ENERGY EFFICIENCY PROGRAMS
ANNUAL SUMMARY AND
TECHNICAL APPENDIX

2001 Results
May 2002

SDGE®

A Sempra Energy™ company

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Executive Summary

Overview

San Diego Gas & Electric (SDG&E) continued to administer energy efficiency programs in 2001, 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 2001, SDG&E's expenditures (actual and commitments) for its 2001 Energy Efficiency programs totaled $36.7 million and achieved a total of 149,761 megawatthours (MWh) in energy savings, 1,294 megawatts (MW) in demand savings and 2,912,743 therms in gas savings.

Residential Energy Efficiency Programs

The 2001 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/rebates, 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 2001, SDG&E worked with the other California utilities to continue the Statewide Energy Guide, the Statewide Upstream Lighting and Appliance program, and the Statewide Single Family Rebate program. The Statewide Energy Guide available in Spanish and English**,** was designed to provide customers with immediate and useful information to manage energy costs and improve the efficiency of their appliances. In 2001, 7000 guides were distributed in SDG&E's service territory. Under the Statewide Upstream Lighting program, which targeted the residential upstream (manufacturers) and midstream markets (retailers, vendors) for energy efficiency, over 378,000 ENERGY STAR® qualified lighting products were shipped into SDG&E's service territory. The Upstream Appliance program, which closed in early 2001 worked with other market participants, through cooperative activities to increase the overall knowledge and sales of ENERGY STAR® qualified appliances.

The Single Family Rebate program (formerly RCP) was developed through an extensive cooperative effort with other California utilities. It was designed to provide residential customers with direct rebates for various energy efficiency measures. The program provides downstream rebates for 25 various energy efficiency measures.

SDG&E also offered the following Residential programs: Information and Education, In-Store Demonstration, Energy Management Services, Downstream Appliance Incentives, and Targeted Third Party initiatives.

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. In 2001, SDG&E distributed 400,000 informational brochures to residential customers. In-Store Demonstration provides targeted information on energy efficient products to consumers who frequent home improvement centers. Under Energy Management Services, three types of audits are available: Mail-In, On-line, and In-Home. In 2001, SDG&E processed over 3000 Mail In audits, and over 300 In Home Audits for residential customers. An additional 3,681 customers logged onto SDG&E's website to perform on-line audits. Downstream Appliance Incentives provides incentives to customers for the purchase of ENERGY STAR® qualified dishwashers, clothes washers, room a/c's, and refrigerators. In 2001, the program rebated over 8000 various ENERGY STAR® and DOE qualified appliances.

Nonresidential Energy Efficiency Programs

SDG&E's Nonresidential Program Area continued to provide energy education, promote energy efficiency improvements, offered upstream and downstream incentives, and offered training seminars and participated in numerous trade show and community events.

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 2001, there were 76 SBSPC projects. 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. There were seventy-three (73) active SPC projects at yearend 2001.

Statewide standard incentives were also provided for 863 applications that were received for the installation of energy efficient equipment (e.g. heating, ventilation, refrigeration, lighting, and cooking) through the Express Efficiency program. The Small Business EZ Turnkey program, which offers rebates to SDG&E's smallest nonresidential customers, was designed to promote the installation of multiple energy efficient measures by providing higher incentives for additional measures. This program processed 431 applications in 2001.

SDG&E's Nonresidential Information Program provided information on energy efficient technologies and services through workshops and informational seminars. SDG&E also participated in a variety of trade fairs geared towards nonresidential customers.

SDG&E's Nonresidential Energy Audits program provided 579 on-site energy efficiency audits to customers with maximum energy usage of 500 kW. In 2001, nonresidential customers completed a total of 3,913 on-line audit sessions. 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. There were six proposals authorized and completed in 2001. The Process Technical Assistance program provides large commercial customers with on-site information and support needed to make decisions regarding energy efficiency retrofits. There were twelve proposals authorized and completed in 2001.

The Building Operator Certification program is a seven-module course designed to train and certify facility managers of their professional competence in energy efficient building operations

and maintenance. In 2001, eighteen students received the BOC certification through this program.

SDG&E's continued its third party initiative Horizontal Clothes Washer program. The San Diego County Water Authority implements this program. There were 1,379 vouchers redeemed in 2001 to replace existing clothes washers with high efficiency horizontal clothes washers.

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, signed 58 contracts in 2001. This program continues to be implemented through the Nonresidential New Construction programs: Savings By Design, and Energy Design Resources.

SDG&E also promoted emerging technologies by participating in the Emerging Technologies Coordinating Council (ETCC) with the other California utilities and the California Energy Commission. SDG&E signed a memorandum of understanding with four different customers for the installation of an emerging technology at their sites.

New Construction Energy Efficiency Programs

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

During 2001, SDG&E continued to administer Savings By Design, a statewide nonresidential new construction program that provides information, technical and design assistance, and financial incentives to building owners, architects, engineers, and design teams to promote the design and construction of high performance new commercial, industrial and agricultural facilities. Within its service territory, SDG&E actively promoted participation in Savings By Design through the development and distribution of information, and more than 75 presentations made at various industry sponsored events, as well as one-on-one meetings with local architectural and engineering firms. Other outreach activities included participation in co-sponsored events, and presenting energy efficiency design awards. These promotional efforts resulted in a total of 193 contracts signed by SBD program participants through December 2001, more than double the number of contracts signed in 2000.

Interest in the statewide Collaborative for High Performance Schools (CHPS) also continued to grow. This effort has proven extremely successful in combining and integrating programs and efforts of the participating organizations to emphasize the benefits of designing high performance schools that teach and encourage better learning environments. Over the past year, three schools located in SDG&E's service territory have implemented the CHPS methodology as it applies to energy-efficiency, and qualified to receive SBD incentives under the "Whole Building Approach." Two of these projects have been completed, and the third is under construction. A fourth school, the Escondido Charter School, has expressed interest in becoming the first CHPS certified school in the State.

Energy Design Resources, which provides many of the tools and training materials that are needed to optimize customer participation in Savings By Design, is now entering its second full year of operation at SDG&E. Local training seminars sponsored by EDR in 2001 drew 512

attendees at 21 different seminars, and over 26,000 site-hits were recorded at the Energy Design Resources Website.

SDG&E also 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.

SDG&E also offered a menu of residential new home construction design services and financial incentives under The Home Energy Partnership Program (HEPP) marketing umbrella. These activities target key members of the residential construction industry including designers, architects, engineers, developers, builders, energy consultants, contractors/subcontractors, sales agents and homebuyers.

Based on the ENERGY STAR® rating system, the HEPP Single Family program provides design assistance, advertising/marketing support, and financial incentives to builders, developers and design teams to encourage the design and construction of highly energy efficient single-family homes. This program, first rolled out in October 2000, gained significant momentum during its second year of operation and was so successful in capturing the interest of the local building industry that all available funding was committed by October 2001. Contracts were signed for 1,259 single-family units, which will be constructed over the next two years.

The HEPP - Multi-Family program provides design assistance, advertising/marketing support, and incentives for the incorporation of energy efficiency features in multi-family residential buildings with three or more units, which increase energy performance over California Title 24 requirements. Through December 2001, contracts were signed for the construction of 2,577 multi-family units. This program made major strides in the affordable housing segment. Last year, 1,032 or roughly forty-two percent of the approximately 2700 affordable housing units built in San Diego County participated in HEPP.

The HEPP – Appliance program, offers rebates for the purchase and installation of qualifying ENERGY STAR® appliances in newly constructed single or multi-family homes through participating design centers. During 2001, 19 builders committed to install 3,418 Energy Star appliances, including 712 clothes washers, 1,464 dishwashers, and 1,242 refrigerators.

SDG&E continued to support the California Home Energy Efficiency Rating System (CHEERS). Five CHEERS training seminars were hosted by SDG&E in 2001, along with 29 other training sessions designed to familiarize builders and other members of the local construction industry with Title 24 energy requirements.

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.

The Commission selected and approved implementation of four third party programs in SDG&E's service territory : Ecos consulting, ARCA, UCSD, and California State University.

ECOS Consulting offered a program to replace halogen torchieres in commercial and institutional buildings. This program was revised with CPUC approval in September 2001 to provide this measure to residential customers in commercially meters buildings in SDG&E's service area. Appliance Centers of America (ARCA) implemented a residential refrigerator recycling program. Under the program10,856 refrigerators and 2,079 freezers were recycled in 11,831 households in SDG&E's service territory. The University of California, San Diego and California State University, San Marcos installed various energy efficiency measures at the their facilities to achieve energy and demand savings by Summer 2001.

In addition, SDG&E 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. SDG&E signed contracts with these third parties to implement Summer Initiative programs in its service territory.

SDG&E's LED Traffic Signal rebate program was designed to encourage the retrofit of incandescent traffic lights to light emitting diode (LED) traffic lamps. SDG&E signed contracts with 26 governmental agencies in San Diego for replacement of these traffic signals.

The Whole House Fan program provides financial incentives to single family customers to purchase and install whole house fans. In 2000-2001, 666 rebates were processed under this program.

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. During the program, aproximately1,000 customers received 720 torchieres and, over 3000 compact fluorescent lamps at no cost .

The Residential Hard to Reach 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® lighting equipment, ENERGY STAR® refrigerators, ENERGY STAR® clothes washers, ENERGY STAR® dishwashers, HVAC equipment, thermal shell measures, water heaters, and low flow shower heads.

The Pool Efficiency program incorporates both pool pump efficiency and time-of-day controls for an integrated approach to pool electricity usage. In 2000-2001, SDG&E provided 4,984 rebates for pool pump conversions and signed up 14,639 customers to switch pool filtering to an off-peak time schedule.

Market Assessment & Evaluation

Market Assessment and Evaluation activities primarily focused on statewide coordination of program studies, management of the Residential Lighting and Appliance statewide studies, tracking of program indicators, completion of studies to support SDG&E's adopted PY 2001 performance incentive mechanism, and participation in the 2001 CEC data collection and analysis efforts.

TABLE 1.1
SUMMARY OF COSTS

Electric and Gas Combined			
	2001		2002
	Budgeted	Recorded	Budgeted*
Residential	$14,268,000	$14,140,266	$8,311,000
Nonresidential	$15,175,000	$14,921,415	$10,190,000
New Construction	$7,870,500	$7,644,583	$5,551,000
Cross-Cutting	$0	$0	$5,074,000
Public Ed & Outreach	$1,340,000	$1,340,000	$0
MA&E & Reg Oversight	$1,681,000	$1,392,832	$1,440,000
Shareholder Incentives	$2,705,780	$2,681,202	$0
Unallocated	$0	$0	$0
EE Total	$43,040,280	$42,120,298	$30,566,000
Summer Initiative	$13,300,000	$10,222,404	$0
Total EE and SI	$56,340,280	$52,342,702	$30,566,000

Electric Only			
	2001		2002
	Budgeted	Recorded	Budgeted*
Residential	$10,450,000	$9,614,071	$6,881,508
Nonresidential	$12,197,972	$11,936,047	$8,437,320
New Construction	$6,443,335	$6,265,267	$4,596,228
Cross-Cutting	$0	$0	$4,201,272
Public Ed & Outreach	$1,340,000	$1,258,250	$0
MA&E & Reg Oversight	$1,340,590	$1,108,712	$1,192,320
Shareholder Incentives	$2,135,943	$2,116,541	$0
Unallocated	$0	$0	$0
EE Total	$33,907,840	$32,298,887	$25,308,648
Summer Initiative	$13,300,000	$10,222,404	$0
Total EE and SI	$47,207,840	$42,521,291	$25,308,648

Gas Only			
	2001		2002
	Budgeted	Recorded	Budgeted*
Residential	$3,818,000	$4,526,194	$1,429,492
Nonresidential	$2,977,028	$2,985,369	$1,752,680
New Construction	$1,427,165	$1,379,316	$954,772
Cross-Cutting	$0	$0	$872,728
Public Ed & Outreach	$0	$81,750	$0
MA&E & Reg Oversight	$340,410	$284,120	$247,680
Shareholder Incentives	$569,837	$564,661	
Unallocated	$0	$0	$0
EE Total	$9,132,440	$9,821,411	$5,257,352
Summer Initiative	$0	$0	$0
Total EE and SI	$9,132,440	$9,821,411	$5,257,352

*Authorized in Decision 01-11-066

TABLE 1.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS

Annual and Lifecycle Energy Reductions, Electric, MWH

	2001 (Recorded)	2001 Life Cycle (Recorded)	2002 (Planned)*	2002 Life Cycle (Planned)*
Residential	44,222	516,219	20,579	243,831
Nonresidential	70,959	989,384	60,107	823,982
New Construction	34,182	553,300	10,331	159,299
Cross-Cutting	n/a	n/a	22,628	236,442
Total EE	149,362	2,058,904	113,645	1,463,553
Summer Initiative	49,745	n/a	n/a	n/a
Total EE and SI	199,107	2,058,904	113,645	1,463,553

Annual Demand Reductions, Electric, MW

	2001 (Recorded)	2002 (Planned)*
Residential	10.73	8.24
Nonresidential	12.88	10.81
New Construction	7.48	3.15
Cross-Cutting	n/a	3.12
Total EE	31.09	25.31
Summer Initiative	25.03	n/a
Total EE and SI	56.12	25.31

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

	2001 (Recorded)	2001 Life Cycle (Recorded)	2002 (Planned)*	2002 Life Cycle (Planned)*
Residential	1,445	516,219	616	9,275
Nonresidential	720	8,590	794	8,457
New Construction	709	12,282	235	3,802
Cross-Cutting	n/a	n/a	-	-
Total EE	2,875	537,091	1,646	21,534
Summer Initiative	75	n/a	n/a	n/a
Total EE and SI	2,949	537,091	1,646	21,534

* Note: Planned 2002 reflects proposals submitted to the CPUC on 12/15/01 and does not reflect 2002 1st Quarter activity.

TABLE 1.3
SUMMARY OF COST-EFFECTIVENESS

	Benefit-Cost Ratios			
	2001 (Recorded)		2002 (Planned)*	
	Utility Cost Test	Total Resource Cost Test	Utility Cost Test	Total Resource Cost Test
Residential	2.41	1.46	2.06	1.45
Nonresidential	3.87	2.20	4.83	1.77
New Construction	4.15	2.03	1.71	1.61
Cross-Cutting	n/a	n/a	2.39	1.88
Total EE Portfolio	3.37	1.89	2.98	1.70

* Note: Planned 2002 reflects proposals submitted to the CPUC on 12/15/01 and does not reflect 2002 1st Quarter activity.

TABLE 1.4
SUMMARY OF COST-EFFECTIVENESS

	Net Benefits; $ Mil	
	2001 (Recorded) TRC	2002 (Planned)* TRC
Residential	$10.65	$4.58
Nonresidential	$33.30	$18.31
New Construction	$16.08	$3.24
Cross-Cutting	n/a	$5.76
Total EE	$60.04	$31.89

Net Benefits = RBn - Net Costs

* Note: Planned 2002 reflects proposals submitted to the CPUC on 12/15/01 and does not reflect 2002 1st Quarter activity.

Residential Programs

Information

Statewide Energy Guide

Program Description:

The 2001 Residential Statewide Guide provided information to residential customers relating to energy efficient technologies, products, services and behavior modification to help them become more energy efficient in the home. Informational materials were developed to be consistent and uniform in design and content within all four California utilities. The 2001 program targeted the distribution of all remaining energy guides in each of the four service territories.

Consistent with OP 69 of D. 00-07-017, SDG&E developed an enhanced plan and budget for publicizing and distributing the Residential Statewide Energy Guide in 2001. SDG&E along with SoCalGas, Pacific Gas & Electric Company, and Southern California Edison, developed a specific program and budget associated with the Residential Statewide Energy Guide. This program included significantly expanded efforts to distribute guides to hard-to-reach customer group, which included a Spanish translation of the Guide.

2001 SDG&E Results and Achievements:

Residential Guides were distributed through direct mailings and contacts made with community resource centers, to include hard to reach areas throughout San Diego such as North Park, Barrio Logan, and San Ysidro. Nearly 1,000 guides were requested in aggregate from these organizations alone. Remaining Residential Guides in inventory were distributed at scheduled events and through field personnel. In total, SDG&E distributed over 7,000 Residential Energy Guides.

SDG&E's performance indicator for this program was "market participants that received information/education exhibit a higher level of knowledge of energy efficiency than those not having received the information/education do, and increase general awareness and access to energy efficiency opportunities." SDG&E tracked this indicator through a survey which showed that participants scored 3% higher than non-participants in their awareness of energy efficiency and 7% higher than non-participants with respect to knowledge of energy efficiency.

Information and Education

Program Description:

Information and Education is designed to educate and provide information to residential customers on energy efficiency, conservation and energy savings. The 2001 program incorporates several types of activities to include local and community events such as the Del Mar fair, brochure distribution and in-store displays.

Most information is delivered through brochures, fact sheets, advertising, and/or SDG&E's web site. A variety of these materials are also offered in Spanish and Vietnamese. In addition, the exhibit portion of the program provides a vehicle for the promotion of all other energy efficiency programs.

2001 Results and Achievements:

SDG&E participated in 60 community and corporate events through the end of December 2001. Attendance at these events is estimated at 393,000 people. In addition, over 400,000 brochures were distributed to customers in SDG&E's service territory. These brochures, which included How Much Are Your Appliances Running and 100 Ways (Floor-to-Ceiling Guide), were re-designed in 2001 to reflect updated energy savings data. The interactive "scanning game" used at many exhibits was also updated to reflect current energy costs. Six local malls served as distribution points for SDG&E's energy efficiency information and brochures.

In-Store Energy Efficient Demonstration Co-op

Program Description:

The In-Store Energy Efficient Demonstration Co-op (In Store Kiosk) program is designed to provide residential customers with information on various energy saving appliances and technologies through the use of automated kiosks located in home improvement retail centers (i.e. Dixieline, Home Depots). The interactive kiosks display energy efficient concepts and practical tips as well as energy saving literature. The mobility of the in-store kiosk allows retailers the flexibility to display information according to individual needs such as seasonal and marketing events, and retailer promotions.

2001 Results and Achievements:

In 2001 SDG&E's Energy Chronicles, the brochure which is distributed through the kiosks, was updated to reflect the most current information on ENERGY STAR® qualifying products and appliances. An earlier edition of the Chronicle addressed issues surrounding the uncertainty of the 2000 energy crisis. The new updated version of the chronicle provides specific information on appliances and programs such as the CARE program that assist Hard To Reach customers. In addition new kiosks were placed in Lowes stores in SDG&E service territory, and National City. Over 70 kiosks were placed in various locations overall.

Schools

Program Description:

The 2001 School program is a comprehensive energy awareness program, which educates kindergarten through sixth graders on the benefits of energy conservation. The program also provides parents with practical information they can apply to make their homes more energy efficient. The 2001 program targets kindergarten through sixth grade, through a combination of in class presentations, and classroom material. It is anticipated that this combined approach will increase knowledge of concepts that will effectively help develop awareness of basic energy efficiency practices both at school and at home.

2001 Results and Achievements:

During the First Quarter of 2001, a standard curriculum was completed for lower and upper grade levels. Initially approximately 16,000 classroom kits were mailed out to schoolteachers including take home exercises for students and information for their parents in both English and Spanish. Curriculum "kick-off" events were held at several schools and more than 800 CFLs were distributed at these events. During the third and fourth quarters, 50,000 book covers displaying energy efficiency messages were also distributed. In addition, various posters were designed, produced, and distributed. Thirteen welcome back-to school functions were attended that involved both parents and students. In addition, twenty-six presentations at twelve various schools and Cub Scout dens were also held.

Energy Information Center

Program Description

The Energy Information Center (EIC) utilizes trained Energy Information Representatives (EIR's) to assist residential and nonresidential customers with specific issues related to energy efficiency. Customer calls are routed through SDG&E's existing general customer service number: 1 (800) 411-SDGE. The EIC provides customers with an opportunity to speak with a trained representative regarding issues pertaining to energy conservation and available services. Representatives are also trained to perform telephone audits; schedule in-home audits and conduct follow-up phone calls with customers.

2001 Results & Achievements

Information Representatives (EIR's) attended extensive training in 2001, which included, classes on ENERGY STAR® windows, whole house energy efficiency, and energy efficiency program overviews. The Energy Information Center (EIC) opened on April 18, 2001. Beginning on April 18, 2001, through - December 31, 2001, the EIC handled 51,534 phone calls.

Brochure distribution was handled in-house, to include mailings, which were done on a daily basis. Information provided to customers is another method to inform customers about other available energy efficiency programs. A quality assurance monitoring system, for the EIR's, was installed to ensure quality and accurate customer service was provided to customers.

Energy Management Services

Energy Management Services (EMS)

Program Description:

Residential Energy Management Services is comprised of three types of audits: In-Home Audit, Mail-In both English and Spanish and On-Line Audits. Customers who call the Energy Information Center regarding an energy audit may participate in any of the three audit types. All audits seek to provide detailed information to residential customers on what they can do to become more energy efficient in their home, by changing their behavior and attitudes towards energy efficiency. Through the Audit program, customers receive information on how they can participate in rebate and incentive programs as well as other services that are offered by SDG&E. In addition, there is a partnership audit component, which includes partnering with local cities, communities and organizations to make audits easily available to local residents. The Mail In Audit offers one compact florescent and the In–Home Audit offers up to three compact florescent per customer, for participating in the program.

2001 Results and Achievements:

Accomplishments	**Total Number**
Mail-In audit (includes five Spanish)	3,653
On-line audit	3,681
Partnership audits (includes both Mail In & In Home)	746
In Home Audits	309
	8389 Audits Completed

In 2001, 3,348 energy efficient compact florescent bulbs were distributed through the In-Home and Mail In options.

Energy Efficient Incentives

Downstream Appliance Incentives

Program Description:

Downstream Appliance Rebates promotes ENERGY STAR® and Department Of Energy (DOE) compliant qualified energy efficient appliances through customer rebates for qualifying clothes washers, refrigerators, room air conditioners and dishwashers. In 2001, over 80 retail outlets participated in the program by offering direct rebates to encourage customers to purchases higher efficiency appliances by reducing their initial purchase cost.

2001 Results and Achievements:

Appliance	Units Rebated
ENERGY STAR® Clothes Washer	3,068
ENERGY STAR® Dishwasher	1,433
ENERGY STAR® Room A/C	18
ENERGY STAR® Refrigerators	1,100
DOE 2001 Refrigerators	2,955

Downstream Lighting

Program Description:

Downstream Lighting targets the replacement of inefficient Halogen torchiere fixtures and/or incandescent bulbs with energy efficient ENERGY STAR® qualified replacement products. This FREE promotion is targeted at hard to reach lower income and elderly customers located within SDG&E's service territory (San Diego County and South Orange County), and offers customers no cost CFL's and torchieres in a one for one exchange. The SDG&E Downstream Lighting program began on April 1, 2001, once 2000 Summer Initiative (SI) program funds were exhausted.

2001 Results and Achievements:

Under the energy efficiency program which ran from April 2001-June 2001, multiple lighting events were held where 6,831 customers received over one thousand torchieres and over 24,000 energy efficient compact florescent lamps. The popularity of lighting turn-in events continued to increase, and funding for the SDG&E Downstream was completely expended and/or committed as of June 30, 2001.

Multi-Family Rebate

Program Description:

The Multifamily Rebate Program provides rebates to multifamily property owners, managers or contractors to property owners who install efficiency measures in their rental units and/or common areas of apartment complexes, mobile home parks, and homeowner associations. The program was redesigned in 2001 to target "hard to reach" customers (e.g., lower to moderate income apartment tenants and senior citizens with fixed incomes), and has proven to be very successful even with reductions in rebate levels from past years. Participating property owners have the option of installing energy efficiency measures themselves or using the services of a contractor of their choice.

The Multifamily Rebate Program is designed to help those customers within the multifamily residential sectors that have traditionally not actively participated in energy efficiency programs. The primary objectives of this program are to increase customer awareness, help multifamily customers - in particular, the hard-to-reach (HTR) sector - reduce energy usage and manage their energy bills, and achieve long term peak demand and energy savings. The incentives are offered for a comprehensive list of energy efficiency measures.

2001 Results and Achievements:

Through December, a total of $14,000,000 million were committed in rebates and $2,000,000 in rebate requests were processed, totaling 100% of the program's $2,000,000 incentive budget. In 2001, 881 apartment complexes have received rebates for purchasing and installing energy efficient measures. Approximately 86% of these rebates involved installation of interior and exterior lighting measures and the remaining 14% involved rebates for energy-efficient appliances, (primarily refrigerators).

The Performance Indicator for the program is "number of contractors that offer services to multi-family property owners/property managers." Eight project sponsors have submitted Agreements with SDG&E and have participated in the 2001 Program.

Single Family Rebate

Program Description:

The 2001 Single Family Rebate program is designed to achieve long term energy savings through the installation of multiple measures in the home, which emphasize a "whole house approach". The program which focuses on providing direct rebates and incentives to residential homeowners was revised in 2001, to add the provision of rebates for "do-it-yourselfers" and homeowners who prefer to hire their own contractor to install energy efficiency measures. SDG&E consolidated the Residential Contractor Program (RCP) and Single Family Rebate into one program in 2001.

2001 Results and Achievements:

In 2001 the program was streamlined to accommodate an emphasis on direct customer rebates. Customers now have the option of receiving the rebate directly or assigning the rebate to their own contractor. Priority was also given to close out of the 2000 Single Family RCP program, and the processing of project applications that were submitted by the February 28th deadline. The following table lists total measures installed under this program in 2001:

2001 Measures	**Units Rebated**	**2001 Measures**	**Units Rebated**
Furnaces	945	Water Heaters	1,371
Air Conditioners	1,128	Water Heater Pipe Insulation	423
Heat Pumps	73	Water Heater Blankets	123
AC/HP Diagnostics	1,729	Faucet Aerators	54
AC/HP Tune-ups	1,553	Chalking	105
Windows	527,972	Cover Plate Gaskets	245
Reflective Window Film	11,343	Door Shoes	78
Thermostats	1,210	Thresholds	130
Duct Testing	2,612	Weather-stripping	186
Duct Sealing	1,688	Evaporative Coolers	35
Showerheads (2.0 gpm)	45	Evaporative Cooler Covers	4
Attic Insulation	755,069sq. ft	Whole House Fans	804

2001 Measures	Units Rebated	2001 Measures	Units Rebated
Wall Insulation	188,316 sq. ft		

Under the Residential Contractor program component, SDG&E tracked the following performance indicators for this program:
Number of contractors trained or certified by third parties on techniques/practices as defined in the Residential Contractor program standards manual. Increase in customer awareness of the interaction among energy related systems in their homes, number of contractors trained or screened by third parties on proper installation and diagnostic procedures; and number of contractors that offer services to multi-family property owners/property managers. SDG&E Single Family RCP program showed a very high level of performance in these areas. In total, eight Project Sponsors submitted agreements with SDG&E and participated in the 2001 program.

Upstream programs

Statewide Upstream Lighting (incorporates SDG&E Lighting component))

Program Description:

The Residential Statewide Lighting Program was designed to promote and educate consumers on the benefits of ENERGY STAR® lighting products. This program promoted various lighting technologies and included an incentive to help offset the cost of the product for customers.

In 2001, SDG&E augmented the statewide program with additional lighting manufacturer buy-downs. This component was designed to reduce the price consumers' pay for ENERGY STAR® lighting products at retail outlets under the program.

2001 SDG&E Results and Achievement

Under the statewide program, the utilities jointly participated in co-op projects with three manufacturers to promote ENERGY STAR® qualified torchieres and compact fluorescent light bulbs to multiple retailers. Funding for this effort had been expended and this activity was completed by the end of the Second Quarter. By redirecting funds, from other EE programs, SDG&E worked with lighting manufacturers Lights of America, Good Earth Lighting, Feit Electric and participating retailers including Ace Hardware, Dixieline, Home Depot, Lamps Plus, Longs Drugs, Lowes Hardware, Orchard Supply, Price-Costco, Sam's Club and Wal-Mart on a year-end manufacturer buydown campaign. The year-to-date totals for the combined IOU statewide and SDG&E utility specific activities accounted for over 378,000 ENERGY STAR® qualified lighting products shipped into SDG&E's service territory which included 357,661 CFL's, 12,785 Torchieres and 7,725 indoor/outdoor fixtures.

SDG&E 's performance indicators for this program are as follows: number of lighting manufacturers participating in the co-op program -Lighting manufacturers signed participation agreement such that an additional six retailers participated in SDG&E's co-op lighting program in 2001, which meets the objective of this Performance Indicator. Number of lighting manufacturers and percent that are participating by shipping ENERGY STAR® lights -SDG&E

tracked the objectives of this performance indicator through an increase in the number of manufacturers agreeing to ship ENERGY STAR® qualified lighting products to retailers in SDG&E's service territory.

Increased number of lighting manufacturers participating in the program and shipping ENERGY STAR® qualified lighting products to retail companies in California. In order to monitor this indicator, SDG&E tracked the objectives by increasing the number of manufacturers agreeing to ship ENERGY STAR® qualified lighting products to retailers in SDG&E's service territory. Market Share and Increased sales of ENERGY STAR® qualified lighting products were tracked through an increase the market share for CFL's. There is some evidence that the market share for compact fluorescent hard-wired lighting fixtures has also increased in the new construction segment.

Statewide Upstream Appliances

Program Description:

The Upstream Appliance program leverages opportunities with appliance manufacturers and retailers to promote awareness and continued interest in ENERGY STAR® qualified appliances. It is anticipated that the results of these partnerships will lead to higher stocking levels of ENERGY STAR® qualified appliances, higher product visibility and increased promotion of the benefits to customers. By funding activities cooperatively with the upstream market actors program resources will be leveraged to increase overall measurable energy savings.

2001 SDG&E Results and Achievements:

The Upstream Appliance program closed in early 2001. The program worked with other market participants, through cooperative activities to increase the overall knowledge and sales of ENERGY STAR® qualified appliances.

For Upstream Appliance, the following program performance indicators were measured based on the results of an MA&E report. Increase the sales of ENERGY STAR® qualified room air conditioners, market share of ENERGY STAR® qualified appliances, obtain major manufacturers participating in the co-op activities to increase sales of ENERGY STAR® qualified appliances, and number of customers reached with energy efficiency messages. Overall, substantial progress has been made during 2001 to increase the market share of ENERGY STAR® qualified appliances. SDG&E did not formally solicit any manufacturers to participate in a co-op appliance program in 2001, in order to re-direct funding to downstream efforts which provided more money for available rebates.

Targeted Third Party Initiative

Program Description:

The Residential Targeted Third Party program, which was issued under a Request For Proposal (RFP) on March 2, 2001 and awarded on April 27, 2001, targets hard-to-reach fixed-income and elderly senior citizens living in mobile homes within SDG&E's service territory (San Diego

County and south Orange County). through a comprehensive central heating air conditioning and lighting program.. The program actively targeted non-English speaking customers.

2001 Results and Achievements:

Installations of energy saving measures were implemented in 1,290 mobile homes under this TPI.

TABLE 2.1
SUMMARY OF COSTS:
RESIDENTIAL PROGRAM AREA

Electric and Gas Combined

	2001	
	Budgeted	Recorded
Information	$2,125,200	$2,393,035
EMS	$1,169,800	$770,119
EEI		
SPCs	$0	$0
Rebates	$8,091,000	$8,210,669
Loans	$0	$0
Other	$0	$0
Upstream	$2,882,000	$2,766,442
Total	$14,268,000	$14,140,266

Electric Only

	2001	
	Budgeted	Recorded
Information	$1,803,980	$2,054,759
EMS	$994,330	$654,602
EEI		
SPCs	$0	$0
Rebates	$4,780,940	$4,146,271
Loans	$0	$0
Other	$0	$0
Upstream	$2,870,750	$2,758,439
Total	$10,450,000	$9,614,071

Gas Only

	2001	
	Budgeted	Recorded
Information	$321,220	$338,276
EMS	$175,470	$115,518
EEI		
SPCs	$0	$0
Rebates	$3,310,060	$4,064,398
Loans	$0	$0
Other	$0	$0
Upstream	$11,250	$8,003
Total	$3,818,000	$4,526,194

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

Annual and Lifecycle Energy Reductions, Electric, MWH

	2001 Annual (Recorded)	2001 Life Cycle (Recorded)
Information	N/A	N/A
EMS	212	1,906
EEI		
SPC	N/A	N/A
Rebates	14,076	172,053
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	29,934	342,261
Total	44,222	516,219

Demand Reductions, Electric, MW

	2001 Annual (Recorded)
Information	N/A
EMS	0.02
EEI	
SPC	N/A
Rebates	7.24
Loans	N/A
Other	N/A
Upstream Programs	
Information	N/A
Financial Assistance	3.47
Total	10.73

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

	2001 Annual (Recorded)	2001 Life Cycle (Recorded)
Information	N/A	N/A
EMS	0	1,906
EEI		
SPC	N/A	N/A
Rebates	1,424	172,053
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	21	342,261
Total	1,445	516,219

TABLE 2.3
SUMMARY OF COST-EFFECTIVENESS:
RESIDENTIAL PROGRAM AREA

	Benefit-Cost Ratios	
	2001 (Recorded)	
	Utility Cost Test	Total Resource Cost Test
Information	N/A	N/A
EMS	0.15	0.15
EEI		
SPCs	N/A	N/A
Rebates	1.89	1.25
Loans	N/A	N/A
Other	N/A	N/A
Upstream Programs		
Information	N/A	N/A
Financial Assistance	6.65	2.36

TABLE 2.4
SUMMARY OF COST-EFFECTIVENESS:
RESIDENTIAL PROGRAM AREA

Net Benefits, $Mill	2001 Recorded
Information	($2.39)
EMS	($0.67)
EEI	
SPCs	$0.00
Rebates	$3.11
Loans	N/A
Other	N/A
Upstream Programs	
Information	$0.00
Financial Assistance	$10.61
Total	$10.65

Nonresidential Programs

Nonresidential Information

Information

Program Description

The Nonresidential Information program (large and small) provides information about energy efficiency and services and introduces customers to state-of-the-art efficient technologies and practices through workshops and seminars. The program targets facility managers of large businesses (greater than 500 kW demand and/or 250,000 therms per year) in addition to focusing on business owners and property managers of small/medium businesses (less than or equal to 500 kW and/or 250,000 therms per year).

2001 Results & Achievements

An informational event to educate and promote SDG&E's 2001 nonresidential energy efficiency programs to suppliers and contractors was held on February 27th and February 28th. A total of 347 individuals attended the six large nonresidential customer seminars and 150 individuals attended the four small nonresidential customer seminars. Approximately 9,198 individuals attended the trade fairs where SDG&E was a participant. SDG&E personnel gave presentations on SDG&E programs at 43 different groups or organizational events.

Seminar events for the large nonresidential customers included:

- May 16 - Fume Hood Technology Workshop: Working in conjunction with Biocom, representing the biotech and pharmaceutical industries. There were 30 attendees.
- May 24 - Creating Value in Commercial Real Estate: Partnered with ENERGY STAR®. One of two seminars on computer based training on the ENERGY STAR® Portfolio Manager and QuikScope. There were 21 attendees.
- June 27 - Lighting Efficiency Showcase Seminar: The morning session was for large nonresidential customers. This event demonstrated advanced lighting applications and design for institutional, commercial and other nonresidential customers with local vendor displays. There were 117 attendees.
- October 2 & October 3 - Energy Solutions for Schools & Cities: A seminar focusing on whole building solutions, were co-sponsored by the City of San Diego, San Diego Regional Energy Office (SDREO) and San Diego County Office of Education. There were 50 attendees on October 2nd and 48 attendees at the October 3rd seminar.
- October 31 - The Do's and Don'ts of Applying Adjustable Speed Drives: Seminar took place at the U.S./Mexico Plant Engineering Show. There were 81 attendees.

Seminar events for the small/medium nonresidential customers included:

- March 13 - ENERGY STAR® Workshop for Restaurants: Seminar focused on low cost/no cost and investment solutions. Part of the Hospitality Expo & Job Fair. There were 13 attendees.

- April 27- How to Become an Energy Efficient Business Workshop: Whole building solutions for Non-Profit organizations. There were 63 attendees.
- May 24 - Creating Value in Commercial Real Estate: Partnered with ENERGY STAR®. Second of two seminars on computer based training on the ENERGY STAR® Portfolio Manager and QuikScope. There were 28 attendees.
- June 27 - Lighting Efficiency Showcase Seminar: The afternoon session was for small/medium nonresidential customers. This event demonstrated basic and advanced lighting applications and design. Lighting vendors had table-top displays. There were 46 attendees.

Trade fair events attended or sponsored by SDG&E for nonresidential customers included:

March 13	Hospitality Expo. - Approximately 300 attendees
April 03	ASHRAE Annual Heating, AC, Refrig.Tradeshow- Approximately 300 attendees
April 10	North County Business to Business Expo - Approximately 700 attendees
April 20	San Diego Energy Forum - Approximately 300 attendees
April 26	S.D Regional Chamber of Commerce Energy Forum- Approximate attendees 50
April 26	Real Estate Expo & Tradeshow XII – Approximately 1700 attendees
May 7-9	Summer Preparedness – Approximately 1100 attendees
May 9-10	West Coast Energy Management Congress – Approximately 1000 attendees
June 7	North County Summer Preparedness – Approximately 90 attendees
June 14 -19	Business to Business Expo – Approximately 2000 attendees
August 2	Chula Vista Leap Fair – Approximately 150 attendees
Sept. 26	Coronado Chamber of Commerce Bus. Expo – Approximately 50 attendees
Oct. 26	SDRCC Economic Summit – Approximately 379 attendees
Oct 31-Nov 1	US/Mexico Plant Engineering & Maint. Show - Approximately 1045 attendees
Nov. 8	Small Business Energy Fair – Approximately 34 attendees

The Business Seminar Online Calendar successfully launched on March 20. Site visitors can use a credit card to pay on-line for services. The "user personalization" allows registered visitors to view the information/seminars that they have specifically asked to see. The Online Calendar has received positive responses from business organizations as a descriptive resource and easy registration tool.

For the large customer seminars, the performance indicator "Customers attending educational seminars will indicate a higher likelihood of adopting measures/techniques featured in workshop-sessions." was measured through surveys. The results showed that 59% of the seminar attendees indicated a willingness to adopt measures/techniques discussed at the workshops.

For the small and medium customer seminars, the performance indicator "Customers attending educational seminars indicate a higher likelihood of adopting measures/techniques taught at the

sessions." was measured through surveys. The results showed that 73% of the seminar attendees indicated a willingness to adopt measures/techniques taught at the workshops.

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.

2001 Results & Achievements

SDG&E responded to approximately 184 requests for information on the financing program. Approximately 425 program fact sheets were distributed at various meetings and events. SAFE-BIDCO received six applications for energy efficiency project financing. One application was approved for funding, two were pending approval and three applications were cancelled.

Building Operator Certification

Program Description

The Building Operator Certification (BOC) program trains and certifies facility managers of commercial or governmental buildings to increase professional competence in energy efficient building operation and maintenance. The certification program is comprised of a series of training courses conducted by the Northwest Energy Efficiency Council (NEEC), and has met with considerable success in Washington and Oregon. SDG&E strongly encouraged participation in the BOC program of all City of San Diego and the City of Chula Vista facility managers.

2001 Results & Achievements

Northwest Energy Efficiency Council (NEEC) was contracted to provide a certification program for city building operations employees. Recruitment began in the second quarter and 18 city employees are participating in the 7 module certification series. The subjects covered in the series included Building Systems Overview, Facility Electrical Systems, HVAC Systems & Controls, Energy Conservation Techniques, Efficient Lighting, Building Codes and Indoor Air Quality.

Small Comprehensive Technical Assistance

Program Description

Provides technical consulting expertise to small and medium business customers from a pool of independent consultants who offer specialized services for specific end-uses related to retrofit applications. Provides a report that identifies energy savings measures for customers by changing processes or upgrading existing equipment.

2001 Results & Achievements

Six technical assistance studies were authorized and completed by consultants through December 2001. These results were reviewed by SDG&E and presented to customers. A new screening process for technical assistance studies was instituted in the second quarter. The process involves SDG&E meeting with small nonresidential customers and providing a preliminary technical assistance summary. This preliminary assessment quantifies the energy savings and project payback for the customers. If further technical assistance is needed, SDG&E will then commission a consultant to complete the study. The preliminary technical assistance process has proven successful in 2001.

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.

2001 Results & Achievements

Twelve technical assistance studies were authorized and completed in 2001. These results were reviewed by SDG&E and presented to customers. A screening process for technical assistance studies was instituted in the second quarter. The process involves SDG&E meeting with nonresidential customers and providing a preliminary technical assistance summary. This preliminary assessment quantifies the energy savings and project payback for the customers. If further technical assistance is needed, SDG&E will then commission a consultant to complete the study. The preliminary technical assistance process has proven successful in 2001.

The performance indicator “Number of studies completed by independent consultants.” was satisfied with twelve studies completed. The performance indicator “Number of customers adopting energy efficiency measures/techniques on process systems.” resulted with the adoption by six customers. The performance indicator “Number of studies resulting in customers utilizing SPC incentive programs.” resulted in two customers utilizing SPC incentives.

Building Efficiency Rating Tool

Program Description

This program offers a building efficiency rating tool to be tested on targeted large business customers.

2001 Results & Achievements

The EnVINTA (One-2-Five) pilot project was completed in March. The diagnostics were conducted for ten large nonresidential customers. SDG&E Account Executives met with customers to give them the report feedback, which identified opportunities for SDG&E services such as energy efficiency and training. The tool was viewed positively by most customers as an organized way to assess total energy management practices for their organization.

Statewide Energy Guide

Program Description

The Statewide Energy Guide " Smarter Business Energy Use, Saving Energy & Money" provides energy information and education to customers to better manage their business energy costs. The guide provides energy information for office buildings, grocery stores, restaurants, retail outlets and manufacturing facilities. The guide is available in English, Spanish, and Chinese. Target markets include commercial businesses, business trade/vendor shows, Small Business Associations, Chambers of Commerce, building permits and government offices, and businesses that receive on-site surveys conducted by utility representatives.

2001 Results & Achievements

The Business Energy Guides in inventory were distributed at scheduled events throughout 2001 and by field personnel. In 2001, SDG&E distributed over 6,800 Business Energy Guides.

Energy Information Center (EIC)

Program Description

The Energy Information Center (EIC) utilizes trained Energy Information Representatives (EIR's) to assist residential and nonresidential customers with specific issues related to energy efficiency. Customer calls are routed through SDG&E's existing general customer service number: 1 (800) 411-SDGE. EIC provides customers with an opportunity to speak at length with a trained EIR regarding issues pertaining to energy conservation and available services. EIR's are also trained to perform telephone audits, schedule in-home audits and conduct follow-up phone calls with customers.

2001 Results & Achievements

Information Representatives (EIR's) attended extensive training in 2001, which included, classes on ENERGY STAR® windows, whole house energy efficiency, and energy efficiency program

overviews. The Energy Information Center (EIC) opened on April 18, 2001. Beginning on April 18, 2001, through - December 31, 2001, the EIC handled 51,534 phone calls.

Brochure distribution was handled in-house, to include mailings, which were done on a daily basis. Information provided to customers is another method to inform customers about other available energy efficiency programs. A quality assurance monitoring system, for the EIR's, was installed to ensure quality and accurate customer service was provided to customers.

Energy Management Services

Energy Audits

Program Description

This program provides a comprehensive energy analysis and identifies energy efficiency opportunities for small and medium nonresidential customers following an on-site energy audit. The on-line audit option was available to customers in 2001.

2001 Results & Achievements

A total of 3,913 on-line audit sessions were completed in 2001. There were 579 on-site audits at nonresidential customer facilities. The estimated energy savings from the on-site audits would result in 26,125 MWH and 6.4 MW demand reduction if recommended measures were implemented. An audit follow-up phone survey was developed for use by the Energy Information Center (EIC) staff. The EIC staff called customers following an on-site audit to identify the measures they had installed and to ask what else SDG&E could do to assist the customer in implementing the remaining audit recommendations. There were 117 audit follow up phone surveys of customers who received an on-site audit in 2001

Energy Efficiency Incentives: Customized Rebates

Emerging Technologies

Program Description

The program is designed to work with large customers to develop demonstration projects that showcase emerging technologies. 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. The purpose of the Emerging Technologies Coordinating Council (ETCC), 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), is to focus on emerging technologies and maintain an emerging technologies database.

2001 Results & Achievements

In May 2001, a large manufacturing company agreed to install a solar tracking skylight system in one of their facilities. The project installation has been completed and the metering has been installed on the system to track performance. The electrical contractor is tasked with testing the monitoring equipment is ensure it is recording accurately. Monitoring points include the current transformers, two heat sensors and 10 photo sensors. Data collection will begin after testing of the monitoring equipment.

In 2001, SDG&E worked with a variety of commercial customers to identify cool-roof applications for installation and/or performance evaluation. This work resulted in three signed contracts to perform performance monitoring on commercial customer cool-roof installations. The three buildings (a manufacturing facility and two styles of retail sales facilities) were selected for their application diversity and geographic location. They are located both inland and along the coast. A tailored monitoring plan was developed specifically for each site. Instrumentation was installed at each site and monitoring will continue through the summer of 2003.

The ETCC members participated in several conference calls during the year to discuss the status of emerging technologies. The ETCC also maintained the emerging technologies database.

Peak Load Reduction TPI

Program Description

The Peak Load Reduction TPI solicited innovative and unique ideas and technologies from large nonresidential electric customers for implementing peak demand reduction projects. The TPI was targeted at large commercial customers (over 500 KW), Energy Efficient Service Providers (EESP), contractors, and engineering firms. The desired measures for this TPI included heating, ventilation, air-conditioning, lighting, water heating, and other building-type-specific end-uses.

2001 Results & Achievements

The request for proposals was issued on February 26, 2001. A total of 26 projects from 15 customers were received. Two customer projects were selected for funding. These two projects

were projected to yield 1.6 MW of demand reduction and 9,604 MWH in energy savings. Contracts were signed in June. One project was completed in July and the second project was completed in December. Measurement and verification is currently underway and results are due in the summer of 2002.

Energy Efficiency Incentives: Prescriptive Rebates

Nonresidential Remodeling and Renovation (Tenant Improvement)

Program Description

The statewide program encourages high performance nonresidential building design and construction for all nonresidential buildings under going remodeling and/or renovations. The process seeks to permanently reduce the transaction costs associated with developing and evaluating energy efficient design alternatives. The process seeks to improve the comfort, efficiency, and performance of buildings by promoting an integrated team approach to design. SDG&E representatives promote this program to architects, engineers, and building owners.

2001 Results and Achievements

There were 58 signed contracts in 2001 (37 committed and 21 installed jobs).

Express Efficiency

Program Description

The statewide program provides standard rebates to customers for the installation of energy efficient equipment. An alliance of Trade Allies (contractors and distributors) helps market the benefits of energy efficiency to customers. Financial incentives for lighting, air conditioning, refrigeration, food service, and gas equipment are offered to small and medium commercial customers (less than or equal to 500 kW monthly demand and 250,000 therms per year) through a direct rebate process.

2001 Results & Achievements

There were 863 rebate applications received and processed in 2001. Program funds were exhausted in late October and the program was closed. Program outreach targeted vendors, contractors, and specific end use customers to promote the program measures including new measures (refrigeration, agricultural and additional gas measures) added in 2001. A rebate calculator and web-based electronic version of the applications was in development in late 2001.

The performance indicator for the SBSPC, Express Efficiency and EZ Turnkey programs "Achieve 33,905 MWH and 4.04 MW of peak load reduction." was satisfied. The results of this performance indicator can be found in Section TA 8, Table TA 8.2.

Commercial Horizontal Washers Program

Program Description

This program targets the commercial market to promote the purchase of energy efficient coin-operated 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) to implement this program as part of their Commercial Industrial,

Institutional (CII) Voucher Incentive Program (VIP) which allows for a larger incentive than the current voucher offered by the SDCWA for coin-operated clothes washers.

2001 Results & Achievements

There were 1,379 vouchers redeemed for the purchase/installation of coin-operated energy-efficient H-axis clothes washers in 2001. This program was awarded the Governor's Environmental and Economic Leadership Award in a Sacramento ceremony in November 2001.

"EZ" Turnkey Program

Program Description

The program offers rebates to the smallest commercial customers with peak demand less than 50 kW, with special emphasis directed to customers in state-identified Enterprise Zones. Rebates are available for specific measures in the end-use categories of lighting, water heating and weatherization. The program promotes the installation of multiple energy efficient measures by providing an increase in rebate levels for the installation of more than one type of measure.

2001 Results & Achievements

There were 431 rebate applications received in 2001. Several new contractors participated in the program in 2001. Extensive outreach included meetings with the Black Contractors Association of San Diego, City Heights Development Center, Logan Heights Family Health Center, Imperial Beach Chamber of Commerce, Southern California Golf Association, Exxon-Mobil Franchisees, National Green Restaurant Association, Metropolitan Area Advisory Committee (MAAC) in National City and the United Pan Asian Community.

In June, a CFL turn-in program was developed for senior citizens and low-income residents in "hard-to-reach" areas. Because these residents lived in buildings on commercial meters, they were not eligible to participate in the residential CFL turn-in program. There were eleven CFL turn-in events and 4,300 CFL's were distributed to these customers.

The performance indicator for the SBSPC, Express Efficiency and EZ Turnkey programs "Achieve 33,905 MWH and 4.04 MW of peak load reduction." was satisfied. The results of this performance indicator can be found in Section TA 8, Table TA 8.2.

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 energy efficient projects delivering verified energy savings at large commercial, industrial and agricultural 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 targets large nonresidential customers (over 500 kW or 250,000 therms per year).

2001 Results & Achievements

In 2001, 84 LNSPC projects were funded. Eleven projects cancelled during the year resulting in 73 active LNSPC projects at yearend. There were also 14 LNSPC projects on the wait list at yearend.

On July 9th, the LNSPC program was fully committed. New projects were placed on a wait list in case any additional funds became available.

The performance indicator "Achieve 11,131 MWH and 1.64 MW of peak load reduction." was satisfied. The results of this performance indicator can be found in Section TA 8, Table TA 8.2. The performance indicator "Increase the number of participating customers and EESPs." was increased by 81% from 32 participants to 58 participants.

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). The fixed price, performance measurement protocols, payment terms, and all other operating rules of the program are specified in the program procedure manual. The customer may self-sponsor an SBSPC project in 2001.

2001 Results & Achievements

There were 76 SBSPC project applications funded in 2001. There were 6 SBSPC projects on the wait list at yearend. On June 8, 2001, the SBSPC program was fully committed. New projects were placed on a wait list in case any additional funds became available. If the measures for a wait listed project were eligible for the Express Efficiency program, the customer was encouraged to participate in that program.

The performance indicator for the SBSPC, Express Efficiency and EZ Turnkey programs "Achieve 33,905 MWH and 4.04 MW of peak load reduction." was satisfied. The results of this performance indicator can be found in Section TA.8, Table TA 8.2. The performance indicator

"Increase the number of participating customers and EESPs." was increased by 26% from 23 participants to 29 participants.

Upstream Programs

Building Recommissioning TPI

Program Description

The Building Recommissioning Third Party Initiative (TPI) was designed to demonstrate the energy savings potential for commissioning building systems to attain the efficiency intended by the design engineers and equipment manufacturers in at least one commercial building. The TPI was targeted at large commercial customers (over 500 kW), Energy Efficient Service Providers (EESP), contractors, and engineering firms. The desired measures for this TPI included heating, ventilation, air-conditioning, lighting, water heating, and other building-type-specific end uses.

2001 Results & Achievements

The request for proposals was issued on May 24, 2001. Three proposals were received on June 20th. Two proposals were selected in July 2001. One of the selected proposals focused on the controls, lighting controls and equipment repair at a department store. The second selected proposal involved maintenance, controls and equipment at an office facility. Following negotiations, both contracts were signed in the third quarter. Both projects were completed by March 31, 2002.

Retrofits in Leased Space TPI

Program Description

The Retrofits in Leased Space TPI was designed to demonstrate to tenants and building owners the energy savings potential from retrofitting a leased space in at least one facility with multiple tenants.

2001 Results & Achievements

Over 1,100 notices were mailed on Wednesday, March 28, 2001 to announce the request for proposals would be posted at www.sdge.com on Monday, April 2, 2001. SDG&E mailed hard copies upon request to anyone unable to access the web-site. Four proposals were received on April 26th. Two proposals were selected on May 4th. One contract was signed in May and lighting installation in an office facility was completed in July 2001. In September, the project sponsor of the second project advised SDG&E they were withdrawing from participation due to project financing problems.

Midstream HVAC

Program Description

This program offers incentives to contractors to promote and install high efficiency heating, ventilation and air conditioning (HVAC) units.

2001 Results & Achievements

Incentives were paid to over 40 participating contractors for 329 high efficiency HVAC units in 2001. On November 19, 2001, a letter was sent to participating contractors giving notification of program closure due to depletion of funds.

The performance indicator "Installation of high efficiency equipment (non-package units) relative to minimum standard equipment" was satisfied as a result of this program.

Upstream Motors

Program Description

The Upstream Motors Incentive program is designed to improve the current stocking practices and installation of motors by local motor 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 ranging in size from 1 horsepower to 200 horsepower.

2001 Results & Achievements

There were applications for stocking/installation of 275 motors from five participating distributors. This program was closed July 2, 2001.

The performance indicator "Sale of high-efficiency motors relative to minimum standards" was satisfied as a result of this program.

TABLE 3.1
SUMMARY OF COSTS:
NONRESIDENTIAL PROGRAM AREA

Electric and Gas Combined

	2001	
	Budgeted	Recorded
Information	$1,095,000	$1,172,715
EMS		
Large	$0	$0
Small/Medium	$550,000	$555,540
EEI: Custom Rebates		
Large	$0	$0
Small/Medium	$1,400,000	$1,310,026
EEI: Pres Rebates		
Large	$855,000	$856,187
Small/Medium	$3,002,000	$3,247,979
EEI: SPCs		
Large	$5,735,000	$5,558,704
Small/Medium	$1,385,000	$1,445,403
Upstream Programs		
Financial	$1,153,000	$774,863
Total	$15,175,000	$14,921,415

Electric Only

	2001	
	Budgeted	Recorded
Information	$870,400	$934,941
EMS		
Large	$0	$0
Small/Medium	$412,500	$416,655
EEI: Custom Rebates		
Large	$0	$0
Small/Medium	$1,400,000	$1,310,026
EEI: Pres Rebates		
Large	$641,250	$642,140
Small/Medium	$2,667,572	$2,882,278
EEI: SPCs		
Large	$4,014,500	$3,891,093
Small/Medium	$1,038,750	$1,084,052
Upstream Programs		
Financial	$1,153,000	$774,863
Total	$12,197,972	$11,936,047

Gas Only

	2001	
	Budgeted	Recorded
Information	$224,600	$237,774
EMS		
Large	$0	$0
Small/Medium	$137,500	$138,885
EEI: Custom Rebates		
Large	$0	$0
Small/Medium	$0	$0
EEI: Pres Rebates		
Large	$213,750	$214,047
Small/Medium	$334,428	$365,701
EEI: SPCs		
Large	$1,720,500	$1,667,611
Small/Medium	$346,250	$361,351
Upstream Programs		
Financial	$0	$0
Total	$2,977,028	$2,985,369

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

Annual and Lifecycle Energy Reductions, Electric, MWH

	2001 Annual (Recorded)	2001 Life Cycle (Recorded)
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Customized Rebates		
Large	N/A	N/A
Small/Medium	7,646	115,612
EEI: Prescriptive Rebates		
Large	5,092	80,261
Small/Medium	31,867	420,033
EEI: SPCs		
Large	18,421	260,639
Small/Medium	6,600	98,263
Upstream Programs		
Information	N/A	N/A
Financial Assistance	1,332	14,575
Total	70,959	989,384

Demand Reductions, Electric, MW

	2001 Annual (Recorded)
Information	N/A
EMS	
Large	N/A
Small/Medium	N/A
EEI: Customized Rebates	
Large	N/A
Small/Medium	1.42
EEI: Prescriptive Rebates	
Large	1.14
Small/Medium	6.45
EEI: SPCs	
Large	2.23
Small/Medium	1.29
Upstream Programs	
Information	N/A
Financial Assistance	0.34
Total	12.88

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

	2001 Annual (Recorded)	2001 Life Cycle (Recorded)
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Customized Rebates		
Large	N/A	N/A
Small/Medium	80.00	1,200.00
EEI: Prescriptive Rebates		
Large	20.47	324.43
Small/Medium	327.78	2,684.63
EEI: SPCs		
Large	172.79	2,591.87
Small/Medium	119.27	1,789.06
Upstream Programs		
Information	N/A	N/A
Financial Assistance	0.00	0.00
Total	720	8,590

TABLE 3.3
SUMMARY OF COST-EFFECTIVENESS:
NONRESIDENTIAL PROGRAM AREA

	Benefit-Cost Ratios	
	2001 (Recorded)	
	Utility Cost Test	Total Resource Cost Test
Information	N/A	N/A
EMS		
Large	N/A	N/A
Small/Medium	N/A	N/A
EEI: Customized Rebates		
Large	N/A	N/A
Small/Medium	5.03	2.01
EEI: Prescriptive Rebates		
Large	5.22	2.54
Small/Medium	7.13	2.57
EEI: SPCs		
Large	2.87	2.08
Small/Medium	4.15	3.39
Upstream Programs		
Information	N/A	N/A
Financial Assistance	1.44	1.29

TABLE 3.4
SUMMARY OF COST-EFFECTIVENESS:
NONRESIDENTIAL PROGRAM AREA

Net Benefits, $MILL

	2001 Recorded
Information	N/A
EMS	
Large	N/A
Small/Medium	N/A
EEI: Customized Rebates	
Large	N/A
Small/Medium	$3.31
EEI: Prescriptive Rebates	
Large	$2.71
Small/Medium	$14.54
EEI: SPCs	
Large	$8.30
Small/Medium	$4.23
Upstream Programs	
Information	N/A
Financial Assistance	$0.22
Total	$33.30

New Construction Programs

Residential

The Residential New Construction Program is targeted at educating and influencing the residential marketplace to build homes and install appliances using the most energy efficient, cost-effective products and technology available. In order for this to occur, builders, architects, developers, homebuyers, and other key market players must be educated in the long-term benefits of incorporating energy efficiency into residential homes. Using education, technical assistance, incentives and marketing tools as building blocks, SDG&E expects to increase overall consumer demand for energy efficient homes.

Home Energy Partnership Program

The Home Energy Partnership Program (HEPP) is a multi-faceted program that targets key members of the residential construction industry including designers, architects, engineers, developers, builders, energy consultants, contractors/subcontractors, sales agents and homebuyers. HEPP includes 3 separate program components designed to encourage the widespread adoption of energy-efficient construction practices in all types of residential buildings (single and multi-family), as well as promote the purchase and installation of ENERGY STAR® qualified appliances. Each program component is described in greater detail below.

Home Energy Partnership Program - Appliances

Program Description

The HEPP – Appliance program, offers rebates for the purchase and installation of qualifying ENERGY STAR® appliances in newly constructed single or multi-family homes through participating design centers. By providing information and rebates for energy efficient appliances through design centers, customers who are purchasing new homes will be motivated to upgrade their new appliances to ENERGY STAR® qualified models.

2001 Results & Achievements

SDG&E's goal of obtaining commitments from builders to install 1,000 appliances was accomplished in November.

The performance indicator for this program was to increase the number of new residential units (both single and multi-family) that install ENERGY STAR® rates appliances. In 2000, no ENERGY STAR® appliances were installed under SDG&E's residential new construction programs. During 2001, 19 builders installed or committed to install 3,418 ENERGY STAR® appliances, including 712 clothes washers, 1,464 dishwashers, and 1,242 refrigerators.

Home Energy Partnership Program – Multi-Family

Program Description

The HEPP - Multi-Family program provides design assistance, advertising/marketing support, and incentives for the incorporation of energy efficiency features in multi-family residential

buildings with three or more units, that increase energy performance over Title 24 requirements. To qualify for an incentive of $200 per unit, energy performance of the building must exceed 1998 Title 24 requirements by 30%, or 2001 Title 24 requirements by 15%. Eighty percent of the incentive is paid to the builder and 20% is paid to a designated energy support team whose primary role is to help maximize the energy performance of the building. Depending upon the builder's needs, the designated energy support team may be comprised of: designers, architects, engineers, Title 24 consultants, or other energy consultants. Installation of energy efficiency measures is verified through random on-site inspections of approximately 15% of the total number of multi-family units completed each year.

2001 Results & Achievements

In 2001, SDG&E was particularly proactive in soliciting project leads and the participation of the builders in San Diego. Over 40 sales presentations were made to local architects, design consultants, builders and new construction project managers, representing over 7000 new single family homes and multi-family units in our territory.

In the affordable housing market, alliances were established with local housing authorities and non-profit organizations such as Affirmed Housing Group, Mercy Housing California, Community Housing of North County, San Diego Interfaith Housing Foundation, San Diego Housing Commission and the San Diego Habitat for Humanity. SDG&E's residential new construction group was also the major sponsor of the Non Profit Federation for Housing Conference in 2001. Of the approximate 2700 affordable housing units built in San Diego County last year, 1,032 (or approximately 42%) participated in the HEP Program. Through December, 2,578 multi-family units were signed up to be constructed through early 2004.

The performance indicator for the PY2001 Home Energy Partnership Single Family and Multi-Family programs was to increase the number of builders that offer ENERGY STAR® qualified homes in SDG&E's service territory. In 2000, 6 individual builders offered ENERGY STAR® Homes within the SDG&E service territory. In 2001, the number of builders offering ENERGY STAR® Homes increased to 47 (including production and custom builders).

Home Energy Partnership Program – Single-Family

Program Description

The HEPP Single Family program provides design assistance, advertising/marketing support, and financial incentives to builders, developers and design teams to encourage the design and construction of highly energy efficient single family homes and duplexes, and is based on the ENERGY STAR® rating system. During 2001, SDG&E offered an incentive of $400 for ENERGY STAR® qualified homes and an incentive of $500 for homes that exceeded ENERGY STAR® requirements by 10%. Ninety percent of the incentive was paid to the builder or owner builder, and 10% was paid to the designated energy support team. Installation of energy efficiency measures is verified through random on-site inspections of approximately 15% (1 in 7 homes) of the total number of single family homes completed each year.

2001 Results and Achievements

The HEPP Single Family program, which was first rolled out in October 2000, gained significant momentum during its second year of operation. This program was so successful in capturing the interest of the local building industry that all available funding was exhausted in October 2001, requiring SDG&E to place 1500 homes totaling $600,000 on a waiting list. Through December of 2001, contracts were signed for 1,258 single family units, including 11 production builders, 22 custom homes, and 12 new affordable homes that are currently being constructed by Habitat for Humanity.

The performance indicator for the PY2001 Home Energy Partnership Single Family and Multi-Family programs was to increase the number of builders that offer ENERGY STAR® qualified homes in SDG&E's service territory. In 2000, 6 individual builders offered ENERGY STAR® Homes within the SDG&E service territory. In 2001, the number of builders offering ENERGY STAR® Homes increased to 47 (including production as well as custom builders).

Industry & Consumer Information and Promotion

Program Description

Industry and Consumer Information and Promotion activities encourage awareness of energy efficient housing, appliances, and opportunities that are available to consumers. This program component provides marketing support for all residential new construction programs, including the Home Energy Partnership Program.

2001 Results & Achievements

During 2001, the Home Energy Partnership Program was actively promoted through SDG&E's participation on the Building Industry Association's Sales & Marketing Council (SMC), Specialty Contractor's Council (SCC), Home Builder's Council (HBC), BIA Communications Committee, and the North and South County Chapters of the Building Industry Association. In addition, SDG&E worked closely with the Commercial New Construction Team and the American Institute of Architect's annual Design Awards Committee and presented two awards honoring energy efficient residential and mixed-use buildings.

SDG&E also co-sponsored and attended the Pacific Coast Builder's Conference, Non-profit Federation for Housing Conference, National Association of Homebuilders Conference, Building Industry Show (BIS), and held the following exhibits and activities targeting consumers in 2001.

- Power Palooza
- Fall Home Show
- EarthFair
- Universal Design
- Del Mar Fair
- Real Estate Expo
- Solar Energy Workshops

These consumer outreach events and exhibits were conducted to help promote energy efficient new homes, and an aggressive industry and consumer advertising campaign helped promote energy efficient projects in the HEP Program.

The following marketing and outreach efforts were conducted in 2001:

- Advertising - An advertising campaign was secured for trade publications such as San Diego Business Journal, San Diego Magazine, San Diego Daily Transcript, Builder Magazine and the San Diego Union Tribune.
- Website - A hotlink from the www.sdge.com website was developed to promote program information and builder participation;
- Consumer Brochures - Two new consumer marketing brochures were developed to promote various energy efficient measures to consider when buying or renting a new home.

The 2001 Performance Indicator for Industry and Consumer Information and Promotional activities was "to increase customer awareness of energy efficiency opportunities in new homes and in energy efficient appliances." In 2000, there were no ENERGY STAR® appliances installed. In 2001, builders installed or committed to install a total of 3,418 ENERGY STAR® appliances, thus indicating an increased awareness of energy efficiency opportunities available in new homes and appliances.

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 photovoltaics.

2001 Results & Achievements

During 2001 SDG&E continued to support the California Home Energy Rating System, through the use of utility CHEERS certified inspectors.

In the past, most CHEERS training sessions have been held in Stockton, California, at the CHEERS center. In order to increase the number of C-HERS raters within San Diego, SDG&E hosted 2 local CHEERS/HERS Analyst training workshop sessions on April 17 and June 12 which drew a total of 14 participants. Additionally, 3 CHEERS Rater & Certification Training Seminars were hosted by SDG&E on April 9-11 (18 attendees), August 15-17 (13 attendees), and September 24-26 (14 attendees).

SDG&E also coordinated with CHEERS representatives on the design of its 2002 residential new construction program activities.

The 2001 Performance Indicator for this program element was to increase the number of certified CHEERS raters in San Diego in order to support builders of energy efficient homes. In 2000, CHEERS reported an estimated 150 CHEERS raters. Of these, 13 attended classes offered by

SDG&E. In 2001 CHEERS reported an increase of 50 raters for a total of 200. 45 of the 200 participants have attended classes offered by SDG&E.

CEC's Public Interest Energy Research (PIER)

Program Description

The CEC's Public Interest Energy Research (PIER) program supports efforts in testing and demonstrating new energy efficient technologies. Funding for this program was discontinued in early 2001. SDG&E's revised budget for this program reflects a reallocation of funds to the Home Energy Partnership Program – Multi-family, and to builder training through Information & Promotion.

2001 Results & Achievements

The 2001 Program Indicator for the PIER program was "to increase the availability of new tested technologies for residential new construction." This Program Indicator is no longer applicable, since SDG&E did not pursue this program in 2001.

Builder Training

Program Description

Training seminars are offered to builders, architects, and other members of the new construction industry 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.

2001 Results & Achievements

During 2001, SDG&E provided a total of 33 training classes including High-Performance Windows, Title 24 AB 970 Update, High-Performance Duct Systems, EnergyPro, MICROPAS, Builder Energy Code, CHEERS, CHEERS HERS / ENERGY STAR® Analyst Certification, HVAC, Sales Agent Training and Energy Code Training to YouthBuild. Nearly 500 builders, contractors, developers, architects, engineers, energy consultants, building officials and sales agents attended the various classes. Requests for additional classes included Title 24 Updates to Plan Checkers and Field Inspectors of local building departments, CHEERS, AB 970 Advanced Training for Title 24 Professionals and Energy Code Training to YouthBuild students at BCA (Black Contractors Association).

Class participants received a Home Energy Partnership Program presentation overview, class specific materials, and a Builder Packet. Packets included a quarterly newsletter highlighting current projects, participation process and requirements, training calendar, and Tip Sheets on Energy Efficient options detailing the benefits of the following:

- Proper Sizing of Heating and Cooling Systems
- ENERGY STAR® Furnaces and Central Air Conditioners

- Proper Sizing and Installing of Ducts for Improved HVAC Performance
- Tightly Sealed Ducts, Blower Door Tests
- Spectrally Selective, Low-E Windows
- Upgraded Insulation for Walls and Attics
- Water Heaters (Tank and Tankless)
- High-Efficiency Appliances

Participants overwhelmingly commented on the necessity and benefits received from various training classes. The major concern among builders is the impact and understanding of the new Title 24 requirements, therefore many have requested continued emphasis in 2002.

The California Energy Commission (CEC) formally recognized the efforts of SDG&E in providing AB 970 Title 24 Training classes to building departments prior to the June 1 effective date. The letter expressed their appreciation of organizing, advertising, coordinating, facilitating and unfailing attention to detail at every training session.

The 2001 Performance Indicator for Builder Training was "to increase participation in energy efficiency courses." In 2000, 23 Builder Training classes were offered, and there were 282 attendees. In 2001, the number of Builder Training classes offered increased to 31, and the number of participants increased from 282 to 447.

Nonresidential

Savings By Design

Program Description

Savings By Design is a statewide program that provides information, technical and design assistance, and financial incentives to building owners, architects, engineers, and design teams to promote the design and construction of high performance new commercial, industrial and agricultural facilities.[1] This program is aimed at the primary decision-makers associated with nonresidential new construction and major renovation/remodeling projects, and is dedicated to achieving greater savings than those required under California's Title 24 Standards for Nonresidential Buildings. The program was revised in June to reflect changes in Title 24 energy requirements. Under the 2001 Savings By Design program, financial incentives of up to $150,000 per project (e.g., per freestanding building or individual meter) are offered under the Whole Building Approach, and up to $75,000 per project under the Systems Approach, which is ideally suited for smaller, less complex projects. In both cases, the incentive may not exceed 50% of the total incremental cost, and the building must be designed and constructed to perform better than Title 24 energy-efficiency requirements by a minimum of 10%. The program was revised in June of 2001 to acknowledge the change in Title 24 Nonresidential Energy Standards. Projects that performed at least 5% better than Title 24 standards became eligible for Owner incentives.

Design teams can also qualify for an incentive of up to $50,000 per project to help offset the additional cost of energy simulation modeling and design assistance during the project design phase. To qualify for a design team incentive, the project must qualify for the Whole Building Approach and the team must use a computer simulation model to optimize the design and to calculate energy savings for the proposed building compared to the Title 24 baseline. The design team qualifies for an incentive when the building design saves 15% or more than Title 24 requirements. The program was revised in June of 2001 to acknowledge the change in Title 24 Nonresidential Energy Standards. Projects that performed at least 10% better than Title 24 standards became eligible for Design Team incentives.

On-site inspections are conducted for 100% of the completed Savings By Design projects.

2001 Results & Achievements

Participation in SBD more than doubled in 2001, with 193 contracts for SBD projects signed through December 2001, compared to a total of 82 contracts signed in 2000. Of the 193 contracts signed in 2001, 80 projects are utilizing the whole building approach, and 83 are utilizing the systems approach.

Within its service territory, SDG&E promoted participation in Savings By Design during 2001 through the development and distribution of marketing materials, and more than 75 presentations made at various industry sponsored events, as well as one-on-one meetings with local

[1] SDG&E has very small industrial and agricultural markets, therefore program activities targeting these markets have been incorporated into Savings By Design.

architectural and engineering firms. Other outreach activities included producing co-sponsored events, and presenting energy efficiency design awards.

SBD was also actively promoted at the statewide level through sponsorship of various trade association events throughout California during PY2001, including the American Institute of Architects (AIA) California Council's Monterey Design Conference in April. Support was also provided to local chapters of the 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 second annual Savings By Design Energy Efficiency Integration Awards was held in June with the help and support of The American Institute of Architects California Council (AIACC). Four projects were selected by the jury to be recognized for their high quality design and energy efficiency integration.

Interest in the statewide Collaborative for High Performance Schools (CHPS) continued to grow in 2001. 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. Utility participants 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 (DOEd), and the Department of Public School Construction. 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.

Marketing materials highlighting the revised SBD program, including a new “Commercial Building Guidelines” tip sheets, as well as the Design Team Incentives and Whole Building Approach inserts for the Savings By Design brochures, were completed in August to alert designers and developers to Title 24 changes. New storyboards, for use at trade shows and other public events supported by Savings By Design, were designed and created recognizing newly constructed energy-efficient projects. Eight articles were also placed in local trade newsletters, including the ASHRAE “*Upblast*”, and five articles were run in the AIA-SD bi-monthly newsletter, covering a range of topics from free seminars being offered to new technologies available in the marketplace. Joint advertising, with the residential new construction HEPP program, was placed in the “*San Diego Business Journal*” special builders edition. This type of additional promotion for successful projects has been highly praised by local architects and identified as one of the most desirable benefits of participation in Savings By Design.

A co-sponsored lecture was designed and presented by Savings By Design and the San Diego Regional Energy Office and conducted on October 4, 2001. Together, these groups brought a nationally known architect to San Diego and accommodated over 180 people to hear the 2-hour presentation on the latest in photovoltaics and the important role for energy efficiency in renewable energy projects.

Savings By Design, in cooperation with the local chapter of the AIA, selected two San Diego projects - one multi-family and one commercial - to receive energy efficiency awards in June. These projects were featured in local articles and at trade events throughout the year.

CHPS - A training seminar dedicated to public school design and construction was held on November 14, 2001 in central San Diego. San Diego Unified School District administration personnel, as well as design team architects and engineers, attended to learn about CHPS and gather information for their specific school construction project. This event was well attended with over 60 participants, and offered valuable information according to the post-event surveys.

The 2001 program performance indicator for Savings By Design "to increase net annualized energy savings and peak demand reduction over the levels achieved in 2000" was achieved Please refer to Table TA 4.4 for details.

A second program performance indicator was "to increase energy (net) savings from projects utilizing the Whole Building Approach in the PY 2001 SBD program over PY 2000 levels. " This program performance indicator was also satisfied in all areas of energy savings (MW, MWh, and therms). Please refer to Table TA 4.4 for details.

Energy Design Resources

Program Description

Energy Design Resources (EDR) is an integrated package of design tools and information resources designed to work in concert with the Savings By Design program. This information-based statewide program provides:

- Information resources supporting a wide range of energy efficient design strategies, techniques and technologies
- Software modeling tools that facilitate design and financial processes that lead to increase energy efficiency in buildings
- Technology transfer, including industry seminars, targeted training events and an easily accessible internet website where software and other informational materials are available for free downloading.
- Validation of and peer recognition for designers and developers of exemplary projects that successfully incorporate principles of energy efficient design.

The principal strategy of Energy Design Resources is to develop and distribute an integrated package of design tools and information that reduce the time required by designers to include energy analysis and life-cycle cost analysis in the design of new buildings. The program educates and informs key decision-makers in the design and construction industry on the value of energy efficiency in new buildings and provides methods for quantification and verification of this value.

Information tools currently available include design briefs discussing the basics of energy efficiency design strategies, illustrated case studies of exemplary projects built in California, a skylighting guidelines handbook, building commissioning guidelines, and lighting design scenario references to assist designers in exploring energy efficient lighting concepts in common building types. Software tools include eQUEST^{TM}, an energy simulation tool that contains wizards to simplify and expedite input, Energy eVALUator, a simple financial analysis computer program focusing on life-cycle costing, and SkyCalc^{TM}, a user-friendly spreadsheet tool for optimizing the efficiency of skylighting systems.

The resources are made available through a variety of media, including "www.energydesignresources.com", a dynamic internet website providing access to all of the above tools, as well as a hosted on-line forum, semi-monthly e-mail newsletters, interactive training modules, and an on-line energy simulation game; and on-going seminars and educational opportunities aimed at design professionals desiring to upgrade their energy efficiency knowledge and skills.

2001 Results & Achievements

EDR tools were 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.

Training seminars were offered in each of the service territories of the three participating utilities (PG&E, SCE, and SDG&E). Six on-line training modules on energy efficiency processes and technologies were developed and made available on the EDR web-site.

A comprehensive resource binder, containing 14 Design Briefs and 4 CDs featuring Daylighting and Commissioning manuals, was completed in 2001, providing overviews of specific energy efficiency systems applicable to new construction. Approximately 4,000 binders will be distributed by the utilities in the upcoming year.

SDG&E produced a Progress Through Design-Summer 2001 newsletter, which was distributed to over 2,100 architects, engineers, and mechanical designers in June. Feature articles included profiling a new elementary school in San Pasqual Union School District and a local engineering firm's new high-performance office building.

Two program performance indicators were established for Energy Design Resources. The first called for "an increase in activity on the Energy Design Resources Web site, such as increase Web site hits, increased tool downloads, increased participation in interactive training courses, in increase use of Web site features such as the EDR Charette." For this performance indicator, EDR program results were measured by comparing 2001 web site activity levels to 2000. In 2001, over 26,000 site-hits were recorded, with more than 24,900 Mbytes downloaded: eQUEST downloads increased by 28%, eVALUator downloads were up by 23%, and SkyCalc downloads increased 57%. The "EDR Charette" - an on-line analysis software - saw registered users increase from 119 in 2000, to 284 by the end of 2001.

The second program performance indicator for 2001 was "continued and increasing participation in EDR training and educational events." For this performance indicator, results were measured by comparing 2001 activity levels to calendar year 2000. The activity in the on-line virtual workshop training area increased from 5 completions in 2000 to 12 completions in 2001. Local trainings funded under EDR in 2001 involved 512 attendees at 21 different seminars. In 2000, 494 participants attended during the 26 events offered.

Industrial and Agricultural Process

See Savings by Design.

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) program element 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.

In 2001, the Codes and Stardards activities continued to support AB 970 emergency rulemaking processes for both California Title 24 and Title 20. Activities included:

(a) participation in public workshops and meetings,

(b) support and advocacy for code change through the end of Phase II of the rulemaking, and

(c) broad-based training efforts for code officials, contractors, T-24 consultants, and other groups, that support administration and enforcement of new and existing codes.

The program addressed long-term peak demand issues by addressing code change opportunities that are not included in the AB 970 process. Examples include: a time dependent valuation methodology for valuing source energy, alternative cooling systems, alternative building system control strategies, and daylighting.

Upgrading codes and standards is an ongoing and evolving process. Process issues may include:

(a) improving and maintaining relationships with stakeholders e.g., manufacturers and builders,

(b) exploration of pilot projects that involve stakeholders earlier in the code change process,

(c) increasing alignment between market-based, voluntary programs and Codes & Standards objectives e.g., education or incentives that support a specific program objective,

(d) continuing emphasis on synergistic standards work with the CEC, California Building Industry Association, Building Owners and Managers Association, and other building industry stakeholders,

(e) improving approaches to enhancing administration and enforcement e.g. through improved outreach and education, and support professional certification and development, and

(f) influencing energy codes through non-energy codes e.g., fire codes.

2001 Results & Achievements

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 also continued to work to bring about upgrades in standards and codes, thereby capturing the benefits for society from California's diverse energy efficiency efforts.

Locally, SDG&E (through its contract with the San Diego Regional Energy Office) 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. In cooperation with SDREO, over 60 leads to potential SBD projects were received and investigated.

Five training seminars on codes and standards covering Title 24 requirements for non-residential buildings were held in SDG&E's service territory through year-end, drawing 185 participants.

Under the Community Energy Partnership Program, a local government initiative that encourages the adoption of energy efficiency standards that exceed Title 24 requirements adopted in 1998 by 15 percent, two additional jurisdictions adopted energy efficiency policies during 2001: the County of San Diego and the City of Chula Vista. The cities of El Cajon, San Diego, and Santee signed contracts agreeing to participate in the Community Energy Partnership Program in 2000.

Three performance indicators were established for Codes and Standards activities in 2001:

1) "preparing CASE studies for code improvement;"
2) "supporting consensus making activities by providing stakeholder forums and information;" and.
3) "participating in public rulemaking workshops and advocating for code change."

During 2001, a total of 8 Codes and Standards Enhancement (CASE) studies were refined and presented to CEC Code reviewers for incorporation into future standard enhancements. No code-related stakeholder forums were held last year. (Due to AB970 emergency code revision requirements, activity under Codes and Standards was directed away from stakeholder forums and toward CEC's goal of implementing a new code within 180 days.) Representatives from the utilities attended all meetings and workshops regarding AB970 Code changes.

TABLE 4.1
SUMMARY OF COSTS:
NEW CONSTRUCTION PROGRAM AREA

Electric and Gas Combined

	2001	
	Budgeted	Recorded
Residential	$2,419,500	$2,741,794
Nonresidential	$4,969,000	$4,394,729
Other	$482,000	$508,060
Total	$7,870,500	$7,644,583

Electric Only

	2001	
	Budgeted	Recorded
Residential	$2,056,575	$2,330,525
Nonresidential	$3,977,060	$3,502,891
Other	$409,700	$431,851
Total	$6,443,335	$6,265,267

Gas Only

	2001	
	Budgeted	Recorded
Residential	$362,925	$411,269
Nonresidential	$991,940	$891,838
Other	$72,300	$76,209
Total	$1,427,165	$1,379,316

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

Annual and Lifecycle Energy Reductions, Electric, MWH

	2001 (Recorded)	2001 Life Cycle (Recorded)
Residential	4,143	79,922
Nonresidential	30,039	473,379
Total	34,182	553,300

Demand Reductions, Electric, MW

	2001 (Recorded)
Residential	1.52
Nonresidential	5.96
Total	7.48

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

	2001 (Recorded)	2001 Life Cycle (Recorded)
Residential	255	5,024
Nonresidential	454	7,258
Total	709	12,282

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

Benefit-Cost Ratios

	2001 (Recorded)	
	Utility Cost Test	Total Resource Cost Test
Residential	1.52	1.04
Nonresidential	5.84	2.42

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

	Net Benefits, $MILL
	2001 Recorded
Residential	$0.17
Nonresidential	$15.91
Total	$16.08

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 Lighting and Appliances

Milestone and Performance Indicator Report: SDG&E

XENERGY

March 2002

San Diego Gas & Electric Company's (SDG&E) 2001 Energy Efficiency Application was filed on November 15, 2000 and included the utility's initial market assessment and evaluation plan. On March 26 2001, this plan was revised and filed (Appendix G, Market Assessment and Evaluation Plan 2001, Application No. 00-11-045). This plan describes milestones and performance indicators for the residential and nonresidential energy efficiency programs. SDG&E established one milestone for the residential lighting program and one milestone for the residential appliance program.

This report presents the results of the measurement and evaluation of SDG&E's residential lighting and appliance milestones and performance indicators.

PY2001 Residential Lighting and Appliance Program Milestones

End Use	Project Description	Milestone
SDR-1: Residential **Lighting:**	**Increase the purchase and availability of ENERGY STAR® qualified Lighting and will produce measurable energy savings by increasing the use of energy-efficient Lighting in residential applications.**	**Increase by one the number of eligible retailers (companies) participating in the co-op program. An eligible retail company for the purpose of this milestone is defined as one with 10 or more stores that conduct business with the public on a retail basis which sells ENERGY STAR® lighting products. (Level 2 Performance – none)**
SDR-2: Residential **Appliances**:	**Increase the purchase and availability of ENERGY STAR® qualified Appliances and will produce measurable energy savings by increasing the use of energy-efficient Appliances in residential applications.**	**Of the six major appliance manufacturers that produce ENERGY STAR® qualified products (clothes washers, dishwashers, and refrigerators), sign-up two of these major manufacturers to the 2001 co-op program. (Level 2 Performance – one manufacturer)**

Lighting Milestone SDR-1

In order to satisfy this milestone, SDG&E needed to increase by one the number of eligible lighting retail companies participating in the co-op program. An "eligible retail company" for the purpose of this milestone was defined as one with 10 or more stores selling ENERGY STAR® lighting products to the public on a retail basis.

Data Reviewed

To determine whether this milestone was met, XENERGY reviewed letters of agreement from lighting manufacturers specifying the retailers (referred to as "Project Partners") to which they will ship energy efficient lighting products and the planned number of units to be shipped. These agreements also specify the proposed promotional activity at each retail store.

Results

The baseline for comparing performance against this milestone can be found in SDG&E's PY2001 Energy Efficiency Program Application[2]. In that document, it states that the baseline for the number of retailers participating in the co-op program is five. In PY2001, manufacturers agreed to various promotional activities at 11 unique retailers covering 263 storefronts[3].

Conclusion

An increase of six retailers in PY2001 more than meets the objective of Milestone SDR-1.

Appliance Milestone SDR-2

The appliance co-op program was designed to sign-up major appliance manufacturers to agree to use the same energy efficiency appliance promotional materials. In order to address the Commission's established energy and demand reduction targets, however, SDG&E did not actively pursue its manufacturer co-op program and redirected program funds to an appliance rebate program that provided direct incentives to customers who purchased qualifying appliances. Thus, Appliance Milestone SDR-2 was not met. It should be emphasized that this outcome was the result of a strategic decision to shift funds earmarked for co-op advertising to appliance rebates.

[2] *SDG&E PY2001 Energy Efficiency Program Application*, Attachment H, page H-6, November 2000.

[3] See Appendix A of this report for copies of letters of agreement between SDG&E and lighting manufacturers.

Non Residential Programs

Evaluation of Large Non Residential Comprehensive Retrofit

PY 2001 Milestone Achievement Report:Emerging Technologies/Demonstration Projects - High-Reflectivity Roofs

SDG&E

April 2002

Program Description

The program is designed to work with large customers to develop demonstration projects that showcase emerging technologies. 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. The purpose of the Emerging Technologies Coordinating Council (ETCC), 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), is to focus on emerging technologies and maintain an emerging technologies database.

2001 Accomplishments

During the year, SDG&E also worked with a variety of commercial customers to identify cool-roof applications for installation and/or performance evaluation. This work resulted in four signed contracts to perform performance monitoring on commercial customer cool-roof installations, located both inland and along the coast. Instrumentation was installed at three of the four sites and monitoring will continue through the summer of 2003.

Milestone

"During PY2001, increase by 3 customers that install or commit to install a high-reflectivity roof over the PY2000 baseline. (Level 2 Performance – increase by 2 customers)."

Methodology

Copies of the contracts are attached in the appendix to this summary report to document the achievement of the milestone. The monitoring plan for these projects is also attached.

Results

During PY2001 there were four signed commitments to install high reflectivity roofs. In PY2000 there was one high reflectivity roof commitment. An increase of three was achieved in PY2001; therefore the milestone is satisfied at the Level 1 Performance level.

New Construction Programs

Evaluation of Residential New Construction - SF

New Construction: Residential Single Family Milestone
SDG&E
March 2002

Background

The Residential New Construction Single Family program works with builders, developers, and consumers to incorporate energy efficient design practices and measures into single family homes during construction. This program is based on the ENERGY STAR home rating system, targeting increased energy performance with incentives paid to the builder and the design or energy support team upon verification of installation of energy efficient measures. This program also offers suggested performance based packages by climate zone for builders to consider, which simplifies participation, and allows performance compliance, so participants can determine the most cost-efficient measures for their specific projects. Additionally, participants and homebuyers are provided quality assurance as third party verification is performed by CHEERS inspectors. Design assistance, Title 24 planned check, marketing and advertising support is provided to program participants in addition to financial incentives offered.

Milestone

Achieve a 25% market share increase of newly constructed ENERGY STAR homes over the 2000 base year. This equates to a 12.5% market share for the year 2001 – (Level 2 Performance-Scaleable where 70% = 17.5% market share increase.

Measurement

The level 1 milestone for this program is based on increasing market share by 25%. In the year 2000, market share for ENERGY STAR Single Family homes was estimated at 10%. This was based on an estimate of housing starts developed by the consulting firm Regional Economic Resources (RER) in their report "California Residential Efficiency Market Share Tracking", October 20, 2000. It was estimated that in the first half of 2000, ENERGY STAR homes accounted for 449 homes out of 4592 starts (about 10%). For the year 2001, the goal was to increase the ENERGY STAR homes to 12.5% of the total new single family housing starts.

For the year 2001, RER has estimated single Family housing starts in the San Diego area at 9,331. The goal of 12.5% is equal to 1,167 (12.5% of 9,331) ENERGY STAR homes. Actual ENERGY STAR homes (signed contracts) developed in 2001 was 1,242, exceeding the goal by 75 units.

Conclusion:

The Level 1 Milestone of the Residential Single Family New Construction program was to increase the market share of ENERGY STAR homes to 12.5% in the San Diego area. To accomplish this, 1,167 homes had to have signed contracts as ENERGY STAR units for the year 2001. Actual signed contracts for ENERGY STAR homes exceeded this value by 75 units (1,242); therefore the level 1 milestone was accomplished.

Evaluation of Residential New Construction - MF

New Construction: Residential Multi-Family Milestone
SDG&E
March 2002

Background

The Multi-Family program is designed to work with all housing types other than single family. This program works with builders and developers of multi-family units to incorporate energy efficient design practices and measures into multi-family homes during construction. This program is based on targeting increased energy performance with incentives paid to the builder and the design team upon verification of installation. Given the diverse nature of the multi-family housing market, "hands on" design assistance is provided to assist builders in identifying the cost-effective measures specific to each project. Additionally, participants are provided quality assurance as third party verification is performed by CHEERS inspectors. Design assistance, marketing and advertising support are provided to program participants in addition to the cash incentives.

Milestone

Achieve 8% market share of newly constructed high efficiency multi-family units during 2001. Units must exceed Title 24 standards by 15% (Level 2 Performance-Scaleable where 70% = 5.6 Market share).

Measurement

The Level 1 milestone for the program is to achieve an 8% market share of energy efficient newly constructed multifamily homes. The consulting firm Regional Economic Resources (RER) has estimated that there were 6,319 multifamily housing starts in the San Diego area during the year 2001. This means that an 8% market share would be approximately 505 energy efficient multi-family housing starts. For the program year 2001, SDG&E received 2,400 signed contracts for energy efficient Multi-family units.

Conclusion

SDG&E received signed contracts for 2,400 energy efficient multi-family units during 2001. This is 1,895 units over the required goal of 505 units needed to achieve an 8% market share. This indicates that the Level 1 milestone for Residential Multi-Family new constructed was achieved for program year 2001.

Demand Assessment

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

CEC DATA COLLECTION ACTIVITIES[4]

2001 Results and Achievements

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 (1999 and 2000) to the CEC for Title 20 data collection activities. In November 2000, a request for an additional $2.1 million for 2001 was made in the utilities' study plans. The funding allocation is shown in the table at the end of this section. The Commission adopted this proposal in Decision (D.) 01-06-037 in June 2001.

Commercial End Use Survey (CEUS)

The Commercial End Use Survey began in March 2001, and is expected to be completed 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. Most of 2001 was spent negotiating the sampling frame and data requirements of the project. Field testing of the on-site survey instrument will begin in early 2002.

Residential Appliance Saturation Survey (RASS)

Work on this project was on hold until CPUC approval of CEC's 2001 MA&E plan. Approval was received on June 14, 2001 in Decision (D.) 01-06-037. 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

[4] The following write-up on the CEC Data Collection and Analysis was provided by the CEC.

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. An update of the measure cost and residential peak and energy savings portions of the database was completed in August 2001. This update uses measure-specific data collection 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. Both the 2001 update and the previous complete edition of DEER, which contains commercial energy savings, are available through the CEC and CALMAC websites.

2002 MA&E Plans

CEC DATA COLLECTION ACTIVITIES

Database of Energy Efficiency Resources (DEER) – Customized Measures, Load Shape Data Collection and Analysis

The focus of this project is to maintain the value of the DEER to planning and evaluation in the face of evolving energy efficiency programs and strategies. The nonresidential standard performance contract (SPC) program has a need for development of incremental measure cost data for measures currently not included in the DEER. Because SPC incentives are paid per kilowatt-hour saved, rather than per measure installed, new methodologies for applying measure cost data to the SPC program must be developed. Other program areas may also have new measures for which cost data is needed as well.

With the recent shift in focus to achieving peak savings through energy efficiency, load management, and distributed generation, we also anticipate the need to incorporate updated load shapes and load impacts at the end use level to assist program managers in estimating the cost effectiveness of new programs, load control technologies, or energy management systems.

The CEC expects to continue with the current DEER contractor for this next round of updating. Delay in the adoption of the PY 2001 MA&E plans means this work will start in spring 2002.

Commercial End-Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) data collection will commence for both of these surveys in 2002.

STATEWIDE STUDIES

Nonresidential Market Share Tracking Study

Phase II efforts in 2002 will include some modification to the original objectives based on input from CALMAC's Nonresidential Area Managers. One the four preliminary SIC codes selected, petroleum production, will be dropped in favor of a general industrial cross-cutting technology

category. The SICs retained in the study are 1) transportation equipment, 2) stone, clay and glass products, and 3) chemical and allied products. Commercial supplier surveys are in preparation.

Energy Efficiency Market Assessment Studies

Residential

Residential Lighting & Appliance Programs

Phase 4 Evaluation Report for the California Statewide Residential Lighting and Appliance Program Final Report

XENERGY

April 2002

This report presents the results of the Phase 4 Evaluation of the California Statewide Residential Lighting and Appliance Program. Program years analyzed in this study include 1999, 2000, and 2001.

Overview of Objectives and Approach

This study was planned as part of a four-phase evaluation effort:

- The Phase 1 report (December 1999) measured key baseline market indicators and characterized the market for the relevant appliances and lighting products.
- The Phase 2 report (September 2000) included a study and documentation of the rationale behind the new PY2000 Program (i.e., what was planned, why it changed, and the reasons for making those changes).
- The Phase 3 report focused on the evaluation of PY2000 and measured the same market indicators addressed in Phase 1, as well as additional relevant indicators, to quantify changes over baseline measurements.
- This Phase 4 effort was designed to address these same indicators, with the focus on measuring market effects attributable to the PY2001 program.

Overall, this evaluation was designed to follow a theory-driven approach. Initial program theories and hypotheses developed in Phase 1 of this effort have formed the basis of the market effects evaluations conducted as part of the Phase 3 and Phase 4 efforts. The following summarizes key data collection and analysis components of each phase of the evaluation:

- In Phase 1, data were gathered from four sources: customers, retail stores via mystery shoppers, retail stores managers, and in-depth interviews with utility program staff and the implementation contractor.
- The Phase 2 effort involved an extensive review of program materials, utility filings, correspondence, related documentation, and tracking data, and interviews with members of the implementation team.
- Phase 3 involved data collection from three sources: an appliance floor stock survey, a follow-up mystery shopper survey, and a follow-up retail store manager survey.
- Phase 4 data collection included customer surveys, mystery shops, and manufacturer and retailer interviews.

Lighting Programs

Over ten million compact fluorescent lamps (CFLs) were provided at reduced cost or no cost to California residents in 2001. Utilities and the state sponsored ambitious programs, costing over $40 million, to encourage residents to conserve energy through the replacement of incandescent bulbs with CFLs. Utilities also offered programs that provided free or reduced-cost CFL torchieres and CFL hard-wired fixtures.

Appliance Programs

Over 100,000 ENERGY STAR® appliances were rebated by utilities in 2001 through their energy-efficient appliance programs. Many consumers opted to replace an old or inoperable appliance with an ENERGY STAR® appliance to aid in statewide conservation efforts and to decrease their utility bills. The utility-provided cash incentives diminished the effect of the higher up-front cost of buying efficient and helped consumers identify energy-efficient products through promotion and endorsement of the ENERGY STAR® label. Statewide promotional efforts by the IOUs assisted retailers in advertising the benefits of purchasing ENERGY STAR®-labeled products.

Market Effects

Market shares have increased substantially over time for ENERGY STAR® appliances and lighting products. These increases are ultimate or lagging indicators of market effects, and are summarized below:

- **Appliances:** Market share for ENERGY STAR® qualified appliances has steadily increased over time, as shown below:

Annual ENERGY STAR® Appliance Market Share

1998-2000

Appliance	Annual Market Share		
	1998	1999	2000
Refrigerators	17%	26%	30%
Clothes Washers	12%	18%	19%
Dishwashers	17%	29%	32%
Room AC	7%	20%	12%

Source: California Residential Efficiency Market Share Tracking: Appliances 2001, RER Inc., September 2001.

- **Lighting:** The average CFL market share in California in 2001 was 5.7 percent, representing a dramatic increase over time. Before 2001, CFL market shares steadily increased from 0.8 percent in the last half of 1998 to 1.2 percent in the last quarter of 2000. In addition, CFL sales in California have significantly outpaced sales in the rest of the U.S – fourth quarter 2001 data show that the national CFL market share is just over 2 percent. Data on compact fluorescent hard-wired fixtures suggest that market share is increasing in the new construction segment, while data on torchiere market share trends is unavailable.

This study was designed to measure changes in proximate or leading indicators, as summarized below:

- Awareness of energy efficiency in general and energy efficient products and technologies has increased over time.
- Attitudes have improved towards energy efficiency in general, energy efficiency as a product attribute, and energy efficient product performance and cost savings potential.
- Self-reported energy efficient behaviors have increased over time, including both perceptions of general energy efficiency behavior and with regard to the purchase of specific energy efficient products.
- Availability has increased for energy efficient products in general and with a broad array of features and brands.
- Exposure of energy efficient products has improved over time through retailer in-store promotions and salesperson discussions.

Many outside influences acted on consumers in 2001 to make them more aware of energy efficiency, to improve their attitudes and inclinations towards energy conservation behavior, and to encourage energy efficient purchases. These same influences also encouraged manufacturers, distributors, and retailers to stock more energy efficient units, to display them more prominently, and to promote them more vigorously through salesperson discussions and in-store advertising.

The major outside influences that affected market behavior during 1998-2001 are as follows:

- California's Energy Crisis
- The ENERGY STAR® Labeling Program
- Retailer Promotions
- Utility Rebate Programs
- Utility Upstream Programs

While the energy crisis and its accompanied media attention clearly led to heightened awareness of conservation, other external factors acted to take full advantage of consumers' increased willingness to invest in energy efficiency, which ultimately resulted in increased market shares. While the State's intensive Flex Your Power campaign influenced the general population to "do their part" in undertaking easy, common sense-based behavioral actions at home, ultimately retailer exposure, rebates, and the threat of higher electricity bills caused most appliance purchasers to invest in energy efficiency because they were convinced that such investments were financially sound.

Supplier ability to meet the increased demand was key to turning consumer willingness to purchase efficient products into actual purchases, as ENERGY STAR® -labeled appliances and CFLs were available to all who sought them, and also were available with desirable features and would meet most applications. Prior and current utility programs directed at the upstream market are to be credited with ensuring adequate availability of energy efficient products and equipping local retailers with the tools necessary to effectively promote these products.

Statewide Residential Ceiling Fan Run Hour Study

RLW Analytics

In process – Expected Completion Summer, 2002

About two-thirds of households nationally have ceiling fans, and more than 150 million are in use. Domestic fan sales are approximately 16 million units per year, and a major portion of those go into new homes. Most installed fans include lights, typically 3 to 5 incandescent sockets. To date, little attention has been paid to the energy consumed by ceiling fans. In short, common opinion was that ceiling fans automatically save energy. While ceiling fans use much less energy than air conditioners, significant opportunities exist to make the fan components themselves (lights, blade design, motors, and controls) more energy efficient.

By early 2002, at least a dozen manufacturers will be offering new ENERGY STAR labeled fan models at Home Depot, Lowe's and other retailers. All of these products will have fairly efficient motors and/or blade designs. Most will likely include ENERGY STAR lighting as well (the rest will be sold with no lighting). The more efficient models will be easily identifiable by consumers due to the new ENERGY STAR label for ceiling fans. The first generation of ENERGY STAR ceiling fans will move air about 15 to 25% more efficiently than a typical fan, and about 3 to 9 times more efficiently than the worst performing fans.

The goal of this study is to determine the number of hours ceiling fans and lights are turned on. The study will breakdown the run hours by homes with and without air conditioning to try to determine if ceiling fans decrease air conditioning use.

Nonresidential[5]

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.

2001 Results and Achievements

The California Energy Commission (CEC) continues to manage two statewide study areas, 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 to MA&E planning and coordination by providing technical expertise on buildings codes and standards, and through dissemination of studies. CEC staff manages the California Measurement Advisory Committee (CALMAC) website and maintains both physical and on-line libraries of statewide MA&E studies. Under the guidance of the CALMAC, the website was redesigned to improve its use as a means of disseminating CALMAC studies. The database includes more than 500 report citations. Nearly one-half of these reports are available as PDF files for direct downloading from the site. Additional electronic files are being located and added with the assistance of the CALMAC Website Committee. Database search capabilities by keyword in title and abstract as well as by report category, sponsoring entity, program year, report author, market sector and publication date were added in 2001.

[5] The following write-up on the CEC Data Collection and Analysis was provided by the CEC.

Nonresidential Remodeling and Renovation

The nonresidential remodeling and renovation study neared completion in 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. All data collection is complete. Data were obtained from focus groups, secondary data, building permits, Title 24 documentation, telephone surveys and on-site visits to remodeling and renovation projects completed in 2000.

A report discussing the qualitative findings has been released. Differences in the way market actors view the remodeling and renovation market are captured in this report. Architects and engineers, for example, see little difference in their remodeling and renovation work from that in new construction. Commercial real estate firms and developers, however, specialize in either remodeling/renovation or new construction. Five unique remodeling/renovation investment options are described in this report along with suggestions for program strategies tuned to the different options. An additional report drawing from the quantitative analysis and a final summary report are expected in early 2002.

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, market characterization attributes, prices and decision factors will inform planning and evaluation of demand-side management and market transformation programs. 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. The first round of raw data has been collected.

Performance Indicator Studies/Tracking of Activities

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 in Section 3 of this report.

New Construction

Performance Indicator Studies/Tracking of Activities

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 in Section 4 of this report.

Summer Initiative

Statewide Summer Initiative - Pool Efficiency Programs

Evaluation of Year 2001 Summer Initiative Pool Pump Program Baseline and Market Characterization Report

ADM Associates

May, 2002

A brief baseline study that determined the duty cycles of existing pool pumps to estimate on-peak usage. ADM utilized 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.. SDG&E co-funded this study under PG&E's project management.

Pool Pump Evaluation in Response to Resolution E-3741

SDG&E

April, 2002

Participation in SDG&E's Pool Pump program was so overwhelming that SDG&E requested additional funds to continue the program. One million dollars in pre-1998 DSM funds was authorized through the Resolution E-3741 on June 28, 2001. This resolution required SDG&E to:

- Reevaluate the program's net-to-gross ratio, and
- Provide empirical research on the program's actual system peak demand (kW) savings.

Based on the program design, the net-to-gross ratio is defined as the number of customers participating in the program that were not previously filtering off-peak versus all program participants.

Peak demand savings has been determined through a statewide study conducted by ADM Associates, Inc, called Evaluation of Year 2001 Summer Initiative Pool Pump Program Baseline and Market Characterization Report, May 2002.

The report quantifies 1.4 kW savings per pump tripper and .99 net-to-gross ratio for future Pool Pump Programs that use similar program design.

Statewide Summer Initiative - LED Program

This program encouraged the retrofit of traffic lights from traditional incandescent bulbs to light emitting diode (LED) traffic lamps. The number of traffic signals installed and the calculated energy and demand savings using engineering estimates have been summarized. These savings can be found in Section 7 Table 7.2.

Statewide Summer Initiative - Whole House Fans

This program informed consumers about the installation and operation of whole house fans, and provided financial incentives to customers who choose to install whole house fans. The program activities and estimated demand and energy savings impacts have been summarized. These savings can be found in Section 7 Table 7.2.

Statewide Summer Initiative - Halogen Torchiere Turn-In

This program targeted lower income users of halogen torchiere lamps and encouraged them to replace those lamps with ENERGY STAR® models. The program also provided the recycling of halogen torchieres that are replaced. The program activities and estimated demand and energy savings impacts have been summarized. These savings can be found in Section 7 Table 7.2.

Other Program Evaluation Studies

Evaluation of SDG&E's School Based Energy Efficiency Program

Knight Research

November, 2001

Focus groups were conducted with parents, teachers, and students that participated in SDG&E's School Based Energy Efficiency Program (SBEEP). Focus groups usually consist of a group of 8 to 12 participants led by a moderator, with the goal of obtaining open and honest customer feedback on a particular product or program. Focus groups are a form of qualitative research that provides a richness of response not found in quantitative research methods of research.

Teachers felt that the following steps would have been effective in engaging their interest:

1. Clearly indicate which state standards the curriculum meets (e.g., science, verbal, written, etc.). This could even be put on the outside envelope of the mailed material.
2. SDG&E should send a letter with a response card, instead of the full curriculum. The postcard would allow interested teachers to quickly select the number of curriculum packages by the language and grade level required.
3. If an incentive for participation (e.g., raffle, credit for classroom supplies, etc.) is included in the program, it should be clearly stated in the materials. Once again, it could be put on the outside of the envelope.
4. The materials must arrive early enough in the school year for the teachers to work them into their lesson plans conveniently.

The teachers also recommended that SDG&E spokespersons kick off the curricula at school assemblies. They mentioned that an energy mascot (for example: Ready Kilowatt or Off-a-lot) might be an excellent way to engage their younger students. All of the teachers and students felt that an energy game would be an effective adjunct to the curriculum.

Both the teachers and students asked for more energy-related experiments; preferably ones that work with a high degree of consistency. The 4th and 5th graders wanted hands-on experiments (they didn't want to watch their teachers conduct the experiments). The teachers also said they would prefer not to have to supply curriculum materials. They suggested that the materials could come as a kit when they ordered the curriculum materials from SDG&E. The teachers also felt that some portion of the project should go home each night to better engage the parents with the material. Many suggested that the curriculum span a four to five week period, with a prize like a Compact Fluorescent Light bulb (CFL) offered at the end of the program for students who kept a journal of energy efficiency activities or otherwise participated in the curriculum.

At least in the short term, students and to a lesser extent their parents were prompted into energy saving behaviors in their homes due to the curriculum (parent and student reports). Anecdotally, student energy-related vocabulary and conversation ethos increased due to the SBEEP curriculum (teacher and parent reports).

The City of San Diego Ridgehaven Green Building Review

WorldBuild Technologies Inc.

February, 2002

The Project Review describes the City of San Diego Ridgehaven Demonstration Green Building energy operating results during the building's four years of building operations after its substantial rehabilitation completed in 1996. The goal of the Review is to inform San Diego and the rest of the country of the successful design approach and building operational data. The hope is that project's such as Ridgehaven accelerate green building adoption by both public and private sectors. The Review provides four years of operating and financial return on investment data for the building. The data is tracked against project benchmarks.

In 1994 the City of San Diego's Environmental Services Department "ESD" purchased a 15-year old existing 73,020 ft2 office building, to be renovated into its new headquarters. Its building systems and layout were in need of substantial retrofit in order to accommodate the City's future needs. In addition to the City ESD, the building would house the City's Permitting and Inspection Division. These two high-profile city tenants made the project an ideal candidate for a sustainable building demonstration project.

Despite a limited improvement budget, the team set high sustainable building goals for energy, water, waste and resource efficiency, and indoor air quality. A major goal of the greening program was to achieve an annual energy consumption of 9 kWh/ft2. SDG&E, as a financial and technical assistance partner in the demonstration project was insistent that the renovated building be a model for energy efficient design. The energy consumption goal was considered by the utility to be an appropriate threshold for a "model" building. The building's average electricity consumption for the prior tenant was 21 kWh/ft2. The energy goal represented a 57% reduction from the older use. At the time the team decided to make the project into a sustainable building demonstration, the building design plans were fairly advanced (completion of design development). As a result, the team was able to model the electricity consumption level for a Title 24 Code Compliant building renovation. The model, utilizing DOE-2 software, indicated an estimated consumption level of 17.8 kWh/ft2. The energy goal of 9 kWh/ft2 represented a 49% reduction from the Code requirement. (Note: Title 24 has changed twice since the analysis, becoming even more energy efficient. The modeling was based on the 1992 version of Title 24).

The four years of building operational data studied for the Review (1997-2000), indicate that the Ridgehaven building has consumed an average annual electricity load of 605,00 kWh. This equates to an annual consumption level of 8.3 kWh/ft2. The four-year consumption level falls 8% lower than the project goal of 9.0 kWh/ft2 set by the team. Achievement of such a low electricity consumption level is impressive; placing the building at one of the lowest energy operating levels within the United States. The operating results are 53% below the California Title 24 Energy Code compliant level of 17.67 kWh/ft2 estimated at the time of building design. Ridgehaven's electricity consumption during the Review period is 60% below the building's prior electricity use average consumption level of 20.8 kWh/ft2/year.

ENERGY MANAGEMENT SERVICES (RESIDENTIAL AND NONRESIDENTIAL) AND NON-RESIDENTIAL SEMINARS: An Evaluation of Program Impacts on Participants Who Do Not Participate in Other SDG&E Programs

SDG&E

April, 2002

I) Residential Energy Management Services Evaluation

The Residential In-Home Audits program encourages consumers to implement a broad array of permanent, sustainable energy saving measures in their homes, including appliance replacement and energy efficiency home retrofits. SDG&E provides one on one contact with customers in their own home. This approach allows the auditor the opportunity to answer each customer's specific questions. Auditors speak directly to the customers concern and provide an immediate response to many of the efficiency questions that might not be covered outside of a face-to-face contact. The auditor also provides references to additional programs or incentives that may be available to the customer.

A survey was developed and administered by CIC Research to determine if Audit participants who do not participate in SDG&E energy efficiency programs implement recommendations for energy efficiency measures and/or behavior changes as a result of the audit. The survey questions used in this evaluation are attached to this study. The evaluation utilized a random survey of 200 customers who participated in audits during 2001. Out of the 200 participants surveyed, 59 or about 30% of the audit participants made no behavioral or physical changes associated with energy efficiency. However, 141 participants did make some energy efficiency changes as a result of receiving the audit. Of these, 91 (45%) made changes outside of SDG&E programs. In addition, 50 of the participants who were a part of the survey indicated that changes were made both through SDG&E programs and outside the SDG&E Energy Efficiency programs.

These results indicate that a substantial number of audit participants do use the information provided through residential audits to increase energy efficiency. It also indicates that even if participants do not use SDG&E programs, they still make changes to increase energy efficiency based on information gained through the SDG&E administered audits.

II) Non-Residential Energy Management Services Evaluation

This program offers opportunities to small and medium commercial customers to identify energy efficiency opportunities. These customers need resources for information regarding all events occurring in the electric industry, all the programs that they may be eligible for and recommendations for energy efficiency that are specific to their facility. This strategy was designed to complement the financial incentives strategy and t help customers benefit from the lower interest financing. Customers find these services very helpful in addressing their energy usage and desire the individualized service, as evidenced by the increased demand for energy audits during the past summer.

A survey was developed and administered to determine if Audit participants who do not participate in SDG&E energy efficiency programs implement recommendations for energy efficiency measures and/or behavior changes as a result of the audit. The evaluation utilized a random survey of 170 customers who participated in audits during 2001. Out of these surveys

138 had competed responses. Out of the 138 completed surveys, 17 or about 12% of the audit participants made no behavioral or physical changes associated with energy efficiency. However, 121 participants (about 88%) did make some energy efficiency changes as a result of receiving the audit. Of these, 48 (40%) made changes outside of SDG&E programs.

These results indicate that a substantial number of audit participants do use the information provided through residential audits to increase energy efficiency. It also indicates that even if participants do not use SDG&E programs, they still make changes to increase energy efficiency based on information gained through the SDG&E administered audits.

III) Nonresidential Information Programs (Seminars):

As a part of its energy efficiency programs SDG&E provides customers with information and educational outreach designed to enable customers to utilize energy more efficiently.

Part of this information flow includes energy efficiency seminars (called Energy Insight) designed specifically for our nonresidential customers. In these seminars, customers are introduced to state-of-the-art technologies and practices relating to a variety of end uses, with special emphasis on emerging technologies. The goal of the workshops is that some action will be undertaken by the customer to enhance the energy utilization at their facilities.

A survey was developed and administered by CIC Research to determine if seminar participants who do not participate in other SDG&E energy efficiency programs implement recommendations for energy efficiency measures and/or behavior changes as a result of the seminar. The survey questions used in this evaluation are attached to this report. The evaluation utilized a random survey of 152 Seminar participants throughout 2001. Out of the 152 participants surveyed, 39 or about 26% of the seminar participants made no behavioral or physical changes associated with energy efficiency. However, the survey also indicated a total of 113 of the participants did make some change in energy efficiency as a result of the seminar. Out of these 113 participants, 86 (56%) made energy efficiency changes outside of SDG&E programs, and 27 (18%) of the participants indicated that changes were made through SDG&E Energy Efficiency programs.

These results indicate that a substantial number of seminar participants do use the information provided in the seminars to increase energy efficiency. It also indicates that even if participants do not use SDG&E programs, they still make changes to increase energy efficiency based on information gained through the SDG&E administered seminars.

Cost-Effectiveness Assumptions – Verified, Validated & Expanded

McNulty & Associates

May, 2002

SDG&E hired Mark McNulty and Associates to:

1) Review SDG&E's cost-effectiveness input assumptions and compare SDG&E's assumptions with those of PG&E, SCE and SoCalGas;
2) Review the Draft 2001 DEER update study and provide input into the final study;
3) Refine cost-effectiveness assumptions as needed and develop assumptions for new energy efficiency measures planned for 2002;

4) Review current studies and literature relating to emerging technologies to identify potential new energy efficiency measures that could be available in 2002, 2003, 2004 or 2005;

5) Compile and provide documentation for a verified set of cost-effectiveness input assumptions.

In the summer of 2001 SDG&E contracted with Mark McNulty & Associates (MM&A) to develop a revised set of cost-effectiveness input assumptions and documentation. The project began with a thorough review of SDG&E's existing cost-effectiveness input assumptions and a review of those from PG&E, SCE and SoCalGas. On a parallel path, MM&A conducted a review of current studies and literature relating to emerging technologies to identify potential new energy efficiency measures that could be available in 2003, 2004 or 2005. The review indicated: 1) kW load impacts were unavailable for a number of measures, mostly because the cost-effectiveness methodology adopted for PY1999 forward did not explicitly value kW load reductions; 2) a number of new measures were planned for 2002 that did not have cost-effectiveness input assumptions for SDG&E's service territory; 3) a number of input assumptions were outdated (e.g., incremental measure cost); and 4) savings estimates had not been compiled for hard-to-reach sectors (i.e., mobile homes, apartments, and rural areas). After the reviews were complete, MM&A worked with SDG&E to identify a set of energy efficiency measures that would be viable for future programs. In a number of cases cost-effectiveness assumptions needed to be developed. To aid with some of the specialized work, Proctor Engineering and Robert Mowris & Associates were hired to develop kW, kWh, and therm savings for new measures and/or hard-to-reach sectors. After the new set of cost-effectiveness assumptions were compiled a detailed document was written which documented the sources and/or the computation of each of the cost-effectiveness assumptions.

Regulatory Oversight

Regulatory Compliance and Reporting

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

ED Oversight Costs

Oversight costs include SDG&E's allocation for the Energy Division (ED) budgets and expenditures. In 2001, SDG&E paid $39,879 for the ED's expenditures and carry-over CBEE expenditures.

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

Electric and Natural Gas Combined

	2001 ($000)	
Cost Category and Element	Budgeted	Recorded [1]
Measurement for Program Admin Incentives		
1. Utility Studies Reports for PY 2001 Programs	$350	$331
Total Measurement for Program Admin Incentives	$350	$331
Demand Assessment	$0	$0
1. Customer Data for CEC: Utility Costs	$0	$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	$287	$232
3. DEER Updates	$0	$55
Total CEC Data Collection Costs	$287	$287
4. EE Market Assessment (Res Program Area)	$545	$548
5. EE Market Assessment (NonRes Program Area)	$95	$32
6. EE Market Assessment (NC Program Area)	$55	$4
7. EE Product Assessment (all Markets)	$0	$75
Total Demand Assessment	$982	$946
Total EE Market Assessment Costs	$1,332	$1,277.2
Other Program Evaluation Studies:	$0	$0
1. General	$169	$0
2. PY2000, Residential	$0	$0
3. PY2000 Nonresidential	$0	$0
4. PY2000 New Construction	$0	$0
5. PY2001, Residential	$60	$33.8
6. PY2001 Nonresidential	$10	$12.0
7. PY2001 New Construction	$10	$0
8. Summer Initiatives	$40	$29.3
M&E Total	$1,621	$1,352.3
Regulatory Oversight	$0	$0
Regulatory Compliance and Reporting (utility)	$0	$0
Oversight Costs	$0	$0
1. ED Operating Costs	$60	$40
2. Other	$0	$0
Total MA&E and Oversight	$1,681	$1,392

Notes:
[1] Recorded costs include actual and committed costs.
[2] See Table 5.2

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

Electric

Cost Category and Element	2001 ($000) Budgeted	2001 ($000) Recorded [1]
Measurement for Program Admin Incentives		
1. Utility Studies Reports for PY 2001 Programs	$277	$261
Total Measurement for Program Admin Incentives	$277	$261
Demand Assessment		
1. Customer Data for CEC: Utility Costs	$0	$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	$227	$184
3. DEER Updates		$43
Total CEC Data Collection Costs	$227	$227
4. EE Market Assessment (Res Program Area)	$431	$433
5. EE Market Assessment (NonRes Program Area)	$75	$25
6. EE Market Assessment (NC Program Area)	$43	$3
7. EE Product Assessment (all Markets)	$0	$60
Total Demand Assessment	$776	$748
Total EE Market Assessment Costs	$1,052	$1,009
Other Program Evaluation Studies:		
1. General	$134	$0
2. PY2000, Residential	$0	$0
3. PY2000 Nonresidential	$0	$0
4. PY2000 New Construction	$0	$0
5. PY2001, Residential	$47	$27
6. PY2001 Nonresidential	$8	$9
7. PY2001 New Construction	$8	$0
8. Summer Initiatives	$32	$23
M&E Total	$1,281	$1,069
Regulatory Oversight		
Regulatory Compliance and Reporting (utility) Oversight Costs	$0	$0
1. ED Operating Costs	$60	$40
2. Other	$0	$0
Total MA&E and Oversight	$1,341	$1,109

Notes:
[1] Recorded costs include actual and committed costs.
[2] See Table 5.2

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

Natural Gas

Cost Category and Element	2001 ($000) Budgeted	2001 ($000) Recorded [1]
Measurement for Program Admin Incentives		
1. Utility Studies Reports for PY 2001 Programs	$74	$70
Total Measurement for Program Admin Incentives	$74	$70
Demand Assessment		
1. Customer Data for CEC: Utility Costs	$0	$0
2. Customer Data Analysis: CEC costs (cost of studies) [2]	$60	$49
3. DEER Updates		$11
Total CEC Data Collection Costs	$60	$60
4. EE Market Assessment (Res Program Area)	$114	$115
5. EE Market Assessment (NonRes Program Area)	$20	$7
6. EE Market Assessment (NC Program Area)	$12	$1
7. EE Product Assessment (all Markets)	$0	$16
Total Demand Assessment	$206	$199
Total EE Market Assessment Costs	$280	$268
Other Program Evaluation Studies:	$0	$0
1. General	$35	$0
2. PY2000, Residential	$0	$0
3. PY2000 Nonresidential	$0	$0
4. PY2000 New Construction	$0	$0
5. PY2001, Residential	$13	$7
6. PY2001 Nonresidential	$2	$3
7. PY2001 New Construction	$2	$0
8. Summer Initiatives	$8	$6
M&E Total	$340	$284
Regulatory Oversight		
Regulatory Compliance and Reporting (utility)	$0	$0
Oversight Costs		
1. ED Operating Costs	$0	$0
2. Other	$0	$0
Total MA&E and Oversight	$340	$284

Notes:
[1] Recorded costs include actual and committed costs.
[2] See Table 5.2

TABLE 5.2

CEC MA&E Expenditures and Budgets

Table 5.2a: CEC MA&E Expenditures and Budgets

	PY 2001 Authorized	PY 2001 Actual and Committed	2002 Planned Budget
CEC Data Collection and Analysis	$ 2,100,000.00		
Commercial End Use Survey (CEUS)		$ 1,500,000.00	$ 0
Residential Appliance Saturation Survey (RASS)		$ 200,000.00	$ 0
Database of Energy Efficient Resources (DEER)		$ 400,000.00	$ 0
Total		$ 2,100,000.00	$ 0
	$ 0		
CEC-Managed Statewide Studies			
Nonresidential Market Share Tracking		$ 0	
Nonresidential Remodeling & Renovation		$ 0	
Total		$ 0	$0
	$ 2,100,000.00		
TOTAL AUTHORIZED			
TOTAL ACTUAL AND COMMITTED		**$ 2,100,000.00**	

Table 5.2b: Funding Contribution to CEC 2001 Data Collection and Analysis Budget by Utility

	Dollars	Percent
(1) PG&E	$ 680,000	32%
(2) SCE	$ 945,000	45%
(3) SDG&E	$ 287,000	15%
(4) SoCalGas	$ 204,000	10%
Total	$ 2,116,000	100%

Shareholder Performance Incentives

PY2000 Energy Efficiency Programs Incentive Mechanism

SDG&E filed Application 00-11-045 on November 15, 2000, requesting approval of its 2001 Energy Efficiency program plans, budgets, and performance incentive award mechanism as directed by the August 15, 2000 Administrative Law Judge's ("ALJ") Ruling Establishing Schedule and Process for PY 2001 Energy Efficiency Program Planning, the October 25, 2000 Ruling on Cost Effectiveness Issues for PY 2001 Programs and the ALJ's Ruling Giving Direction for Program Year 2001 Planning, dated October 25, 2000. On January 31, 2001 the Commission issued D.01-01-060 approving the utilities' Program Year (PY) 2001 energy efficiency programs and the proposed budgets, with modifications to program design, budgets and performance incentives, and the statewide Market Assessment and Evaluation ("MA&E") activities. The utility-specific and California Energy Commission MA&E activities were approved by D.01-06-037 on June 14, 2001.

D.01-01-060 adopted an incentive mechanism that allowed the utilities to be eligible to earn shareholder awards based on proven energy savings from absolute savings targets set by the Commission, with a minimum threshold of a 50% award and a maximum threshold of a 100% award, scaled between 50% and 100%. For example, a 1% increase in savings over the minimum threshold level will result in an award equaling 52% of shareholder earnings, once savings are verified and reported. The Commission adopted the utility-proposed performance adder and market effects award incentive levels.

The following table shows the minimum and threshold savings requirements SDG&E must meet to earn shareholder incentives. [6]

	Minimum/Threshold (50% earnings)			**Maximum (100% earnings)**		
Program Area	Million kWh	MW	Million therms	Million kWh	MW	Million therms
Residential	17.8	6.8	0.7	22.3	8.5	0.8
Nonresidential	44.8	7.3	0.3	56.0	9.1	0.3
New Construction	18.4	4.7	0.1	23.0	5.8	0.2
Total	**81.0**	**18.8**	**1.1**	**101.2**	**23.4**	**1.3**

The following table shows the maximum shareholder incentives as savings targets are achieved.

	Maximum Earnings Potential for Energy and Demand Savings ($ million)			
Program Area	**kWh savings**	**Peak MW savings**	**Therm Savings**	**Total, Savings**
Residential	0.50	0.17	0.17	0.83

[6] The incentive amounts reflected in D.01-01-060 are rounded to two decimal places. SDG&E's actual achievements are shown as full amounts.

	Maximum Earnings Potential for Energy and Demand Savings ($ million)			
Nonresidential	0.53	0.18	0.18	0.88
New Construction	0.27	0.09	0.09	0.46
Total	**1.30**	**0.43**	**0.43**	**2.16**
Weighting	*60%*	*20%*	*20%*	

Utilities will be eligible to earn these incentives on a program area basis, not on a portfolio basis. In order to encourage the utilities to meet all of their targets, however, the mechanism provides a 5 % shareholder incentive bonus to utilities who meet all of their program area kWh, MW, and therm savings targets. The bonus will be equal to 5% of the 7% of program budgets. This will reduce the amount of shareholder incentives available under the performance adder mechanism to 5%. SDG&E's maximum potential bonus is $140,000. In addition, the determination of the savings achievement is based on the *ex ante* savings for measures and the quantity of measures installed or committed.

The total potential shareholder incentive is described as follows:

Utility	Market Effects Incentives ($million)	Performance Adder Incentives ($million)	Total Potential Earnings ($million)
SDG&E	**0.27**	**0.14**	**2.71**

SDG&E's 2001 MILESTONES AND AWARD LEVELS

The following section provides a detailed description including the corresponding program goal, performance indicator, and corresponding verification plan for each of the proposed market effects milestones.

Programs:	Residential Lighting
Program Element:	Statewide Upstream Residential Lighting
Performance Award Milestone: (SDR-1)	Increase by 1 the number of eligible retailers (companies) participating in the co-op program. An eligible retail company for the purpose of this milestone is defined as one with 10 or more stores that conduct business with the public on a retail basis which sells ENERGY STAR® lighting products. (Level 2 Performance – none)
Award Levels:	Level 1: $100,000 Level 2: None
Baseline:	In 2000, the baseline is 5 for SDG&E.
Program Goal:	Increase consumer adoption of energy efficiency lighting technologies by increasing supply and availability.
Program Performance Indicator:	Number of lighting manufacturers and retail companies participating in the co-op program.
Verification Plan:	Identify 2000 baseline and document 2001 co-op retailers (companies) participation commitments based upon the signed co-op agreements.

Programs:	Residential Appliances
Program Element:	Statewide Upstream Residential Appliances
Performance Award Milestone: (SDR-2)	Of the 6 major appliance manufacturers that produce ENERGY STAR® qualified products (clothes washers, dishwashers, and refrigerators), sign-up 2 of these major manufacturers to the 2001 co-op program. (Level 2 Performance –1 manufacturer)
Award Levels:	Level 1: $25,000 Level 2: $18,000
Baseline:	In 2000, there is not a co-op program with the Residential Appliance program element. Therefore, the baseline is 0.
Program Goal:	Increase supply and consumer demand of energy efficient appliances (ENERGY STAR®) while decreasing usage of inefficient appliances.
Program Performance Indicator:	Number of eligible major appliance manufacturers participating in the co-op program.
Verification Plan:	Signed agreements with the manufacturers will be the form of verification.

Programs:	Large Non Residential Comprehensive Retrofit
Program Element:	Emerging Technologies/Demonstration Projects
Performance Award Milestone: **(SDNR-1**)	During PY2001, increase by 3 customers that install or commit to install a high-reflectivity roof over the PY2000 baseline. (Level 2 Performance – increase by 2 customers)
Award Levels:	Level 1: $40,000 Level 2: $28,000
Baseline:	Baseline = 1 in PY2000. NOTE: this is a new program
Program Goal:	Promote the implementation of high-reflectivity roofs retrofits in the non-residential market place.
Program Performance Indicator:	Demonstrate the energy savings potential for reducing the heat gain through a roof.
Verification Plan:	Provide documentation from customer agreements and/or invoices.

Programs:	Residential New Construction
Program Element:	Home Energy Partnership – Single Family
Performance Award Milestone: **(SDRNC-1)**	Achieve 25 % market share increase of newly constructed ENERGY STAR® homes over the 2000 base year (12.5% market share) - (Level 2 Performance – Scaleable where 70% = 17.5% market share increase)
Award Levels:	Level 1: $50,000 Level 2: scalable
Baseline:	Baseline = 10% in PY2000, based on the first 6 months of 2000: (449 ENERGY STAR® Homes built out of 4592 homes constructed)
Program Goal:	Increase the market share of newly constructed homes that are ENERGY STAR® qualified.
Program Performance Indicator:	Number of builders that offer ENERGY STAR® qualified homes
Verification Plan:	Utilize data from the on-going California Residential Efficiency Market Share Tracking study being performed by Regional Economic Research, Inc. The number of newly constructed homes will come from the RER Market Share Tracking Report; the number of ENERGY STAR® qualified homes will come from Program tracking database.

Programs:	Residential New Construction
Program Element:	Home Energy Partnership - Multifamily
Performance Award Milestone: **(SDRNC-2)**	Achieve 8 % market share of newly constructed high efficiency units (i.e., units that exceed Title 24 Standard in place at the end of 2000 by 15%) - (Level 2 Performance – Scaleable where 70% = 5.6% market share)
Award Levels:	Level 1: $56,000 Level 2: scalable
Baseline:	Baseline = 0 in PY2000, since this is a new program for PY2001.
Program Goal:	Increase the market share of high efficiency units and work with the Department of Energy to establish an ENERGY STAR® Multifamily Home.
Program Performance Indicator:	Number of builders that offer energy efficient qualified MF units
Verification Plan:	Utilize data from the on-going California Residential Efficiency Market Share Tracking study being performed by Regional Economic Research, Inc. The number of newly constructed units will come from the RER Market Share Tracking Report; the number of qualified units will come from Program tracking database.

PY 2001 Energy Efficiency Program Achievements

SDG&E's total performance incentive award for PY 2001 is $2,681,202. This incentive award is a result of SDG&E achieving an award for its energy and demand savings, Market Effects milestones, and performance adders from its information programs.

1. Energy and Peak Demand Savings Achievements

The following table shows the energy and demand savings achieved through SDG&E's 2001 Energy Efficiency programs.

SDG&E has exceeded all the electric energy (kWh), electric peak demand (kW) and gas (therms) savings goals in each program area set by the Commission. SDG&E has achieved the maximum award of $2,164,624 for its documented energy and demand program savings. In addition, because all the savings goals were exceeded, SDG&E is eligible for the additional 5 percent (of the seven percent of the program budget) shareholder incentive bonus of $135,289. Therefore the total shareholder incentives for this incentive category is $2,299,913.

	Energy and Demand Savings Achievements (Target Goal for 100% Earnings)			**Shareholder Incentives Achievements (Includes the bonus award)**			
Program Area	**MWH Savings**	**Peak MW Savings**	**Therm Savings**	**MWH Savings**	**Peak MW Savings**	**Therm Savings**	**Total**
Residential	44.2 (22.3)	10.7 (8.5)	1,445,446 (800,000)	$528,980	$183,993	$183,993	$896,966
Nonresidential	70.8 (56.0)	12.8 (7.3)	720,308 (300,000)	$551,979	$183,993	$183,993	$919,965
New Construction	34.8 (23.0)	7.7 (5.8)	746,989 (200,000)	$298,989	$91,997	$91,997	$482,982
Total	**149.8 (101.2)**	**31.2 (23.4)**	**2,912,743 (1,300,000)**	**$1,379,948**	**$459,983**	**$459,983**	**$2,299,913**

2. Market Effects Milestones

The first milestone (SDR-1) requires SDG&E to increase by 1 the number of eligible retailers (companies) participating in the Statewide Upstream Residential Lighting program. An eligible retail company for the purpose of this milestone is defined as one with 10 or more stores that conducts business with the public on a retail basis and sells ENERGY STAR® lighting products. SDG&E modified its program design in order to meet the established energy savings and demand targets and, accordingly, changed its focus to the immediate delivery of savings. The baseline for comparing performance against this milestone can be found in SDG&E's PY 2001 Energy Efficiency Program Application. That application states that the baseline for the number of retailers participating in the co-op program is five. In PY 2001, manufacturers agreed to various promotional activities at 11 unique retailers covering 263 storefronts.[7] The PY 2001

[7] See Appendix A of this report for copies of letters of agreement between SDG&E and lighting manufacturers.

program exceeded the milestone by increasing the number of participating retailers by a total of 16. Therefore, SDG&E has achieved the Level 1 award of $100,000 for this milestone.

The second milestone (SDR-2) requires SDG&E to sign-up two (2) of the six (6) major appliance manufacturers that produce ENERGY STAR® qualified products (clothes washers, dishwashers, and refrigerators), to achieve a Level 1 award of $25,000, or to sign-up one (1) manufacturer to the 2001 co-op program to achieve a Level 2 award of $18,000. The appliance co-op program was designed to sign-up major appliance manufacturers to agree to use the same energy efficiency appliance promotional materials. In order to address the Commission's established energy and demand reduction targets, however, SDG&E did not actively pursue its manufacturer co-op program and redirected program funds to an appliance rebate program that provided direct incentives to customers who purchased qualifying appliances. This program, however, contributed to SDG&E's achievement of its residential energy and demand reduction targets. The Commission permitted this flexibility to revise the program design to allow the utilities to achieve the targeted levels (D.01-01-060 at page 6.):

Furthermore, we are confident that the energy savings targets and associated incentives will drive the utilities to make the necessary program improvements. Indeed, we have purposefully provided the utilities with maximum flexibility to accomplish this objective.

Therefore, SDG&E's has not achieved this milestone.

The third milestone (SDNR-3) requires SDG&E to increase its baseline of non-residential customers that install or commit to install a high-reflectivity roof (cool roof) over the PY2000 baseline. A Level 1 award of $40,000 requires an increase of three (3) customers and a Level 2 award of $28,000 requires an increase of two (2) customers. The baseline for comparing performance is one customer as documented in SDG&E's PY 2001 Energy Efficiency Program Application.[8] SDG&E has signed Memoranda of Understanding with three (3) customers to facilitate their cool roof installations through monitoring of the roof's performance and signed a contract with one (1) customer under the Standard Performance Contract program to install the roof for a total of four (4) nonresidential customers. This activity reflects an increase of three (3) over the baseline. Therefore, SDG&E has achieved a Level 1 award of $40,000.

The fourth milestone (SDRNC-1) requires SDG&E to achieve a 25 percent market share increase of newly constructed ENERGY STAR® single family homes over the 2000 base year for a maximum award of $50,000 and a 17.5 percent market share increase for the minimum award of $35,000. This milestone award is scalable between $50,000 and $39,200. The baseline for this milestone is 10 %. For the year 2001, Regional Economic Research ("RER") has estimated single family housing starts in the San Diego area at 9,331.[9] The goal of 12.5% (25% increase over the 10% baseline) is equal to 1,167 (12.5% of 9,331) ENERGY STAR homes. SDG&E has signed contracts in 2001 for 1,242 ENERGY STAR® homes, exceeding the goal by 75 units. Therefore, SDG&E has achieved the Level 1 award of $50,000.

The fifth milestone (SDRNC-2) requires SDG&E to achieve an 8 % market share increase of newly constructed high efficiency (i.e., units exceed Title 24 Standards in effect at the end of 2000 by 15 %) multi-family homes over the base year 2000 for a maximum award of $56,000

[8] *SDG&E PY2001 Energy Efficiency Program Application*, Attachment H, page H-7, November 2000.

[9] *California Residential Efficiency Market Share Tracking Report*, RER.

and a 5.6 % increase for the minimum award of $35,000. This milestone award is scalable between $50,000 and $35,000. The baseline for this milestone is 0 % since this is a new program in PY 2001.[10] RER has estimated that there were 6,319 multifamily housing starts in the San Diego area during the year 2001. This means that an 8% market share would be approximately 505 energy efficient multi-family housing starts. For the program year 2001, SDG&E received 2,400 signed contracts for energy efficient Multi-family units. This achievement exceeds the requirement to have 505 units committed. Therefore, SDG&E has achieved the Level 1 award of $56,000.

In sum, SDG&E has achieved a total award of $246,000 for its documented achievements for these market effects milestones.

Performance Adder Incentives

SDG&E directed its information programs to several hard-to-reach market segments in SDG&E's service territory. SDG&E participated in several ethnic community events and provided energy efficiency information to seniors through its Lighting Turn-in events. Several efforts were also directed at the smallest nonresidential customers (less than 20 kW) to assist them in determining energy efficiency potential in their businesses. Several outreach efforts were done to include affordable housing projects in the residential new construction program.

The performance adder incentive is 5 percent of all program expenditures for information programs not to exceed $135,289. SDG&E performance adder achievement is $268,853 (5% of $5,377,060). Therefore SDG&E has achieved a total award of $135,289 for the performance adder programs.

[10] *SDG&E PY2001 Energy Efficiency Program Application*, Attachment H, page H-7, November 2000.

TABLE 6.1
COST OF PERFORMANCE INCENTIVES

Electric and Gas Combined		
	2001	
	Budgeted	Claimed
Residential Program Area	$1,083,032	$1,058,454
Nonresidential Program Area	$1,003,403	$1,003,403
New Construction	$619,345	$619,345
General/Other	NA	NA
Total[1]	$2,705,780	$2,681,202

Electric Only		
	2001	
	Budgeted	Claimed
Residential Program Area	$854,945	$835,544
Nonresidential Program Area	$792,086	$792,086
New Construction	$488,911	$488,911
General/Other	NA	NA
Total	$2,135,943	$2,116,541

Gas Only		
	2001	
	Budgeted	Claimed
Residential Program Area	$228,087	$222,910
Nonresidential Program Area	$211,317	$211,317
New Construction	$130,434	$130,434
General/Other	NA	NA
Total	$569,837	$564,661

Summer Initiative Programs

Summer 2000 Energy Efficiency Initiative

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

Program Description

This statewide program targets commercial and industrial users of halogen torchiere lamps and encourages them to replace those lamps with ENERGY STAR® 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 - 2001 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 explored a revised program design to effectively reach this market. As of year-end 2000, no torchieres were exchanged and/or returned.

Ecos proposed to modify their program format and provided the utilities with their revised plans in the third quarter 2001. In September 2001, Ecos submitted their revised proposal to the CPUC and the CPUC approved their proposal on 9/26/01. As a result of the decision, in SDG&E service territory, Ecos targeted and offered residential customers in commercially metered facilities a free torchiere exchange. These customers were not eligible to participate in the SDG&E residential torchiere/CFL exchange program.

SDG&E provided Ecos with several contact leads for potential exchange sites during the fourth quarter 2001. In the fourth quarter 2001, Ecos exchanged 229 torchieres in SDG&E's service territory. The CPUC authorized a program extension through March 2002. Results from the first quarter 2002 were 628 torchiere exchanges. Per the Ecos summary report, this program resulted in exchanging a total of 857 torchieres over the 18-month period in SDG&E's service territory.

Residential Refrigerator Recycling-ARCA

Program 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 - 2001 Results & Achievements

During the 3rd 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 4th 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. The following are results in SDG&E's service territory as of December 31, 2001.

Number of Households	11,831
Refrigerators	10,856
Freezers	2,079
Total Appliances	12,935

The performance indicator for this program was for ARCA to submit a summary of program activities to the Commission. The final report was issued in December 2001.

Pool Efficiency Program

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 the 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 - 2001 Results & Achievements

SDG&E'performance indicator for the program was to establish a brief baseline study. Results of the study can be found in the Pool Pump Evaluation dated April 2002.

Activity	Units of Measure
Switch timer to off peak	14,639
Conversion	4,984

Program: Campus Energy Efficiency Programs

Program 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 UC/CSU contracts were signed by October 23, 2000.

2000 - 2001 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 was awarded $1,125,000 for forecasted energy savings of 0.830 MW, 5,292 MWH, and 171,800 therms.

The contract was signed on October 20, 2000. SDG&E received UCSD's Project application on December 21, 2000. UCSD completed installation of all six retrofit projects in June 2001. UCSD provided SDG&E with the final report summarizing the estimated annual energy savings for this project.

California State University San Marcos

California State University San Marcos (CSUSM) submitted two projects that were approved by the CPUC. CSUSM was awarded $875,000 for forecasted energy savings of 1,501 MWH and 0.400 MW.

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. CSUSM completed installation of their two projects in August 2001 and submitted a

partial final report in December 2001. CSUSM requested and was granted an extension until March 1, 2002 for the submitting the remaining portion of the final report. The final report included the estimated annual energy savings for this project

Residential Hard to Reach

Program 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® lighting equipment, ENERGY STAR® refrigerators, ENERGY STAR® clothes washers, ENERGY STAR® 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.

2000 - 2001 Results & Achievements

Ten contracts were signed with project sponsors in SDG&E's service territory. An inspection of the contracts show that all ten contracts use the agreed upon deemed savings values set forth in the program. The performance indicator for this program stated that the utilities should work to establish these deemed savings in consultation with members of the energy service community. The deemed savings numbers come from the 1998 RES-SPC and the 1999/2000 RCP program and were approved by the CPUC.

LED Traffic Signal Rebate Program

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 - 2001 Results & Achievements

SDG&E kicked off the LED Traffic Signal Rebate program on September 6, 2000 at the LED Traffic Signal seminar. Program details included: 1) higher incentives for installations before June 1, 2001 2) the incentive amount paid was the posted amount, not to exceed the invoice amount; 3) the actual incentive was dependent on the number of actual lamps replaced. If more lamps than contracted for were installed, additional lamps would be eligible for funds if funds were available; and 4) the program ended December 15, 2001.

From September 2000 through December 2001, 26 agencies agreed to participate in the LED Traffic Signal Rebate program. Twenty-one agencies completed LED installation and several other agencies had partial completions by yearend 2001. The remaining LED projects, unable to

complete installations in December 2001 due to delivery delays, were given an extension through the end of March 2002.

The performance indicator "Track and audit the number of traffic signals installed and calculate energy and demand savings using engineering estimates." was satisfied. There were over 23,000 LED traffic lamps installed. The energy savings results of this performance indicator can be found in Section 7, Table 7.2.

Whole House Fans

Program 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. 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 building code. This program also uses a "Whole House Fan Brochure " which provides information on how to properly operate these fans.

2000 Results and Achievements

This program ended on June 30, 2001. There were 668 whole house fans installed and $99,900 in rebates paid. In July 2001, whole house fans were incorporated as a measure under the Single Family Rebate program at a reduced rebate of $100 per unit. SDG&E participated in several Home Depot Energy Efficiency events. Meetings were held with other retailers including Dixieline, Sears, True Value Hardware, Lowe's, and Ace Hardware to promote this program. The performance indicator for this program was to submit an estimate of demand and energy savings for this program. Table 1 shows the program summary and the program savings.

Table 1

Measure Incentive (per unit)	$150
Net to Gross	1.00
Quantity of Measures	668

Halogen Torchiere Turn In Event

Program 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® qualified torchiere and compact fluorescent lamps.

2000 - 2001 Results & Achievements

Fifteen lighting events were held at various community centers around the service territory. The performance indicator for this program was to provide an estimate of demand and energy savings impacts. The total demand savings for the program was 197.9 kW and the energy savings were 1,903,648 kWh. The results of the events are shown in Table 1.

Table 1

Measure	**Qty**
CFL Bulb (20 watt)	2
CFL Bulb (25 watt)	2,685
CFL Bulb (32 watt)	468
Halogen Torchiere	720
Total	**3,875**

Third Party Initiatives

Program 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 - 2001 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 were to be completed by December 31, 2001. In December 2001, the CPUC allowed an extension through March 31, 2002.

Project 1 installed a voltage regulator type, high intensity discharge lighting control system at a commercial facility in San Diego. The estimated annual energy savings were 950 MWH with a demand reduction of 0.109 MW. The contract was signed on December 27, 2000. The customer received loan approval in July 2001, but the project was delayed at their division headquarters. The project was completed in the first quarter of 2002.

Project 2 installed a compressed air energy efficiency system at a commercial facility in San Diego. The estimated annual energy savings were 269 MWH with a demand reduction of 0.0307 MW. The contract was signed on December 27, 2000. The customer received loan approval in July 2001. The project was installed in the fourth quarter 2001.

Project 3 replaced high intensity discharge lighting fixtures at selected area locations. The estimated annual energy savings were 1,420 MWH with a demand reduction of 0.327 MW. The contract was signed on December 27, 2000. All installations were completed in June 2001 and annual energy savings are expected to be higher than forecast.

Project 4 installed lighting control devices for tubular skylights in commercial and industrial buildings. The estimated annual energy savings were 4,359 MWH with a demand reduction of 21.1 MW. The contract was signed on November 17, 2000. The vendor only installed seven projects in 2001. This vendor was awarded CEC funds for a related project that has had a significant impacted the achievements of this project.

Project 5 was to install evaporative pre-cooling packages to rooftop packaged cooling systems. The estimated annual energy savings were 594 MWH with a demand reduction of 0.227 MW. The contract was signed on November 7, 2000. In June 2001, SDG&E asked the vendor to submit a revised Scope of Work and Payment Schedule because there had been zero installations in SDG&E's service territory. The revised proposal was accepted in August 2001 and an amended contract was signed in September 2001. The vendor installed a prototype in a major store in SDG&E's service territory in mid November 2001. Data downloading was scheduled to begin on December 14, 2001. The vendor requested and was granted an extension until the end of March 2002 to negotiate and complete installations at other locations. The vendor notified SDG&E in mid-March that they would not be able to complete any installations in SDG&E's territory by the end of March.

Project 6 repaired commercial rooftops package air conditioners. The estimated annual energy savings were 1,940 MWH with a demand reduction of 0.400 MW. The contract was signed on November 6, 2000. The vendor completed all repairs by June 2001.

TABLE 7
SUMMARY OF COSTS:
SUMMER INITIATIVE PROGRAMS

	2001	
Program	Budgeted	Recorded
Appliance Replacement	$1,500,000	$1,380,526
Refrigerator Recycling	$3,000,000	$2,270,988
Res Torchiere Turn-In	$50,000	$32,408
Whole House Fan Rebates	$100,000	$104,198
Swimming Pool Pumps	$500,000	$874,121
Swimming Pool Pumps	$1,000,000	$715,243
LED Traffic Lights	$4,000,000	$3,171,487
Nonres Torchier Replacement	$150,000	($272,638)
Original TPI Solicitation Program	$0	$113,063
UCSD (OLD Name UC/CSU Projects)	$1,125,000	$1,016,394
Proctor Engineering	$120,000	$126,061
Davis Energy Group	$225,000	$34,330
Navy Region	$300,000	$275,675
Solatube	$252,000	$7,189
CalState Univ San Marcos	$875,000	$355,761
US Postal Lighting	$85,000	$4,269
US Postal Compressed	$18,000	$13,329
Totals Summer Initiatives	$13,300,000	$10,222,404

TABLE 7.2
SUMMARY OF ENERGY EFFICIENCY PROGRAM EFFECTS:
SUMMER INITIATIVE PROGRAMS

Annual Energy Reductions, Electric, MWH

	2001 (Recorded)
Utility Programs	
Pool Efficiency Program	17,552
Residential Hard to Reach	2,183
LED Traffic Signal Rebate Program	12,952
Whole House Fans	135
Halogen Torchiere Turn In Event	388
Total Utility Programs	33,209
Non-Utility Programs	
Beat the Heat: Replacement of Halogen Torchieres in Commercial and Institutional Buildings	543
Residential Refrigerator Recycling-ARCA	3,246
Program: Campus Energy Efficiency Programs	5,950
Third Party Initiatives	6,797
Total Non-Utility Programs	16,536

Demand Reductions, Electric, MW

	2001 (Recorded)
Utility Programs	
Pool Efficiency Program	17.57
Residential Hard to Reach	0.67
LED Traffic Signal Rebate Program	1.48
Whole House Fans	1.64
Halogen Torchiere Turn In Event	0.04
Total Utility Programs	21.39
Non-Utility Programs	
Beat the Heat: Replacement of Halogen Torchieres in Commercial and Institutional Buildings	0.00
Residential Refrigerator Recycling-ARCA	0.60
Program: Campus Energy Efficiency Programs	1.66
Third Party Initiatives	1.38
Total Non-Utility Programs	3.64

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

	2001 (Recorded)
Utility Programs	
Pool Efficiency Program	0
Residential Hard to Reach	75
LED Traffic Signal Rebate Program	0
Whole House Fans	0
Halogen Torchiere Turn In Event	0
Total Utility Programs	75
Non-Utility Programs	
Beat the Heat: Replacement of Halogen Torchieres in Commercial and Institutional Buildings	0
Residential Refrigerator Recycling-ARCA	0
Program: Campus Energy Efficiency Programs	0
Third Party Initiatives	0
Total Non-Utility Programs	0

2001 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 2002, which reviews the progress of activities during 2000. We are reporting these results using the Energy Efficiency Programs Reporting Requirements Manual 2, draft dated March, 2002, as agreed to by the utilities, Office of Ratepayer Advocates and the Energy Division of the California Public Utilities Commission.

SDG&E's 2001 Energy Efficiency Program plans were filed on November 15, 2002 in Application 00-11-045 and authorized through Interim Opinion D.01-01-060. D.01-06-037 adopted revisions to the PY2001 market assessment and evaluation studies.

All incremental measure costs, energy savings, and measure lives are documented in SDG&E's Request for Approval of 2001 Energy Efficiency Programs, filed in Application 99-11-045 and authorized by D. 01-01-060.

Table TA 1.1
Avoided Costs
Program Year: 2001

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

2002 Avoided Costs (Cumulative and Discounted)

Year	Electric $/MWh	Gas $/Therm
2002	110.850	0.580
2003	174.660	1.015
2004	231.249	1.382
2005	284.777	1.738
2006	330.981	2.082
2007	375.352	2.413
2008	417.754	2.731
2009	458.365	3.038
2010	497.241	3.332
2011	534.373	3.574
2012	570.078	3.807
2013	604.455	4.030
2014	637.559	4.249
2015	669.504	4.459
2016	700.317	4.662
2017	730.102	4.857
2018	758.910	5.045
2019	786.795	5.225
2020	813.670	5.398
2021	839.700	5.565

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	$36,256	$0	-	$0	$36,256
Information & Education	$0	$0	$1,428,300	$0	-	$0	$1,428,300
In-Store EE Demonstration Co-op Program	$0	$0	$90,770	$0	-	$0	$90,770
Schools	$0	$0	$621,067	$0	-	$0	$621,067
Energy Information Center	$0	$0	$216,642	$0	-	$0	$216,642
Total Information	$0	$0	$2,393,035	$0	-	$0	$2,393,035
EMS							
Energy Management Services	$30,942	$0	$739,177	$0	-	$0	$770,119
Total EMS	$30,942	$0	$739,177	$0	-	$0	$770,119
EEI							
SPC	$0	$0	$0	$0	-	$0	$0
Rebates	$0	$0	$0	$0		$0	$0
Downstream Appliance Incentives	$735,625	$0	$752,950	$0	-	$0	$1,488,575
Downstream Lighting	$153,118	$0	$39,437	$0	-	$0	$192,555
Multifamily	$2,126,604	$296,448	$675,414	$14,822	-	$0	$3,113,288
Single Family	$2,119,868	$0	$1,296,383	$0	-	$0	$3,416,251
Loans	$0	$0	$0	$0	-	$0	$0
Other	$0	$0	$0	$0	-	$0	$0
Total EEI	$5,135,215	$296,448	$2,764,184	$14,822	-	$0	$8,210,669
Upstream Programs							
Financial Assistance							
Statewide Upstream Lighting	$1,394,629	$0	$728,654	$0	-	$0	$2,123,283
Statewide Upstream Appliances	$0	$0	$53,350	$0	-	$0	$53,350
Targeted Third Party Initiative	$0	$0	$589,808	$0	-	$0	$589,808
							$0
Total Upstream	$1,394,629	$0	$1,371,813	$0	-	$0	$2,766,442
TOTAL RESIDENTIAL	$6,560,786	$296,448	$7,268,210	$14,822	$1,058,454	$0	$15,198,720

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

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Statewide Energy Guide	$0	$0	$30,040	$0	-	$0	$30,040
Information & Education	$0	$0	$1,235,511	$0	-	$0	$1,235,511
In-Store EE Demonstration Co-op Program	$0	$0	$77,154	$0	-	$0	$77,154
Schools	$0	$0	$527,907	$0	-	$0	$527,907
Energy Information Center	$0	$0	$184,146	$0	-	$0	$184,146
Total Information	$0	$0	$2,054,759	$0	-	$0	$2,054,759
EMS							
Energy Management Services	$26,301	$0	$628,301	$0	-	$0	$654,602
Total EMS	$26,301	$0	$628,301	$0	-	$0	$654,602
EEI							
SPC	$0	$0	$0	$0	-	$0	$0
Rebates							
Downstream Appliance Incentives	$625,281	$0	$640,008	$0	-	$0	$1,265,289
Downstream Lighting	$153,118	$0	$39,437	$0	-	$0	$192,555
Multifamily	$552,917	$77,076	$209,805	$3,854	-	$0	$843,652
Single Family	$1,144,729	$0	$700,047	$0	-	$0	$1,844,775
Loans	$0	$0	$0	$0	-	$0	$0
Other	$0	$0	$0	$0	-	$0	$0
Total EEI	$2,476,045	$77,076	$1,589,296	$3,854	-	$0	$4,146,271
							$0
Upstream Programs							$0
Financial Assistance							
Statewide Upstream Lighting	$1,394,629	$0	$728,654	$0	-	$0	$2,123,283
Statewide Upstream Appliances	$0	$0	$45,348	$0	-	$0	$45,348
Targeted Third Party Initiative	$0	$0	$589,808	$0	-	$0	$589,808
Total Upstream	$1,394,629	$0	$1,363,810	$0	-	$0	$2,758,439
TOTAL RESIDENTIAL	$3,896,975	$77,076	$5,636,166	$3,854	$835,544	$0	$10,449,615

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

PROGRAM	UTILITY COSTS						
	Program Incentives (Recorded)		Admin		Shareholder Inc	Other	Total
	Actual	Committed	Actual	Committed			
Information							
Statewide Energy Guide	$0	$0	$6,216	$0	-	$0	$6,216
Information & Education	$0	$0	$192,788	$0	-	$0	$192,788
In-Store EE Demonstration Co-op Program	$0	$0	$13,615	$0	-	$0	$13,615
Schools	$0	$0	$93,160	$0	-	$0	$93,160
Energy Information Center	$0	$0	$32,496	$0	-	$0	$32,496
Total Information	$0	$0	$338,276	$0	-	$0	$338,276
EMS							
Energy Management Services	$4,641	$0	$110,877	$0	-	$0	$115,518
Total EMS	$4,641	$0	$110,877	$0	-	$0	$115,518
EEI							
SPC	$0	$0	$0	$0	-	$0	$0
Rebates							
Downstream Appliance Incentives	$110,344	$0	$112,943	$0	-	$0	$223,286
Downstream Lighting	$0	$0	$0	$0	-	$0	$0
Multifamily	$1,573,687	$219,372	$465,609	$10,969	-	$0	$2,269,636
Single Family	$975,139	$0	$596,336	$0	-	$0	$1,571,475
Loans	$0	$0	$0	$0	-	$0	$0
Other	$0	$0	$0	$0	-	$0	$0
Total EEI	$2,659,170	$219,372	$1,174,888	$10,969	-	$0	$4,064,398
Upstream Programs							
Financial Assistance							
Statewide Upstream Lighting	$0	$0	$0	$0	-	$0	$0
Statewide Upstream Appliances	$0	$0	$8,003	$0	-	$0	$8,003
Targeted Third Party Initiative	$0	$0	$0	$0	-	$0	$0
Total Upstream	$0	$0	$8,003	$0	-	$0	$8,003
TOTAL RESIDENTIAL	$2,663,811	$219,372	$1,632,043	$10,969	$222,910	$0	$4,749,105

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	$16,338	$17,405	$0	$2,513	$36,256
Information & Education	$258,210	$1,071,083	$0	$99,007	$1,428,300
In-Store EE Demonstration Co-op Program	$18,931	$65,547	$0	$6,292	$90,770
Schools	$71,437	$506,579	$0	$43,051	$621,067
Energy Information Center	$178,124	$23,501	$0	$15,017	$216,642
Total Information	$543,040	$1,684,115	$0	$165,881	$2,393,035
EMS					
Energy Management Services	$388,082	$297,712	$0	$53,383	$739,177
Total EMS	$388,082	$297,712	$0	$53,383	$739,177
EEI					
SPC	$0	$0	$0	$0	$0
Rebates					
Downstream Appliance Incentives	$65,392	$584,373	$0	$103,185	$752,950
Downstream Lighting	$10,930	$15,159	$0	$13,348	$39,437
Multifamily	$314,352	$146,282	$0	$214,780	$675,414
Single Family	$482,789	$576,785	$0	$236,808	$1,296,383
Loans	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0
Total EEI	$873,464	$1,322,600	$0	$568,121	$2,764,184
Upstream Programs					
					$0
Financial Assistance					
Statewide Upstream Lighting	$118,826	$462,646	$0	$147,182	$728,654
Statewide Upstream Appliances	$36,377	$13,275	$0	$3,698	$53,350
Targeted Third Party Initiative	$27,443	$521,481	$0	$40,884	$589,808
Total Upstream	$182,646	$997,402	$0	$191,765	$1,371,813
TOTAL RESIDENTIAL	$1,987,232	$4,301,828	$0	$979,150	$7,268,210

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	$13,907	$14,051	$0	$2,082	$30,040
Information & Education	$219,383	$930,485	$0	$85,643	$1,235,511
In-Store EE Demonstration Co-op Program	$16,092	$55,715	$0	$5,348	$77,154
Schools	$60,722	$430,592	$0	$36,594	$527,907
Energy Information Center	$151,405	$19,976	$0	$12,765	$184,146
Total Information	$461,508	$1,450,819	$0	$142,432	$2,054,759
EMS					
Energy Management Services	$329,870	$253,055	$0	$45,376	$628,301
Total EMS	$329,870	$253,055	$0	$45,376	$628,301
EEI					
SPC	$0	$0	$0	$0	$0
Rebates					
Downstream Appliance Incentives	$55,583	$496,717	$0	$87,707	$640,008
Downstream Lighting	$10,930	$15,159	$0	$13,348	$39,437
Multifamily	$113,524	$38,068	$0	$58,213	$209,805
Single Family	$260,706	$311,464	$0	$127,876	$700,047
Loans	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0
Total EEI	$440,743	$861,408	$0	$287,145	$1,589,296
Upstream Programs					
Financial Assistance					
Statewide Upstream Lighting	$118,826	$462,646	$0	$147,182	$728,654
Statewide Upstream Appliances	$30,921	$11,283	$0	$3,143	$45,348
Targeted Third Party Initiative	$27,443	$521,481	$0	$40,884	$589,808
Total Upstream	$177,190	$995,411	$0	$191,210	$1,363,810
TOTAL RESIDENTIAL	$1,409,310	$3,560,693	$0	$666,163	$5,636,166

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					
Statewide Energy Guide	$2,431	$3,354	$0	$431	$6,216
Information & Education	$38,827	$140,597	$0	$13,364	$192,788
In-Store EE Demonstration Co-op Program	$2,840	$9,832	$0	$944	$13,615
Schools	$10,716	$75,987	$0	$6,458	$93,160
Energy Information Center	$26,719	$3,525	$0	$2,253	$32,496
Total Information	$81,532	$233,295	$0	$23,449	$338,276
EMS					
Energy Management Services	$58,212	$44,657	$0	$8,007	$110,877
Total EMS	$58,212	$44,657	$0	$8,007	$110,877
EEI					
SPC	$0	$0	$0	$0	$0
Rebates					
Downstream Appliance Incentives	$9,809	$87,656	$0	$15,478	$112,943
Downstream Lighting	$0	$0	$0	$0	$0
Multifamily	$200,828	$108,214	$0	$156,567	$465,609
Single Family	$222,083	$265,321	$0	$108,932	$596,336
Loans	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0
Total EEI	$432,720	$461,192	$0	$280,976	$1,174,888
Upstream Programs					
Financial Assistance					
Statewide Upstream Lighting	$0	$0	$0	$0	$0
Statewide Upstream Appliances	$5,457	$1,991	$0	$555	$8,003
Targeted Third Party Initiative	$0	$0	$0	$0	$0
Total Upstream	$5,457	$1,991	$0	$555	$8,003
TOTAL RESIDENTIAL	$577,922	$741,135	$0	$312,987	$1,632,043

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Appliance Program: Downstream Appliance Incentives
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	0	1,440	0				136	1,615,459	73,632
2002	0	1,440	0				136	1,615,459	73,632
2003	0	1,440	0				136	1,615,459	73,632
2004	0	1,440	0				136	1,615,459	73,632
2005	0	1,440	0				136	1,615,459	73,632
2006	0	1,440	0				136	1,615,459	73,632
2007	0	1,440	0				136	1,615,459	73,632
2008	0	1,440	0				136	1,615,459	73,632
2009	0	1,440	0				136	1,615,459	73,632
2010	0	1,440	0				136	1,615,459	73,632
2011	0	1,440	0				136	1,615,459	73,632
2012	0	1,440	0				136	1,615,459	73,632
2013	0	1,440	0				136	1,615,459	73,632
2014	0	1,440	0				110	1,354,653	73,632
2015	0	1,440	0				104	1,060,125	0
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)	0	21,600	0				136	23,415,745	1,030,848

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Lighting Program: Downstream Lighting
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001				219	2,106,726	0			
2002				219	2,106,726	0			
2003				219	2,106,726	0			
2004				219	2,106,726	0			
2005				219	2,106,726	0			
2006				219	2,106,726	0			
2007				219	2,106,726	0			
2008				219	2,106,726	0			
2009				219	2,106,726	0			
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)				219	18,960,534	0	0	0	0

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Lighting Program: Statewide Upstream Lighting
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			MISC		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001				3,224	36,810,607	0			
2002				3,224	36,810,607	0			
2003				3,224	36,810,607	0			
2004				3,224	36,810,607	0			
2005				3,224	36,810,607	0			
2006				3,224	36,810,607	0			
2007				3,224	36,810,607	0			
2008				3,224	36,810,607	0			
2009				3,224	36,810,607	0			
2010				219	7,985,362	0			
2011				219	7,985,362	0			
2012				219	7,985,362	0			
2013				219	7,985,362	0			
2014				219	7,985,362	0			
2015				219	7,985,362	0			
2016				219	7,985,362	0			
2017				219	7,985,362	0			
2018				219	7,985,362	0			
2019				219	7,985,362	0			
2020				219	7,985,362	0			
SUM (Lifecycle)				3,224	419,134,445	0	0	0	0

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Retrofit & Renovation Program : Multi-Family Rebate
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2002	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2003	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2004	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2005	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2006	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2007	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2008	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2009	3	2,540	10	402	8,744,085	0	45	1,403,321	1,287,769
2010	3	2,540	10	154	1,816,720	0	45	1,403,321	1,287,769
2011	1	320	10	154	1,816,720	0	45	1,403,321	1,284,993
2012	1	320	10	154	1,816,720	0	45	1,403,321	1,284,993
2013	1	320	10	154	1,816,720	0	45	1,403,321	1,284,993
2014	1	320	10	154	1,816,720	0	45	1,403,321	1,281,573
2015	1	320	10	154	1,816,720	0	45	1,403,321	1,281,573
2016				154	1,816,720	0			
2017				136	1,734,704	0			
2018				136	1,734,704	0			
2019				136	1,734,704	0			
2020				136	1,734,704	0			
SUM (Lifecycle)	3	27,002	144	402	98,352,624	0	45	21,049,815	19,295,815

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Retrofit & Renovation Program : Single Family Rebate
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2002	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2003	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2004	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2005	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2006	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2007	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2008	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2009	7,199	2,165,522	171,115	2	13,616	0	0	0	41,447
2010	7,199	2,165,522	171,115	1	4,453	0	0	0	41,447
2011	6,500	1,941,217	171,115	1	4,453	0	0	0	41,047
2012	6,500	1,941,217	171,115	1	4,453	0	0	0	41,047
2013	6,500	1,788,100	158,236	1	4,453	0	0	0	41,047
2014	6,500	1,788,100	158,236	1	4,453	0	0	0	1,772
2015	6,500	1,788,100	158,236	1	4,453	0	0	0	1,772
2016	3,940	970,677	100,396	1	4,453	0			
2017	3,940	970,677	100,396	1	4,453	0			
2018	3,940	970,677	100,396						
2019	560	429,028	99,997						
2020	560	429,028	99,997						
SUM (Lifecycle)	7,199	34,672,045	3,029,274	2	158,168	0	0	0	541,155

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

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Retrofit & Renovation Program : Targeted TPI
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	865	446,902	21,887	51	53,903	0			
2002	865	446,902	21,887	51	53,903	0			
2003	865	446,902	21,887	51	53,903	0			
2004	865	446,902	21,887	51	53,903	0			
2005	865	446,902	21,887	51	53,903	0			
2006	865	446,902	21,887	51	53,903	0			
2007	865	446,902	21,887	51	53,903	0			
2008	865	446,902	21,887	51	53,903	0			
2009	865	446,902	21,887	51	53,903	0			
2010	865	446,902	21,887						
2011	204	221,415	21,887						
2012	204	221,415	21,887						
2013	204	221,415	21,887						
2014	204	221,415	21,887						
2015	204	221,415	21,887						
2016	204	221,415	21,887						
2017	204	221,415	21,887						
2018	204	221,415	21,887						
2019	204	221,415	21,887						
2020	204	221,415	21,887						
SUM (Lifecycle)	865	6,683,170	437,740	51	485,128	0			

Table TA 2.3
Market Effects: Residential Projected Annual Program Energy Reductions
Energy Management Services : Energy Management Services (Audits)
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	Lighting			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	28	264,726	0						
2002	28	264,726	0						
2003	28	264,726	0						
2004	28	264,726	0						
2005	28	264,726	0						
2006	28	264,726	0						
2007	28	264,726	0						
2008	28	264,726	0						
2009	28	264,726	0						
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)	28	2,382,534	0						

Table TA 2.4
Market Effects: Distribution of Residential Single-Family Contractor Payments
Program Year: 2001

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra EnergySolutions	$ -	$ -	$ -	$ -	$ -
Total Affiliate	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
Contractor #1	$0.00	$0.00	$16,922.00	$0.00	$ 16,922
Contractor #2	$0.00	$0.00	$12,500.00	$0.00	$ 12,500
Contractor #3	$0.00	$0.00	$11,100.00	$0.00	$ 11,100
Contractor #4	$0.00	$0.00	$8,125.00	$0.00	$ 8,125
Contractor #5	$0.00	$0.00	$3,654.00	$0.00	$ 3,654
Contractor #6	$0.00	$0.00	$3,656.00	$0.00	$ 3,656
Contractor #7	$0.00	$61.54	$83.43	$249.48	$ 1,269
Contractor #8	$0.00	$0.00	$245.55	$0.00	$ 246
Contractor #9	$0.00	$0.00	$550.00	$0.00	$ 550
Contractor #10	$0.00	$0.00	$16,450.00	$0.00	$ 16,450
Contractor #11	$0.00	$0.00	$9,950.00	$0.00	$ 9,950
Contractor #12	$0.00	$0.00	$4,500.00	$0.00	$ 4,500
Contractor #13	$0.00	$0.00	$525.00	$0.00	$ 525
Contractor #14	$0.00	$0.00	$100.00	$0.00	$ 100
Contractor #15	$0.00	$51.50	$53.33	$28.48	$ 2,394
Contractor #16	$0.00	$0.00	$5,820.00	$0.00	$ 5,820
Contractor #17	$0.00	$0.00	$1,450.00	$0.00	$ 1,450
Contractor #18	$0.00	$0.00	$129,175.00	$0.00	$ 129,175
Contractor #19	$0.00	$0.00	$18,442.00	$0.00	$ 18,442
Contractor #20	$0.00	$0.00	$3,648.00	$0.00	$ 3,648
Contractor #21	$0.00	$0.00	$250.00	$0.00	$ 250
Contractor #22	$0.00	$0.00	$8,314.00	$0.00	$ 8,314
Contractor #23	$0.00	$0.00	$282.00	$0.00	$ 282
Contractor #24	$0.00	$0.00	$7,354.00	$0.00	$ 7,354
Contractor #25	$0.00	$0.00	$3,826.00	$0.00	$ 3,826
Contractor #26	$0.00	$0.00	$1,575.00	$0.00	$ 1,575
Contractor #27	$0.00	$0.00	$3,200.00	$0.00	$ 3,200
Contractor #28	$0.00	$0.00	$7,475.00	$0.00	$ 7,475
Contractor #29	$0.00	$0.00	$9,122.72	$0.00	$ 9,123
Contractor #30	$0.00	$0.00	$7,980.00	$0.00	$ 7,980
Contractor #31	$0.00	$0.00	$4,942.00	$0.00	$ 4,942
Contractor #32	$0.00	$0.00	$15,610.00	$0.00	$ 15,610
Contractor #33	$0.00	$0.00	$7,038.00	$0.00	$ 7,038
Contractor #34	$0.00	$0.00	$7,275.00	$0.00	$ 7,275
Contractor #35	$0.00	$0.00	$16,739.28	$125.72	$ 16,865
Contractor #36	$0.00	$0.00	$2,424.00	$0.00	$ 2,424
Contractor #37	$0.00	$0.00	$72,536.00	$0.00	$ 72,536
Contractor #38	$0.00	$0.00	$73,490.00	$0.00	$ 73,490
Contractor #39	$0.00	$0.00	$4,500.00	$0.00	$ 4,500
Contractor #40	$0.00	$0.00	$0.00	$0.00	$ 280
Contractor #41	$0.00	$0.00	$1,772.00	$0.00	$ 1,772
Contractor #42	$0.00	$20.16	$71.99	$0.00	$ 100
Contractor #43	$0.00	$0.00	$2,012.95	$0.00	$ 2,013
Contractor #44	$0.00	$0.00	$787.58	$42.42	$ 830
Contractor #45	$0.00	$0.00	$776.00	$0.00	$ 776
Contractor #46	$0.00	$0.00	$20,822.00	$0.00	$ 20,822
Contractor #47	$0.00	$0.00	$140.00	$0.00	$ 140
Contractor #48	$0.00	$0.00	$1,772.00	$0.00	$ 1,772
Contractor #49	$0.00	$0.00	$900.00	$0.00	$ 900
Contractor #50	$0.00	$0.00	$336.00	$0.00	$ 336
Contractor #51	$0.00	$0.00	$828.00	$0.00	$ 828
Contractor #52	$0.00	$0.00	$71,556.00	$0.00	$ 71,556
Contractor #53	$0.00	$0.00	$3,598.00	$0.00	$ 3,598
Contractor #54	$0.00	$0.00	$6,950.00	$0.00	$ 6,950
Contractor #55	$0.00	$0.00	$3,302.00	$0.00	$ 3,302
Contractor #56	$0.00	$0.00	$168.00	$0.00	$ 168
Contractor #57	$0.00	$0.00	$28,325.90	$0.00	$ 28,326
Contractor #58	$0.00	$0.00	$225.00	$0.00	$ 225
Contractor #59	$0.00	$0.00	$2,400.00	$0.00	$ 2,400
Contractor #60	$0.00	$0.00	$11,832.00	$0.00	$ 11,832
Total Contractors	*$ -*	*$ 133*	*$ 659,458*	*$ 446*	*$ 663,460*
Totals	**$ -**	**$ 133.21**	**$ 659,458**	**$ 446**	**$ 660,037**

Table TA 2.4
Market Effects: Distribution of Residential Multi-Family Contractor Payments
Program Year: 2001

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	$ -	$ -	$ -	$ -	$ -
Total Affiliate	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
ESCO #1	$0.00	$ -	$ -	$27,339.51	$27,339.51
Total ESCO	*$ -*	*$ -*	*$ -*	*$ 27,339.51*	*$ 27,339.51*
Totals	**$ -**	**$ -**	**$ -**	**$ 27,339.51**	**$ 27,339.51**

Table TA 2.5
Measure Detail: Residential Program Area
Appliance Program: Downstream Appliance Incentives
Program Year: 2001

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
2001	AC13	Room Air Conditioner - Energy Star Qualified	18	$1,080.00	$60.00	1,440	80	-	-	15	HVAC
2001	CW02	Clothes Washer - Energy Star Qualified	3,068	$1,073,800.00	$350.00	294,528	96	73,632	24	14	Misc
2001	DW01	Dishwasher - Energy Star Qualified	1,433	$57,320.00	$40.00	260,806	182	-	-	13	Misc
2001	RF02	Refrigerator - Energy Star Qualified	1,100	$165,000.00	$150.00	247,500	225	-	-	15	Misc
2001	RF03	Refrigerator - 2001 DOE Compliant	2,955	$443,250.00	$150.00	812,625	275	-	-	15	Misc

Table TA 2.5
Measure Detail: Residential Program Area
Lighting Program: Downstream Lighting
Program Year: 2001

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
2001	TT01	Halogen Torchiere Turn-In	1,278	$38,340.00	$30.00	256,878	201	-	-	9	Lighting
2001	TT02	CFL Bulb (25 watt)	15,786	$236,790.00	$15.00	1,215,522	77	-	-	9	Lighting
2001	TT03	CFL Bulb (32 watt)	1,721	$25,815.00	$15.00	132,517	77	-	-	9	Lighting
2001	TT04	CFL Bulb (20 watt)	6,065	$90,975.00	$15.00	467,005	77	-	-	9	Lighting
2001	TT05	CFL Bulb (14 watt)	452	$6,780.00	$15.00	34,804	77	-	-	9	Lighting

Table TA 2.5
Measure Detail: Residential Program Area
Lighting Program: Statewide Upstream Lighting
Program Year: 2001

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
2001	LIT01	Energy Star Torchiere (55 watt)	12,785	$383,550.00	$30.00	2,569,785	201	-	-	9	Lighting
2001	LIT02	Compact Fluorescent Screw-In	340,980	$5,114,700.00	$15.00	26,255,460	77	-	-	9	Lighting
2001	LIT03	Hardwired Fluorescent Lighting Fxtrs	16,583	$646,737.00	$39.00	4,411,078	266	-	-	20	Lighting
2001	LIT04	Hardwired Fluorescent Lighting Fxtrs - Porch	2,520	$50,400.00	$20.00	456,120	181	-	-	20	Lighting
2001	LIT05	Hardwired Fluorescent Lighting Fxtrs - Ext Flood	5,303	$212,120.00	$40.00	3,118,164	588	-	-	20	Lighting

Table TA 2.5
Measure Detail: Residential Program Area
Retrofit & Renovation Program : Multi-Family Rebate
Program Year: 2001

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
2001	CS05-13	Screw-in 5-13 watt CF Lamp	2,124	$31,860.00	$15.00	140,184	66	-	-	9	Lighting
2001	CS14-26	Screw-in 14-26 watt CF Lamp	228	$3,420.00	$15.00	15,048	66	-	-	9	Lighting
2001	CS27+	Screw-in >= 27 watt CF Lamp	267	$4,005.00	$15.00	17,622	66	-	-	9	Lighting
2001	CUSTO	Digital Control	3	$16,521.00	$5,507.00	-	-	22,045	7,348	15	Misc
2001	CUSTO	Economaster	3	$16,521.00	$5,507.00	48,471	16,157	-	-	15	Misc
2001	HF05-13	Hardwired 5-13 watt CF Fixture	625	$24,375.00	$39.00	166,250	266	-	-	20	Lighting
2001	HF14-26	Hardwired 14-26 watt CF Fixture	156	$6,084.00	$39.00	41,496	266	-	-	20	Lighting
2001	HFI27-	Hardwired Incand Base 27-65 watt CF Fixture	209	$8,151.00	$39.00	18,601	89	-	-	20	Lighting
2001	LI4T5-8	Install 4ft T-8/T-5 Lamp & Elec. Ballast	1,762	$29,231.58	$16.59	82,016	47	-	-	16	Lighting
2001	MF01	1 X 4 2 Lamp w/T8 lamps & low power ball IS	15	$233.25	$15.55	1,771	118	-	-	9	Lighting
2001	MF01	15w Spring Lamps	172	$2,674.60	$15.55	35,408	206	-	-	9	Lighting
2001	MF01	1x4 1 lamp T8 W/NLO ballast	16	$248.80	$15.55	7,695	481	-	-	9	Lighting
2001	MF01	1X4 2 Lamp	29	$450.95	$15.55	3,423	118	-	-	9	Lighting
2001	MF01	1x4 2 lamp w/ low pwr ballast	12	$186.60	$15.55	1,416	118	-	-	9	Lighting
2001	MF01	1x4 2 lamp w/ T8 lamps & low pwr ballasts	13	$202.15	$15.55	2,107	162	-	-	9	Lighting
2001	MF01	1x4 2 lamps w/ T8 & low pwr ballasts	11	$171.05	$15.55	3,565	324	-	-	9	Lighting
2001	MF01	1x4 2 lamps w/ T8 and low pwr ballasts	1	$15.55	$15.55	118	118	-	-	9	Lighting
2001	MF01	1X4 2Lamp	118	$1,834.90	$15.55	35,527	301	-	-	9	Lighting
2001	MF01	1x4 2lamp w/ T8 lamps w/ low pwr ballasts	3	$46.65	$15.55	972	324	-	-	9	Lighting
2001	MF01	1x4 2lamps w/ T8 & low pwr ballasts	26	$404.30	$15.55	6,778	261	-	-	9	Lighting
2001	MF01	1x4 lamp T8 W/NLO ballast	36	$559.80	$15.55	17,313	481	-	-	9	Lighting
2001	MF01	1x4 lamp w/ T8 W/NLO ballast	129	$2,005.95	$15.55	62,039	481	-	-	9	Lighting
2001	MF01	1x8 w/ T8 lamps & low pwr ballasts	84	$1,306.20	$15.55	27,226	324	-	-	9	Lighting
2001	MF01	28w linear quad	1	$15.55	$15.55	2,067	2,067	-	-	9	Lighting
2001	MF01	2x4 F32T8	97	$1,508.35	$15.55	26,280	271	-	-	9	Lighting
2001	MF01	CF/QD	1,748	$27,181.40	$15.55	312,969	179	-	-	9	Lighting
2001	MF01	CF/QD MAG STD 13W	117	$1,819.35	$15.55	29,723	254	-	-	9	Lighting
2001	MF01	CF/QD MAG STD 26W	9	$139.95	$15.55	4,508	501	-	-	9	Lighting
2001	MF01	CF/TWN MAG STD 13W	297	$4,618.35	$15.55	82,844	279	-	-	9	Lighting
2001	MF01	CFL	19,588	$304,593.40	$15.55	4,794,107	245	-	-	9	Lighting
2001	MF01	CFL 14w	103	$1,601.65	$15.55	28,663	278	-	-	9	Lighting
2001	MF01	CFL 14watt	36	$559.80	$15.55	7,411	206	-	-	9	Lighting
2001	MF01	CFL 15W	26	$404.30	$15.55	4,735	182	-	-	9	Lighting
2001	MF01	CFLs	285	$4,431.75	$15.55	57,838	203	-	-	9	Lighting
2001	MF01	CFL's	49	$761.95	$15.55	46,108	941	-	-	9	Lighting
2001	MF01	F/T 848 EB/RLO 2 Lamp	152	$2,363.60	$15.55	39,200	258	-	-	9	Lighting
2001	MF01	F/T8	45	$699.75	$15.55	19,876	442	-	-	9	Lighting
2001	MF01	F/T8-ISB/NLO	8	$124.40	$15.55	3,567	446	-	-	9	Lighting
2001	MF01	F3248T LAMP	22	$342.10	$15.55	1,060	48	-	-	9	Lighting
2001	MF01	F32T8	4	$62.20	$15.55	1,784	446	-	-	9	Lighting

Table TA 2.5
Measure Detail: Residential Program Area
Retrofit & Renovation Program : Multi-Family Rebate
Program Year: 2001

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
2001	MF01	F32T8 LAMP 2X4 TROFFER	13	$202.15	$15.55	1,253	96	-	-	9	Lighting
2001	MF01	F96T8	13	$202.15	$15.55	7,459	574	-	-	9	Lighting
2001	MF01	Floods	199	$3,094.45	$15.55	189,334	951	-	-	9	Lighting
2001	MF01	FT/T848 EB/RLO 2 Lamp	24	$373.20	$15.55	3,729	155	-	-	9	Lighting
2001	MF01	ISB/NLO	145	$2,254.75	$15.55	55,508	383	-	-	9	Lighting
2001	MF01	ISB/NLO carport	224	$3,483.20	$15.55	85,750	383	-	-	9	Lighting
2001	MF01	Lighting (14 cents/kWh)	27	$419.85	$15.55	5,558	206	-	-	9	Lighting
2001	MF01	occupancy corridor	22	$342.10	$15.55	3,084	140	-	-	9	Lighting
2001	MF01	Occupancy sensor	33	$513.15	$15.55	5,427	164	-	-	9	Lighting
2001	MF01	occupancy sensors	128	$1,990.40	$15.55	80,732	631	-	-	9	Lighting
2001	MF01	painting and removing 50% or the 4' FL T8 (1) 32	156	$2,425.80	$15.55	40,927	262	-	-	9	Lighting
2001	MF01	Replace incandescent lights with CFLs	43	$668.65	$15.55	8,475	197	-	-	9	Lighting
2001	MF01	Replace incandescent lights with CFL's	1,654	$25,719.70	$15.55	410,726	248	-	-	9	Lighting
2001	MF01	Replace incandescent w/4 hardwire	4	$62.20	$15.55	4,783	1,196	-	-	9	Lighting
2001	MF01	screw in CFL	3	$46.65	$15.55	450	150	-	-	9	Lighting
2001	MF01	screw-in CFL	757	$11,771.35	$15.55	182,357	241	-	-	9	Lighting
2001	MF01	T8	6	$93.30	$15.55	863	144	-	-	9	Lighting
2001	MF04	DHW PT 5500	90	$1,867.50	$20.75	-	-	3,420	38	13	Misc
2001	MFR03	Wall/Window Air Conditioners	4	$240.00	$60.00	320	80	-	-	15	HVAC
2001	MFR04	Kitchen Hardwired Fluorescent Fixture (26w-30w)	8,793	$342,927.00	$39.00	782,577	89	-	-	20	Lighting
2001	MFR05	Ext. Hardwired Fluorescent Porch Light (13w-18w)	6,598	$131,960.00	$20.00	725,780	110	-	-	20	Lighting
2001	MFR06	Low Flow Showerhead	347	$4,858.00	$14.00	-	-	2,776	8	10	Misc
2001	MFR16	Gas Water Heater Controller	244	$1,343,817.80	$5,507.45	963,800	3,950	1,259,528	5,162	15	Misc
2001	RF01	Refrigerator	1,251	$187,650.00	$150.00	281,475	225	-	-	15	Misc
2001	RF04	***Refrigerator*** ($200)	487	$73,050.00	$150.00	109,575	225	-	-	15	Misc
2001	RWF	Reflective Window Film	1,025	$3,116.00	$3.04	2,220	2	-	-	10	HVAC
2001	WTRHT	Gas Storage Water Heater	6	$13.20	$2.20	-	-	10	2	15	HVAC

Table TA 2.5
Measure Detail: Residential Program Area
Retrofit & Renovation Program : Single Family Rebate
Program Year: 2001

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
2001	RC01	Basic HVAC Diagnostic/Tuneup	9	$1,404.00	$156.00	1,017	113	-	-	10	HVAC
2001	RC05	Energy Star Gas Furnace	66	$21,450.00	$325.00	-	-	1,538	23	20	HVAC
2001	RC06	Energy Star Central Heat Pump	1	$706.00	$706.00	228	228	399	399	18	HVAC
2001	RC07	Energy Star Central Air Conditioner	71	$39,760.00	$560.00	16,330	230	-	-	18	HVAC
2001	RC08	Programmable Thermostat	1,431	$231,822.00	$162.00	153,117	107	12,879	9	12	HVAC
2001	RC09	Attic Insulation (attic area per SqFt.)	547,330	$541,856.70	$0.99	103	0	55	0	20	HVAC
2001	RC10	Wall Insulation (wall area per SqFt.)	146,106	$8,766.36	$0.06	(1)	(0)	12	0	20	HVAC
2001	RC11	Insulation Package* (per SqFt.)	35,931	$35,571.69	$0.99	4	0	2	0	20	HVAC
2001	RC12	High Performance Windows (window area per SqFt.)	219,739	$329,608.50	$1.50	2,678	0	(211)	(0)	20	HVAC
2001	RC13	High Efficiency Gas Water Heater	5	$103.75	$20.75	-	-	125	25	13	Misc
2001	RC15	Water Saving Showerheads	1	$14.00	$14.00	-	-	8	8	10	Misc
2001	RC18	Energy Star Central Heat Pump	4	$3,080.00	$770.00	1,700	425	-	-	18	HVAC
2001	RC19	High Performance Windows (window area per SqFt.)	201,054	$301,581.00	$1.50	2,165	0	(171)	(0)	20	HVAC
2001	RC20	Hardwired Fluorescent Lighting Fixtures	73	$3,861.70	$52.90	4,453	61	-	-	17	Lighting
2001	RC21	Screw In Compact Fluorescent Lamps	119	$1,785.00	$15.00	9,163	77	-	-	9	Lighting
2001	RC22	AC/HP Diagnostic/Tuneup	321	$50,076.00	$156.00	36,273	113	-	-	10	HVAC
2001	RC23	Duct Sealing	728	$333,715.20	$458.40	165,984	228	29,120	40	20	HVAC
2001	SFR02	Water Heater	1,551	$32,183.25	$20.75	-	-	38,775	25	13	Misc
2001	SFR03	Water Heater Pipe Insulation	443	$2,547.25	$5.75	-	-	1,772	4	15	Misc
2001	SFR04	Low Flow Showerhead (2.0 GPM)	49	$686.00	$14.00	-	-	392	8	10	Misc
2001	SFR08	Whole-House Fan	826	$110,684.00	$134.00	183,950	223	-	-	18	HVAC
2001	SFR09	Air Conditioning Energy Star (12 SEER)	860	$481,600.00	$560.00	197,800	230	-	-	18	HVAC
2001	SFR10	Air Conditioning 13 SEER (11.0 EER)	256	$143,360.00	$560.00	58,880	230	-	-	18	HVAC
2001	SFR11	Air Conditioning 14 SEER (11.6 EER)	121	$67,760.00	$560.00	27,830	230	-	-	18	HVAC
2001	SFR12	Air Conditioning 15 SEER (11.9 EER)	58	$32,480.00	$560.00	13,340	230	-	-	18	HVAC
2001	SFR13	Air Conditioning Diagnostic Test	681	$106,236.00	$156.00	76,953	113	-	-	10	HVAC
2001	SFR14	Air Conditioning Tune-Up	605	$371,470.00	$614.00	342,006	565	24,200	40	15	HVAC
2001	SFR16	Air Conditioning Duct Sealing	227	$104,056.80	$458.40	51,756	228	9,080	40	20	HVAC
2001	SFR18	Heat Pump Energy Star (12 SEER)	57	$43,890.00	$770.00	24,225	425	-	-	18	HVAC
2001	SFR19	Heat Pump 13 SEER (11.0 EER)	23	$17,710.00	$770.00	9,775	425	-	-	18	HVAC
2001	SFR20	Heat Pump 14 SEER (11.6 EER)	8	$6,160.00	$770.00	3,400	425	-	-	18	HVAC
2001	SFR21	Heat Pump 15 SEER (11.9 EER)	2	$1,540.00	$770.00	850	425	-	-	18	HVAC
2001	SFR22	Heat Pump Diagnostic	33	$5,148.00	$156.00	3,729	113	-	-	10	HVAC
2001	SFR23	Heat Pump Tune-Up	33	$20,262.00	$614.00	18,655	565	1,320	40	15	HVAC
2001	SFR25	Heat Pump Duct Sealing	14	$6,417.60	$458.40	3,192	228	560	40	20	HVAC

Table TA 2.5
Measure Detail: Residential Program Area
Retrofit & Renovation Program : Single Family Rebate
Program Year: 2001

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
2001	SFR27	Gas Furnace 80% AFUE/VSD	340	$110,500.00	$325.00	-	-	7,922	23	20	HVAC
2001	SFR28	Gas Furnace 80% AFUE/ECM Air Handler	43	$13,975.00	$325.00	-	-	1,002	23	20	HVAC
2001	SFR29	Gas Furnace Energy Star 90% AFUE	271	$88,075.00	$325.00	-	-	6,314	23	20	HVAC
2001	SFR30	Gas Furnace Energy Star 90% AFUE/ECM A.H.	135	$43,875.00	$325.00	-	-	3,146	23	20	HVAC
2001	SFR32	Gas Furnace Duct Sealing	96	$44,006.40	$458.40	21,888	228	3,840	40	20	HVAC
2001	SFR35	Duct Sealing (Single Family Home or Condo)	209	$95,805.60	$458.40	47,652	228	8,360	40	20	HVAC
2001	SFR36	Duct Sealing (Mobile Home)	586	$268,622.40	$458.40	133,608	228	23,440	40	20	HVAC
2001	SFR38	Air Conditioning/Heat Pump Diagnostic	941	$146,796.00	$156.00	106,333	113	-	-	10	HVAC
2001	SFR39	Air Conditioning/Heat Pump Tune-Up	808	$496,112.00	$614.00	456,762	565	32,320	40	15	HVAC
2001	SFR45	Gas Furnace 80% AFUE/ECM Air Handler	257	$83,525.00	$325.00	-	-	5,988	23	20	HVAC
2001	SFR48	Water Heater	15	$311.25	$20.75	-	-	375	25	13	Misc
2001	SFR49	Whole-House Fan	15	$2,010.00	$134.00	3,341	223	-	-	18	HVAC

Table TA 2.5
Measure Detail: Residential Program Area
Retrofit & Renovation Program : Targeted TPI
Program Year: 2001

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
2001	CUSTOM	A/C tune-up	1	$156.00	$156.00	225,487	225,487	-	-	10	HVAC
2001	CUSTOM	CFL	1	$15.00	$15.00	53,903	53,903	-	-	9	Lighting
2001	CUSTOM	Duct sealing	1	$458.40	$458.40	221,415	221,415	21,887	21,887	20	HVAC

Table TA 2.5
Measure Detail: Residential Program Area
Energy Management Services : Energy Management Services (Audits)
Program Year: 2001

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
2001	TT05	CFL Bulb (14 watt)	3,438	$51,570.00	$15.00	264,726	77	-	-	9	Lighting

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	$122,722	$0	-	$0	$122,722
Small	$0	$0	$317,876	$0	-	$0	$317,876
Energy Efficiency Financing (Energy Cents)	$0	$0	$10,820	$0	-	$0	$10,820
Building Operator Certification	$0	$0	$63,457	$0	-	$0	$63,457
Technical Assistance, Small Comprehensive	$0	$0	$145,562	$0	-	$0	$145,562
Technical Assistance, Process	$0	$0	$360,414	$0	-	$0	$360,414
Building Efficiency Rating Tool	$0	$0	$68,004	$0	-	$0	$68,004
Business Energy Guide	$0	$0	$0	$0	-	$0	$0
Energy Information Center (EIC)	$0	$0	$83,861	$0	-	$0	$83,861
Total Information	$0	$0	$1,172,715	$0	-	$0	$1,172,715
EMS							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Energy Audits	$0	$0	$555,540	$0	-	$0	$555,540
Total EMS	$0	$0	$555,540	$0	-	$0	$555,540
EEI: Customized Rebates							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Emerging Technologies	$51,000	$0	$28,523	$0	-	$0	$79,523
Peak Load Reduction (TPI)	$1,113,000	$0	$117,502	$0	-	$0	$1,230,502
EEI: Prescriptive Rebates							
Large							
Tenant Improvements	$202,846	$189,311	$454,564	$9,466	-	$0	$856,187
Small/Medium							
Express Efficiency	$1,855,875	$0	$542,073	$0	-	$0	$2,397,948
Commercial Horizontal Washers	$206,850	$0	$82,656	$0	-	$0	$289,506
EZ Turnkey	$427,672	$0	$219,703	$0	-	$0	$647,376
EEI: SPCs							
Large							
Large Nonresidential SPC (LNSPC)	$1,167,761	$3,373,541	$848,725	$168,677	-	$0	$5,558,704
Small/Medium							
Small Business SPC (SBSPC)	$585,517	$477,840	$358,154	$23,892	-	$0	$1,445,403
Total EEI	$5,610,522	$4,040,692	$2,651,901	$202,035	-	$0	$12,505,149
Upstream Programs							
Financial Assistance							$0
Building Recommissioning TPI	$0	$0	$202,532	$0	-	$0	$202,532
Retrofit in Leased Space PI	$83,913	$0	$34,336	$0	-	$0	$118,249
HVAC Midstream	$100,525	$0	$163,744	$0	-	$0	$264,269
Upstream Motors	$23,695	$0	$79,266	$0	-	$0	$102,961
Total Upstream	$208,133	$0	$479,878	$0	-	$0	$688,011
TOTAL NONRESIDENTIAL	$5,818,654	$4,040,692	$4,860,034	$202,035	$1,003,403	$0	$15,924,818

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	$104,314	$0	-	$0	$104,314
Small	$0	$0	$254,300	$0	-	$0	$254,300
Energy Efficiency Financing (Energy Cents)	$0	$0	$8,656	$0	-	$0	$8,656
Building Operator Certification	$0	$0	$53,938	$0	-	$0	$53,938
Technical Assistance, Small Comprehensive	$0	$0	$116,450	$0	-	$0	$116,450
Technical Assistance, Process	$0	$0	$270,311	$0	-	$0	$270,311
Building Efficiency Rating Tool	$0	$0	$57,803	$0	-	$0	$57,803
Business Energy Guide	$0	$0	$0	$0	-	$0	$0
Energy Information Center (EIC)	$0	$0	$69,169	$0	-	$0	$69,169
							$0
Total Information	$0	$0	$934,941	$0	-	$0	$934,941
EMS							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Energy Audits	$0	$0	$416,655	$0	-	$0	$416,655
Total EMS	$0	$0	$416,655	$0	-	$0	$416,655
EEI: Customized Rebates							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Emerging Technologies	$51,000	$0	$28,523	$0	-	$0	$79,523
Peak Load Reduction (TPI)	$1,113,000	$0	$117,502	$0	-	$0	$1,230,502
EEI: Prescriptive Rebates							
Large							
Tenant Improvements	$152,135	$141,983	$340,923	$7,099	-	$0	$642,140
Small/Medium							
Express Efficiency	$1,829,893	$0	$534,484	$0	-	0	$2,364,377
Commercial Horizontal Washers	$62,055	$0	$24,797	$0	-	$0	$86,852
EZ Turnkey	$342,138	$0	$175,763	$0	-	$0	$517,901
EEI: SPCs							
Large							
Large Nonresidential SPC (LNSPC)	$817,433	$2,361,479	$594,107	$118,074	-	$0	$3,891,093
Small/Medium							
Small Business SPC (SBSPC)	$439,138	$358,380	$268,615	$17,919	-	$0	$1,084,052
Total EEI	$4,806,791	$2,861,842	$2,084,715	$143,092	-	$0	$9,896,440
Upstream Programs							
Financial Assistance							
Building Recommissioning TPI	$0	$0	$202,532	$0	-	$0	$202,532
Retrofit in Leased Space TPI	$83,913	$0	$34,336	$0	-	$0	$118,249
HVAC Midstream	$100,525	$0	$163,744	$0	-	$0	$264,269
Upstream Motors	$23,695	$0	$79,266	$0	-	$0	$102,961
Total Upstream	$208,133	$0	$479,878	$0	-	$0	$688,011
TOTAL NONRESIDENTIAL	$5,014,924	$2,861,842	$3,916,189	$143,092	$792,086	$0	$12,728,133

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	$18,408	$0	-	$0	$18,408
Small	$0	$0	$63,575	$0	-	$0	$63,575
Energy Efficiency Financing (Energy Cents)	$0	$0	$2,164	$0	-	$0	$2,164
Building Operator Certification	$0	$0	$9,519	$0	-	$0	$9,519
Technical Assistance, Small Comprehensive	$0	$0	$29,112	$0	-	$0	$29,112
Technical Assistance, Process	$0	$0	$90,104	$0	-	$0	$90,104
Building Efficiency Rating Tool	$0	$0	$10,201	$0	-	$0	$10,201
Business Energy Guide	$0	$0	$0	$0	-	$0	$0
Energy Information Center (EIC)	$0	$0	$14,692	$0	-	$0	$14,692
Total Information	$0	$0	$237,774	$0	-	$0	$237,774
EMS							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Energy Audits	$0	$0	$138,885	$0	-	$0	$138,885
Total EMS	$0	$0	$138,885	$0	-	$0	$138,885
EEI: Customized Rebates							
Large	$0	$0	$0	$0	-	$0	$0
Small/Medium							
Emerging Technologies	$0	$0	$0	$0	-	$0	$0
Peak Load Reduction (TPI)	$0	$0	$0	$0	-	$0	$0
EEI: Prescriptive Rebates							
Large							
Tenant Improvements	$50,712	$47,328	$113,641	$2,366	-	$0	$214,047
Small/Medium							
Express Efficiency	$25,982	$0	$7,589	$0	-	0	$33,571
Commercial Horizontal Washers	$144,795	$0	$57,859	$0	-	$0	$202,654
EZ Turnkey	$85,534	$0	$43,941	$0	-	$0	$129,475
EEI: SPCs							
Large							
Large Nonresidential SPC (LNSPC)	$350,328	$1,012,062	$254,617	$50,603	-	$0	$1,667,611
Small/Medium							
Small Business SPC (SBSPC)	$146,379	$119,460	$89,538	$5,973	-	$0	$361,351
Total EEI	$803,731	$1,178,850	$567,186	$58,943	-	$0	$2,608,709
Upstream Programs							
Financial Assistance							
Building Recommissioning TPI	$0	$0	$0	$0	-		$0
Retrofit in Leased Space TPI	$0	$0	$0	$0	-		$0
HVAC Midstream	$0	$0	$0	$0	-		$0
Upstream Motors	$0	$0	$0	$0	-		$0
Total Upstream	$0	$0	$0	$0	-	$0	$0
TOTAL NONRESIDENTIAL	$803,731	$1,178,850	$943,846	$58,943	$211,317	$0	$3,196,686

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	$48,032	$66,183	$0	$8,507	$122,722
Small	$74,502	$221,339	$0	$22,035	$317,876
Energy Efficiency Financing (Energy Cents)	$0	$10,070	$0	$750	$10,820
Building Operator Certification	$24,912	$34,146	$0	$4,399	$63,457
Technical Assistance, Small Comprehensive	$96,187	$39,285	$0	$10,090	$145,562
Technical Assistance Process	$231,441	$103,990	$0	$24,983	$360,414
Building Efficiency Rating Tool	$53,385	$9,905	$0	$4,714	$68,004
Business Energy Guide	$0	$0	$0	$0	$0
Energy Information Center (EIC)	$61,140	$16,908	$0	$5,813	$83,861
Total Information	$589,600	$501,825	$0	$81,290	$1,172,715
EMS					
Large	$0	$0	$0	$0	$0
Small/Medium					
Energy Management Services	$386,336	$130,695	$0	$38,509	$555,540
Total EMS	$386,336	$130,695	$0	$38,509	$555,540
EEI: Customized Rebates					
Large	$0	$0	$0	$0	$0
Small/Medium					
Emerging Technologies	$12,135	$10,876	$0	$5,512	$28,523
Peak Load Reduction (TPI)	$25,625	$6,581	$0	$85,296	$117,502
EEI: Prescriptive Rebates					
Large					
Tenant Improvements	$251,480	$144,391	$0	$58,693	$454,564
Small/Medium					
Express Efficiency	$274,830	$101,022	$0	$166,221	$542,073
Commercial Horizontal Washers	$41,136	$21,453	$0	$20,068	$82,656
Turnkey Pilot	$121,553	$53,276	$0	$44,875	$219,703
EEI: SPCs					
Large					
Nonresidential SPC (NRSPC)	$405,767	$69,331	$0	$373,627	$848,725
Small/Medium					
Small Business SPC (SBSPC)	$210,520	$49,097	$0	$98,536	$358,154
Total EEI	$1,343,045	$456,026	$0	$852,829	$2,651,901
Upstream Programs					
Financial Assistance					
Building Recommissioning TPI	$12,667	$175,826	$0	$14,039	$202,532
Retrofit and Leased Space PI	$25,478	$662	$0	$8,197	$34,336
HVAC Midstream	$123,362	$22,063	$0	$18,319	$163,744
Upstream Motors Incentives	$53,912	$18,217	$0	$7,137	$79,266
Total Upstream	$215,418	$216,768	$0	$47,692	$479,878
TOTAL NONRESIDENTIAL	$2,534,399	$1,305,315	$0	$1,020,320	$4,860,034

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	$40,827	$56,256	$0	$7,231	$104,314
Small	$59,601	$177,071	$0	$17,628	$254,300
Energy Efficiency Financing (Energy Cents)	$0	$8,056	$0	$600	$8,656
Building Operator Certification	$21,176	$29,024	$0	$3,739	$53,938
Technical Assistance, Small Comprehensive	$76,950	$31,428	0	$8,072	$116,450
Technical Assistance Process	$173,581	$77,992	$0	$18,737	$270,311
Building Efficiency Rating Tool	$45,377	$8,419	$0	$4,007	$57,803
Business Energy Guide	$0	$0	$0	$0	$0
Energy Information Center (EIC)	$50,606	$13,769	$0	$4,795	$69,169
Total Information	$468,118	$402,015	$0	$64,808	$934,941
EMS					
Large	$0	$0	$0	$0	$0
Small/Medium					
Energy Management Services	$289,752	$98,022	$0	$28,882	$416,655
Total EMS	$289,752	$98,022	$0	$28,882	$416,655
EEI: Customized Rebates					
Large	$0	$0	$0	$0	$0
Small/Medium					
Emerging Technologies	$12,135	$10,876	$0	$5,512	$28,523
Peak Load Reduction (TPI)	$25,625	$6,581	$0	$85,296	$117,502
EEI: Prescriptive Rebates					
Large					
Tenant Improvements	$188,610	$108,293	$0	$44,020	$340,923
Small/Medium					
Express Efficiency	$270,982	$99,608	$0	$163,894	$534,484
Commercial Horizontal Washers	$12,341	$6,436	$0	$6,020	$24,797
Turnkey Pilot	$97,242	$42,621	$0	$35,900	$175,763
					$0
EEI: SPCs					$0
Large					$0
Nonresidential SPC (NRSPC)	$284,037	$48,532	$0	$261,539	$594,107
					$0
Small/Medium					$0
Small Business SPC (SBSPC)	$157,890	$36,823	$0	$73,902	$268,615
Total EEI	$1,048,862	$359,769	$0	$676,084	$2,084,715
Upstream Programs					
Financial Assistance					
Building Recommissioning TPI	$12,667	$175,826	$0	$14,039	$202,532
Retrofit and Leased Space PI	$25,478	$662	$0	$8,197	$34,336
HVAC Midstream	$123,362	$22,063	$0	$18,319	$163,744
Upstream Motors Incentives	$53,912	$18,217	$0	$7,137	$79,266
Total Upstream	$215,418	$216,768	$0	$47,692	$479,878
TOTAL NONRESIDENTIAL	$2,022,150	$1,076,573	$0	$817,466	$3,916,189

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	$7,205	$9,927	$0	$1,276	$18,408
Small	$14,900	$44,268	$0	$4,407	$63,575
Energy Efficiency Financing (Energy Cents)	$0	$2,014	$0	$150	$2,164
Building Operator Certification	$3,737	$5,122	$0	$660	$9,519
Technical Assistance, Small Comprehensive	$19,237	$7,857	0	$2,018	$29,112
Technical Assistance Process	$57,860	$25,997	$0	$6,246	$90,104
Building Efficiency Rating Tool	$8,008	$1,486	$0	$707	$10,201
Business Energy Guide	$0	$0	$0	$0	$0
Energy Information Center (EIC)	$10,535	$3,139	$0	$1,018	$14,692
Total Information	$121,482	$99,810	$0	$16,482	$237,774
EMS					
Large	$0	$0	$0	$0	$0
Small/Medium					
Energy Management Services	$96,584	$32,674	$0	$9,627	$138,885
Total EMS	$96,584	$32,674	$0	$9,627	$138,885
EEI: Customized Rebates					
Large	$0	$0	$0	$0	$0
					$0
Small/Medium					
Emerging Technologies	$0	$0	$0	$0	$0
Peak Load Reduction (TPI)	$0	$0	$0	$0	$0
EEI: Prescriptive Rebates					
Large					
Tenant Improvements	$62,870	$36,098	$0	$14,673	$113,641
Small/Medium					
Express Efficiency	$3,848	$1,414	$0	$2,327	$7,589
Commercial Horizontal Washers	$28,795	$15,017	$0	$14,048	$57,859
Turnkey Pilot	$24,311	$10,655	$0	$8,975	$43,941
EEI: SPCs					
Large					
Nonresidential SPC (NRSPC)	$121,730	$20,799	$0	$112,088	$254,617
Small/Medium					
Small Business SPC (SBSPC)	$52,630	$12,274	$0	$24,634	$89,538
Total EEI	$294,183	$96,258	$0	$176,745	$567,186
Upstream Programs					
Financial Assistance					
Building Recommissioning TPI	$0	$0	$0	$0	$0
Retrofit and Leased Space PI	$0	$0	$0	$0	$0
HVAC Midstream	$0	$0	$0	$0	$0
Upstream Motors Incentives	$0	$0	$0	$0	$0
Total Upstream	$0	$0	$0	$0	$0
TOTAL NONRESIDENTIAL	$512,249	$228,742	$0	$202,854	$943,846

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
HVAC Turnover Program: Midstream HVAC
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	265	265,118	0						
2002	265	265,118	0						
2003	265	265,118	0						
2004	265	265,118	0						
2005	265	265,118	0						
2006	265	265,118	0						
2007	265	265,118	0						
2008	265	265,118	0						
2009	265	265,118	0						
2010	265	265,118	0						
2011	265	265,118	0						
2012	265	265,118	0						
2013	265	265,118	0						
2014	265	265,118	0						
2015	265	265,118	0						
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)	265	3,976,775	0	0	0	0	0	0	0

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Large Nonres Comprehensive Program: Large Nonresidential SPC
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2002	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2003	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2004	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2005	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2006	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2007	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2008	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2009	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2010	1,476	8,115,626	0	1,883	10,506,894	0	857	16,134,925	326,021
2011	1,476	8,115,626	0	1,883	10,506,894	0	0	0	326,021
2012	1,476	8,115,626	0	1,883	10,506,894	0	0	0	326,021
2013	1,476	8,115,626	0	1,883	10,506,894	0	0	0	326,021
2014	1,476	8,115,626	0	1,883	10,506,894	0	0	0	326,021
2015	1,476	8,115,626	0	1,883	10,506,894	0	0	0	326,021
2016	1,476	8,115,626	0	1,883	10,506,894	0			
2017	1,476	8,115,626	0						
2018	1,476	8,115,626	0						
2019	1,476	8,115,626	0						
2020	1,476	8,115,626	0						
SUM (Lifecycle)	1,476	162,312,520	0	1,883	168,110,310	0	857	161,349,250	4,890,315

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Large Nonres Comprehensive Program: Building Recommissioning TPI
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	0	627,138	0						
2002	0	384,659	0						
2003	0	208,943	0						
2004	0	133,132	0						
2005	0	133,132	0						
2006	0	66,727	0						
2007	0	66,727	0						
2008	0	66,727	0						
2009	0	66,727	0						
2010	0	66,727	0						
2011	0	66,727	0						
2012	0	66,727	0						
2013	0	66,727	0						
2014	0	66,727	0						
2015	0	66,727	0						
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)	0	2,154,274	0						

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Large Nonres Comprehensive Program: Peak Load Reduction TPI
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2002	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2003	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2004	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2005	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2006	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2007	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2008	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2009	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2010	753	1,199,377	100,000	0	245,189	0	1,026	8,112,796	0
2011	753	1,199,377	100,000	0	245,189	0	1,026	7,669,724	0
2012	753	1,199,377	100,000	0	245,189	0	1,026	7,669,724	0
2013	753	1,199,377	100,000	0	245,189	0	1,026	7,669,724	0
2014	753	1,199,377	100,000	0	245,189	0	1,026	7,669,724	0
2015	753	1,199,377	100,000	0	245,189	0	1,026	7,669,724	0
2016	753	625,000	0	0	245,189	0			
2017	753	625,000	0						
2018	753	625,000	0						
2019	753	625,000	0						
2020	753	625,000	0						
SUM (Lifecycle)	753	21,115,655	1,500,000	0	3,923,024	0	1,026	119,476,580	0

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Large Nonres Comprehensive Program: Retrofits in Leased Space TPI
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001				116	502,607	0			
2002				116	502,607	0			
2003				116	502,607	0			
2004				116	502,607	0			
2005				116	502,607	0			
2006				116	502,607	0			
2007				116	502,607	0			
2008				116	502,607	0			
2009				116	502,607	0			
2010				116	502,607	0			
2011				116	502,607	0			
2012				116	502,607	0			
2013				116	502,607	0			
2014				116	502,607	0			
2015				116	502,607	0			
2016				116	502,607	0			
2017									
2018									
2019									
2020									
SUM (Lifecycle)				116	8,041,712	0			

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Motor Turnover Program: Upstream Motors
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001							42	269,708	0
2002							42	269,708	0
2003							42	269,708	0
2004							42	269,708	0
2005							42	269,708	0
2006							42	269,708	0
2007							42	269,708	0
2008							42	269,708	0
2009							42	269,708	0
2010							42	269,708	0
2011							42	269,708	0
2012							42	269,708	0
2013							42	269,708	0
2014							42	269,708	0
2015							42	269,708	0
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)							42	4,045,623	0

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Remodeling & Renovation Program: Savings By Design
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2002	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2003	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2004	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2005	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2006	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2007	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2008	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2009	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2010	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2011	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2012	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2013	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2014	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2015	421	1,519,697	3,774	539	1,726,812	-106	465	3,118,899	21,914
2016				539	1,726,812	-106	465	3,118,899	21,914
2017									
2018									
2019									
2020									
SUM (Lifecycle)	421	22,795,455	56,610	539	27,628,992	-1,696	465	49,902,384	350,624

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Small Nonres Comprehensive Program: Commercial Horizontal Clothes Washer
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001							0	151,690	180,649
2002							0	151,690	180,649
2003							0	151,690	180,649
2004							0	151,690	180,649
2005							0	151,690	180,649
2006							0	151,690	180,649
2007							0	151,690	180,649
2008							0	151,690	180,649
2009							0	151,690	180,649
2010							0	151,690	180,649
2011									
2012									
2013									
2014									
2015									
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)							0	1,516,900	1,806,490

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Small Nonres Comprehensive Program: Express Efficiency-Rebates
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	165	316,050	4,312	5,539	27,638,533	0	17	439,345	129,420
2002	165	316,050	4,312	5,539	27,638,533	0	17	439,345	129,420
2003	165	316,050	4,312	5,539	27,638,533	0	17	439,345	129,420
2004	165	316,050	4,312	5,539	27,638,533	0	17	439,345	129,420
2005	165	316,050	4,312	5,539	27,638,533	0	17	439,345	129,420
2006	143	302,598	4,312	5,539	27,638,533	0	17	439,345	0
2007	143	302,598	4,312	5,539	27,638,533	0	17	439,345	0
2008	143	302,598	4,312	5,539	27,638,533	0	17	439,345	0
2009	143	302,598	4,312	5,484	27,356,872	0	17	439,345	0
2010	143	302,598	4,312	3,926	17,755,107	0	17	439,345	0
2011	115	102,548	4,312	3,926	17,755,107	0	17	439,345	0
2012	49	38,588	4,312	3,926	17,755,107	0	17	439,345	0
2013	49	38,588	4,312	3,926	17,755,107	0	17	275,987	0
2014	49	38,588	4,312	3,926	17,755,107	0	17	275,987	0
2015	49	38,588	4,312	3,926	17,755,107	0	17	236,463	0
2016				3,926	17,755,107	0	17	233,713	0
2017									
2018									
2019									
2020									
SUM (Lifecycle)	165	3,350,134	64,680	5,539	372,750,886	0	17	6,294,290	647,099

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Small Nonres Comprehensive Program: Small Business SPC
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2002	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2003	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2004	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2005	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2006	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2007	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2008	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2009	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2010	27	362,405	0	1,425	6,117,391	0	162	1,770,232	149,088
2011	27	362,405	0	1,425	6,117,391	0	0	0	149,088
2012	27	362,405	0	1,425	6,117,391	0	0	0	149,088
2013	27	362,405	0	1,425	6,117,391	0	0	0	149,088
2014	27	362,405	0	1,425	6,117,391	0	0	0	149,088
2015	27	362,405	0	1,425	6,117,391	0	0	0	149,088
2016	27	362,405	0	1,425	6,117,391	0			
2017	27	362,405	0						
2018	27	362,405	0						
2019	27	362,405	0						
2020	27	362,405	0						
SUM (Lifecycle)	27	7,248,100	0	1,425	97,878,254	0	162	17,702,323	2,236,320

Table TA 3.3
Market Effects: Nonresidential Projected Annual Program Energy Reductions
Small Nonres Comprehensive Program: Small Commercial Turnkey
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	4	3,728	0	387	1,640,626	0			
2002	4	3,728	0	387	1,640,626	0			
2003	4	3,728	0	387	1,640,626	0			
2004	4	3,728	0	387	1,640,626	0			
2005	4	3,728	0	387	1,640,626	0			
2006	4	3,728	0	387	1,640,626	0			
2007	4	3,728	0	387	1,640,626	0			
2008	4	3,728	0	249	874,705	0			
2009	4	3,728	0	58	376,687	0			
2010	4	3,728	0	27	180,022	0			
2011	1	615	0	27	180,022	0			
2012				27	180,022	0			
2013				27	180,022	0			
2014				27	180,022	0			
2015				27	180,022	0			
2016				27	180,022	0			
2017									
2018									
2019									
2020									
SUM (Lifecycle)	4	37,898	0	387	13,995,925	0			

Table TA 3.4
Market Effects: Distribution of Large Nonresidential SPC Payments
Program Year: 2001

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solutions	$ -	$ -	$ -	$ -	$ -
Total Affiliate	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
ESCO #1	$20,494.36	$ 83,783.27	$ -	$ -	$ 83,783.27
ESCO #2	$2,987.42	$ 7,876.14	$ -	$ -	$ 7,876.14
ESCO #3	$5,898.45	$ 1,031.95	$ -	$ 7,693.90	$ 8,725.85
ESCO #4	$0.00	$ -	$ -	$ 23,799.69	$ 23,799.69
ESCO #5	$45,755.00	$ -	$ 87,933.92	$ -	$ 87,933.92
ESCO #6	$5,509.56	$ -	$ -	$ 8,264.34	$ 8,264.34
ESCO #7	$25,950.00	$ -	$ 40,372.38	$ -	$ 40,372.38
ESCO #8	$31,504.44	$ -	$ -	$ -	$ -
ESCO #9	$12,560.00	$ -	$ -	$ -	$ -
ESCO #10	$7,848.50	$ -	$ -	$ -	$ -
ESCO #11	$102,007.73	$ -	$ -	$ -	$ -
ESCO #12	$0.00	$ 125,130.38	$ -	$ -	$ 125,130.38
ESCO #13	$4,538.88	$ 10,174.66	$ -	$ -	$ 10,174.66
ESCO #14	$2,471.50	$ -	$ 2,965.80	$ -	$ 2,965.80
ESCO #15	$380,991.42	$ -	$ 4,911.02	$ 55,087.78	$ 59,998.80
ESCO #16	$21,453.45	$ -	$ -	$ 25,744.14	$ 25,744.14
Total ESCO	*$ 669,970.71*	*$ 227,996.40*	*$ 136,183.12*	*$ 120,589.84*	*$ 484,769.37*
Customer #1	$17,865.00	$ -	$ 21,438.00	$ -	$ 21,438.00
Customer #2	$5,252.83	$ -	$ -	$ -	$ -
Customer #3	$51,598.85	$ -	$ -	$ 61,918.62	$ 61,918.62
Customer #4	$14,497.01	$ -	$ -	$ -	$ -
Customer #5	$0.00	$ -	$ -	$ 10,583.33	$ 10,583.33
Customer #6	$9,014.00	$ 20,457.57	$ -	$ -	$ 20,457.57
Customer #7	$8,596.90	$ 12,228.32	$ -	$ -	$ 12,228.32
Customer #8	$11,359.04	$ -	$ -	$ 17,038.56	$ 17,038.56
Customer #9	$442,443.24	$ -	$ -	$ -	$ -
Customer #10	$76,695.20	$ -	$ -	$ 127,584.24	$ 127,584.24
Customer #11	$1,712.56	$ 4,023.84	$ -	$ -	$ 4,023.84
Customer #12	$15,034.41	$ -	$ -	$ -	$ -
Customer #13	$43,989.98	$ -	$ -	$ 82,010.02	$ 82,010.02
Customer #14	$11,088.00	$ 16,632.00	$ -	$ -	$ 16,632.00
Customer #15	$52,419.40	$ -	$ -	$ -	$ -
Customer #16	$20,034.30	$ -	$ -	$ 34,091.16	$ 34,091.16
Customer #17	$1,627.60	$ -	$ 4,214.54	$ -	$ 4,214.54
Customer #18	$68,355.63	$ -	$ -	$ -	$ -
Customer #19	$75,912.30	$ -	$ -	$ -	$ -
Customer #20	$3,387.10	$ -	$ 12,044.66	$ -	$ 12,044.66
Customer #21	$5,971.68	$ -	$ -	$ -	$ -
Customer #22	$27,636.40	$ -	$ -	$ -	$ -
Customer #23	$12,553.75	$ -	$ -	$ -	$ -
Customer #24	$178,976.25	$ -	$ -	$ 88,852.50	$ 88,852.50
Customer #25	$50,167.15	$ -	$ -	$ 60,200.58	$ 60,200.58
Customer #26	$38,708.00	$ -	$ -	$ -	$ -
Customer #27	$139,401.19	$ -	$ -	$ -	$ -
Customer #28	$19,629.50	$ -	$ -	$ -	$ -
Customer #29	$313,391.54	$ -	$ -	$ -	$ -
Customer #30	$182,283.36	$ -	$ 216,078.38	$ 52,768.86	$ 268,847.24
Customer #31	$48,688.79	$ 9,898.90	$ -	$ 62,335.68	$ 72,234.58
Customer #32	$12,319.90	$ -	$ 14,783.88	$ -	$ 14,783.88
Customer #33	$0.00	$ 42,330.80	$ -	$ -	$ 42,330.80
Customer #34	$3,438.99	$ -	$ -	$ -	$ -
Customer #35	$25,096.44	$ -	$ -	$ -	$ -
Customer #36	$3,595.36	$ -	$ -	$ 5,393.04	$ 5,393.04
Customer #37	$55,175.70	$ -	$ 82,763.54	$ -	$ 82,763.54
Customer #38	$9,094.21	$ 1,019.62	$ 12,621.70	$ -	$ 13,641.32
Customer #39	$3,175.49	$ -	$ 14,910.73	$ -	$ 14,910.73
Customer #40	$33,756.80	$ -	$ -	$ -	$ -
Customer #41	$36,851.23	$ -	$ -	$ -	$ -
Customer #42	$167,543.42	$ -	$ -	$ -	$ -
Total Customer	*$ 2,298,338.50*	*$ 106,591.05*	*$ 378,855.43*	*$ 602,776.58*	*$ 1,088,223.07*
Totals	**$ 2,968,309.21**	**$ 334,587.45**	**$ 515,038.56**	**$ 723,366.43**	**$ 1,572,992.44**

Table TA 3.4
Market Effects: Distribution of Small Nonresidential SPC Payments
Program Year: 2001

	Commitments	Lighting Payments	HVAC Payments	Other Payments	Total Payments
Sempra Energy Solution	$ -	$ -	$ -	$ -	$ -
Total Affiliate	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
ESCO #1	$ 82,329.75	$ 274,170.82	$ 293.48	$ -	$ 274,464.30
ESCO #2	$ 6,949.76	$ 3,945.45	$ -	$ 1,038.55	$ 4,984.00
ESCO #3	$ 1,931.49	$ -	$ 4,317.79	$ -	$ 4,317.79
ESCO #4	$ 11,512.99	$ -	$ -	$ -	$ -
ESCO #5	$ 8,356.62	$ -	$ 7,051.08	$ 5,483.85	$ 12,534.93
ESCO #6	$ 3,886.47	$ 34,729.47	$ -	$ -	$ 34,729.47
ESCO #7	$ -	$ 23,647.40	$ -	$ -	$ 23,647.40
ESCO #8	$ 6,001.91	$ 16,271.61	$ -	$ -	$ 16,271.61
ESCO #9	$ 4,227.98	$ -	$ -	$ -	$ -
ESCO #10	$ 6,088.08	$ 16,094.62	$ -	$ -	$ 16,094.62
ESCO #11	$ 41,749.80	$ -	$ -	$ -	$ -
ESCO #12	$ 5,552.11	$ 14,614.69	$ -	$ -	$ 14,614.69
ESCO #13	$ 3,222.78	$ -	$ -	$ 5,867.34	$ 5,867.34
ESCO #14	$ 13,600.00	$ -	$ -	$ 35,787.70	$ 35,787.70
ESCO #15	$ 13,054.05	$ -	$ 17,664.86	$ -	$ 17,664.86
ESCO #16	$ -	$ 3,887.22	$ -	$ -	$ 3,887.22
ESCO #17	$ 1,230.46	$ -	$ -	$ 5,366.55	$ 5,366.55
ESCO #18	$ 7,061.44	$ -	$ -	$ 12,592.16	$ 12,592.16
Total ESCO	*$ 216,755.69*	*$ 387,361.28*	*$ 29,327.21*	*$ 66,136.16*	*$ 482,824.64*
Customer #1	$ 26,510.27	$ -	$ -	$ 51,828.26	$ 51,828.26
Customer #2	$ 1,814.37	$ 7,514.41	$ 2,109.42	$ -	$ 9,623.83
Customer #3	$ 18,387.44	$ -	$ 4,736.71	$ 22,844.45	$ 27,581.16
Customer #4	$ 34,874.40	$ -	$ -	$ 43,849.28	$ 43,849.28
Customer #5	$ -	$ 6,340.96	$ -	$ -	$ 6,340.96
Customer #6	$ -	$ 11,759.50	$ -	$ -	$ 11,759.50
Customer #7	$ -	$ 2,483.60	$ -	$ -	$ 2,483.60
Customer #8	$ 2,387.36	$ -	$ -	$ 3,581.04	$ 3,581.04
Customer #9	$ 1,657.89	$ -	$ 3,883.23	$ -	$ 3,883.23
Customer #10	$ 25,686.11	$ -	$ -	$ 32,823.34	$ 32,823.34
Customer #11	$ 24,555.99	$ -	$ -	$ 34,148.77	$ 34,148.77
Total Customer	*$ 135,873.83*	*$ 28,098.47*	*$ 10,729.36*	*$ 189,075.14*	*$ 227,902.97*
Totals	**$ 352,629.52**	**$ 415,459.75**	**$ 40,056.57**	**$ 255,211.29**	**$ 710,727.61**

Table TA 3.5
Measure Detail: Nonresidential Program Area
HVAC Turnover Program: Midstream HVAC
Program Year: 2001

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
2001	AC01	HVAC Single Package, Air Cooled	58	$21,672.00	$373.66	36,850	635	-	-	15	HVAC
2001	AC04	Heat Pump	19	$5,975.00	$314.47	14,077	741	-	-	15	HVAC
2001	AC05	HVAC Single Package, Air Cooled (11 to 12 SEER)	96	$33,528.00	$349.25	74,818	779	-	-	15	HVAC
2001	AC06	HVAC Single Package, Air Cooled (13 to 14 SEER)	38	$28,085.00	$739.08	38,298	1,008	-	-	15	HVAC
2001	AC07	HVAC Split Unit, Air Cooled (11 to 12 SEER)	1	$228.00	$228.00	636	636	-	-	15	HVAC
2001	AC08	HVAC Split Unit, Air Cooled (13 to 14 SEER)	1	$615.00	$615.00	1,156	1,156	-	-	15	HVAC
2001	AC10	Heat Pump (11 to 12 SEER)	109	$50,064.00	$459.30	90,611	831	-	-	15	HVAC
2001	AC11	Heat Pump (13 to 14 SEER)	10	$3,980.00	$398.00	8,671	867	-	-	15	HVAC

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Large Nonresidential SPC
Program Year: 2001

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
2001	CUSTO	10 Ton & Under HVAC Units	1	$3,390.75	$3,390.75	22,605	22,605	-	-	20	HVAC
2001	CUSTO	156,000 FT2 Energy Savings Curtain	1	$191,851.38	$191,851.38	-	-	49,574	49,574	15	Misc
2001	CUSTO	173T screw compressor	1	$6,357.45	$6,357.45	42,383	42,383	-	-	20	HVAC
2001	CUSTO	1-Stage Lubric'nt inj'ted rotary screw- Compressor	1	$8,406.42	$8,406.42	38,211	38,211	-	-	10	Misc
2001	CUSTO	2 - 75 h.p. Fans	1	$58,177.02	$58,177.02	264,441	264,441	-	-	10	Misc
2001	CUSTO	2- 15.0 HP VFD	1	$15,507.58	$15,507.58	70,489	70,489	-	-	10	Misc
2001	CUSTO	2 Lamp 4' T12 Fluores conv to 2 lamp 4' T8	1	$534.96	$534.96	8,916	8,916	-	-	16	Lighting
2001	CUSTO	2 lamp 8' T12 fluor magnetic conv 2 lamp 4' T8	1	$136.50	$136.50	2,275	2,275	-	-	16	Lighting
2001	CUSTO	2 Lamp ubend T12 fluores conv 2 Lamp 2' fluores T8	1	$8,947.20	$8,947.20	149,120	149,120	-	-	16	Lighting
2001	CUSTO	200T screw compressor	1	$7,101.30	$7,101.30	47,342	47,342	-	-	20	HVAC
2001	CUSTO	220T Screw Compressor 2u @ 300T	1	$18,375.45	$18,375.45	122,503	122,503	-	-	20	HVAC
2001	CUSTO	25 HP VFD	1	$12,648.68	$12,648.68	57,494	57,494	-	-	10	Misc
2001	CUSTO	250w high pressur conv to 4 lamp 4' T8	1	$249.48	$249.48	4,158	4,158	-	-	16	Lighting
2001	CUSTO	2Lamp ubend T8 fluores conv to 2 Lamp 2' T8 fluore	1	$12,069.12	$12,069.12	201,152	201,152	-	-	16	Lighting
2001	CUSTO	3 LAMP 8' T12 fluores conv to 4 lamp 4' T8	1	$1,764.72	$1,764.72	29,412	29,412	-	-	16	Lighting
2001	CUSTO	40 HP VFD	1	$20,237.80	$20,237.80	91,990	91,990	-	-	10	Misc
2001	CUSTO	40 w incandescent emergency exit sign conv to 2w L	1	$194.40	$194.40	3,240	3,240	-	-	16	Lighting
2001	CUSTO	400T Chiller w/ VFD	1	$31,426.05	$31,426.05	209,507	209,507	-	-	20	HVAC
2001	CUSTO	400w mercu vapor conv to 2 lamp 4'T8	1	$6,060.78	$6,060.78	101,013	101,013	-	-	16	Lighting
2001	CUSTO	47,952 FT2 Energy Savings Curtain	1	$58,452.48	$58,452.48	-	-	15,104	15,104	15	Misc
2001	CUSTO	60 HP VFD	1	$28,728.04	$28,728.04	130,582	130,582	-	-	10	Misc
2001	CUSTO	7.5 HP VFD	1	$4,453.24	$4,453.24	20,242	20,242	-	-	10	Misc
2001	CUSTO	84,240 FT2 Energy Savings Curtain	1	$102,690.45	$102,690.45	-	-	26,535	26,535	15	Misc
2001	CUSTO	A/C Replacement	1	$18,479.85	$18,479.85	123,199	123,199	-	-	20	HVAC
2001	CUSTO	Air Compressor and Fire Pumps	1	$337,458.88	$337,458.88	1,533,904	1,533,904	-	-	10	Misc
2001	CUSTO	Air Handler VFDS	4	$229,897.80	$57,474.45	1,532,652	383,163	-	-	20	HVAC
2001	CUSTO	Air Handling Unit Motors & VSD's	1	$25,057.35	$25,057.35	167,049	167,049	-	-	20	HVAC
2001	CUSTO	Boiler Replacement	1	$216,511.02	$216,511.02	-	-	55,946	55,946	15	Misc
2001	CUSTO	Calculated	1	$10,594.50	$10,594.50	176,575	176,575	-	-	16	Lighting
2001	CUSTO	Calculated - Front House	1	$42,135.00	$42,135.00	702,250	702,250	-	-	16	Lighting
2001	CUSTO	Calculated - Pool & Spa light retrofits	1	$248.10	$248.10	4,135	4,135	-	-	16	Lighting
2001	CUSTO	Calculated - Room Ltg.	1	$39,480.00	$39,480.00	658,000	658,000	-	-	16	Lighting
2001	CUSTO	Calculated: 1000 w Metal Halide to 400 w MH	1	$27,377.94	$27,377.94	456,299	456,299	-	-	16	Lighting
2001	CUSTO	Calculated: T12 changed to T8	1	$8,147.52	$8,147.52	135,792	135,792	-	-	16	Lighting
2001	CUSTO	CFL RETROFIT	3	$8,215.20	$2,738.40	136,920	45,640	-	-	16	Lighting
2001	CUSTO	CFL RETROFIT FOR BEQ	2	$22,713.60	$11,356.80	378,560	189,280	-	-	16	Lighting
2001	CUSTO	Chilled water and condenser tower water pump	1	$4,052.40	$4,052.40	18,420	18,420	-	-	10	Misc
2001	CUSTO	Chilled water pump	3	$21,971.62	$7,323.87	99,871	33,290	-	-	10	Misc
2001	CUSTO	Chiller	2	$13,296.45	$6,648.23	88,643	44,322	-	-	20	HVAC
2001	CUSTO	Chiller	1	$14,770.80	$14,770.80	67,140	67,140	-	-	10	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Large Nonresidential SPC
Program Year: 2001

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
2001	CUSTO	Chiller Repl.	2	$107,557.50	$53,778.75	717,050	358,525	-	-	20	HVAC
2001	CUSTO	Chiller VSD	3	$167,543.42	$55,847.81	761,561	253,854	-	-	10	Misc
2001	CUSTO	Chillers	1	$9,840.00	$9,840.00	65,600	65,600	-	-	20	HVAC
2001	CUSTO	Chillers	3	$49,245.90	$16,415.30	223,845	74,615	-	-	10	Misc
2001	CUSTO	Compressed air system	2	$428,175.88	$214,087.94	1,946,254	973,127	-	-	10	Misc
2001	CUSTO	Compressor System	2	$661,984.84	$330,992.42	3,009,022	1,504,511	-	-	10	Misc
2001	CUSTO	Computer Room DX A/C Unit	1	$28,843.05	$28,843.05	192,287	192,287	-	-	20	HVAC
2001	CUSTO	Controls: Dimming Electronic Ballasts	1	$9,077.76	$9,077.76	151,296	151,296	-	-	16	Lighting
2001	CUSTO	Convert T12 to T8 Elec Configuration	1	$665.45	$665.45	11,091	11,091	-	-	16	Lighting
2001	CUSTO	Convert T12 t0 T8 Elec Configuration	1	$2,570.11	$2,570.11	42,835	42,835	-	-	16	Lighting
2001	CUSTO	Convert T12 ti T8 Elec Configuration	1	$279.60	$279.60	4,660	4,660	-	-	16	Lighting
2001	CUSTO	convert T12 to Elec Configuration	1	$32.21	$32.21	537	537	-	-	16	Lighting
2001	CUSTO	convert T12 to T8 Elec Configuration	16	$19,171.06	$1,198.19	319,518	19,970	-	-	16	Lighting
2001	CUSTO	Cool / white roofing	1	$3,707.25	$3,707.25	24,715	24,715	-	-	20	HVAC
2001	CUSTO	Cooling Fans	1	$1,268.25	$1,268.25	8,455	8,455	-	-	20	HVAC
2001	CUSTO	Cooling Tower Pump	1	$24,881.56	$24,881.56	113,098	113,098	-	-	10	Misc
2001	CUSTO	Cooling Units	2	$5,272.05	$2,636.03	35,147	17,574	-	-	20	HVAC
2001	CUSTO	Daylighting Control Bldg 1	1	$13,581.12	$13,581.12	226,352	226,352	-	-	16	Lighting
2001	CUSTO	Demo Bldg 54	1	$35,877.48	$35,877.48	597,958	597,958	-	-	16	Lighting
2001	CUSTO	Efficiency Upgrade	2	$4,215.84	$2,107.92	70,264	35,132	-	-	16	Lighting
2001	CUSTO	Efficient Boilers	1	$215,396.46	$215,396.46	-	-	55,658	55,658	15	Misc
2001	CUSTO	Effiency Upgrade	1	$1,516.14	$1,516.14	25,269	25,269	-	-	16	Lighting
2001	CUSTO	EMS Lighting	2	$17,535.48	$8,767.74	292,258	146,129	-	-	16	Lighting
2001	CUSTO	Fluores 96" T8	1	$5,730.36	$5,730.36	95,506	95,506	-	-	16	Lighting
2001	CUSTO	Heater Replacement	1	$10,704.42	$10,704.42	-	-	2,766	2,766	15	Misc
2001	CUSTO	HVAC Adjustable Speed Drives	1	$106,566.24	$106,566.24	484,392	484,392	-	-	10	Misc
2001	CUSTO	HVAC Cooling Units	10	$55,483.05	$5,548.31	369,887	36,989	-	-	20	HVAC
2001	CUSTO	Hydraulic Injection Molding	1	$453,337.50	$453,337.50	2,060,625	2,060,625	-	-	10	Misc
2001	CUSTO	Hylsave Refrigeration Pumps	1	$21,480.30	$21,480.30	143,202	143,202	-	-	20	HVAC
2001	CUSTO	Incandescent to compact fluorescent	1	$57,184.80	$57,184.80	953,080	953,080	-	-	16	Lighting
2001	CUSTO	Install IR Film	1	$69,060.15	$69,060.15	-	-	17,845	17,845	15	Misc
2001	CUSTO	Installing daylighting into roofs	1	$5,428.80	$5,428.80	90,480	90,480	-	-	16	Lighting
2001	CUSTO	Lighting	1	$5,419.86	$5,419.86	90,331	90,331	-	-	16	Lighting
2001	CUSTO	Lighting Efficiency	8	$95,317.02	$11,914.63	1,588,617	198,577	-	-	16	Lighting
2001	CUSTO	Lighting Efficiency (C)	1	$6,318.00	$6,318.00	105,300	105,300	-	-	16	Lighting
2001	CUSTO	Lighting Efficiency (M)	1	$5,324.40	$5,324.40	88,740	88,740	-	-	16	Lighting
2001	CUSTO	Lighting Retrofit	2	$66,810.42	$33,405.21	1,113,507	556,754	-	-	16	Lighting
2001	CUSTO	Measure 1&2 HVAC Upgrades and Replacements	1	$332,373.30	$332,373.30	2,215,822	2,215,822	-	-	20	HVAC
2001	CUSTO	Measured - Pool & Spa pumps and motor	1	$2,216.06	$2,216.06	10,073	10,073	-	-	10	Misc
2001	CUSTO	Motor & 1 VSD	1	$67,513.60	$67,513.60	306,880	306,880	-	-	10	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Large Nonresidential SPC
Program Year: 2001

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
2001	CUSTO	New Chiller Modules & Cooling Tower	1	$6,615.60	$6,615.60	44,104	44,104	-	-	20	HVAC
2001	CUSTO	Occupancy Sensor	1	$31,984.98	$31,984.98	533,083	533,083	-	-	16	Lighting
2001	CUSTO	Occupancy Sensors for HVAC	1	$94,395.18	$94,395.18	429,069	429,069	-	-	10	Misc
2001	CUSTO	Premium Efficiency Chillers	1	$228,913.05	$228,913.05	1,526,087	1,526,087	-	-	20	HVAC
2001	CUSTO	Refrigeration for cold storage/HVAC	1	$313,391.54	$313,391.54	1,424,507	1,424,507	-	-	10	Misc
2001	CUSTO	Replace Draft Fan	1	$2,997.28	$2,997.28	13,624	13,624	-	-	10	Misc
2001	CUSTO	Replace furnance install temp controls	1	$358,451.01	$358,451.01	-	-	92,623	92,623	15	Misc
2001	CUSTO	Replace Heater	1	$38,583.90	$38,583.90	-	-	9,970	9,970	15	Misc
2001	CUSTO	Replace Jet Motors	1	$750.20	$750.20	3,410	3,410	-	-	10	Misc
2001	CUSTO	Replace Motors	1	$4,116.42	$4,116.42	18,711	18,711	-	-	10	Misc
2001	CUSTO	Retrofit T-8 and Watt GE elect. ballast	1	$12,186.36	$12,186.36	203,106	203,106	-	-	16	Lighting
2001	CUSTO	Room & No Common Area Lighting installed 4/1/02	1	$30,240.00	$30,240.00	504,000	504,000	-	-	16	Lighting
2001	CUSTO	Supply fan	1	$35,810.55	$35,810.55	238,737	238,737	-	-	20	HVAC
2001	CUSTO	Three 40 HP VFD's	1	$54,965.24	$54,965.24	249,842	249,842	-	-	10	Misc
2001	CUSTO	Upgrade T-12 to T8 Hallway	1	$1,382.40	$1,382.40	23,040	23,040	-	-	16	Lighting
2001	CUSTO	Variable Speed Drive for Supply Fans	1	$45,147.52	$45,147.52	205,216	205,216	-	-	10	Misc
2001	CUSTO	Various Lighting	1	$13,695.00	$13,695.00	228,250	228,250	-	-	16	Lighting
2001	CUSTO	VFD - Chiller #1	1	$26,797.50	$26,797.50	178,650	178,650	-	-	20	HVAC
2001	CUSTO	VFD's on Air Handlers	1	$263,351.00	$263,351.00	1,197,050	1,197,050	-	-	10	Misc
2001	CUSTO	VFD's on five hot water pumps	1	$59,224.22	$59,224.22	269,201	269,201	-	-	10	Misc
2001	CUSTO	VSD HVAC Supply Fans	8	$121,285.34	$15,160.67	551,297	68,912	-	-	10	Misc
2001	CUSTO	VSD Secondary CHW Pumps	1	$85,418.96	$85,418.96	388,268	388,268	-	-	10	Misc
2001	CUSTO	Water Pumps	1	$16,763.12	$16,763.12	76,196	76,196	-	-	10	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Building Recommissioning TPI
Program Year: 2001

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
2001	CUSTO	controls	1	$14,632.00	$14,632.00	97,731	97,731	-	-	2	HVAC
2001	CUSTO	improve condensing fan control scheme	1	$0.00	$0.00	23,702	23,702	-	-	2	HVAC
2001	CUSTO	isolate condenser air exhaust from OA makeup of AH	1	$4,044.00	$4,044.00	287	287	-	-	15	HVAC
2001	CUSTO	Repair AHU discharge air boot	1	$2,400.00	$2,400.00	46,550	46,550	-	-	15	HVAC
2001	CUSTO	Repair AHU OA damper control	1	$0.00	$0.00	75,811	75,811	-	-	3	HVAC
2001	CUSTO	repair building pressurization control; add CO2 se	1	$0.00	$0.00	54,283	54,283	-	-	2	HVAC
2001	CUSTO	rewire heat pump supply fans	1	$8,531.00	$8,531.00	66,405	66,405	-	-	5	HVAC
2001	CUSTO	scheduling and programming	1	$243.00	$243.00	219,460	219,460	-	-	1	HVAC
2001	CUSTO	trim pump impellers	1	$2,426.00	$2,426.00	19,890	19,890	-	-	15	HVAC
2001	CUSTO	tune-up heat pumps	1	$2,788.00	$2,788.00	23,019	23,019	-	-	1	HVAC

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Peak Load Reduction TPI
Program Year: 2001

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
2001	CUSTO	CFT32/1-L	1	$78,339.00	$78,339.00	245,189	245,189	-	-	16	Lighting
2001	CUSTO	Compressed Air	1	$499,346.00	$499,346.00	7,119,000	7,119,000	-	-	15	Misc
2001	CUSTO	Convert Air Handler System	1	$149,187.00	$149,187.00	337,258	337,258	-	-	15	HVAC
2001	CUSTO	Direct Digital Control	1	$493,998.00	$493,998.00	443,072	443,072	-	-	10	Misc
2001	CUSTO	Installation of High-efficiency chillers	1	$950,999.00	$950,999.00	625,000	625,000	-	-	20	HVAC
2001	CUSTO	Replace Cooling Tower	1	$237,119.00	$237,119.00	237,119	237,119	-	-	15	HVAC
2001	CUSTO	Revise heating systems	1	$395,199.00	$395,199.00	-	-	100,000	100,000	15	HVAC
2001	CUSTO	Revise pumping systems	1	$330,988.00	$330,988.00	550,724	550,724	-	-	15	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Large Nonres Comprehensive Program: Retrofits in Leased Space TPI
Program Year: 2001

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
2001	CUSTO	Lamp Fixtures	1	$93,413.00	$93,413.00	502,607	502,607	-	-	16	Lighting

Table TA 3.5
Measure Detail: Nonresidential Program Area
Motor Turnover Program: Upstream Motors
Program Year: 2001

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
2001	MTR01	Motor - Open Drip Proof (ODP)	37	$9,032.00	$244.11	62,459	1,688	-	-	15	Misc
2001	MTR02	Motor - Totally Enclosed Fan Cooled (TEFC)	238	$10,714.00	$45.02	207,249	871	-	-	15	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Remodeling & Renovation Program: Savings By Design
Program Year: 2001

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
2001	NC001	Other Systems	7	$656,619.18	$93,802.74	2,962,644	423,235	21,994	3,142	16	Misc
2001	NC002	Whole Building - Overall Building Performance	6	$43,751.40	$7,291.90	156,255	26,043	(80)	(13)	16	Misc
2001	NC010	Air-Cooled Package Air-Conditioner (greater than or	35	$12,219.00	$349.11	61,095	1,746	-	-	15	HVAC
2001	NC011	Air-Cooled Package Heat Pump (greater than or	28	$5,808.20	$207.44	29,041	1,037	-	-	15	HVAC
2001	NC012	Air-Cooled Package and Split System Air-	198	$46,071.40	$232.68	230,357	1,163	(15)	(0)	15	HVAC
2001	NC013	Air-Cooled Package and Split System Heat Pumps	25	$2,293.40	$91.74	11,467	459	-	-	15	HVAC
2001	NC018	High Efficiency Lighting	57	$276,289.92	$4,847.19	1,726,812	30,295	(106)	(2)	16	Lighting
2001	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	3	$2,628.40	$876.13	13,142	4,381	-	-	15	HVAC
2001	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	3	$1,970.00	$656.67	9,850	3,283	-	-	15	HVAC
2001	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	3	$6,259.40	$2,086.47	31,297	10,432	-	-	15	HVAC
2001	NC027	Low Solar Heat Gain Coefficient Glass, Orientation:	3	$3,572.20	$1,190.73	17,861	5,954	-	-	15	HVAC
2001	NC047	Variable Frequency Drive for Chilled Water Pump	1	$28,225.60	$28,225.60	141,128	141,128	-	-	15	HVAC
2001	NC048	Variable Frequency Drive for Cooling Tower Fan	1	$446.80	$446.80	2,234	2,234	-	-	15	HVAC
2001	NC049	Variable Frequency Drive for HVAC Fan Motors	51	$109,341.80	$2,143.96	546,709	10,720	-	-	15	HVAC
2001	NC052	Water Cooled Chillers	2	$26,735.80	$13,367.90	133,679	66,840	-	-	15	HVAC
2001	NC053	Water Source Package Heat Pump	161	$45,434.80	$282.20	227,174	1,411	(131)	(1)	15	HVAC
2001	NC054	HVAC Air Cooled Package A/C	1	$2,860.80	$2,860.80	14,304	14,304	-	-	15	HVAC
2001	NC060	HVAC Motors - Premium Efficiency	1	$1,924.40	$1,924.40	9,622	9,622	-	-	15	HVAC
2001	NC061	HVAC Variable Frequency Drives	1	$8,147.40	$8,147.40	40,737	40,737	(6)	(6)	15	HVAC
2001	NC068	HVAC - Large Boilers (>= 300,000 Btu/hr)	1	$15,193.62	$15,193.62	-	-	3,926	3,926	15	HVAC

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Commercial Horizontal Clothes Washer
Program Year: 2001

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
2001	CW01	Clothes Washer	480	$240,000.00	$500.00	52,800	110	62,880	131	10	Misc
2001	CW01	FRONT LOAD WASHER	749	$374,500.00	$500.00	82,390	110	98,119	131	10	Misc
2001	CW01	HORIZON E-MECH LINE	24	$12,000.00	$500.00	2,640	110	3,144	131	10	Misc
2001	CW01	SPEED QUEEN	13	$6,500.00	$500.00	1,430	110	1,703	131	10	Misc
2001	CW01	SPEED QUEEN COMMERCI	113	$56,500.00	$500.00	12,430	110	14,803	131	10	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Express Efficiency-Rebates
Program Year: 2001

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
2001	ACPT	Package Terminal Air Conditioners	392	$25,617.20	$65.35	36,355	93	-	-	15	HVAC
2001	CS05-13	Screw-in 5-13 watt CF Lamp	4,828	$28,485.20	$5.90	1,034,366	214	-	-	9	Lighting
2001	CS14-26	Screw-in 14-26 watt CF Lamp	20,426	$265,538.00	$13.00	5,729,751	281	-	-	9	Lighting
2001	CS27+	Screw-in >= 27 watt CF Lamp	7,640	$145,160.00	$19.00	2,756,436	361	-	-	9	Lighting
2001	CS27+a	Two or more Screw-in >= 27 watt CF Lamps	214	$4,066.00	$19.00	81,213	380	-	-	9	Lighting
2001	EBDD	Lamps controlled by Dimming Elec Ballast	5,970	$252,232.50	$42.25	267,456	45	-	-	16	Lighting
2001	EBND	Lamps controlled by Non-Dimming Elec Bal	99	$1,270.17	$12.83	3,195	32	-	-	16	Lighting
2001	EHI0-	Exterior 0-100w Incand Base HID	65	$6,175.00	$95.00	50,102	771	-	-	16	Lighting
2001	EHI176+	Exterior >=176w Incand Base HID	38	$7,600.00	$200.00	75,096	1,976	-	-	16	Lighting
2001	EHM0-	Exterior 0-100w Merc Vap Base HID	77	$7,315.00	$95.00	27,782	361	-	-	16	Lighting
2001	EHM176	Exterior >=176w Merc Vap Base HID	52	$8,159.32	$156.91	70,395	1,354	-	-	16	Lighting
2001	EXITK	Exit Sign Retrofit Kit	269	($6,388.75)	($23.75)	95,197	354	-	-	16	Lighting
2001	EXITLE	LED Exit Sign	513	($12,183.75)	($23.75)	181,547	354	-	-	16	Lighting
2001	EXP01	Greenhouse Heat Curtain	431,399	$293,351.32	$0.68	-	-	129,420	0	5	Misc
2001	HF05-13	Hardwired 5-13 watt CF Fixture	769	$14,887.84	$19.36	17,852	23	-	-	16	Lighting
2001	HF14-26	Hardwired 14-26 watt CF Fixture	1,116	$21,605.76	$19.36	24,977	22	-	-	16	Lighting
2001	HFI27-	Hardwired Incand Base 27-65 watt CF Fixture	699	($33,866.55)	($48.45)	481,657	689	-	-	16	Lighting
2001	HFI66-	Hardwired Incand Base 66-90 watt CF Fixture	178	($14,240.00)	($80.00)	171,223	962	-	-	16	Lighting
2001	HFI90+	Hardwired Incand Base >90 watt CF Fixture	144	($11,520.00)	($80.00)	100,883	701	-	-	16	Lighting
2001	HFM27-	Hardwired Merc Vap Base 27-65 watt CF Fixture	15	$165.00	$11.00	4,020	268	-	-	16	Lighting
2001	HFM90+	Hardwired Merc Vap Base >90 watt CF Fixture	43	$1,376.00	$32.00	19,952	464	-	-	16	Lighting
2001	IHI101-	Interior 101-175w Incand Base HID	132	$520,692.48	$3,944.64	48,370	366	-	-	16	Lighting
2001	IHM071-	Interior 71-100w Merc Vap Base HID	48	$189,342.72	$3,944.64	15,120	315	-	-	16	Lighting
2001	LI2T5-8	Install 2ft T-8/T-5 Lamp & Elec. Ballast	2,433	$97,320.00	$40.00	225,194	93	-	-	16	Lighting
2001	LI2T5-82	Install 2nd Gen. 2ft T-8/T-5 Lamp & Elec. Ballast	2,758	$110,320.00	$40.00	245,906	89	-	-	16	Lighting
2001	LI3T5-8	Install 3ft T-8/T-5 Lamp & Elec. Ballast	305	$12,200.00	$40.00	40,728	134	-	-	16	Lighting
2001	LI4T5-8	Install 4ft T-8/T-5 Lamp & Elec. Ballast	73,967	$1,227,112.53	$16.59	3,218,697	44	-	-	16	Lighting
2001	LI4T5-82	Install 2nd Gen. 4ft T-8/T-5 Lamp & Elec. Ballast	73,735	$1,223,263.65	$16.59	3,057,431	41	-	-	16	Lighting
2001	LI4T5-8a	<100kW Install 4ft T-8/T-5 Lamp & Elec. Ballast	304	$5,043.36	$16.59	6,536	22	-	-	16	Lighting
2001	LI8T5-8	Install 8ft T-8/T-5 Lamp & Elec. Ballast	18,840	$753,600.00	$40.00	1,453,980	77	-	-	16	Lighting
2001	LI8T5-	Install 8ft HO T-8/T-5 Lamp & Elec. Bal.	48	$1,872.00	$39.00	3,840	80	-	-	16	Lighting
2001	LR2T5-8	Remove 2ft T-12 fluorescent lamp	770	$26,950.00	$35.00	107,946	140	-	-	16	Lighting
2001	LR3T5-8	Remove 3ft T-12 fluorescent lamp	395	$13,825.00	$35.00	78,047	198	-	-	16	Lighting
2001	LR4T5-8	Remove 4ft T-12 fluorescent lamp	34,706	$1,266,769.00	$36.50	5,736,788	165	-	-	16	Lighting
2001	LR8T5-8	Remove 8ft T-12 fluorescent lamp	5,865	$293,250.00	$50.00	1,826,014	311	-	-	16	Lighting
2001	LR8T5-	Remove 8ft HO T-12 fluorescent lamp	202	$10,100.00	$50.00	69,777	345	-	-	16	Lighting
2001	NCDC	Night Covers for Display Cases	228	$2,109.00	$9.25	13,452	59	-	-	5	HVAC
2001	OSP	Plug Load Occupancy Sensor	572	$11,440.00	$20.00	138,739	243	-	-	8	Lighting

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Express Efficiency-Rebates
Program Year: 2001

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
2001	OSWB	Wallbox lighting sensor	773	$50,245.00	$65.00	71,880	93	-	-	8	Lighting
2001	OSWC	Wall or Ceiling Mounted Lighting Sensor	764	$49,660.00	$65.00	71,043	93	-	-	8	Lighting
2001	RF03	Refrigerator - 2001 DOE Compliant	10	$1,500.00	$150.00	2,750	275	-	-	15	Misc
2001	RF06	New Refrigeration Display Case with Doors	216	$21,600.00	$100.00	125,496	581	-	-	16	Misc
2001	RF07	High Efficiency Multiplex Compressor System	61	$210,206.00	$3,446.00	163,358	2,678	-	-	12	Misc
2001	RF08	Floating Head Pressure Controller	41	$11,439.00	$279.00	39,524	964	-	-	14	Misc
2001	RF09	Eff. Evaporator Fan Motor (Shaded Pole to PSC)	330	$53,130.00	$161.00	55,440	168	-	-	16	Misc
2001	RF10	Special Doors with Low/No Anti-Sweat Heat	21	$1,617.00	$77.00	15,729	749	-	-	16	Misc
2001	RF12	Efficient Lighting System for Display Cases	421	$5,894.00	$14.00	37,048	88	-	-	16	Misc
2001	RWF	Reflective Window Film	12,963	$23,333.40	$1.80	185,126	14	-	-	10	HVAC
2001	RWF1	Reflective Window Film (Climate Zone 10 or 15)	1,045	$1,881.00	$1.80	14,924	14	-	-	10	HVAC
2001	SPT	Setback Programmable Thermostats	312	$63,960.00	$205.00	63,960	205	-	-	11	HVAC
2001	TCL	Lighting Time Clocks	62	$2,542.00	$41.00	29,403	474	-	-	16	Lighting
2001	VFD	Variable Freq. Drive HVAC Fans 100hp max	3	$599.19	$199.73	2,233	744	-	-	15	HVAC
2001	WTRHT	Gas Storage Water Heater	8	$10,088.00	$1,261.00	-	-	4,312	539	15	HVAC

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Small Business SPC
Program Year: 2001

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
2001	CUSTO	1 Lamp 4'T12 Fluores Convert to 1Lamp 4' T8 Fluore	1	$30.90	$30.90	515	515	-	-	16	Lighting
2001	CUSTO	100W incandes conv to 18 w circline fluores	1	$288.00	$288.00	4,800	4,800	-	-	16	Lighting
2001	CUSTO	100W incandes conv to 27W circline fluores	1	$504.00	$504.00	8,400	8,400	-	-	16	Lighting
2001	CUSTO	100W incandes fixture conv to 27 w circline fluore	1	$873.60	$873.60	14,560	14,560	-	-	16	Lighting
2001	CUSTO	1LAMP 4'FLUORES T12 CONV TO 1 LAMP 4'	1	$2.94	$2.94	49	49	-	-	16	Lighting
2001	CUSTO	1LAMP 4'FLUORES T12 CONV TO 1 LAMP 4' T8	1	$66.24	$66.24	1,104	1,104	-	-	16	Lighting
2001	CUSTO	2 LAMP 4' FLUORES T12 CONV TO 1 LAMP 4'	1	$856.80	$856.80	14,280	14,280	-	-	16	Lighting
2001	CUSTO	2 LAMP 4' FLUORES T12 CONV TO 2'LAMP 4'	1	$31.48	$31.48	525	525	-	-	16	Lighting
2001	CUSTO	2 lamp 4' T12 fluores ballast conv to 2 lamp 4' T8	1	$15.90	$15.90	265	265	-	-	16	Lighting
2001	CUSTO	2 LAMP 4'FLUORES T12 CONV TO 1 LAMP 4'	1	$943.44	$943.44	15,724	15,724	-	-	16	Lighting
2001	CUSTO	2 LAMP 4'FLUORES T12 CONV TO 1 LAMP 4'	1	$1,075.32	$1,075.32	17,922	17,922	-	-	16	Lighting
2001	CUSTO	2 LAMP 4'FLUORES T12 CONV TO 1 LAMP	1	$28.80	$28.80	480	480	-	-	16	Lighting
2001	CUSTO	2 LAMP 4'FLUORES T12 CONV TO 2 LAMP 4'	2	$150.96	$75.48	2,516	1,258	-	-	16	Lighting
2001	CUSTO	2 Lamp 4'T12 Fluores conv to 2 Lamp 4' T8 Fluores	1	$37.08	$37.08	618	618	-	-	16	Lighting
2001	CUSTO	2 lamp 8' T12 fluor ballast conv to 2 lamp 4' T8 f	1	$2,985.84	$2,985.84	49,764	49,764	-	-	16	Lighting
2001	CUSTO	2 Lamp 8' T12 Fluores	1	$339.78	$339.78	5,663	5,663	-	-	16	Lighting
2001	CUSTO	2 Lamp 8' T12 Fluores convert to 4 Lamp 4' T8 Fluo	1	$5.40	$5.40	90	90	-	-	16	Lighting
2001	CUSTO	2 lamp 8'T12 conv to 4' Lamp 4' T8 elect ballast	1	$244.80	$244.80	4,080	4,080	-	-	16	Lighting
2001	CUSTO	2 Lamp 8'T12 Fluores conv to 2 lamp 4' T8 fluores	1	$360.96	$360.96	6,016	6,016	-	-	16	Lighting
2001	CUSTO	2 Lamp T12 ballast conv to 2 lamp T8 elect	1	$16.40	$16.40	273	273	-	-	16	Lighting
2001	CUSTO	2 Lamp T12 magnetic ballast conv to 2 lamp T8 ball	2	$26.65	$13.33	444	222	-	-	16	Lighting
2001	CUSTO	2 LAMP UBEND FLUORES T12 CONV TO 2 LAMP	1	$229.86	$229.86	3,831	3,831	-	-	16	Lighting
2001	CUSTO	2 LAMP UBEND FLUORES T12 CONV TO 2 LAMP	1	$48.60	$48.60	810	810	-	-	16	Lighting
2001	CUSTO	2 LAMP UBEND FLUORES T12 CONV TO 2 LAMP	2	$174.72	$87.36	2,912	1,456	-	-	16	Lighting
2001	CUSTO	2 LAMP UBEND FLUORES T12 CONV TO 2 LAMP	1	$19.20	$19.20	320	320	-	-	16	Lighting
2001	CUSTO	2 lamp ubend T12 fluores ballast conv to 2 lamp 2'	1	$52.74	$52.74	879	879	-	-	16	Lighting
2001	CUSTO	2 Lamp ubend T12 fluores conv to 2 lamp 2' T8 fluo	1	$95.28	$95.28	1,588	1,588	-	-	16	Lighting
2001	CUSTO	2 lamp ubend T12 Fluores conv to 2 Lamp 2'T8 Fluor	2	$374.28	$187.14	6,238	3,119	-	-	16	Lighting
2001	CUSTO	2 Lamp ubend T12 Fluores convert to 2 Lamp 2' T8	1	$81.66	$81.66	1,361	1,361	-	-	16	Lighting
2001	CUSTO	2 LAMP4'FLUORES T12 CONV TO 2 LAMP 4'	1	$106.56	$106.56	1,776	1,776	-	-	16	Lighting
2001	CUSTO	250W incand heat lamp conv to 125W incandes	1	$1,008.00	$1,008.00	16,800	16,800	-	-	16	Lighting
2001	CUSTO	2LAMP 4' FLUORES T12 CONV TO 2 LAMP 4' T8	1	$212.16	$212.16	3,536	3,536	-	-	16	Lighting
2001	CUSTO	2Lamp 4' T12 Fluores convert to 2 Lamp 4" T8 Fluor	1	$241.86	$241.86	4,031	4,031	-	-	16	Lighting
2001	CUSTO	2lamp 4'T12 fluores conv to 2 lamp 4' T8 fluores	1	$179.34	$179.34	2,989	2,989	-	-	16	Lighting
2001	CUSTO	3 LAMP 4' FLUORES T12 CONV TO 2 LAMP 4'	1	$1,399.20	$1,399.20	23,320	23,320	-	-	16	Lighting
2001	CUSTO	3 LAMP 4' FLUROSENT T12 CONV TO 2 LAMP 4'	1	$213.60	$213.60	3,560	3,560	-	-	16	Lighting
2001	CUSTO	3 LAMP 4'FLUORES T12 CONV TO 2 LAMP 4'	3	$2,934.08	$978.03	48,901	16,300	-	-	16	Lighting
2001	CUSTO	3 LAMP 4'FLUORES T12 CONV TO 2 LAMP 4' T8	1	$132.48	$132.48	2,208	2,208	-	-	16	Lighting

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Small Business SPC
Program Year: 2001

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
2001	CUSTO	3 LAMP 4'FLUORES T8 CONV TO 2 LAMP 4'	1	$148.15	$148.15	2,469	2,469	-	-	16	Lighting
2001	CUSTO	3 Lamp 4'T12 Fluores conv to 2 lamp 4' Lamp T8 Flu	1	$3,894.90	$3,894.90	64,915	64,915	-	-	16	Lighting
2001	CUSTO	3 Lamp 4'T12 Fluores conv to 2 Lamp 4' T8 Fluores	1	$463.68	$463.68	7,728	7,728	-	-	16	Lighting
2001	CUSTO	3 lamp 4'T12 fluores conv to 2 lamp 4'T8 fluores	1	$314.64	$314.64	5,244	5,244	-	-	16	Lighting
2001	CUSTO	3 Lamp 4'T12 Fluores convert to 2 lamp 4' T8 Fluor	1	$1,316.82	$1,316.82	21,947	21,947	-	-	16	Lighting
2001	CUSTO	3 Lamp 4'T8 F	1	$7,921.56	$7,921.56	132,026	132,026	-	-	16	Lighting
2001	CUSTO	3 Lamp 4'T8 Fluores convet to 2 Lamp 4'T8 Fluor	1	$1,125.42	$1,125.42	18,757	18,757	-	-	16	Lighting
2001	CUSTO	3 lamp T12 ballast conv to 2 lamp T8 ballast	1	$166.93	$166.93	2,782	2,782	-	-	16	Lighting
2001	CUSTO	3 lamp T12 magnetic ballast conv to 2 lamp T8	1	$37.09	$37.09	618	618	-	-	16	Lighting
2001	CUSTO	3LAMP 4' FLUORES T12 CONV TO 2 4' FLUORES	1	$5,625.42	$5,625.42	93,757	93,757	-	-	16	Lighting
2001	CUSTO	4 LAMP 4' FLUORES T12 CONV 2 LAMP 4'	1	$195.54	$195.54	3,259	3,259	-	-	16	Lighting
2001	CUSTO	4 LAMP 4' FLUORES T12 CONV TO 2 LAMP 4'	3	$6,787.18	$2,262.39	113,120	37,707	-	-	16	Lighting
2001	CUSTO	4 LAMP 4' FLUORES T12 CONV TO 2 LAMP 4' T8	1	$1,333.74	$1,333.74	22,229	22,229	-	-	16	Lighting
2001	CUSTO	4 LAMP 4'FLUORES T12 CONV TO 2 LAMP 4'	1	$3,475.78	$3,475.78	57,930	57,930	-	-	16	Lighting
2001	CUSTO	4 LAMP 4'FLUORES T12 CONV TO 4 LAMP	1	$14.94	$14.94	249	249	-	-	16	Lighting
2001	CUSTO	4 Lamp 4'T12 Fluores conv to 2 Lamp 4'T8 fluores	1	$5,355.12	$5,355.12	89,252	89,252	-	-	16	Lighting
2001	CUSTO	4 lamp T12 ballast conv to 2 Lamp ballast	1	$5,535.72	$5,535.72	92,262	92,262	-	-	16	Lighting
2001	CUSTO	4 Lamp T12 conv 3 lamp T8 elect ballast	1	$800.19	$800.19	13,337	13,337	-	-	16	Lighting
2001	CUSTO	4 Lamp T12 conv 4 lamp T8 elect ballast	1	$295.80	$295.80	4,930	4,930	-	-	16	Lighting
2001	CUSTO	4 Lamp T12 conv to 3 Lamp T8 electronic ballast	1	$57.74	$57.74	962	962	-	-	16	Lighting
2001	CUSTO	4 LAP 4'FLUORES T12 CONV TO 2 LAMP 4'	1	$3,337.26	$3,337.26	55,621	55,621	-	-	16	Lighting
2001	CUSTO	40 W incandes exit sign conv to 2W LED exit sign	1	$21.60	$21.60	360	360	-	-	16	Lighting
2001	CUSTO	40W incandes exit sign conv to 2W LED exit	1	$516.78	$516.78	8,613	8,613	-	-	16	Lighting
2001	CUSTO	4LAMP 4' FLUORES T12 CONV TO 2 LAMP 4'	1	$1,864.08	$1,864.08	31,068	31,068	-	-	16	Lighting
2001	CUSTO	4lamp 4' T12 fluores ballast conv to 2 lamp 4' T8	1	$1,581.72	$1,581.72	26,362	26,362	-	-	16	Lighting
2001	CUSTO	4lamp T12 ballast conv to 3 lamp T8 elect ballast	1	$263.59	$263.59	4,393	4,393	-	-	16	Lighting
2001	CUSTO	500W incandes pool conv to 29W compact fluores	1	$987.00	$987.00	16,450	16,450	-	-	16	Lighting
2001	CUSTO	50-100 150W 3 Way incand conv to 20-30 50W	1	$108.00	$108.00	1,800	1,800	-	-	16	Lighting
2001	CUSTO	50-100-150W 3way incandes lamp conv to 20-30-	1	$2,160.00	$2,160.00	36,000	36,000	-	-	16	Lighting
2001	CUSTO	60W incandes conv to 13W compact fluores	1	$172.80	$172.80	2,880	2,880	-	-	16	Lighting
2001	CUSTO	60W INCANDES CONV TO 18W COMPAC	1	$283.80	$283.80	4,730	4,730	-	-	16	Lighting
2001	CUSTO	60W INCANDES CONV TO 18W COMPACT	1	$180.60	$180.60	3,010	3,010	-	-	16	Lighting
2001	CUSTO	60W incandes fixture convert to 18W circline fluo	1	$492.00	$492.00	8,200	8,200	-	-	16	Lighting
2001	CUSTO	65W INCANDES CONV TO 13W COMPAC	1	$554.70	$554.70	9,245	9,245	-	-	16	Lighting
2001	CUSTO	65W incandes conv to 13W compact fluores	1	$1,440.00	$1,440.00	24,000	24,000	-	-	16	Lighting
2001	CUSTO	65W incandes conv to 23w compact fluores	1	$508.80	$508.80	8,480	8,480	-	-	16	Lighting
2001	CUSTO	65w incandescent conv to 32W compact Fluores	1	$88.32	$88.32	1,472	1,472	-	-	16	Lighting
2001	CUSTO	75W incandes conv to 13W compact Fluores	1	$212.52	$212.52	3,542	3,542	-	-	16	Lighting
2001	CUSTO	75W INCANDES CONV TO 18W COMPAC	1	$722.40	$722.40	12,040	12,040	-	-	16	Lighting
2001	CUSTO	75W INCANDES CONV TO 18W COMPACT	1	$50.40	$50.40	840	840	-	-	16	Lighting
2001	CUSTO	75W incandes conv to 27w circline fluores	1	$54.00	$54.00	900	900	-	-	16	Lighting
2001	CUSTO	Boiler Controls	1	$45,886.59	$45,886.59	-	-	11,857	11,857	15	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Small Business SPC
Program Year: 2001

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
2001	CUSTO	Calc: Lighting retrofit	2	$10,608.06	$5,304.03	176,801	88,401	-	-	16	Lighting
2001	CUSTO	Calculated - Lighting retrofit	1	$7,526.28	$7,526.28	125,438	125,438	-	-	16	Lighting
2001	CUSTO	Calculated lighting retrofit	2	$11,755.86	$5,877.93	195,931	97,966	-	-	16	Lighting
2001	CUSTO	Canopy and pump lighting	1	$3,535.02	$3,535.02	58,917	58,917	-	-	16	Lighting
2001	CUSTO	Canopy and Pump Lighting	1	$352.20	$352.20	5,870	5,870	-	-	16	Lighting
2001	CUSTO	Change Lighting	3	$834.90	$278.30	13,915	4,638	-	-	16	Lighting
2001	CUSTO	Changed Lighting	12	$3,759.68	$313.31	62,661	5,222	-	-	16	Lighting
2001	CUSTO	Chiller Replacement	1	$7,391.85	$7,391.85	49,279	49,279	-	-	20	HVAC
2001	CUSTO	Dishwasher Syst. Contrls	1	$80,511.48	$80,511.48	-	-	20,804	20,804	15	Misc
2001	CUSTO	Economizer	1	$44,940.72	$44,940.72	204,276	204,276	-	-	10	Misc
2001	CUSTO	Efficiency Upgrade	1	$21.00	$21.00	350	350	-	-	16	Lighting
2001	CUSTO	Efficiency Upgrade	22	$30,182.76	$1,371.94	503,046	22,866	-	-	16	Lighting
2001	CUSTO	Effieiency Upgrade	1	$24.48	$24.48	408	408	-	-	16	Lighting
2001	CUSTO	Energy Efficient Lighting	1	$2,909.40	$2,909.40	48,490	48,490	-	-	16	Lighting
2001	CUSTO	Heat pumps	1	$2,496.00	$2,496.00	16,640	16,640	-	-	20	HVAC
2001	CUSTO	Heater	1	$12,318.21	$12,318.21	-	-	3,183	3,183	15	Misc
2001	CUSTO	High Efficiency HVAC	1	$2,400.90	$2,400.90	16,006	16,006	-	-	20	HVAC
2001	CUSTO	HVAC EMS	2	$548.55	$274.28	3,657	1,829	-	-	20	HVAC
2001	CUSTO	HVAC Occupancy Therm. Sensors	1	$22,063.21	$22,063.21	100,287	100,287	-	-	10	Misc
2001	CUSTO	Injection Molding Machine	2	$14,846.26	$7,423.13	67,483	33,742	-	-	10	Misc
2001	CUSTO	IR Plastic	1	$100,747.71	$100,747.71	-	-	26,033	26,033	15	Misc
2001	CUSTO	Lighting conversion for retrofit	38	$55,485.14	$1,460.14	924,752	24,336	-	-	16	Lighting
2001	CUSTO	Lighting Efficiency	32	$95,123.95	$2,972.62	1,585,399	49,544	-	-	16	Lighting
2001	CUSTO	Lighting Efficiency(Revised)	1	$18,992.40	$18,992.40	316,540	316,540	-	-	16	Lighting
2001	CUSTO	Lighting Retrofit	1	$312.43	$312.43	5,207	5,207	-	-	16	Lighting
2001	CUSTO	Lighting retrofit for pool and spa	5	$3,897.24	$779.45	64,954	12,991	-	-	16	Lighting
2001	CUSTO	Measured Lighting Retrofit	1	$4,407.18	$4,407.18	73,453	73,453	-	-	16	Lighting
2001	CUSTO	Measured: Energy Curtin in Greenhouse	1	$100,732.23	$100,732.23	-	-	26,029	26,029	15	Misc
2001	CUSTO	Motor, 30 hp	1	$359.04	$359.04	1,632	1,632	-	-	10	Misc
2001	CUSTO	Motor, 5 hp	1	$90.64	$90.64	412	412	-	-	10	Misc
2001	CUSTO	Motor, 75 hp	1	$349.36	$349.36	1,588	1,588	-	-	10	Misc
2001	CUSTO	New York Chiller	1	$50,230.62	$50,230.62	228,321	228,321	-	-	10	Misc
2001	CUSTO	Pumps, 10HP, 3pH	1	$6,565.90	$6,565.90	29,845	29,845	-	-	10	Misc
2001	CUSTO	Refrigeration Controls	1	$13,090.00	$13,090.00	59,500	59,500	-	-	10	Misc
2001	CUSTO	Repl. 16 Incandscent lmps w/ Fluorescents	1	$818.36	$818.36	13,639	13,639	-	-	16	Lighting
2001	CUSTO	Repl. 2ea. 5HP Pumps w/1ea. 10HP + VFD	1	$5,239.74	$5,239.74	23,817	23,817	-	-	10	Misc
2001	CUSTO	Replace 1X 3HP Pump	1	$1,425.82	$1,425.82	6,481	6,481	-	-	10	Misc
2001	CUSTO	Replace 2 15t AC units w/VFD fan drive AC units	1	$13,130.48	$13,130.48	59,684	59,684	-	-	10	Misc
2001	CUSTO	Replace 2x 80% efficient heaters	1	$11,834.46	$11,834.46	-	-	3,058	3,058	15	Misc
2001	CUSTO	Replace absorber w/natural gas engine	1	$224,939.88	$224,939.88	-	-	58,124	58,124	15	Misc
2001	CUSTO	Replace pool ligjhts	1	$270.72	$270.72	4,512	4,512	-	-	16	Lighting

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Small Business SPC
Program Year: 2001

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
2001	CUSTO	Replace Refrigeration	1	$17,405.40	$17,405.40	116,036	116,036	-	-	20	HVAC
2001	CUSTO	Replace spa light	2	$56.16	$28.08	936	468	-	-	16	Lighting
2001	CUSTO	Rooftop Packaged heat pumps	1	$2,745.30	$2,745.30	18,302	18,302	-	-	20	HVAC
2001	CUSTO	Run Hour meter	2	$39,647.74	$19,823.87	180,217	90,109	-	-	10	Misc
2001	CUSTO	Spa lights	5	$219.36	$43.87	3,656	731	-	-	16	Lighting
2001	CUSTO	upgrade HVAC	2	$1,709.10	$854.55	11,394	5,697	-	-	20	HVAC
2001	CUSTO	Various Lighting	6	$32,039.56	$5,339.93	533,993	88,999	-	-	16	Lighting
2001	CUSTO	VDF's	1	$20,157.94	$20,157.94	91,627	91,627	-	-	10	Misc
2001	CUSTO	VFD on Cooling Towr Fan	1	$5,267.70	$5,267.70	35,118	35,118	-	-	20	HVAC
2001	CUSTO	VFD'S	1	$7,055.70	$7,055.70	117,595	117,595	-	-	16	Lighting
2001	CUSTO	VFD's	3	$85,866.66	$28,622.22	390,303	130,101	-	-	10	Misc
2001	CUSTO	VFDs at Cooling Tower	1	$12,891.12	$12,891.12	58,596	58,596	-	-	10	Misc
2001	CUSTO	VFD's for 3 air handlers	1	$24,847.46	$24,847.46	112,943	112,943	-	-	10	Misc
2001	CUSTO	VSD HVAC Supply Fan	1	$14,395.95	$14,395.95	95,973	95,973	-	-	20	HVAC
2001	CUSTO	VSD RA Fan	1	$8,847.52	$8,847.52	40,216	40,216	-	-	10	Misc
2001	CUSTO	VSD SA Fan	1	$24,860.88	$24,860.88	113,004	113,004	-	-	10	Misc

Table TA 3.5
Measure Detail: Nonresidential Program Area
Small Nonres Comprehensive Program: Small Commercial Turnkey
Program Year: 2001

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
2001	CS05-	Two or more Screw-in 5-13 watt CF Lamps	147	$867.30	$5.90	27,270	186	-	-	9	Lighting
2001	CS14-26	Screw-in 14-26 watt CF Lamp	88	$1,144.00	$13.00	22,618	257	-	-	7	Lighting
2001	CS14-	Two or more Screw-in 14-26 watt CF Lamp	2,907	$37,791.00	$13.00	743,303	256	-	-	7	Lighting
2001	CS27+a	Two or more Screw-in >= 27 watt CF Lamps	470	$8,930.00	$19.00	169,395	360	-	-	9	Lighting
2001	EXITLE	Two or more LED Exit Signs	150	($3,562.50)	($23.75)	53,084	354	-	-	16	Lighting
2001	HF05-	Two or more Hardwired 5-13 watt CF Fixtures	4	$48.00	$12.00	743	186	-	-	16	Lighting
2001	HF14-	Two or more Hardwired 14-26 watt CF Fixtures	7	$217.00	$31.00	2,405	344	-	-	16	Lighting
2001	LI2T8a	Two or more 2ft T-8 Lamps & Elec. Ballasts	1	$40.00	$40.00	93	93	-	-	16	Lighting
2001	LI3T8a	Two or more 3ft T-8 Lamps & Elec. Ballasts	3	$120.00	$40.00	347	116	-	-	16	Lighting
2001	LI4T8	Install 4ft T-8 Lamp & Elec. Ballast	24	$400.32	$16.68	1,068	45	-	-	16	Lighting
2001	LI4T8a	Two or more 4ft T-8 Lamps & Elec. Ballasts	1,796	$29,957.28	$16.68	112,896	63	-	-	16	Lighting
2001	LI8T8a	Two or more 8ft T-8 Lamps & Elec. Ballasts	108	$4,212.00	$39.00	9,386	87	-	-	16	Lighting
2001	OSPa	Two or more Plug load occupancy sensors	39	$780.00	$20.00	9,459	243	-	-	8	Lighting
2001	OSWB	Wallbox lighting sensor	215	$13,975.00	$65.00	19,992	93	-	-	8	Lighting
2001	OSWBa	Two or more wallbox lighting sensors	5,033	$327,145.00	$65.00	468,009	93	-	-	8	Lighting
2001	OSWCa	Two or more Wall or ceiling mounted light sensors	6	$390.00	$65.00	558	93	-	-	8	Lighting
2001	RWF	Reflective Window Film	103	$185.40	$1.80	1,471	14	-	-	10	HVAC
2001	RWFa	Two or more Reflective Window Film	115	$207.00	$1.80	1,642	14	-	-	10	HVAC
2001	SPTa	Two or more Setback Programmable Thermostats	3	$615.00	$205.00	615	205	-	-	11	HVAC

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							
Home Energy Partnership - Appliances	$21,482	$228,788	$229,207	$11,439	-	$0	$490,916
Home Energy Partnership - Multi-Family	$1,600	$546,600	$435,096	$27,330	-	$0	$1,010,626
Home Energy Partnership - Single-Family	$102,200	$403,600	$358,609	$20,180	-	$0	$884,589
Information and Promotion	$0	$0	$184,452	$0	-	$0	$184,452
CHEERS	$0	$0	$31,141	$0	-	$0	$31,141
Public Interest Energy Research (PIER)	$0	$0	$0	$0	-	$0	$0
Consumer Info and Training	$0	$0	$140,070	$0	-	$0	$140,070
Total Residential	$125,282	$1,178,988	$1,378,575	$58,949	-	$0	$2,741,794
Nonresidential							
Savings by Design	$335,162	$2,110,192	$746,819	$105,510	-	$0	$3,297,682
Energy Design Resources	$0	$0	$344,326	$0	-	$0	$344,326
Industrial and Agricultural Process	$380,176	$191,702	$171,258	$9,585	-	$0	$752,721
Total Nonresidential	$715,338	$2,301,894	$1,262,402	$115,095	-	$0	$4,394,729
Other							
New Construction Codes and Standards Support	$0	$0	$250,973	$0	-	$0	$250,973
Local Government Initiatives	$0	$0	$257,087	$0	-	$0	$257,087
Total Other	$0	$0	$508,060	$0	-		$508,060
Total New Construction	$840,620	$3,480,882	$3,149,037	$174,044	$619,345	$0	$8,263,928

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							
Home Energy Partnership - Appliances	$18,259	$194,470	$194,826	$9,723	-	$0	$417,278
Home Energy Partnership - Multi-Family	$1,360	$464,610	$369,832	$23,231	-	$0	$859,032
Home Energy Partnership - Single-Family	$86,870	$343,060	$304,818	$17,153	-	$0	$751,901
Information and Promotion	$0	$0	$156,784	$0	-	$0	$156,784
CHEERS	$0	$0	$26,470	$0	-	$0	$26,470
Public Interest Energy Research (PIER)	$0	$0	$0	$0	-	$0	$0
Consumer Info and Training	$0	$0	$119,060	$0	-	$0	$119,060
Total Residential	$106,489	$1,002,140	$1,171,789	$50,107	-	$0	$2,330,525
							$0
Nonresidential							$0
Savings by Design	$268,130	$1,688,154	$597,455	$84,408	-	$0	$2,638,146
Energy Design Resources	$0	$0	$292,677	$0	-	$0	$292,677
Industrial and Agricultural Process	$288,934	$145,694	$130,156	$7,285	-	$0	$572,068
Total Nonresidential	$557,063	$1,833,847	$1,020,288	$91,692	-	$0	$3,502,891
							$0
Other							$0
New Construction Codes and Standards Support	$0	$0	$213,327	$0	-	$0	$213,327
Local Government Initiatives	$0	$0	$218,524	$0	-	$0	$218,524
Total Other	$0	$0	$431,851	$0	-	$0	$431,851
							$0
Total New Construction	$663,553	$2,835,987	$2,623,928	$141,799	$488,911	$0	$6,754,178

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							
Home Energy Partnership - Appliances	$3,222	$34,318	$34,381	$1,716	-	$0	$73,637
Home Energy Partnership - Multi-Family	$240	$81,990	$65,264	$4,100	-	$0	$151,594
Home Energy Partnership - Single-Family	$15,330	$60,540	$53,791	$3,027	-	$0	$132,688
Information and Promotion	$0	$0	$27,668	$0	-	$0	$27,668
CHEERS	$0	$0	$4,671	$0	-	$0	$4,671
Public Interest Energy Research (PIER)	$0	$0	$0	$0	-	$0	$0
Consumer Info and Training	$0	$0	$21,011	$0	-	$0	$21,011
Total Residential	$18,792	$176,848	$206,786	$8,842	-	$0	$411,269
Nonresidential							
Savings by Design	$67,032	$422,038	$149,364	$21,102	-	$0	$659,536
Energy Design Resources	$0	$0	$51,649	$0	-	$0	$51,649
Industrial and Agricultural Process	$91,242	$46,008	$41,102	$2,300	-	$0	$180,653
Total Nonresidential	$158,275	$468,047	$242,114	$23,402	-	$0	$891,838
Other							
New Construction Codes and Standards Support	$0	$0	$37,646	$0	-	$0	$37,646
Local Government Initiatives	$0	$0	$38,563	$0	-	$0	$38,563
Total Other	$0	$0	$76,209	$0	-	$0	$76,209
Total New Construction	$177,067	$644,895	$525,110	$32,245	$130,434	$0	$1,509,751

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					
Home Energy Partnership - Appliances	$44,031	$151,939	$0	$33,236	$229,207
Home Energy Partnership - Multi-Family	$57,989	$308,947	$0	$68,160	$435,096
Home Energy Partnership - Single-Family	$69,346	$229,344	$0	$59,919	$358,609
Information and Promotion	$28,577	$143,089	$0	$12,786	$184,452
CHEERS	$2,813	$26,169	$0	$2,159	$31,141
Public Interest Energy Research (PIER)	$0	$0	$0	$0	$0
Consumer Info and Training	$68,302	$62,059	$0	$9,709	$140,070
Total Residential	$271,059	$921,547	$0	$185,970	$1,378,575
Nonresidential					
Savings by Design	$333,292	$192,251	$0	$221,276	$746,819
Energy Design Resources	$97,258	$223,200	$0	$23,868	$344,326
Industrial and Agricultural Process	$111,539	$8,206	$0	$51,513	$171,258
Total Nonresidential	$542,089	$423,657	$0	$296,656	$1,262,402
Other					
New Construction Codes and Standards Support	$29,430	$204,146	$0	$17,397	$250,973
Local Government Initiatives	$48,950	$190,316	$0	$17,821	$257,087
Total Other	$78,380	$394,462	$0	$35,218	$508,060
Total New Construction	$891,527	$1,739,667	$0	$517,844	$3,149,037

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					
Home Energy Partnership - Appliances	$37,426	$129,148	$0	$28,251	$194,826
Home Energy Partnership - Multi-Family	$49,291	$262,605	$0	$57,936	$369,832
Home Energy Partnership - Single-Family	$58,944	$194,942	$0	$50,931	$304,818
Information and Promotion	$24,290	$121,626	$0	$10,868	$156,784
CHEERS	$2,391	$22,243	$0	$1,835	$26,470
Public Interest Energy Research (PIER)	$0	$0	$0	$0	$0
Consumer Info and Training	$58,057	$52,750	$0	$8,253	$119,060
Total Residential	$230,400	$783,315	$0	$158,074	$1,171,789
Nonresidential					
Savings by Design	$266,634	$153,801	$0	$177,020	$597,455
Energy Design Resources	$82,669	$189,720	$0	$20,288	$292,677
Industrial and Agricultural Process	$84,770	$6,237	$0	$39,150	$130,156
Total Nonresidential	$434,072	$349,758	$0	$236,458	$1,020,288
Other					
New Construction Codes and Standards Support	$25,015	$173,524	$0	$14,787	$213,327
Local Government Initiatives	$41,607	$161,769	$0	$15,148	$218,524
Total Other	$66,623	$335,293	$0	$29,935	$431,851
Total New Construction	$731,095	$1,468,365	$0	$424,467	$2,623,928

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					
Home Energy Partnership - Appliances	$6,605	$22,791	$0	$4,985	$34,381
Home Energy Partnership - Multi-Family	$8,698	$46,342	$0	$10,224	$65,264
Home Energy Partnership - Single-Family	$10,402	$34,402	$0	$8,988	$53,791
Information and Promotion	$4,287	$21,463	$0	$1,918	$27,668
CHEERS	$422	$3,925	$0	$324	$4,671
Public Interest Energy Research (PIER)	$0	$0	$0	$0	$0
Consumer Info and Training	$10,245	$9,309	$0	$1,456	$21,011
Total Residential	$40,659	$138,232	$0	$27,895	$206,786
Nonresidential					
Savings by Design	$66,658	$38,450	$0	$44,255	$149,364
Energy Design Resources	$14,589	$33,480	$0	$3,580	$51,649
Industrial and Agricultural Process	$26,769	$1,969	$0	$12,363	$41,102
Total Nonresidential	$108,016	$73,900	$0	$60,198	$242,114
Other					
New Construction Codes and Standards Support	$4,414	$30,622	$0	$2,610	$37,646
Local Government Initiatives	$7,342	$28,547	$0	$2,673	$38,563
Total Other	$11,757	$59,169	$0	$5,283	$76,209
Total New Construction	$160,432	$271,301	$0	$93,377	$525,110

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Residential New Construction -- Home Energy Partnership- Appliance
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001							59	614,250	17,088
2002							59	614,250	17,088
2003							59	614,250	17,088
2004							59	614,250	17,088
2005							59	614,250	17,088
2006							59	614,250	17,088
2007							59	614,250	17,088
2008							59	614,250	17,088
2009							59	614,250	17,088
2010							59	614,250	17,088
2011							59	614,250	17,088
2012							59	614,250	17,088
2013							59	614,250	17,088
2014							33	347,802	17,088
2015							32	279,450	0
2016									
2017									
2018									
2019									
2020									
SUM (Lifecycle)							59	8,612,502	239,232

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Residential New Construction -- Home Energy Partnership- Single Family
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001							708	1,724,616	113,926
2002							708	1,724,616	113,926
2003							708	1,724,616	113,926
2004							708	1,724,616	113,926
2005							708	1,724,616	113,926
2006							708	1,724,616	113,926
2007							708	1,724,616	113,926
2008							708	1,724,616	113,926
2009							708	1,724,616	113,926
2010							708	1,724,616	113,926
2011							708	1,724,616	113,926
2012							708	1,724,616	113,926
2013							708	1,724,616	113,926
2014							708	1,724,616	113,926
2015							708	1,724,616	113,926
2016							708	1,724,616	113,926
2017							708	1,724,616	113,926
2018							708	1,724,616	113,926
2019							708	1,724,616	113,926
2020							708	1,724,616	113,926
SUM (Lifecycle)							708	34,492,320	2,278,520

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Residential New Construction -- Home Energy Partnership- Multi-Family
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001							1,134	2,839,854	188,121
2002							1,134	2,839,854	188,121
2003							1,134	2,839,854	188,121
2004							1,134	2,839,854	188,121
2005							1,134	2,839,854	188,121
2006							1,134	2,839,854	188,121
2007							1,134	2,839,854	188,121
2008							1,134	2,839,854	188,121
2009							1,134	2,839,854	188,121
2010							1,134	2,839,854	188,121
2011							1,134	2,839,854	188,121
2012							1,134	2,839,854	188,121
2013							1,134	2,839,854	188,121
2014							1,134	2,839,854	188,121
2015							1,134	2,839,854	188,121
2016							1,134	2,839,854	188,121
2017							1,134	2,839,854	188,121
2018							1,134	2,839,854	188,121
2019							1,134	2,839,854	188,121
2020							1,134	2,839,854	188,121
SUM (Lifecycle)							1,134	56,797,080	3,762,420

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Nonresidential New Construction -- Commercial Savings By Design
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2002	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2003	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2004	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2005	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2006	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2007	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2008	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2009	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2010	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2011	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2012	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2013	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2014	772	5,609,693	-574	334	1,028,666	-328	6,012	27,334,077	270,852
2015	772	5,609,693	-574	334	1,028,666	-328	5,736	25,373,957	270,852
2016				334	1,028,666	-328	5,736	25,373,957	270,852
2017									
2018									
2019									
2020									
SUM (Lifecycle)	772	84,145,395	-8,610	334	16,458,661	-5,248	6,012	433,424,985	4,333,632

Table TA 4.3
Market Effects: New Construction Projected Annual Program Energy Reductions
Nonresidential New Construction -- Industrial/Agricultural Savings By Design
Program Year: 2001

Average Load Impacts Per Unit (Gross)

	HVAC			Lighting			Misc		
Year	kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2001	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2002	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2003	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2004	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2005	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2006	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2007	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2008	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2009	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2010	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2011	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2012	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2013	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2014	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2015	68	120,910	0	43	163,840	0	715	5,794,212	334,821
2016				43	163,840	0	715	5,794,212	334,821
2017									
2018									
2019									
2020									
SUM (Lifecycle)	68	1,813,650	0	43	2,621,440	0	715	92,707,392	5,357,136

Table TA 4.4
Measure Detail: New Construction Program Area
Residential New Construction -- Home Energy Partnership- Appliance
Program Year: 2001

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
2001	CW02	Clothes Washer - Energy Star Qualified	712	$249,200.00	$350.00	68,352	96	17,088	24	14	Misc
2001	DW01	Dishwasher - Energy Star Qualified	1,464	$58,560.00	$40.00	266,448	182	-	-	13	Misc
2001	RF02	Refrigerator - Energy Star Qualified	1,242	$186,150.00	$149.88	279,450	225	-	-	15	Misc

Table TA 4.4
Measure Detail: New Construction Program Area
Residential New Construction -- Home Energy Partnership- Single Family
Program Year: 2001

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
2001	HOME1	New Single-Family home with 86+ CHEERS rating	1,237	$1,477,300.00	$1,194.26	1,652,632	1,336	111,330	90	20	Misc
2001	HOME2	New Single-Family home with 88+ CHEERS rating	22	$41,580.00	$1,890.00	71,984	3,272	2,596	118	20	Misc

Table TA 4.4
Measure Detail: New Construction Program Area
Residential New Construction -- Home Energy Partnership- Multi-Family
Program Year: 2001

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
2001	HOME3	New Multi-Family unit ($200)	2,249	$619,440.00	$275.43	2,478,398	1,102	164,177	73	20	Misc
2001	HOME4	New Multi-Family unit ($300)	328	$68,880.00	$210.00	361,456	1,102	23,944	73	20	Misc

Table TA 4.4
Measure Detail: New Construction Program Area
Nonresidential New Construction -- Commercial Savings By Design
Program Year: 2001

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
2001	NC001	Other Systems	81	$3,562,039.58	$43,975.80	16,191,089	199,890	174,144	2,150	16	Misc
2001	NC002	Whole Building - Overall Building Performance	232	$2,627,008.44	$11,323.31	9,182,868	39,581	96,603	416	16	Misc
2001	NC010	Air-Cooled Package Air-Conditioner (greater than or equal to 65,000 BTUH)	85	$27,453.60	$322.98	137,268	1,615	-	-	15	HVAC
2001	NC011	Air-Cooled Package Heat Pump (greater than or equal to 65,000 BTUH)	10	$4,609.20	$460.92	23,046	2,305	-	-	15	HVAC
2001	NC012	Air-Cooled Package and Split System Air-Conditioners (less than 65,000	99	$13,757.20	$138.96	68,786	695	-	-	15	HVAC
2001	NC013	Air-Cooled Package and Split System Heat Pumps (less than 65,000 BTUH)	16	$1,930.40	$120.65	9,652	603	-	-	15	HVAC
2001	NC018	High Efficiency Lighting	47	$145,523.72	$3,096.25	909,523	19,352	(36)	(1)	16	Lighting
2001	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	6	$7,404.00	$1,234.00	37,020	6,170	-	-	15	HVAC
2001	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	7	$2,670.60	$381.51	13,353	1,908	-	-	15	HVAC
2001	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	6	$10,472.40	$1,745.40	52,362	8,727	-	-	15	HVAC
2001	NC027	Low Solar Heat Gain Coefficient Glass, Orientation: W	7	$11,586.00	$1,655.14	57,930	8,276	-	-	15	HVAC
2001	NC028	Premium Efficiency Motors for HVAC	11	$941.40	$85.58	4,707	428	-	-	15	HVAC
2001	NC029	Refrigerated Display Case Efficient Fan Motors, Air Base	5	$171,059.75	$34,211.95	684,239	136,848	-	-	14	Misc
2001	NC030	Refrigerated Display Case Efficient Fan Motors, Evaporative Base	2	$81,326.32	$40,663.16	325,305	162,653	-	-	14	Misc
2001	NC033	Refrigeration with floating head pressure and efficient condenser, Air Base	5	$206,744.67	$41,348.93	826,979	165,396	-	-	14	Misc
2001	NC040	Refrigeration Equipment, Hot Gas Defrost, Evaporative Base	2	$30,899.12	$15,449.56	123,597	61,798	-	-	14	Misc
2001	NC047	Variable Frequency Drive for Chilled Water Pump Motors	18	$234,547.00	$13,030.39	1,172,735	65,152	-	-	15	HVAC
2001	NC048	Variable Frequency Drive for Cooling Tower Fan Motors	12	$4,050.40	$337.53	20,252	1,688	-	-	15	HVAC
2001	NC049	Variable Frequency Drive for HVAC Fan Motors	107	$504,957.00	$4,719.22	2,524,785	23,596	-	-	15	HVAC
2001	NC051	Variable Frequency Drive on Air Handler, Advanced HVAC Energy	2	$53,719.80	$26,859.90	268,599	134,300	-	-	15	HVAC
2001	NC052	Water Cooled Chillers	8	$188,428.80	$23,553.60	942,144	117,768	-	-	15	HVAC
2001	NC053	Water Source Package Heat Pump	35	$3,467.80	$99.08	17,339	495	-	-	15	HVAC
2001	NC054	HVAC Air Cooled Package A/C	10	$10,695.40	$1,069.54	53,477	5,348	(38)	(4)	15	HVAC
2001	NC058	Glass - Low Solar Heat Gain Coefficient by Orientation	3	$10,753.20	$3,584.40	53,766	17,922	(209)	(70)	15	HVAC
2001	NC059	Lighting - High Efficiency	12	$19,062.88	$1,588.57	119,143	9,929	(292)	(24)	16	Lighting
2001	NC060	HVAC Motors - Premium Efficiency	2	$2,313.60	$1,156.80	11,568	5,784	(59)	(30)	15	HVAC
2001	NC061	HVAC Variable Frequency Drives	2	$25,494.80	$12,747.40	127,474	63,737	(1,007)	(504)	15	HVAC
2001	NC063	HVAC - Air-Cooled Package HP	5	$2,671.00	$534.20	13,355	2,671	-	-	15	HVAC
2001	NC066	HVAC - Room and Package Terminal Heat Pumps	1	$15.00	$15.00	75	75	-	-	15	HVAC
2001	NC068	HVAC - Large Boilers (>= 300,000 Btu/hr)	1	$2,859.93	$2,859.93	-	-	739	739	15	HVAC
2001	NC073	Water Heating - Gas, Medium Storage (75,000 to 155,000 BTUH)	1	$406.35	$406.35	-	-	105	105	16	Misc

Table TA 4.4
Measure Detail: New Construction Program Area
Nonresidential New Construction -- Industrial/Agricultural Savings By Design
Program Year: 2001

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
2001	NC001	Other Systems	3	$170,325.76	$56,775.25	774,208	258,069	-	-	16	Misc
2001	NC002	Whole Building - Overall Building Performance	17	$1,405,601.12	$82,682.42	5,020,004	295,294	334,821	19,695	16	Misc
2001	NC010	Air-Cooled Package Air-Conditioner (greater than or equal to 65,000 BTUH)	19	$7,745.40	$407.65	38,727	2,038	-	-	15	HVAC
2001	NC011	Air-Cooled Package Heat Pump (greater than or equal to 65,000 BTUH)	2	$444.40	$222.20	2,222	1,111	-	-	15	HVAC
2001	NC012	Air-Cooled Package and Split System Air-Conditioners (less than 65,000	20	$5,106.00	$255.30	25,530	1,277	-	-	15	HVAC
2001	NC013	Air-Cooled Package and Split System Heat Pumps (less than 65,000 BTUH)	1	$228.40	$228.40	1,142	1,142	-	-	15	HVAC
2001	NC018	High Efficiency Lighting	3	$26,214.40	$8,738.13	163,840	54,613	-	-	16	Lighting
2001	NC024	Low Solar Heat Gain Coefficient Glass, Orientation: E	2	$335.60	$167.80	1,678	839	-	-	15	HVAC
2001	NC025	Low Solar Heat Gain Coefficient Glass, Orientation: N	2	$489.60	$244.80	2,448	1,224	-	-	15	HVAC
2001	NC026	Low Solar Heat Gain Coefficient Glass, Orientation: S	1	$394.20	$394.20	1,971	1,971	-	-	15	HVAC

MA&E AND REGULATORY OVERSIGHT

Not applicable

SHAREHOLDER PERFORMANCE INDICATORS

See Section 6 for details.

TABLE TA7.1
SUMMER INITIATIVE PROGRAMS
PY 2002

PROGRAM	Program Incentives (Recorded)		Admin		Other	Total
	Actual	Committed	Actual	Committed		
Appliance Replacement	$1,371,667	$0	$8,859	$0	$0	$1,380,526
Refrigerator Recycling	$2,250,000	$0	$20,988	$0	$0	$2,270,988
Res Torchiere Turn-In	$32,050	$0	$358	$0	$0	$32,408
Whole House Fan Rebates	$100,790	$0	$3,408	$0	$0	$104,198
Swimming Pool Pumps	$667,900	$0	$206,221	$0	$0	$874,121
Swimming Pool Pumps	$603,105	$0	$112,138	$0	$0	$715,243
LED Traffic Lights	$3,109,980	$0	$61,507	$0	$0	$3,171,487
Nonres Torchier Replacement	-$280,198	$0	$7,560	$0	$0	-$272,638
Original TPI Solicitation Program	$112,500	$0	$563	$0	$0	$113,063
UCSD (OLD Name UC/CSU Projects)	$1,012,500	$0	$3,894	$0	$0	$1,016,394
Proctor Engineering	$120,988	$0	$5,073	$0	$0	$126,061
Davis Energy Group	$30,000	$0	$4,330	$0	$0	$34,330
Navy Region	$270,000	$0	$5,675	$0	$0	$275,675
Solatube	$2,941	$0	$4,248	$0	$0	$7,189
CalState Univ San Marcos	$350,000	$0	$5,761	$0	$0	$355,761
US Postal Lighting	$0	$0	$4,269	$0	$0	$4,269
US Postal Compressed	$9,000	$0	$4,329	$0	$0	$13,329
Totals Summer Initiatives	$9,763,223	$0	$459,181	$0	$0	$10,222,404

TABLE TA 7.2
Summer Initiative Programs
DIRECT AND ALLOCATED ADMINISTRATIVE COSTS

PROGRAM	Administrative Cost Elements				
	Labor (direct)	Non-Labor (direct)	Contract (direct)	Allocated	Total
Appliance Replacement	$21,496	($12,637)	$0	$0	$8,859
Refrigerator Recycling	$9,738	$11,250	$0	$0	$20,988
Res Torchiere Turn-In	$298	$60	$0	$0	$358
Whole House Fan Rebates	$40	$3,368	$0	$0	$3,408
Swimming Pool Pumps	$64,264	$141,957	$0	$0	$206,221
Swimming Pool Pumps	$60,063	$52,075	$0	$0	$112,138
LED Traffic Lights	$38,800	$22,707	$0	$0	$61,507
Nonres Torchier Replacement	$7,976	($416)	$0	$0	$7,560
Original TPI Solicitation Program	($91)	$654	$0	$0	$563
UCSD (OLD Name UC/CSU Projects)	$1,062	$2,832	$0	$0	$3,894
Proctor Engineering	$4,203	$870	$0	$0	$5,073
Davis Energy Group	$4,180	$150	$0	$0	$4,330
Navy Region	$4,964	$711	$0	$0	$5,675
Solatube	$4,203	$45	$0	$0	$4,248
CalState Univ San Marcos	$4,011	$1,750	$0	$0	$5,761
US Postal Lighting	$4,262	$7	$0	$0	$4,269
US Postal Compressed	$4,284	$45	$0	$0	$4,329
Totals Summer Initiatives	$233,753	$225,428	$0	$0	$459,181

BALANCING ACCOUNTS FOR POST-1997 EE ACTIVITIES

TA Section 8: Balancing Accounts for Post-1997 EE Activities

Table TA 8.1 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 8.2 and TA 8.4 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 8.1
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 8.2
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	PROGRAM BUDGET						ENERGY SAVINGS		
	BUDGETED AMOUNT			RECORDED AMOUNT			RECORDED		
	Total	Electric	Gas	Total	Electric	Gas	MWh	MW	Therm
PROGRAM AREAS									
Program									
Residential Programs									
Heating & Cooling									
HVAC Upstream	$0	$0	$0	$0	$0	$0	-	-	-
Sub Total	$0	$0	$0	$0	$0	$0	-	-	-
Lighting	$0								
Downstream Lighting	$173,000	$173,000	$0	$192,555	$192,555	$0	-	-	-
Statewide Upstream Lighting	$573,000	$573,000	$0	$2,123,283	$2,123,283	$0	29,448	2.58	-
SDG&E Lighting Program	$1,644,000	$1,644,000	$0	$0	$0	$0	1,685	0.18	-
Sub Total	$2,390,000	$2,390,000	$0		$2,315,838	$0	31,134	2.75	-
Appliances	$0								
Downstream Appliance Incentives	$1,523,000	$1,294,550	$228,450	$1,488,575	$1,265,289	$223,286	1,294	0.11	58,906
Statewide Upstream Appliances	$75,000	$63,750	$11,250	$53,350	$45,348	$8,003	-	-	-
Sub Total	$1,598,000	$1,358,300	$239,700	$1,541,925	$1,310,637	$231,289	1,294	0.11	58,906
Retrofit & Renovation	$0								
Common Area Audit	$0	$0	$0	$5,113	$4,346	$767	-	-	-
Energy Efficient Financing Program	$0	$0	$0	$15,322	$13,024	$2,298	-	-	-
Energy Efficient Mortgages/Time of Sale Energy Rating	$0	$0	$0	$0	$0	$0	-	-	-
Energy Information Center (EIC)	$150,000	$127,500	$22,500	$216,642	$184,146	$32,496	-	-	-
Energy Management Services	$1,169,800	$994,330	$175,470	$765,006	$650,255	$114,751	212	0.02	-
In-Store Energy Efficient Demonstration Co-op Program	$121,000	$102,850	$18,150	$90,770	$77,154	$13,615	-	-	-
Lighting & Appliance Replacement	$1,008,000	$1,008,000	$0	$45,325	$45,325	$0	-	-	-
Res. Contractor Program	$0			$0					
Multifamily (RCPMF)	$2,063,000	$536,380	$1,526,620	$3,062,912	$796,357	$2,266,555	9,069	0.40	1,151,818
Single Family (RCPSF)	$1,995,000	$1,077,300	$917,700	$1,678,063	$906,154	$771,909	229	0.44	29,545
Single Family Rebate	$1,156,000	$624,240	$531,760	$1,738,188	$938,622	$799,567	1,754	6.11	163,886
Small Complex Self-Sponsorship (SCSSP)	$173,000	$67,470	$105,530	$5,052	$1,970	$3,082	44	-	20,061
Targeted TPI (PY 2001)	$590,000	$590,000	$0	$589,808	$589,808	$0	486	0.89	21,230
Contractor Training	$0	$0	$0	$0	$0	$0	-	-	-
Energy Star Windows	$0	$0	$0	$0	$0	$0	-	-	-
Information & Education 1	$1,254,200	$1,064,481	$189,719	$1,428,300	$1,235,511	$192,788	-	-	-
Schools Program	$570,000	$484,500	$85,500	$621,067	$527,907	$93,160	-	-	-
Statewide Residential Energy Guide 1	$30,000	$24,649	$5,351	$20,934	$17,017	$3,917	-	-	-
Sub Total	$10,280,000	$6,701,700	$3,578,300	$10,282,503	$5,987,597	$4,294,906	11,794	7.87	1,386,541
Public Education Outreach Program	$513,000	$513,000	$0	$513,000	$513,000	$0	-	-	-
Residential Subtotal	$14,781,000	$10,963,000	$3,818,000	$14,653,266	$10,127,071	$4,526,195	44,222	10.73	1,445,446

TABLE TA 8.2
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	PROGRAM BUDGET						ENERGY SAVINGS		
	BUDGETED AMOUNT			RECORDED AMOUNT			RECORDED		
	Total	Electric	Gas	Total	Electric	Gas	MWh	MW	Therm
PROGRAM AREAS									
Program									
Nonresidential Programs	$0								
Large Nonres Comprehensive	$0								
Building Recommissioning TPI	$270,000	$270,000	$0	$202,532	$202,532	$0	502	-	-
Emerging Technologies/Demonstration Projects	$100,000	$100,000	$0	$79,523	$79,523	$0	-	-	-
Large Nonresidential SPC	$5,735,000	$4,014,500	$1,720,500	$5,558,704	$3,891,093	$1,667,611	18,421	2.23	172,791
Peak Load Reduction TPI	$1,300,000	$1,300,000	$0	$1,230,502	$1,230,502	$0	7,646	1.42	80,000
Retrofits in Leased Space TPI	$485,000	$485,000	$0	$118,249	$118,249	$0	402	0.09	-
Building Efficiency Rating Tool	$15,000	$12,750	$2,250	$68,004	$57,803	$10,201	-	-	-
Large Nonresidential Info	$95,000	$80,750	$14,250	$122,722	$104,314	$18,408	-	-	-
Energy Information Center (EIC)	$25,000	$21,250	$3,750	$41,604	$35,363	$6,241	-	-	-
Sub Total	$8,025,000	$6,284,250	$1,740,750	$7,421,840	$5,719,379	$1,702,460	26,971	3.75	252,791
Small Nonres Comprehensive	$0								
Commercial Horizontal Clothes Washer	$250,000	$75,000	$175,000	$289,506	$86,852	$202,654	168	-	200,520
Express Efficiency-Rebates	$2,102,000	$2,072,572	$29,428	$2,397,948	$2,364,377	$33,571	29,956	6.04	127,261
Small Business SPC	$1,385,000	$1,038,750	$346,250	$1,445,403	$1,084,052	$361,351	6,600	1.29	119,270
Small Commercial Turnkey	$650,000	$520,000	$130,000	$647,376	$517,901	$129,475	1,743	0.41	-
Building Operator Certification	$50,000	$42,500	$7,500	$63,457	$53,938	$9,519	-	-	-
Business Energy Guide	$25,000	$20,000	$5,000	$0	$0	$0	-	-	-
Energy Efficiency Financing (Energy Cents)	$10,000	$8,000	$2,000	$10,820	$8,656	$2,164	-	-	-
Energy Information Center (EIC)	$75,000	$60,000	$15,000	$42,257	$33,806	$8,451	-	-	-
Energy Management Services (Audits)	$550,000	$412,500	$137,500	$555,540	$416,655	$138,885	-	-	-
Small Non Residential Information	$353,000	$282,400	$70,600	$317,876	$254,300	$63,575	-	-	-
Technical Assistance (Small)	$150,000	$120,000	$30,000	$145,562	$116,450	$29,112	-	-	-
Sub Total	$5,600,000	$4,651,722	$948,278	$5,915,745	$4,936,987	$978,758	38,467	7.74	447,052
HVAC Turnover	$0								
Midstream HVAC	$325,000	$325,000	$0	$264,269	$264,269	$0	212	0.21	-
Sub Total	$325,000	$325,000	$0	$264,269	$264,269	$0	212	0.21	-
Motor Turnover	$0								
Upstream Motors	$73,000	$73,000	$0	$102,961	$102,961	$0	216	0.03	-
Sub Total	$73,000	$73,000	$0	$102,961	$102,961	$0	216	0.03	-
Process Overhaul	$0								
Technical Assistance (Process)	$297,000	$222,750	$74,250	$360,414	$270,311	$90,104	-	-	-
Sub Total	$297,000	$222,750	$74,250	$360,414	$270,311	$90,104	-	-	-
Remodeling & Renovation	$0								
Savings By Design	$855,000	$641,250	$213,750	$856,186	$642,140	$214,046	5,092	1.14	20,466
Sub Total	$855,000	$641,250	$213,750	$856,186	$642,140	$214,046	5,092	1.14	20,466
Public Education Outreach Program	$545,000	$545,000	$0	$545,000	$463,250	$81,750	-	-	-
Nonresidential Subtotal	$15,720,000	$12,742,972	$2,977,028	$15,466,415	$12,399,296	$3,067,118	70,959	12.88	720,308

TABLE TA 8.2
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	PROGRAM BUDGET						ENERGY SAVINGS		
	BUDGETED AMOUNT			RECORDED AMOUNT			RECORDED		
	Total	Electric	Gas	Total	Electric	Gas	MWh	MW	Therm
PROGRAM AREAS									
Program									
New Construction Programs	$0								
Residential New Construction	$0								
Builder Training	$149,500	$127,075	$22,425	$140,070	$119,060	$21,011	-	-	-
CHEERS	$32,000	$27,200	$4,800	$31,141	$26,470	$4,671	-	-	-
Home Energy Partnership - Appliance	$442,000	$375,700	$66,300	$490,915	$417,278	$73,637	491	0.05	13,670
Home Energy Partnership - Multi-family	$927,000	$787,950	$139,050	$1,010,627	$859,033	$151,594	2,272	0.91	150,497
Home Energy Partnership - Single-family	$769,000	$653,650	$115,350	$884,589	$751,901	$132,688	1,380	0.57	91,141
Consumer Information & Awareness	$100,000	$85,000	$15,000	$179,626	$152,682	$26,944	-	-	-
Public Interest Energy Research (PIER)	$0	$0	$0	$4,825	$4,102	$724	-	-	-
Design Assistance/Incentives	$0	$0	$0	$0	$0	$0	-	-	-
New EE Products & Services	$0	$0	$0	$0	$0	$0	-	-	-
Manufactured Housing	$0	$0	$0	$0	$0	$0	-	-	-
Sub Total	$2,419,500	$2,056,575	$362,925	$2,741,795	$2,330,525	$411,270	4,143	1.52	255,308
Nonresidential New Construction	$0								
Energy Design Resources	$410,000	$348,500	$61,500	$344,326	$292,677	$51,649	-	-	-
Savings By Design 3	$4,559,000	$3,628,560	$930,440	$4,050,403	$3,210,214	$840,189	30,039	5.96	453,578
TPI - Building Commissioning	$0	$0	$0	$0	$0	$0	-	-	-
Sub Total	$4,969,000	$3,977,060	$991,940	$4,394,729	$3,502,891	$891,838	30,039	5.96	453,578
Codes & Standards and Local Government	$0								
Local Govt. Initiatives	$241,000	$204,850	$36,150	$257,087	$218,524	$38,563	-	-	-
Codes & Standards	$241,000	$204,850	$36,150	$250,973	$213,327	$37,646	-	-	-
Sub Total	$482,000	$409,700	$72,300	$508,060	$431,851	$76,209	-	-	-
Public Education Outreach Program	$282,000	$282,000	$0	$282,000	$282,000	$0	-	-	-
New Construction Subtotal	$8,152,500	$6,725,335	$1,427,165	$7,926,584	$6,547,267	$1,379,317	34,182	7.48	708,886
PROGRAM TOTALS	$38,653,500	$30,431,307	$8,222,193	$38,046,265	$29,073,635	$8,972,630	149,362	31.09	2,874,641

TABLE TA 8.4
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	ENERGY SAVINGS			COST-EFFECTIVENESS			
	RECORDED			RECORDED			
	MWh	MW	Therm	Benefits	IMC	Admin	TRC Ratio
PROGRAM AREAS							
Program							
Residential Programs							
Heating & Cooling							
HVAC Upstream	-	-	-				
Sub Total	-	-	-				
Lighting							
Downstream Lighting	-	-	-				
Statewide Upstream Lighting	29,448	2.58	-	$ 17,715	$ 6,408	$ 729	2.48
SDG&E Lighting Program	1,685	0.18	-	$ 939	$ 399	$ 39	2.14
Sub Total	31,134	2.75	-	$ 18,654	$ 6,806	$ 768	2.46
Appliances						$ -	
Downstream Appliance Incentives	1,294	0.11	58,906	$ 1,223	$ 1,740	$ 753	0.49
Statewide Upstream Appliances	-	-	-			$ 53	-
Sub Total	1,294	0.11	58,906	$ 1,223	$ 1,740	$ 806	0.48
Retrofit & Renovation						$ -	
Common Area Audit	-	-	-			$ -	
Energy Efficient Financing Program	-	-	-			$ -	
Energy Efficient Mortgages/Time of Sale Energy Rating	-	-	-			$ -	
Energy Information Center (EIC)	-	-	-			$ 217	-
Energy Management Services	212	0.02	-	$ 118	$ 52	$ 739	0.15
In-Store Energy Efficient Demonstration Co-op Program	-	-	-			$ 91	-
Lighting & Appliance Replacement	-	-	-			$ -	
Res. Contractor Program						$ -	
Multifamily (RCPMF)	9,069	0.40	1,151,818	$ 9,852	$ 2,612	$ 690	2.98
Single Family (RCPSF)	229	0.44	29,545	$ 433	$ 857	$ -	0.51
Single Family Rebate	1,754	6.11	163,886	$ 2,966	$ 3,996	$ 1,297	0.56
Small Complex Self-Sponsorship (SCSSP)	44	-	20,061	$ 108	$ 33	$ -	3.27
Targeted TPI (PY 2001)	486	0.89	21,230	$ 676	$ 1	$ 590	1.15
Contractor Training	-	-	-			$ -	
Energy Star Windows	-	-	-			$ -	
Information & Education	-	-	-			$ 1,428	-
Schools Program	-	-	-			$ 621	-
Statewide Residential Energy Guide	-	-	-			$ 36	-
Sub Total	11,794	7.87	1,386,541	$ 14,154	$ 7,550	$ 5,709	1.07
Public Education Outreach Program	-	-	-			$ -	
Residential Subtotal	44,222	10.73	1,445,446	$ 34,030	$ 16,097	$ 7,284	1.46

TABLE TA 8.4
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	ENERGY SAVINGS			COST-EFFECTIVENESS			
	RECORDED			RECORDED			
	MWh	MW	Therm	Benefits	IMC	Admin	TRC Ratio
PROGRAM AREAS							
Program							
Nonresidential Programs							
Large Nonres Comprehensive							
Building Recommissioning TPI	502	-	-	237	35.06	203	1.00
Emerging Technologies/Demonstration Projects	-	-	-			29	-
Large Nonresidential SPC	18,421	2.23	172,791	15,978	6,659.14	1,018	2.08
Peak Load Reduction TPI	7,646	1.42	80,000	6,590	3,135.18	118	2.03
Retrofits in Leased Space TPI	402	0.09	-	357	93.41	34	2.80
Building Efficiency Rating Tool	-	-	-			68	-
Large Nonresidential Info	-	-	-			123	-
Energy Information Center (EIC)	-	-	-			84	-
Sub Total	26,971	3.75	252,791	23,162	9,923	1,675	2.00
Small Nonres Comprehensive						-	
Commercial Horizontal Clothes Washer	168	-	200,520	-	689.50	83	-
Express Efficiency-Rebates	29,956	6.04	127,261	22,783	7,277.71	542	2.91
Small Business SPC	6,600	1.29	119,270	5,997	1,387.83	382	3.39
Small Commercial Turnkey	1,743	0.41	-	992	423.46	220	1.54
Building Operator Certification	-	-	-			63	-
Business Energy Guide	-	-	-			-	
Energy Efficiency Financing (Energy Cents)	-	-	-			11	-
Energy Information Center (EIC)	-	-	-			-	
Energy Management Services (Audits)	-	-	-			556	
Small Non Residential Information	-	-	-			318	
Technical Assistance (Small)	-	-	-			146	
Sub Total	38,467	7.74	447,052	29,772	9,778	2,320	2.46
HVAC Turnover						-	
Midstream HVAC	212	0.21	-	214	144.15	164	0.69
Sub Total	212	0.21	-	214	144	164	0.69
Motor Turnover						-	
Upstream Motors	216	0.03	-	185	19.81	79	1.87
Sub Total	216	0.03	-	185	20	79	1.87
Process Overhaul						-	
Technical Assistance (Process)	-	-	-			360	-
Sub Total	-	-	-	-	-	360	-
Remodeling & Renovation						-	
Savings By Design	5,092	1.14	20,466	4,466	1,295.79	464	2.54
Sub Total	5,092	1.14	20,466	4,466	1,296	464	2.54
Public Education Outreach Program	-	-	-				
Nonresidential Subtotal	70,959	12.88	720,308	57,798	21,161	5,063	2.20

TABLE TA 8.4
PROGRAM PORTFOLIO BUDGETS AND BENEFITS
PY2001

	ENERGY SAVINGS			COST-EFFECTIVENESS			
	RECORDED			RECORDED			
	MWh	MW	Therm	Benefits	IMC	Admin	TRC Ratio
PROGRAM AREAS							
Program							
New Construction Programs							
Residential New Construction							
Builder Training	-	-	-	-	-	140	
CHEERS	-	-	-	-	-	31	
Home Energy Partnership - Appliance	491	0.05	13,670	428	493.91	241	0.58
Home Energy Partnership - Multi-family	2,272	0.91	150,497	2,573	713.73	462	2.19
Home Energy Partnership - Single-family	1,380	0.57	91,141	1,561	1,493.47	379	0.83
Consumer Information & Awareness	-	-	-	-	-	180	
Public Interest Energy Research (PIER)	-	-	-	-	-	5	
Design Assistance/Incentives	-	-	-	-	-	-	
New EE Products & Services	-	-	-	-	-	-	
Manufactured Housing	-	-	-	-	-	-	
Sub Total	4,143	1.52	255,308	4,562	2,701	1,438	
Nonresidential New Construction							
Energy Design Resources	-	-	-			344	
Savings By Design	30,039	5.96	453,578	27,140	9,595.19	1,033	2.55
TPI - Building Commissioning	-	-	-	-	-	-	
Sub Total	30,039	5.96	453,578	27,140	9,595	1,378	
Codes & Standards and Local Government							
Local Govt. Initiatives	-	-	-			257	
Codes & Standards	-	-	-			251	
Sub Total	-	-	-	-	-	508	
Public Education Outreach Program	-	-	-				
New Construction Subtotal	34,182	7.48	708,886	31,702	12,296	3,323	2.03
PROGRAM TOTALS	149,362	31.09	2,874,641	123,531	49,554	15,670	1.89

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

PROGRAM	Program Incentives 1998		Program Incentives 1999		Program Incentives 2000	
	Actual	Committed	Actual	Committed	Actual	Committed
Residential EEI/SPC	$ 16,768	$ 3,617,232	$ 1,251,127	$ 2,297,589	$ 68,516	$ -
Upstream MT-Res TPI	$ 355,652	$ 900,342	$ 470,809	$ 429,533	$ -	$ -
Total	$ 372,420	$ 4,517,574	$ 1,721,936	$ 2,727,122	$ 68,516	$ -

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

PROGRAM	Program Incentives 1998		Program Incentives 1999		Program Incentives 2000	
	Actual	Committed	Actual	Committed	Actual	Committed
EEI Prescriptive Rebatres/Tenant Improvements	$ 255,152	$ -	$ 548,293	$ 6,400	$ 225,899	$ 123,053
Nonresidential EEI/SPC	$ 4,578,413	$ -	$ 588,693	$ 1,485,486	$ 904,727	$ 3,338,057
Nonresidential Small Business SPC	$ -	$ -	$ 184,129	$ 57,417	$ 273,617	$ 161,357
Fastrac	$ -	$ -	$ -	$ -	$ 361,796	$ -
Total	$ 4,833,565	$ -	$ 1,321,115	$ 1,549,303	$ 1,766,039	$ 3,622,467

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

PROGRAM	Program Incentives 1998		Program Incentives 1999		Program Incentives 2000	
	Actual	Committed	Actual	Committed	Actual	Committed
Residential Design Assistance	$ -	$ -	$ -	$ -	$ 9,200	$ 155,550
Subtotal Residential	$ -	$ -	$ -	$ -	$ 9,200	$ 155,550
Nonresidential New Construction	$ 1,081,783	$ -	$ 523,672	$ -	$ -	$ -
Savings by Design	$ -	$ -	$ 315,474	$ 468,231	$ 466,807	$ 667,547
Industrial and Agricultural New Construction	$ -	$ -	$ -	$ -	$ 76,647	$ 100,000
Energy Design Resources	$ -	$ -	$ -	$ -	$ -	$ -
Relocatable Class Rooms	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Nonresidential	$ 1,081,783	$ -	$ 839,146	$ 468,231	$ 543,454	$ 767,547
Grand Total	$ 1,081,783	$ -	$ 839,146	$ 468,231	$ 552,654	$ 923,097