715,096	$ 213,078	954,219	659,226	18	4.65	46.12

Table TA 4.4
Measure Detail: New Construction Projected Annual Program Energy Reductions
Statewide Nonres New Construction Savings by Design
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
HVAC	54002-HVAC (per kWh)	391,429	$ 28,887	$ 82,200	219,352	-	15	0.80	
HVAC	54007-Space Heat/Boiler (per Therm)	5,977	$ 441	$ -	3,349	-	15	0.80	
HVAC	54009-Whole Bldg (per kWh)	6,140,650	$ 453,178	$ 614,065	3,441,147	-	15	0.80	
HVAC	54010-Whole Bldg (per Therm)	74,553	$ 37,973	$ 221,422	-	288,346	15		5.55
Light	54003-Lighting (per kWh)	795,419	$ 58,702	$ 127,267	445,743	-	15	0.80	
Misc	54004-Misc (per kWh)	1,899,983	$ 140,218	$ 417,996	1,064,728	-	15	0.80	
Misc	54005-Misc (per Therm)	110,502	$ 56,284	$ 279,570	-	427,384	15		5.55

TABLE TA 5.1
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (CROSSCUTTING)
NATURAL GAS

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total	IMC
	Actual	Committed	Actual	Committed				
Information								
Codes & Standards Program	$ -	$ -	$ 115,496	$ -	$ -	$ -	$ 115,496	$ -
Education and Training Services	$ -	$ -	$1,925,429	$ -	$ -	$ -	$ 1,925,429	$ -
Emerging Technologies Program	$ -	$ -	$ 932,254	$ -	$ -	$ -	$ 932,254	$ -
Total Information	**$ -**	**$ -**	**$2,973,179**	**$ -**	**$ -**	**$ -**	**$ 2,973,179**	**$ -**
Crosscutting EMS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Crosscutting EEI	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Upstream MT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Upstream MT	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Crosscutting	**$ -**	**$ -**	**$2,973,179**	**$ -**	**$ -**	**$ -**	**$ 2,973,179**	**$ -**

TABLE TA 5.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS (CROSSCUTTING)
NATURAL GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Codes & Standards Program	$ (9,263)	$ 123,108	$ -	$ 1,651	$ 115,496
Education and Training Services	$ 1,123,776	$ 769,288	$ -	$ 32,365	$ 1,925,429
Emerging Technologies Program	$ 534,231	$ 381,147	$ -	$ 16,876	$ 932,254
Total Information	**$ 1,648,744**	**$ 1,273,543**	**$ -**	**$ 50,892**	**$ 2,973,179**
Crosscutting EMS					
EMS	$ -	$ -	$ -	$ -	$ -
Crosscutting EEI	$ -	$ -	$ -	$ -	$ -
Upstream MT	$ -	$ -	$ -	$ -	$ -
Total Upstream MT	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Crosscutting	**$ 1,648,744**	**$ 1,273,543**	**$ -**	**$ 50,892**	**$ 2,973,179**

MA & E AND REGULATORY OVERSIGHT

Not applicable

TABLE 7.1
COST OF PERFORMANCE INCENTIVES

Gas

	2004		2005	
	Budgeted	Claimed	Budgeted	Claimed
Residential Program Area	NA	NA	NA	NA
Nonresidential Program Area	NA	NA	NA	NA
New Construction	NA	NA	NA	NA
Crosscutting	NA	NA	NA	NA
General/Other	NA	NA	NA	NA
Total1	NA	NA	NA	NA

TABLE TA 8.1
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS
IOU PARTNERSHIP PROGRAMS
GAS

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total	IMC
	Actual	Committed	Actual	Committed				
IOU Partnership Programs								
Bakersfield/Kern Energy Watch Partnership	$ -	$ -	$ 499,004	$ -	$ -	$ -	$ 499,004	$ -
Energy Coalition ("Twelve Cities Project")	$ -	$ -	$1,167,551	$ -	$ -	$ -	$ 1,167,551	$ 474,960
LA County	$ -	$ -	$ 679,636	$ -	$ -	$ -	$ 679,636	$ -
South Bay Cities Council of Governments	$ -	$ -	$ 165,300	$ -	$ -	$ -	$ 165,300	$ -
UC/CSU - Statewide Partnership	$ -	$ -	$1,620,867	$ -	$ -	$ -	$1,620,867	$ 1,460,969
Ventura REA	$ -	$ -	$ 294,977	$ -	$ -	$ -	$294,977	$ 21,118
Total IOU Partnership Programs	**$ -**	**$ -**	**$4,427,335**	**$ -**	**$ -**	**$ -**	**$ 4,427,335**	**$ 1,957,047**

TABLE TA 8.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS
IOU PARTNERSHIP PROGRAMS
GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
IOU Partnership Programs					
Bakersfield/Kern Energy Watch Partnership	$ 408	$ 498,596	$ -	$ -	$499,004
Energy Coalition ("Twelve Cities Project")	$ 10,389	$ 1,157,162	$ -	$ -	$1,167,551
LA County	$ 22,377	$ 657,259	$ -	$ -	$679,636
South Bay Cities Council of Governments	$ 1,143	$ 164,157	$ -	$ -	$165,300
UC/CSU - Statewide Partnership	$ 69,671	$ 1,551,196	$ -	$ -	$1,620,867
Ventura REA	$ 6,889	$ 288,088	$ -	$ -	$294,977
Total IOU Partnership Programs	**$ 110,877**	**$ 4,316,458**	**$ -**	**$ -**	**$ 4,427,335**

Table TA 8.3
Market Effects: Residential Projected Annual Program Energy Reductions
UC-CSU Partnership
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			MISC		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004									375,281
2005									375,281
2006									375,281
2007									375,281
2008									375,281
2009									375,281
2010									375,281
2011									375,281
2012									375,281
2013									375,281
2014									375,281
2015									375,281
2016									375,281
2017									375,281
2018									375,281
2019									375,281
2020									
2021									
2022									
2023									
SUM (Lifecycle)	-	-	-	-	-	-	-	-	6,004,496

Table TA 8.3
Market Effects: Residential Projected Annual Program Energy Reductions
Energy Coalition Partnership
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			MISC		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004						5,718			634,852
2005						5,718			634,852
2006						5,718			634,852
2007						5,718			634,852
2008						5,718			634,852
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
2020									
2021									
2022									
2023									
SUM (Lifecycle)	-	-	-	-	-	28,592	-	-	3,174,260

Table TA 8.3
Market Effects: Residential Projected Annual Program Energy Reductions
Ventura Partnership
Program Year: 2005

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			MISC		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2004									21,793
2005									21,793
2006									21,793
2007									21,793
2008									21,793
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
2020									
2021									
2022									
2023									
SUM (Lifecycle)	-	-	-	-	-	-	-	-	108,965

Table TA 8.4
Measure Detail: Residential Program Area
UC-CSU Partnership
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
Misc	12-Project 3 - Laboratory Fume Hood Sensors	1	$ 640,962	$ 363,069	-	665,761	16		62.73
Misc	13-Project 4 - Monitoring based commissioning	1	$ 325,105	$ 428,888	-	337,684	16		116.09
Misc	14-Project 5 - Monitoring based commissioning	1	$ 332,096	$ 428,888	-	344,945	16		114.70
Misc	15-Project 6 - Monitoring based commissioning	1	$ 56,360	$ 74,000	-	58,540	16		115.78
Misc	16-Project 7 - Laboratory Fume Hood Sensors	1	$ 44,466	$ 18,738	-	46,186	16		71.15
Misc	17-Project 8 - Monitoring based commissioning	1	$ 221,878	$ 220,000	-	230,463	16		99.69

Table TA 8.4
Measure Detail: Residential Program Area
Energy Coalition Partnership
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
Light	25-23-watt Compact Fluorescents	7,148	$ 10,360	$ -	-	9,144	5		42.12
Misc	18-Municipal Energy Management	6	$ 163,051	$ 120,000	-	143,915	5		47.29
Misc	19-School District Facilities	4	$ 45,292	$ 80,000	-	39,977	5		60.72
Misc	20-Miscellaneous Efficiency Measures	162	$ 35,219	$ -	-	31,086	5		52.65
Misc	21-Household efficiency actions	7,874	$ 855,909	$ 393,700	-	755,460	5		42.12
Misc	22-Miscellaneous Efficiency Measures	900	$ 26,088	$ -	-	23,026	5		42.12
Misc	23-Miscellaneous Efficiency Measures	366	$ 10,609	$ -	-	9,364	5		42.12
Misc	24-Miscellaneous Efficiency Measures	967	$ 21,023	$ -	-	18,556	5		42.12

Table TA 8.4
Measure Detail: Residential Program Area
Ventura Partnership
Program Year: 2005

(1) Administrative Cost: To be allocated to each end use by Resource Benefits net (RBn).
(2) Incremental Measure Cost: Per definition in Appendix A of the Reporting Requirements Manual 2.
(3) Levelized Cost: Per unit of the total cost of the resource (see California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, July 2002).

			Total Resource Costs		Total Resource Benefits (Lifecycle)			Levelized Costs [3]	
End Use	Measure Description	Recorded Qty	Administrative Cost [1]	Incremental Measure Cost [2]	kWh	Therms	Useful Life	Cents per kWh	Cents per Therm
Misc	27-Livingwise kits	1,111	$ 195,492	$ 24,998	-	23,095	5		314.73
Misc	28-Low Flow Showerheads	21	$ 99,485	$ 1,400	-	11,753	5		314.91

TABLE TA 9.2
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS
UTILITY ADMINISTRATION OF NON-IOU PROGRAMS
GAS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
CA UWCC - (Calif. Urban Water Conservation Council)	$ 6,383	$ -	$ -	$ -	$ 6,383
Energy Analysis Technologies	$ (470)	$ -	$ -	$ -	$ (470)
Heschong Mahone Group, Inc.	$ (1,747)	$ -	$ -	$ -	$ (1,747)
SESCO, Inc.	$ -	$ -	$ -	$ -	$ -
ADM	$ -	$ -	$ -	$ -	$ -
ASC	$ 4	$ -	$ -	$ -	$ 4
CSU Chico	$ -	$ -	$ -	$ -	$ -
CSU Fresno	$ -	$ -	$ -	$ -	$ -
GES (Global Energy Services)	$ -	$ -	$ -	$ -	$ -
Total Non-IOU Programs	**$ 4,170**	**$ -**	**$ -**	**$ -**	**$ 4,170**