

# ANNUAL REPORT AND TECHNICAL APPENDIX OF ENERGY EFFICIENCY PROGRAMS

2000 Results  
May 2001



A  Sempra Energy™ company

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## Executive Summary

### **Overview**

San Diego Gas & Electric (SDG&E) continued to administer energy efficiency programs in 2000, under the oversight of the California Public Utilities Commission (CPUC or Commission). Although initially many of the programs remained designed for market transformation, with the advent of the energy crisis during the summer of 2000, focus was placed on programs that could bring immediate results. In August 2000, the Commission directed the utilities to initiate the Summer Initiative programs that were designed to achieve peak energy and demand savings by as early as Summer 2001. Several programs that are currently administered by SDG&E are being implemented by third parties.

In 2000, SDG&E's expenditures (actual and commitments) for its 2000 Energy Efficiency programs totaled \$32.7 million and achieved a total of 113,202 megawatthours (MWh) in energy savings, 19.58 megawatts (MW) in demand savings and 1,610 Mtherms in gas savings. Through the 2000 program accomplishments, SDG&E achieved performance incentives of \$2.59 million.

SDG&E also continued to administer low-income energy efficiency programs that provided energy education and weatherization services to qualifying low-income customers within SDG&E's service territory. SDG&E's expenditures for its 2000 Low Income Energy Efficiency programs totaled \$6.4 million and achieved a total of 3,265 MWh in energy savings, .198 MW in demand savings and 307,312 therms in gas savings. The 2000 low-income activities resulted in \$89,389 in performance incentives.

### **Residential Energy Efficiency Programs**

The 2000 energy efficiency Residential Program Area included both statewide and local efforts that were designed to encourage customers to improve energy efficiency behaviors and to increase the installation of energy efficient products and appliances. Activities in the Residential Program Area included upstream and downstream incentives, training, education, and information. These programs, which were designed to provide more energy efficiency options to residential customers, also encouraged them to work directly with key market players to encourage market transformation and to help them make smarter energy efficiency choices.

In 2000, SDG&E worked with the other California utilities to continue the Statewide Energy Guide, the Statewide Upstream Lighting and Appliance program, and the Statewide Residential Energy Efficiency Contractor program. The Statewide Energy Guide was designed to provide customers with immediate steps they can take to save energy and improve the efficiency of their appliances. The guide was available in English, Spanish and Chinese. The Statewide Upstream Lighting and Appliance programs target the residential upstream (manufacturers) and midstream markets (retailers, vendors) for energy efficiency. A contractor who was selected through a formal competitive bid process implemented the Lighting and Appliance programs. The main focus of the Lighting & Appliance programs is to encourage upstream players to support the increase of energy efficient products and appliances at the local retail level. The Residential Energy Efficiency Contractor program was developed through an extensive cooperative effort with other California utilities and input from interested parties and contractors. It was designed to promote the development of a self-sustaining contractor market for multiple energy-efficiency

services in the retrofit, remodeling/renovation, heating ventilation and air conditioning (HVAC) equipment and appliance replacement markets.

SDG&E also offered the following Residential programs: Information and Education, Energy Efficient Mortgage, In-Store Demonstration, Energy Management Services, Downstream Appliance Incentives, Contractor Training, Upstream Distributor program, ENERGY STAR® Windows, and Targeted Third Party Contractor Training.

Under Information and Education, SDG&E promotes energy efficiency messages and programs through a variety of outreach efforts to include direct mailings, seminars and local community events. The Energy Efficient Mortgage program, which will be incorporated under Information in 2001, promotes energy efficient mortgages to homebuyers for improving the energy efficiency of their new home. In-Store Demonstration provides targeted information on energy efficient products to consumers who frequent home improvement centers. Information is contained in Kiosks strategically located throughout the store. Under Energy Management Services, three types of audits are available: Mail-In, On-line, and In-Home. Downstream Appliance Incentives provides incentives to customers for the purchase of ENERGY STAR® qualified dishwashers and clothes washers. The Contractor Training program provides no cost training to licensed contractors on proper sizing and installation practices. The Upstream Distributor Program, which will be discontinued in 2001, provided upstream incentives to local distributors for stocking high efficiency 12 SEER and above air conditioning units. ENERGY STAR® Windows, which will be incorporated under the Multi-Family Rebate programs in 2001, targets key players who influence purchasing habits of residential customers by offering upstream manufacturer buy downs.

### **Nonresidential Energy Efficiency Programs**

SDG&E's Nonresidential Program Area continues to provide education and increased awareness, promote energy efficiency improvements through the private market, and target stocking practices of commercial distributors through a series of upstream and downstream incentives, training seminars and public input meetings. Program designs incorporate market transformation efforts as well as opportunities for competitive bidding where applicable.

SDG&E offers a Small Business Standard Performance Contract (SBSPC) program, developed by the utilities to be consistent on a statewide basis, in which energy efficiency service providers (EESPs) sponsor projects to serve commercial/industrial/agricultural customers 500kW or less of connected load and /or 250,000 annual therms of usage. This statewide program offers fixed incentives for energy savings from the installation of energy efficient equipment. In 2000, there were 40 SBSPC projects sponsored by 24 EESPs. The Large Nonresidential SPC program is designed for large commercial, industrial, and agricultural customers and is a key element of the Commission's goals of market transformation. Thirty-seven (37) SPC projects were submitted. Statewide standard incentives were also provided for 1,843 applications that were received for the installation of energy efficient equipment (e.g. heating, ventilation, refrigeration, lighting, and cooking) through the Express Efficiency program.

In 2000, through the Statewide Information program, SDG&E and the other utilities jointly distributed "Smarter Business Energy Use, Saving Energy & Money", a Statewide Energy Guide designed to give customers information to empower them to better manage their business energy costs. This guide provides small businesses with energy efficiency information and will continue

to be available through various promotional events and the SDG&E website. SDG&E's Nonresidential Information Program provided information on energy efficient technologies and services through workshops and informational seminars.

The Energy Cents program promotes the availability of low-cost financing for energy efficiency projects to small/medium customers. In 2000, six applications were received for this financing program.

SDG&E's Nonresidential Energy Management Services program provided 400 energy efficiency audits to customers with energy usage of less than 250 kW. The Small Comprehensive Technical Assistance program offers technical assistance to small customers by reviewing projects and providing energy efficiency recommendations related to process, HVAC and motors applications. Seventeen proposals to perform technical assistance studies were approved in 2000 with 6 studies completed. The Process Technical Assistance program provides large commercial customers with on-site information and support needed to make decisions regarding energy efficiency retrofits. Thirty-three proposals to perform technical assistance studies were approved in 2000 with 19 studies completed, 8 of which resulted in SPC projects.

The Building Operator Certification program is comprised of five courses designed to establish a standard of professional competence in energy efficiency. Offered through the University of California San Diego, 200 students enrolled in the program.

SDG&E's continued its third party initiative Horizontal Clothes Washer program. This program is implemented by the San Diego County Water Authority, and had 1,848 vouchers issued in 2000 for the replacement of existing clothes washers with high efficiency horizontal clothes washers.

Two upstream incentive programs continued in 2000 are the Upstream Motor Dealer Incentive program and the HVAC Distributor Incentive program. The Upstream Motor Dealer Incentive program achieved 604 units stocked by year end. In the HVAC Distributor Incentive program, incentives were paid for 1,104 HVAC units, with seven out of eight distributors participating in the program. A midstream HVAC incentives program was offered also in 2000. Approximately 149 heat pumps and 179 air conditioning units were installed under this program.

The Tenant Improvement program, which pays incentives to builders and design teams for the inclusion of energy efficiency systems and equipment in remodel and renovations, achieved 74 projects. This program will continue to be implemented through the Nonresidential New Construction programs: Savings By Design, and Energy Design Resources.

Six new pilot programs were initiated in 2000. Two of the pilots, the Purchase Savings Pilot and the Procure Savings Pilot, were directed to either facility owners and managers of small businesses or to purchasing agents of large commercial companies, and provided them with essential information needed to determine cost-savings in the replacement of equipment. Under these programs, equipment surveys were completed for seven customers. A Small Commercial Turnkey Pilot, aimed at the smallest nonresidential customers, was designed to promote the installation of multiple energy efficient measures by providing an increase in incentives for additional measures. This program processed approximately 328 applications. The Commercial Dishwasher Pilot goal was to assess and evaluate the effectiveness of new emerging dishwasher technologies. Two test sites were selected for the installation and demonstration of high efficiency dishwashers. The FasTrac Performance Contracting Pilot was designed to test the

feasibility of using performance contracting for smaller energy efficiency retrofit projects which are not addressed in the Large Standard Performance Contract program. Results show that there were 25 projects submitted under this program. SDG&E also promoted emerging technologies by participating in the creation of an Emerging Technologies Council with the other California utilities and the California Energy Commission. SDG&E also signed contracts to install emerging technologies at two customer sites.

### **New Construction Energy Efficiency Programs**

The New Construction Program Area provides design assistance services aimed at identifying and capturing energy savings opportunities in new construction projects. New construction programs also offer incentives to encourage the installation of energy efficient design and equipment that exceed Title 24 standards.

Savings By Design, a statewide program, provides financial incentives to owners and design teams of new commercial, industrial, and agricultural construction projects for incorporating high energy efficient systems and equipment into the design and construction of new buildings. Special emphasis was placed on the incorporation of energy efficiency in the construction of schools through the Collaborative for High Performance Schools (“CHPS”), a statewide group comprised of IOUs, the California Public Utilities Commission, the California Energy Commission, and other major interested parties.

Energy Design Resources was activated statewide during 2000, providing information designed to work in concert with the Savings By Design program. Many of the tools and training that are needed to optimize customer participation in Savings By Design are offered through this program.

SDG&E actively supported the statewide Codes and Standards/ Local Government Initiatives program, and continued to promote and support the implementation of energy efficiency codes and standards through the San Diego Regional Energy Office. These activities involve working with state and local governments to facilitate, educate, train and support those who implement and develop energy codes, standards and initiatives.

By mid-year, SDG&E ended its involvement in “ComfortWise,” a program directed at new single family housing which obtained builder commitments to install energy efficient space conditioning measures in residential new home construction projects. Instead, SDG&E’s Residential New Construction program underwent a major renovation after consulting with residential new construction market actors, such as the Department of Energy, the California Energy Commission, building contractors, developers and other various interested parties. Several strategies, including the “Designed for Comfort” program directed at multi-family housing, were consolidated into a new program titled, “Home Energy Partnership Program” that addressed single family housing, multi-family housing, and energy efficient appliances in new residential construction. Although the program continues to provide design assistance services, training and marketing support to architects, sales agents and consumers, the emphasis moved from commitments to installation with incentives offered directly to builders or developers, and design teams for the installation and verification of energy efficient measures.

SDG&E implemented a one-year pilot Manufactured Housing program during 2000. Unfortunately, the manufactured housing market experienced a decline last year, and we were unable to attract any participants to the program. The focus of the program was the installation

of energy efficient measures during construction of the manufactured housing with the program providing information on energy efficient measures to the potential participants and promoting and advertising those builders who incorporated those measures.

SDG&E continued to support the California Home Energy Efficiency Rating System (CHEERS) and also sponsored a CHEERS seminar in San Diego, and the Public Interest Energy Research (PIER) program which assesses emerging technologies and promotes the benefits of those technologies to the building community.

### **2000 Summer Initiative Programs**

In July 2000, the Commission adopted the Summer 2000 Energy Efficiency Initiative (Summer Initiative) as a “rapid response procedure” to provide measurable demand and energy usage reductions beginning in summer 2000.” The programs were approved in August 2000 for implementation beginning September 1, 2000, and concluding on December 31, 2001. The programs that were approved must deliver energy and demand savings by June 1, 2001, and must be designed to achieve savings quickly. SDG&E’s approved budget is \$12.25 million with the following energy and demand savings goals: 170 MWh, 68 MW, and 408,000 therms.

SDG&E signed contracts with several third parties that are implementing Summer Initiative programs in its service territory. ECOS Consulting offers a program to replace halogen torchieres in commercial and institutional buildings. Initial orders of 3,840 replacement torchieres are warehoused in Southern California for the program. Appliance Centers of America (ARCA) is implementing a residential refrigerator recycling program. Approximately 2,000 refrigerators were recycled through this program in 2000.

The University of California, San Diego and California State University, San Marcos are installing various energy efficiency measures at the their facilities to achieve energy and demand savings by Summer 2001.

SDG&E has also selected 6 TPI projects for the Summer Initiative with a total budget of \$1.0 million and an estimated potential savings of 9.5 gigawatthours and on-peak demand reduction of 22.2 MW.

The LED Traffic Signal rebate program is designed to encourage the retrofit of incandescent traffic lights to light emitting diode (LED) traffic lamps. SDG&E has signed contracts with 15 governmental agencies in San Diego for replacement of these traffic signals.

SDG&E’s Whole House Fan program provides financial incentives to single family customers to purchase and install whole house fans. As of yearend, SDG&E completed informational brochures for distribution at home improvement centers and processed 4 rebates.

SDG&E’s Halogen Torchiere Turn-In Events program targets community and senior centers with high saturation of elderly and lower income members. The program encourages seniors to exchange inefficient halogen torchiere and incandescent lamps for ENERGY STAR® qualified torchieres and compact fluorescent lamps. Fifteen turn-in events have been held with over 300 halogen lamps exchanged.

The Residential Hard to Reach program encourages installation of energy efficiency measures at multifamily apartment complexes, mobile home parks and condominium complexes. SDG&E approved 10 applications for contractor participation in 2000.

The Pool Efficiency program incorporates both pool pump efficiency and time-of-day controls for an integrated approach to pool electricity usage. SDG&E provided 25 rebates for pool pump conversions and signed up 310 customers to switch pool filtering to an off-peak time schedule.

**Market Assessment & Evaluation**

Market Assessment and Evaluation activities primarily focused on statewide coordinating of program studies, managing the Residential Lighting and Appliance statewide studies, tracking of program indicators, completion of studies to support SDG&E's adopted PY 2000 performance incentive mechanism, managing statewide studies, and participating in the 2000 CEC data collection and analysis efforts.

**Low Income**

The PY2000 Energy Education for Low-Income (EELI) program continued to provide information and education to low income customers to enable them to reduce their energy needs. Energy education was provided to over 26,575 low-income customers in 10 languages. Direct Assistance provided services and installed energy efficiency measures to 9,893 low-income homes.



**TABLE 1.1  
SUMMARY OF COSTS**

Electric and Gas Combined			
	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$12,521,000	\$12,315,748	\$14,268,000
Nonresidential	\$17,981,000	\$15,474,177	\$15,175,000
New Construction	\$4,913,000	\$4,912,175	\$7,870,500
Public Ed & Outreach	\$0	\$0	\$1,340,000
MA&E & Reg Oversight	\$1,903,000	\$1,575,000	\$1,681,000
Shareholder Incentives	\$3,896,000	\$2,102,572	\$2,706,000
Unallocated	\$0	\$0	\$0
EE Total	\$41,214,000	\$36,379,671	\$43,040,500
Low Income Total	\$6,691,400	\$6,414,270	\$8,795,796
Low Inc Shareholder Inc	\$100,498	\$89,389	\$100,498
Summer Initiative	<u>\$12,300,000</u>	<u>\$0</u>	<u>\$0</u>
Total EE, Low Inc and SI	\$60,305,898	\$42,883,330	\$51,936,794

Electric Only			
	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$10,570,000	\$10,644,159	\$10,461,095
Nonresidential	\$15,185,000	\$13,714,007	\$12,414,795
New Construction	\$4,147,000	\$4,158,514	\$6,443,335
Public Ed & Outreach	\$0	\$0	\$1,195,900
MA&E & Reg Oversight	\$1,618,000	\$1,347,000	\$1,429,000
Shareholder Incentives	\$3,289,000	\$1,775,202	\$2,136,000
Unallocated	\$0	\$0	\$0
EE Total	\$34,809,000	\$31,638,881	\$34,080,125
Low Income Total	\$1,114,999	\$1,527,055	\$2,454,992
Low Inc Shareholder Inc	\$27,443	\$35,529	\$27,443
Summer Initiative	\$12,300,000	\$0	\$0
Total EE, Low Inc and SI	\$48,251,442	\$33,201,465	\$36,562,560

Gas Only			
	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$1,951,000	\$1,671,589	\$3,806,905
Nonresidential	\$2,796,000	\$1,760,170	\$2,760,205
New Construction	\$766,000	\$753,661	\$1,427,165
Public Ed & Outreach	\$0	\$0	\$144,100
MA&E & Reg Oversight	\$285,000	\$228,000	\$252,000
Shareholder Incentives	\$607,000	\$327,370	\$570,000
Unallocated	\$0	\$0	\$0
EE Total	\$6,405,000	\$4,740,790	\$8,960,375
Low Income Total	\$5,576,401	\$4,887,215	\$6,340,804
Low Inc Shareholder Inc	\$73,055	\$53,860	\$73,055
Summer Initiative	\$0	\$0	\$0
Total EE, Low Inc and SI	\$12,054,456	\$9,681,865	\$15,374,234

\* As of May 1, 2001

**TABLE 1.2  
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS**

**(Annual Energy Reductions, Electric, MWH)**

	2000 (Recorded)	2001 (Planned)
Residential	22,374	32,887
Nonresidential	74,881	54,479
New Construction	15,947	24,371
Total EE	113,202	111,737
Low Income	3,265	1,460
Summer Initiative		
Total EE, LI and SI		

**(Annual Demand Reductions, Electric, MW)**

	2000 (Recorded)	2001 (Planned)
Residential	3.10	3.36
Nonresidential	12.25	8.18
New Construction	4.23	5.72
Total EE	19.58	17.26
Low Income	0.20	0.12
Summer Initiative		
Total EE, LI and SI		

**(Annual Energy Reductions, Natural Gas, Therms, 000's)**

	2000 (Recorded)	2001 (Planned)
Residential	475	1217
Nonresidential	895	720
New Construction	240	404
Total EE	1610	2340
Low Income	307	176
Summer Initiative		
Total EE, LI and SI		

**TABLE 1.3  
SUMMARY OF COST-EFFECTIVENESS**

	<b>(Benefit-Cost Ratios)</b>			
	2000 (Recorded)		2001 (Planned)	
	Utility Cost Test	Total Resource Cost Test	Utility Cost Test	Total Resource Cost Test
Residential	0.75	0.49	1.58	1.12
Nonresidential	2.35	1.38	2.46	1.59
New Construction	1.67	1.57	2.08	1.64
Total EE Portfolio	1.64	1.07	2.04	1.43
Low Income	0.31	0.31	0.23	0.23

**TABLE 1.4**  
**SUMMARY OF COST-EFFECTIVENESS**  
**(Net Benefits; \$ Mil)**

	2000 (Recorded) TRC	2001 (Planned) TRC
Residential	\$9.20	\$25.89
Nonresidential	\$36.32	\$42.98
New Construction	\$8.20	\$18.83
Total EE	\$53.72	\$87.71
Low Income	\$1.98	\$1.17
Total EE and LI	\$55.69	\$88.88

# RESIDENTIAL PROGRAMS

## Residential Information

### Statewide Residential Energy Guide

#### Program Description:

Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric Company (SDG&E) worked together in 2000, on the Statewide Energy Guide Team to distribute English, Spanish and Chinese Energy Guides to residential customers through a variety of delivery channels. The Residential Energy Guide provides statewide consistency to each utility's residential customers on energy efficiency information and awareness of appliance practices.

#### 2000 SDG&E Results and Achievements:

In 2000, the statewide committee expanded distribution efforts in order to maximize the number and types of customer groups that had access to the guide. Translation of the guide into a fourth language, which was investigated in 2000, will not be pursued at this time. However, translation of alternative communication vehicles into other languages may occur on an individual utility basis

#### 2000 Statewide Distribution:

Language	PG&E	SDG&E	SCE	SoCalGas*	TOTAL
English	65,645	10,287	17,001	13,450	106,383
Spanish	2,104	1,824	7,542	1,600	13,070
Chinese	1,175	510	2,551	N/A	4,236
<b>Total</b>	68,924	12,621	27,094	15,050	123,689

### Energy Efficient Mortgage (EEM)

#### Program Description:

The EEM program promoted the use of energy efficient mortgages for the retrofit market. Homeowners interested in refinancing, and Sellers and homebuyers who considered renovations to increase the energy efficiency of their homes at the time of sale or purchase, were provided with information on how to take advantage of the energy efficient mortgage programs. EEM's are currently available from several financial institutions. In order to qualify for an EEM, the homeowner must schedule a home energy rating, to be performed by a qualified Home Energy Rating (HERS) organization.

**2000 Results and Achievements:**

Fifty home energy ratings were completed as of December 31, of which forty-five were part of the application process for an EEM.

Seven energy efficient mortgages were issued in 2000

270 real estate/mortgage professionals attended EEM workshops in 2000.

Performance Indicators: Number of qualified energy efficient raters as needed for energy efficiency home loans. Results = A total of 5 qualified energy efficient raters, in the 2000 program, and 45 customers who applied for EEM loans. This number exceeds the specified number (20) for the SDG&E milestone for 100% Award.

**Information and Education**

**Program Description:**

Information and Education provides energy efficiency information to residential customers through a variety of implementation strategies, to include brochure distribution, SDG&E and statewide web-sites, general advertising in support of energy efficiency programs, and the inclusion of two projects: a grocery store and theatre pilot.

**2000 Results and Achievements:**

A mall pilot which was introduced in the third quarter of PY 2000 incorporates display stands, in English & Spanish, which inform customers on how they can make their homes “Energy Smart”. These stands, which are located in food courts, promote SDG&E’s website on energy efficiency and include fact sheets on “ Simple Steps for Long Term Savings.” Over 360,000 energy efficiency brochures were distributed to residential customers through various channels as of December 31, 2000.

Performance Indicator: Market Participants that received information/education exhibit a higher level of knowledge than those who did not receive the material.

Post survey results available from the Del Mar Fair.

**In-Store Energy Efficient Demonstration Co-op**

**Program Description:**

In-Store Energy Efficient Demonstration Co-op provides information on energy efficiency through the use of kiosks at home centers and do-it-yourself retailers. Information provided includes “how-to” methods for lighting, heating and cooling, windows, and insulation.

**2000 Results and Achievements:**

In 2000, stores in SDG&E service territory averaged 50,000 customers each store or roughly 750,000 customers per week for 15 stores.

SDG&E retrofitted 8 kiosk units with a counter mechanism intended to collect data on the number of “hits” the audio button was depressed to play the energy efficiency messaging. Overall hit rate averaged around 114 a day.

## Energy Management Services

### Energy Management Services (EMS)

#### Program Description:

EMS offers three different types of energy conservation audits: In-Home, Mail-in, and On-line. All three services assist customers in understanding their current energy usage patterns, and offer recommendations for energy savings.

#### 2000 Results and Achievements:

SDG&E began efforts to add additional in-home auditors to accommodate customer requests for more comprehensive whole house audits. It is expected that the increase of auditors in early 2001 will help to expedite turn around time for this service. Additionally, a Spanish Mail-In audit will be available in April 2001.

Audit Report Year 2000			
	Mail-In	On-line	In-Home
Year to Date	2346	2648	2460



## Energy Efficient Incentives

### Residential Contractor (SPC)

#### Program Description:

The 2000 Residential Contractor Program (RCP) was developed to promote a self-sustaining contractor market for energy efficiency services in the residential retrofit, renovation, and remodeling market. The specific objectives addressed by the program are to:

- improve Customers' awareness and understanding of the benefits associated with energy efficiency;
- promote whole system and whole house approaches to energy efficiency in the residential sector; and
- provide standard incentives for Contractors to help build self-sustaining businesses that provide diagnostic/tune-up procedures and installations of various energy efficiency measures to customers.

The program has two distinct elements: the Multifamily and Single Family Elements:

- The multi-family element consists of apartment dwelling units, common areas of apartments and condominium complexes, and common areas of mobile home parks.
- The single-family element consists of single family homes, condominium dwelling units,
- Small attached apartments with up to four dwelling units (e.g., duplexes, triplexes, and fourplexes), and mobile homes.

#### 2000 Results and Achievements:

##### Single Family Element (RCP-SF)

- SDG&E processed 8,498 vouchers through December 31, 2000, of which 6,133 received incentives totaling \$1,130,005.
- SDG&E's inspectors completed 3,731 in 2000, an inspection rate of 60%.

- 2,415 information packets were sent to customers in 2000. The League of California Homeowners, a third party screening agency and RCP-SF fulfillment agent for SDG&E, completed 1749 of the mailings, which included an RCP contractor list.
- A third party fulfillment house completed 540 mailings in the first quarter of 2000.
- SDG&E completed 126 of the mailings internally during the first quarter.
- The League received 46 contractor applications in 2000 for RCP screening of which 39 were screened and 27 approved for the RCP.
- SDG&E currently has 54 contractors participating in the RCP-SF who have gone through screening and training provided through SDG&E. This includes contractors located in Orange County and LA County doing business in San Diego. There are currently 86 contractors participating in SDG&E's RCP-SF.

#### Multifamily Element (RCP-MF)

- Six contractors offered services to multifamily property owners/property managers through performance contracting in 2000.
- Approximately 80% of total commitments were for common area and exterior dwelling unit lighting and 20% for gas water heater controllers. Lighting was approximately 80% CFLs and 20% T12s to T8 retrofits.

Performance Indicators: Customer awareness of the interaction among energy related systems in their homes; number of contractors trained or certified by third parties on techniques/practices as in the RCP manual; and number of contractors that offer services to multi-family through performance contracts. Award level scaled from 100% for 3 contractors to 70% for 2 contractors.

As a measure of customer awareness, SDG&E used the average number of SF-RCP measures installed per household. The 1999 baseline was 1.34 measures installed per household. In PY2000, 1.40 measures were installed per household. A total of 515 individuals were trained. Copies of course content, to include number of classes; class size and time required for timing are available for review. The number of contractors who offered services to multifamily property owners/managers was seven. This exceeds the specified number (3) for the SDG&E milestone for 100% Award.

**Downstream Appliance ( Rebates)****Program Description:**

Under this program, SDG&E provided customer rebates for energy efficient clothes washers. This strategy was coordinated with the other California utilities for setting incentives levels, and was closely coordinated with the statewide upstream appliance program.

**2000 Results and Achievements:**

The clothes washer rebate strategy ended on June 30, 2000. The following reflects total activity in SDG&E service territory:

Financial Incentives	Participating Retailers	Field Services
4,400 – year 2001 Compliant Refrigerator rebates	81 Store fronts	350 Field visits were conducted at participating dealers
2,043 clothes washers rebated		

Performance Indicators: Percentage of participating retailers displaying ENERGY STAR® POP materials, survey of sales staff and floor stock survey. Data Collection collected by Xenergy, using “Mystery Shoppers” indicates that ENERGY STAR® point of purchase materials were on display in 100% of participating retail stores. Survey of sales staff - data and Floor stock surveys were also collection by Xenergy which support performance indicators.

## Upstream programs

### Contractor Training ( Information)

#### Program Description:

The contractor-training program provides training via a third party contractor to residential heating and air conditioning (HVAC) contractors on the proper sizing and installation of air conditioning equipment and duct systems. The goal of the training is to educate HVAC contractors on the energy efficiency benefits of proper sizing of equipment and for the contractor to adopt techniques when replacing or installing new air conditioners for a homeowner.

#### 2000 Results and Achievements:

<b>Training Type</b>	<b>Number of Unique Presentations</b>	<b>Total Number of Attendees</b>
Airflow diagnostic testing techniques and repair.	1	7
Combustion Safety Testing & Repair	3	73
Front Office Personnel Training	2	37
High Performance Window Training	14	71
Insulation Training	4	13
Proper installation of air conditioners.	1	16
Proper sizing and selection of air conditioners	6	72
Proper sizing of duct systems.	1	25
RCP Duct Testing & Sealing	28	95
RCP HVAC Diagnostic	45	93
Wrightsoft Software Usage	2	13
<b>Totals</b>	<b>107</b>	<b>515</b>
<b>Total Number of Unique Training Sessions</b>	<b>107</b>	
<b>Total Number of Individuals Trained</b>	<b>515</b>	
<b>Total Number of Unique Individuals Trained</b>	<b>345</b>	

Performance Indicators: Number of Contractors who use manuals J&S or are knowledgeable and aware of diagnostic & maintenance techniques relating to heating & cooling. In 2000, 345 contractors were trained using manuals J&S and are knowledgeable and aware of diagnostic & maintenance techniques relating to heating & cooling.

**Targeted Third Party Initiative**

## Program Description:

SDG&E issued a residential RFP for an Upstream High Efficiency Gas Water program in February 2000. Due to low response, and to make funds available for summer initiative proposals, the RFP was withdrawn. In its place, a refrigerator-recycling program which SDG&E planned to offer as a TPI was subsequently superseded by the Statewide Refrigerator recycling program, administered by ARCA. SDG&E did not issue a subsequent TPI under the residential program area in 2000.

**Upstream Distributor Incentive (Financial Assistance)**

## Program Description:

Distributors were encouraged to promote premium efficient air conditioning systems through the use of financial incentives. The program was designed to improve current stocking practices of local HVAC distributors by increasing the inventory stock of split system units that meet the Consortium of Energy Efficiency (CEE) Tier 1 level and are ENERGY STAR<sup>®</sup> compliant.

## 2000 Results and Achievements:

Seven of eight available air conditioning distributors participated in the program. 3,502 high efficiency units were stocked under the program. Funding was exhausted on 12/11/00. The program will not be continued in 2001 in order to support downstream efforts.

Performance Indicators: Percent of high efficiency units stocked by local distributors was over the 1999 baseline. The 1999 baseline was determined by a manual count of all the HVAC units stocked within the SDG&E service territory. The 1999 baseline was 5.8%. Based upon PY2000 program activity, SDG&E estimates the HVAC units stocked of 12 SEER or greater to have increased to 8.2%.

**Statewide Upstream Lighting (Financial Assistance)**

## Program Description:

PG&E, SCE, and SDG&E worked together in PY2000, as The California Residential Lighting and Appliance collaborative to operate the statewide residential lighting program. In 2000, lighting program strategies included manufacturer incentives, cooperative promotional incentives to retailers and manufacturers, education and outreach to retailers and manufacturers, field services, salesperson training, paid advertising, and other consumer outreach and promotional activities.

## 2000 SDG&amp;E Results and Achievements:

The Statewide Upstream Lighting paid financial incentives on 16,911 ENERGY STAR<sup>®</sup> qualified torchieres in PY2000.

Final percentage of sales associate training on ENERGY STAR<sup>®</sup> lighting was 106%.

A total of 5 lighting manufacturers participated in the program.

Performance Indicators: 106% of lighting retail locations received sales training and five (5) fixture manufacturers offered energy efficient lighting products.

### **Statewide Upstream Appliances**

#### Program Description:

PG&E, SCE, SoCalGas, and SDG&E worked together in PY2000, as the California Residential Lighting and Appliance collaborative to operate the Statewide Residential Appliance program. For 2000, appliance program strategies included: financial incentives, cooperative advertising incentives to retailers and manufacturers, field services, outreach to retailers and manufacturers, training and education and outreach to consumers through a variety of marketing and communications tactics.

#### 2000 SDG&E Results and Achievements:

379 retailer Sales Person Incentive Funds (spiffs) were paid for the sales of ENERGY STAR<sup>®</sup> qualified room air conditioners.

386 retailer Sales Person Incentive Funds (spiffs) were paid for the sales of ENERGY STAR<sup>®</sup> qualified clothes washers.

\$44,542 paid to 8 retailers for participation in the co-op-advertising component of the program.

Performance Indicators: Percent of appliance retail locations receiving sales training. The results were that 308 of 317 sales people were trained.

### **ENERGY STAR<sup>®</sup> Windows program**

#### Program Description:

The ENERGY STAR<sup>®</sup> window program was designed for window manufacturers, component suppliers and retailers. The upstream market participant ensures that ENERGY STAR<sup>®</sup> window products are available to the customers. The ENERGY STAR<sup>®</sup> window retailer initiative is implemented through a third party. This program included financial incentives to window manufacturers, training for sales associates at home improvement stores, interactive Point-of-Purchase materials, advertising support, and reporting and tracking of sales for participating retailers.

#### 2000 Results and Achievements:

As of December 31, 2000 there were six manufacturers participating in the program. In 1998, when the program began, only 2% of the windows sold through retailers in our service territory were ENERGY STAR<sup>®</sup> - qualified. The latest figures show that as of December 2000, ENERGY STAR<sup>®</sup> - qualified windows account for 27% of windows sold. In 2001, the windows program will be incorporated into the Residential Contractor program in order to facilitate increased customer participation.

**TABLE 2.1  
SUMMARY OF COSTS:  
RESIDENTIAL PROGRAM AREA**

**Electric and Gas Combined**

	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$1,802,000	\$1,690,095	\$2,055,000
EMS	\$1,365,000	\$1,561,566	\$1,367,000
EEI			
SPCs	\$3,080,000	\$3,325,760	\$4,331,000
Rebates	\$1,130,000	\$1,126,291	\$5,108,000
Loans	\$0	\$0	\$0
Other	\$0	\$0	\$0
Upstream			
Information	\$1,890,000	\$245,387	\$0
Fin Assistance	\$3,254,000	\$4,366,649	\$1,407,000
<b>Total</b>	<b>\$12,521,000</b>	<b>\$12,315,748</b>	<b>\$14,268,000</b>

**Electric Only**

	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$1,301,000	\$1,226,406	\$1,744,955
EMS	\$903,000	\$1,171,175	\$1,161,950
EEI			
SPCs	\$2,926,000	\$3,159,472	\$1,707,150
Rebates	\$1,130,000	\$1,126,291	\$4,476,940
Loans	\$0	\$0	\$0
Other	\$0	\$0	\$0
Upstream			
Information	\$1,437,000	\$122,693	\$0
Fin Assistance	\$2,873,000	\$3,838,122	\$1,370,100
<b>Total</b>	<b>\$10,570,000</b>	<b>\$10,644,159</b>	<b>\$10,461,095</b>

**Gas Only**

	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$501,000	\$463,689	\$310,045
EMS	\$462,000	\$390,392	\$205,050
EEI			
SPCs	\$154,000	\$166,288	\$2,623,850
Rebates	\$0	\$0	\$631,060
Loans	\$0	\$0	\$0
Other	\$0	\$0	\$0
Upstream			
Information	\$453,000	\$122,693	\$0
Fin Assistance	\$381,000	\$528,527	\$36,900
<b>Total</b>	<b>\$1,951,000</b>	<b>\$1,671,589</b>	<b>\$3,806,905</b>

\* As of May 1, 2001

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

**(Annual Energy Reductions, Electric, MWh)**

	2000 (Recorded)	2001 (Planned)
Information	N/A	64
EMS	1254	854
EEI		
SPC	5649	11491
Rebates	734	15943
Loans	N/A	
Other	N/A	
Upstream Programs		
Information	N/A	219
Financial Assistance	14736	4317
Total	22374	32887

**(Annual Demand Reductions, Electric, MW)**

	2000 (Recorded)	2001 (Planned)
Information	N/A	N/A
EMS	0.11	0.08
EEI		
SPC	0.68	1.26
Rebates	0.12	1.60
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	0.02
Financial Assistance	2.19	0.40
Total	3.10	3.36

**(Annual Energy Reductions, Natural Gas, Therms, 000's)**

	2000 (Recorded)	2001 (Planned)
Information	N/A	N/A
EMS	N/A	213
EEI		
SPC	416	898
Rebates	49	67
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	39
Financial Assistance	9	N/A
Total	475	1217



**TABLE 2.3  
SUMMARY OF COST-EFFECTIVENESS:  
RESIDENTIAL PROGRAM AREA**

**(Benefit-Cost Ratios)**

	2000 (Recorded)		2001 (Planned)	
	Utility Cost Test	Total Resource Cost Test	Utility Cost Test	Total Resource Cost Test
Information	N/A	N/A	0.01	0.01
EMS	0.24	0.20	0.32	0.24
EEI				
SPCs	1.13	0.75	1.80	1.23
Rebates	0.44	0.19	2.92	1.81
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	1.08	0.43
Financial Assistance	1.04	0.62	1.74	1.40

**TABLE 2.4  
SUMMARY OF COST-EFFECTIVENESS:  
RESIDENTIAL PROGRAM AREA**

	(Net Benefits, \$Mill)	
	2000 Recorded	2001 Planned TRC
Information	\$0.00	\$0.03
EMS	\$0.38	\$0.49
EEl		
SPCs	\$3.77	\$12.56
Rebates	\$0.50	\$10.27
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	\$0.00	\$0.30
Financial Assistance	\$4.55	\$2.24
<b>Total</b>	<b>\$9.20</b>	<b>\$25.89</b>

# Nonresidential Programs

## Nonresidential Information

### Information

#### Program Description

The Nonresidential Information program provides information about energy efficiency and services and introduces customers to state-of-the-art efficient technologies and practices through workshops and seminars. Facility managers of large businesses (greater than 500 kW demand and/or 250,000 therms per year) are notified of the workshops and seminars through mailed invitations. Business owners and property managers of small/ medium businesses (less than or equal to 500 kW and/or 250,000 therms per year) are notified through direct mail invitations and through business and trade associations.

#### 2000 Results & Achievements

SDG&E held six technology seminars for large nonresidential customers and five seminars plus twenty-eight informational seminars for small nonresidential customers. A total of 425 individuals attended the large nonresidential customer seminars and 1,074 individuals attended the small nonresidential customer seminars.

Seminar topics for the large nonresidential customers were:

1. Indoor Air Quality (2/2/00)
2. Air Compressors (6/7 – 6/8/00)
3. Refrigerant Compliance (8/9/00)
4. HVAC Controls (8/31/00)
5. Boilers Basics (10/5/00)
6. Lighting Efficiency Showcase (10/11/00)

Seminar topics for small nonresidential customers were:

1. Data Management Software training (6/15/00)
2. Ultra Violet Powder Coating (6/29/00)
3. Clothes Washer Seminar (7/20/00)
4. “Understanding and Managing Your Energy Usage” (28 sessions in August)
5. LED Traffic Signal seminar (9/6/00)
6. Lighting Efficiency Showcase (10/12/00)

The program performance indicator “Customers attending educational seminars will indicate a higher likelihood of adopting measures/techniques featured in workshop-sessions.” was measured from a survey question. The results showed that 74% of seminar attendees indicated a willingness to adopt measures/techniques discussed at the workshops.

**Statewide Energy Guide****Program Description**

The Statewide Energy Guide “Smarter Business Energy Use, Saving Energy & Money” is an energy information and education guide designed by the California utilities in 1999 to give customers information that will empower them to better manage their business energy costs. Development of the guide represents specific energy efficiency information to both customers and other market actors, such as energy efficiency service providers and contractors. Customers can call SDG&E’s Customer Service to request the Statewide Energy Guide or they can access the electronic version of the energy guide on SDG&E’s website.

**2000 Results & Achievements**

In 2000, SDG&E distributed 13,762 Business Energy Guides. PG&E, in response to D.00-07-017 Ordering Paragraph 68, on behalf of SDG&E, SCE and SoCalGas submitted to the CPUC a report on the “Joint Residential and Business Energy Guide Plans” on August 7, 2000. The report described the coordinated statewide plan to distribute the energy guides.

**Energy Efficiency Financing (Energy Cents)****Program Description**

The Energy Cents program is a cooperative effort between SDG&E and SAFE-BIDCO, a non-profit state organization offering low-cost financing to customers interested in installing energy efficient projects. SAFE-BIDCO agreed to waive their usual application-processing fee for SDG&E’s customers with a qualifying small/medium commercial audit. This financing, in addition to other SDG&E incentives, can be used to facilitate installation of energy efficiency projects. SAFE BIDCO defines a small business customer as having a net worth less than \$6 million with average net annual income of less than \$2 million. For eligibility requirements and an application, customers can contact SDG&E or SAFE-BIDCO.

**2000 Results & Achievements**

In 2000, six finance loan applications were received. SDG&E promoted this program at small business seminars, including the twenty-six small business energy efficiency outreach workshops held in August. The program was also promoted through the SDG&E energy audit program.

**Building Operator Certification****Program Description**

The Building Operator Certification program promotes energy efficient operations and maintenance practices in nonresidential buildings by establishing a training and certification program for building operators. The program establishes a standard of professional competence in energy efficiency by focusing on practice oriented education where skill development is more likely to be attained. Upon successful completion and approval of all qualifying segments, participants receive a certificate. The certification program is comprised of five courses, which are conducted by the University of California San Diego (UCSD). To encourage individuals to

participate in the program, SDG&E funded half of the certification tuition. To enroll, customers register through the Extended Studies Department at UCSD.

### 2000 Results & Achievements

In 2000, 200 students enrolled in the program. SDG&E encouraged program participation through newspaper advertisements, distribution of program brochures through the San Diego Regional Energy Office, and by promotion of the program through communications targeted to nonresidential customers.

### **Small Comprehensive Technical Assistance**

#### Program Description

The Technical Assistance program provides technical consulting expertise to small business customers from a pool of independent consultants offering specialized services for specific end uses related to retrofit applications. A detailed analysis of a customer's energy use patterns is provided to help identify potential energy savings gained by changing processes or upgrading equipment. This analysis often serves as the first step to customer participation in the Small Business Standard Performance Contract program.

### 2000 Results & Achievements

SDG&E worked with its engineers and four independent consultants to increase customer awareness of the program. The customer market segments identified were bio-med, small supermarkets, restaurants and ice-skating arenas.

Seventeen proposals to perform technical assistance studies were approved in 2000. Six technical assistance studies were completed and one study became an SPC project.

### **Process Technical Assistance**

#### Program Description

Process Technical Assistance provides customers with on-site information and support needed to make decisions regarding energy efficiency retrofits for process applications. This program addresses high-efficiency nonresidential processes, customized systems or equipment, as well as emerging technologies. The Technical Assistance studies performed by consultants are lead generators for the Standard Performance Contract (SPC) programs.

### 2000 Results & Achievements

This program was promoted through customer technical workshops, SDG&E's representatives and engineers, other customer contacts, and through direct mail and e-mail. Thirty-three proposals to perform technical studies were approved in 2000. Nineteen studies were completed and eight studies resulted in SPC projects. Process technologies studied include air compressor systems, water pumping, HVAC systems, fume hoods refrigeration systems and heat recovery systems.

**Purchase-Savings Pilot Program****Program Description**

The Purchase Savings Pilot program is targeted to the small/medium sized facility owner or manager responsible for replacing non-performing or burned-out equipment with little or no advance notice. Purchase Savings provides information needed to realize cost-savings before having to make a replacement decision. Small businesses under 500 kW are eligible for this program. The program is limited to 10 or fewer customers within a pilot study group.

**2000 Results & Achievements**

Website information was posted in February (<http://www.sdge.com/business/purchase.html>) detailing the program availability and particulars. "Purchase-Savings: Quick Start Market Characterization Study" was completed in April 2000. A focus group was held on July 17, 2000. Equipment surveys were completed and delivered to four customers (restaurant, office, fast-food restaurant and retail establishment). Customer comments on the surveys were favorable.

The program performance indicator "Sales of Energy Efficient (EE) equipment at time of burn-out relative to minimum standard equipment and adoption of emerging technologies" was promoted through this program. The program encouraged customers to consider purchasing EE equipment or considering emerging technologies at the time of equipment burnout.

**Procure-Savings Pilot Program****Program Description**

Although energy efficiency programs have been available for years, the vast majority of purchasing agents in large companies are still not aware of energy efficiency efforts. The criterion for a purchasing agent's performance is how well they contain or reduce capital outlays. Energy efficiency equipment often has a higher first cost than standard efficiency units. This program is targeted to large business customers to help simplify and expedite their energy efficiency purchasing decisions. The program is designed to identify potential long-term cost savings when replacing equipment. Customers greater than 500 kW are eligible. The program is limited to 10 or fewer customers within a pilot study group.

**2000 Results & Achievements**

Website information was posted in February (<http://www.sdge.com/business/procure.html>) detailing the program availability and particulars. A market characterization study, "Procure-Savings Quick-Start Market Characterization Study" was completed April 2000. Potential participants were contacted in June to participate in a focus group on July 17, 2000. Equipment surveys were completed and delivered to three customers (two manufacturers and one hotel). Customer comments on the surveys were favorable.

The program performance indicator "Sales of EE equipment at time of burn-out relative to minimum standard equipment" was promoted through this program. The program encouraged purchasing agents to pre-qualify EE equipment so at the time of burnout, EE equipment could be purchased.

## **Energy Management Services**

### **Energy Audits**

#### Program Description

Audits that identify energy efficient opportunities are offered to small commercial customers. The audit program helps customers identify energy-savings opportunities at their facilities. Customers receive a comprehensive analysis of their energy use, plus specific recommendations on energy-saving measures that can significantly lower their energy use. In addition, auditors give customers information regarding all events occurring in the electric industry, and programs for which they may be eligible. Small commercial customers whose demand is less than 250 kW or whose gas usage is less than 250,000 therms are eligible for the audits.

#### 2000 Results & Achievements

In 2000, 400 on-site audits were performed. Estimated energy savings from audit recommendations would result in 17,309,207 kWh and 3,526 kW demand reduction if measures were implemented.

The on-line audit was operational on 12/28/00. The on-line commercial energy audit targets nonresidential customers with 500 kW or less demand.

### **Third Party Initiative - Small Cities Energy Efficiency Retrofit Demonstration Program**

#### Program Description

SDG&E issued a request for proposal for programs that would address market barriers that limit the adoption and installations of energy efficient measures by small cities in San Diego County. SDG&E requested that the bidders address market barriers faced by small cities, such as the availability of funding for energy efficiency measures, which limit the adoption and installation of energy efficient measures.

#### 2000 Results & Achievements

SDREO completed four technology assessments conducted at three cities. Based on this information, a list of recommendations and market barriers were developed and distributed to the participating cities and SDG&E. SDG&E evaluated these recommendations and provided energy savings opportunities available through our energy savings programs to these cities.

## Energy Efficiency Incentives

### **Nonresidential Remodeling and Renovation**

#### Program Description

The Nonresidential Remodeling and Renovation program is implemented through the commercial/industrial/agricultural new construction Savings By Design and Energy Design Resources programs. It is designed to encourage and assist building owners, developers, or occupants of tenant improvement projects to incorporate energy efficiency technologies into the building design. It also provides financial resources, information and incentives. Refer to Nonresidential New Construction for program details.

#### 2000 Results and Achievements

Performance Indicators: The number of design professionals adopting integrated (whole building) design techniques; the number of commercial renovation and remodeling projects exceeding Title 24 standards. This program had 74 contracts signed by yearend, and of these projects 71 utilized the Systems Approach and three utilized the Whole Building Approach with a Design Team. These projects will provide over 6,290 MWh in energy savings.

### **Emerging Technologies**

#### Program Description

New energy efficient technologies are not often implemented by customers and energy efficiency service providers (EESPs) because of low awareness of the availability of emerging technologies, uncertainty of the benefits of the technologies or prohibitive cost. SDG&E worked with large customers to develop demonstration projects that would showcase emerging technologies.

In addition, SDG&E worked with the Emerging Technologies Coordinating Council (ETCC), a new organization currently comprised of members from SDG&E, Southern California Edison (SCE), Pacific Gas & Electric (PG&E), Southern California Gas (SoCalGas), and the California Energy Commission (CEC), to identify emerging technologies.

#### 2000 Results & Achievements

San Diego State University (SDSU) entered into an agreement on 12/6/00 with Lawrence Berkley National Laboratory (LBNL) to install a low flow fume hood to be funded by SDG&E. On 12/8/00, SDSU signed a memorandum of understanding with SDG&E to install, monitor, and report the energy and safety benefits associated with the operation of the low-flow fume hood technology.

On December 14, 2000, the City of El Cajon installed LED green ball, yellow ball, and pedestrian hands on the traffic signals at an intersection which had existing LED red balls. This became the first intersection in SDG&E's service territory to be completely retrofitted with LED lamps.



**Express Efficiency****Program Description**

Through the Express Efficiency statewide program, an alliance of Trade Allies (contractors and distributors) helps market the benefits of energy efficiency. Financial incentives for lighting, air conditioning, refrigeration, food service, and gas equipment are offered to small commercial customers (less than 250 kW and 250,000 therms per year) through a direct rebate process. For each qualifying piece of equipment purchased, SDG&E reimburses the customer or contractor (if authorized by the customer) for the amount of the incentive. Measures, technical requirements, and most rebate levels are consistent statewide and are published in statewide program materials.

**2000 Results & Achievements**

In 2000, there were 1,843 applications processed. This success is attributed to the fact that third party contractors focused on the hard to reach market (customers with a demand of less than 100 kW). On August 14, 2000, SDG&E filed Advice Letter 1247-E/1213-G requesting additional funds for this program. The Advice Letter was approved by the CPUC in September 2000, effective as of September 7, 2000. Per the Summer Initiative Ruling, incentives for measures with on-peak kW savings were increased. For customers under 20 kW, incentives were doubled, and for customers greater than 20 kW, incentives were increased by 50%.

The program performance indicator “Number of third party sponsored projects” was increased by 88% in PY2000.

**Small Commercial Turnkey Pilot Program****Program Description**

The Small Commercial Turnkey pilot program is designed to reach SDG&E’s smallest nonresidential customers. Eligible customers are those on SDG&E’s Rate Schedule A (e.g. monthly demand less than 20 kW). The Small Commercial Turnkey Pilot program is designed to promote the installation of multiple energy efficient measures by providing an increase in rebate levels if more than one type of measure is installed. Rebate levels are designed to discount a significant portion of the cost of energy efficiency improvements, thereby providing an incentive for contractors to address this market in a comprehensive manner.

**2000 Results & Achievements**

There were 328 applications processed. Approximately 99.4 % of these applications were for multiple measure projects.

The program performance indicator “Number of third party sponsored projects” was increased by 88% in PY2000.

**Commercial Dishwasher Pilot Program****Program Description**

The Commercial Dishwasher Pilot program is designed to assess the effectiveness, including the costs and benefits, of emerging dishwashing technologies. The potential target market includes an estimated 4,800 restaurants, hotels, medical facilities, schools, colleges and universities. SDG&E plans to work with a limited number of customers to demonstrate these technologies.

**2000 Results & Achievements**

Contracts were signed with the San Diego Convention Center and San Diego Teen Challenge as test sites for the installation and demonstration of high efficiency dishwashers. Monitoring of the existing dishwasher systems began in the fourth quarter.

**Third Party Initiative - Horizontal Washers Program****Program Description**

This program targets the commercial market to promote the purchase of energy efficient horizontal clothes washers for laundromats and common-use laundry rooms in apartments, dormitories and barracks. SDG&E contracted with the San Diego County Water Authority (SDCWA), through the 1998 third party program, to augment their Commercial Industrial, Institutional (CII) Voucher Incentive Program (VIP) toward the purchase of coin-operated washers by providing a larger incentive than the current voucher offered by the SDCWA.

**2000 Results & Achievements**

Of the 1,848 vouchers issued in 2000, 939 energy-efficient top-loader clothes washers have been installed. The September direct mail campaign helped to accelerate participation in the program.

## **Energy Efficiency Incentives-Standard Performance Contract**

### **Large Nonresidential Standard Performance Contract**

#### **Program Description**

The Large Nonresidential Standard Performance Contract program (LNSPC) is a performance-based statewide retrofit program that offers incentive payments for projects delivering verified energy savings at large commercial, industrial and agricultural customers facilities. The fixed price, performance measurement protocols, payment terms, and all other operating rules of the program are specified in the program procedure manual. The program was developed with guidance from the CBEE and its Technical Advisory Committee. Customers with a load of over 500 kW or 250,000 therms per year are eligible for this program.

#### **2000 Results & Achievements**

There were thirty-seven LNSPC projects submitted with one cancellation. Twenty-three projects were self-sponsored and fourteen were sponsored by an EESP. Twenty projects were for mixed measure retrofits, seven were HVAC projects and ten were process retrofit projects.

Promotional efforts included:

1. Direct mail letter announcing the standard performance contract (SPC) programs for 2000 and introducing the FasTrac pilot program to contractors.
2. E-mail to EESPs, Energy Service Companies (ESCOs), and contractors registered on SDG&E's website, announcing the 2000 SPC programs were operational.
3. Trade Allies calling on contractors to advise on new programs.
4. SDG&E engineers making weekly contacts with new and existing contractors to explain programs as well as meeting with several large customers to discuss the SPC program, identify potential projects and encourage program participation.
5. SPC program information was discussed and distributed at technology seminars for large customers and contractors.
6. Two breakfast workshops designed for EESPs and contractors to promote SPC and FasTrac programs.
7. Presentations to 20 large governmental accounts about LNSPC and FasTrac.
8. Presentation to the Hotel Engineers Association.

Per direction from the Summer Initiative Ruling, incentives for on-peak kW savings were added to the program in September.

The program performance indicator "Number of third party sponsored projects" was increased by 62% in PY2000. The program performance indicator "Number of customers adopting energy efficiency measures and techniques" was recorded in this program. The program performance indicator "Number of installed energy efficient process systems" resulted in ten installed process system SPC projects.

**FasTrac Performance Contracting Pilot Program****Program Description**

The FasTrac Pilot is a pilot program, formulated to test the feasibility of using performance contracting for large customers with smaller energy efficiency retrofit projects not suited for the Large Standard Performance Contract (LNSPC) program. The FasTrac pilot will preserve many of the essential features of the LNSPC program while providing a more streamlined and simplified application, measurement and verification (M & V), and funds disbursement process. Large customers (greater than 500 kW) and chain accounts (two or more SDG&E accounts), with energy efficient lighting or HVAC projects, are eligible to participate in this project. Project Applications must be submitted through a third party project sponsor, (such as an energy efficiency service provider, a lighting contractor, an HVAC contractor, etc).

**2000 Results & Achievements**

There were twenty-five projects submitted by fourteen EESPs in 2000. In August 2000, the program was opened to all commercial customers, the retention analysis period was reduced to six months, and the corporate parent incentive cap was raised to \$50,000.

Promotional efforts included:

1. Direct mail letter announcing FasTrac Pilot program to contractors.
2. E-mail to EESPs, ESCOs, and contractors registered on SDG&E's website announcing the FasTrac Program.
3. Trade Allies called on contractors to introduce pilot program.
4. SDG&E engineers making weekly contacts with new and existing contractors to explain the program.
5. Large Customer Account Executives notified customers of the program.
6. Two breakfast workshops designed for EESPs and contractors to promote SPC and FasTrac programs.

The program performance indicator "Number of third party sponsored projects" was increased by 62% in PY2000.

**Small Business Standard Performance Contract (SBSPC)****Program Description**

The Small Business Standard Performance Contract (SBSPC) program is a performance-based, statewide retrofit program that offers incentive payments for energy efficient projects that deliver verified energy savings at small/medium sized customer facilities (equal to or less than 500 kW demand or 250,000 annual therms of usage). The fixed price, performance measurement protocols, payment terms, and all other operating rules of the program are specified in the program procedure manual. The Project Application must be submitted through a third party project sponsor, (such as an energy efficiency service provider, a lighting contractor, an HVAC contractor, etc).

## 2000 Results & Achievements

There were forty-four SBSPC projects submitted with four cancellations sponsored by twenty-four EESPs. Per direction from the Summer Initiative Ruling effective September 11, 2000, incentives for measures with on-peak kW savings were added to the program in 2000.

Presentations and/or promotional materials have been given to various groups and organizations including the Business Improvement Districts, Greater San Diego Chambers of Commerce, Business to Business Expo, City of San Diego Office of Small Business, the Association of Building Engineers, Southland Industries, Dept. of the Navy, Carrier Corp., Landmark Refrigeration, Commonwealth Energy, Electronic Computer Systems, Marine Corps, SD Metro Transit System, A. O. Reed, State of California, Biostrut, San Diego Chiller, and the Hotel Engineers Association.

On July 31, 2000 SDG&E filed Advice Letter 1243-E/1209-G with the CPUC requesting measured savings for the SBSPC program. This Advice Letter was approved by the CPUC in September 2000, effective as of July 31, 2000. All SDG&E registered EESPs and contractors were notified that measured savings were available.

The program performance indicator “Number of third party sponsored projects” was increased by 88% in PY2000.

## Upstream Programs

### **Upstream HVAC Incentives**

#### Program Description

This program offers standard upstream incentives to manufacturing distributors to encourage the promotion of premium efficient package A/C units instead of units with standard efficiencies. The Nonresidential Upstream HVAC Distributor Incentive program is designed to improve the current stocking practices of local HVAC distributors by increasing the inventory stock of split and package system air conditioning units to the Consortium for Energy Efficiency (CEE) Tier 1 energy efficiency level. This strategy is expected to achieve its goals by providing a financial incentive to distributors for stocking CEE Tier 1 high-efficiency HVAC (HEHVAC) units.

#### 2000 Results & Achievements

Incentives have been paid for 1,104 HVAC units. Seven of eight air conditioning distributors are participating in the program. On August 9, 2000, SDG&E kicked off a Midstream HVAC Incentives program that offered standard incentives to contractors and vendors who purchased and installed premium efficiency HVAC units. There were 149 heat pumps and 179 air conditioning units installed in the Midstream HVAC Incentives program in 2000.

The program performance indicator “Inventory of high efficiency equipment relative to minimum standard equipment available to San Diego Market that meet Consortium for Energy Efficiency (CEE) Standard.” was increased as a result of this program. The program performance indicator “Installation of high efficiency equipment (non-package units) relative to minimum standard equipment” was increased as a result of this program and the Midstream HVAC program.

### **Upstream Motors Incentive**

#### Program Description

The Upstream Motor Dealer Incentive program is designed to improve the current stocking practices of local motors dealers by increasing the inventory stock of premium efficiency motors that meet the Consortium for Energy Efficiency (CEE) rating for premium-efficient motors. The program provides dealers with a financial incentive for stocking premium efficient motors from 1 horsepower to 200 horsepower. This approach supports the overall motor market transformation strategy by encouraging key upstream market players to facilitate change in the market place.

#### 2000 Results & Achievements

Incentives were paid for stocking 604 units. Eight dealers participated in this program. SDG&E continued to work with motor manufacturers to encourage dealer participation and implement program recommendations as appropriate. SDG&E, in participation with the CEE Motors Committee, pursued a standardization of premium efficiency with the National Electrical Manufacturers Association (NEMA).

The program performance indicator “Sale of high-efficiency motors relative to minimum standards” was increased as a result of this program. The program performance indicator “Number of distributors who stock high-efficiency motors” was increased as a result of this program.

### **Targeted Third Party Initiative**

#### **Program Description**

This Targeted Third Party Initiative was designed to solicit creative and innovative proposals from interested third parties to address market barriers, such as funding, faced by existing small/medium commercial customers (500 kW or less demand per month). Due to their size, these customers are limited in the availability, adoption and installation of energy efficient equipment measures. The scope of work under this RFP was designed to address the needs of small/medium customers as a sector of the nonresidential energy efficiency retrofit market.

This program supports SDG&E’s effort to continue to offer energy efficiency options to its customers through Targeted Third Party Initiatives and to ensure that program offerings are available to hard to reach communities and customer groups.

#### **2000 Results & Achievements**

The Request For Proposal (RFP) was issued in February 2000, and four proposals were received. The selected bidder was Redstone Engineering Consulting, Inc., who proposed the installation and testing of an energy saving device, the “Energy Shaver”. This device utilizes salt hydrates used to cool the refrigerant in small air conditioning units. The intent of utilizing this device was to lower electrical consumption and demand during on-peak periods. The market targeted for this demonstration project was any nonresidential customer on a time-of-use rate with a packaged air conditioning unit of 5 tons or less. A total of three Energy Shavers and monitoring equipment were installed at two sites (university and manufacturer) in September 2000. The final report of the performance and monitoring of the Energy Shaver devices indicated the electrical consumption and demand were only reduced by 2% to 3% instead of the 20% expected. Performance problems were due to a problem with the salt solutions used to cool the refrigerant in the air conditioning units.

**TABLE 3.1  
SUMMARY OF COSTS:  
NONRESIDENTIAL PROGRAM AREA**

<b>Electric and Gas Combined</b>			
	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$1,723,000	\$1,585,888	\$1,245,000
EMS			
Large	\$0	\$0	\$0
Small/Medium	\$598,000	\$391,474	\$600,000
EEl: Custom Rebates			
Large	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0
EEl: Pres Rebates			
Large	\$1,058,000	\$972,445	\$2,405,000
Small/Medium	\$1,700,000	\$4,343,554	\$4,432,000
EEl: SPCs			
Large	\$10,300,000	\$6,376,826	\$4,235,000
Small/Medium	\$1,600,000	\$773,755	\$810,000
Upstream Programs			
Information	\$0	\$0	\$0
Financial	\$1,002,000	\$1,030,236	\$1,448,000
<b>Total</b>	<b>\$17,981,000</b>	<b>\$15,474,177</b>	<b>\$15,175,000</b>

<b>Electric Only</b>			
	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$1,723,000	\$1,543,617	\$983,545
EMS			
Large	\$0	\$0	\$0
Small/Medium	\$598,000	\$391,474	\$451,200
EEl: Custom Rebates			
Large	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0
EEl: Pres Rebates			
Large	\$1,058,000	\$972,445	\$2,191,250
Small/Medium	\$1,700,000	\$4,263,082	\$3,943,800
EEl: SPCs			
Large	\$7,790,000	\$4,863,199	\$2,964,500
Small/Medium	\$1,382,000	\$649,954	\$607,500
Upstream Programs			
Information	\$0	\$0	\$0
Financial	\$934,000	\$1,030,236	\$1,273,000
<b>Total</b>	<b>\$15,185,000</b>	<b>\$13,714,007</b>	<b>\$12,414,795</b>

<b>Gas Only</b>			
	2000		2001
	Budgeted	Recorded	Budgeted*
Information	\$0	\$42,271	\$261,455
EMS			
Large	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$148,800
EEl: Custom Rebates			
Large	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0
EEl: Pres Rebates			
Large	\$0	\$0	\$213,750
Small/Medium	\$0	\$80,472	\$488,200
EEl: SPCs			
Large	\$2,510,000	\$1,513,627	\$1,270,500
Small/Medium	\$218,000	\$123,801	\$202,500
Upstream Programs			
Information	\$0	\$0	\$0
Financial	\$68,000	\$0	\$175,000
<b>Total</b>	<b>\$2,796,000</b>	<b>\$1,760,170</b>	<b>\$2,760,205</b>

\* As of May 1, 2001



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

<b>(Annual Energy Reductions, Electric, MWh)</b>		
	2000 (Recorded)	2001 (Planned)
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Prescriptive Rebates		
Large	6290	8690
Small/Medium	12866	32796
EEl: SPCs		
Large	50676	8481
Small/Medium	3799	2033
Upstream Programs		
Information	N/A	N/A
Financial Assistance	1251	2479
<b>Total</b>	<b>74881</b>	<b>54479</b>

<b>(Annual Demand Reductions, Electric, MW)</b>		
	2000 (Recorded)	2001 (Planned)
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Prescriptive Rebates		
Large	2.08	2.00
Small/Medium	3.13	3.82
EEl: SPCs		
Large	5.97	0.80
Small/Medium	0.42	0.31
Upstream Programs		
Information	N/A	N/A
Financial Assistance	0.66	1.25
<b>Total</b>	<b>12.25</b>	<b>8.18</b>

<b>(Annual Energy Reductions, Natural Gas, Therms, 000's)</b>		
	2000 (Recorded)	2001 (Planned)
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Prescriptive Rebates		
Large	13	29
Small/Medium	0	N/A
EEl: SPCs		
Large	752	586
Small/Medium	7	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	123	105
<b>Total</b>	<b>895</b>	<b>720</b>

**TABLE 3.3  
SUMMARY OF COST-EFFECTIVENESS:  
NONRESIDENTIAL PROGRAM AREA**

	<b>(Benefit-Cost Ratios)</b>			
	2000 (Recorded)		2001 (Planned)	
	Utility Cost Test	Total Resource Cost Test	Utility Cost Test	Total Resource Cost Test
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
EEl: Customized Rebates				
Large	N/A	N/A	N/A	N/A
Small/Medium	N/A	N/A	N/A	N/A
EEl: Prescriptive Rebates				
Large	2.98	2.47	2.37	1.78
Small/Medium	1.37	1.08	4.83	3.08
EEl: SPCs				
Large	3.90	1.87	1.96	1.39
Small/Medium	2.21	0.60	1.69	0.51
Upstream Programs				
Information	N/A	N/A	N/A	N/A
Financial Assistance	0.86	0.56	1.30	0.61

**TABLE 3.4  
SUMMARY OF COST-EFFECTIVENESS:  
NONRESIDENTIAL PROGRAM AREA**

(Net Benefits, \$MILL)		
	2000 Recorded	2001 Planned TRC
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Customized Rebates		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEl: Prescriptive Rebates		
Large	\$2.90	\$6.34
Small/Medium	\$5.97	\$23.79
EEl: SPCs		
Large	\$24.87	\$9.24
Small/Medium	\$1.71	\$1.52
Upstream Programs		
Information	N/A	N/A
Financial Assistance	\$0.88	\$2.09
Total	\$36.32	\$42.98

# New Construction Programs

## Residential

### *Design Assistance/Incentives (Home Energy Partnership Program – Single-Family)*

#### Program Description

Initially, many strategies were incorporated under Design Assistance/Incentives. In the latter part of 2000, this program was revamped and became the Home Energy Partnership program (HEP), a new residential new construction program that provides design assistance services, marketing support, and incentives for verified energy efficiency installations in residential new construction. HEP will have three sections: single family housing, multi-family housing, and energy efficient appliances. Through these programs, SDG&E will promote the adoption of energy efficiency at the design level, provide design assistance services, incentives, and marketing support to architects, sales agents, and consumers.

"ComfortWise", a program implemented by ConSol, targets new construction for single family homes. ComfortWise covers all aspects of home construction with an emphasis on quality control. The program provides a variety of services, including engineered HVAC system layout, design and sizing, third-party inspections and diagnostics ranging from framing techniques and insulation installation to home energy ratings, ENERGY STAR<sup>®</sup> marketing support, and promotion of Energy Efficient Mortgages. Integrated energy efficient design, air conditioners, water heaters, integrated systems, and efficient lighting and appliances are targeted.

#### 2000 Results and Achievements

SDG&E concluded its participation in ComfortWise on June 30, 2000, ending with 755 homes signed to participate in the program. However, by yearend only 449 units remained in the program.

The new "Home Energy Partnership Program" (HEPP) for single family housing was rolled out on October 1, 2000. This program provides incentives directly to program participants (builders and design teams) after the installation of energy efficient equipment has been completed and verified. By yearend, four builders (three builders with multiple units and one custom homebuilder) had signed to participate in the program for a total of 329 homes.

Performance Indicators: The number of builders that offer homes that exceed the standards and the percentage of housing units that exceed standards. In total, five builders signed to participate in one of the residential new construction single-family programs<sup>1</sup> for a total of 778 homes. The US Census Bureau reports that 9,296 housing permits were issued for single family housing in San Diego County<sup>2</sup>. This results in an increase of 8.4% of single family homes exceeding the standards.

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<sup>1</sup> Builders signed under ComfortWise or Home Energy Partnership Program – Single-Family.

<sup>2</sup> US Census Bureau – [www.census.gov/const/c40/Table3/t3yu0012.txt](http://www.census.gov/const/c40/Table3/t3yu0012.txt).

**Design Assistance/Incentives (Home Energy Partnership Program – Multi-Family)****Program Description**

Under Design Assistance/Incentives, “Designed for Comfort “ was created to address multi-family housing needs, single family attached housing, and some custom homes. It also provides for reviews of contractor plans in the construction of military housing. The program targets specific market barriers to bring about a change in the way multi-family homes are built so that energy efficiency becomes a design intent, thus making it easier to incorporate energy efficiency options into the building process. By providing plan check of contractor plans prior to construction, compliance with Title 24 requirements can be verified and areas for energy efficiency improvement can be identified. Incentives are paid to the developer and design team for incorporating energy efficiency into the homes.

**2000 Results & Achievements**

This program was implemented on March 1, 2000. Brochures were developed and distributed to potential participants. Design team seminars were held during the year to assist and encourage exploration of energy efficiency alternatives. Direct assistance and tools were provided to energy consultants and other members of the design team and developers. By yearend this successful program had 265 units committed to participate in it. Designed for Comfort will be integrated into the newly designed residential Home Energy Partnership Program (HEPP) – Multi-Family, beginning January 1, 2001.

Performance Indicators: The number of builders that offer homes that exceed the standards and the percentage of housing units that exceed standards. Per the US Census Bureau, 6,305 permits were issued for multi-family housing units in San Diego County during 2000<sup>3</sup>. Under Designed for Comfort, five builders signed to participate in the program for a total of 265 units; therefore, 4.2% of multi-family units exceed standards.

**Design Assistance/Incentives (Home Energy Partnership Program - Appliances)****Program Description**

Under Design Assistance/Incentives, SDG&E planned a demonstration project which would consist of two new construction housing design centers that would provide brochures to educate and influence potential home buyers on the benefits of high energy efficient appliances and energy efficiency technologies, and rebates on specific ENERGY STAR<sup>®</sup> appliances for customers willing to upgrade their new home appliances.

**2000 Results & Achievements**

Performance Indicator: Increase in the number of new home appliances that meet or exceed the ENERGY STAR<sup>®</sup> levels. Meetings were held with various builders to explain the new HEPP - Appliances program that was currently under design. By yearend, two builders’ design centers had agreed to participate in this program.

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<sup>3</sup> US Census Bureau – [www.census.gov/const/c40/Table3/t3yu0012.txt](http://www.census.gov/const/c40/Table3/t3yu0012.txt).

**Consumer Information & Awareness (Industry & Consumer Information and Promotion)****Program Description**

This program offers promotional support to builders, including an advertising campaign featuring builders committed to energy efficiency and quality construction. Advertising collateral is also offered to builders, designers and contractors to help influence purchase decisions on energy efficiency.

Training seminars are offered to builders and architects on topics such as HVAC sizing and installation, duct installation techniques, lighting, windows, selling energy efficiency upgrades, and Title 24 issues. The training is coordinated with the Building Industry Association (BIA) and the American Institute of Architects (AIA) to increase participation.

**2000 Results & Achievements**

Performance Indicator: Increased customer awareness of energy efficient homes and appliance options. SDG&E helped to sponsor the “Street of Dreams” event, utilizing that opportunity to promote energy efficiency to 1,486 customers who participated in the ENERGY STAR® “Energy Clues Bonanza” during the Energy Conservation Weekend event. SDG&E also promoted energy efficiency through interactive displays and a series of presentations, specifically directed towards the residential new construction customer, at its exhibit at the Del Mar Fair. Additionally, two new homebuyer consumer seminars were held to promote energy awareness and educate the potential new homebuyer on the availability of energy efficient housing. Unfortunately, despite targeted advertising of the two events, there were no attendees.

Performance Indicator: Increased awareness in the building industry of energy efficient practices and products. During 2000, 245 builders, contractors and building officials attended at least one of the 22 seminars held by SDG&E. These seminars provided information about energy efficiency over a wide range of topics; such as, high performance windows, building energy code training, HVAC, and other pertinent topics.

**Manufactured Housing****Program Description**

This is a pilot program focused on upstream market transformation by directing the efforts of incorporating energy efficiency options in manufactured housing toward the producers of that housing. This market may have a significant potential for capturing energy savings and lost opportunities. The results of a baseline and market assessment study, completed August 12, 1999, revealed that this market would benefit from an energy efficiency program. Most of the manufacturers are located in Northern California and there are no manufacturers in SDG&E's service territory. However, SDG&E will attempt to influence the market as there are some manufactured homes located in San Diego.

Manufactured homes can qualify for this program either by having incorporated a pre-qualified package of efficiency measures into the home or by installing a custom package of measures selected by the manufacturer that will meet the program's efficiency requirements. These

requirements are designed to reduce the total energy used for space heating, space cooling, and water heating by approximately 30% compared with a standard home that only meets code.

The benefit to the manufacturers in participating in this program is the increased marketability of the qualifying homes through promotion by the program of their housing. This will be done through co-op advertising for dealers, promotional materials for dealers highlighting the benefits of energy efficient homes, press releases at the manufacturer's plant and other promotional events.

## 2000 Results & Achievements

There was minimal manufacturer interest in participating in this program, as the manufactured housing market experienced a decrease in overall sales during 2000. A Memorandum of Understanding was developed to be used instead of a contract between SDG&E and program participants, as this is not a cash incentive program. Potential program participants were identified as any producer of manufactured housing in California. These companies were initially contacted by telephone with the intent of having follow-up meetings to further explain the benefits of the program and elicit participation. Site visits and interviews were conducted at four manufacturing plants. Only one manufacturer responded positively but was unable to participate in the program during 2000, as his production line was already committed. Due to lack of participant interest, the pilot program ended December 31, 2000.

Performance Indicators: The number of builders that offer manufactured homes that exceed the standards and the percentage of housing units that exceed standards. According to the "Manufactured Housing Market Characterization Final Report, August 12, 1999", (Report) prepared for PG&E by Quantum Consulting and XENERGY, about two-thirds of all manufactured homes in California are built just to the HUD Manufactured Housing Code<sup>4</sup>. The Report indicated that in a climate zone most similar to the San Diego area, about 62% of manufactured homes dealers reported that they offered energy efficiency upgrades and about 15% - 20% of homes are sold with upgrades.

## **California Home Energy Rating System (CHEERS)**

### Program Description

The California Home Energy Rating System (CHEERS) is a very important element in the quality assurance of new buildings. A CHEERS certification also provides additional value to customers at the time of resale as proof that the home has added energy efficiency features. Targeted measures include integrated energy efficient design, air conditioners, heat pumps, furnaces, boilers, water heaters, integrated systems, ventilation equipment, efficient lighting and appliances, solar heating and cooling, and rooftop PV's.

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<sup>4</sup> HUD Manufactured Housing Code has a uniform requirement of a U-value of 0.096 for all of California. About four manufacturers provide the homes sold in this area. The mean insulation values of the upgrades sold in this region are ceiling insulation of R-33.6, wall insulation of R-19, and floor insulation of R-20.1 Report, Appendix D- 2. The average standard levels are R-25.7 in ceiling insulation, R-15.4 in wall insulation, and R-15.7 in floor insulation. Report Appendix C-2.

## 2000 Results & Achievements

Performance Indicator: An increase in the number of certified HERS raters in San Diego to support builders of energy efficient homes. Most CHEERS training sessions are held in Stockton, California, at the CHEERS center. In order to increase the number of C-HERS raters within San Diego, SDG&E hosted a CHEERS training session on October 30 – November 1, 2000 which had an attendance of 13 people. Additionally, on November 16, 2000, five individuals attended a CHEERS/HERS Analyst training workshop that was also hosted by SDG&E in San Diego.

### **CEC's Public Interest Energy Research (PIER)**

#### Program Description

The CEC's Public Interest Energy Research (PIER) program is dedicated to the advancement of new energy efficient technologies, improved building performance evaluation methods, and development and improvement of building energy practices. SDG&E, through the San Diego Regional Energy Office, coordinates with the CEC's PIER and Renewable Energy (RE) programs. Various technologies identified by the CEC as qualified under this program are targeted with the intent of introducing the technologies to the appropriate market implementers. Efforts are focused on the optimization of buildings and equipment that are uniquely suited to the Southern California climate.

## 2000 Results & Achievements

SDG&E worked with the San Diego Regional Energy Office (SDREO) in accessing the availability of new and emerging technologies as they occurred. These technologies were evaluated and ranked according to cost-effectiveness. Emphasis was placed on the planning and implementation of a residential AC2000 air conditioning system. Three units were installed: a 2.5 ton unit, 3.5 ton unit, and one 5 ton unit. The purpose of this demonstration project was to determine the applicability of the AC2000 air conditioning technology to the San Diego region. Significant delays in the delivery of the demonstration units hampered the goal of completing performance testing during the 2000 cooling season. Monitoring of this demonstration project will continue through 2001.



## **Nonresidential**

### **Savings By Design**

#### **Program Description**

Savings By Design is a statewide nonresidential new construction program that is closely coordinated with the other California utilities. This program is dedicated to achieving greater savings than those required under California's 1998 Energy Efficiency Standards for Nonresidential Buildings (Title 24) that became effective on July 1, 1999. SDG&E serves commercial, industrial, and agricultural customers through its SBD program. Design assistance, access to tools and training, and financial incentives are offered to promote the design and installation of high efficiency building systems that perform better than Title 24 by a minimum specified amount.

The Savings By Design program targets the primary decision-makers involved with new construction projects, including architects, engineers, contractors, builders, developers, energy consultants, and building owners. Together they address all of the following: equipment efficiencies for lighting, heating, ventilation and air-conditioning; performance characteristics for glazing and other envelope components; and inclusion of energy efficient equipment such as controls, sensors, and drives. This program offers project-specific information and assistance to these decision-makers throughout the construction process.

Design Team Incentives is a strategy within Savings By Design involving energy simulation modeling and the whole building approach. This element includes a process by which design teams can document their efforts to integrate high-energy efficiency systems, simulate and evaluate their energy efficient designs, identify successful installations, and be paid for their efforts and achievements. Maximized comprehensive savings is the outcome of this "dollars to designers" approach that relies on whole building simulation. Architects and engineers who spend additional design time on projects will be paid in relation to the energy saving options modeled and actual measures that are installed in the completed project. Utilizing the whole building approach, greater savings can be achieved by integrating the design of the building's energy systems.

The Savings By Design program also assists owners of new construction projects with financial information and incentives. The choice to include highly efficient equipment is facilitated by offering financial information regarding return-on-investment, simple-payback, and long-term savings associated with high efficiency equipment. Financial incentives, to help offset the increased first costs, are made available to owners/end-users that choose to implement energy efficiency measures. All building sizes are eligible to participate in the Savings By Design program. All new construction end uses and technologies are eligible.

#### **2000 Results & Achievements**

The statewide SBD program was actively promoted at trade association events throughout California during PY2000, including the AIACC Desert Practice Conference, where over 500 architects from throughout California participated in educational sessions and a products trade show where energy efficiency information was made available. Support was also provided to local chapters of the American Institute of Architects (AIA), the American Society of Heating

Refrigeration and Air Conditioning Engineers (ASHRAE), Illuminating Engineers Society (IES), the US Green Building Council, and the Building Owners and Managers Association (BOMA).

The first annual Savings By Design Energy Efficiency Integration Awards was held with the help and support of The American Institute of Architects California Council (AIACC). Four awards for projects demonstrating energy efficiency and award winning design were recognized at a consolidated ceremony in Long Beach, where other AIACC design awards were presented. Positive feedback from the event sponsors and participants indicates continuing this effort will be very valuable to the success of this energy efficiency program.

The new statewide Collaborative for High Performance Schools (CHPS) saw tremendous growth in the number of interested stakeholders by yearend. CHPS was initially formed by the statewide utilities, municipal utilities, and the California Energy Commission to focus on improving the energy and resource-efficiency of public school facilities. This effort has been successful in combining and integrating programs and efforts of the participating organizations to bring attention to the benefits of high performance schools by designing schools that teach and encourage better learning environments. CHPS participated in two very successful Sustainable Buildings Industries Council conferences that were held in October 2000; one targeting school officials, and one directed to school designers.

- Utility participants in CHPS include PG&E, SDG&E, SCE, SCG and two municipalities: Los Angeles Department of Water and Power (LADWP), and the Sacramento Municipal Utility District (SMUD).
- Non-utility members are the Natural Resources Defense Council (NRDC) the California Energy Commission (CEC), the California Integrated Waste Management Board, the Division of the State Architect, the Department of Education (DOE), and the Department of Public School Construction.

Performance Indicators for Commercial New Construction: Number of Design Professionals adopting integrated design techniques; number of new commercial new construction projects exceeding 1998 Title 24 standards. The Whole Building Approach (integrated design) was utilized by 17 building owners, of which 15 took advantage of the Design Team incentives. Overall, there were 76 SBD signed contracts for greenfield buildings<sup>5</sup>.

Performance Indicators for Industrial and Agricultural New Construction: Number of customers adopting energy efficient measures and techniques; number of installed energy efficient process systems. Nine contracts were signed for agricultural or industrial customers. No energy efficient process systems were installed during 2000.

### **Energy Design Resources**

#### **Program Description**

Energy Design Resources (EDR) is a statewide program that provides benefits for all market actors by making utility developed materials accessible through a variety of media, including a website, where existing tools and enhanced resources are made available for free downloading. Quarterly industry newsletters are published, targeting key decision-makers in six strategic

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<sup>5</sup> Additional participants in SBD are under Nonresidential Remodel and Renovation.

segments of the new construction industry that highlight and promote the advantages of energy efficient facilities. Also offered are on-going seminars and educational opportunities aimed at design professionals desiring to upgrade their energy efficiency knowledge and skills.

This information-based program is designed to work in concert with the Savings By Design program which provides incentives directly to designers who undertake an integrated energy design process to increase the energy efficiency of the buildings they design. EDR complements the Whole Building Approach strategies of the Savings By Design program. It also provides validation of, and peer recognition for, designers and developers of exemplary projects that successfully incorporate principles of energy efficient design. Many of the tools and training that designers need to optimize their participation in Savings By Design are offered through Energy Design Resources.

SDG&E and the other utilities coordinate activities to further enhance the tools, case studies, and training made available through Energy Design Resources. Consistent training, applicable tools, distribution of design briefs and informational newsletters were offered throughout the participating utilities' service territories.

### 2000 Results & Achievements

This program was actively promoted by e-mailing bi-weekly electronic newsletters covering energy efficiency and its role in designing a new building to designers, architects, builders and other interested parties. Additionally, four quarterly newsletters were issued to owners and facility decision-makers of six different building types (e.g. schools, health care, retail, office, governmental, manufacturing).

Training seminars on EDR design tools were offered in each of the service territories of the three participating utilities. Six on-line training modules on energy efficiency processes and technologies were developed and made available on the EDR web-site

14 new Design Briefs were completed, providing comprehensive overviews of specific energy efficiency systems applicable to new construction.

Performance Indicators: Increased use of energy simulation modeling tools. . The EDR web-site received 16,000 successful hits, with more than 3,000 Mbytes of data being downloaded from the website: 50% for eQUEST, 11% for eVALUator, and 4% for SkyCalc.

## Other

### **Codes and Standards Support, Local Government Initiatives**

#### Program Description

This program involves working with state and local governments to facilitate, educate, train and support people who implement and develop energy codes, standards and initiatives. Although Codes & Standards is a statewide program, SDG&E specifically utilizes local government agencies and the San Diego Regional Energy Office (SDREO) for promotion and implementation. SDREO promotes the new construction programs under the title, "Community Energy Partnership Program". All residential and nonresidential new construction end uses and technologies are eligible.

The Codes and Standards (C&S) element of this program involves a range of activities supporting implementation of existing codes. Techniques to improve the availability and use of code training are developed and implemented. Emphasis is placed on developing new, voluntary design guidelines that exceed current efficiency requirements. C&S also supports participation in local, state and national code and standards development and upgrade efforts.

The Local Government Initiatives (LGI) program element recognizes the importance of city and county enforcement authorities and their ability to guide standards change and introduce energy initiatives into their General Plans. Since the public benefit of any standard or code is only realized if it is implemented, LGI utilizes opportunities to increase compliance among practitioners and enforcement officials and specifically directs efforts to influence local governments to incorporate energy efficiency policies.

#### 2000 Results & Achievements

The SDREO continued to conduct a targeted program of information dissemination, outreach and training of local government entities to increase the rate of adoption of nonresidential new construction design practices that deliver energy efficiency and high performance building design. Working as a lead generator for the nonresidential new construction Savings By Design program, 22 leads were developed resulting in 14 signed SBD contracts from 10 different governmental jurisdictions.

Three local jurisdictions adopted energy efficiency policies during 2000: the cities of El Cajon, San Diego, and Santee. Two additional jurisdictions are expected to adopt energy efficiency policies early in 2001.

On a statewide level, the utilities actively participated in AB 970 by attending CEC workshops and other related meetings, and by contributing standards enhancement proposals and studies.

The statewide Codes and Standards group continues to work together to bring about upgrades in standards and codes, thereby capturing the benefits for society from California's diverse energy efficiency efforts.

Performance Indicators: Prepare and technically refine case studies for code improvement and submit to the CEC and interested parties; increase the number of local governments with guidelines that promote energy efficiency performance. Codes And Standards Enhancement (CASE) studies for improvements were developed for promising design practices and

technologies and then presented to standards and code setting bodies in a coordinated manner. Studies that were submitted to the California Energy Commission during 2000 are: LED Exit Signs, Dry-Type Transformers, Nonresidential Cool Roofs, Lighting Controls, and HVAC Air Distribution Systems. Three local governments adopted the Community Energy Partnership program policies: the cities of El Cajon, San Diego, and Santee.

**TABLE 4.1  
SUMMARY OF COSTS:  
NEW CONSTRUCTION PROGRAM AREA**

**Electric and Gas Combined**

	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$2,248,000	\$2,052,600	\$2,419,500
Nonresidential	\$2,216,000	\$2,367,017	\$4,969,000
Other	\$449,000	\$492,558	\$482,000
Total	\$4,913,000	\$4,912,175	\$7,870,500

**Electric Only**

	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$1,937,000	\$1,781,727	\$2,056,575
Nonresidential	\$1,828,000	\$1,958,113	\$3,977,060
Other	\$382,000	\$418,674	\$409,700
Total	\$4,147,000	\$4,158,514	\$6,443,335

**Gas Only**

	2000		2001
	Budgeted	Recorded	Budgeted*
Residential	\$311,000	\$270,873	\$362,925
Nonresidential	\$388,000	\$408,904	\$991,940
Other	\$67,000	\$73,884	\$72,300
Total	\$766,000	\$753,661	\$1,427,165

\* As of May 1, 2001

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

**(Annual Energy Reductions, Electric, MWh)**

	2000 (Recorded)	2001 (Planned)
Residential	791	2164
Nonresidential	15155	22208
Total	15947	24371

**(Annual Energy Reductions, Electric, MW)**

	2000 (Recorded)	2001 (Planned)
Residential	0.43	0.78
Nonresidential	3.80	4.94
Total	4.23	5.72

**(Annual Energy Reductions, Natural Gas, Therms, 000's)**

	2000 (Recorded)	2001 (Planned)
Residential	50	130
Nonresidential	190	273
Total	240	404

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

	<b>(Benefit-Cost Ratios)</b>			
	2000 (Recorded)		2001 (Planned)	
	Utility Cost Test	Total Resource Cost Test	Utility Cost Test	Total Resource Cost Test
Residential	0.28	0.27	0.81	0.70
Nonresidential	2.89	2.68	3.02	2.21



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

(Net Benefits, \$MILL)

	2000 Recorded	2001 Planned TRC
Residential	\$0.65	\$2.17
Nonresidential	\$7.54	\$16.66
Total	\$8.20	\$18.83

## Market Assessment & Evaluation and Regulatory Oversight

The primary purposes and contents of the Market Assessment & Evaluation (MA&E) section are to: (1) record costs (previous calendar year and current calendar year) associated with MA&E activities; and, (2) highlight the status of various market assessment and evaluation studies. These studies are used to demonstrate performance per an adopted shareholder performance incentive, to measure the status and or changes in the energy efficiency industry and/or energy efficiency products, and to measure other effects of identified programs.

### Measurement for Program Administrative Incentives

These studies are designed primarily to support performance incentives milestones and to provide valuable information to enhance continuing program design.

#### Residential Programs

##### Evaluation of Residential Appliances

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#### **2000 SDG&E Residential Appliance Milestone Report**

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XENERGY

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March 2001

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This document represents the results of several data collection and analysis tasks completed by XENERGY Inc., in support of documenting San Diego Gas & Electric's (SDG&E) efforts in achieving several milestones related to the PY2000 Residential Appliance and Lighting Programs. This report presents a summary of the relevant milestones, followed by a separate section describing the specific methodology used to document each milestone as well as the results.

In September 1999, SDG&E submitted its application for proposed energy efficiency programs, budgets, and performance incentives for PY2000 and PY2001. Included in its application for the Statewide Residential Appliance and Lighting Programs was a set of performance milestones and incentive awards specific to SDG&E's participation in this statewide effort. The milestones were modified and approved in 00-07-017 dated July 6, 2000. SDG&E's specific performance milestones related to the appliance component of the Statewide Residential Lighting and Appliance Programs are summarized in Table 1.

**Table 1  
SDG&E Residential Appliance Milestones**

	<b>MILESTONE</b>	<b>AWARD LEVEL</b>
<b>ENERGY STAR® Sales Staff Training</b>	Train an average percent of sales associates on respective ENERGY STAR® products. Sales staff must achieve an average of 75% accuracy level on follow-on surveys. Shared with Residential Lighting Program.	Average percent of sales associates trained between 55-30% scaled to receive 100-50% of award
<b>Sales Staff Knowledge and Awareness</b>	Increase the number of appliance sales staff who are knowledgeable and aware of energy efficient appliances over the 1999 baseline. Shared with Residential Lighting Program.	Increase of 20-5% over baseline scaled to receive 100-50% of award
<b>Floor Stock - Appliances</b>	Work with local appliance dealers to achieve a specified percentage of ENERGY STAR® appliance floor stock (includes clothes washers, room A/C, and dishwashers) during PY2000.	Floor stock percentage of 30-25% over baseline scaled to receive 100-70% of award
<b>Floor Stock - Refrigerators</b>	Increase the floor stock of qualifying DOE-2001 compliant refrigerators by a specified percentage over the 1999 baseline.	Floor stock percentage of 35-10% over baseline scaled to receive 100-50% of award.

ENERGY STAR® Sales Staff Training

SDG&E’s milestone for ENERGY STAR® Sales Training is shared for both appliances and lighting. The targets for the appliance and lighting programs were to train 174 and 140 sales people, respectively, or 314 combined and these sales people were to achieve an average 75% score on their post-training tests.

As shown in Table 2, a total of 449 sales people were trained receiving an average post-training test score of 91.48%. These results exceed the targets for both the individual and combined programs.

**Table 2  
ENERGY STAR® Sales Staff Training Results – Appliances, Lighting and Combined**

	<b>Appliances</b>	<b>Lighting</b>	<b>Combined</b>
Number of stores	78	32	110
Average number of sales associates	4	8	5
Total number of sales associates	316	255	571
Target number of sales associates to be trained (1)	174	140	314
Actual number of sales associates trained	308	141	449
Target average post-training test score	75%	75%	75%
Actual average post-training test score	91.88%	90.43%	91.48%

(1) Targets are 55% of applicable sales force in SDG&E’s service territory, which represents 100% of the milestone award.

Sales Staff Knowledge and Awareness

The second milestone related to sales training is worded as follows: “Increase the number of sales associates who are knowledgeable and aware of energy efficient appliances over the 1999 baseline.” This milestone applies to both Residential Appliance and Residential Lighting Programs.

An index score of 75% or above was used to indicate that a sales associate appeared to be knowledgeable and aware. The indices were created using both the Phase 1 (1999 Baseline) and Phase 3 (PY2000 Results) mystery shop results. These indices were then compared to determine the extent of any change in sales associate knowledge and awareness.

Table 3 compares the 1999 Baseline and PY2000 results individually for lighting and appliances sales associates, and then combined for both types of sales staff. Also shown is the percent change from 1999 to 2000 in the knowledge and awareness index. For appliances, the sales associates' knowledge and awareness index increased by 76%. Combined with the results for lighting, there is an increase of 140%, which is considerably higher than the 20% increase required to achieve the full award for this milestone.

**Table 3  
Results of Sales Staff Knowledge and Awareness Indices**

<b>Equipment</b>	<b>PY1999 Baseline</b>	<b>PY2000 Results</b>	<b>Percent Increase</b>
Appliances	16.4	28.9	76.2
Lighting	9.7	33.3	243.3
Combined	13.0	31.2	140.0

Floor Stock

There are two milestones related to appliance floor stock:

- Work with local appliance dealers to achieve a specified percentage of ENERGY STAR<sup>®</sup> appliance floor stock (includes clothes washers, room A/C, and dishwashers) over 1999 baseline.
- Increase the floor stock of qualifying DOE-2001 compliant refrigerators by a specified percentage over the 1999 baseline.

The results from the baseline and follow-up floor stock surveys are presented in Table 4. As shown, floor stock for DOE-2001 compliant refrigerators increased by 151% over the baseline. For the other appliances combined, ENERGY STAR<sup>®</sup> qualifying appliances increased by 51% over the baseline. These results are well in excess of the 100% target awards for these appliances, which were to achieve a 35% increase for refrigerators and a 30% increase for the other appliances combined.

**Table 4**  
**Floor Stock Results – Baseline and Follow-up Surveys**

Appliance Type	Baseline Survey			Follow-up Survey			Percent Change
	Number of Units on Floor	Number of Units Compliant / Qualifying	Percent Compliant / Qualifying	Number of Units on Floor	Number of Units Compliant / Qualifying	Percent Compliant / Qualifying	
Refrigerators	605	16	2.64%	949	63	6.64%	151.02%
Clothes Washers	333	30	9.01%	558	80	14.34%	59.14%
Dishwashers	334	72	21.56%	527	162	30.74%	42.60%
Room A/C	35	1	2.86%	22	3	13.64%	377.27%
Total	702	103	14.67%	1107	245	22.13%	50.84%

Evaluation of Residential Lighting

**2000 SDG&E Residential Lighting Milestone Report**

XENERGY

March 2001

This document represents the results of several data collection and analysis tasks completed by XENERGY Inc., in support of documenting San Diego Gas & Electric’s (SDG&E) efforts in achieving several milestones related to the PY2000 Residential Appliance and Lighting Programs. This report presents a summary of the relevant milestones, followed by a separate section describing the specific methodology used to document each milestone as well as the results.

In September 1999, SDG&E submitted its application for proposed energy efficiency programs, budgets, and performance incentives for PY2000 and PY2001. Included in its application for the Statewide Residential Appliance and Lighting Programs was a set of performance milestones and incentive awards specific to SDG&E’s participation in this statewide effort. The milestones were modified and approved in 00-07-017 dated July 6, 2000. SDG&E’s specific performance milestones related to the lighting component of the Statewide Residential Lighting and Appliance Programs are summarized in Table 5.

**Table 5**  
**SDG&E Residential Lighting Milestones**

	<b>MILESTONE</b>	<b>AWARD LEVEL</b>
<b>ENERGY STAR® Sales Staff Training</b>	Train an average percent of sales associates on respective ENERGY STAR products. Sales staff must achieve an average of 75% accuracy level on follow-on surveys. Shared with Residential Appliance Program.	Average percent of sales associates trained between 30-55% scaled to receive 50-100% of award.
<b>Sales Staff Knowledge and Awareness</b>	Increase the number of appliance sales staff who are knowledgeable and aware of energy efficient appliances over the 1999 baseline. Shared with Residential Appliance Program.	Increase of 5-20% over baseline scaled to receive 50-100% of award.
<b>Torchiere Manufacturers</b>	Increase the number of indoor/outdoor fixture (including torchieres) manufacturers offering ENERGY STAR-rated or equivalent products in San Diego county over the 1999 baseline.	Increase of 30-50% over baseline scaled to receive 50-100% of award.

ENERGY STAR® Sales Staff Training

There are two milestones related to sales training. One of these milestones is phrased: “Train an average percent of sales associates on respective ENERGY STAR® products. Sales staff must achieve an average of 75% accuracy level on follow-on surveys.” This milestone applies to both Residential Appliance and Residential Lighting Programs. See Table 2 under the Appliance Report for results.

Sales Staff Knowledge and Awareness

The second milestone related to sales training is worded as follows: “Increase the number of sales associates who are knowledgeable and aware of energy efficient appliances over the 1999 baseline.” This milestone applies to both Residential Appliance and Residential Lighting Programs. See Table 3 under the Appliance Report for results.

Torchiere Manufacturers

The milestone associated with this study is worded as follows: “Increase the number of indoor/outdoor fixture (including torchieres) manufacturers offering ENERGY STAR® -rated or equivalent products in San Diego county over the 1999 baseline.”

SDG&E baseline for this milestone was three fixture manufacturers participating in the statewide program. XENERGY Inc. reviewed participation agreements submitted by fixture manufacturers during PY2000 to determine the percent increase in participating manufacturers over the baseline. A total of nine torchiere manufacturers submitted participation agreements for the PY2000 program. This represents a 200% increase over the baseline SDG&E established for this milestone.

## Evaluation of Residential Cross-cutting

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### Evaluation of the 2000 Residential Cross-cutting Market Effects

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#### Milestone

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SDG&E

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May 2001

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Based on information gathered at customer focus groups and on a study done by Hagler Bailly,<sup>6</sup> customers lack the awareness and knowledge necessary to make informed choices at the time of appliance replacement or repair, or during home maintenance to better manage their home energy costs. A major consideration for participants was a lack of credible information and resources. Energy efficiency brochures and audits are designed to be a reliable resource for information consumers about energy efficiency strategies and programs.

SDG&E has taken a two pronged approach; 1) brochures are available on specific energy efficiency topics, and 2) audits are performed that recommend energy efficient measures and programs available to residential consumers. Both brochures and audits are available upon request. In addition, mail-in audits were also sent out to customers with high electricity usage.

The Residential Cross-Cutting Milestone for PY2000 requires

*"an increase in the percentage of customers that received energy efficiency materials or audits and implement one or more of the recommendations by a specified percentage over the 1999 baseline."*

A database of customers who received either a brochure or an audit in 1999 was collected. After the data was cleaned and all duplicate names were removed, there were 36,661 customers. A random sample of 3000 customers was picked by SDG&E and provided to CIC Research, Inc. CIC Research Inc., surveyed the customers regarding their implementation of energy efficiency measures. Customers were asked about any changes they had made in their energy consumption in relation to their lighting, heating and cooling, appliances, and hot water as a direct result of an audit or brochure. A copy of the questionnaire is provided at the end of the report. The sample observations established the 1999 baseline at 48.8%.

This process was repeated for customers in PY2000 who received either a brochure or an audit. A random sample was picked and surveyed about their implementation of energy efficiency recommendations. Customers were asked the same questions as in the previous year's survey. In 2000, 44.7% of the customers who received an audit or brochure implemented one or more of the recommendations.

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<sup>6</sup> Hagler Bailly Study, "CBEE Baseline Study On Public Awareness And Attitudes Toward Energy Efficiency" June 18,1999

**Percent of Participants that Implemented One or More Measures**

<b>1999</b>	<b>Total # of Customers</b>	<b>Sample Size</b>	<b># that Implemented one or more Measures</b>	<b>Percent</b>
Brochures	21,895 <sup>1</sup>	138	64	46.4%
Mail in Audits	10,009	118	55	46.6%
In Home Audits	3,021	33	20	60.6%
Online Audits	1,736	12	8	66.7%
<b>Total</b>	<b>36,661</b>	<b>301</b>	<b>147</b>	<b>48.8%</b>
<b>2000</b>	<b>Total # of Customers</b>	<b>Sample Size</b>	<b># that Implemented one or more Measures</b>	<b>Percent</b>
Brochures	34,257 <sup>1</sup>	152	68	44.7%
Mail in Audits	19,736	131	58	44.3%
In Home Audits	1,745	7	3	42.9%
Online Audits	2,128	14	7	50.0%
<b>Total</b>	<b>57,866</b>	<b>304</b>	<b>136</b>	<b>44.7%</b>

<sup>1</sup> Customers receiving one or more brochures

**Evaluation of Residential Renovation & Retrofit**

**Evaluation of the 2000 SDG&E Residential Upstream HVAC Training**

Proctor Engineering Group

January 2001

Proctor Engineering Group (PEG) was retained by SDG&E to evaluate the effectiveness of a program aimed at changing the way residential contractors "do business" to a more comprehensive and energy efficient model known as "the house as a system". This report details the findings of this investigation.

There are two essentials in the house as a system that effect HVAC contractors. First, the HVAC equipment is integrated with the duct system and house performance. Second, the house and duct systems are highly interactive with the health and safety of occupants via their interactions with combustion equipment. These facts give rise to the need for knowledge of diagnostic and maintenance techniques that address these systems and their interactions.



Numerous studies (nineteen listed in Neme et al. 1999<sup>7</sup>) have shown that residential duct systems are consistently leaky and inefficient particularly when they are located in the attic (as in most San Diego homes). In most areas, under the house as a system method, the interaction between house pressures, duct leakage, and combustion appliances are addressed by combustion safety testing and maintenance.

The SDG&E 2000 Residential Upstream HVAC Training Program intervened into the market by providing training and follow up contact with HVAC contractors. The training included duct system design and diagnostic training as well as sessions on combustion safety diagnosis, maintenance and repair.

San Diego Gas and Electric Company has a PY2000 milestone to:

*" Increase the average number of contractors who use manuals J&S by specified percentage over the 1999 baseline, or are knowledgeable and aware of diagnostic and maintenance techniques relating to heating and cooling system by a specified percentage. "*

The number of contractors knowledgeable and aware of diagnostic and maintenance techniques relating to HVAC increased between 90% (as measured in the duct domain) and 67% (as measured in the combustion safety domain) through the program.

This exceeds the specified percentage (25%) for the SDG&E milestone for 100% Award.

## Evaluation of Residential Renovation & Retrofit

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### Evaluation of the 2000 SDG&E Residential HVAC Training Program

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Proctor Engineering Group

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March 2001

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Proctor Engineering Group (PEG) was retained by SDG&E to deliver training services for residential contractors delivering duct testing and sealing services under the Residential Contractor Program (RCP). San Diego Gas and Electric Company has a PY2000 milestone to:

*" Achieve a number of Residential Contractor Program contractors with expertise in duct testing/whole system approach (i.e. demonstrated required skills through testing). "*

The baseline for this milestone is based on the number of contractors attending the SDG&E duct testing and sealing training in PY 1999. There were a total of 19 contractors trained under the PY 1999 program.

The award level associated with the milestone is scaled for 20 to 15 contractors. The award is scaled from 100% to 50%.

The PY2000 program had a milestone of training 20 contractors in duct testing and sealing. The PY2000 program exceeded the established milestone by training a total of 21 new contractors. SDG&E has met the milestone required for the 100% award level.

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<sup>7</sup> "National Energy Savings Potential from Addressing Residential HVAC Installation Problems" is a comprehensive compilation of studies on AC problems.

## Evaluation of Residential Contractor Program

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### Evaluation of the Multifamily Element of the 2000 Residential Contractor Program

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SDG&E

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March 2000

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The Multi-Family element (MF-RCP) is designed to foster energy efficiency improvements in apartment building by promoting sustaining relationships between apartment building owners/property managers and contractors/EESPs. Financial incentives will be made available in the form of standard performance contracts (SPC) for retrofits performed by contractors/EESPs. The Multifamily Element has the following specific features:

Contractors can receive incentives based on the energy savings from virtually any energy efficiency measure except the following: fuel switching, co-generation or self-generation, bypass, personal computers, home electronics, repairs and maintenance, measures with lives under three years, decreasing plug loads, or operational changes.

Contractor Eligibility and Training - The program has minimal contractor eligibility requirements (primarily license and insurance requirements), and does not require specific contractor training.

San Diego Gas and Electric Company had a PY2000 milestone of:

*"Have contractors that offer services to multifamily property owners/property managers through performance contracting."*

The award level was scaled from 100% for 3 contractors to 70% for 2 contractors.

Six contractors offered services to multifamily property owners/property managers through performance contracting.

## Evaluation of Residential Energy Efficient Mortgages

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### Evaluation of the 2000 Energy Efficient Mortgage Program

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SDG&E

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March 2000

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This program was designed to create an energy efficiency link between customers who were purchasing homes, and the industry that financed these purchases. This strategy relied heavily on training and education of lenders, realtors and mortgage providers along with potential homebuyers and existing homeowners who were considering refinancing. This program addressed the financial barrier, which often prevented customers from considering energy efficient products and services.

SDG&E's Energy Efficient Mortgage (EEM) program was designed to promote and facilitate the use of EEMs. The objective was to assist market participants in creating a sustainable and hassle-free environment in the EEM market. Since the real estate and mortgage industries in San Diego County were just beginning to warm up to EEMs, our emphasis was on identifying and educating mortgage lenders and real estate agents along with the education of customers. SDG&E provided EEM training for lenders and real estate agents through out 2000, using a third party contractor. SDG&E provided energy efficient mortgage awareness workshops to potential

homebuyers and to homeowners who were interested in refinancing. This training was provided on a contract basis by Housing and Urban Development (HUD) approved loan counselors.

San Diego Gas and Electric Company had a PY2000 milestone of:

*"Work with industry professionals to achieve a specified number of customers that apply for an energy efficiency mortgage."*

The award level was scaled from 100% to 0% based on a range of from 20 to 5 customers that applied for an energy efficiency mortgage.

Forty-five (45) customers applied for an energy efficiency mortgage in 2000.

### **Nonresidential Programs**

#### Evaluation of Nonresidential Information program

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#### **Evaluation of the 2000 Nonresidential Information program**

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SDG&E

April 2001

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The Nonresidential Information program provides information about energy efficiency and services and introduces customers to state-of-the-art efficient technologies and practices through workshops and seminars. Facility managers of large businesses (greater than 500 kW demand and/or 250,000 Therms) are notified of the workshops and seminars through mailed invitations.

In PY2000, SDG&E sponsored six technology seminars for large nonresidential customers. Approximately 425 individuals attended these seminars. Seminar topics included:

1. Indoor Air Quality (2/2/00)
2. Air Compressors (6/7 – 6/8/00)
3. Refrigerant Compliance (8/9/00)
4. HVAC Controls (8/31/00)
5. Boilers Basics (10/5/00)
6. Lighting Efficiency Showcase (10/11/00)

San Diego Gas & Electric had a PY2000 milestone of:

*"A percentage of seminar attendees indicate a willingness to adopt measures and techniques discussed at workshops."*

The award was scaled for 30% (100% of award) - 10% (70% of award) willingness to adopt measures and techniques discussed at workshops.

74% of seminar attendees indicated a willingness to adopt measures and techniques discussed at the workshops.

## Evaluation of Nonresidential Upstream Motors Incentives

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### **Evaluation of the 2000 Upstream Motor Incentives program**

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SDG&E

April 2001

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The Upstream Motor Dealer Incentive program is designed to improve the current stocking practices of local motors dealers by increasing the inventory stock of premium efficiency motors that meet the Consortium for Energy Efficiency (CEE) rating for premium-efficient motors. The program provides a financial incentive for 1 horsepower to 200 horsepower motors to dealers for stocking premium efficient motors. This approach supports the overall motor market transformation strategy by encouraging key upstream market players to facilitate change in the market place.

Results for PY2000 show incentives have been paid for stocking 604 units. Eight dealers participated in this program. In PY1999, 198 units were stocked.

SDG&E, in participation with the CEE Motors Committee, pursued a standardization of premium efficiency with the National Electrical Manufacturers Association (NEMA).

San Diego Gas & Electric had a PY2000 milestone to:

*“Increase the market share (sales) of CEE-rated motors.”*

The award was scaled for 10% (100% of award) - 5% (70% of award) increase of market share (sales) of CEE-rated motors.

SDG&E achieved 12% market share (sales) of CEE-rated motors in 2000.

## Evaluation of Nonresidential Upstream HVAC Incentives

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### **Evaluation of the 2000 Upstream HVAC Incentives program**

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SDG&E

April 2001

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This program offers standard upstream incentives to manufacturing distributors to encourage the promotion of premium efficient package A/C units instead of units with standard efficiencies.

The Nonresidential Upstream HVAC Distributor Incentive program is designed to improve the current stocking practices of local HVAC distributors by increasing the inventory stock of split and package system air conditioning units to the Consortium for Energy Efficiency (CEE) Tier 1 energy efficiency level. This strategy is expected to achieve its goals by providing a financial incentive to distributors for stocking CEE Tier 1 high-efficiency HVAC (HEHVAC) units.

In 2000, continued focus was placed on increased stocking efforts, with an emphasis on expanding the list of participating distributors above 1999 levels. Increased participation by dealers was necessary to achieve PY2000 program objectives.

Seven of eight air conditioning distributors participated in the program. Incentives were paid for 1,104 nonresidential HVAC units and 3,502 residential HVAC units for a total of 4,606 HVAC units in PY2000. This compares favorably to the 3,340 total HVAC units in PY1999.

San Diego Gas & Electric had a PY2000 milestone to:

*“Increase the percent of high efficiency HVAC units stocked over the 1999 level.”  
(Shared with Residential Heating and Cooling program.)*

The award was scaled for 30% (100% of award) - 15% (70% of award) over the 1999 baseline.

SDG&E achieved 38% increase of high efficiency HVAC units stocked over the 1999 level.

## Evaluation of Commercial Clothes Washer Incentives

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### **Evaluation of the 2000 Commercial Clothes Washer Incentives program**

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SDG&E

April 2001

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This program targets the commercial market to promote the purchase of energy efficient horizontal clothes washers for Laundromats and common-use laundry rooms in apartments, dormitories and barracks. SDG&E contracted with the San Diego County Water Authority (SDCWA), through the 1998 third party program, to augment their Commercial Industrial, Institutional (CII) Voucher Incentive Program (VIP) toward the purchase of coin-operated washers by providing a larger incentive than the current voucher offered by the SDCWA.

The program goal was to provide incentive vouchers to install 800 horizontal clothes washers in PY2000. Of the 1,848 vouchers issued in PY2000, 939 energy-efficient horizontal clothes washers were installed. In PY1999, 598 commercial horizontal clothes washers were given incentives and installed.

San Diego Gas & Electric had a PY2000 milestone to:

*“Increase the saturation of high efficiency commercial clothes washers over the 1999 level.”*

The award was scaled for 30% (100% of award) - 15% (70% of award) over the 1999 baseline.

SDG&E increased the saturation of high efficiency commercial clothes washers over the 1999 level by 47%.

## **New Construction Programs**

### Evaluation of Nonresidential New Construction

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#### **Evaluation of the Energy Design Resources**

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SDG&E

April 2001

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Energy Design Resources is an integrated package of design tools and information resources that promotes the design and construction of high-performance buildings. These tools are readily available and accessible to designers working in the new construction market and inherently complement the whole building approach strategies of the Savings By Design program. The goal of this effort is to educate architects, engineers, lighting designers, and developers about techniques and technologies that contribute to energy efficient new construction. The program provides:

- Information resources supporting a wide range of energy efficiency design strategies, techniques, and technologies
- Software tools that facilitate design practices and financial processes that lead to increased energy efficiency in buildings
- Technology transfer, including industry seminars, targeted training events, and an easily-accessible internet website
- Validation of and peer recognition for designers and developers of exemplary projects that successfully incorporate principles of energy efficient design

San Diego Gas and Electric Company had the following PY2000 milestone:

*"Train at least 125 decision makers and design professional to use the whole building approach and demonstrate that 35% understand the key concepts from the training and that 20% of the trainees intend to use these concepts in their business practice."*

The award level was scaled for 125 to 100 participants, 35% to 25% understanding and 20% to 15% who intended to use the knowledge with the award being scaled from 100% to 70%.

SDG&E held a large number of seminars primarily over the summer months to educate architects, engineers, lighting designers, and developers about techniques and technologies that contribute to energy efficient new construction. These seminars were held at no cost to the participants and stressed the whole building approach strategies of the Savings By Design program.

At each of these seminars, participants were asked to fill out a brief survey concerning the information contained within the training. Through these evaluations we can determine the attendance, how many understood and plan to implement the concepts taught, and glean ideas for future training that the decision makers and design professionals would like to see made available to them. These surveys were used as the basis for this evaluation.

There were approximately 494 participants in a series of SDG&E sponsored New Construction Energy Efficiency Seminars presented during PY2000. Of these 494 participants, 407 completed an evaluation survey.

- 1) Over 52% of those responding to the survey indicate that the key concepts in the training were explained well enough that they would be of immediate use to the participant in their new construction business activities.
- 2) Over 70% of those responding to the survey indicate that they will use the concepts explained in the training in their business practice.

From this SDG&E concludes that:

- 1) SDG&E trained the minimum 125 decision makers required to achieve the performance milestone;

- 2) Over 35% of those attending the seminars understood the key concepts of the training;
- 3) Over 20% intend to use these concepts in their business practice.

As a result, SDG&E has achieved the milestone.

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**Evaluation of the California Investor-Owned Utilities Achievement of the Savings by Design Program Market Change/Effect Milestone**

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Quantum Consulting Inc.

February 2001

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The statewide Savings By Design (SBD) Program, implemented by the three California electric investor-owned utilities (IOUs) PG&E, SCE and SDG&E, is designed to transform energy-efficiency investment behavior in the commercial construction market. The program seeks to change the design practice of professionals in the construction industry by promoting the understanding and use of energy efficient and integrated design techniques in commercial building construction; to increase the awareness of building owners of the benefits associated with integrated designs; and to increase the penetration of energy efficient materials, equipment, and systems in the commercial building market.

The SBD Program's market change/effect milestone for PY2000:

*"Achieve an increase in the absolute market share of new building designs that exceed the 1998 Title 24 standards by at least 10%."*

The award was scaled for 3% (100% of award) - 2% (70% of award) increase in market share.

The SDG&E territory-level milestone verification analysis evaluates the market share of designs that exceed the 1998 Title 24 standard by at least 10% by calculating the market share of SBD Program participants. This approach is based on a SBD Program requirement that all Program participants must achieve designs that exceed the 1998 Title 24 standard by at least 10%. The market share of SBD program participants in SDG&E's service territory has increased from 17.0% in PY1999 to 22.6% in PY2000. This 5.6% increase in PY2000 as compared to PY1999 is higher than the 3% increase required, and indicates that SDG&E has exceeded the SBD milestone for the nonresidential new construction market.

## **Demand Assessment**

These studies include the CEC Data Collection, Database of Energy Efficient Resources updates and energy efficiency market assessment studies.

### **CEC Data Collection And Analysis<sup>8</sup>**

The focus of this area is the collection and analysis of basic data about customer characteristics, energy use, and energy-using technologies that provide the foundation for energy efficiency program planning and evaluation, energy demand analysis, and market monitoring. In the past, customer characteristics data were provided to the CEC by the state's utilities through general rate case authorizations. However, with the passage of California State Assembly Bill 1890, these data collection efforts were no longer funded, although utilities are still required to provide the data under the California Code of Regulations, Title 20. In Resolution E-3592, the CPUC, acknowledging the value of Title 20 survey research to cost-effective energy efficiency and conservation activities (Ordering Paragraph 82), authorized the utilities to transfer a total of \$2.1 million for two years to the CEC for Title 20 data collection activities.

### **Commercial End Use Survey (CEUS)**

The Commercial End Use Survey has begun, and is expected to be complete in 2003. This project will collect and analyze building characteristic information for use in commercial sector market characterization and for developing estimates of energy usage by end-use, end-use saturations, and end-use load shapes by building type. The CEC will develop site-specific engineering models to simulate energy efficiency technology options and assess the results to the sector as a whole. The individual site models will be combined into a building energy demand analysis model that can analyze hourly energy use for user-defined market segments, for applications such as assessing hourly impacts of load management strategies and building standards.

### **Residential Appliance Saturation Survey (RASS)**

In 2000, the CEC selected a contractor and encumbered funds to conduct a residential customer characteristics survey, but work will not begin until CPUC approval of CEC's 2001 MA&E plan. The RASS will gather basic information on building characteristic, appliance holdings, demographic data, awareness of energy efficiency measures and programs, and load shifting opportunities and behavior. The project will produce appliance saturations, end-use intensities, and both confidential and public data sets and reports on project results. The analysis will incorporate data provided by utilities and collected through other surveys, including the Statewide Residential Lighting and Appliance Saturation Study completed in 2000.

### **Improvements to the Database of Energy Efficient Resources (DEER)**

The DEER contains data on costs and energy impacts for commercially available efficiency measures and is used by utilities and the CEC for cost-effectiveness evaluation. In 2000 an update of the measure cost and residential peak and energy savings portions of the database was begun and will be completed in May 2001. This update is using measure-specific data collection

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<sup>8</sup> The following write-up on the CEC Data Collection and Analysis was provided by the CEC.



methods, cost models, and analyses to develop recommended cost values and estimates of energy use savings and peak load impacts. The measures included in the updated database were revised and prioritized in consultation with utilities and other program planning stakeholders and include information to support both Energy Efficiency and Low Income programs.

### **Energy Efficiency Market Assessment Studies**

#### **Residential**

##### Residential Lighting & Appliance Programs

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#### **Phase 2 Evaluation Report for the Statewide Residential Lighting and Appliance Program Final Report**

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XENERGY

September 2000

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Phase 2 report includes a study and documentation of the "rationale" behind the new PY2000 Programs (i.e., what was planned, why it changed, and the reasons for making those changes). These changes are grouped into five main components of the PY2000 Program:

- Financial Incentives – consumer rebates, manufacturer incentives, sales person incentives, and co-operative advertising.
- Consumer Outreach and Education – in-store promotions, merchandising support, formal sales person training, advertising, editorial support, media support, etc.
- Retailer and Manufacturer Outreach – building and maintaining retailer and manufacturer networks to facilitate program success.
- Pilot Programs – pilot effort to encourage the sale of energy efficient CFLs in grocery stores.

Support Activities – various activities in support of external and internal program coordination

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#### **Phase 3 Evaluation Report for the Statewide Residential Lighting and Appliance Program Final Report**

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XENERGY

April 2001

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Some noteworthy accomplishments for the PY2000 program are highlighted below:

- Nearly 50,000 consumer rebates were awarded for qualifying, energy efficient clothes washers and refrigerators.
- Nearly \$2 million was spent in developing and implementing a variety of co-operative advertising projects with appliance and lighting manufacturers and retailers.
- Over 11,000 visits were conducted at participating lighting and appliance retailers to support in-store promotions, merchandising, and training.
- Over 3,000 sales associates received formalized training on the benefits of energy efficient lighting and appliances.

- Consumer outreach and education consisted of the development of Point of Purchase (POP) materials, print and radio advertisements, editorial outreach services and kits, and promotional partnerships and events.
- Retailer and manufacturer outreach involved managing a network of nearly 1,500 appliance and lighting industry contacts.
- A grocery store pilot was introduced to expand the market share of CFLs to this important but overlooked product distribution channel.

### Results and Conclusions

- The effort of the appliance and lighting programs to influence the customer in-store experience has had mixed results. Employee turnover, the inability of the program to substantially affect the reward structure and business plans of retail stores, and the recent, substantial change in the mix of retail appliance stores constitute plausible explanations for the modest changes in awareness and knowledge of sales staff in promoting the sale of energy efficient appliances.
- Appliance retailers would encourage utilities to continue efforts to raise consumer demand and support the use of consumer rebates as a means to influence the sale of energy efficient appliances. Recognizing that utilities have limited funds, retail store managers offered suggestions for the role they thought electric and gas utilities could best play in bringing about improvements in market share for energy efficient appliances. The most commonly suggested activities among appliance retailers included offering limited-time consumer rebates or product discounts, and increasing consumer demand. Providing in-store promotional support and funding co-operative advertising were the most frequently mentioned recommendations from lighting retailers.

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### **Statewide Residential Lighting and Appliance Saturation Study**

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RLW Analytics

June 2000

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To characterize the current residential market, lighting and appliance baseline data is required. Through on-site surveys of California residences, a database of lighting and appliance data was constructed to provide the utilities with baseline information to aid in program design. The three investor owned utilities, in addition to SMUD, participated in the study. This report summarizes the on-site survey data that was collected over a four-month period, December 1999 - March 2000.

There were three primary objectives this study needed to achieve:

Objective 1: Completion of 1,258 on-site surveys of single-family, multi-family and mobile homes throughout the service territories of PG&E, SCE, SDG&E and SMUD.

Objective 2: Development of a user-friendly database of residential lighting and appliance saturation by energy efficiency.

Objective 3: Determine the potential market barriers in the residential market to adopting energy efficient lighting systems.

While on-site, the surveyors collected data on the homes major appliances and lighting systems. The surveyors collected nameplate data for the following appliances in order to determine base line appliance efficiencies:

- ◆ Refrigerator-Freezer
- ◆ Self-standing Freezers
- ◆ Dishwashers
- ◆ Clothes Washers
- ◆ Clothes Dryers
- ◆ Water Heaters
- ◆ Heating Equipment
- ◆ Cooling Equipment

The following table shows the number of appliances in the database and how many were matched to an efficiency database.

<b>All Utilities</b>		<b>Total Number In Database</b>	<b>Model Numbers Found</b>	<b>Matched</b>	<b>% Matched</b>	<b>% Mn# Not Found</b>	<b>% of Total Matched</b>
<b>Appliance</b>	<b>Refrigerators</b>	1444	1259	866	69%	13%	60%
	<b>Cooling Overall</b>	739	468	303	65%	37%	41%
	<b>Cooling Evap</b>	50	14	0	0%	72%	0%
	<b>Cooling Packaged</b>	117	48	27	56%	59%	23%
	<b>Cooling Split Sys</b>	402	332	270	81%	17%	67%
	<b>Cooling Win Wall</b>	167	72	6	8%	57%	4%
	<b>Furnace</b>	1278	888	339	38%	31%	27%
	<b>Heat Pumps</b>	85	62	31	50%	27%	36%
	<b>Freezers</b>	217	167	51	31%	23%	24%
	<b>Dishwashers</b>	871	849	286	34%	3%	33%
	<b>Washing Machines</b>	965	865	156	18%	10%	16%
	<b>Hot Water Heaters</b>	1074	859	437	51%	20%	41%

### Performance Indicator Studies

A number of Performance Indicator Studies were conducted in order to measure program effectiveness in PY2000. The results of these performance indicators can be found Section 2.

### **Nonresidential<sup>9</sup>**

SDG&E co-funded two of the statewide studies on Energy Efficiency Market Assessment that were conducted by the California Energy Commission (CEC), Nonresidential Market Share Tracking and Nonresidential Remodeling and Renovation. The CEC is also conducting data collection activities that provide benefits to cost-effective energy efficiency activities, including commercial and residential customer characteristics surveys and development of energy efficiency measure cost and savings data. In addition, CEC staff will continue to support MA&E planning and coordination by providing technical expertise on buildings codes and standards, and through dissemination of studies. CEC staff manages the CALMAC website and maintains both physical and on-line libraries of statewide MA&E studies.

The CEC received two years of funding from Planning Years 1999 and 2000, with the stipulation that funds not encumbered by December 31, 2000 revert to the utilities. The disposition of these funds is summarized in tables at the end of this section.

#### **Nonresidential Remodeling and Renovation**

The nonresidential remodeling and renovation study was begun, with completion scheduled for July 2001. This study seeks to characterize the decision-making process for purchase of energy using equipment during remodeling or renovating events, and to describe the level and types of such activity by market segment. The study will use these results to identify targeted strategies that may facilitate energy efficient investment during remodeling and renovation and identify market segments with high potential for energy savings. The qualitative data collection phase of the study is complete. Work on quantitative data collection is underway. Data is being drawn from building permits, Title 24 documentation, telephone surveys and on-site visits to remodeling and renovation projects completed in 2000. Information on construction practices specific to the remodeling and renovation market will be combined with survey results and simulations to define the dimensions and characteristics of the remodeling and renovation market in California. Also, an in-house literature review is underway to collate information from studies that have touched on the remodeling and renovation market in a peripheral way. Final results from this study are expected in summer 2001.

#### **Nonresidential Market Share Tracking Study**

This study, begun in June 2000, seeks to track and analyze the adoption of commercial and industrial energy efficiency services and products in California. The study is identifying and collecting data on key energy efficiency measures, and processing the data into parameters for an efficiency market share tracking database. The market shares will be used as indicators of both the effectiveness of individual programs as well as the extent to which markets have been transformed. The current contract provides funding for two years of data collection. Major categories of measures under study include motors, refrigeration, chillers, windows, lighting, compressed air, water re-use and recycling, electronic process controls, lubrications practices, and distributed generation.

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<sup>9</sup> The following write-up on the CEC Data Collection and Analysis was provided by the CEC.

### Performance Indicator Studies

A number of Performance Indicator Studies were conducted in order to measure program effectiveness in PY2000. The results of these performance indicators can be found Section 3.

### **New Construction**

#### Performance Indicator Studies

A number of Performance Indicator Studies were conducted in order to measure program effectiveness in PY2000. The results of these performance indicators can be found Section 4.

### **Summer Initiative**

#### Statewide Summer Initiative - Pool Efficiency Programs

A brief baseline study to determine duty cycles of existing pool pumps to estimate on-peak usage is appropriate and should be coordinated among all three electric utilities. Utilities should employ random inspections and short-term time-of-use data loggers on a percentage of installed pumps and timers to estimate savings impacts from the program before the end of 2001. SDG&E will co-fund this study under PG&E's project management. ADM is the selected contractor.

#### Statewide Summer Initiative - LED Program

Encourage the retrofit of traffic lights from traditional incandescent bulbs to light emitting diode (LED) traffic lamps. This study will track and audit the number of traffic signals installed and calculate energy and demand savings using engineering estimates

#### Statewide Summer Initiative - Whole House Fans

This program is designed to inform consumers about the installation and operation of whole house fans, and provide financial incentives to customers who chose to install whole house fans. This study will summarize program activities and estimate demand and energy savings impacts.

#### Statewide Summer Initiative - Halogen Torchiere Turn-In

This program targets lower income users of halogen torchiere lamps and encourages them to replace those lamps with ENERGY STAR® models. The program also provides the recycling of halogen torchieres that are replaced. This study will summarize program activities and estimate demand and energy savings impacts.

## **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.

### **CBEE and ED Oversight Costs**

Oversight costs include SDG&E's allocation for the California Board for Energy Efficiency (CBEE) and Energy Division (ED) budgets and expenditures. In 2000, SDG&E paid \$55,974 for CBEE's expenditures and the ED's expenditures of \$70,037.

**TABLE 5.1  
MARKET ASSESSMENT & EVALUATION EXPENDITURES (MA&E)**

Electric and Natural Gas Combined

Cost Category and Element	2001 (\$000)			
	Budgeted	Recorded [1]	Authorized	Budgeted
<b>Measurement for Program Admin Incentives</b>				
1. Utility Studies Reports for PY 2000 Programs	\$210	\$278	\$0	\$350
<b>Total Measurement for Program Admin Incentives</b>	\$210	\$278	\$0	\$350
<b>Demand Assessment</b>				
1. Customer Data for CEC: Utility Costs	\$0	\$0	\$0	\$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	\$287	\$287	\$0	\$287
3. DEER Updates [3]				
<b>Total CEC Data Collection Costs</b>	\$287	\$287	\$0	\$287
4. EE Market Assessment (Res Program Area)	\$535	\$603	\$500	\$545
5. EE Market Assessment (NonRes Program Area) [4]	\$414	\$228	\$0	\$95
6. EE Market Assessment (NC Program Area)	\$175	\$54	\$0	\$55
7. EE Product Assessment (all Markets)	\$0	\$0	\$0	\$0
<b>Total Demand Assessment</b>	\$1,411	\$1,171	\$500	\$982
<b>Total EE Market Assessment Costs</b>	\$1,621	\$1,449	\$500	\$1,332
<b>Other Program Evaluation Studies:</b>				
1. General	\$0	\$0	\$0	\$169
2. PY2000, Residential	\$0	\$0	\$0	\$0
3. PY2000 Nonresidential	\$0	\$0	\$0	\$0
4. PY2000 New Construction	\$0	\$0	\$0	\$0
5. PY2001, Residential	\$0	\$0	\$0	\$60
6. PY2001 Nonresidential	\$0	\$0	\$0	\$10
7. PY2001 New Construction	\$0	\$0	\$0	\$10
8. Summer Initiatives	\$0	\$0	\$0	\$40
<b>M&amp;E Total</b>	\$1,621	\$1,449	\$500	\$1,621
<b>Regulatory Oversight</b>				
Regulatory Compliance and Reporting (utility) [5]	\$0	\$0	\$0	\$0
Oversight Costs				
1. CBEE/ED Operating Costs [4]	\$282	\$126	\$60	\$60
2. Other [6]	\$0	\$0	\$0	\$0
<b>Total MA&amp;E and Oversight</b>	\$1,903	\$1,575	\$560	\$1,681

Notes:

[1] Recorded costs include actual and committed costs.

[2] See Table 5.3

[3] Budget is included in 2. See Table 5.3

[4] The CBEE will no longer function in 2000 per D.00-02-045. This also includes Energy Division Costs

**TABLE 5.1  
MARKET ASSESSMENT & EVALUATION EXPENDITURES (MA&E)**

**Electric**

<b>Cost Category and Element</b>	<b>2000 (\$000)</b>		<b>2001 (\$000)</b>	
	<b>Budgeted</b>	<b>Recorded [1]</b>	<b>Authorized</b>	<b>Budgeted</b>
<b>Measurement for Program</b>				
<b>Admin Incentives</b>				
1. Utility Studies Reports for PY 2000 Programs	\$179	\$236	\$0	\$298
<b>Total Measurement for Program Admin Incentives</b>	\$179	\$236	\$0	\$298
<b>Demand Assessment</b>				
1. Customer Data for CEC: Utility Costs	\$0	\$0	\$0	\$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	\$244	\$244	\$0	\$244
3. DEER Updates [3]				
<b>Total CEC Data Collection Costs</b>	\$244	\$244	\$0	\$244
4. EE Market Assessment (Res Program Area)	\$455	\$512	\$425	\$463
5. EE Market Assessment (NonRes Program Area) [4]	\$352	\$194	\$0	\$81
6. EE Market Assessment (NC Program Area)	\$149	\$46	\$0	\$47
7. EE Product Assessment (all Markets)	\$0	\$0	\$0	\$0
<b>Total Demand Assessment</b>	\$1,199	\$995	\$425	\$835
<b>Total EE Market Assessment Costs</b>	\$1,378	\$1,231	\$425	\$1,132
<b>Other Program Evaluation</b>				
<b>Studies:</b>	\$0	\$0	\$0	\$0
1. General	\$0	\$0	\$0	\$144
2. PY2000, Residential	\$0	\$0	\$0	\$0
3. PY2000 Nonresidential	\$0	\$0	\$0	\$0
4. PY2000 New Construction	\$0	\$0	\$0	\$0
5. PY2001, Residential	\$0	\$0	\$0	\$51
6. PY2001 Nonresidential	\$0	\$0	\$0	\$9
7. PY2001 New Construction	\$0	\$0	\$0	\$9
8. Summer Initiatives	\$0	\$0	\$0	\$34
<b>M&amp;E Total</b>	\$1,378	\$1,231	\$425	\$1,378
<b>Regulatory Oversight</b>	\$0	\$0	\$0	\$0
Regulatory Compliance and Reporting (utility) [5]	\$0	\$0	\$0	\$0
Oversight Costs	\$0	\$0	\$0	\$0
1. CBEE/ED Operating Costs [4]	\$240	\$116	\$51	\$51
2. Other [6]	\$0	\$0	\$0	\$0
<b>Total MA&amp;E and Oversight</b>	\$1,618	\$1,347	\$476	\$1,429



**TABLE 5.1  
MARKET ASSESSMENT & EVALUATION EXPENDITURES (MA&E)**

**Natural Gas**

<b>Cost Category and Element</b>	<b>2000 (\$000)</b>		<b>2001 (\$000)</b>	
	<b>Budgeted</b>	<b>Recorded [1]</b>	<b>Authorized</b>	<b>Budgeted</b>
<b>Measurement for Program</b>				
<b>Admin Incentives</b>				
1. Utility Studies Reports for PY 2000 Programs	\$32	\$42	\$0	\$53
<b>Total Measurement for Program Admin Incentives</b>	\$32	\$42	\$0	\$53
<b>Demand Assessment</b>	\$0	\$0	\$0	\$0
1. Customer Data for CEC: Utility Costs	\$0	\$0	\$0	\$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	\$43	\$43	\$0	\$43
3. DEER Updates [3]	\$0	\$0	\$0	\$0
<b>Total CEC Data Collection Costs</b>	\$43	\$43	\$0	\$43
4. EE Market Assessment (Res Program Area)	\$80	\$90	\$75	\$82
5. EE Market Assessment (NonRes Program Area) [4]	\$62	\$34	\$0	\$14
6. EE Market Assessment (NC Program Area)	\$26	\$8	\$0	\$8
7. EE Product Assessment (all Markets)	\$0	\$0	\$0	\$0
<b>Total Demand Assessment</b>	\$212	\$176	\$75	\$147
<b>Total EE Market Assessment Costs</b>	\$243	\$217	\$75	\$200
<b>Other Program Evaluation</b>				
<b>Studies:</b>	\$0	\$0	\$0	\$0
1. General	\$0	\$0	\$0	\$25
2. PY2000, Residential	\$0	\$0	\$0	\$0
3. PY2000 Nonresidential	\$0	\$0	\$0	\$0
4. PY2000 New Construction	\$0	\$0	\$0	\$0
5. PY2001, Residential	\$0	\$0	\$0	\$9
6. PY2001 Nonresidential	\$0	\$0	\$0	\$2
7. PY2001 New Construction	\$0	\$0	\$0	\$2
8. Summer Initiatives	\$0	\$0	\$0	\$6
<b>M&amp;E Total</b>	\$243	\$217	\$75	\$243
<b>Regulatory Oversight</b>	\$0	\$0	\$0	\$0
Regulatory Compliance and Reporting (utility) [5]	\$0	\$0	\$0	\$0
Oversight Costs	\$0	\$0	\$0	\$0
1. CBEE/ED Operating Costs [4]	\$42	\$11	\$9	\$9
2. Other [6]	\$0	\$0	\$0	\$0
<b>Total MA&amp;E and Oversight</b>	\$285	\$228	\$84	\$252

**TABLE 5.2  
CEC MARKET ASSESSMENT & EVALUATION EXPENDITURES (MA&E)**

**Electric and Natural Gas Combined**

**Table 5.2a: CEC MA&E Expenditures and Budgets**

	PY 1999 and 2000 Authorized	PY99 and 2000 Actual and Committed*	2001 Planned Budget
<b>CEC Data Collection</b>	\$4,200,000.00		
Commercial End Use Survey (CEUS)		\$2,106,134	\$1,500,000
Residential Appliance Saturation Survey (RASS)		\$1,700,000	\$200,000
Database of Energy Efficient Resources (DEER)		\$353,562	\$400,000
Total		<u>\$4,159,696</u>	<u>\$4,200,000</u>
<b>CEC-Managed Statewide Studies</b>	\$1,600,000.00		
Nonresidential Market Share Tracking		\$1,009,054	
Nonresidential Remodeling & Renovation		\$205,310	\$200,000
Total		<u>\$1,214,364</u>	<u>\$200,000</u>
<b>TOTAL AUTHORIZED</b>	<b>\$5,800,000.00</b>		
<b>TOTAL ACTUAL AND COMMITTED</b>		<b>\$5,374,059.90</b>	
<b>TOTAL RETURNED TO UTILITIES (PY 2000)</b>		<b>\$425,940.10</b>	

\* If the CEC's 2001 budget is not approved, committed funds will be redirected from the RASS to the CEUS as approved by E-3592, and remaining funds will be returned to the utilities.

**Table 5.2b: 1999 and 2000 Funding Contribution to CEC MA&E Budget by Utility**

	Statewide Studies		CEC Data Collection and Analysis		Total Contribution by Utility
	Contribution	Percent	Contribution	Percent	
(1) PG&E	\$708,000.00	44%	\$1,894,000.00	45%	\$2,602,000.00
(2) SCE	\$508,000.00	32%	\$1,360,000.00	32%	\$1,868,000.00
(3) SDG&E	\$348,000.00	22%	\$574,000.00	14%	\$922,000.00
(4) SoCalGas	\$36,000.00	2%	\$372,000.00	9%	\$408,000.00
Total	<u>\$1,600,000.00</u>	<u>100%</u>	<u>\$4,200,000.00</u>	<u>100%</u>	<u>\$5,800,000.00</u>

**Unencumbered PY 2000 Funds Returned by CEC**

	Statewide Studies	CEC Data Collection and Analysis	Total Returned to Utility
(1) PG&E	\$170,643.93	\$18,175.23	\$188,819.16
(2) SCE	\$122,439.43	\$13,050.85	\$135,490.28
(3) SDG&E	\$83,875.83	\$5,508.23	\$89,384.06
(4) SoCalGas	\$8,676.81	\$3,569.79	\$12,246.60
Total	<u>\$385,636.00</u>	<u>\$40,304.10</u>	<u>\$425,940.10</u>

## Shareholder Performance Incentives

### PY2000 Performance Incentives Structure

SDG&E's PY2000 performance incentive structure was authorized through D.00-07-017, which adopted revisions to SDG&E's PY2000 energy efficiency programs and approved the performance award milestones and mechanisms. D.00-05-019 adopted a cap of 7% of program expenditures for utility performance awards associated with PY2000 and PY2001 energy efficiency programs. D.00-10-019 modified D.00-05-019 utility performance awards mechanism to a 7% cap based on *authorized budget*.

SDG&E's incentive mechanism for low-income programs was authorized and adopted through D.94-10-059, with D.98-06-063, OP No.6 authorizing the continued use of that existing mechanism.

### PY2000 Energy Efficiency Programs

SDG&E's energy efficiency programs' incentives structure provides milestones for four areas:

- **Base Award** – Milestones in this section focus on the timing of the rollout of programs, particularly statewide efforts.
- **Market Changes/Market Effects** – Milestones are designed to measure changes in the market associated with program activities.
- **Administrative Award** – Milestones address performance in processing program activities and results achieved in certain programs.
- **Aggressive Implementation** – This section of the structure is based on the amount of authorized funds that are spent or committed during 2000.
- SDG&E will earn its award in this section by incurring program expenditures and commitments by the end of 2000. Commitments are defined as follows:
  - Funds committed to customers or project sponsors in multi-year programs.
  - Funds identified for administrative activities occurring in future years associated with projects accepted or contracts signed in 2000 in multi-year programs, such as New Construction and SPC programs.
  - Commitments to contractors or suppliers for services or products where all or the large majority of services are provided in 2000, but paid for in early 2001.
  - Commitments under contracts to third parties to manage or implement programs for services provided during 2000, such as the statewide Residential Lighting and Appliance programs and Third Party programs.
  - Expenditures and commitments for all 2000 activities except those related to 1998 and 1999 programs (commitments for multi-year 1998, 1999 programs and close-out/reporting of 1998 and 1999 programs) will be counted towards the requirements and achievements for this award.

- Authorized program funding or budgets as used in this description would be the budgets adopted by the Commission in D.00-07-017.
- The award for this area is calculated as follows:
  - Maximum award for Aggressive Implementation is \$546,000.
  - The \$546,000 maximum award for Aggressive Implementation is allocated to the three program areas based on each program area's percentage of the total adjusted program budget. For the Residential and New Construction program areas, total adopted program budgets for each area is used.
  - The Nonresidential program area authorized budget is adjusted downward for the estimated administrative costs associated with the Large Nonresidential Comprehensive Retrofit and the Small Nonresidential Comprehensive Retrofit programs. The administrative costs removed include a portion of future estimated administrative costs to process projects in the Large SPC intervention strategy and estimated future administrative costs to process projects in the Small/Medium SPC intervention strategy. These future administrative costs are estimated for the purposes of determining the adjusted Nonresidential Program Area budget only for this portion of the performance incentives structure.

The following table summarizes SDG&E's Aggressive Implementation achievements:

Program Area	Adjusted Program Budget	% of Total Budget	Aggressive Implementation Award Cap	Achieved Incentive Awards
Residential	\$12,521,000	35%	\$193,000	\$193,000
Nonresidential	\$17,981,000	51%	\$277,000	\$220,000
New Construction	\$4,913,000	14%	\$76,000	\$76,000
<b>Total</b>	<b>\$35,415,000</b>	<b>100%</b>	<b>\$546,000</b>	<b>\$489,000</b>

SDG&E's award earned for Aggressive Implementation is \$489,000.

SDG&E's PY2000 Energy Efficiency Programs have earned a total award of \$2,591,572.

#### PY99 LIEE Programs

SDG&E proposed in the 2000 AEAP to collect the PY99 LIEE earnings in two earnings claims: 50% to be authorized by the 2000 AEAP and 50% to be authorized in the 2001 AEAP.

Incentives are earned on the non-mandatory component of the LIEE program, subject to meeting the minimum performance threshold for the mandatory portion of the program. SDG&E's second earning claim for the PY99 LIEE program is \$39,383.

#### PY2000 LIEE Programs

SDG&E proposes to collect the PY2000 LIEE earnings in two earnings claims: 50% to be authorized by the 2001 AEAP and 50% to be authorized in the 2002 AEAP. This two year

collection proposal is consistent with the prior year's proposal, and with the "Joint Recommendation On The Program Year 2000 Low-Income Energy Efficiency Shareholder Incentive Mechanism" submitted on November 10, 1999, and identified as Exhibit 66 in Phase 2 of the 1999 AEAP. SDG&E's first earnings claim for the PY2000 LIEE program is \$44,694.

**TABLE 6.1  
COST OF PERFORMANCE INCENTIVES**

<b>Electric and Gas Combined</b>			
	2000		2001
	Budgeted	Claimed	Budgeted
Residential Program Area	\$1,377,427	\$740,211	
Nonresidential Program Area	\$1,978,030	\$1,089,045	
New Construction	\$540,543	\$273,316	
General/Other	NA	NA	
Total <sup>1</sup>	\$3,896,000	\$2,102,572	\$2,706,000

<b>Electric Only</b>			
	2000		2001
	Budgeted	Claimed	Budgeted
Residential Program Area	\$1,162,654	\$624,960	
Nonresidential Program Area	\$1,670,237	\$919,481	
New Construction	\$456,109	\$230,761	
General/Other	NA	NA	
Total	\$3,289,000	\$1,775,202	\$2,136,000

<b>Gas Only</b>			
	2000		2001
	Budgeted	Claimed	Budgeted
Residential Program Area	\$214,773	\$115,251	
Nonresidential Program Area	\$307,793	\$169,564	
New Construction	\$84,434	\$42,555	
General/Other	NA	NA	
Total	\$607,000	\$327,370	\$570,000

**TABLE TA 6.2**  
**LIEE Shareholder Incentive Earnings**

<b>Gas Measures</b>	<b>Per Installation Incentive</b>	<b>Installation Frequency</b>	<b>Total Incentive Amount</b>
W/strip Dr. - MF Unit	\$1.97	3496	\$6,887.12
M. Hm Repair Materials	\$3.22	2985	\$9,611.70
Low Flow Showerheads	\$0.59	6518	\$3,845.62
Caulking - MF Unit	\$1.11	3469	\$3,850.59
W/strip Dr. - SF unit	\$1.97	695	\$1,369.15
Ceil. Insul. R-19	\$14.81	89	\$1,318.09
Caulking - SF Unit	\$1.11	688	\$763.68
Ceil. Insul. R-11	\$14.81	27	\$399.87
Water Heater Blankets	\$0.51	1096	\$558.96
Evaporative Cooler Cover	\$3.60	603	\$2,170.80
<b>Total Gas Incentive</b>			<b>\$30,775.58</b>
<b>Electric Measures</b>	<b>Per Installation Incentive</b>	<b>Installation Frequency</b>	<b>Total Incentive Amount</b>
Evaporative Cooler Replacement	\$6.67	21	\$140.07
Refrigerator Replacement	\$12.39	714	\$8,846.46
Exterior CFL Fixture	\$0.47	50	\$23.50
Compact Fluorescent Lamps	\$2.11	12568	\$26,518.48
<b>Total Electric Incentive</b>			<b>\$35,528.51</b>
<b>NON-SAVINGS MEASURES</b>	<b>Electric</b>	<b>Gas</b>	<b>Total</b>
EELI	\$1,244.06	\$11,196.52	\$12,440.58
Furnace	\$0.00	\$10,644.29	\$10,644.29
<b>Total Non-Savings Incentive</b>			<b>\$23,084.87</b>
<b>Total Shareholder Incentive</b>			<b>\$89,388.96</b>

# Low Income Energy Efficiency Programs

## Residential Programs

### Program Summary

#### Program Description

SDG&E offers the low-income customer two separate Low Income Energy Efficiency (LIEE) programs: the Direct Assistance Program (DAP) and the Energy Education for Low Income Program (EELI). SDG&E engages a prime contractor to administer its LIEE services, outreach to customers, provide in-home energy education, and conduct a home needs assessment. The prime contractor employs subcontractors to install DAP program measures and offer the EELI program within the community.

DAP is designed to help low-income residential customers control energy costs by providing free weatherization, energy education, and appliance services. Communities targeted for DAP participation by SDG&E are those where a majority of the households are at or below the income guidelines established by the California Public Utilities Commission (CPUC) for the utilities' low income programs.

SDG&E's second LIEE program offering, EELI, has, as its sole objective, providing information to low-income customers on how to conserve and better manage their energy usage. Outreaching the EELI program is achieved through a continued presence in the community, dissemination of written informational materials, and networking with community-based organizations and agencies. EELI is comprised of the following design elements:

- The Energy Practices Survey consists of a simple energy-use checklist that, when completed by the customer, provides immediate feedback on the cost of various energy-use practices. The survey is provided in English, Spanish, Somali, Arabic, Russian, Laotian, and Vietnamese.
- The Energy Conservation Video reviews energy and money saving information and provides the cost of many day-to-day energy usages.

During PY2000, as the cost of electricity in SDG&E's service territory skyrocketed, SDG&E filed an advice letter<sup>10</sup> with the Commission which included a request to increase its PY2000 and PY2001 LIEE program goals. SDG&E requested authorization to expend \$4.28 million of unspent PY1998 and PY1999 funds (including interest) over the two program years in order to help low-income customers weather the price storm.

#### Regulatory Compliance

SDG&E actively supported PUC Code Sections 327 and 381.5. Section 327 (a.) (1) directs that utility program funds are to be leveraged with state and federal funds while 381.5 states the intent of the Legislature to strengthen the network of community service providers. The community-based organizations (CBOs) in SDG&E's program leverage the funding with the state's Low Income Home Energy Assistance Program. CBOs and other community

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<sup>10</sup> Advice Letter 1239-E/1207-G, filed July 21, 2000.



organizations provide the installations and energy education to the LIEE customers. Section 381.5 also specifies that one major legislative objective of the public utilities' LIEE programs is to ensure that high quality, low-income energy efficiency programs are delivered to the maximum number of eligible participants at reasonable costs. During 2000, SDG&E increased the number of customers served by its LIEE program, achieved a 99% inspection pass rate, and managed the costs of its program with the goal of achieving cost-efficiencies in the administration and delivery of its program and services.

Section 2790 of PUC Code directs the LIEE programs to provide as many basic measures as feasible to the customers served in the program. Per statewide policy, SDG&E's program installed all feasible Commission-authorized measures to the homes served during PY2000. (See Table TA 7.4 for a list of all measures included in SDG&E's PY2000.)

SDG&E also worked consistently with the other investor-owned utilities (IOUs) and the Energy Division during PY2000 on several Commission-directed activities. D. 00-07-020 included directions to the utilities to complete standardization efforts, develop reporting requirements and a cost-effectiveness test for LIEE programs, provide comparable bill savings documentation, and recommend methods of comparing programs (including program costs) across the utilities. In response to the Commission's direction, several inter-utility teams were formed and, with guidance from the Energy Division and input from the Office of Ratepayer Advocates, the following achievements were completed:

- California Conventional Home and Mobile Home Installation Standards were adopted for use in PY2001
- A Reporting Requirements Manual was adopted for use in reporting PY2000 results
- A new cost-effectiveness test, the Low Income Public Purpose Test (LIPPT), was filed with the Commission on April 14, 2001
- A report was filed with the Commission comparing bill savings across the four utilities

### **PY2000 Low Income Energy Efficiency (LIEE) Program**

In response to the increased prices for electricity experienced in San Diego in the summer of 2000, SDG&E filed Advice Letter 12339-E/1207-G requesting authorization to expend unspent balancing account funds to enhance its PY2000 and PY2001 LIEE program. After authorization was received from the Commission in Resolution E-3703, dated September 7, 2000, SDG&E was able to increase its DAP goal for weatherization by 1,000 homes.

As shown on Tables 7.1 through 7.4, SDG&E spent a total of \$6,414,270 on its PY2000 LIEE program and achieved total annual energy reductions of 3,265 mWh and 307 Mtherms. The total resource cost ratio of the program is .30, the utility cost ratio is also .30, and the new LIPPT ratio is 1.044<sup>11</sup>.

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<sup>11</sup> The LIPPT as reported for SDG&E was calculated using the model developed by the RRM Working Group's cost-effectiveness team. Submitted for Commission review on April 7, 2001, the test includes the quantification of non-energy benefits associated with the utilities' LIEE programs. SDG&E notes that the LIPPT, as filed, and therefore SDG&E's results reported herein, reflect very preliminary results subject to refinement as testing of the LIPPT and the results continue by the utilities.

## DAP

DAP exceeded its revised weatherization goals for PY2000 by weatherizing 9,893 homes, 393 units over the revised plan of 9,500 units. Additionally, DAP provided another 4,000 customers with energy education and compact fluorescent lights. Outreach efforts were increased through community agencies and other media reports and interviews. SDG&E provided the contractor with a list of customers on CARE and information on communities where a majority of the customers qualify for low-income services. The contractor canvassed the neighborhoods to enroll qualified customers and also worked with a network of local community organizations to inform customers about LIEE programs.

Weatherization measures included ceiling insulation, water heater blankets, weather-stripping and caulking, minor home repairs, low flow showerheads, and evaporative cooler covers. Energy efficient measures included refrigerators, compact fluorescent lights and fixtures, and evaporative coolers. Energy education and furnace repair and replacement services were also provided through DAP. As part of a Commission directed pilot, SDG&E also installed attic ventilation when existing ventilation was not adequate. (See Table TA 7.4 for detailed information on measure installations.)

## EELI

During PY2000, under the EELI program, 26,575 customers (1,575 over SDG&E's target goal of 25,000) received in-home energy education and energy conservation tips on Heating and Cooling Usage, Water Heating System Usage, Major Electric and Gas Appliance Usage, Small Appliance Usage, and Lighting Usage. The goal of energy education is to give customers increased control over their energy consumption by informing them on how energy is being consumed in their homes and providing them with methods of reducing energy costs through energy conservation. The EELI contractor held additional energy education workshops to reach seniors and other special interest customers at local agencies outside of the network. Participants were appreciative of the information provided, and the workshops were well received in the community.

### **Energy-related Hardship**

SDG&E's LIEE impacted the low-income customer's energy-related hardship by addressing comfort, health, and safety. The new "Low Income Public Participant Test" is a quantified indicator that such energy-related hardship benefits were achieved. SDG&E's LIEE program was able to provide customers with more control over their utility bills, improve upon the air leakage rates of the home, decrease air drafts in customers' homes, and make the dwellings more secure.

Both the in-home energy education component of DAP and the EELI program provided customers with the knowledge to conserve their energy use, thereby giving them more control over their utility bills. Installation of DAP weatherization measures helped to better control the amount of energy needed in the home. By providing for minor home repairs, such as door and window replacement, along with weatherization measures, the comfort and health of the low-income customers was positively impacted. Repairing and replacing customers' furnaces had a similar positive impact upon customers' health and safety.

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

Plans for a PY2000 statewide M&E have been developed by the four investor-owned utilities with input from the Energy Division. A third-party consultant has been retained by the utilities to complete the evaluation and analysis. The M&E will include a process evaluation of each utility's program as well as a usage impact analysis at a total estimated cost of \$190,500. The process evaluation will include an assessment of marketing and outreach efforts, customer satisfaction, the effectiveness of energy education, and the comprehensiveness of energy education, quality assurance/quality control procedures, staffing, and coordination with other low-income programs. The consultant will identify possible areas for improvement and make recommendations on how those improvements may be achieved.

It is the intent of the utilities to complete the process analysis as quickly as possible so that any practical improvements to the program can be implemented during 2001 and/or be used during PY2002 planning. The impact analysis is to be completed and filed with the Commission by May of 2002.

**Shareholder Performance Incentives for Low Income Activities**

Using the mechanism adopted by the Commission for PY2000, SDG&E is requesting a shareholder incentive of \$89,390 payable 50% upon verification of earnings and 50% as a second claim in the 2002 AEAP.

Table 7.1  
 Summary of Costs: Low Income - San Diego Gas & Electric  
 (Electric and Gas Combined)

LIEE Program	Last Year		Current Year
	Budgeted	Recorded	Budgeted
Energy Efficiency			
- Gas Appliances	\$454,747	\$617,826	\$799,747
- Electric Appliances	\$390,100	\$944,806	\$1,677,840
- Weatherization Measures	\$4,655,651	\$3,549,298	\$5,178,175
- Outreach Assessment/In Home Energy Education	\$581,000	\$684,923	\$581,000
- Education Workshops (EELI)	\$268,107	\$203,690	\$268,107
Energy Efficiency TOTAL	\$6,349,605	\$6,000,543	\$8,504,869
Pilots			
- Attic Venting	\$0	\$1,277	\$0
Total Pilots	\$0	\$1,277	\$0
Training Center	\$0	\$0	\$0
Inspections	\$0	\$245,978	\$0
Advertising	\$0	\$0	\$0
M&E Studies	\$30,000	\$0	\$0
Regulatory Compliance	\$97,559	\$112,513	\$32,843
Other Administration	\$56,250	\$0	\$100,098
Indirect Costs	\$0	\$0	\$0
Oversight Costs			
- LIAB Start-Up	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0
- LIAB PY Present Year	\$85,256	\$37,566	\$85,256
- CPUC Energy Division	\$72,730	\$16,393	\$72,730
Total Oversight Costs	\$157,986	\$53,958	\$157,986
Total Costs	\$6,691,400	\$6,414,270	\$8,795,796

Table 7.1  
 Summary of Costs: Low Income - San Diego Gas & Electric  
 (Electric)

LIEE Program	Last Year		Current Year
	Budgeted	Recorded	Budgeted
Energy Efficiency			
- Gas Appliances	\$0	\$0	\$0
- Electric Appliances	\$390,100	\$944,806	\$1,677,840
- Weatherization Measures	\$465,565	\$353,780	\$517,818
- Outreach Assessment/In Home Energy Education	\$29,050	\$34,246	\$29,050
- Education Workshops (EELI)	\$214,486	\$162,952	\$214,486
Energy Efficiency TOTAL	\$1,099,201	\$1,495,785	\$2,439,193
Pilots			
- Attic Venting	\$0	\$1,277	\$0
Total Pilots	\$0	\$1,277	\$0
Training Center	\$0	\$0	\$0
Inspections	\$0	\$24,598	\$0
Advertising	\$0	\$0	\$0
M&E Studies	\$0	\$0	\$0
Regulatory Compliance	\$0	\$0	\$0
Other Administration	\$0	\$0	\$0
Indirect Costs	\$0	\$0	\$0
Oversight Costs			
- LIAB Start-Up	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0
- LIAB PY Present Year	\$8,526	\$3,757	\$8,526
- CPUC Energy Division	\$7,273	\$1,639	\$7,273
Total Oversight Costs	\$15,799	\$5,396	\$15,799
Total Costs	\$1,114,999	\$1,527,055	\$2,454,992

Table 7.1  
 Summary of Costs: Low Income - San Diego Gas & Electric  
 (Gas)

LIEE Program	Last Year		Current Year
	Budgeted	Recorded	Budgeted
Energy Efficiency			
- Gas Appliances	\$454,747	\$617,826	\$799,747
- Electric Appliances	\$0	\$0	\$0
- Weatherization Measures	\$4,190,086	\$3,195,517	\$4,660,358
- Outreach Assessment/In Home Energy Education	\$551,950	\$650,677	\$551,950
- Education Workshops (EELI)	\$53,621	\$40,738	\$53,621
Energy Efficiency TOTAL	\$5,250,404	\$4,504,759	\$6,065,676
Pilots			
- Attic Venting	\$0	\$0	\$0
Total Pilots	\$0	\$0	\$0
Training Center	\$0	\$0	\$0
Inspections	\$0	\$221,380	\$0
Advertising	\$0	\$0	\$0
M&E Studies	\$30,000	\$0	\$0
Regulatory Compliance	\$97,559	\$112,513	\$32,843
Other Administration	\$56,250	\$0	\$100,098
Indirect Costs	\$0	\$0	\$0
Oversight Costs			
- LIAB Start-Up	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0
- LIAB PY Present Year	\$76,730	\$33,809	\$76,730
- CPUC Energy Division	\$65,457	\$14,753	\$65,457
Total Oversight Costs	\$142,187	\$48,562	\$142,187
Total Costs	\$5,576,401	\$4,887,215	\$6,340,804

Table 7.2  
 Summary of LIEE Program Effects: DAP - San Diego Gas & Electric  
 Program Year: 2000  
 (Annual Energy Reductions)

	2000 (Recorded)	2001 (Planned)
mWh	3,265	1,460
mTherms	307	176

Table 7.3  
 Summary of LIEE Cost-Effectiveness - San Diego Gas & Electric  
 Program Year: 2000

(Benefit-Cost Ratios)

	2000 (Recorded)			2001 (Planned)		
	Utility Cost Test	Total Resource Cost Test	LIPPT	Utility Cost Test	Total Resource Cost Test	LIPPT
DAP	0.31	0.31	1.044	0.23	0.23	No forecast



Table 7.4  
 Summary of LIEE Cost-Effectiveness: DAP - San Diego Gas & Electric  
 Program Year: 2000  
 (Net Benefits; \$Mil)

	2000 Recorded		2001 Planned	
	TRC	LIPPT	TRC	LIPPT
DAP	(\$6,285,553)	\$283,978	(\$3,864,542)	No Forecast

# Summer Initiative Programs

## Summer 2000 Energy Efficiency Initiative

### **Beat the Heat: Replacement of Halogen Torchieres in Commercial and Institutional Buildings**

#### Description

This statewide program targets commercial and industrial users of halogen torchiere lamps and encourages them to replace those lamps with ENERGY STAR<sup>®</sup> models that save energy and demand, improve building comfort, and eliminate fire danger. The program also provides for recycling of halogen torchieres that are replaced.

Ecos Consulting will offer this program in the service territories of PG&E, SCE and SDG&E. SDG&E will manage the contract with Ecos Consulting.

#### 2000 Results & Achievements

As the program administrator, SDG&E successfully completed contract negotiations with Ecos on behalf of PG&E and SCE. A contract with Ecos Consulting was signed on September 11, 2000.

The research phase that involves characterizing the market and testing the hypotheses about the high incidence of halogen torchiere lighting in commercial spaces was completed. Research identified approximately 1,200 torchieres and thirteen potential participants. Survey results also showed torchieres appear to be concentrated in fewer quantities and at smaller companies than was originally believed. The Ecos Program team is exploring a revised program design to effectively reach this market.

An initial order of 3,840 replacement torchieres is currently warehoused at an Ecos Consulting facility in southern California. As of year-end 2000, no torchieres were exchanged and/or returned.

### **Residential Refrigerator Recycling-ARCA**

#### Description

In the August 21, 2000 Ruling of Assigned Commissioners and Administrative Law Judge on Summer 2000 Energy Efficiency Initiative, the Commission directed SCE to contract with the Appliance Centers of America (ARCA) to implement a Residential Refrigerator Recycling Program in the service territories of SDG&E and PG&E. In this Ruling, the Commission directed SCE to administer the program for SDG&E and PG&E for purposes of streamlining administration and oversight since SCE already works with ARCA on SCE's existing program.

The Residential Refrigerator Recycling Program targets residential customers in SCE, SDG&E, and PG&E's service territories and provides a cash incentive to customers for recycling their old, inefficient refrigerators or freezers. ARCA picks up the old appliance from the customer's home at no charge and recycles it in an environmentally safe manner. The old appliances are taken to a

staging area where they are later trucked to ARCA’s recycling facility located in Compton, California.

**2000 Results & Achievements**

During the 3<sup>rd</sup> Quarter, a contract was signed between ARCA and SCE to collect and recycle over 40,000 refrigerator/freezers from the three service territories from September 2000 through December 2001. In the 4<sup>th</sup> Quarter, a co-funding agreement to establish arrangements for the transfer of funds from SDG&E and PG&E to SCE for the Summer Initiative (S.I.) Statewide Recycling Program was created and signed by both SDG&E and PG&E. By December 31, 2000, the SI recycling program had been completed in SCE’s service territory. In October 2000, advertising for the SI recycling program began in SDG&E’s service territory. It is expected that number of units will significantly increase soon thereafter. The following are results as of December 31, 2000.

	<b>Unit Goal</b>	<b>Actual Units</b>	<b>Pending Units</b>	<b>Total Units</b>	<b>MWh</b>	<b>MW</b>
SCE	8,813	8,813	0	8,813	14,039	2.4
SDG&E	12,812	1,849	189	2,038	3,246	0.6
PG&E	23,489	29	62	91	46	0.0
Totals	45,114	10,691	251	10,942	17,331	3.0

**Pool Efficiency Program**

**Description**

The residential Pool Efficiency Program was “piloted” in the summer of 2000 by PG&E, SCE, and SDG&E, as a comprehensive swimming pool intervention strategy, designed as a rapid response to reduce demand and energy usage of residential pool pumps. The pool Efficiency program incorporates both pool pump efficiency and time-of day controls for an integrated approach to pool electricity use.

The program was designed to offer residential pool owners, financial incentives for the purchase and installation of high efficiency pool pumps and the re-set of pool pump timers to run during summer off-peak hours. The program also includes an informational element to help build consumer awareness of energy consumption with pools. Market objectives include: Reduction of peak demand by encouraging the operation of pool pumps during off peak hours, reduction in electricity consumption by encouraging the replacement of pool pumps or motors with more energy efficient units, and an increase in the consumer awareness of swimming pool efficiencies through an educational campaign directed at end users of pools.

2000 Results & Achievements

Activity	SDG&E
Switch timer to off peak	419
Conversion	38

**Program: Campus Energy Efficiency Programs**

Description

The California State Universities, in conjunction with the University of California system (referred to collectively as UC/CSU), submitted a wide range of projects for Commission consideration. The University of California, San Diego and California State University San Marcos projects were approved for funding in SDG&E’s service territory.

SDG&E was authorized to provide \$2,000,000 for the UC/CSU projects. The deadline for signing the UC/CSU contracts was October 23, 2000.

2000 Results & Achievements

University of California, San Diego

The University of California, San Diego (UCSD) submitted six revised retrofit projects that were accepted by SDG&E per direction from the CPUC. UCSD will receive a total of \$1,125,000 for an expected energy savings of 830 kW, 5,291,700 kWh, and 171,800 therms.

The contract was signed on October 20, 2000. SDG&E received UCSD’s Project application on December 21, 2000.

California State University San Marcos

California State University San Marcos (CSUSM) submitted two projects that were approved by the CPUC. CSUSM will receive a total of \$875,000 for expected energy savings of 1,500,786 kWh and 400 kW.

The contract was signed on October 23, 2000. SDG&E received CSUSM’s Project application on November 13, 2000. The Project Application payment of \$437,500 was issued December 18, 2000.

**Residential Hard to Reach**

Description

The program seeks to achieve peak demand savings through the installation of energy efficiency measures at multifamily apartment complexes, mobile home parks, and condominium complexes. Incentives are offered for a wide variety of measures including: ENERGY STAR<sup>®</sup> lighting equipment, ENERGY STAR<sup>®</sup> refrigerators, ENERGY STAR<sup>®</sup> clothes washers, ENERGY STAR<sup>®</sup> dishwashers, HVAC equipment, thermal shell measures, water heaters, and low flow shower heads.

Standardized statewide, including incentive levels, procedures, and contracts. The program is open to all project sponsors that have the appropriate licenses, bonding, certification, and insurance to perform the required work.

Utility administers program; project sponsors identify and sell individual projects based upon an approved marketing plan.

### 2000 Results & Achievements

SDG&E received 13 applications for the Multi-Family Summer Initiative Program ( MF SIP ) on November 8, 2000, the maximum reservations of funds were requested. Based on an independent third party review, three applicants were determined to be ineligible. Applications of the remaining applicants were approved on November 22, 2000. Program guidelines along with SDG&E specific program components such as marketing and bonus guidelines were reviewed in a kick off meeting on November 29.

Three refrigerators were installed in late December.

### **LED Traffic Signal Rebate Program**

#### Description

The program is designed to encourage the retrofit of traffic lights from traditional incandescent bulbs to light emitting diode (LED) traffic lamps. SDG&E was authorized \$4,000,000 for LED traffic signal customer projects.

### 2000 Results & Achievements

SDG&E kicked off the LED Traffic Signal Rebate program on 9/6/00 at the LED Traffic Signal seminar. Program details include: 1) higher incentives for installations before 6/1/01; 2) incentive amount paid will be the posted amount, not to exceed the invoice amount; 3) actual incentive will depend on the number of actual lamps replaced. If more lamps than contracted for are installed, additional lamps will be eligible for funds if funds are available; and 4) program ends 12/15/01.

In 2000, fifteen agencies signed up to participate in the LED Traffic Signal Rebate program. SDG&E signed contracts with all fifteen agencies for LED incentives.

### **Whole House Fans**

#### Description

The Whole House Fan Program provides financial incentives to single family homeowners who purchase and install a whole house fan. The program will promote the use of whole house fans, which can be used to reduce air conditioning operation during peak hours. Whole house fans utilize cool evening air to remove heat from the living space and attic areas. Using a whole house fan to cool down the house in the evening and nighttime hours reduces the on peak run time of air-conditioning units because it takes longer to reach the thermostat setting. Whole house fans use significantly less energy and are much less expensive to run than air conditioners

In addition to incentives, this program will include a training component, which encourages contractors to install fans per code. This program is coordinated with a new “Whole House Fan Brochure “ which provides information on how to properly operate these fans.

### 2000 Results & Achievements

Four requests for rebates were paid in 2000.

The application/mailer and informational brochures for the whole house fan were completed in late 2000, and are currently available for placement in home improvement centers.

### **Halogen Torchiere Turn In Event**

#### Description

In 2000, SDG&E targeted a variety of community and senior centers with a high saturation of elderly and lower income members. Scheduled “turn in” events were coordinated with centers to encourage seniors to exchange inefficient halogen torchiere and incandescent lamps for ENERGY STAR<sup>®</sup> qualified torchiere and compact fluorescent lamps.

### 2000 Results & Achievements

Since the introduction of the program on September 11, 2000, efforts were targeted at promoting the program and scheduling events.

The program experienced a high rate of interest from local senior centers.

Total number of torchieres exchanged program to date = fifteen turn-in events and three hundred twenty-six (326) Halogen lamps being replaced.

### **Third Party Initiatives**

#### Description

This program was modeled on the third party initiatives (TPIs) that the utilities have solicited in the past. The purpose of these TPIs is to solicit innovative and unique ideas and technologies from the marketplace. The program specifically asks bidders to identify peak demand reduction opportunities rather than simply energy savings.

### 2000 Results & Achievements

On September 1, 2000, SDG&E issued a Request for Proposals for Demand Reduction Projects that would produce energy efficiency savings and reduce on-peak demand with quantifiable savings by June 1, 2001. Of the 26 bids received, six projects were chosen for a total of \$1,000,000, with estimated potential energy savings of 9.5 gWh and on-peak demand reduction of 22.2 MW. All projects must be completed by December 31, 2001.

Project 1 will install a voltage regulator type, high intensity discharge lighting control system at a commercial facility in San Diego. The estimated annual energy savings are 950,000 kWh with a demand reduction of 109 kW. The contract was signed on December 27, 2000.

Project 2 will install a compressed air energy efficiency system at a commercial facility in San Diego. The estimated annual energy savings are 269,000 kWh with a demand reduction of 30.7 kW. The contract was signed on December 27, 2000.

Project 3 will replace high intensity discharge light fixtures at selected area locations. The estimated annual energy savings are 1,420,000 kWh with a demand reduction of 327 kW. The contract was signed on December 27, 2000.

Project 4: will install lighting control devices for tubular skylights in commercial and industrial buildings. The estimated annual energy savings are 4,359,168 kWh with a demand reduction of 21,120 kW. The contract was signed on November 17, 2000.

Project 5 will install evaporative pre-cooling packages to rooftop packaged cooling systems. The estimated annual energy savings are 594,000 kWh with a demand reduction of 227 kW. The contract was signed on November 7, 2000.

Project 6 will repair commercial rooftops package air conditioners. The estimated annual energy savings are 1,940,400 kWh with a demand reduction of 400 kW. The contract was signed on November 6, 2000.

**Table 8.1**  
**Summer Initiative Programs**  
**Budget Expenditures -YTD**  
**PY 2001**

Program	2000/2001	YTD			
	Authorized Budget	Actual	Commitment	Total (act + Com)	Utility Adm Costs
<b>Statewide Programs</b>					
Beat The Heat--ECOS Consulting	\$150,000	\$70,825	\$79,175	\$150,000	\$4,940
Residential Refrigerator Recycling --ARCA	\$3,000,000	\$750,000	\$2,250,000	\$3,000,000	\$1,227
Pool Efficiency Program	\$500,000	\$4,260	\$0	\$4,260	\$22,425
<b>Campus Energy Efficiency Programs</b>					
UC - UC San Diego	\$1,125,000		\$1,125,000	\$1,125,000	\$0
CSU - San Marcos	\$875,000	\$437,500	\$437,500	\$875,000	\$1,592
Residential Hard To Reach	\$1,500,000	\$0	\$1,500,000	\$1,500,000	\$54,597
LED Traffic Signal Rebate Program	\$4,000,000		\$4,000,000	\$4,000,000	\$16,726
Subtotal	\$11,150,000	\$1,262,585	\$9,391,675	\$10,654,260	\$101,507
<b>Utility-Specific Programs</b>					
Whole House Fans	\$100,000	\$150	\$0	\$150	\$118
Halogen Torchiere Turn-In	\$50,000	\$10,094	\$0	\$10,094	\$7,208
<b>Third Party Initiatives</b>					
<i>Program 1</i>	\$1,000,000	\$0	\$1,000,000	\$1,000,000	\$6,560
<i>Program 2</i>					
Subtotal	\$1,150,000	\$10,244	\$1,000,000	\$1,010,244	\$13,886
<b>Total</b>	<b>\$12,300,000</b>	<b>\$1,272,829</b>	<b>\$10,391,675</b>	<b>\$11,664,504</b>	<b>\$115,393</b>



**Table 8.2**  
**SUMMER INITIATIVE PROGRAMS**  
**Budget Expenditures -YTD**  
**PY 2001**

Program	2000/2001		YTD			
	Actual kWh	Actual kW	Commitments kWh	Commitments kW	Grand Total kWh	Grand Total kW
Statewide Programs						
Beat The Heat--ECOS Consulting	0	0.0	0	0	0	0
Residential Refrigerator Recycling --ARCA	55,302,597	1,599.0	0	0	55,302,597	1,599
Pool Efficiency Program	0	774.0	0	0	0	774
Campus Energy Efficiency Programs						
UC - UC San Diego	2,116,681	332.0	5,291,700	830	7,408,381	1,162
CSU - San Marcos	0	0.0	1,500,786	400	1,500,786	400
Residential Hard To Reach	185,300	32.6	5,641,200	760	5,826,500	793
LED Traffic Signal Rebate Program	0	0.0	11,628,576	1,327	11,628,576	1,327
Subtotal	57,604,578	2,737.6	24,062,262	3,317	81,666,840	6,055
Utility-Specific Programs						
Whole House Fans	0	0.0	0	0	0	0
Halogen Torchiere Turn-In	9,045	0.9	0	0	9,045	1
Third Party Initiatives						
Program 1	8,611	4.1	9,532,568	22,214	9,541,179	22,218
Program 2						
Subtotal	17,656	5.0	9,532,568	22,214	9,550,224	22,219
Total	57,622,234	2,742.6	33,594,830	25,531	91,217,064	28,274

# **Technical Appendix**

## **2000 ENERGY EFFICIENCY PROGRAM PLANS—TECHNICAL APPENDIX**

### **EXECUTIVE SUMMARY**

This Technical Appendix provides additional supporting documentation for SDG&E's "Annual Summary of Energy Efficiency Programs," dated May 2001, which reviews the progress of activities during 2000. We are reporting these results using the Energy Efficiency Programs Reporting Requirements Manual 2, draft dated 04/03/01, as agreed to by the utilities, Office of Ratepayer Advocates and the Energy Division of the California Public Utilities Commission.

SDG&E's 2000 Energy Efficiency Program plans were filed on September 29, 1999 in Application 99-09-057 and authorized through Interim Opinion D.99-12-053. D.00-07-017 adopted revisions to the PY2000 energy efficiency programs, market assessment and evaluation studies, program budgets, and modified and approved the performance award mechanisms and milestones.

All incremental measure costs, energy savings, and measure lives are documented in SDG&E's Request for Approval of 2000 and 2001 Energy Efficiency Programs, filed in Application 99-09-057 and authorized by D. 00-07-017.

This Technical Appendix also provides supporting documentation for SDG&E's Low Income Energy Efficiency Programs as filed in July 1999, and authorized through D.00-07-020. Results are reported based on the revised Reporting Requirements Manual low-income requirements as filed by the RRM Working Group on April 16, 2001.

**Table TA 1.1**  
**Avoided Costs**  
**Program Year: 2000**

2000 Avoided Costs (Cumulative and Discounted)  
 Note: Environmental Externalities not used in TRC calculation

Year	Gen \$/MWh	T&D \$/MWh	Env Ext \$/MWh	Total \$/MWh	Gas \$/therm	Env Ext \$/therm	Total \$/therm
2000	34.1	4.9	6.2	45.2	0.330	0.055	0.385
2001	66.4	9.6	12.1	88.1	0.643	0.107	0.750
2002	98.2	14.1	17.7	130.0	0.941	0.156	1.097
2003	128.6	18.5	23.1	170.2	1.224	0.204	1.428
2004	157.8	22.6	28.2	208.7	1.494	0.249	1.743
2005	185.9	26.7	33.1	245.7	1.751	0.292	2.042
2006	213.0	30.6	37.7	281.3	1.995	0.332	2.327
2007	239.0	34.3	42.1	315.4	2.228	0.371	2.599
2008	264.0	37.9	46.3	348.2	2.451	0.408	2.859
2009	288.0	41.4	50.3	379.8	2.663	0.443	3.106
2010	311.2	44.8	54.1	410.2	2.864	0.476	3.341
2011	333.6	48.0	57.8	439.4	3.055	0.508	3.564
2012	355.2	51.1	61.2	467.5	3.235	0.539	3.774
2013	376.1	54.1	64.5	494.7	3.406	0.568	3.974
2014	396.2	57.0	67.7	520.8	3.567	0.595	4.162
2015	415.5	59.7	70.7	545.9	3.719	0.622	4.341
2016	434.2	62.4	73.5	570.1	3.863	0.647	4.510
2017	452.2	65.0	76.2	593.3	3.999	0.671	4.670
2018	469.5	67.4	78.8	615.7	4.128	0.693	4.821
2019	486.3	69.8	81.2	637.3	4.250	0.715	4.965

2001 Avoided Costs (Cumulative and Discounted)  
 Does Not Include Environmental Externalities

Year	Summer On-Peak \$/MWh	Summer Semi-Peak \$/MWh	Summer Off-Peak \$/MWh	Winter On-Peak \$/MWh	Winter Semi-Peak \$/MWh	Winter Off-Peak \$/MWh	Gas \$/Therm
2001	495.594	104.540	102.517	89.348	67.413	49.741	0.542
2002	953.840	201.203	197.309	171.962	129.745	95.734	0.981
2003	1148.075	255.598	237.498	233.898	187.041	142.894	1.294
2004	1317.957	300.200	273.976	288.512	237.628	184.683	1.541
2005	1478.175	345.490	308.273	339.829	285.141	223.883	1.779
2006	1611.516	388.213	340.760	387.589	329.004	260.527	2.010
2007	1739.347	428.869	371.569	433.091	370.757	295.335	2.233
2008	1861.242	467.400	400.684	476.256	410.336	328.274	2.449
2009	1977.648	503.966	428.232	517.260	447.907	359.485	2.657
2010	2088.955	538.710	454.327	556.259	483.614	389.092	2.858
2011	2179.155	567.605	476.297	588.562	513.280	413.875	3.020
2012	2265.672	595.114	497.140	619.351	541.531	437.425	3.177
2013	2348.806	621.346	516.945	648.746	568.479	459.840	3.329
2014	2428.748	646.382	535.779	676.834	594.206	481.193	3.476
2015	2505.767	670.318	553.720	703.721	618.811	501.569	3.619
2016	2580.078	693.238	570.834	729.497	642.376	521.041	3.757
2017	2640.846	712.412	585.310	750.984	662.074	537.425	3.868
2018	2699.280	730.713	599.077	771.515	680.880	553.033	3.975
2019	2755.578	748.210	612.191	791.168	698.865	567.927	4.079
2020	2809.897	764.963	624.701	810.009	716.090	582.160	4.180
2021	2862.379	781.027	636.651	828.098	732.612	595.781	4.277
2022	2913.157	796.452	648.083	845.488	748.482	608.834	4.371
2023	2962.383	811.292	659.039	862.239	763.755	621.368	4.462
2024	3022.498	828.721	671.646	882.042	781.721	635.338	4.572
2025	3078.084	844.837	683.304	900.352	798.334	648.256	4.674

TABLE TA 2.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (RESIDENTIAL)  
TOTAL GAS AND ELECTRIC

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Statewide Energy Guide	\$0	\$0	\$39,826	\$0		\$0	\$39,826
Energy Efficient Mortgage Program	\$0	\$0	\$399,933	\$0		\$0	\$399,933
Information & Education	\$0	\$0	\$1,062,652	\$0		\$0	\$1,062,652
In-Store EE Demonstration Co-op Program	\$0	\$0	\$187,684	\$0		\$0	\$187,684
<b>Total Information</b>	\$0	\$0	\$1,690,095	\$0	\$43,239	\$0	\$1,733,334
EMS							
Energy Management Services	\$0	\$0	\$1,561,566	\$0		\$0	\$1,561,566
<b>Total EMS</b>	\$0	\$0	\$1,561,566	\$0	\$0	\$0	\$1,561,566
EEl							
SPC							
Res Energy Eff Prog (RCP) - Single-Family	\$1,128,633	\$0	\$1,154,916	\$0		\$0	\$2,283,549
Res Energy Eff Prog (RCP) - Multi-Family	\$773,062	\$0	\$269,148	\$0		\$0	\$1,042,210
Rebates							
Downstream Appliance Incentives	\$595,725	\$0	\$530,566	\$0		\$0	\$1,126,291
Loans	\$0	\$0	\$0	\$0		\$0	\$0
Other	\$0	\$0	\$0	\$0		\$0	\$0
<b>Total EEl</b>	\$2,497,420	\$0	\$1,954,630	\$0	\$92,656	\$0	\$4,544,706
Upstream Programs							
Information							
Contractor Training Program (HVAC)	\$0	\$0	\$226,918	\$0		\$0	\$226,918
Targeted Third Party Initiatives	\$0	\$0	\$18,469	\$0		\$0	\$18,469
Financial Assistance							
Upstream Distributor Incentive Prog	\$434,968	\$0	\$80,910	\$0		\$0	\$515,878
Statewide Upstream Lighting	\$169,100	\$0	\$2,139,336	\$0		\$0	\$2,308,436
Statewide Upstream Appliances	\$61,772	\$0	\$997,964	\$0		\$0	\$1,059,736
Energy Star Windows Program	\$173,274	\$0	\$309,324	\$0		\$0	\$482,599
<b>Total Upstream</b>	\$839,114	\$0	\$3,772,922	\$0	\$604,316	\$0	\$5,216,352
<b>TOTAL RESIDENTIAL</b>	\$3,336,534	\$0	\$8,979,214	\$0	\$740,211	\$0	\$13,055,959

**TABLE TA 2.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (RESIDENTIAL)  
ELECTRIC ONLY**

PROGRAM	UTILITY COSTS						Total
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	
	Actual	Committed	Actual	Committed			
Information							
Statewide Energy Guide	\$0	\$0	\$33,853	\$0		\$0	\$33,853
Energy Efficient Mortgage Program	\$0	\$0	\$199,966	\$0		\$0	\$199,966
Information & Education	\$0	\$0	\$898,744	\$0		\$0	\$898,744
In-Store EE Demonstration Co-op Progra	\$0	\$0	\$93,842	\$0		\$0	\$93,842
<b>Total Information</b>	\$0	\$0	\$1,226,406	\$0	\$36,507	\$0	\$1,262,913
EMS							
Energy Management Services	\$0	\$0	\$1,171,175	\$0		\$0	\$1,171,175
<b>Total EMS</b>	\$0	\$0	\$1,171,175	\$0	\$0	\$0	\$1,171,175
EEl							
SPC							
Res Energy Eff Prog (RCP) - Single-Fami	\$1,072,201	\$0	\$1,097,171	\$0		\$0	\$2,169,372
Res Energy Eff Prog (RCP) - Multi-Family	\$734,409	\$0	\$255,691	\$0		\$0	\$990,100
Rebates							
Downstream Appliance Incentives	\$595,725	\$0	\$530,566	\$0		\$0	\$1,126,291
Loans	\$0	\$0	\$0	\$0		\$0	\$0
Other	\$0	\$0	\$0	\$0		\$0	\$0
<b>Total EEI</b>	\$2,402,335	\$0	\$1,883,427	\$0	\$78,229	\$0	\$4,363,992
Upstream Programs							
Information							
Contractor Training Program (HVAC)	\$0	\$0	\$113,459	\$0		\$0	\$113,459
Targeted Third Party Initiatives	\$0	\$0	\$9,234	\$0		\$0	\$9,234
Financial Assistance							
Upstream Distributor Incentive Prog	\$213,134	\$0	\$39,646	\$0		\$0	\$252,780
Statewide Upstream Lighting	\$169,100	\$0	\$2,139,336	\$0		\$0	\$2,308,436
Statewide Upstream Appliances	\$61,772	\$0	\$997,964	\$0		\$0	\$1,059,736
Energy Star Windows Program	\$77,973	\$0	\$139,196	\$0		\$0	\$217,169
<b>Total Upstream</b>	\$521,980	\$0	\$3,438,836	\$0	\$510,224	\$0	\$4,471,040
<b>TOTAL RESIDENTIAL</b>	\$2,924,315	\$0	\$7,719,844	\$0	\$624,960	\$0	\$11,269,119

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

PROGRAM	UTILITY COSTS						Total
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	
	Actual	Committed	Actual	Committed			
Information							
Statewide Energy Guide	\$0	\$0	\$5,972	\$0		\$0	\$5,972
Energy Efficient Mortgage Program	\$0	\$0	\$199,966	\$0		\$0	\$199,966
Information & Education	\$0	\$0	\$163,908	\$0		\$0	\$163,908
In-Store EE Demonstration Co-op Program	\$0	\$0	\$93,842	\$0		\$0	\$93,842
<b>Total Information</b>	\$0	\$0	\$463,689	\$0	\$6,732	\$0	\$470,421
EMS							
Energy Management Services	\$0	\$0	\$390,392	\$0		\$0	\$390,392
<b>Total EMS</b>	\$0	\$0	\$390,392	\$0	\$0	\$0	\$390,392
EEI							
SPC							
Res Energy Eff Prog (RCP) - Single-Family	\$56,432	\$0	\$57,746	\$0		\$0	\$114,177
Res Energy Eff Prog (RCP) - Multi-Family	\$38,653		\$13,457	\$0		\$0	\$52,111
Rebates							
Downstream Appliance Incentives	\$0	\$0	\$0	\$0		\$0	\$0
Loans	\$0	\$0	\$0	\$0		\$0	\$0
Other	\$0	\$0	\$0	\$0		\$0	\$0
<b>Total EEI</b>	\$95,085	\$0	\$71,203	\$0	\$14,427	\$0	\$180,715
Upstream Programs							
Information							
Contractor Training Program (HVAC)	\$0	\$0	\$113,459	\$0		\$0	\$113,459
Targeted Third Party Initiatives	\$0	\$0	\$9,234	\$0		\$0	\$9,234
Financial Assistance							
Upstream Distributor Incentive Prog	\$221,834	\$0	\$41,264	\$0		\$0	\$263,098
Statewide Upstream Lighting	\$0	\$0	\$0	\$0		\$0	\$0
Statewide Upstream Appliances	\$0	\$0	\$0	\$0		\$0	\$0
Energy Star Windows Program	\$95,301	\$0	\$170,128	\$0		\$0	\$265,429
<b>Total Upstream</b>	\$317,135	\$0	\$334,086	\$0	\$94,092	\$0	\$745,312
<b>TOTAL RESIDENTIAL</b>	<b>\$412,219</b>	<b>\$0</b>	<b>\$1,259,370</b>	<b>\$0</b>	<b>\$115,251</b>	<b>\$0</b>	<b>\$1,786,840</b>

**TABLE TA 2.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
RESIDENTIAL: TOTAL GAS & ELECTRIC**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Statewide Energy Guide	\$28,749	\$7,620	\$0	\$3,457	\$39,826
Energy Efficient Mortgage Program	\$119,267	\$245,955	\$0	\$34,711	\$399,933
Information & Education	\$173,417	\$797,006	\$0	\$92,230	\$1,062,652
In-Store EE Demonstration Co-op Program	\$28,585	\$142,810	\$0	\$16,289	\$187,684
<b>Total Information</b>	\$350,017	\$1,193,391	\$0	\$146,686	\$1,690,095
EMS					
Energy Management Services	\$199,375	\$1,226,660	\$0	\$135,531	\$1,561,566
<b>Total EMS</b>	\$199,375	\$1,226,660	\$0	\$135,531	\$1,561,566
EEl					
SPC					
Res Energy Eff Prog (RCP) - Single-Family	\$305,220	\$615,602	\$0	\$234,094	\$1,154,916
Res Energy Eff Prog (RCP) - Multi-Family	\$71,130	\$143,463	\$0	\$54,555	\$269,148
Rebates					
Downstream Appliance Incentives	\$114,100	\$318,713	\$0	\$97,753	\$530,566
Loans	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0
<b>Total EEl</b>	\$490,450	\$1,077,778	\$0	\$386,402	\$1,954,630
Upstream Programs					
Information					
Contractor Training Program (HVAC)	\$17,388	\$189,835	\$0	\$19,695	\$226,918
Targeted Third Party Initiatives	\$16,318	\$548	\$0	\$1,603	\$18,469
Financial Assistance					
Upstream Distributor Incentive Prog	\$35,547	\$589	\$0	\$44,774	\$80,910
Statewide Upstream Lighting	\$146,604	\$1,792,379	\$0	\$200,353	\$2,139,336
Statewide Upstream Appliances	\$56,535	\$849,453	\$0	\$91,976	\$997,964
Energy Star Windows Program	\$45,900	\$221,539	\$0	\$41,886	\$309,324
<b>Total Upstream</b>	\$318,290	\$3,054,345	\$0	\$400,287	\$3,772,922
<b>TOTAL RESIDENTIAL</b>	\$1,358,133	\$6,552,175	\$0	\$1,068,906	\$8,979,214



**TABLE TA 2.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
RESIDENTIAL ELECTRIC ONLY**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Statewide Energy Guide	\$24,487	\$6,428	\$0	\$2,938	\$33,853
Energy Efficient Mortgage Program	\$59,633	\$122,978	\$0	\$17,355	\$199,966
Information & Education	\$147,177	\$673,564	\$0	\$78,004	\$898,744
In-Store EE Demonstration Co-op Program	\$14,292	\$71,405	\$0	\$8,145	\$93,842
Total Information	\$245,589	\$874,375	\$0	\$106,442	\$1,226,406
EMS					
Energy Management Services	\$149,531	\$919,995	\$0	\$101,648	\$1,171,175
<b>Total EMS</b>	\$149,531	\$919,995	\$0	\$101,648	\$1,171,175
EEl					
SPC					
Res Energy Eff Prog (RCP) - Single-Family	\$289,959	\$584,822	\$0	\$222,389	\$1,097,171
Res Energy Eff Prog (RCP) - Multi-Family	\$67,574	\$136,290	\$0	\$51,827	\$255,691
Rebates					
Downstream Appliance Incentives	\$114,100	\$318,713	\$0	\$97,753	\$530,566
Loans	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0
<b>Total EEl</b>	\$471,633	\$1,039,825	\$0	\$371,969	\$1,883,427
Upstream Programs					
Information					
Contractor Training Program (HVAC)	\$8,694	\$94,918	\$0	\$9,847	\$113,459
Targeted Third Party Initiatives	\$8,159	\$274	\$0	\$801	\$9,234
Financial Assistance					
Upstream Distributor Incentive Prog	\$17,418	\$289	\$0	\$21,939	\$39,646
Statewide Upstream Lighting	\$146,604	\$1,792,379	\$0	\$200,353	\$2,139,336
Statewide Upstream Appliances	\$56,535	\$849,453	\$0	\$91,976	\$997,964
Energy Star Windows Program	\$20,655	\$99,693	\$0	\$18,849	\$139,196
<b>Total Upstream</b>	\$258,064	\$2,837,006	\$0	\$343,766	\$3,438,836
<b>TOTAL RESIDENTIAL</b>	\$1,124,817	\$5,671,201	\$0	\$923,826	\$7,719,844

**TABLE TA 2.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
RESIDENTIAL GAS**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
	\$4,262	\$1,192	\$0	\$518	\$5,972
Statewide Energy Guide	\$59,633	\$122,978	\$0	\$17,355	\$199,966
Energy Efficient Mortgage Program	\$26,240	\$123,442	\$0	\$14,226	\$163,908
Information & Education	\$14,292	\$71,405	\$0	\$8,145	\$93,842
In-Store EE Demonstration Co-op Program					
	\$104,428	\$319,017	\$0	\$40,244	\$463,689
Total Information					
EMS					
Energy Management Services	\$49,844	\$306,665	\$0	\$33,883	\$390,392
<b>Total EMS</b>	\$49,844	\$306,665	\$0	\$33,883	\$390,392
EEI					
SPC					
Res Energy Eff Prog (RCP) - Single-Family	\$15,261	\$30,780	\$0	\$11,705	\$57,746
Res Energy Eff Prog (RCP) - Multi-Family	\$3,557	\$7,173	\$0	\$2,728	\$13,457
Rebates					
Downstream Appliance Incentives	\$0	\$0	\$0	\$0	\$0
Loans	\$0	\$0	\$0	\$0	\$0
Other					
<b>Total EEI</b>	\$18,818	\$37,953	\$0	\$14,432	\$71,203
Upstream Programs					
Information					
Contractor Training Program (HVAC)	\$8,694	\$94,918	\$0	\$9,847	\$113,459
Targeted Third Party Initiatives	\$8,159	\$274	\$0	\$801	\$9,234
Financial Assistance					
Upstream Distributor Incentive Prog	\$18,129	\$301	\$0	\$22,835	\$41,264
Statewide Upstream Lighting	\$0	\$0	\$0	\$0	\$0
Statewide Upstream Appliances	\$0	\$0	\$0	\$0	\$0
Energy Star Windows Program	\$25,245	\$121,847	\$0	\$23,037	\$170,128
<b>Total Upstream</b>	\$60,226	\$217,339	\$0	\$56,521	\$334,086
<b>TOTAL RESIDENTIAL</b>	\$233,316	\$880,974	\$0	\$145,080	\$1,259,370

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**SPC Program -- Residential Contractor Program (Single Family Component)**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2001	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2002	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2003	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2004	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2005	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2006	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2007	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2008	570	2,918,119	184,077	0.56	3,904	0	0	92	268
2009	570	2,918,119	184,077	0.12	549	0	0	92	268
2010	553	2,734,155	184,077	0.12	549	0	0	0	210
2011	553	2,734,155	184,077	0.12	549	0	0	0	210
2012	553	2,686,349	162,739	0.12	549	0	0	0	210
2013	553	2,686,349	162,739	0.12	549	0	0	0	210
2014	553	2,686,349	162,739	0.12	549	0	0	0	210
2015	549	1,542,164	81,768	0.12	549	0			
2016	549	1,542,164	81,768	0.12	549	0			
2017	549	1,542,164	81,768						
2018	422	1,489,566	74,586						
2019	422	1,489,566	74,586						
SUM (Lifecycle)	570	50,314,172	3,091,623	0.56	39,528	0	0	920	3726

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**SPC Program -- Residential Contractor Program (Multi Family Component)**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000				85	2,560,434	0	25	166,618	231,891
2001				85	2,560,434	0	25	166,618	231,891
2002				85	2,560,434	0	25	166,618	231,891
2003				85	2,560,434	0	25	166,618	231,891
2004				85	2,560,434	0	25	166,618	231,891
2005				85	2,560,434	0	25	166,618	231,891
2006				85	2,560,434	0	25	166,618	231,891
2007				85	2,560,434	0	25	166,618	231,891
2008				85	2,560,434	0	25	166,618	231,891
2009				6	302,347	0	25	166,618	231,891
2010				6	302,347	0	25	0	131,670
2011				6	302,347	0	25	0	131,670
2012				6	302,347	0	25	0	131,670
2013				6	302,347	0	25	0	131,670
2014				6	302,347	0	25	0	131,670
2015				6	302,347	0			
2016									
2017									
2018									
2019									
SUM (Lifecycle)				85	25,160,336	0	382	1,666,180	2,977,260

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**SPC Program -- Energy Management Services**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			MISC		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000				109	1,254,404	0			
2001				109	1,254,404	0			
2002				109	1,254,404	0			
2003				109	1,254,404	0			
2004				109	1,254,404	0			
2005				109	1,254,404	0			
2006				109	1,254,404	0			
2007				109	1,254,404	0			
2008				109	1,254,404	0			
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
<b>SUM (Lifecycle)</b>				109	11,289,636	0	0	0	0

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**Rebates Program -- Downstream Appliance Incentives Program**  
**Program Year: 2000**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000							116	734,296	49,200
2001							116	734,296	49,200
2002							116	734,296	49,200
2003							116	734,296	49,200
2004							116	734,296	49,200
2005							116	734,296	49,200
2006							116	734,296	49,200
2007							116	734,296	49,200
2008							116	734,296	49,200
2009							116	734,296	49,200
2010							116	734,296	49,200
2011							116	734,296	49,200
2012							116	734,296	49,200
2013							116	734,296	49,200
2014							111.9	541,596	0
2015									
2016									
2017									
2018									
2019									
SUM (Lifecycle)							116	10,821,740	688,800

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**Upstream Programs: Financial Assistance -- Lighting Fixtures Program\***  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000				1,646	14,346,420	0			
2001				1,646	14,346,420	0			
2002				1,646	14,346,420	0			
2003				1,646	14,346,420	0			
2004				1,646	14,346,420	0			
2005				1,646	14,346,420	0			
2006				1,646	14,346,420	0			
2007				1,646	14,346,420	0			
2008				1,646	14,346,420	0			
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
SUM (Lifecycle)				1,646	129,117,780	0			

\* Includes both SDG&E Lighting Fixture Program and Statewide Upstream Lighting Program.

**Table TA 2.3**  
**Market Effects: Residential Projected Annual Program Energy Reductions**  
**Upstream Programs: Financial Assistance -- HVAC Distributor Incentives Program**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	469	187,591	0						
2001	469	187,591	0						
2002	469	187,591	0						
2003	469	187,591	0						
2004	469	187,591	0						
2005	469	187,591	0						
2006	469	187,591	0						
2007	469	187,591	0						
2008	469	187,591	0						
2009	469	187,591	0						
2010	469	187,591	0						
2011	469	187,591	0						
2012	469	187,591	0						
2013	469	187,591	0						
2014	469	187,591	0						
2015	469	187,591	0						
2016	469	187,591	0						
2017	469	187,591	0						
2018									
2019									
SUM (Lifecycle)	469	3,376,638	0						



**Table TA 2.4**  
**Market Effects: Distribution of Residential Single-Family Contractor Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra EnergySolutions	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Affiliate</i>	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor #1	\$3,296.00	\$0.00	\$3,296.00	\$0.00	\$3,296
Contractor #2	\$396.93	\$0.00	\$396.93	\$0.00	\$397
Contractor #3	\$161,300.00	\$0.00	\$161,300.00	\$0.00	\$161,300
Contractor #4	\$43,450.00	\$0.00	\$43,450.00	\$0.00	\$43,450
Contractor #5	\$358.00	\$0.00	\$358.00	\$0.00	\$358
Contractor #6	\$38,550.00	\$0.00	\$38,550.00	\$0.00	\$38,550
Contractor #7	\$15,148.00	\$0.00	\$15,148.00	\$0.00	\$15,148
Contractor #8	\$5,874.00	\$0.00	\$5,874.00	\$0.00	\$5,874
Contractor #9	\$11,066.00	\$0.00	\$11,066.00	\$0.00	\$11,066
Contractor #10	\$140.00	\$0.00	\$140.00	\$0.00	\$140
Contractor #11	\$475.00	\$0.00	\$475.00	\$0.00	\$475
Contractor #12	\$44,925.00	\$0.00	\$44,925.00	\$0.00	\$44,925
Contractor #13	\$25,950.00	\$0.00	\$25,950.00	\$0.00	\$25,950
Contractor #14	\$14,225.00	\$0.00	\$14,225.00	\$0.00	\$14,225
Contractor #15	\$400.00	\$0.00	\$400.00	\$0.00	\$400
Contractor #16	\$300.00	\$0.00	\$300.00	\$0.00	\$300
Contractor #17	\$10,425.00	\$0.00	\$10,425.00	\$0.00	\$10,425
Contractor #18	\$3,150.00	\$0.00	\$3,150.00	\$0.00	\$3,150
Contractor #19	\$1,400.00	\$0.00	\$1,400.00	\$0.00	\$1,400
Contractor #20	\$735.00	\$0.00	\$675.00	\$60.00	\$735
Contractor #21	\$140,300.00	\$0.00	\$140,300.00	\$0.00	\$140,300
Contractor #22	\$16,604.00	\$0.00	\$16,604.00	\$0.00	\$16,604
Contractor #23	\$8,014.00	\$0.00	\$8,014.00	\$0.00	\$8,014
Contractor #24	\$675.00	\$0.00	\$675.00	\$0.00	\$675
Contractor #25	\$8,875.00	\$0.00	\$8,875.00	\$0.00	\$8,875
Contractor #26	\$4,800.00	\$0.00	\$4,800.00	\$0.00	\$4,800
Contractor #27	\$142.00	\$0.00	\$142.00	\$0.00	\$142
Contractor #28	\$150.00	\$0.00	\$150.00	\$0.00	\$150
Contractor #29	\$850.00	\$0.00	\$850.00	\$0.00	\$850
Contractor #30	\$10,248.00	\$0.00	\$10,248.00	\$0.00	\$10,248
Contractor #31	\$180.00	\$0.00	\$180.00	\$0.00	\$180
Contractor #32	\$11,325.00	\$0.00	\$11,325.00	\$0.00	\$11,325
Contractor #33	\$1,562.00	\$0.00	\$1,562.00	\$0.00	\$1,562
Contractor #34	\$706.00	\$0.00	\$706.00	\$0.00	\$706
Contractor #35	\$428.00	\$0.00	\$428.00	\$0.00	\$428
Contractor #36	\$10,850.00	\$0.00	\$10,850.00	\$0.00	\$10,850
Contractor #37	\$7,650.00	\$0.00	\$7,650.00	\$0.00	\$7,650
Contractor #38	\$356.89	\$0.00	\$342.89	\$14.00	\$357
Contractor #39	\$275.00	\$0.00	\$275.00	\$0.00	\$275
Contractor #40	\$23,825.00	\$0.00	\$23,825.00	\$0.00	\$23,825
Contractor #41	\$33,075.97	\$0.00	\$33,075.97	\$0.00	\$33,076
Contractor #42	\$13,584.00	\$0.00	\$13,584.00	\$0.00	\$13,584
Contractor #43	\$5,258.00	\$0.00	\$5,258.00	\$0.00	\$5,258

**Table TA 2.4**  
**Market Effects: Distribution of Residential Single-Family Contractor Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Contractor #44	\$8,152.00	\$0.00	\$8,152.00	\$0.00	\$8,152
Contractor #45	\$6,040.00	\$0.00	\$6,040.00	\$0.00	\$6,040
Contractor #46	\$23,600.00	\$0.00	\$23,600.00	\$0.00	\$23,600
Contractor #47	\$218.00	\$0.00	\$218.00	\$0.00	\$218
Contractor #48	\$350.00	\$0.00	\$350.00	\$0.00	\$350
Contractor #49	\$14,780.00	\$0.00	\$14,600.00	\$180.00	\$14,780
Contractor #50	\$2,050.00	\$0.00	\$2,050.00	\$0.00	\$2,050
Contractor #51	\$97,206.00	\$0.00	\$97,206.00	\$0.00	\$97,206
Contractor #52	\$8,950.00	\$0.00	\$8,950.00	\$0.00	\$8,950
Contractor #53	\$1,325.00	\$0.00	\$1,325.00	\$0.00	\$1,325
Contractor #54	\$39,890.00	\$0.00	\$39,890.00	\$0.00	\$39,890
Contractor #55	\$425.00	\$0.00	\$425.00	\$0.00	\$425
Contractor #56	\$2,775.00	\$0.00	\$2,775.00	\$0.00	\$2,775
Contractor #57	\$8,850.00	\$0.00	\$8,850.00	\$0.00	\$8,850
Contractor #58	\$549.00	\$0.00	\$505.00	\$44.00	\$549
Contractor #59	\$9,494.30	\$0.00	\$9,494.30	\$0.00	\$9,494
Contractor #60	\$4,162.55	\$0.00	\$4,132.55	\$30.00	\$4,163
Contractor #61	\$23,450.00	\$0.00	\$23,450.00	\$0.00	\$23,450
Contractor #62	\$642.00	\$0.00	\$642.00	\$0.00	\$642
Contractor #63	\$658.00	\$0.00	\$658.00	\$0.00	\$658
Contractor #64	\$12,997.00	\$571.00	\$12,405.00	\$21.00	\$12,997
Contractor #65	\$660.00	\$0.00	\$660.00	\$0.00	\$660
Contractor #66	\$71,454.00	\$0.00	\$71,454.00	\$0.00	\$71,454
Contractor #67	\$14,484.00	\$0.00	\$14,484.00	\$0.00	\$14,484
Contractor #68	\$18,421.00	\$39.00	\$18,375.00	\$7.00	\$18,421
Contractor #69	\$7,400.00	\$0.00	\$7,400.00	\$0.00	\$7,400
Contractor #70	\$56,140.00	\$0.00	\$56,140.00	\$0.00	\$56,140
Contractor #71	\$7,025.00	\$0.00	\$7,025.00	\$0.00	\$7,025
Contractor #72	\$5,188.00	\$0.00	\$5,188.00	\$0.00	\$5,188
<i>Total Contractors</i>	<i>\$1,128,633.64</i>	<i>\$610.00</i>	<i>\$1,127,667.64</i>	<i>\$356.00</i>	<i>\$1,128,634</i>
<b>Totals</b>	<b>\$1,128,633.64</b>	<b>\$610.00</b>	<b>\$1,127,667.64</b>	<b>\$356.00</b>	<b>\$1,128,634</b>

**Table TA 2.4**  
**Market Effects: Distribution of Residential Multi-Family Contractor Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Affiliate</i>	\$ -	\$ -	\$ -	\$ -	\$ -
ESCO #1	\$ 27,257.46	\$ 17,345.66	\$ -	\$ -	\$ 17,345.66
ESCO #2	\$ 153,111.39	\$ -	\$ -	\$ 137,823.50	\$ 137,823.50
ESCO #3	\$ 38,355.06	\$ -	\$ -	\$ 38,355.06	\$ 38,355.06
<i>Total ESCO</i>	\$ 218,723.91	\$ 17,345.66	\$ -	\$ 176,178.56	\$ 193,524.22
<b>Totals</b>	<b>\$ 218,723.91</b>	<b>\$ 17,345.66</b>	<b>\$ -</b>	<b>\$ 176,178.56</b>	<b>\$ 193,524.22</b>

**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**SPC Program -- Residential Contractor Program (Single Family Component)**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	RC01	Basic HVAC Diagnostic/Tuneup	1,628	\$253,968.00	\$156.00	183,964.00	113.00	0	0	10	HVAC
2000	RC02	Advanced HVAC Diagnostic/Tuneup	213	\$130,782.00	\$614.00	120,408.90	565.30	8520	40	15	HVAC
2000	RC03	Duct Testing	1,660	\$760,944.00	\$458.40	378,480.00	228.00	66400	40	20	HVAC
2000	RC04	Duct Testing and Sealing	53	\$8,395.20	\$158.40	12,084.00	228.00	2120	40	20	HVAC
2000	RC05	Energy Star Gas Furnace	64	\$20,800.00	\$325.00	0.00	0.00	1491.2	23.3	20	HVAC
2000	RC06	Energy Star Central Heat Pump	3	\$2,118.00	\$706.00	683.10	227.70	1197	399	18	HVAC
2000	RC07	Energy Star Central Air Conditioner	213	\$112,187.10	\$526.70	48,500.10	227.70	0	0	18	HVAC
2000	RC08	Programmable Thermostat	454	\$73,548.00	\$162.00	47,806.20	105.30	21338	47	12	HVAC
2000	RC09	Attic Insulation (attic area per SqFt.)	167,644	\$92,160.00	\$0.55	44,249.60	0.26	36608	0.218367	20	HVAC
2000	RC10	Wall Insulation (wall area per SqFt.)	74,007	\$64,386.00	\$0.87	-840.00	-0.01	6913.2	0.093413	20	HVAC
2000	RC12	High Performance Windows (window area per SqFt.)	3,218	\$6,270.00	\$1.95	10,640.00	3.31	-526.11	-0.16349	20	HVAC
2000	RC13	High Efficiency Gas Water Heater	10	\$150.00	\$15.00	0.00	0.00	210	21	15	Misc
2000	RC14	Pipe Insulation	3	\$17.25	\$5.75	17.40	5.80	10.8	3.6	15	HVAC
2000	RC15	Water Saving Showerheads	8	\$112.00	\$14.00	92.00	11.50	57.6	7.2	10	Misc
2000	RC18	Energy Star Central Heat Pump	15	\$10,590.00	\$706.00	3,415.50	227.70	5985	399	18	HVAC
2000	RC19	High Performance Windows (window area per SqFt.)	214,966	\$458,040.00	\$2.13	777,280.00	3.62	-38419.8	-0.17873	20	HVAC
2000	RC20	Hardwired Fluorescent Lighting Fixtures	9	\$476.10	\$52.90	549.00	61.00	0	0	17	Lighting
2000	RC21	Screw In Compact Fluorescent Lamps	55	\$814.00	\$14.80	3,355.00	61.00	0	0	9	Lighting
2000	RC22	AC/HP Diagnostic/Tuneup	1,811	\$1,111,954.00	\$614.00	1,023,758.30	565.30	72440	40	15	HVAC
2000	RC23	Duct Sealing	918	\$145,411.20	\$158.40	209,304.00	228.00	0	0	20	HVAC
2000	RC24	Diagnostic & Duct Package Bonus	256	\$0.00	\$0.00	58,368.00	228.00	0	0	20	HVAC

**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**SPC Program -- Residential Contractor Program (Multi Family Component)**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	MF01	1 x 4 2Lamp	126	\$3,881.77	\$30.81	40,839.90	324.13	0	0	16	Lighting
2000	MF01	13 watt CFL	53	\$658.82	\$12.43	10,911.00	205.87	0	0	9	Lighting
2000	MF01	18 WATT	11	\$331.67	\$30.15	5,493.00	499.36	0	0	9	Lighting
2000	MF01	1x4 2 Lamp	43	\$1,324.71	\$30.81	13,937.20	324.12	0	0	16	Lighting
2000	MF01	1x4 2lamp	206	\$5,576.09	\$27.07	58,665.70	284.78	0	0	16	Lighting
2000	MF01	1x4 Lamp w/ T8 & low power ballast	144	\$4,436.23	\$30.81	46,673.30	324.12	0	0	16	Lighting
2000	MF01	2x4 2Lamp w/ reflector & low pwr ball IS	25	\$932.36	\$37.29	9,809.30	392.37	0	0	16	Lighting
2000	MF01	2x4 w/ 2T8 Lamp, Refl .and low watt bulbs	6	\$223.76	\$37.29	2,354.20	392.37	0	0	16	Lighting
2000	MF01	CFL	5,697	\$74,995.37	\$13.16	1,242,029.90	218.01	0	0	9	Lighting
2000	MF01	CFL 11watt	532	\$7,429.77	\$13.97	123,047.60	231.29	0	0	9	Lighting
2000	MF01	LED Exit Sign	1	\$52.04	\$52.04	547.50	547.50	0	0	16	Lighting
2000	MF01	Lighting (14 cents/kWh)	146	\$1,737.57	\$11.90	28,776.60	197.10	0	0	9	Lighting
2000	MF01	screw-in CFL	3,646	\$51,193.00	\$14.04	847,828.80	232.54	0	0	9	Lighting
2000	MF03	DHW PT76 CONTROLLER	251	\$6,804.09	\$27.11	0.00	0.00	9538	38	15	Misc
2000	MF04	DHW - PT76	685	\$18,568.94	\$27.11	0.00	0.00	26030	38	15	Misc
2000	MF04	DHW-PT76	1,610	\$68,555.97	\$42.58	0.00	0.00	96102	60	15	Misc
2000	MISC	Dig Control Economaster	2	\$702.51	\$351.25	10,662.00	5,331.00	0	0	10	Misc
2000	MISC	Dig. Control Economaster	1	\$346.11	\$346.11	5,253.00	5,253.00	0	0	10	Misc
2000	MISC	Digital control	7	\$44,660.87	\$6,380.12	48,315.00	6,902.14	77890	11127	10	Misc
2000	MISC	Economaster	10	\$11,643.53	\$1,164.35	82,414.00	8,241.40	11668	1166.8	10	Misc
2000	MISC	Gas Water Heater	4	\$4,867.84	\$1,216.96	13,491.00	3,372.75	7472	1868	10	Misc
2000	MISC	Gas WH Control	1	\$1,699.25	\$1,699.25	0.00	0.00	3191	3191	10	Misc
2000	MISC	Int. HW Fix Dwl	1	\$819.60	\$819.60	8,623.00	8,623.00	0	0	16	Lighting
2000	MISC	Lighting Efficiency	1	\$11,491.08	\$11,491.08	120,897.00	120,897.00	0	0	16	Lighting
2000	MISC	Water Heater	1	\$427.16	\$427.16	6,483.00	6,483.00	0	0	10	Misc

**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**SPC Program -- Energy Management Services**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	RC17	CFLs In-Home Audit	1,123	\$16,620.40	\$14.80	68,503.00	61.00	0	0	9	Lighting
2000	RC17	CFLs Mail-In Audits	19,441	\$287,726.80	\$14.80	1,185,901.00	61.00	0	0	9	Lighting

**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**Rebates Program -- Downstream Appliance Incentives Program**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
		Clothes									
2000	CW01	Washer	2,050	\$717,500.00	\$350.00	192,700.00	94.00	49200	24	14	Misc
2000	RF01	Refrigerator	4,476	\$1,342,800.00	\$300.00	541,596.00	121.00	0	0	15	Misc

**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**Upstream Programs: Financial Assistance -- Lighting Fixtures Program\***  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	LIT01	Energy Star Torchiere (55 watt)	16,911	\$828,639.00	\$49.00	3,720,420.00	220.00	0	0	9	Lighting
2000	LIT02	*Compact fluorescents sold in territory	161,000	\$2,415,000.00	\$15.00	10,626,000.00	66.00	0	0	9	Lighting



**Table TA 2.5**  
**Measure Detail: Residential Program Area**  
**Upstream Programs: Financial Assistance -- HVAC Distributor Incentives Program**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	AC02	HVAC Split Unit, Air Cooled	3,502	\$366,095.00	\$104.54	187,590.99	53.57	0	0	18	HVAC

**TABLE TA 3.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NONRESIDENTIAL)  
GAS AND ELECTRIC TOTAL**

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Large	\$0	\$0	\$272,681	\$0		\$0	\$272,681
Procure	\$0	\$0	\$67,762	\$0		\$0	\$67,762
Small	\$0	\$0	\$406,005	\$0		\$0	\$406,005
Purchase - Savings	\$0	\$0	\$66,444	\$0		\$0	\$66,444
Emerging Technologies	\$0	\$0	\$123,863	\$0		\$0	\$123,863
Energy Efficiency Financing (Energy Cents)	\$0	\$0	\$12,468	\$0		\$0	\$12,468
Building Operator Certificate	\$0	\$0	\$64,428	\$0		\$0	\$64,428
Technical Assistance, Small Comprehensive	\$0	\$0	\$116,321	\$0		\$0	\$116,321
Technical Assistance (Process)	\$0	\$0	\$302,413	\$0		\$0	\$302,413
Targeted 3rd Party (TPI)	\$0	\$0	\$153,504	\$0		\$0	\$153,504
<b>Total Information</b>	\$0	\$0	\$1,585,888	\$0	\$0	\$0	\$1,585,888
EMS							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium							
Energy Management Services	\$0	\$0	\$391,474	\$0		\$0	\$391,474
<b>Total EMS</b>	\$0	\$0	\$391,474	\$0	\$154,425	\$0	\$545,899
EEl: Customized Rebates							
Large	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EEl: Prescriptive Rebates							
Large							
Tenant Improvements	\$116,057	\$261,836	\$594,552	\$0	\$0	\$0	\$972,445
Small/Medium							
Express Efficiency	\$3,230,270	\$0	\$643,172	\$0	\$0	\$0	\$3,873,442
Commercial Horizontal Washers	\$141,066	\$0	\$103,201	\$0	\$0	\$0	\$244,267
Turnkey Pilot	\$186,311	\$0	\$39,533	\$0	\$0	\$0	\$225,844
EEl: SPCs							
Large							
Nonresidential SPC (NRSPC)	\$81,989	\$4,780,150	\$1,021,065	\$0	\$0	\$0	\$5,883,204
Fastrac	\$52,293	\$349,593	\$91,735	\$0	\$0	\$0	\$493,621
Small/Medium							
Small Business SPC (SBSPC)	\$96,095	\$309,129	\$368,531	\$0	\$0	\$0	\$773,755
<b>Total EEl</b>	\$3,904,082	\$5,700,708	\$2,861,789	\$0	\$679,305	\$0	\$13,145,884
Upstream Programs							
Information	\$0	\$0	\$0	\$0		\$0	\$0
Financial Assistance							
Food Services Dishwashing Technologies	\$145,418	\$0	\$39,596	\$0		\$0	\$185,014
Upstream HVAC Incentives	\$362,650	\$0	\$97,273	\$0		\$0	\$459,923
HVAC Midstream	\$185,400	\$0	\$54,053	\$0		\$0	\$239,453
Upstream Motors Incentives	\$50,675	\$0	\$95,172	\$0		\$0	\$145,847
<b>Total Upstream</b>	\$744,143	\$0	\$286,093	\$0	\$255,315	\$0	\$1,285,551
<b>TOTAL NONRESIDENTIAL</b>	\$3,954,757	\$5,700,708	\$5,125,244	\$0	\$1,089,045	\$0	\$16,563,222

**TABLE TA 3.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NONRESIDENTIAL)  
ELECTRIC ONLY**

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Large	\$0	\$0	\$272,681	\$0		\$0	\$272,681
Procure	\$0	\$0	\$50,144	\$0		\$0	\$50,144
Small	\$0	\$0	\$406,005	\$0		\$0	\$406,005
Purchase - Savings	\$0	\$0	\$57,142	\$0		\$0	\$57,142
Emerging Technologies	\$0	\$0	\$123,863	\$0		\$0	\$123,863
Energy Efficiency Financing (Energy Cents)	\$0	\$0	\$12,468	\$0		\$0	\$12,468
Building Operator Certificate	\$0	\$0	\$64,428	\$0		\$0	\$64,428
Technical Assistance, Small Comprehensive	\$0	\$0	\$116,321	\$0		\$0	\$116,321
Technical Assistance (Process)	\$0	\$0	\$302,413	\$0		\$0	\$302,413
Targeted 3rd Party (TPI)	\$0	\$0	\$138,153	\$0		\$0	\$138,153
<b>Total Information</b>	\$0	\$0	\$1,543,617	\$0	\$0	\$0	\$1,543,617
EMS							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium							
Energy Management Services	\$0	\$0	\$391,474	\$0		\$0	\$391,474
<b>Total EMS</b>	\$0	\$0	\$391,474	\$0	\$130,381	\$0	\$521,855
EEl: Customized Rebates							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0		\$0	\$0
EEl: Prescriptive Rebates							
Large							
Tenant Improvements	\$116,057	\$261,836	\$594,552	\$0		\$0	\$972,445
Small/Medium							
Express Efficiency	\$3,230,270	\$0	\$643,172	\$0		\$0	\$3,873,442
Commercial Horizontal Washers	\$112,853	\$0	\$82,561	\$0		\$0	\$195,414
Turnkey Pilot	\$160,228	\$0	\$33,999	\$0		\$0	\$194,226
EEl: SPCs							
Large							
Nonresidential SPC (NRSPC)	\$64,220	\$3,659,278	\$774,422	\$0		\$0	\$4,497,919
Fastrac	\$38,697	\$258,699	\$67,884	\$0		\$0	\$365,280
Small/Medium							
Small Business SPC (SBSPC)	\$80,720	\$259,668	\$309,566	\$0		\$0	\$649,954
<b>Total EEl</b>	\$3,803,044	\$4,439,481	\$2,506,155	\$0	\$573,537	\$0	\$11,322,217
Upstream Programs							
Information	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Financial Assistance							
Food Services Dishwashing Technologies	\$145,418	\$0	\$39,596	\$0		\$0	\$185,014
Upstream HVAC Incentives	\$362,650	\$0	\$97,273	\$0		\$0	\$459,923
HVAC Midstream	\$185,400	\$0	\$54,053	\$0		\$0	\$239,453
Upstream Motors Incentives	\$50,675	\$0	\$95,172	\$0		\$0	\$145,847
<b>Total Upstream</b>	\$744,143	\$0	\$286,093	\$0	\$215,562	\$0	\$1,245,799
<b>TOTAL NONRESIDENTIAL</b>	\$4,547,187	\$4,439,481	\$4,727,339	\$0	\$919,481	\$0	\$14,633,488

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

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Procure	\$0	\$0	\$17,618	\$0		\$0	\$17,618
Small	\$0	\$0	\$0	\$0		\$0	\$0
Purchase - Savings	\$0	\$0	\$9,302	\$0		\$0	\$9,302
Emerging Technologies	\$0	\$0	\$0	\$0		\$0	\$0
Energy Efficiency Financing (Energy Cents)	\$0	\$0	\$0	\$0		\$0	\$0
Building Operator Certificate	\$0	\$0	\$0	\$0		\$0	\$0
Technical Assistance, Small Comprehensive	\$0	\$0	\$0	\$0		\$0	\$0
Technical Assistance (Process)	\$0	\$0	\$0	\$0		\$0	\$0
Targeted 3rd Party (TPI)	\$0	\$0	\$15,350	\$0		\$0	\$15,350
<b>Total Information</b>	\$0	\$0	\$42,271	\$0	\$0	\$0	\$42,271
EMS							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium							
Energy Management Services	\$0	\$0	\$0	\$0		\$0	\$0
<b>Total EMS</b>	\$0	\$0	\$0	\$0	\$24,044	\$0	\$24,044
EEL: Customized Rebates							
Large	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0		\$0	\$0
EEL: Prescriptive Rebates							
Large							
Tenant Improvements	\$0	\$0	\$0	\$0		\$0	\$0
Small/Medium							
Express Efficiency	\$0	\$0	\$0	\$0		\$0	\$0
Commercial Horizontal Washers	\$28,213	\$0	\$20,640	\$0		\$0	\$48,853
Turnkey Pilot	\$26,084	\$0	\$5,535	\$0		\$0	\$31,618
EEL: SPCs							
Large							
Nonresidential SPC (NRSPC)	\$17,770	\$1,120,872	\$246,643	\$0		\$0	\$1,385,285
Fastrac	\$13,596	\$90,894	\$23,851	\$0		\$0	\$128,341
Small/Medium							
Small Business SPC (SBSPC)	\$15,375	\$49,461	\$58,965	\$0		\$0	\$123,801
<b>Total EEL</b>	\$101,038	\$1,261,227	\$355,634	\$0	\$105,768	\$0	\$1,823,667
Upstream Programs							
Information	\$0	\$0	\$0	\$0		\$0	\$0
Financial Assistance							
Food Services Dishwashing Technologies	\$0	\$0	\$0	\$0		\$0	\$0
Upstream HVAC Incentives	\$0	\$0	\$0	\$0		\$0	\$0
HVAC Midstream	\$0	\$0	\$0	\$0		\$0	\$0
Upstream Motors Incentives	\$0	\$0	\$0	\$0		\$0	\$0
<b>Total Upstream</b>	\$0	\$0	\$0	\$0	\$39,753	\$0	\$39,753
<b>TOTAL NONRESIDENTIAL</b>	\$101,038	\$1,261,227	\$397,905	\$0	\$169,564	\$0	\$1,929,734

TABLE TA 3.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
NONRESIDENTIAL TOTAL

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Large	\$87,458	\$161,557	\$0	\$23,666	\$272,681
Procure	\$28,631	\$33,250	\$0	\$5,881	\$67,762
Small	\$59,628	\$311,139	\$0	\$35,238	\$406,005
Purchase - Savings	\$28,518	\$32,159	\$0	\$5,767	\$66,444
Emerging Technologies	\$7,349	\$105,764	\$0	\$10,750	\$123,863
Energy Efficiency Financing (Energy Cents)	\$9,543	\$1,843	\$0	\$1,082	\$12,468
Building Operator Certificate	\$11,547	\$47,289	\$0	\$5,592	\$64,428
Technical Assistance, Small Comprehensive	\$30,075	\$76,150	\$0	\$10,096	\$116,321
Technical Assistance (Process)	\$31,323	\$244,843	\$0	\$26,247	\$302,413
Targeted 3rd Party (TPI)	\$28,173	\$112,008	\$0	\$13,323	\$153,504
<b>Total Information</b>	\$322,244	\$1,126,002	\$0	\$137,642	\$1,585,888
EMS					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium					
Energy Management Services	\$276,360	\$81,137	\$0	\$33,977	\$391,474
<b>Total EMS</b>	\$276,360	\$81,137	\$0	\$33,977	\$391,474
EEI: Customized Rebates					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0	\$0
EEI: Prescriptive Rebates					
Large					
Tenant Improvements	\$307,411	\$202,740	\$0	\$84,400	\$594,552
Small/Medium					
Express Efficiency	\$183,802	\$123,187	\$0	\$336,183	\$643,172
Commercial Horizontal Washers	\$19,279	\$62,722	\$0	\$21,200	\$103,201
Turnkey Pilot	\$13,161	\$6,771	\$0	\$19,601	\$39,533
EEI: SPCs					
Large					
Nonresidential SPC (NRSPC)	\$467,220	\$43,232	\$0	\$510,614	\$1,021,065
Fastrac	\$41,309	\$7,584	\$0	\$42,842	\$91,735
Small/Medium					
Small Business SPC (SBSPC)	\$229,993	\$71,382	\$0	\$67,156	\$368,531
<b>Total EEI</b>	\$1,262,174	\$517,618	\$0	\$1,081,997	\$2,861,789
Upstream Programs					
Information	\$0	\$0	\$0	\$0	\$0
Financial Assistance					
Food Services Dishwashing Technologies	\$3,882	\$19,656	\$0	\$16,058	\$39,596
Upstream HVAC Incentives	\$49,426	\$7,929	\$0	\$39,918	\$97,273
HVAC Midstream	\$19,351	\$13,919	\$0	\$20,783	\$54,053
Upstream Motors Incentives	\$65,536	\$16,978	\$0	\$12,658	\$95,172
<b>Total Upstream</b>	\$138,194	\$58,483	\$0	\$89,416	\$286,093
<b>TOTAL NONRESIDENTIAL</b>	\$1,998,973	\$1,783,239	\$0	\$1,343,032	\$5,125,244

**TABLE TA 3.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
NONRESIDENTIAL ELECTRIC ONLY**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Large	\$87,458	\$161,557	\$0	\$23,666	\$272,681
Procure - Savings	\$21,187	\$24,605	\$0	\$4,352	\$50,144
Small	\$59,628	\$311,139	\$0	\$35,238	\$406,005
Purchase - Savings	\$24,526	\$27,656	\$0	\$4,959	\$57,142
Emerging Technologies	\$7,349	\$105,764	\$0	\$10,750	\$123,863
Energy Efficiency Financing (Energy Cents)	\$9,543	\$1,843	\$0	\$1,082	\$12,468
Building Operator Certificate	\$11,547	\$47,289	\$0	\$5,592	\$64,428
Technical Assistance, Small Comprehensive	\$30,075	\$76,150	\$0	\$10,096	\$116,321
Technical Assistance Process	\$31,323	\$244,843	\$0	\$26,247	\$302,413
Targeted 3rd Party (TPI)	\$25,356	\$100,807	\$0	\$11,991	\$138,153
<b>Total Information</b>	\$307,990	\$1,101,654	\$0	\$133,973	\$1,543,617
EMS					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium					
Energy Management Services	\$276,360	\$81,137	\$0	\$33,977	\$391,474
<b>Total EMS</b>	\$276,360	\$81,137	\$0	\$33,977	\$391,474
EEl: Customized Rebates					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0	\$0
EEl: Prescriptive Rebates					
Large					
Tenant Improvements	\$307,411	\$202,740	\$0	\$84,400	\$594,552
Small/Medium					
Express Efficiency	\$183,802	\$123,187	\$0	\$336,183	\$643,172
Commercial Horizontal Washers	\$15,423	\$50,178	\$0	\$16,960	\$82,561
Turnkey Pilot	\$11,318	\$5,823	\$0	\$16,857	\$33,999
EEl: SPCs					
Large					
Nonresidential SPC (NRSPC)	\$351,666	\$32,373	\$0	\$390,383	\$774,422
Fastrac	\$30,569	\$5,612	\$0	\$31,703	\$67,884
Small/Medium					
Small Business SPC (SBSPC)	\$193,194	\$59,961	\$0	\$56,411	\$309,566
<b>Total EEl</b>	\$1,093,383	\$479,874	\$0	\$932,898	\$2,506,155
Upstream Programs					
Information	\$0	\$0	\$0	\$0	\$0
Financial Assistance					
Food Services Dishwashing Technologies	\$3,882	\$19,656	\$0	\$16,058	\$39,596
Upstream HVAC Incentives	\$49,426	\$7,929	\$0	\$39,918	\$97,273
HVAC Midstream	\$19,351	\$13,919	\$0	\$20,783	\$54,053
Upstream Motors Incentives	\$65,536	\$16,978	\$0	\$12,658	\$95,172
<b>Total Upstream</b>	\$138,194	\$58,483	\$0	\$89,416	\$286,093
<b>TOTAL NONRESIDENTIAL</b>	\$1,815,928	\$1,721,147	\$0	\$1,190,264	\$4,727,339

**TABLE TA 3.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS  
NONRESIDENTIAL GAS ONLY**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Information					
Large	\$0	\$0	\$0	\$0	\$0
Procure	\$7,444	\$8,645	\$0	\$1,529	\$17,618
Small	\$0	\$0	\$0	\$0	\$0
Purchase - Savings	\$3,993	\$4,502	\$0	\$807	\$9,302
Emerging Technologies	\$0	\$0	\$0	\$0	\$0
Energy Efficiency Financing (Energy Cents)	\$0	\$0	\$0	\$0	\$0
Building Operator Certificate	\$0	\$0	\$0	\$0	\$0
Technical Assistance, Small Comprehensive	\$0	\$0	\$0	\$0	\$0
Technical Assistance (Process)	\$0	\$0	\$0	\$0	\$0
Targeted 3rd Party (TPI)	\$2,817	\$11,201	\$0	\$1,332	\$15,350
<b>Total Information</b>	\$14,254	\$24,348	\$0	\$3,669	\$42,271
EMS					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium					
Energy Management Services	\$0	\$0	\$0	\$0	\$0
<b>Total EMS</b>	\$0	\$0	\$0	\$0	\$0
EEl: Customized Rebates					
Large	\$0	\$0	\$0	\$0	\$0
Small/Medium	\$0	\$0	\$0	\$0	\$0
EEl: Prescriptive Rebates					
Large					
Tenant Improvements	\$0	\$0	\$0	\$0	\$0
Small/Medium					
Express Efficiency	\$0	\$0	\$0	\$0	\$0
Commercial Horizontal Washers	\$3,856	\$12,544	\$0	\$4,240	\$20,640
Turnkey Pilot	\$1,842	\$948	\$0	\$2,744	\$5,535
EEl: SPCs					
Large					
Nonresidential SPC (NRSPC)	\$115,553	\$10,859	\$0	\$120,231	\$246,643
Fastrac	\$10,740	\$1,972	\$0	\$11,139	\$23,851
Small/Medium					
Small Business SPC (SBSPC)	\$36,799	\$11,421	\$0	\$10,745	\$58,965
<b>Total EEl</b>	\$168,791	\$37,744	\$0	\$149,100	\$355,634
Upstream Programs					
Information	\$0	\$0	\$0	\$0	\$0
Financial Assistance					
Food Services Dishwashing Technologies	\$0	\$0	\$0	\$0	\$0
Upstream HVAC Incentives	\$0	\$0	\$0	\$0	\$0
HVAC Midstream	\$0	\$0	\$0	\$0	\$0
Upstream Motors Incentives	\$0	\$0	\$0	\$0	\$0
<b>Total Upstream</b>	\$0	\$0	\$0	\$0	\$0
<b>TOTAL NONRESIDENTIAL</b>	\$183,045	\$62,092	\$0	\$152,768	\$397,905

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Large Prescriptive Rebates -- Tenant Improvement Program**  
**Program Year: 2000**

Year	Average Load Impacts Per Unit (Gross)			HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2001	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2002	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2003	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2004	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2005	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2006	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2007	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2008	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2009	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2010	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2011	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2012	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2013	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2014	1,131	2,446,774	0	657	2,087,421	0	292	1,756,276	13,192			
2015												
2016												
2017												
2018												
2019												
SUM (Lifecycle)	1,131	36,701,604	0	657	31,311,320	0	292	26,344,140	197,880			



**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Small/Medium Prescriptive Rebates -- Express Efficiency Program**  
**Program Year: 2000**

Year	Average Load Impacts Per Unit (Gross)			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	114	113,730	3	2,761	11,694,334	0			
2001	114	113,730	3	2,761	11,694,334	0			
2002	114	113,730	3	2,761	11,694,334	0			
2003	114	113,730	3	2,761	11,694,334	0			
2004	114	113,730	3	2,761	11,694,334	0			
2005	109	103,749	3	2,761	11,694,334	0			
2006	109	103,749	3	2,761	11,694,334	0			
2007	109	103,749	3	2,647	11,129,835	0			
2008	109	103,749	3	2,647	11,127,609	0			
2009	109	103,749	3	2,647	11,127,609	0			
2010	109	103,749	3	2,647	11,127,609	0			
2011	101	83,284	3	2,647	11,127,609	0			
2012	101	83,284	3	2,647	11,127,609	0			
2013	101	83,284	3	2,647	11,127,609	0			
2014	101	83,284	3	2,647	11,127,609	0			
2015	3	7,534	0	2,647	11,127,609	0			
2016									
2017									
2018									
2019									
SUM (Lifecycle)	114	1,531,820	48	2,761	182,011,044	0			

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Small/Medium Prescriptive Rebates -- Turnkey Program**  
**Program Year: 2000**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	19	19,340	0	235	1,038,233	0			
2001	19	19,340	0	235	1,038,233	0			
2002	19	19,340	0	235	1,038,233	0			
2003	19	19,340	0	235	1,038,233	0			
2004	19	19,340	0	235	1,038,233	0			
2005	19	19,340	0	235	1,038,233	0			
2006	19	19,340	0	235	1,038,233	0			
2007	19	19,340	0	226	1,001,632	0			
2008	19	19,340	0	226	1,001,420	0			
2009	19	19,340	0	226	1,001,420	0			
2010	19	16,372	0	226	1,001,420	0			
2011				226	1,001,420	0			
2012				226	1,001,420	0			
2013				226	1,001,420	0			
2014				226	1,001,420	0			
2015				226	1,001,420	0			
2016									
2017									
2018									
2019									
SUM (Lifecycle)	19	209,772	0	235	16,280,625	0			

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Small/Medium Prescriptive Rebates -- TPI Horizontal Washers Program**  
**Program Year: 2000**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000							0	103,290	123,009
2001							0	103,290	123,009
2002							0	103,290	123,009
2003							0	103,290	123,009
2004							0	103,290	123,009
2005							0	103,290	123,009
2006							0	103,290	123,009
2007							0	103,290	123,009
2008							0	103,290	123,009
2009							0	103,290	123,009
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
SUM (Lifecycle)							0	1,032,900	1,230,090

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**EI SPC: Large -- Large SPC**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2001	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2002	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2003	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2004	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2005	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2006	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2007	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2008	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2009	1,139	8,424,091	11,704	2,486	24,003,975	0	891	13,040,941	740,481
2010	1,139	8,424,091	11,704	2,486	24,003,975	0			
2011	1,139	8,424,091	11,704	2,486	24,003,975	0			
2012	1,139	8,424,091	11,704	2,486	24,003,975	0			
2013	1,139	8,424,091	11,704	2,486	24,003,975	0			
2014	1,139	8,424,091	11,704	2,486	24,003,975	0			
2015	1,139	8,424,091	11,704	2,486	24,003,975	0			
2016	1,139	8,424,091	11,704						
2017	1,139	8,424,091	11,704						
2018	1,139	8,424,091	11,704						
2019	1,139	8,424,091	11,704						
SUM (Lifecycle)	1,139	168,481,820	234,080	2,486	384,063,604	0	891	130,409,410	7,404,810

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**EI SPC: Large -- Fastrac SPC**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2001	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2002	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2003	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2004	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2005	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2006	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2007	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2008	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2009	160	282,827	0	1,198	4,657,898	0	96	266,378	0
2010	160	282,827	0	1,198	4,657,898	0			
2011	160	282,827	0	1,198	4,657,898	0			
2012	160	282,827	0	1,198	4,657,898	0			
2013	160	282,827	0	1,198	4,657,898	0			
2014	160	282,827	0	1,198	4,657,898	0			
2015	160	282,827	0	1,198	4,657,898	0			
2016	160	282,827	0						
2017	160	282,827	0						
2018	160	282,827	0						
2019	160	282,827	0						
<b>SUM (Lifecycle)</b>	<b>160</b>	<b>5,656,530</b>	<b>0</b>	<b>1,198</b>	<b>74,526,365</b>	<b>0</b>	<b>96</b>	<b>2,663,780</b>	<b>0</b>

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**EEl SPC: Small/Medium -- Small Business SPC**  
**Program Year: 2000**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2001	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2002	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2003	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2004	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2005	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2006	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2007	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2008	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2009	192	666,004	0	197	984,384	-153	29	2,148,186	6,657
2010	192	666,004	0	197	984,384	-153			
2011	192	666,004	0	197	984,384	-153			
2012	192	666,004	0	197	984,384	-153			
2013	192	666,004	0	197	984,384	-153			
2014	192	666,004	0	197	984,384	-153			
2015	192	666,004	0	197	984,384	-153			
2016	192	666,004	0						
2017	192	666,004	0						
2018	192	666,004	0						
2019	192	666,004	0						
SUM (Lifecycle)	192	13,320,076	0	197	15,750,141	-2,448	29	21,481,857	66,570

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Upstream Programs: Financial Assistance -- Upstream HVAC Incentives Program**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	567	566,613	0						
2001	567	566,613	0						
2002	567	566,613	0						
2003	567	566,613	0						
2004	567	566,613	0						
2005	567	566,613	0						
2006	567	566,613	0						
2007	567	566,613	0						
2008	567	566,613	0						
2009	567	566,613	0						
2010	567	566,613	0						
2011	567	566,613	0						
2012	567	566,613	0						
2013	567	566,613	0						
2014	567	566,613	0						
2015									
2016									
2017									
2018									
2019									
SUM (Lifecycle)	567	8,499,196	0						

**Table TA 3.3**  
**Market Effects: Nonresidential Projected Annual Program Energy Reductions**  
**Upstream Programs: Financial Assistance -- Upstream Motor Incentives Program**  
**Program Year: 2000**

Year	Average Load Impacts Per Unit (Gross)								
	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000							91	580,615	0
2001							91	580,615	0
2002							91	580,615	0
2003							91	580,615	0
2004							91	580,615	0
2005							91	580,615	0
2006							91	580,615	0
2007							91	580,615	0
2008							91	580,615	0
2009							91	580,615	0
2010							91	580,615	0
2011							91	580,615	0
2012							91	580,615	0
2013							91	580,615	0
2014							91	580,615	0
2015									
2016									
2017									
2018									
2019									
SUM (Lifecycle)							91	8,709,224	0



**Table TA 3.4**  
**Market Effects: Distribution of Large Nonresidential SPC Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	\$ -	\$ -	\$ -	\$ -	\$ -
Total Affiliate	\$ -	\$ -	\$ -	\$ -	\$ -
ESCO #1	\$ 86,346.42	\$ 13,156.84			\$ 13,156.84
ESCO #2	\$ 6,473.30				
ESCO #3	\$ 34,111.36			\$ 13,644.54	\$ 13,644.54
ESCO #4	\$ 60,562.80				
ESCO #5	\$ 146,544.96				
ESCO #6	\$ 36,424.02				
ESCO #7	\$ 107,861.10	\$ 4,047.86			\$ 4,047.86
ESCO #8	\$ 233,323.07				
ESCO #9	\$ 18,066.00				
ESCO #10	\$ 45,789.00				
Total ESCO	\$ 775,502.03	\$ 17,204.70	\$ -	\$ 13,644.54	\$ 30,849.24
Customer #1	\$ 18,812.25				
Customer #2	\$ 31,165.12				
Customer #3	\$ 37,181.00				
Customer #4	\$ 103,553.28				
Customer #5	\$ 198,599.00				
Customer #6	\$ 168,900.00				
Customer #7	\$ 74,009.00				
Customer #8	\$ 238,034.16				
Customer #9	\$ 275,385.73				
Customer #10	\$ 212,708.00				
Customer #11	\$ 424,584.99				
Customer #12	\$ 77,910.80				
Customer #13	\$ 55,346.16				
Customer #14	\$ 465,000.00				
Customer #15	\$ 146,159.00				
Customer #16	\$ 491,400.00				
Customer #17	\$ 171,378.00				
Customer #18	\$ 64,582.48				
Customer #19	\$ 187,850.25		\$ 51,140.00		\$ 51,140.00
Customer #20	\$ 167,960.00				
Customer #21	\$ 22,181.88				
Customer #22	\$ 169,617.28				
Total Customer	\$ 3,802,318.38	\$ -	\$ 51,140.00	\$ -	\$ 51,140.00
<b>Totals</b>	<b>\$ 4,577,820.41</b>	<b>\$ 17,204.70</b>	<b>\$ 51,140.00</b>	<b>\$ 13,644.54</b>	<b>\$ 81,989.24</b>

**Table TA 3.4**  
**Market Effects: Distribution of Fastrac Nonresidential SPC Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	\$ 35,278.86	\$ -	\$ -	\$ -	\$ -
<i>Total Affiliate</i>	\$ 35,278.86	\$ -	\$ -	\$ -	\$ -
ESCO #1	\$ 160,745.25	\$ 7,935.58			\$ 7,935.58
ESCO #2	\$ 4,641.23				
ESCO #3	\$ 29,311.00			\$ 2,574.50	\$ 2,574.50
ESCO #4	\$ 20,541.60				
ESCO #5	\$ 859.82		\$ 429.91		\$ 429.91
ESCO #6	\$ 33,215.00	\$ 3,516.17	\$ 18,356.33		\$ 21,872.50
ESCO #7	\$ 36,274.39	\$ 11,423.82		\$ 993.38	\$ 12,417.20
ESCO #8	\$ -				
ESCO #9	\$ 22,213.35				
ESCO #10	\$ 21,025.64	\$ 3,582.48	\$ 3,481.09		\$ 7,063.57
ESCO #11	\$ 14,435.11				
ESCO #12	\$ 10,297.32				
ESCO #13	\$ 19,540.89				
<i>Total ESCO</i>	\$ 373,100.60	\$ 26,458.05	\$ 22,267.33	\$ 3,567.88	\$ 52,293.26
<b>Totals</b>	<b>\$ 408,379.46</b>	<b>\$ 26,458.05</b>	<b>\$ 22,267.33</b>	<b>\$ 3,567.88</b>	<b>\$ 52,293.26</b>

**Table TA 3.4**  
**Market Effects: Distribution of Small Nonresidential SPC Payments**  
**Program Year: 2000**

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Affiliate</i>	\$ -	\$ -	\$ -	\$ -	\$ -
ESCO #1	\$ 4,574.68				
ESCO #2	\$ 7,278.42				
ESCO #3	\$ 35,283.75			\$ 14,048.25	\$ 14,048.25
ESCO #4	\$ 53,477.54	\$ 5,658.68	\$ 1,568.17		\$ 7,226.85
ESCO #5	\$ 15,607.00				
ESCO #6	\$ 3,604.65				
ESCO #7	\$ 6,830.88				
ESCO #8	\$ 9,796.63				
ESCO #9	\$ 19,477.81				
ESCO #10	\$ 15,983.70				
ESCO #11	\$ 3,823.66				
ESCO #12	\$ 8,068.60				
ESCO #13	\$ 11,268.94				
ESCO #14	\$ 7,741.29				
ESCO #15	\$ 52,771.02			\$ 27,862.57	\$ 27,862.57
ESCO #16	\$ 14,510.20				
ESCO #17	\$ 18,563.20				
ESCO #18	\$ 6,923.38				
ESCO #19	\$ 12,243.80				
ESCO #20	\$ 6,810.06				
ESCO #21	\$ 80,032.94			\$ 44,336.14	\$ 44,336.14
ESCO #22	\$ 5,307.40				
ESCO #23	\$ 4,583.16			\$ 2,621.11	\$ 2,621.11
<i>Total ESCO</i>	\$ 404,562.71	\$ 5,658.68	\$ 1,568.17	\$ 88,868.07	\$ 96,094.92
<b>Totals</b>	<b>\$ 404,562.71</b>	<b>\$ 5,658.68</b>	<b>\$ 1,568.17</b>	<b>\$ 88,868.07</b>	<b>\$ 96,094.92</b>

Table TA 3.5  
 Measure Detail: Nonresidential Program Area  
 Large Prescriptive Rebates -- Tenant Improvement Program  
 Program Year: 2000

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	NC001	Other Systems	9	\$133,135.94	\$14,792.88	1,469,150.00	163,238.89	0	0	15	Misc
2000	NC002	Whole Building - Overall Building Performance	10	\$19,051.55	\$1,905.15	106,386.00	10,638.60	13192	1319.2	15	Misc
2000	NC010	Air-Cooled Package Air-Conditioner (greater than or equal to 65,000 BTUH)	168	\$25,381.29	\$151.08	280,081.60	1,667.15	0	0	15	HVAC
2000	NC011	Air-Cooled Package Heat Pump (greater than or equal to 65,000 BTUH)	19	\$2,075.40	\$109.23	22,902.00	1,205.37	0	0	15	HVAC
2000	NC012	Air-Cooled Package and Split System Air-Conditioners (less than 65,000 BTUH)	447	\$23,190.42	\$51.88	255,905.40	572.50	0	0	15	HVAC
2000	NC013	Air-Cooled Package and Split System Heat Pumps (less than 65,000 BTUH)	147	\$7,903.92	\$53.77	87,219.40	593.33	0	0	15	HVAC
2000	NC018	High Efficiency Lighting	149	\$189,164.35	\$1,269.56	2,087,421.30	14,009.54	0	0	15	Lighting
2000	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	6	\$3,313.20	\$552.20	36,561.00	6,093.50	0	0	15	HVAC
2000	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	6	\$1,976.54	\$329.42	21,811.00	3,635.17	0	0	15	HVAC
2000	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	6	\$5,699.07	\$949.84	62,889.00	10,481.50	0	0	15	HVAC
2000	NC027	Low Solar Heat Gain Coefficient Glass, Orientation: W	6	\$6,034.91	\$1,005.82	66,595.00	11,099.17	0	0	15	HVAC
2000	NC047	Variable Frequency Drive for Chilled Water Pump Motors	3	\$14,598.69	\$4,866.23	161,096.00	53,698.67	0	0	15	Misc
2000	NC048	Variable Frequency Drive for Cooling Tower Fan Motors	8	\$1,780.16	\$222.52	19,644.00	2,455.50	0	0	15	Misc
2000	NC049	Variable Frequency Drive for HVAC Fan Motors	32	\$31,005.45	\$968.92	342,144.00	10,692.00	0	0	15	HVAC
2000	NC052	Water Cooled Chillers	7	\$85,900.16	\$12,271.45	947,905.00	135,415.00	0	0	15	HVAC
2000	NC053	Water Source Package Heat Pump	378	\$29,248.87	\$77.38	322,760.20	853.86	0	0	15	HVAC

**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**Small/Medium Prescriptive Rebates -- Express Efficiency Program**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	ACPT	Package Terminal Air Conditioners	650	\$42,250.00	\$65.00	75,750.00	116.54	0	0	15	HVAC
2000	CS05-13	Screw-in 5-13 watt CF Lamp	62	\$868.00	\$14.00	11,902.50	191.98	0	0	7	Lighting
2000	CS05-13a	Two or more Screw-in 5-13 watt CF Lamps	11	\$154.00	\$14.00	2,202.75	200.25	0	0	7	Lighting
2000	CS05-13b	Screw-in 5-13 watt CF Lamp with socket mod.	12	\$168.00	\$14.00	2,430.00	202.50	0	0	7	Lighting
2000	CS14-26	Screw-in 14-26 watt CF Lamp	768	\$8,739.84	\$11.38	211,555.50	275.46	0	0	7	Lighting
2000	CS14-26a	Two or more Screw-in 14-26 watt CF Lamp	672	\$7,647.36	\$11.38	208,067.10	309.62	0	0	7	Lighting
2000	CS14-26b	Screw-in 14-26 watt CF Lamp with socket mod.	235	\$2,674.30	\$11.38	59,006.40	251.09	0	0	7	Lighting
2000	CS27+	Screw-in >= 27 watt CF Lamp	186	\$3,906.00	\$21.00	58,532.70	314.69	0	0	7	Lighting
2000	CS27+a	Two or more Screw-in >= 27 watt CF Lamps	19	\$399.00	\$21.00	5,833.95	307.05	0	0	7	Lighting
2000	CS27+b	Screw-in >= 27 watt CF Lamp with socket mod.	16	\$336.00	\$21.00	4,968.00	310.50	0	0	7	Lighting
2000	EFC	Evaporator Fan Controllers	9	\$2,700.00	\$300.00	9,981.00	1,109.00	0	0	5	HVAC
2000	EHI0-100	Exterior 0-100w Incand Base HID	1	\$95.00	\$95.00	771.00	771.00	0	0	16	Lighting
2000	175	Exterior 101-175w Incand Base HID	5	\$750.00	\$150.00	6,765.00	1,353.00	0	0	16	Lighting
2000	EHI176+	Exterior >=176w Incand Base HID	1	\$200.00	\$200.00	1,976.00	1,976.00	0	0	16	Lighting
2000	175	Exterior 101-175w Merc Vap Base HID	3	\$450.00	\$150.00	1,416.00	472.00	0	0	16	Lighting
2000	EHM176+	Exterior >=176w Merc Vap Base HID	9	\$1,800.00	\$200.00	6,867.00	763.00	0	0	16	Lighting
2000	EXITLED	LED Exit Sign	29	(\$686.72)	(\$23.68)	10,324.00	356.00	0	0	16	Lighting
2000	HF05-13	Hardwired 5-13 watt CF Fixture	138	\$7,038.00	\$51.00	30,217.50	218.97	0	0	16	Lighting
2000	HF14-26	Hardwired 14-26 watt CF Fixture	270	\$23,220.00	\$86.00	95,482.20	353.64	0	0	16	Lighting
2000	HF127-65	Hardwired Incand Base 27-65 watt CF Fixture	3	(\$145.35)	(\$48.45)	560.70	186.90	0	0	16	Lighting
2000	LI2T5-8	Install 2ft T-8/T-5 Lamp & Elec. Ballast	316	\$6,320.00	\$20.00	15,818.00	50.06	0	0	16	Lighting
2000	LI3T5-8	Install 3ft T-8/T-5 Lamp & Elec. Ballast	25	\$500.00	\$20.00	1,450.15	58.01	0	0	16	Lighting
2000	LI4T5-8	Install 4ft T-8/T-5 Lamp & Elec. Ballast	25,795	\$386,925.00	\$15.00	1,001,852.10	38.84	0	0	16	Lighting
2000	LI4T5-82	Install 2nd Gen. 4ft T-8/T-5 Lamp & Elec. Ballast	1,995	\$29,925.00	\$15.00	79,232.40	39.72	0	0	16	Lighting
2000	LI4T5-8a	<100kW Install 4ft T-8/T-5 Lamp & Elec. Ballast	248,787	\$3,731,805.00	\$15.00	9,322,635.60	37.47	0	0	16	Lighting
2000	LI8T5-8	Install 8ft T-8/T-5 Lamp & Elec. Ballast	838	\$16,341.00	\$19.50	38,530.00	45.98	0	0	16	Lighting
2000	LR2T5-8	Remove 2ft T-8/T-5 fluorescent lamp	4	\$140.00	\$35.00	576.00	144.00	0	0	16	Lighting
2000	LR4T5-8	Remove 4ft T-8/T-5 fluorescent lamp	1,803	\$63,105.00	\$35.00	335,943.95	186.32	0	0	16	Lighting
2000	LR4T5-8a	<100kW Remove 4ft T-8/T-5 fluorescent lamp	380	\$13,300.00	\$35.00	74,155.65	195.15	0	0	16	Lighting
2000	LR8T5-8	Remove 8ft T-8/T-5 fluorescent lamp	293	\$14,650.00	\$50.00	103,035.75	351.66	0	0	16	Lighting
2000	PHC	Photocell	21	\$210.00	\$10.00	2,226.00	106.00	0	0	8	Lighting
2000	SPT	Setback Programmable Thermostats	5	\$1,025.00	\$205.00	20,465.00	4,093.00	0	0	11	HVAC
2000	VFD	Variable Freq. Drive HVAC Fans 100hp max	10	\$2,020.00	\$202.00	7,534.40	753.44	0	0	16	HVAC
2000	WTRHT	Gas Storage Water Heater	2	\$4.40	\$2.20	0.00	0.00	3.2	1.6	15	HVAC

**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**Small/Medium Prescriptive Rebates -- Turnkey Program**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	CS05-13a	Two or more Screw-in 5-13 watt CF Lamps	18	\$252.00	\$14.00	3,523.50	195.75	0	0	7	Lighting
2000	CS14-26a	Two or more Screw-in 14-26 watt CF Lamp	133	\$1,513.54	\$11.38	33,077.10	248.70	0	0	7	Lighting
2000	EXITLEDa	Two or more LED Exit Signs	81	(\$1,918.08)	(\$23.68)	28,836.00	356.00	0	0	16	Lighting
2000	HF14-26a	Two or more Hardwired 14-26 watt CF Fixtures	273	\$23,478.00	\$86.00	87,856.50	321.82	0	0	16	Lighting
2000	LI2T8a	Two or more 2ft T-8 Lamps & Elec. Ballasts	4	\$80.00	\$20.00	195.80	48.95	0	0	16	Lighting
2000	LI3T8a	Two or more 3ft T-8 Lamps & Elec. Ballasts	25	\$500.00	\$20.00	1,417.00	56.68	0	0	16	Lighting
2000	LI4T8	Install 4ft T-8 Lamp & Elec. Ballast	136	\$2,040.00	\$15.00	5,446.80	40.05	0	0	16	Lighting
2000	LI4T8a	Two or more 4ft T-8 Lamps & Elec. Ballasts	21,747	\$326,205.00	\$15.00	844,513.20	38.83	0	0	16	Lighting
2000	LI8T8a	Two or more 8ft T-8 Lamps & Elec. Ballasts	498	\$9,711.00	\$19.50	22,235.00	44.65	0	0	16	Lighting
2000	OSWBa	Two or more wallbox lighting sensors	130	\$4,550.00	\$35.00	10,920.00	84.00	0	0	16	Lighting
2000	PHCa	Two or more Photocells	2	\$20.00	\$10.00	212.00	106.00	0	0	8	Lighting
2000	RWFa	Two or more Reflective Window Film	212	\$379.48	\$1.79	2,968.00	14.00	0	0	10	HVAC
2000	SPTa	Two or more Setback Programmable Thermostats	4	\$820.00	\$205.00	16,372.00	4,093.00	0	0	11	HVAC

Table TA 3.5  
 Measure Detail: Nonresidential Program Area  
 Small/Medium Prescriptive Rebates -- TPI Horizontal Washers Program  
 Program Year: 2000

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	CW01	Clothes Washer	939	\$469,500.00	\$500.00	103,290.00	110.00	123009	131	10	Misc

**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**EEI SPC: Large -- Large SPC**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	MISC	Air economizer, VFD	1	\$241,644.17	\$241,644.17	1,029,473.00	1,029,473.00	0	0	20	HVAC
2000	MISC	Boiler Tune-up/Insulation	1	\$18,863.02	\$18,863.02	0.00	0.00	16784	16784	10	Misc
2000	MISC	Boiler, Piping insulation	1	\$21,628.86	\$21,628.86	0.00	0.00	19245	19245	10	Misc
2000	MISC	Chilled Water Mgmt Sys	1	\$112,259.21	\$112,259.21	807,281.00	807,281.00	0	0	10	Misc
2000	MISC	Chiller Repl.	9	\$1,176,671.77	\$130,741.31	5,012,957.00	556,995.22	0	0	20	HVAC
2000	MISC	Chiller Repl./economizers	1	\$202.30	\$202.30	0.00	0.00	180	180	10	Misc
2000	MISC	CHILLER TO VAR.SPD	1	\$104,746.52	\$104,746.52	446,250.00	446,250.00	0	0	20	HVAC
2000	MISC	Compressed Air Efficiency	1	\$308,064.99	\$308,064.99	2,215,364.00	2,215,364.00	0	0	10	Misc
2000	MISC	Compressed air system	4	\$386,730.61	\$96,682.65	2,781,066.00	695,266.50	0	0	10	Misc
2000	MISC	DDC Controls	1	\$59,293.39	\$59,293.39	426,392.00	426,392.00	0	0	10	Misc
2000	MISC	Economizers/Water Htr	1	\$615.61	\$615.61	4,427.00	4,427.00	0	0	10	Misc
2000	MISC	Econs, Contrl, Water Htr	1	\$2,004.39	\$2,004.39	14,414.00	14,414.00	0	0	10	Misc
2000	MISC	Gas Dryer	1	\$120,973.28	\$120,973.28	0.00	0.00	107640	107640	10	Misc
2000	MISC	Hot Water Heater	1	\$78,305.59	\$78,305.59	0.00	0.00	69675	69675	10	Misc
2000	MISC	HVAC Controls	1	\$41,638.95	\$41,638.95	299,435.00	299,435.00	0	0	10	Misc
2000	MISC	Lighting Efficiency	16	\$4,794,358.91	\$299,647.43	23,900,109.23	1,493,756.83	0	0	16	Lighting
2000	MISC	Motor Projects	3	\$231.12	\$77.04	1,662.00	554.00	0	0	10	Misc
2000	MISC	Motors	1	\$66.89	\$66.89	481.00	481.00	0	0	10	Misc
2000	MISC	Optimal Start/Stop pump/f	1	\$254,728.86	\$254,728.86	1,831,812.00	1,831,812.00	0	0	10	Misc
2000	MISC	Pumps	1	\$44,077.20	\$44,077.20	316,969.00	316,969.00	0	0	10	Misc
2000	MISC	Refurb. Hot Water System	1	(\$10,114.82)	(\$10,114.82)	0.00	0.00	-9000	-9000	10	Misc
2000	MISC	Replace 10 package air conditioning units	1	\$11,522.23	\$11,522.23	49,088.00	49,088.00	0	0	20	HVAC
2000	MISC	Replc AC Condenser	1	\$1,675.24	\$1,675.24	7,137.00	7,137.00	0	0	20	HVAC
2000	MISC	Replc. circ. pump	1	\$14.74	\$14.74	106.00	106.00	0	0	10	Misc
2000	MISC	Steam Traps	1	\$581,017.91	\$581,017.91	0.00	0.00	516980	516980	10	Misc
2000	MISC	Thermostats/Controls	1	\$2,190.87	\$2,190.87	15,755.00	15,755.00	0	0	10	Misc
2000	MISC	Variable pumping	2	\$269,399.52	\$134,699.76	1,937,312.00	968,656.00	0	0	10	Misc
2000	MISC	VAV	1	\$69,393.18	\$69,393.18	206,188.00	206,188.00	11704	11704	20	HVAC
2000	MISC	VAV Fume Hoods	1	\$61,580.86	\$61,580.86	262,352.00	262,352.00	0	0	20	HVAC
2000	MISC	VAV Fume Hoods	1	\$20,219.53	\$20,219.53	0.00	0.00	17991	17991	10	Misc
2000	MISC	VFC, Econs, Hot Wtr.Syst	1	\$23,374.88	\$23,374.88	168,094.00	168,094.00	0	0	10	Misc
2000	MISC	VFD	1	\$69,719.99	\$69,719.99	297,027.00	297,027.00	0	0	20	HVAC
2000	MISC	VFD's for Chillers	1	\$181,877.51	\$181,877.51	774,850.00	774,850.00	0	0	20	HVAC
2000	MISC	VSDDrives/DDC Cntrl	1	\$67,151.31	\$67,151.31	482,900.00	482,900.00	0	0	10	Misc
2000	MISC	Water Heater Controls	1	\$1,108.14	\$1,108.14	0.00	0.00	986	986	10	Misc
2000	MISC	WATER PUMPS VFD	1	\$241,609.95	\$241,609.95	1,737,471.00	1,737,471.00	0	0	10	Misc
2000	MISC	Wattman Controler	1	\$20,835.51	\$20,835.51	103,866.00	103,866.00	0	0	16	Lighting
2000	MISC	White roofing membrane	1	\$43,800.36	\$43,800.36	186,602.00	186,602.00	0	0	20	HVAC
2000	MISC	Window Film	1	\$35,717.56	\$35,717.56	152,167.00	152,167.00	0	0	20	HVAC



**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**EI SPC: Large -- Fastrac SPC**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	MISC	Air Handlers VFDs	1	\$32,547.92	\$32,547.92	89,562.00	89,562.00	0	0	10	Misc
2000	MISC	Chiller Repl.	4	\$147,610.07	\$36,902.52	240,631.50	60,157.88	0	0	20	HVAC
2000	MISC	Chillers	1	\$25,883.59	\$25,883.59	42,195.00	42,195.00	0	0	20	HVAC
2000	MISC	L.E.D. Fire Alarm Bulb	1	\$180,981.34	\$180,981.34	345,224.00	345,224.00	0	0	16	Lighting
2000	MISC	Lighting Efficiency	24	\$2,260,889.93	\$94,203.75	4,312,673.80	179,694.74	0	0	16	Lighting
2000	MISC	Motor Projects	1	\$8,841.09	\$8,841.09	24,328.00	24,328.00	0	0	10	Misc
2000	MISC	Motors for Cooling Tower	1	\$23,145.72	\$23,145.72	63,690.00	63,690.00	0	0	10	Misc
2000	MISC	VSD	1	\$32,270.27	\$32,270.27	88,798.00	88,798.00	0	0	10	Misc

**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**EEl SPC: Small/Medium -- Small Business SPC**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	MISC	40 Ton A/C Unit/Windows	1	\$17,418.51	\$17,418.51	21,525.00	21,525.00	0	0	20	HVAC
2000	MISC	Air Economizers	1	\$42,325.57	\$42,325.57	52,304.00	52,304.00	0	0	20	HVAC
2000	MISC	Air handlers	2	\$244,868.30	\$122,434.15	302,597.00	151,298.50	0	0	20	HVAC
2000	MISC	Ceiling Insulation	1	\$2,600.84	\$2,600.84	3,214.00	3,214.00	0	0	20	HVAC
2000	MISC	Chiller Repl.	2	\$40,906.03	\$20,453.02	50,549.80	25,274.90	0	0	20	HVAC
2000	MISC	Condensing Unit	1	\$3,261.98	\$3,261.98	4,031.00	4,031.00	0	0	20	HVAC
2000	MISC	DDC Control System	1	\$25,713.92	\$25,713.92	53,637.00	53,637.00	0	0	10	Misc
2000	MISC	Evaporator Condensers	1	\$43,778.94	\$43,778.94	54,100.00	54,100.00	0	0	20	HVAC
2000	MISC	Greenhouse wall insulation	1	\$24,072.64	\$24,072.64	0.00	0.00	6213	6213	10	Misc
2000	MISC	HVAC EMS	1	\$67,512.62	\$67,512.62	83,429.00	83,429.00	0	0	20	HVAC
2000	MISC	HVAC Retrofit	1	\$1,232.45	\$1,232.45	1,523.00	1,523.00	0	0	20	HVAC
2000	MISC	Injection Mold Machine	1	\$108,312.81	\$108,312.81	133,848.00	133,848.00	0	0	20	Misc
2000	MISC	Injection Molder-Var Vol	1	\$143,687.16	\$143,687.16	177,562.00	177,562.00	0	0	20	Misc
2000	MISC	Injection Molding Mach	2	\$173,578.22	\$86,789.11	214,500.00	107,250.00	0	0	20	Misc
2000	MISC	Injection Molding Machine	2	\$104,673.74	\$52,336.87	129,351.00	64,675.50	0	0	20	Misc
2000	MISC	Insulation	1	\$1,720.30	\$1,720.30	0.00	0.00	444	444	10	Misc
2000	MISC	Lighting Efficiency	23	\$662,270.40	\$28,794.37	957,630.80	41,636.12	0	0	16	Lighting
2000	MISC	Lighting Retrofit	2	\$17,673.59	\$8,836.80	26,753.00	13,376.50	-153	-76.5	16	Lighting
2000	MISC	Motor Projects	1	\$52,974.41	\$52,974.41	110,500.00	110,500.00	0	0	10	Misc
2000	MISC	Package Units	4	\$46,060.94	\$11,515.24	56,920.00	14,230.00	0	0	20	HVAC
2000	MISC	Programable Thermostats	1	\$87,976.83	\$87,976.83	183,512.00	183,512.00	0	0	10	Misc
2000	MISC	Refrig. fan controls	2	\$4,453.15	\$2,226.58	5,503.00	2,751.50	0	0	20	HVAC
2000	MISC	Refrig. fan controls	1	\$14,836.19	\$14,836.19	30,947.00	30,947.00	0	0	10	Misc
2000	MISC	Split Systems	7	\$24,525.92	\$3,503.70	30,308.00	4,329.71	0	0	20	HVAC
2000	MISC	Thermography Printers	1	\$14,930.15	\$14,930.15	31,143.00	31,143.00	0	0	10	Misc
2000	MISC	Thermoplastic-Electric	1	\$51,416.34	\$51,416.34	107,250.00	107,250.00	0	0	10	Misc
2000	MISC	VFD's for pumps	1	\$380,294.89	\$380,294.89	793,262.00	793,262.00	0	0	10	Misc
2000	MISC	VSD	3	\$87,574.94	\$29,191.65	182,673.70	60,891.23	0	0	10	Misc

**Table TA 3.5**  
**Measure Detail: Nonresidential Program Area**  
**Upstream Programs: Financial Assistance -- Upstream HVAC Incentives Program**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	AC01	HVAC Single Package, Air Cooled	1,157	\$688,649.70	\$595.20	490,662.84	424.08	0	0	15	HVAC
2000	AC02	HVAC Split Unit, Air Cooled	126	\$34,735.80	\$275.68	26,328.92	208.96	0	0	15	HVAC
2000	AC04	Heat Pump	149	\$40,885.20	\$274.40	49,621.32	333.03	0	0	15	HVAC

**Table TA 3.5**

**Measure Detail: Nonresidential Program Area**

**Upstream Programs: Financial Assistance -- Upstream Motor Incentives Program**

**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	MTR01	Motor - Open Drip Proof (ODP)	148	\$15,078.15	\$101.88	157,310.05	1,062.91	0	0	15	Misc
2000	MTR02	Motor - Totally Enclosed Fan Cooled (TEFC)	456	\$27,976.65	\$61.35	423,304.89	928.30	0	0	15	Misc

**TABLE TA 4.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NEW CONSTRUCTION)  
TOTAL GAS AND ELECTRIC**

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Residential							
Statewide Programs (Manufactured Housing)	\$0	\$0	\$115,625	\$0		\$0	\$115,625
Residential Design Assistance	\$0	\$155,550	\$1,200,234	\$0		\$0	\$1,355,784
Customer Information and Awareness	\$0	\$0	\$312,073	\$0		\$0	\$312,073
CHEERS	\$0	\$0	\$41,951	\$0		\$0	\$41,951
New Energy Efficient Products and Services	\$0	\$0	\$74,148	\$0		\$0	\$74,148
CEC Public Interest Energy Research (PIER)	\$0	\$0	\$76,474	\$0		\$0	\$76,474
Targeted Third Party Initiatives (TPI)	\$0	\$0	\$76,543	\$0		\$0	\$76,543
<b>Total Residential</b>	\$0	\$155,550	\$1,897,050	\$0	\$18,000	\$0	\$2,070,600
Nonresidential							
Savings by Design	\$124,767	\$1,002,774	\$638,951	\$0		\$0	\$1,766,492
Energy Design Resources	\$0	\$0	\$396,193	\$0		\$0	\$396,193
Industrial and Agricultural New Construction	\$43,989	\$133,419	\$26,924	\$0		\$0	\$204,332
<b>Total Nonresidential</b>	\$168,756	\$1,136,193	\$1,062,068	\$0	\$255,316	\$0	\$2,622,333
Other							
New Construction Codes and Standards Support	\$0	\$0	\$232,722	\$0		\$0	\$232,722
Local Government Initiatives	\$0	\$0	\$259,835	\$0		\$0	\$259,835
Total Other	\$0	\$0	\$492,558	\$0	\$0	\$0	\$492,558
<b>Total New Construction</b>	\$168,756	\$1,291,743	\$3,451,676	\$0	\$273,316		\$5,185,491

**TABLE TA 4.1  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NEW CONSTRUCTION)  
ELECTRIC ONLY**

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Residential							
Statewide Programs (Manufactured Housing)	\$0	\$0	\$92,500	\$0		\$0	\$92,500
Residential Design Assistance	\$0	\$139,995	\$1,080,211	\$0		\$0	\$1,220,206
Customer Information and Awareness	\$0	\$0	\$312,073	\$0		\$0	\$312,073
CHEERS	\$0	\$0	\$31,883	\$0		\$0	\$31,883
New Energy Efficient Products and Services	\$0	\$0	\$37,074	\$0		\$0	\$37,074
CEC Public Interest Energy Research (PIER)	\$0	\$0	\$38,237	\$0		\$0	\$38,237
Targeted Third Party Initiatives (TPI)	\$0	\$0	\$49,753	\$0		\$0	\$49,753
<b>Total Residential</b>	\$0	\$139,995	\$1,641,732	\$0	\$15,197	\$0	\$1,796,924
							\$0
Nonresidential							\$0
Savings by Design	\$107,300	\$862,386	\$549,498	\$0		\$0	\$1,519,183
Energy Design Resources	\$0	\$0	\$336,764	\$0		\$0	\$336,764
Industrial and Agricultural New Construction	\$21,995	\$66,710	\$13,462	\$0		\$0	\$102,166
<b>Total Nonresidential</b>	\$129,294	\$929,095	\$899,724	\$0	\$215,563	\$0	\$2,173,676
							\$0
Other							\$0
New Construction Codes and Standards Support	\$0	\$0	\$197,814	\$0		\$0	\$197,814
Local Government Initiatives	\$0	\$0	\$220,860	\$0		\$0	\$220,860
<b>Total Other</b>	\$0	\$0	\$418,674	\$0	\$0	\$0	\$418,674
							\$0
<b>Total New Construction</b>	\$129,294	\$1,069,090	\$2,960,130	\$0	\$230,761	\$0	\$4,389,275

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

PROGRAM	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Residential							
Statewide Programs (Manufactured Housing)	\$0	\$0	\$23,125	\$0			\$23,125
Residential Design Assistance	\$0	\$15,555	\$120,023	\$0			\$135,578
Customer Information and Awareness	\$0	\$0	\$0	\$0			\$0
CHEERS	\$0	\$0	\$10,068	\$0			\$10,068
New Energy Efficient Products and Services	\$0	\$0	\$37,074	\$0			\$37,074
CEC Public Interest Energy Research (PIER)	\$0	\$0	\$38,237	\$0			\$38,237
Targeted Third Party Initiatives (TPI)	\$0	\$0	\$26,790	\$0			\$26,790
<b>Total Residential</b>	\$0	\$15,555	\$255,318	\$0	\$2,803		\$273,676
Nonresidential							
Savings by Design	\$17,467	\$140,388	\$89,453	\$0			\$247,309
Energy Design Resources	\$0	\$0	\$59,429	\$0			\$59,429
Industrial and Agricultural New Construction	\$21,995	\$66,710	\$13,462	\$0			\$102,166
<b>Total Nonresidential</b>	\$39,462	\$207,098	\$162,344	\$0	\$39,753		\$448,657
Other							
New Construction Codes and Standards Support	\$0	\$0	\$34,908	\$0			\$34,908
Local Government Initiatives	\$0	\$0	\$38,975	\$0			\$38,975
<b>Total Other</b>	\$0	\$0	\$73,884	\$0	\$0		\$73,884
<b>Total New Construction</b>	\$39,462	\$222,653	\$491,546	\$0	\$42,555		\$796,216

**TABLE TA 4.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS (NEW CONSTRUCTION)  
TOTAL GAS AND ELECTRIC**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Residential					
Statewide Programs (Manufactured Housing)	\$24,475	\$81,115	\$0	\$10,035	\$115,625
Residential Design Assistance	\$150,029	\$932,534	\$0	\$117,671	\$1,200,234
Customer Information and Awareness	\$15,379	\$269,609	\$0	\$27,085	\$312,073
CHEERS	\$28,301	\$10,009	\$0	\$3,641	\$41,951
New Energy Efficient Products and Services	\$4,853	\$62,860	\$0	\$6,435	\$74,148
CEC Public Interest Energy Research (PIER)	\$0	\$69,837	\$0	\$6,637	\$76,474
Targeted Third Party Initiatives (TPI)	\$4,881	\$65,019	\$0	\$6,643	\$76,543
<b>Total Residential</b>	\$227,918	\$1,490,983	\$0	\$178,149	\$1,897,050
Nonresidential					
Savings by Design	\$372,647	\$112,987	\$0	\$153,317	\$638,951
Energy Design Resources	\$50,480	\$311,327	\$0	\$34,386	\$396,193
Industrial and Agricultural New Construction	\$1,810	\$7,380	\$0	\$17,734	\$26,924
<b>Total Nonresidential</b>	\$424,937	\$431,693	\$0	\$205,438	\$1,062,068
Other					
New Construction Codes and Standards Support	\$17,713	\$194,811	\$0	\$20,198	\$232,722
Local Government Initiatives	\$13,804	\$223,479	\$0	\$22,552	\$259,835
<b>Total Other</b>	\$31,517	\$418,291	\$0	\$42,750	\$492,558
<b>Total New Construction</b>	\$684,372	\$2,340,967	\$0	\$426,337	\$3,451,676



**TABLE TA 4.2  
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS (NEW CONSTRUCTION)  
ELECTRIC ONLY**

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Residential					
Statewide Programs (Manufactured Housing)	\$19,580	\$64,892	\$0	\$8,028	\$92,500
Residential Design Assistance	\$135,026	\$839,281	\$0	\$105,904	\$1,080,211
Customer Information and Awareness	\$15,379	\$269,609	\$0	\$27,085	\$312,073
CHEERS	\$21,508	\$7,607	\$0	\$2,767	\$31,883
New Energy Efficient Products and Services	\$2,427	\$31,430	\$0	\$3,218	\$37,074
CEC Public Interest Energy Research (PIER)	\$0	\$34,919	\$0	\$3,319	\$38,237
Targeted Third Party Initiatives (TPI)	\$3,173	\$42,262	\$0	\$4,318	\$49,753
<b>Total Residential</b>	\$197,093	\$1,290,000	\$0	\$154,639	\$1,641,732
Nonresidential					
Savings by Design	\$320,476	\$97,169	\$0	\$131,853	\$549,498
Energy Design Resources	\$42,908	\$264,628	\$0	\$29,228	\$336,764
Industrial and Agricultural New Construction	\$905	\$3,690	\$0	\$8,867	\$13,462
<b>Total Nonresidential</b>	\$364,289	\$365,486	\$0	\$169,948	\$899,724
Other					
New Construction Codes and Standards Support	\$15,056	\$165,590	\$0	\$17,169	\$197,814
Local Government Initiatives	\$11,734	\$189,957	\$0	\$19,169	\$220,860
Total Other	\$26,789	\$355,547	\$0	\$36,337	\$418,674
<b>Total New Construction</b>	\$588,172	\$2,011,033	\$0	\$360,925	\$2,960,130

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

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Residential					
Statewide Programs (Manufactured Housing)	\$4,895	\$16,223	\$0	\$2,007	\$23,125
Residential Design Assistance	\$15,003	\$93,253	\$0	\$11,767	\$120,023
Customer Information and Awareness	\$0	\$0	\$0	\$0	\$0
CHEERS	\$6,792	\$2,402	\$0	\$874	\$10,068
New Energy Efficient Products and Services	\$2,427	\$31,430	\$0	\$3,218	\$37,074
CEC Public Interest Energy Research (PIER)	\$0	\$34,919	\$0	\$3,319	\$38,237
Targeted Third Party Initiatives (TPI)	\$1,708	\$22,757	\$0	\$2,325	\$26,790
<b>Total Residential</b>	<b>\$30,825</b>	<b>\$200,984</b>	<b>\$0</b>	<b>\$23,510</b>	<b>\$255,318</b>
Nonresidential					
Savings by Design	\$52,171	\$15,818	\$0	\$21,464	\$89,453
Energy Design Resources	\$7,572	\$46,699	\$0	\$5,158	\$59,429
Industrial and Agricultural New Construction	\$905	\$3,690	\$0	\$8,867	\$13,462
<b>Total Nonresidential</b>	<b>\$60,647</b>	<b>\$66,207</b>	<b>\$0</b>	<b>\$35,490</b>	<b>\$162,344</b>
Other					
New Construction Codes and Standards Support	\$2,657	\$29,222	\$0	\$3,030	\$34,908
Local Government Initiatives	\$2,071	\$33,522	\$0	\$3,383	\$38,975
Total Other	\$4,728	\$62,744	\$0	\$6,412	\$73,884
<b>Total New Construction</b>	<b>\$96,200</b>	<b>\$329,934</b>	<b>\$0</b>	<b>\$65,412</b>	<b>\$491,546</b>

**Table TA 4.3**  
**Market Effects: New Construction Projected Annual Program Energy Reductions**  
**Residential New Construction -- Design Assistance**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000							429	791,388	50,271
2001							429	791,388	50,271
2002							429	791,388	50,271
2003							429	791,388	50,271
2004							429	791,388	50,271
2005							429	791,388	50,271
2006							429	791,388	50,271
2007							429	791,388	50,271
2008							429	791,388	50,271
2009							429	791,388	50,271
2010							429	791,388	50,271
2011							429	791,388	50,271
2012							429	791,388	50,271
2013							429	791,388	50,271
2014							429	791,388	50,271
2015							429	791,388	50,271
2016							429	791,388	50,271
2017							429	791,388	50,271
2018							429	791,388	50,271
2019							429	791,388	50,271
SUM (Lifecycle)							429	15,827,760	1,005,420

**Table TA 4.3**  
**Market Effects: New Construction Projected Annual Program Energy Reductions**  
**Nonresidential New Construction -- Commercial Savings By Design**  
**Program Year: 2000**

**Average Load Impacts Per Unit (Gross)**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2001	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2002	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2003	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2004	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2005	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2006	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2007	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2008	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2009	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2010	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2011	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2012	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2013	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2014	769	2,214,940	0	470	1,568,547	0	1,564	5,614,656	190,152
2015									
2016									
2017									
2018									
2019									
<b>SUM (Lifecycle)</b>	<b>769</b>	<b>33,224,103</b>	<b>0</b>	<b>470</b>	<b>23,528,207</b>	<b>0</b>	<b>1,564</b>	<b>84,219,839</b>	<b>2,852,280</b>

**Table TA 4.3**  
**Market Effects: New Construction Projected Annual Program Energy Reductions**  
**Nonresidential New Construction -- Industrial/Agricultural Savings By Design**  
**Program Year: 2000**

Year	HVAC			Lighting			Misc		
	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2000	277	745,719	0	51	189,412	0	673	4,822,010	-457
2001	277	745,719	0	51	189,412	0	673	4,822,010	-457
2002	277	745,719	0	51	189,412	0	673	4,822,010	-457
2003	277	745,719	0	51	189,412	0	673	4,822,010	-457
2004	277	745,719	0	51	189,412	0	673	4,822,010	-457
2005	277	745,719	0	51	189,412	0	673	4,822,010	-457
2006	277	745,719	0	51	189,412	0	673	4,822,010	-457
2007	277	745,719	0	51	189,412	0	673	4,822,010	-457
2008	277	745,719	0	51	189,412	0	673	4,822,010	-457
2009	277	745,719	0	51	189,412	0	673	4,822,010	-457
2010	277	745,719	0	51	189,412	0	673	4,822,010	-457
2011	277	745,719	0	51	189,412	0	673	4,822,010	-457
2012	277	745,719	0	51	189,412	0	673	4,822,010	-457
2013	277	745,719	0	51	189,412	0	673	4,822,010	-457
2014	277	745,719	0	51	189,412	0	673	4,822,010	-457
2015									
2016									
2017									
2018									
2019									
<b>SUM (Lifecycle)</b>	<b>277</b>	<b>11,185,790</b>	<b>0</b>	<b>51</b>	<b>2,841,176</b>	<b>0</b>	<b>673</b>	<b>72,330,150</b>	<b>-6,855</b>

**Table TA 4.4**

**Measure Detail: New Construction Program Area  
Residential New Construction -- Design Assistance  
Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	HOME1	New Single-Family home with 86+ CHEERS rating	328	\$144,320.00	\$440.00	497,576.00	1,517.00	30832	94	20	Misc
2000	HOME2	New Single-Family home with 88+ CHEERS rating	1	\$440.00	\$440.00	1,517.00	1,517.00	94	94	20	Misc
2000	HOME3	New Multi-Family unit	265	\$116,600.00	\$440.00	292,295.00	1,103.00	19345	73	20	Misc

**Table TA 4.4**  
**Measure Detail: New Construction Program Area**  
**Nonresidential New Construction -- Commercial Savings By Design**  
**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	NC001	Other Systems	5	\$35,906.33	\$7,181.27	396,225.00	79,245.00	0	0	15	Misc
2000	NC002	Whole Building - Overall Building Performance	50	\$576,159.92	\$11,523.20	4,861,031.00	97,220.62	190152	3803.04	15	Misc
2000	NC010	Air-Cooled Package Air-Conditioner (greater than or equal to 65,000 BTUH)	109	\$54,201.80	\$497.26	598,114.80	5,487.29	0	0	15	HVAC
2000	NC011	Air-Cooled Package Heat Pump (greater than or equal to 65,000 BTUH)	12	\$5,454.47	\$454.54	60,189.90	5,015.83	0	0	15	HVAC
2000	NC012	Air-Cooled Package and Split System Air-Conditioners (less than 65,000 BTUH)	104	\$6,936.32	\$66.70	76,542.00	735.98	0	0	15	HVAC
2000	NC013	Air-Cooled Package and Split System Heat Pumps (less than 65,000 BTUH)	7	\$503.40	\$71.91	5,555.00	793.57	0	0	15	HVAC
2000	NC016	Daylighting Controls, Top Lighting, Two Step Control	1	\$71,235.86	\$71,235.86	786,085.00	786,085.00	0	0	15	Lighting
2000	NC017	Evaporative and Water-Cooled Package Air-Conditioner	6	\$2,840.97	\$473.50	31,350.00	5,225.00	0	0	15	HVAC
2000	NC018	High Efficiency Lighting	36	\$70,907.55	\$1,969.65	782,462.10	21,735.06	0	0	15	Lighting
2000	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	16	\$10,917.15	\$682.32	120,470.30	7,529.39	0	0	15	HVAC
2000	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	12	\$3,289.79	\$274.15	36,302.70	3,025.23	0	0	15	HVAC
2000	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	16	\$7,037.45	\$439.84	77,658.00	4,853.63	0	0	15	HVAC
2000	NC027	Low Solar Heat Gain Coefficient Glass, Orientation: W	12	\$8,542.21	\$711.85	94,263.00	7,855.25	0	0	15	HVAC
2000	NC028	Premium Efficiency Motors for HVAC	2	\$58.86	\$29.43	649.50	324.75	0	0	15	HVAC
2000	NC029	Refrigerated Display Case Efficient Fan Motors, Air Base	1	\$11,225.42	\$11,225.42	123,872.10	123,872.10	0	0	15	Misc
2000	NC033	Refrigeration with floating head pressure and efficient condenser, Air Base	1	\$16,832.30	\$16,832.30	185,743.80	185,743.80	0	0	15	Misc
2000	NC047	Variable Frequency Drive for Chilled Water Pump Motors	1	\$3,899.06	\$3,899.06	43,026.00	43,026.00	0	0	15	Misc
2000	NC048	Variable Frequency Drive for Cooling Tower Fan Motors	4	\$431.18	\$107.79	4,758.00	1,189.50	0	0	15	Misc
2000	NC049	Variable Frequency Drive for HVAC Fan Motors	24	\$52,525.42	\$2,188.56	579,616.00	24,150.67	0	0	15	HVAC
2000	NC052	Water Cooled Chillers	7	\$45,247.46	\$6,463.92	499,304.00	71,329.14	0	0	15	HVAC
2000	NC053	Water Source Package Heat Pump	62	\$3,164.94	\$51.05	34,925.00	563.31	0	0	15	HVAC

**Table TA 4.4**

**Measure Detail: New Construction Program Area**

**Nonresidential New Construction -- Industrial/Agricultural Savings By Design**

**Program Year: 2000**

Year	Measure Code	Measure Description	Recorded Qty	Total Customer Cost	Average Unit Cost	Total KWH Savings	Average kWh Savings	Total Therm Savings	Average Therm Savings	Measure Life	Measure End Use
2000	NC001	Other Systems	5	\$430,847.53	\$86,169.51	4,754,386.00	950,877.20	0	0	15	Misc
2000	NC002	Whole Building - Overall Building Performance	1	\$5,802.15	\$5,802.15	67,624.00	67,624.00	-457	-457	15	Misc
2000	NC010	Air-Cooled Package Air-Conditioner (greater than or equal to 65,000 BTUH)	64	\$49,669.32	\$776.08	548,099.00	8,564.05	0	0	15	HVAC
2000	NC011	Air-Cooled Package Heat Pump (greater than or equal to 65,000 BTUH)	1	\$66.62	\$66.62	735.20	735.20	0	0	15	HVAC
2000	NC012	Air-Cooled Package and Split System Air-Conditioners (less than 65,000 BTUH)	26	\$6,281.58	\$241.60	69,317.00	2,666.04	0	0	15	HVAC
2000	NC013	Air-Cooled Package and Split System Heat Pumps (less than 65,000 BTUH)	7	\$597.06	\$85.29	6,588.50	941.21	0	0	15	HVAC
2000	NC018	High Efficiency Lighting	5	\$17,164.69	\$3,432.94	189,411.70	37,882.34	0	0	15	Lighting
2000	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	2	\$758.75	\$379.38	8,372.80	4,186.40	0	0	15	HVAC
2000	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	1	\$975.08	\$975.08	10,760.00	10,760.00	0	0	15	HVAC
2000	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	2	\$1,291.40	\$645.70	14,250.50	7,125.25	0	0	15	HVAC
2000	NC027	Low Solar Heat Gain Coefficient Glass, Orientation: W	2	\$1,912.68	\$956.34	21,106.30	10,553.15	0	0	15	HVAC
2000	NC049	Variable Frequency Drive for HVAC Fan Motors	2	\$6,025.39	\$3,012.70	66,490.00	33,245.00	0	0	15	HVAC



# MA&E AND REGULATORY OVERSIGHT

Not applicable

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
XC1	Cross Cutting		B	Issue new Targeted Third Party Initiatives request for proposals within 60 days after Commission Decision.	\$61,770	Three TPI RFPs were issued on February 11, 2000	\$61,770	Identify targeted markets, RFP announcements and cited Verif. Plan
XC2			B	Work with other utilities/stakeholders to establish and participate in Emerging Technologies Coordinating Council (ETCC) within a specified number of days after Commission Decision .Award relies on participation and contributing to SCE's database for Emer	\$61,770	SDG&E, together with the other utilities, established the ETCC on February 2, 2000	\$61,770	Participation in the Council and provide a report on progress. Submit emerging tech. data to database for joint website for award.
XC3			A	Work with stakeholders to develop emerging technologies demonstration projects at customer sites.	\$30,885	Signed and have work in-progress for 2 customer demo projects.	\$30,885	Identify the nature of the signed agreements and document as cited.
NC1	New Construction	Commercial New Construction	M	Train at least 125 decision makers and design professionals to use the whole building approach and demonstrate that 35% understand the key concepts from training and that 20% of the trainees intend to use these concepts in their business practice	\$71,036	Trained over 407 decision makers, over 52% understand key concepts, & over 70% will use concepts.	\$71,036	Provide documentation as cited. Provide study. Provide outline of course content.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NC2			A	Achieve a number of customer commitments to the systems approach method. The project minimum size must be at least 7,000 gross kWh.	\$86,478	Achieved 51 customer contracts for jobs over 7,000 gross kWh using systems approach.	\$86,478	Identify project size for each commitment. Identify method used meeting systems approach per commitment. Document as cited.
NC3			M	Achieve an increase in the absolute market share of new building designs that exceed the 1998 T24 standards by at least 10%.	\$61,770	Achieved 5.6% increase in absolute market share in PY2000 compared to PY99	\$61,770	Identify the number of bldgs. representing 40%. Identify the study. Define the baseline measures for exceeding T24 '95 standard by 20%. Identify the targeted number of buildings and the % to exceed '98 T24 standards. Identify what constitutes greater th

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NC4		New Construction Codes & Standards Support and Local Government Initiatives	A	Increase the number of local public agencies participating in Local Govt. and Codes & Stds program that exceed T24 standards by 10%.	\$15,443	Signed 8 agencies, achieving a 25% increase in participation over PY99	\$15,443	Define participation. Identify total local public agencies in service territory. Define what constitutes a 10% increase in T24 standards when providing documentation.
NC5		Residential New Construction	B	Have manufactured home program available within a specified number of days after Commission Decision.	\$18,000	Manufactured Home pilot program was available on February 14, 2000.	\$18,000	How many firms are targeted? Define number of existing energy efficiency models and what standard must be achieved...T24?

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NC6			A	Conduct customer seminars for potential new home buyers to provide information relating to energy efficiency options and seminar attendees provide a favorable seminar rating.	\$36,000	Conducted 14 presentations at Del Mar Fair.	\$0	Provide course content. Do an exit survey for information retention. Identify audience attendance size targets. Retention results are informational and will not impact award and will be applicable to seminars held after D.00-07-017 approval.
NR1	Nonresidential	Commercial Remodeling/ Renovation	A	Achieve a number of customer project commitments that use the systems approach method.	\$30,885	Signed 71 customer contracts that use systems approach.	\$30,885	Identify project size for each commitment. Identify method used meeting systems approach per commitment. Track savings.
NR2			A	Achieve a specified amount of energy savings from remodeling and renovation committed or installed projects.	\$123,540	Signed contracts with savings amounting to over 6.2 gWh.	\$111,020	

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR3		High Efficiency HVAC Equipment	A	Achieve a specified amount of energy savings from installed or committed high efficiency HVAC projects.	\$61,770	Achieved 1,184 mWh installed and 7,712 mWh committed.	\$61,770	
NR4			M	Increase the percent of high efficiency HVAC units stocked over the 1999 level. Shared w/ Residential Heating & Cooling program.	\$55,593	Achieved a 37% increase in high efficiency HVAC units stocked over PY99 level.	\$55,593	Identify number representing 6%. Identify stocked pkg units/models and ratings to qualify as High Eff. HVAC. vs. not. Identify PY99 baseline and provide study.
NR5		High Efficiency Motors	M	Increase the market share (sales) of CEE-rated motors.	\$61,770	Achieved a 12% market share which is 305% higher than PY99.	\$61,770	Identify number of local dealers and number currently stocking these motors. Identify CEE-rated motors vs. non-CEE rated motors. Provide PY99 baseline and study.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR6		Large Nonresidential Comprehensive Retrofits	B	Begin a pilot intervention strategy to promote energy efficient replacements at the time of burn-out a specified number of days after Commission Decision. Shared w/ Nonresidential Small Comprehensive Retrofit program.	\$30,885	Implemented Procure Savings pilot program on February 14, 2000.	\$30,885	Also provide announcement of program availability on SDG&E and common utility EE website, when operational. Provide documentation as described.
NR7			A	Increase the number of Third-party sponsors participating in the Large Comprehensive Retrofit Program from the 1999 participation level.	\$77,213	Inceased third party sponsors by 62% over PY99.	\$77,213	Identify the baseline. If 2, then Award is 100% for 2 more project sponsors; 60% for 1 more sponsor. Provide documentation as cited.
NR8			A	Conduct pre- and post-installation inspections for 1998, 1999 and 2000 Large/SB SPC programs (as required) within a specified average number of working days after a "complete" submittal is received.	\$154,425	Average processing time of 6 days for pre-installations and 10 days for post-installation. Total average processing time of 8 days.	\$154,425	Provide documentation as cited.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR9			A	Conduct customer technology workshops for nonresidential customers. Workshop feedback must average a favorable customer rating.	\$30,885	Conducted 6 technology workshops with a 77% favorable rating.	\$30,885	Also document workshop notices, number of targeted participants and publicity efforts.
NR10			M	A percentage of seminar attendees indicate a willingness to adopt measures and techniques discussed at workshops.	\$30,885	74% of seminar attendees indicated a willingness to adopt measures and techniques.	\$30,885	Provide study. Identify number of PY1999 and PY00 seminar attendees.
NR11			B	Begin a pilot intervention strategy to promote energy efficient replacements at the time of burn-out for small nonresidential within a specified number of days after Commission Decision. Shared with Nonresidential Large Comprehensive Retrofit program.	\$30,885	Implemented Purchase Savings pilot program on February 14, 2000.	\$30,885	Identify number of small customers for PY1999 program participation. Identify promotion efforts and number of responses. Do web-based promotion using SDG&E and common utility EE site, when operational. Document as cited.



TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR12			B	Begin a EESP/contractor based pilot program to promote turn-key energy efficient projects for smaller customers (under 100 kW) within a specified number of days after Commission Decision.	\$61,770	Implemented Turnkey pilot program on February 14, 2000.	\$61,770	Identify goal/number of EESPs and target small customers for program participation. Identify promotion efforts and number of responses. Do web-based promotion using SDG&E and common utility EE site, when operational. Document as cited.
NR13			A	Increase the number of Third-party sponsors in the Small Comprehensive Retrofit Program over 1999 number of participating sponsors.	\$61,770	68 participating third party sponsors which is an 88% increase.	\$61,770	Identify PY99 baseline number of sponsors. Provide documentation. Track savings. Savings is informational and will not impact award.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR14			B	Begin a pilot project to demonstrate the feasibility of high efficiency restaurant dish washing systems within a specified number of days after Commission Decision.	\$12,354	Implemented pilot project on February 14, 2000.	\$12,354	Document pilot availability publicity efforts. Provide publicity notices, and use SDG&E and common site for program pilot announcement. Provide documentation as cited.
NR15			A	Conduct small/medium customer energy efficiency workshops. Workshop feedback must average a favorable customer rating.	\$30,885	Conducted 5 workshops and 28 informational seminars resulting in a 77% favorable rating.	\$30,885	Provide notices and document promotion efforts throughout SD service territory. Use SDG&E and common web site, when operational, for workshop announcement. Provide documentation as cited.
NR16			M	Increase the saturation of high efficiency commercial clothes washers over 1999 level.	\$12,354	Increased saturation level by 47% over PY99.	\$12,354	Identify saturation numbers and the 1999 baseline. Provide study.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
NR17		Large Nonresidential Comprehensive Retrofits	B	Begin an energy efficiency service provider/contractor-based pilot program to promote small energy efficient projects for large customers which are not economically suited for Large SPC program within a specified number of days after Commission Decision.	\$43,239	Implemented the FasTrac pilot program on February 14, 2000.	\$43,239	
NR18		Commercial / Industrial/ Agricultural Process	A	Achieve a specified amount of equivalent kWh savings from installed or committed process systems projects.	\$77,213	Achieved approximately 5,790 mWh in committed process systems projects.	\$77,213	

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R1	Residential	Residential Appliances	M	Increase the average number of lighting/appliance sales associates who are knowledgeable and aware of energy efficient lighting/appliance technologies over the 1999 baseline. Shared w/ Residential Lighting Program.	\$49,416	Increased the average number of knowledgeable lighting/appliance sales associates by 140%.	\$49,416	Provide study. Identify 1999 baselines of number of sales associates knowledgeable and aware of EE lighting and appliances. Identify procedures and methods used to increase knowledge. Provide course outline, # of sessions done per store and staff per st
R2			M	Work with local appliance dealers to achieve a specified percentage of the ENERGY STAR appliance floor stock (includes washers, room a/c, dishwashers) during PY2000.	\$77,213	Increased ENERGY STAR appliance floor stock by 51% over PY99 baseline.	\$77,213	Provide study. Identify number of Energy Star floor stock to other floor stock and number of local dealers for PY99 and PY00.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R3			M	Increase the floor stock of qualifying 2001 DOE compliant refrigerators by a specified percentage over the 1999 baseline.	\$49,416	Increased DOE compliant refrigerators floor stock by 151% over PY99 baseline.	\$49,416	Provide study. Identify PY1999 baseline number of qualifying floor stock vs. other refrigerators. Provide PY00 measures.
R4		Residential Cross-cutting	M	Increase the percentage of customers that received energy efficiency materials or audits and implement one or more of the recommendations by a specified percentage over the 1999 baseline.	\$30,885	Estimate 45% of customers receiving info/audits implement recommendations.	\$0	Provide study and the PY1999 baseline number. Identify number of customers receiving materials and number of audits by type.
R5		Residential Heating & Cooling Systems	M	Increase the average number of contractors who use manuals J & S by specified percentage over the 1999 baseline or are knowledgeable and aware of diagnostic and maintenance techniques relating to heating & cooling systems by a specified percentage.	\$154,425	Increased number of knowledgeable and aware (or use manuals J & S) contractors between 67% to 90%.	\$154,425	Provide study and the PY1999 baseline number. Identify what a J&S manual is. Identify number of contractors employing the techniques vs. those who do not in SD service territory.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R6	Residential Lighting		M	Train an average percentage of lighting/appliance sales associates on respective Energy Star products. Sales associates must achieve an average of 75% accuracy level on follow-up surveys. Shared w/ Residential Appliances program.	\$92,655	Increased average number of knowledgeable and aware lighting/appliance sales associates by 140%.	\$92,655	Provide study and number of Energy Star appliance dealers and avg. staff per dealer. Document training content and length of training session. Identify where training is done - per dealer or offsite and number of sessions.
R7			M	Increase the number of indoor/outdoor fixture (including torchieres) manufacturers offering Energy Star-rated or equivalent products in SD county over the 1999 baseline.	\$123,540	Achieved 200% increase in the number of indoor/outdoor fixture manufacturers over PY99 baseline.	\$123,540	Identify the number of torcheries and indoor/outdoor fixture manufacturers and the baseline number for 1999. Provide the study.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R8		Residential Renovation & Retrofit	A	Train contractors/ personnel on techniques associated with whole system/whole house approach.	\$37,062	Trained 515 contractors on system/whole house approach.	\$37,062	Provide course content. Document as cited. Provide course content, number of classes, class size, and identify amount of time required for each training class. Do an exit survey for retention. Retention results are informational and will not impact award

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R9			M	Achieve a number of Residential Contractor Program contractors with expertise in duct testing/whole system approach (i.e., demonstrated required skills through testing). Testing will only apply to contractors trained after D. 00-07-017 approval.	\$77,213	Trained 21 RCP contractors in duct testing/whole house approach.	\$77,213	Provide training records and PY1999 baseline. Follow up on trained contractors to identify the measures incorporated into each new project engaged in. Provide follow-up in addition to study. PY99 Baseline and follow-up data are informational and does n
R10			M	Have contractors that offer services to multi-family property owners/property managers through performance contracting.	\$15,443	6 contractors offered services to multi-family property owners/managers through performance contracting.	\$15,443	Document as cited.



TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
R11			M	Work with industry professionals to achieve a specified number of customers that apply for an energy efficiency mortgage.	\$43,239	45 customers applied for an energy efficiency mortgage.	\$43,239	The objective is to develop and train more HERS raters and to get them to facilitate an EE mortgage for between 5 to 20 customers. Provide documentation.

TABLE TA 6.1  
ENERGY EFFICIENCY PROGRAM MILESTONES AND AWARD LEVELS

Code	Program Area	Program	Milestone Type	Performance Award Milestone	Target Award (\$000)	Performance Achievement	Achieved Award	Verification Requirements
	Subtotal				\$2,181,977		\$2,102,572	
	Residential		Aggressive Implementation		\$193,000		\$193,000	
	Nonresidential		Aggressive Implementation		\$227,000		\$220,000	
	New Construction		Aggressive Implementation		\$76,000		\$76,000	
	<b>Total</b>				\$2,677,977		<b>\$2,591,572</b>	

Note: Scaling of a performance award (e.g., scaled for 50% - 30%) defines that range of a measured response over which a partial award will be made. The higher end of the scale yields the full award. Any intermediate value within the range yields an award proportionate to its level within the scale defined by the low and high response.

Milestone Type:  
 B - Base  
 A - Activity  
 M - Market  
 Effect/Change

TABLE TA 7.1  
LIEE PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS  
San Diego Gas & Electric

Gas and Electric Combined

Program	Utility Costs						IMC	
	Program Incentives (Recorded)		Admin		Shareholder Incentives	Other		Total
	Actual	Committed	Actual	Committed				
DAP	\$5,402,347	\$0	\$808,234	\$0	\$76,948	\$0	\$6,287,529	\$0.00
EELI	\$181,178	\$0	\$22,511	\$0	\$12,441	\$0	\$216,130	\$0.00
Total	\$5,583,525	\$0	\$830,745	\$0	\$89,389	\$0	\$6,503,659	\$0.00

Electric Only

Program	Utility Costs						IMC	
	Program Incentives (Recorded)		Admin		Shareholder Incentives	Other		Total
	Actual	Committed	Actual	Committed				
DAP	\$978,066	\$0	\$118,261	\$0	\$35,529	\$0	\$1,131,856	\$0.00
EELI	\$144,402	\$0	\$13,656	\$0	\$0	\$0	\$158,059	\$0.00
Total	\$1,122,468	\$0	\$131,918	\$0	\$35,529	\$0	\$1,289,915	\$0.00

Gas Only

Program	Utility Costs						IMC	
	Program Incentives (Recorded)		Admin		Shareholder Incentives	Other		Total
	Actual	Committed	Actual	Committed				
DAP	\$4,424,281	\$0	\$689,973	\$0	\$41,420	\$0	\$5,155,673	\$0.00
EELI	\$36,776	\$0	\$8,855	\$0	\$12,441	\$0	\$58,071	\$0.00
Total	\$4,461,056	\$0	\$698,828	\$0	\$53,860	\$0	\$5,213,745	\$0.00

Table TA 7.2  
 LIEE Cost Elements - San Diego Gas & Electric  
 (Electric and Gas Combined)

LIEE Program	Expenditures Recorded by Cost Element - 2000			
	Labor	Non-Labor	Contract	TOTAL
Energy Efficiency				
- Gas Appliances	\$9,124	\$6,954	\$601,748	\$617,826
- Electric Appliances	\$19,677	\$9,583	\$915,546	\$944,806
- Weatherization Measures	\$188,191	\$140,697	\$3,220,409	\$3,549,298
- Outreach Assessment/In Home Energy Education	\$4,562	\$3,477	\$676,884	\$684,923
- Education Workshops (EELI)	\$15,452	\$7,059	\$181,178	\$203,690
Energy Efficiency TOTAL	\$237,008	\$167,771	\$5,595,765	\$6,000,543
Pilots				
- Attic Venting	\$0	\$0	\$1,277	\$1,277
Total Pilots	\$0	\$0	\$1,277	\$1,277
Training Center	\$0	\$0	\$0	\$0
Inspections	\$189,268	\$40,748	\$15,961	\$245,978
Advertising	\$0	\$0	\$0	\$0
M&E Studies	\$0	\$0	\$0	\$0
Regulatory Compliance	\$18,951	\$24,662	\$68,901	\$112,513
Other Administration	\$0	\$0	\$0	\$0
Indirect Costs	\$0	\$0	\$0	\$0
Oversight Costs				
- LIAB Start-Up	\$0	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0	\$0
- LIAB PY Present Year	\$0	\$0	\$37,566	\$37,566
- CPUC Energy Division	\$0	\$0	\$16,393	\$16,393
Total Oversight Costs	\$0	\$0	\$53,958	\$53,958
Total Costs	\$445,227	\$233,181	\$5,735,863	\$6,414,270

Table TA 7.2  
LIEE Cost Elements - San Diego Gas & Electric  
(Electric)

LIEE Program	Expenditures Recorded by Cost Element - 2000			
	Labor	Non-Labor	Contract	TOTAL
Energy Efficiency				
- Gas Appliances	\$0	\$0	\$0	\$0
- Electric Appliances	\$19,677	\$9,583	\$915,546	\$944,806
- Weatherization Measures	\$18,819	\$14,070	\$320,891	\$353,780
- Outreach Assessment/In Home Energy Education	\$228	\$174	\$33,844	\$34,246
- Education Workshops (EELI)	\$12,362	\$5,647	\$144,942	\$162,952
Energy Efficiency TOTAL	\$51,086	\$29,474	\$1,415,224	\$1,495,785
Pilots				
- Attic Venting	\$0	\$0	\$1,277	\$1,277
Total Pilots	\$0	\$0	\$1,277	\$1,277
Training Center	\$0	\$0	\$0	\$0
Inspections	\$18,927	\$4,075	\$1,596	\$24,598
Advertising	\$0	\$0	\$0	\$0
M&E Studies	\$0	\$0	\$0	\$0
Regulatory Compliance	\$0	\$0	\$0	\$0
Other Administration	\$0	\$0	\$0	\$0
Indirect Costs	\$0	\$0	\$0	\$0
Oversight Costs				
- LIAB Start-Up	\$0	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0	\$0
- LIAB PY Present Year	\$0	\$0	\$3,757	\$3,757
- CPUC Energy Division	\$0	\$0	\$1,639	\$1,639
Total Oversight Costs	\$0	\$0	\$5,396	\$5,396
Total Costs	\$70,013	\$33,549	\$1,423,493	\$1,527,055

Table TA 7.2  
LIEE Cost Elements - San Diego Gas & Electric  
(Gas)

LIEE Program	Expenditures Recorded by Cost Element - 2000			
	Labor	Non-Labor	Contract	TOTAL
Energy Efficiency				
- Gas Appliances	\$9,124	\$6,954	\$601,748	\$617,826
- Electric Appliances	\$0	\$0	\$0	\$0
- Weatherization Measures	\$169,372	\$126,628	\$2,899,518	\$3,195,517
- Outreach Assessment/In Home Energy Education	\$4,334	\$3,303	\$643,040	\$650,677
- Education Workshops (EELI)	\$3,090	\$1,412	\$36,236	\$40,738
Energy Efficiency TOTAL	\$185,921	\$138,296	\$4,180,541	\$4,504,759
Pilots				
- Attic Venting	\$0	\$0	\$0	\$0
Total Pilots	\$0	\$0	\$0	\$0
Training Center	\$0	\$0	\$0	\$0
Inspections	\$170,341	\$36,674	\$14,365	\$221,380
Advertising	\$0	\$0	\$0	\$0
M&E Studies	\$0	\$0	\$0	\$0
Regulatory Compliance	\$18,951	\$24,662	\$68,901	\$112,513
Other Administration	\$0	\$0	\$0	\$0
Indirect Costs	\$0	\$0	\$0	\$0
Oversight Costs				
- LIAB Start-Up	\$0	\$0	\$0	\$0
- LIAB PY Past Year	\$0	\$0	\$0	\$0
- LIAB PY Present Year	\$0	\$0	\$33,809	\$33,809
- CPUC Energy Division	\$0	\$0	\$14,753	\$14,753
Total Oversight Costs	\$0	\$0	\$48,562	\$48,562
Total Costs	\$375,213	\$199,632	\$4,312,370	\$4,887,215

Table TA 7.3  
 Program Detail By Housing Type and Heating Source  
 San Diego Gas & Electric

	Energy Saved and Program Costs			Number of Dwellings		
	Last Year (mWh)	Last Year (mTherm)	Last Year Expenses	Last Year (Planned)	Last Year (Actual)	This Year (Planned)
Gas Heat - Own						
-Single Family	116	17	\$334,108		314	
-Multi Family	0	0	\$370		1	
-Mobile Home	1662	106	\$2,298,273		6288	
Sub Total Dwellings Served	1778	123	\$2,632,751		6604	
Gas Heat - Rent						
-Single Family	93	12	\$176,705		380	
-Multi Family	663	104	\$1,406,060		3609	
-Mobile Home	46	3	\$47,382		198	
Sub Total Dwellings Served	801	119	\$1,630,147		4186	
Electric Heat - Own						
-Single Family	31	5	\$89,305		84	
-Multi Family	0	0	\$99		0	
-Mobile Home	442	28	\$614,315		1672	
Sub Total Dwellings Served	473	33	\$703,719		1755	
Electric Heat - Rent						
-Single Family	25	3	\$47,232		101	
-Multi Family	176	28	\$375,832		961	
-Mobile Home	12	1	\$12,665		53	
Sub Total Dwellings Served	213	32	\$435,729		1115	
Total Dwellings Served	3265	307	\$5,402,346	9500	13660	9500

Table TA 7.4  
Program detail By Measure - San Diego Gas & Electric

	Energy Saved and Program Costs			Number of Dwellings Served
	Last Year (mWh)	Last Year (mTherm)	Last Year Expenses	Last Year (Actual)
Energy Education				
- Outreach & Assesment*				13660
- In-Home Education				0
- Education Workshops				26575
Total Energy Education	376	14	\$858,062	40235
Furnace Gas				
- Repair - Gas				507
- Replacement - Gas				262
- Repair - Electric				0
- Replacement - Electric				0
Total Furnace Gas	0	2	\$416,163	769
Infiltration & Space Conditioning				
- Caulking				4158
- Door Weather Stripping				4191
- Duct Repair				0
- Cover Plates/Gaskets				6742
- Evaporative Cooler/Air Cond. Covers				603
- Window Replacements				0
- Glass Replacements				621
- Wall Repair (exterior)				0
- Door Repair				0
- Door Replacement				537
- Threshold Installed				2088
- Attic Ventilation				51
- Attic Insulation				116
- Attic Access Weatherstripping				0
- HVAC Air Filter Replacement				0
Total Infiltration & Space Conditioning	0	93	\$1,174,166	6742
Water Heating				
- Water Heater Blankets				1096
- Low Flow Showerhead				6518
- Water Heater Pipe Wrap				1163
- Faucet Aerators				7686
Total Water Heating	0	147	\$265,308	7686
Minor Home Repairs	0	52	\$330,290	2985
Miscellaneous Measures*	0	0	\$915	38
Evaporative Coolers	3	0	\$15,750	21
Refrigerators	287		\$409,125	714
Compact Fluorescents (inc. porchlights)	2599		\$460,190	12618

\*Note: 1) Miscellaneous Measures included Jamb replacements. These did not record savings.  
2) SDG&E includes In-Home Energy Education with Outreach & Assessment.



**TABLE TA 8.1  
Summer Initiative Programs  
PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS (NONRESIDENTIAL)  
ELECTRIC ONLY**

PROGRAM	UTILITY COSTS					Total
	Program Incentives (Recorded)		Admin		Other	
	Actual	Committed	Actual	Committed		
Statewide Programs						
Beat The Heat--ECOS Consulting	\$70,825	\$79,175	\$4,940	\$0	\$0	\$154,940
Residential Refrigerator Recycling --ARCA	\$750,000	\$2,250,000	\$1,227	\$0	\$0	\$3,001,227
Pool Efficiency Program	\$4,260	\$0	\$22,425	\$0	\$0	\$26,685
Campus Energy Efficiency Programs	\$0	\$0	\$0	\$0	\$0	\$0
UC - UC San Diego	\$0	\$1,125,000	\$0	\$0	\$0	\$1,125,000
CSU - San Marcos	\$437,500	\$437,500	\$1,592	\$0	\$0	\$876,592
Residential Hard To Reach	\$0	\$1,500,000	\$54,597	\$0	\$0	\$1,554,597
LED Traffic Signal Rebate Program	\$0	\$4,000,000	\$16,726	\$0	\$0	\$4,016,726
Subtotal	\$1,262,585	\$9,391,675	\$101,507	\$0	\$0	\$10,755,767
Utility-Specific Programs						
Whole House Fans	\$150	\$0	\$118	\$0	\$0	\$268
Halogen Torchiere Turn-In	\$10,094	\$0	\$7,208	\$0	\$0	\$17,302
Third Party Initiatives						
Program 1	\$0	\$1,000,000	\$6,560	\$0	\$0	\$1,006,560
Program 2						
Subtotal	\$10,244	\$1,000,000	\$13,886	\$0	\$0	\$1,024,130
Total	\$1,272,829	\$10,391,675	\$115,393	\$0	\$0	\$11,779,897

**TABLE TA 8.2**  
**Summer Initiative Programs**  
**DIRECT AND ALLOCATED ADMINISTRATIVE COSTS**

<b>PROGRAM</b>	<b>Administrative Cost Elements</b>				
	<b>Labor (direct)</b>	<b>Non-Labor (direct)</b>	<b>Contract (direct)</b>	<b>Allocated</b>	<b>Total</b>
Statewide Programs					
Beat The Heat--ECOS Consulting	\$4,085	\$855	\$0	\$0	\$4,940
Residential Refrigerator Recycling --ARCA	\$1,207	\$20	\$0	\$0	\$1,227
Pool Efficiency Program	\$16,543	\$5,882	\$0	\$0	\$22,425
Campus Energy Efficiency Programs	\$0	\$0	\$0	\$0	\$0
UC - UC San Diego	\$0	\$0	\$0	\$0	\$0
CSU - San Marcos	\$1,592	\$0	\$0	\$0	\$1,592
Residential Hard To Reach	\$0	\$54,597	\$0	\$0	\$54,597
LED Traffic Signal Rebate Program	\$12,123	\$4,603	\$0	\$0	\$16,726
Subtotal	\$35,550	\$65,957	\$0	\$0	
Utility-Specific Programs					
Whole House Fans	\$118	\$0	\$0	\$0	\$118
Halogen Torchiere Turn-In	\$6,783	\$425	\$0	\$0	\$7,208
Third Party Initiatives					
Program 1	\$4,725	\$1,835	\$0	\$0	\$6,560
Program 2					
Subtotal	\$11,626	\$2,260	\$0	\$0	\$13,886
Total	\$47,176	\$68,217	\$0	\$0	\$115,393

## **BALANCING ACCOUNTS FOR POST-1997 EE ACTIVITIES**

### **TA Section 9: Balancing Accounts for Post-1997 EE Activities**

Table TA 9.1 identifies the accounts held by SDG&E used to fund the energy efficiency program activities described in SDG&E's filings and reports to the CPUC.

Tables TA 9.2 through TA 9.5 provide the budgets, expenditures, energy savings, and cost effectiveness for energy efficiency programs categorized according to the California Board for Energy Efficiency (CBEE) definitions.

**TABLE TA 9.1  
PUBLIC PURPOSE PROGRAMS DSM BALANCING ACCOUNTS**

Account Name	Description	Authorized by
DSM Balancing Account	Actual DSM Program expenses are compared to authorized DSM program expenses.	D.97-10-057

**TABLE TA 9.2  
PROGRAM PORTFOLIO BUDGETS AND BENEFITS  
PROGRAM YEAR 2000**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET (\$000)						ENERGY SAVINGS		
				BUDGETED AMOUNT**			RECORDED AMOUNT***			(RECORDED)***		
				Total	Electric	Gas	TOTAL	Electric	Gas	MWh	MW	Therms
RESIDENTIAL	Residential Heating & Cooling Systems	Efficient Residential Equipment Information & Education	Statewide Energy Guide	\$127	\$102	\$25	\$9	\$7	\$2	0	0	0
			Information & Education	\$0	\$0	\$0	\$188	\$148	\$39	0	0	0
		Improved HVAC Sizing & Installation Practices	Contractor Training Prog	\$452	\$226	\$226	\$227	\$113	\$113	0	0	0
			Upstream Distributor Incent	\$443	\$217	\$226	\$516	\$253	\$263	188	0	0
	Residential Lighting	Targeted Information & Market Facilitation	Statewide Energy Guide	\$264	\$264	\$0	\$10	\$10	\$0	0	0	0
			Information & Education	\$0	\$0	\$0	\$252	\$252	\$0	0	0	0
		Improved Residential Lighting Fixtures	Statewide Upstream Lighting	\$2,503	\$2,503	\$0	\$2,308	\$2,308	\$0	14,346	2	0
	Residential Appliances	Targeted Information & Market Facilitation	Statewide Energy Guide	\$290	\$232	\$58	\$10	\$8	\$2	0	0	0
			Information & Education	\$0	\$0	\$0	\$290	\$232	\$58	0	0	0
		Energy Star Appliance Incentives	Downstream Appliance Incent	\$2,464	\$2,309	\$155	\$1,126	\$1,126	\$0	734	0	49
			Targeted Third Party Incent	\$0	\$0	\$0	\$18	\$9	\$9	0	0	0
	Retrofit and Renovation	Promotion & Facilitation of Comprehensive, Discretionary Retrofit Service	Statewide Upstream Appliance	\$0	\$0	\$0	\$1,060	\$1,060	\$0	202	0	9
			Res. EE Contractor Program	\$5,187	\$4,324	\$863	\$3,326	\$3,159	\$166	5,649	1	416
			Statewide Energy Guide	\$0	\$0	\$0	\$11	\$9	\$2	0	0	0
			Energy Mgmt Services-Audits	\$0	\$0	\$0	\$1,562	\$1,171	\$390	1,254	0	0
		Facilitation of Efficiency Retrofit at Time-of-Service or Renovation	In-Store EE Demonstration	\$0	\$0	\$0	\$188	\$94	\$94	0	0	0
			Energy Star Windows	\$0	\$0	\$0	\$483	\$217	\$265	0	0	0
			Information & Education	\$0	\$0	\$0	\$333	\$266	\$67	0	0	0
			Energy Efficient Mortgages	\$790	\$392	\$398	\$216	\$108	\$108	0	0	0
	RESIDENTIAL Total				\$12,520	\$10,569	\$1,951	\$12,316	\$10,644	\$1,672	22,374	3

**TABLE TA 9.2  
PROGRAM PORTFOLIO BUDGETS AND BENEFITS  
PROGRAM YEAR 2000**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET (\$000)						ENERGY SAVINGS				
				BUDGETED AMOUNT**			RECORDED AMOUNT***			(RECORDED)***				
				Total	Electric	Gas	TOTAL	Electric	Gas	MWh	MW	Therms		
NON-RESIDENTIAL	Large Comp Retrofit	Information/Education	Information	\$25	\$25	\$0	\$151	\$151	\$0	0	0	0		
			Procure - Savings	\$0	\$0	\$0	\$68	\$50	\$18	0	0	0		
		Financial Incentives	Large SPC	\$6,350	\$4,720	\$1,630	\$3,327	\$2,462	\$865	45,469	5	752		
			Fastrac	\$0	\$0	\$0	\$494	\$365	\$128	5,207	1	0		
			Emerging Technologies	\$0	\$0	\$0	\$124	\$124	\$0	0	0	0		
		Small Comp Retrofit	Financial Incentives	Small/Med SPC Express Efficiency-Rebates		\$4,179	\$3,893	\$286	\$774	\$650	\$124	3,799	0	7
	Turnkey Pilot				\$0	\$0	\$0	\$3,873	\$3,873	\$0	11,808	3	0	
	Energy Eff Fin(Energy Cents)				\$0	\$0	\$0	\$226	\$194	\$32	1,058	0	0	
	Technical Assist, Small Comp			Food Ser Efficient Dishwashing	\$0	\$0	\$0	\$12	\$12	\$0	0	0	0	
				Commercial Horizontal Washer	\$0	\$0	\$0	\$116	\$116	\$0	0	0	0	
				Targeted Third Pty(Energy Shaver)	\$0	\$0	\$0	\$185	\$185	\$0	0	0	0	
					\$0	\$0	\$0	\$244	\$195	\$49	103	0	123	
					\$0	\$0	\$0	\$154	\$138	\$15	0	0	0	
					\$0	\$0	\$0	\$1487	\$1,487	\$0	0	0	0	
	Information/Education			Purchase - Savings	\$1,487	\$1,487	\$0	\$66	\$57	\$9	0	0	0	
				Small Non-Res Information	\$0	\$0	\$0	\$406	\$406	\$0	0	0	0	
				Energy Mgmt Services-Audits	\$0	\$0	\$0	\$391	\$391	\$0	0	0	0	
	HVAC Turnover			High Efficiency HVAC Equipment	Building Operator Certification	\$0	\$0	\$0	\$64	\$64	\$0	0	0	0
					HVAC SPC	\$2,701	\$2,106	\$595	\$934	\$691	\$243	0	0	0
					HVAC Information	\$0	\$0	\$0	\$60	\$60	\$0	0	0	0
			Upstream HVAC Incentives	\$0	\$0	\$0	\$460	\$460	\$0	423	0	0		
				HVAC Midstream Market	\$0	\$0	\$0	\$239	\$239	\$0	143	0	0	
Motors Turnover	High Efficiency Motors	Motors SPC	\$753	\$753	\$0	\$555	\$555	\$0	0	0	0			
		Motors Information	\$0	\$0	\$0	\$28	\$28	\$0	0	0	0			
		Upstream Motors Incentives	\$0	\$0	\$0	\$146	\$146	\$0	581	0	0			
		Process Overhaul	Commercial, Industrial, Agricultural Process	Process Overhaul SPC	\$1,428	\$1,143	\$285	\$1,067	\$790	\$277	0	0	0	
				Process Overhaul Information	\$0	\$0	\$0	\$34	\$34	\$0	0	0	0	
				Tech Assistance, Process Over	\$0	\$0	\$0	\$302	\$302	\$0	0	0	0	
Commercial Remodel/Renovation														

**TABLE TA 9.2  
PROGRAM PORTFOLIO BUDGETS AND BENEFITS  
PROGRAM YEAR 2000**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET (\$000)						ENERGY SAVINGS		
				BUDGETED AMOUNT**			RECORDED AMOUNT***			(RECORDED)***		
				Total	Electric	Gas	TOTAL	Electric	Gas	MWh	MW	Therms
		Savings by Design	Tenant Improvement	\$1,058	\$1,058	\$0	\$972	\$972	\$0	6,290	2	13
NON-RESIDENTIAL Total				\$17,981	\$15,185	\$2,796	\$15,474	\$13,714	\$1,760	74,881	12	895

**TABLE TA 9.2  
PROGRAM PORTFOLIO BUDGETS AND BENEFITS  
PROGRAM YEAR 2000**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET (\$000)						ENERGY SAVINGS			
				BUDGETED AMOUNT**			RECORDED AMOUNT***			(RECORDED)***			
				Total	Electric	Gas	TOTAL	Electric	Gas	MWh	MW	Therms	
NEW CONSTRUCTION	Res New Construction	Market Leader Initiatives	Statewide Prog(Manu Housing)	\$1,573	\$1,402	\$171	\$116	\$93	\$23	791	0	50	
			Design Assistance/Incentives	\$0	\$0	\$0	\$1,356	\$1,220	\$136	0	0	0	
		Targeted Consumer Promotion and Information	Consumer Information & Awareness	\$337	\$337	\$0	\$312	\$312	\$0	0	0	0	
		Infrastructure and Product Development	CA Home Rating Sys(CHEERS)	\$45	\$34	\$11	\$42	\$32	\$10	0	0	0	
		Integrated New Home Products	New EE Products & Services	\$90	\$45	\$45	\$74	\$37	\$37	0	0	0	
		Capability Development	CEC's Pub Int Engy Res(PIER)	\$202	\$118	\$84	\$76	\$38	\$38	0	0	0	
			Targeted TPI	\$0	\$0	\$0	\$77	\$50	\$27	0	0	0	
		Comm New Construction	Savings By Design	Savings by Design	\$1,630	\$1,394	\$236	\$1,766	\$1,519	\$247	9,398	3	190
	Energy Design Resources		Energy Design Resources	\$406	\$344	\$62	\$396	\$337	\$59	0	0	0	
		Agric New Construction	Indust & Ag Process	Indust & Ag Savings by Design	\$180	\$90	\$90	\$204	\$102	\$102	5,757	1	0
			Codes and Standards, Local Gov't Init	New Construction Codes and Standards Support	Codes & Stand Support	\$225	\$191	\$34	\$233	\$198	\$35		
				Local Government Initiatives	Local Govt Initiatives	\$225	\$191	\$34	\$260	\$221	\$39		
<b>NEW CONSTRUCTION Total</b>				<b>\$4,913</b>	<b>\$4,146</b>	<b>\$767</b>	<b>\$4,912</b>	<b>\$4,159</b>	<b>\$754</b>	<b>15,947</b>	<b>4</b>	<b>240</b>	
<b>Grand Total</b>				<b>\$35,415</b>	<b>\$29,900</b>	<b>\$5,514</b>	<b>\$32,702</b>	<b>\$28,517</b>	<b>\$4,185</b>	<b>113,202</b>	<b>20</b>	<b>1,610</b>	

\*CBEE program categories (see Appendix C for list).

\*\* Recorded expenditures includes actual and committed.

\*\*\* Recorded energy savings based on actual and committed expenditures.



Table TA 9.3  
Program Portfolio Budgets and Benefits  
PROGRAM YEAR 2001

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET**			ENERGY SAVINGS**			
				(\$000)			(PLANNED)			
				Total	Electric	Gas	MWh	MW	Therms	
RESIDENTIAL	Residential Appliances	Energy Star Appliance Program	Downstream Appliance Incentives	\$ 1,352	\$ 1,149	\$ 203	1,236	0.10	67,200	
			Statewide Upstream Appliances	\$ 246	\$ 209	\$ 37	219	0.02	38,534	
		Targeted Information & Market Facilitation	Information & Education	\$ 408	\$ 265	\$ 143	0	0.00	0	
			Statewide Residential Energy Guide	\$ 20	\$ 13	\$ 7	0	0.00	0	
	Residential Heating & Cooling Systems	Targeted Information & Market Facilitation	Information & Education	\$ 267	\$ 267	\$ -	0	0.00	0	
			Statewide Residential Energy Guide	\$ 13	\$ 13	\$ -	0	0.00	0	
	Residential Lighting	Improved Residential Lighting Fixtures	Downstream Lighting	\$ 173	\$ 173	\$ -	770	0.59	0	
			SDG&E Lighting Program	\$ 1,644	\$ 1,644	\$ -	13,937	0.90	0	
			Statewide Upstream Lighting	\$ 571	\$ 571	\$ -	4,317	0.40	0	
			Targeted Information & Market Facilitation	\$ 267	\$ 267	\$ -	0	0.00	0	
		Statewide Residential Energy Guide	Information & Education	\$ 13	\$ 13	\$ -	0	0.00	0	
			Statewide Residential Energy Guide	\$ 13	\$ 13	\$ -	0	0.00	0	
	Residential Retrofit & Renovation	Promotion of Comprehensive Discretionary Retrofit Services	Energy Information Center (EIC)	\$ 173	\$ 147	\$ 26	0	0.00	0	
			Energy Management Services	\$ 1,367	\$ 1,162	\$ 205	854	0.08	213,400	
			In-Store Energy Efficient Demonstration Co-op Program	\$ 113	\$ 96	\$ 17	0	0.00	0	
			Lighting and Appliance Replacement (L&ARP)	\$ 1,008	\$ 1,008	\$ -	2,104	0.72	0	
			Residential Contractor Program: Multifamily (RCPMF)	\$ 2,163	\$ 562	\$ 1,601	2,697	0.36	494,194	
			Residential Contractor Program: Single Family (RCPSF)	\$ 1,995	\$ 1,077	\$ 918	1,686	0.00	148,424	
			SDG&E Pool Program	\$ -	\$ -	\$ -	0	0.00	0	
			Single Family Rebate (SFRebate)	\$ 931	\$ 503	\$ 428	2,072	0.00	255,064	
			Small Complex Self-Sponsorship (SCSSP)	\$ 173	\$ 67	\$ 106	2,932	0.18	269	
			Targeted Third Party Initiative ( TTPI ) for Demand Reduction projects	\$ 590	\$ 590	\$ -	0	0.00	0	
			Targeted Information & Market Facilitation	Information & Education	\$ 314	\$ 267	\$ 47	0	0.00	0
				Schools Program	\$ 454	\$ 386	\$ 68	64	0.00	0
				Statewide Residential Energy Guide	\$ 15	\$ 13	\$ 2	0	0.00	0
		Public Education Outreach Campaign		\$ 512	\$ 457	\$ 55	0	0.00	0	
	<b>RESIDENTIAL Total</b>			\$ 14,781	\$ 10,919	\$ 3,862	32,887	3.36	1,217,086	

Table TA 9.3  
Program Portfolio Budgets and Benefits  
PROGRAM YEAR 2001

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET**			ENERGY SAVINGS**				
NONRESIDENTIAL	Large Nonresidential Comprehensive Retrofit	Financial Incentives	Building Recommissioning TPI	\$ 270	\$ 270	\$ -	436	0.11	0		
			Emerging Technologies/Demonstration Projects	\$ 250	\$ 250	\$ -	40	0.02	0		
			Large Nonresidential SPC	\$ 4,235	\$ 2,965	\$ 1,271	8,481	0.80	586,344		
			Peak Load Reduction TPI	\$ 1,300	\$ 1,300	\$ -	2,850	0.71	0		
			Retrofits in Leased Space TPI	\$ 405	\$ 405	\$ -	962	0.24	0		
		Information/Education	Building Efficiency Rating Tool	\$ 75	\$ 64	\$ 11	0	0.00	0		
			Energy Information Center (EIC)	\$ 25	\$ 21	\$ 4	0	0.00	0		
			Large Nonresidential Info	\$ 95	\$ 81	\$ 14	0	0.00	0		
			Nonresidential HVAC Turnover	High Efficiency HVAC Equipment	Midstream HVAC	\$ 400	\$ 400	\$ -	320	0.64	0
			Nonresidential Motor Turnover	High Efficiency Motors	Upstream Motors	\$ 123	\$ 123	\$ -	498	0.22	0
	Nonresidential Process Overhaul	Information/Education	Technical Assistance (Process)	\$ 297	\$ 223	\$ 74	0	0.00	0		
	Nonresidential Remodeling/Renovation	Savings by Design	Savings By Design	\$ 855	\$ 641	\$ 214	5,974	1.31	28,907		
	Small Nonresidential Comprehensive Retrofit	Financial Incentives	Commercial Horizontal Clothes Washer	\$ 250	\$ 75	\$ 175	88	0.00	104,550		
			Express Efficiency-Rebates	\$ 3,982	\$ 3,584	\$ 398	29,987	3.51	0		
			Small Business SPC	\$ 810	\$ 608	\$ 203	2,033	0.31	0		
			Small Commercial Turnkey	\$ 450	\$ 360	\$ 90	2,809	0.31	0		
			Information/Education	Building Operator Certification	\$ 50	\$ 33	\$ 17	0	0.00	0	
		Business Energy Guide	\$ 25	\$ 20	\$ 5	0	0.00	0			
		Energy Information Center (EIC)	\$ 75	\$ 60	\$ 15	0	0.00	0			
		Energy Management Services (Audits)	\$ 600	\$ 451	\$ 149	0	0.00	0			
Small Non Residential Information		\$ 453	\$ 362	\$ 91	0	0.00	0				
Technical Assistance (Small)		\$ 150	\$ 120	\$ 30	0	0.00	0				
	Public Education Outreach Campaign	Public Education Outreach Campaign	\$ 545	\$ 273	\$ 273	0	0.00	0			
<b>NONRESIDENTIAL Total</b>				<b>\$ 15,720</b>	<b>\$ 12,687</b>	<b>\$ 3,033</b>	<b>54,479</b>	<b>8.19</b>	<b>719,800</b>		

Table TA 9.3  
Program Portfolio Budgets and Benefits  
PROGRAM YEAR 2001

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	PROGRAM BUDGET**			ENERGY SAVINGS**			
NEW CONSTRUCTION	Commercial New Construction	Energy Design Resources	Energy Design Resources	\$ 410	\$ 349	\$ 62	0	0.00	0	
		Savings By Design	Savings By Design	\$ 4,093	\$ 3,274	\$ 819	18,225	3.83	273,375	
	Industrial & Agricultural New Construction	Industrial and Agricultural Process	Savings By Design	\$ 466	\$ 354	\$ 112	3,983	1.11	0	
		Local Government Initiatives	Local Govt Initiatives	\$ 241	\$ 205	\$ 36	0	0.00	0	
	New Construction Codes & Standards Support, Local Gov't. Initiatives	New Construction Codes and Standards Support	Codes & Standards	\$ 241	\$ 205	\$ 36	0	0.00	0	
		Builder Training	Builder Training	\$ 150	\$ 127	\$ 22	0	0.00	0	
	Residential New Construction	California Home Energy Efficiency Rating System	California Home Energy Efficiency Rating System (CHEERS)	\$ 32	\$ 27	\$ 5	0	0.00	0	
		Home Energy Partnership	Home Energy Partnership - Appliance	Home Energy Partnership - Appliance	\$ 442	\$ 376	\$ 66	148	0.01	545
			Home Energy Partnership - Multi-family	Home Energy Partnership - Multi-family	\$ 977	\$ 830	\$ 147	1,058	0.42	70,080
			Home Energy Partnership - Single-family	Home Energy Partnership - Single-family	\$ 819	\$ 696	\$ 123	958	0.35	59,548
	Public Education Outreach Campaign	Public Education Outreach Campaign	Public Education Outreach Campaign	\$ 282	\$ 141	\$ 141	0	0.00	0	
	<b>NEW CONSTRUCTION Total</b>				<b>\$ 8,153</b>	<b>\$ 6,584</b>	<b>\$ 1,568</b>	<b>24,371</b>	<b>5.72</b>	<b>403,548</b>
	<b>Grand Total</b>				<b>\$ 38,654</b>	<b>\$ 30,191</b>	<b>\$ 8,463</b>	<b>111,737</b>	<b>17.27</b>	<b>2,340,434</b>

\*CBEE program categories (see Appendix C for list).

\*\* As of May 1, 2001.

**Table TA 9.4**  
**2000 Program Portfolio Cost Effectiveness**  
**(Without non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio
RESIDENTIAL	Residential Heating & Cooling Systems	Efficient Residential Equipment Information & Education	Statewide Energy Guide	-	-	-	\$ -	\$ -	\$ 9	\$ -	-	-
			Information & Education	-	-	-	\$ -	\$ -	\$ 188	\$ -	-	-
		Improved HVAC Sizing & Installation Practices	Contractor Training Prog	-	-	-	\$ -	\$ -	\$ 227	\$ -	-	-
			Linked HVAC Financial Incentives	Upstream Distributor Incent	188	0	-	\$ 97	\$ 111	\$ 447	\$ (336)	0.25
	Residential Lighting	Targeted Information & Market Facilitation	Statewide Energy Guide	-	-	-	\$ -	\$ -	\$ 10	\$ -	-	-
			Information & Education	-	-	-	\$ -	\$ -	\$ 252	\$ -	-	-
		Improved Residential Lighting Fixtures	Statewide Upstream Lighting	14,346	2	-	\$ 4,331	\$ 4,996	\$ 5,383	\$ (387)	0.93	0.80
	Residential Appliances	Targeted Information & Market Facilitation	Statewide Energy Guide	-	-	-	\$ -	\$ -	\$ 10	\$ -	-	-
			Information & Education	-	-	-	\$ -	\$ -	\$ 290	\$ -	-	-
		Energy Star Appliance Incentives	Downstream Appliance Incent	734	0	49	\$ 496	\$ 573	\$ 2,591	\$ (2,018)	0.22	0.19
			Targeted Third Party Incent	-	-	-	\$ -	\$ -	\$ 18	\$ -	-	-
		Statewide Upstream Appliance	202	0	9	\$ 122	\$ 141	\$ 1,156	\$ (1,015)	0.12	0.11	
	Retrofit and Renovation	Promotion & Facilitation of Comprehensive, Discretionary Retrofit Service	Res. EE Contractor Program	5,649	1	416	\$ 3,772	\$ 4,361	\$ 5,001	\$ (640)	0.87	0.75
			Statewide Energy Guide	-	-	-	\$ -	\$ -	\$ 11	\$ -	-	-
			Energy Mgmt Services-Audits	1,254	0	-	\$ 379	\$ 437	\$ 1,562	\$ -	-	-
			In-Store EE Demonstration	-	-	-	\$ -	\$ -	\$ 188	\$ -	-	-
			Energy Star Windows	-	-	-	\$ -	\$ -	\$ 309	\$ -	-	-
			Information & Education	-	-	-	\$ -	\$ -	\$ 333	\$ -	-	-
		Facilitation of Efficiency Retrofit at Time-of-Service or Renovation	Energy Efficient Mortgages	-	-	-	\$ -	\$ -	\$ 400	\$ -	-	-
<b>RESIDENTIAL Total</b>				<b>22,374</b>	<b>3</b>	<b>475</b>	<b>\$ 9,197</b>	<b>\$ 10,618</b>	<b>\$ 18,384</b>	<b>\$ (4,396)</b>	<b>0.58</b>	<b>0.50</b>

**Table TA 9.4**  
**2000 Program Portfolio Cost Effectiveness**  
**(Without non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC	PPT	PPT	PPT	TRC	
							Energy Benefits (Rbn) (\$000)	Energy Benefits (Rbn) (\$000)	Costs (\$000)	Net Benefits (\$000) **		Ratio
NON-RESIDENTIAL	Large Comp Retrofit	Information/Education	Information	-	-	-	\$ -	\$ -	\$ 151	\$ -	-	-
			Procure - Savings	-	-	-	\$ -	\$ -	\$ 68	\$ -	-	-
		Financial Incentives	Large SPC	45,469	5	752	\$ 22,410	\$ 25,783	\$ 10,037	\$ 15,746	2.57	2.23
			Fastrac	5,207	1	-	\$ 2,459	\$ 2,824	\$ 2,804	\$ 20	1.01	0.88
			Emerging Technologies	-	-	-	\$ -	\$ -	\$ 124	\$ -	-	-
	Small Comp Retrofit	Financial Incentives	Small/Med SPC	3,799	0	7	\$ 1,712	\$ 1,966	\$ 2,859	\$ (893)	0.69	0.60
			Express Efficiency-Rebates	11,808	3	0	\$ 5,473	\$ 6,288	\$ 5,012	\$ 1,276	1.25	1.09
			Turnkey Pilot	1,058	0	-	\$ 492	\$ 565	\$ 407	\$ 158	1.39	1.21
			Energy Eff Fin(Energy Cents)	-	-	-	\$ -	\$ -	\$ 12	\$ -	-	-
			Technical Assist, Small Comp	-	-	-	\$ -	\$ -	\$ 116	\$ -	-	-
			Food Ser Efficient Dishwashing	-	-	-	\$ -	\$ -	\$ 40	\$ -	-	-
			Commercial Horizontal Washer	103	-	123	\$ 362	\$ 421	\$ 573	\$ (151)	0.74	0.63
			Targeted Third Pty(Energy Shaver)	-	-	-	\$ -	\$ -	\$ 154	\$ -	-	-
			Information/Education	Purchase - Savings	-	-	-	\$ -	\$ -	\$ 66	\$ -	-
		Small Non-Res Information		-	-	-	\$ -	\$ -	\$ 406	\$ -	-	-
		Energy Mgmt Services-Audits		-	-	-	\$ -	\$ -	\$ 391	\$ -	-	-
		Building Operator Certification		-	-	-	\$ -	\$ -	\$ 64	\$ -	-	-
		HVAC Turnover	High Efficiency HVAC Equipment	HVAC SPC	-	-	-	\$ -	\$ -	\$ 162	\$ -	-
	HVAC Information			-	-	-	\$ -	\$ -	\$ 60	\$ -	-	-
	Upstream HVAC Incentives			423	0	-	\$ 192	\$ 220	\$ 747	\$ (527)	0.30	0.26
	HVAC Midstream Market			143	0	-	\$ 65	\$ 75	\$ 168	\$ (94)	0.44	0.39
	Motors Turnover	High Efficiency Motors	Motors SPC	-	-	-	\$ -	\$ -	\$ 96	\$ -	-	-
			Motors Information	-	-	-	\$ -	\$ -	\$ 28	\$ -	-	-
			Upstream Motors Incentives	581	0	-	\$ 263	\$ 302	\$ 138	\$ 164	2.19	1.90
Process Overhaul	Commercial, Industrial, Agricultural Process	Process Overhaul SPC	-	-	-	\$ -	\$ -	\$ 185	\$ -	-	-	
		Process Overhaul Information	-	-	-	\$ -	\$ -	\$ 34	\$ -	-	-	

**Table TA 9.4**  
**2000 Program Portfolio Cost Effectiveness**  
**(Without non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio
			Tech Assistance, Process Over	-	-	-	\$ -	\$ -	\$ 302	\$ -	-	-
	Commercial Remodel/Renovation	Savings by Design	Tenant Improvement	6,290	2	13	\$ 2,897	\$ 3,331	\$ 1,174	\$ 2,157	2.84	2.47
<b>NON-RESIDENTIAL Total</b>				<b>74,881</b>	<b>12</b>	<b>895</b>	<b>\$ 36,324</b>	<b>\$ 41,776</b>	<b>\$ 26,380</b>	<b>\$ 17,856</b>	<b>1.58</b>	<b>1.38</b>

**Table TA 9.4**  
**2000 Program Portfolio Cost Effectiveness**  
**(Without non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio	
NEW CONSTRUCTION	Res New Construction	Market Leader Initiatives	Statewide Prog(Manu Housing)	791	0	50	\$ 654	\$ 754	\$ 377	\$ 377	2.00	1.73	
			Design Assistance/Incentives	-	-	-	\$ -	\$ -	\$ 1,200	\$ -	-	-	
			Targeted Consumer Promotion and Information	-	-	-	\$ -	\$ -	\$ 312	\$ -	-	-	
		Infrastructure and Product Development	CA Home Rating Sys(CHEERS)	-	-	-	\$ -	\$ -	\$ 42	\$ -	-	-	
		Integrated New Home Products	New EE Products & Services	-	-	-	\$ -	\$ -	\$ 74	\$ -	-	-	
		Capability Development	CEC's Pub Int Engy Res(PIER)	-	-	-	\$ -	\$ -	\$ 76	\$ -	-	-	
			Targeted TPI	-	-	-	\$ -	\$ -	\$ 77	\$ -	-	-	
	Comm New Construction	Savings By Design	Savings by Design	9,398	3	190	\$ 4,937	\$ 5,686	\$ 1,626	\$ 4,059	3.50	3.04	
			Energy Design Resources	-	-	-	\$ -	\$ -	\$ 396	\$ -	-	-	
	Agric New Construction	Indust & Ag Process	Indust & Ag Savings by Design	5,757	1	(0)	\$ 2,607	\$ 2,996	\$ 548	\$ 2,448	5.46	4.75	
	Codes and Standards, Local Gov't Init	New Construction Codes and Standards Support	Codes & Stand Support	-	-	-	\$ -	\$ -	\$ 233	\$ -	-	-	
			Local Government Initiatives	-	-	-	\$ -	\$ -	\$ 260	\$ -	-	-	
	<b>NEW CONSTRUCTION Total</b>				<b>15,947</b>	<b>4</b>	<b>240</b>	<b>\$ 8,197</b>	<b>\$ 9,436</b>	<b>\$ 5,222</b>	<b>\$ 6,884</b>	<b>1.81</b>	<b>1.57</b>
	<b>Grand Total</b>				<b>113,202</b>	<b>20</b>	<b>1,610</b>	<b>\$ 53,718</b>	<b>\$ 61,830</b>	<b>\$ 49,985</b>	<b>\$ 20,345</b>	<b>1.24</b>	<b>1.07</b>

\*CBEE program categories (see Appendix C for list).

\*\* PPT Net Benefits = PPT Energy Benefits (RBn) - PPT Costs

Table TA 9.5  
 2000 Program Portfolio Cost Effectiveness  
 (With non-energy and market effects benefits, and without off-peak multipliers)

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Benefits Market Effects Benefits (\$000)	Non-Energy Benefits (\$000)	Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio
RESIDENTIAL	Residential Heating & Cooling Systems	Efficient Residential Equipment Information & Education	Statewide Energy Guide	-	-	-	-	\$ 270	\$ -	\$ -	\$ 214	\$ 56	1.26	-
			Information & Education	-	-	-	\$ -	\$ 5,929	\$ -	\$ -	\$ 4,691	\$ 1,238	1.26	-
		Improved HVAC Sizing & Installation Practices	Contractor Training Prog	-	-	-	\$ -	\$ 48	\$ -	\$ -	\$ 263	\$ (215)	0.18	-
			Upstream Distributor Incent	188	0	-	\$ 97			\$ 111	\$ 447	\$ (336)	0.25	0.18
	Residential Lighting	Targeted Information & Market Facilitation	Statewide Energy Guide	-	-	-	\$ -	\$ 308	\$ -	\$ -	\$ 245	\$ 64	1.26	-
			Information & Education	-	-	-	\$ -	\$ 7,983	\$ -	\$ -	\$ 6,316	\$ 1,667	1.26	-
		Improved Residential Lighting Fixtures	14,346	2	-	\$ 4,331			\$ 4,996	\$ 5,383	\$ (387)	0.93	0.58	
	Residential Appliances	Targeted Information & Market Facilitation	Statewide Energy Guide	-	-	-	\$ -	\$ 282	\$ -	\$ -	\$ 224	\$ 58	1.26	-
			Information & Education	-	-	-	\$ -	\$ 9,157	\$ -	\$ -	\$ 7,245	\$ 1,912	1.26	-
		Energy Star Appliance Incentives	Downstream Appliance Incent	734	0	49	\$ 496			\$ 573	\$ 2,591	\$ (2,018)	0.22	0.16
			Targeted Third Party Incent	-	-	-	\$ -			\$ -	\$ 18	\$ (18)	-	-
		Statewide Upstream Appliance	202	0	9	\$ 122	\$ 29	\$ -	\$ 141	\$ 1,178	\$ (1,008)	0.14	0.06	
	Retrofit and Renovation	Promotion & Facilitation of Comprehensive, Discretionary Retrofit Service	Res. EE Contractor Program	5,649	1	416	\$ 3,772			\$ 4,361	\$ 5,001	\$ (640)	0.87	0.59
			Statewide Energy Guide	-	-	-	\$ -	\$ 317	\$ -	\$ -	\$ 252	\$ 66	1.26	-
			Energy Mgmt Services-Audits	1,254	0	-	\$ 379	\$ 696	\$ -	\$ 437	\$ 2,090	\$ (958)	0.54	0.12
			In-Store EE Demonstration	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ 188	\$ (188)	-	-
			Energy Star Windows	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ 309	\$ (309)	-	-
			Information & Education	-	-	-	\$ -	\$ 10,530	\$ -	\$ -	\$ 8,331	\$ 2,199	1.26	-
		Facilitation of Efficiency Retrofit at Time-of-Service or Renovation	Energy Efficient Mortgages	-	-	-	\$ -	\$ 5	\$ -	\$ -	\$ 404	\$ (399)	0.01	-
	RESIDENTIAL Total			22,374	3	475	\$ 9,197	\$ 35,554	\$ -	\$ 10,618	\$ 45,389	\$ 783	1.02	0.50



**Table TA 9.5**  
**2000 Program Portfolio Cost Effectiveness**  
**(With non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Benefits Market Effects Benefits (\$000)	Non-Energy Benefits (\$000)	Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio	
NON-RESIDENTIAL	Large Comp Retrofit	Information/Education	Information	-	-	-	\$ -	\$ 76	\$ -	\$ -	\$ 223	\$ (147)	0.34	-	
			Procure - Savings	-	-	-	\$ -			\$ -	\$ 68	\$ (68)	-	-	
		Financial Incentives	Large SPC	45,469	5	752	\$ 22,410			\$ 25,783	\$ 10,037	\$ 15,746	2.57	2.11	
			Fastrac	5,207	1	-	\$ 2,459			\$ 2,824	\$ 2,804	\$ 20	1.01	0.85	
	Emerging Technologies		-	-	-	\$ -	\$ -	\$ -	\$ -	\$ 124	\$ (124)	-	-		
	Small Comp Retrofit	Financial Incentives	Small/Med SPC	3,799	0	7	\$ 1,712			\$ 1,966	\$ 2,859	\$ (893)	0.69	0.53	
			Express Efficiency-Rebates	11,808	3	0	\$ 5,473			\$ 6,288	\$ 5,012	\$ 1,276	1.25	0.97	
			Turnkey Pilot	1,058	0	-	\$ 492			\$ 565	\$ 407	\$ 158	1.39	1.10	
			Energy Eff Fin(Energy Cents)	-	-	-	\$ -			\$ -	\$ 12	\$ (12)	-	-	
			Technical Assist, Small Comp	-	-	-	\$ -	\$ 476	\$ -	\$ -	\$ 668	\$ (192)	0.71	-	
			Food Ser Efficient Dishwashing	-	-	-	\$ -			\$ -	\$ 40	\$ (40)	-	-	
			Commercial Horizontal Washer	103	-	123	\$ 362			\$ 421	\$ 573	\$ (151)	0.74	0.53	
			Targeted Third Pty(Energy Shaver)	-	-	-	\$ -			\$ -	\$ 154	\$ (154)	-	-	
		Information/Education	Purchase - Savings	-	-	-	\$ -			\$ -	\$ 66	\$ (66)	-	-	
			Small Non-Res Information	-	-	-	\$ -			\$ -	\$ 406	\$ (406)	-	-	
			Energy Mgmt Services-Audits	-	-	-	\$ -	\$ 109	\$ -	\$ -	\$ 1,222	\$ (1,112)	0.09	-	
			Building Operator Certification	-	-	-	\$ -	\$ 55	\$ -	\$ -	\$ 193	\$ (139)	0.28	-	
	HVAC Turnover	High Efficiency HVAC Equipment	HVAC SPC	-	-	-	\$ -			\$ -	\$ 162	\$ (162)	-	-	
			HVAC Information	-	-	-	\$ -			\$ -	\$ 88	\$ (88)	-	-	
			Upstream HVAC Incentives	423	0	-	\$ 192			\$ 220	\$ 747	\$ (527)	0.30	0.23	
			HVAC Midstream Market	143	0	-	\$ 65			\$ 75	\$ 168	\$ (94)	0.44	0.29	
	Motors Turnover	High Efficiency Motors	Motors SPC	-	-	-	\$ -			\$ -	\$ 96	\$ (96)	-	-	
			Motors Information	-	-	-	\$ -			\$ -	\$ 41	\$ (41)	-	-	
			Upstream Motors Incentives	581	0	-	\$ 263			\$ 302	\$ 138	\$ 164	2.19	1.13	
	Process Overhaul	Commercial, Industrial, Agricultural Process	Process Overhaul SPC	-	-	-	\$ -			\$ -	\$ 185	\$ (185)	-	-	
			Process Overhaul Information	-	-	-	\$ -			\$ -	\$ 50	\$ (50)	-	-	
			Tech Assistance, Process Over	-	-	-	\$ -	\$ 5,945	\$ -	\$ -	\$ 7,197	\$ (1,252)	0.83	-	
	Commercial Remodel/Renovation	Savings by Design	Tenant Improvement	6,290	2	13	\$ 2,897			\$ 3,331	\$ 1,174	\$ 2,157	2.84	1.64	
	<b>NON-RESIDENTIAL Total</b>				<b>74,881</b>	<b>12</b>	<b>895</b>	<b>\$ 36,324</b>	<b>\$ 6,661</b>	<b>\$ -</b>	<b>\$ 41,776</b>	<b>\$ 34,915</b>	<b>\$ 13,521</b>	<b>1.39</b>	<b>1.38</b>

**Table TA 9.5**  
**2000 Program Portfolio Cost Effectiveness**  
**(With non-energy and market effects benefits, and without off-peak multipliers)**

PROGRAM AREA*	PROGRAM	ELEMENT	STRATEGY	MWh	On-Peak MW	Therms	TRC Energy Benefits (RBn) (\$000)	PPT Benefits Market Effects Benefits (\$000)	Non-Energy Benefits (\$000)	Energy Benefits (RBn) (\$000)	PPT Costs (\$000)	PPT Net Benefits (\$000) **	PPT Ratio	TRC Ratio
NEW CONSTRUCTION	Res New Construction	Market Leader Initiatives	Statewide Prog(Manu Housing)	791	0	50	\$ 654	\$ -	\$ -	\$ 754	\$ 377	\$ 377	2.00	1.33
			Design Assistance/Incentives	-	-	-	\$ -			\$ -	\$ 1,200	\$ (1,200)	-	-
										\$ -				
		Targeted Consumer Promotion and Information	Consumer Information & Awareness	-	-	-	\$ -	\$ 1	\$ -	\$ -	\$ 313	\$ (311)	0.00	-
										\$ -				
		Infrastructure and Product Development	CA Home Rating Sys(CHEERS)	-	-	-	\$ -			\$ -	\$ 42	\$ (42)	-	-
										\$ -				
		Integrated New Home Products	New EE Products & Services	-	-	-	\$ -	\$ 0	\$ -	\$ -	\$ 74	\$ (74)	0.00	-
										\$ -				
	Capability Development	CEC's Pub Int Engy Res(PIER)	-	-	-	\$ -			\$ -	\$ 76	\$ (76)	-	-	
		Targeted TPI	-	-	-	\$ -			\$ -	\$ 77	\$ (77)	-	-	
	Comm New Construction	Savings By Design	Savings by Design	9,398	3	190	\$ 4,937			\$ 5,686	\$ 1,626	\$ 4,059	3.50	2.18
										\$ -				
			Energy Design Resources	-	-	-	\$ -			\$ -	\$ 396	\$ (396)	-	-
	Agric New Construction	Indust & Ag Process	Indust & Ag Savings by Design	5,757	1	(0)	\$ 2,607			\$ 2,996	\$ 548	\$ 2,448	5.46	4.53
										\$ -				
	Codes and Standards, Local Gov't Init	New Construction Codes and Standards Support	Codes & Stand Support	-	-	-	\$ -			\$ -	\$ 233	\$ (233)	-	-
										\$ -				
			Local Government Initiatives	-	-	-	\$ -			\$ -	\$ 260	\$ (260)	-	-
<b>NEW CONSTRUCTION Total</b>				<b>15,947</b>	<b>4</b>	<b>240</b>	<b>\$ 8,197</b>	<b>\$ 1</b>	<b>\$ -</b>	<b>\$ 9,436</b>	<b>\$ 5,222</b>	<b>\$ 4,215</b>	<b>1.81</b>	<b>1.57</b>
<b>Grand Total</b>				<b>90,828</b>	<b>16</b>	<b>1,135</b>	<b>\$ 44,521</b>	<b>\$ 6,662</b>	<b>\$ -</b>	<b>\$ 51,211</b>	<b>\$ 40,137</b>	<b>\$ 17,736</b>	<b>1.44</b>	<b>1.07</b>

\*CBEE program categories (see Appendix C for list).  
\*\* PPT Net Benefits = PPT Energy Benefits (RBn) - PPT Costs