Southern California Edison Company's 2003 Energy Efficiency Program Selection Rulemaking 01-08-028

November 4, 2002

Southern California Edison Company's
2003 Energy Efficiency Program Plans

Index

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Residential Appliance Recycling

II. Requested Total Budget

$6,000,000

III. Program Description

The Statewide Residential Appliance Recycling Program (RARP) program is designed to reduce energy usage by allowing eligible customers (single family and multifamily owners/landlords and tenants) to dispose of their operable, inefficient primary and secondary refrigerators and freezers in an environmentally safe manner. The program is offered to customers within the service territories of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E).

Overview: The program is offered on a first-come, first-served basis and is available January 1 through December 31, 2003 or until funds are spent, whichever comes first. Qualifying refrigerators or freezers must be working (cooling) and be between 10-27 cubic feet. Customers may turn in no more than two refrigerators or freezers or a combination of one refrigerator and freezer per year per dwelling unit. RARP offers a recycling incentive choice of $35 or a five-pack of compact fluorescent lamps (CFLs). The customer is asked when the pickup is scheduled to choose an incentive. The customer receives the incentive from the vendor 6 – 8 weeks after the pickup. The targeted market segment is residential customers, with an emphasis on the hard-to-reach (HTR) as defined by the California Public Utilities Commission (CPUC) in its Energy Efficiency Policy Manual. The program does allow non-HTR customers to participate in the program.

Operation: SCE will continue to serve as the administrator to oversee the program statewide. PG&E and SDG&E will transfer program funds to SCE for payment purposes. The current RARP's recycling vendor is responsible for the recycling process of dismantling the units and removing refrigerants, and scheduling and performing refrigerator and freezer pickups. The vendor is also responsible for meeting the comprehensive toxic material recycling and disposal standards in conformance with California environmental laws and regulations and permitting requirements. Unless directed by the CPUC to open a new bid process to identify a vendor for 2003, SCE plans to continue to rely on the services of the current vendor.

Marketing: The program will advertise and market to customers within each of the investor-owned utilities (IOUs) service territory with an emphasis on hard-to-reach

customer groups. The primary vendor will be exclusively responsible for preparing and implementing all marketing activities in PG&E and SDG&E service territories.

IV. Proposed Program Changes

There are no program changes proposed for 2003.

V. 2002 Program Successes

In 2002, as in previous years, RARP has experienced high customer acceptance and customer demand. The program in each IOU service area is highly successful, each achieving full subscription before the end of the year. In 2003, it is expected RARP will continue to receive strong customer demand.

VI. Proposed Energy & Peak Demand Savings

The following matrix identifies the unit count, energy savings and demand reduction targets for the 2003 Statewide Residential Appliance Recycling program in SCE's service territory. The targets shown below reflect net targets using a 0.80 net-to-gross ratio (refrigerators, freezers only) as required by the CPUC's Energy Efficiency Policy Manual.[1] SCE updated the CFL savings estimates resulting from this program to reflect the results of a recent study related to the installation of the CFLs from this program.[2]

Due to the abovementioned administrative structure of this statewide program, the targets are not the responsibility of SDG&E or PG&E rather the responsibility of the prime vendor.

Recycled Refrigerators/Freezers

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Refrigerators	Unit	26,888	46,204,600	1,718	7,098	0.26
Screw-in CFL 15W	Unit	700	17,248	25	3	0.00
Screw-in CFL 20W	Unit	1,400	54,978	39	9	0.01
Screw-in CFL 23W	Unit	1,400	50,666	36	8	0.01
Freezers	Unit	6,722	11,067,163	1,646	1,667	0.25
Total			57,394,656		8,785	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

0.80 Net-to-Gross for Refrigerators and Freezers: 1.0 Net-to-Gross for 5-pack CFLs.

[1] As noted by the Energy Division in a recent letter to SCE, there is a net-to-gross ratio that has been utilized in the past, which is not reflected in the current CPUC Energy Efficiency Policy Manual. SCE currently utilizes the CPUC Energy Efficiency Policy Manual for its program cost-effectiveness inputs. SCE is willing to update its cost-effectiveness showings for each of its programs based upon the most recent information, should the Commission request.

[2] "Phase 4 Market Effects Study of California Residential Lighting and Appliance Program", Xenergy, Inc., April 26, 2002.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$21,558,168	$4,108,945	$17,449,223	5.25
Participant Cost Test	$32,237,733	4,134,053	28,103,680	7.80

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

In 2003, our target is to have 57 percent of the units collected in SCE's service territory come from "hard-to-reach" geographic areas defined as rural, moderate income and/or multifamily.

X. Program Coordination with Other Energy Efficiency Programs

The IOUs will ensure accurate RARP information on their respective websites and through their phone centers. The program, if feasible, will also leverage the integration of other energy efficiency programs such as those that offer education and information connections through various crosscutting program activities. The program may also leverage the integration of other statewide and outreach campaigns such as those that offer information and education, e.g., Statewide Marketing and Outreach Campaign.

XI. Customer Inquiry and Complaint Procedures

Any customer questions that cannot be answered by the vendor, and all customer complaints, are referred to the SCE program manager within 24 hours of occurrence. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Programs.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Single Family Energy Efficiency Rebate Program

II. Requested Total Budget

$6,000,000

III. Program Description

The Single Family Rebate program is a comprehensive program targeting all market actors in the residential efficient retrofit and renovation product supply chain to increase the availability and market penetration of these products. The program contains three core components: (1) customer rebates; (2) customer information and education; and (3) marketing and outreach to manufacturers, retailers and distributors. Each component is essential to enhancing understanding of and demand for energy efficient products in the residential retrofit and renovation market.

Direct Rebates to Customers

The Single Family Rebate program provides rebates directly to residential customers to help offset the higher cost of purchasing qualifying energy efficient products. The Program offers a broad list of statewide energy efficiency measures with prescribed rebates to encourage customer adoption of comprehensive multi-measure projects. The target markets for the rebates are retrofit and renovation, appliances, heating and cooling.

Customer Information and Education

The program also includes a customer information and education component. As in 2002, the program will make concerted efforts to educate and get participation by customers in hard-to-reach market sectors that typically do not have access to program information or generally do not participate in energy efficiency programs due to language, income, housing type or geographic barriers.

The program provides energy efficiency and rebate information to customers through a variety of marketing channels, including:

- Utility bill inserts;
- Customer information and education materials;
- A toll-free customer hotline;
- Investor-owned utilities (IOUs) websites;
- Community events;
- Referrals from and to other programs, including the rate discount (CARE) program, and the Low-Income Energy Efficiency program (LIEE); and

- Coordinating with statewide and national information and outreach campaign, including the Flex Your Power campaign, the Energy Star® Cool Change and Cooling Promotional Campaign, the Energy Star® Appliance Program and other promotional campaign efforts to ensure reinforcement of the energy efficiency and energy savings message.

Marketing and Outreach to Manufacturers, Retailers, and Distributors

IOUs will work with local retailers and distributors and manufacturers. Marketing and outreach efforts may include:

- Coordinated marketing and outreach materials to retail outlets. This includes providing retailers with point of purchase marketing materials and seasonal advertising promotions;
- Education and training targeted to distributor and contractor/dealer/installer trade allies;
- Field support for the pool, appliance, lighting, home improvement, and large box wholesale stores. Field support may include signing up participating stores with an agreement contract, training retailer staff on rebate promotions, and ensuring marketing materials are posted in the stores; and
- Point-of-sale rebates for programmable thermostats offered by participating retailers.

IV. Proposed Program Changes

- Efficient Electric Storage Water Heaters will be added as a new measure to the statewide program portfolio. The decision to include electric storage water heaters was based on providing added flexibility for customers who have all electric homes.
- Rebates will be increased for whole house fans and pool pump/motor replacements. The IOUs decision to increase the rebates on whole house fans and pool pumps was made due to a drop in demand for these cost-effective measures in 2002 compared to the response in the 2001 program.
- The option of specifying a thermostatic expansion valve (TXV) with an Energy Star® qualified central air conditioner or heat pump for an additional rebate amount will be offered in 2003. The TXV is a proven method of sustaining the energy efficiency of air conditioning unit after installation. Statewide air conditioning rebates are based on a three-tier option approach. The TXV is required for the Tier II and III rebates. To provide customers a consistent message as well as the benefit of the sustained energy savings provided by the TXV, a decision to include a option for the TXV at the Tier I level was made for 2003.

For 2003, SCE will also be shifting its emphasis from pool pumps to programmable thermostats. Studies show programmable thermostats is an untapped market and that customers are highly likely to install this measure to reduce their energy bills. The program is not expected to achieve goals in 2002 for pool pump motors, and it appears the customer demand for this measure has been satisfied from aggressive rebate offers in

prior years. SCE will continue its efforts to work with retailers to offer point-of-sale rebates for programmable thermostats.

V. 2002 Program Successes

The 2002 Statewide Single Family Rebate program, which builds on the successes of the 2000, and 2001 programs continue to provide residential customers with consistent information, on energy efficiency services and product rebates across a wide spectrum of applications. The utility program which supports the Commission's objective of long term energy savings, has developed a network of industry participants to include manufacturers, retailers, and distributors, who together with the utility work towards the sustainable and efficient use of energy in residential households.

By partnering with local industry, utilities can offer a broader selection of energy services to residential customers, who often turn to the utility as the first point-of-contact for reliable energy information. In conjunction with the Flex Your Power Campaign, Energy Star®, local retailers, distributors, and manufacturers, the IOU's jointly conducted a manufacturer and retailer marketing meeting in September 2002 to discuss rebate programs available in California and to facilitate information exchange about the impact of rebate programs on their businesses. Participants expressed an increased interest in energy efficiency by their customers and attributed this increase to ongoing utility rebates, and aggressive statewide marketing efforts. In addition, manufacturers, retailers and contractors have communicated that utility rebates are critical to the continued successful promotion of Energy Star® qualified products. Without this program the demand for high efficiency products could be greatly impacted.

In 2003, market participants expect customer interest in energy efficiency to continue to increase and have based manufacturer production schedules and retailer advertising schedules on the early availability of a 2003 Single Family Rebate program.

For SCE, the program has been very popular with customers. Early in the final quarter of the program, SCE exceeded goal for programmable thermostats, advanced whole house evaporative coolers, energy efficient windows, and room air conditioners.

- SCE worked closely with the Statewide Flex Your Power campaign to promote the energy efficiency message and utility rebate programs and offers.
- SCE distributed rebate applications to over 600 pool supply stores, home improvement centers and retail stores in its service area.
- SCE provided training to retailer sales staff on its HVAC rebate offer.
- SCE worked with major retailers to promote programmable thermostats in-store with posters highlighting the measure, how-to install workshops, and immediate availability of applications.
- SCE also participated in the National Energy Star® Partner Meeting in Providence, Rhode Island. The purpose of this nationwide meeting was to exchange information with manufacturers and retailers about the statewide rebate programs available in California and discuss how our partnership can lead to availability and installation of more energy efficient products.

VI. Proposed Energy & Peak Demand Savings

In 2003, SCE will promote the following measures to the single family market:

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Pool Pump & Motor - Single	site	4,000	2,219,574	555	574	0.14
Pool Pump & Motor - Two Speed	site	150	94,200	628	15	0.10
Room A/C - 5,000 to 18,000 btuh	Unit	1,003	101,905	102	118	0.12
Electric Water Heaters .91 EF	Unit	1,000	250,090	250	0	0.00
High Performance Window	sq. ft.	500,000	641,776	1	633	0.00
Programmable Thermostat	unit	29,500	7,702,938	261	3,151	0.11
Attic Insulation	sq. ft.	2,000	54	0	0	0.00
Wall Insulation	sq. ft.	2,000	82	0	0	0.00
Whole House Fan	unit	3,000	606,383	202	78	0.03
Evaporative Cooler	unit	3,000	3,629,373	1,210	3,980	1.33
EnergyStar AC - Tier I	unit	950	334,818	352	631	0.66
EnergyStar AC - Tier I w/TXV	unit	2,450	923,921	377	1,741	0.71
Central AC - Tier II	unit	400	156,351	391	321	0.80
Central AC - Tier III	unit	400	192,396	481	361	0.90
EnergyStar HP - Tier I	unit	60	28,119	469	35	0.58
EnergyStar HP - Tier I w/TXV	unit	200	100,292	501	125	0.62
Central Heat Pump - Tier II	unit	40	29,536	738	27	0.68
Central Heat Pump - Tier III	unit	15	14,077	938	13	0.85
Total			17,025,886		11,803	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$10,439,681	$10,197,566	$242,115	1.02
Participant Cost Test	$15,760,822	8,926,593	6,834,229	1.77

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

In 2003, our target is to have 34 percent of the 2003 Single Family Rebate applications come from hard to reach customers as defined in the Energy Efficiency Policy Manual.

X. Program Coordination with Other Energy Efficiency Programs

To achieve maximum synergy, the timing of rebate promotion cycle, advertising and product promotion will be consistent throughout the state. This approach not only assures optimum use of advertising resources reaching customers throughout the state, but also helps major retailers and manufacturers plan product shipment to meet projected demand in the market place. Additionally, the timing of rebates and promotions will coincide with the Statewide Marketing and Outreach Campaign. The goal is to provide customers with a focused and consistent message statewide.

The 2003 Single Family Rebate program will also be coordinated with other IOU programs, including the statewide Multifamily Energy Efficiency Rebate Program, local hard-to-reach customer programs, and low-income programs. The coordination is designed to ensure consistency of the energy efficiency message and leverage marketing and advertising resources where possible.

XI. Customer Inquiry and Complaint Procedures

Any customer questions or complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Multifamily Energy Efficiency Rebates

II. Requested Total Budget

$2,000,000

III. Program Description

In 2002, the investor-owned utilities (IOUs) implemented a new Statewide Multifamily (MF) Energy Efficiency Rebate program. The program is for property owners and managers with existing residential dwellings that contain five or more units. The program encourages the property owners and managers to install qualifying energy efficiency products in individual tenant units and for common areas of residential apartments, mobile home parks and condominium complexes.

Traditionally, this market segment has been considered hard-to-reach and has not actively participated in energy efficiency programs. This segment faces increased market barriers compared to other residential segments. Specifically, there is the "split incentive" problem. Often, multi-family residents pay their energy bill, but the property owner or manager is responsible for facility improvements. Given that the property owner/manager often does not realize the financial benefits from installation of energy efficiency measures, as they often do not pay the energy bill, they may be unwilling to pay for increased initial capital costs of energy efficient alternatives.

The MF Rebate Program uses an integrated approach of combining information, education, energy management services including targeted marketing and customer incentives to encourage property owners/managers to select energy efficient measures. This multi-faceted approach is important for reaching this underserved market, educating them about benefits for owners/managers and their tenants, and encouraging this customer segment to take the desired actions.

The MF Rebate Program offers rebates for a wide variety of energy efficiency measures, many of which are identical to those offered under the SF Rebate program. Covered measures include apartment improvements (e.g. interior and exterior hardwired fixtures, ceiling fans, CFLs, clothes washers and dishwashers), common-area improvements (e.g. exit signs, occupancy sensors, photocells, high performance dual-paned windows), mechanical improvements, and high-efficiency heating and cooling equipment.

Although this program is new, it has made in-roads into the underserved MF market during its first year of operation. To continue to build knowledge and understanding of the value of energy efficiency alternatives in the owner and property managers'

community, it is critical to maintain program stability, continuity and momentum. Over time, as more multi-family dwellings receive benefits from the program, and the benefits and program successes are shared within this community, program momentum and market penetration will likely increase at a faster rate. Over time, it may be possible to increase savings on a $/kW, $/kWh and $/therm basis as more property owners/managers understand the long-term cost savings from energy efficient measures, and gain confidence that energy efficient measures perform as well as their less-efficient counterparts. In the meantime, a primary objective of the program is to increase participation and knowledge about energy efficiency in the multi-family sector.

IV. Proposed Program Changes

For 2003, modifications to the Multifamily Rebate program include the following categories of changes: (1) the addition and/or deletion of certain measures; (2) modified rebates; and, (3) general program process improvements. The primary reason for the changes are to increase overall customer participation rates, rather than to increase savings on a $/kW, $/kWh and $/therm basis. Some of the changes are responsive to customer requests. Others are to increase rebates to encourage property owners to install the measures. IOUs may also offer promotions to encourage customers to complete a mail-in or online survey.

By increasing participation rates, this underserved market will become more informed about and comfortable with energy efficiency measures, and be more likely to choose these measures in future years, even with reduced incentives later. However, in the short term, including in 2003, a main program objective is to strive for increased participation and understanding about energy efficiency in the target sector while maintaining overall portfolio cost-effectiveness. Until the MF customer segment has greater understanding of, comfort with and confidence in energy efficient alternatives, it will be difficult to achieve significant savings with this customer segment on a $/kW, $/kWh or $/therm basis.

Change to Measures

The IOUs make the following changes to list of eligible measures:

- Electric Water Heaters: Electric water heaters will be added to the current portfolio of measures.
- Furnaces: Energy Star® 80% AFUE furnaces will be removed due to low customer interest. SCE does not offer incentives for this gas-related measure.
- Lighting Measures: Energy Star® lighting measures are being expanded to include reflector type R30 and R40 for multifamily dwellings. The list of eligible Energy Star® Porch Lights will be expanded to cover all exterior fluorescent lighting applications.
- Clothes Washers: Energy Star® clothes washer rebates will be offered at two levels; one for machines installed in tenant units and a second for installation in coin-operated laundry areas. SCE will not offer incentives for this gas-related measure.
- Central Natural Gas: Central system natural gas equipment controllers will also be available at two rebate levels, based on specific display features of the

equipment and number of tenant units served. SCE will not offer incentives for this gas-related measure.

Modified Rebate Levels/Tiers

The IOUs will make the following changes rebates levels:

- Rebate levels will increase for Energy Star® labeled programmable thermostats, high performance windows, compact fluorescent lights (CFL) rebates for 5-13 watt, 14-20 watt and 21-30 watts (tiered to encourage installation of the higher savings CFLs). Given that economic downturn and the continued reluctance of MF owners/property owners to pay higher initial costs for energy efficient measures, the rebate levels need to be increased so more property owners/managers will elect to install these measures.
- Rebates will be slightly reduced for natural gas storage water heaters.

Program Modifications/Improvements

IOUs will add a funding reservation mechanism in 2003 to help give property owners and managers confidence that if they install the measures, money will be available to pay them. In 2002, some measures, particularly those with small cost differences between the energy-efficient and non-energy efficient alternatives such as hard-wired fixtures, became over-subscribed. When measures become over-subscribed, this creates confusion and concern among property owners and managers that if they choose energy efficient alternatives, rebate funds will not be available when they submit funding requests if no reservation system is in place. Funding uncertainty creates market barriers, particularly in customer segments that are not used to participating in energy efficient programs and/or knowledgeable and confident about the benefits of energy efficient alternatives.

V. 2002 Program Successes

The MF Rebate program achieved several successes in 2002:

- Program Launch of New, Statewide Program Tailored for Traditionally Underserved MF Market - The main program success was achieving participation by a customer segment, the multi-family segment that is traditionally underserved and hard-to-reach. For several measures, demand outstripped available funding, particularly those measures with small cost differences between energy-efficiency and non-energy efficient measures.
- Program Leveraging – The IOUs had a multi-faceted marketing approach to inform and refer customers in multi-family dwellings, as well as contractors and property owners/managers about programs and services that meet their specific needs. For example, some residents in multi-family dwellings are eligible for free energy-saving measures, through the low-income energy efficiency program (LIEE), or a 20% discount on their bill through the California Alternate Rates for Energy (CARE) program. The multi-faceted marketing approach included informing property owners/managers about the LIEE and CARE programs, so they could in turn educate eligible residents. The IOUs also have toll free numbers,

where customers and tenants are referred to various programs and services to meet their specific needs.

SCE-specific highlights of the 2002 program include:

- Successfully sold-out two high demand measures; both interior and exterior hardwired fluorescent light fixtures. Both property owners/managers and apartment residents receive beneficial energy savings from the installation of these measures.
- Achieved significantly high installation levels of interior compact fluorescent screw-in light bulbs (CFLs) benefiting over 2,000 apartment residents.
- Distributed over 2,000 energy saving and safe fluorescent torchieres in exchange for halogen torchieres.

Through persistent and varied marketing and outreach efforts, SCE heightened customer awareness and established the foundation for the program within the property owners/managers industry. Industry partners (i.e., contractors and manufacturers) are keenly aware of program offerings and promote the program well to targeted customer.

VI. Proposed Energy & Peak Demand Savings

Due to a major decline in the economy and the perception that there is no longer an energy crisis, the property owners/landlords did not heavily invest in energy efficient measures/retrofits. Therefore, we have adjusted the goals to meet the customer demands for the energy efficiency measures that they wish to participate in. This has been evident in the demand for interior hard-wired fixtures and installations where customers requested measures in excess of originally forecasted amounts.

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Screw-in CFL 15 Watt-Exterior	Unit	1,000	60,000	60	4	0.00
Screw-in CFL 25 Watt-Exterior	Unit	3,000	357,600	119	24	0.01
Screw-in CFL 30 Watt-Exterior	Unit	3,000	321,600	107	22	0.01
Screw-in CFL 15 Watt-Interior	Unit	1,000	25,600	26	4	0.00
Screw-in CFL 25 Watt-Interior	Unit	4,000	204,800	51	32	0.01
Screw-in CFL 30 Watt-Interior	Unit	2,000	142,400	71	22	0.01
R30 Reflector (15 watts)	Unit	750	99,458	133	7	0.01
R40 Reflector (23 watts)	Unit	500	102,110	204	7	0.01
Indoor Fixtures	Unit	14,500	1,032,400	71	162	0.01
Outdoor Fixtures Flood 13 Watt	Unit	9,000	792,000	88	0	0.00
Outdoor Fixtures Flood 27 Watt	Unit	2,000	348,800	174	0	0.00
Energy Star Ceiling Fan w/ CFL	Unit	10	260	26	0	0.01
Room A/C - 5,000 to 18,000 btuh	Unit	40	4,064	102	5	0.12
High Performance Window	sq. ft.	1,000	1,284	1	1	0.00
Programmable Thermostat	unit	125	32,640	261	13	0.11
Attic Insulation	sq. ft.	0	0	0	0	0.00
Wall Insulation	sq. ft.	0	0	0	0	0.00
Central AC - SEER 12	unit	0	0	313	0	0.38
Central AC - Tier I	unit	3	1,057	352	2	0.66
Central AC - Tier I w/ TXV	unit	2	754	377	1	0.71
Central AC - Tier II	unit	0	0	391	0	0.80
Central AC - Tier III	unit	0	0	481	0	0.90
Central Heat Pump - SEER 12	unit	0	0	315	0	0.64
Central Heat Pump - Tier I	unit	3	1,406	469	2	0.58
Central Heat Pump - Tier I w/	unit	2	1,003	501	1	0.62
Central Heat Pump - Tier II	unit	0	0	738	0	0.68
Central Heat Pump - Tier III	unit	0	0	938	0	0.85
Package Terminal AC (>2, <50	unit	5	5,114	1,023	1	0.15
Package Terminal HP	unit	5	4,454	891	3	0.59
Occupancy Sensor wall mounted	sensor	5	416	83	0	0.04
Occupancy Sensor ceiling mounted	sensor	5	416	83	0	0.04
Photocell	photocell	5	472	94	0	0.00
Exit Sign Retrofit Kit (LED)	fixture	10	1,949	195	0	0.02
LED Exit Sign	fixture	10	2,807	281	0	0.03
2.0 gpm Showerhead	Unit	10	1,340	134	0	0.00
Faucet Aerator	Unit	10	104	10	0	0.00
Electric Water Heater	Unit	5	1,250	250	0	0.00
Turn-In-Torchiere Floor Lamps	Unit	2,000	441,600	221	0	0.00
Total			3,989,157		314	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$2,737,078	$1,340,608	$1,396,470	2.04
Participant Cost Test	$4,878,069	844,378	4,033,691	5.78

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

For 2003, our target is to have 36 percent of the multifamily rebate applications come from hard-to-reach customer groups as defined in the Energy Efficiency Policy Manual.

X. Program Coordination with Other Energy Efficiency Programs

To achieve maximum synergy and provide customers with a focused and consistent message statewide, the timing of rebates and product delivery, as well as advertising promotions, will be consistent throughout the state. This approach assures optimum use of advertising resources, and it also helps major retailers and manufacturers plan product shipment to meet market place demand. The timing of rebates and promotions will coincide with the Statewide Marketing and Outreach Campaign.

The Multi-Family program will also coordinate with other IOU programs, including the statewide Single-Family Rebate program and Low-Income Energy Efficiency programs. The coordination will ensure a consistent energy efficiency message and leverage marketing and advertising resources where possible.

The IOUs continue to develop relationships and encourage third party and local vendor involvement as essential components of the sales process for high-efficiency equipment. In past programs, both have been instrumental in identifying qualifying customers with potential retrofit opportunities, and leveraging Multifamily rebates to capture those opportunities.

IOUs host and participate in seminars and other events to educate customers on energy efficient upgrade opportunities. Customers are introduced to the new and often unfamiliar technologies, provided with an overview of the appropriate applications, and shown installation options. In an effort to effectively educate HTR customers on energy efficiency retrofit opportunities, presentations are offered through community-based organizations, faith-based organizations, associations, ethnic business organizations, local chambers of commerce, non-profit organizations, and trade organizations. Customers who wish to participate in the Multifamily Rebate Program secure applications at these

events and through a variety of sources including local IOU offices, local vendors, IOU websites, local chambers of commerce, local program implementers and various other sources.

XI. Customer Inquiry and Complaint Procedures

Any customer questions or complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Home Energy Efficiency Surveys

II. Requested Total Budget

$1,295,654

III. Program Description

The Home Energy Efficiency Survey (HEES) statewide program, provides customers with valuable information to assist them with understanding, controlling and reducing energy use in their homes. The Home Energy Efficiency Survey program uses two delivery channels. Both channels help consumers understand how their behavior can affect energy costs, how to improve their home's energy efficiency, and what additional resources and programs are available to help reduce energy use:

- Mail-in survey - the written version of the survey, which includes targeted direct mailings, is available in English and Spanish in all four investor-owned utilities' (IOUs) service territories, in Chinese in PG&E, SoCalGas, and SCE service territories, and in Vietnamese in SDG&E's service territory. The mail in survey allows customers with limited or no online access the flexibility of an easy-to-complete mail-back format. Surveys are distributed to consumers via direct mail marketing efforts, as handouts through in-home visits and public events, and through customer requests. Participating customers are given a survey and materials explaining the value of the program. Once completed, the survey is mailed back to the statewide mail-in survey vendor for processing. Completed surveys are analyzed against the customer's actual energy usage, and a report representing actual energy usage in graph form is mailed to the customer. Reports include information on energy efficiency products and services, rebate programs, and other energy-related information to encourage adoption of energy efficiency measures identified through the energy survey.
- Interactive online survey - provides customers easy access via IOUs websites. The interactive feature allows customers to obtain immediate results by answering specific questions regarding their home energy use online. This online home energy analysis only takes few minutes to complete, and provides an analysis of energy use in their home as well as energy-saving recommendations.

IV. Proposed Program Changes

Plans are currently underway to develop an interactive, online home energy efficiency survey in Spanish in 2003. According to recent census data, 25.8% of the Hispanic/Latino people currently living in the state, speak Spanish-only, and 13.7% speak

some English.[3] This new service will be offered through more effective and strategic marketing efforts aimed at increasing the response rate by customers who complete and return energy efficiency surveys. Addition of an interactive Spanish HEES facilitates the following:

- Simplifies the process for Spanish-speaking hard-to-reach customer to obtain information on how their behavior can affect their home energy costs, and provide them guidance on how to improve their homes' energy efficiency;
- Increases overall customer participation for this hard-to-reach customer segment;
- Provides Spanish hard-to-reach customer another way to communicate with the IOUs; and provides a medium to learn about other energy efficiency services, and
- Increases overall participation on the online HEES.

V. 2002 Program Successes

In 2002, the online and mail-in audits continue to receive increased activity after a sluggish start. SCE expects to see greater activity in the remaining quarter 2002 due to aggressive print and website promotion. With the 2003 addition of the Spanish interactive, online home energy efficiency survey, the program will be positioned to reach a large population of this growing hard to reach market segment.

The Home Energy Efficiency program is uniquely designed to provide customers with customized energy efficiency information. By considering account history and behavioral considerations the report provides pertinent information on actions the customer can take to improve overall energy efficiency on their home.

Additionally, because of the IOUs ability to cross-reference other utility programs such as customer assistance (e.g. CARE, DAP, medical baseline), through either community outreach events or the Internet, customers are provided with a greater selection of energy efficiency services and opportunities.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission (Commission) approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not

[3] Based on Census data for California from the national 2002 census

imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

Program progress for the written survey to include both hard-to-reach and non hard-to-reach, will be reported based on the following:

- 18,000 completed survey reports returned to customers

Program progress for the on-line version of the survey will be reported based on the following:

- 12,000 surveys completed on-line

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

SCE will work within the Commission's definition of hard to reach customers as defined in the Energy Efficiency Policy Manual; to actively target one or more of the customer segments for mailing. Consistent with Commission direction, at least 50% of the mailed surveys will be sent to hard-to-reach customers.

X. Program Coordination with Other Energy Efficiency Programs

Where possible, the Home Energy Efficiency program will leverage energy efficiency messages with other existing third party and utility programs in order to achieve maximum consistency in the overall energy efficiency message for California residents.

XI. Customer Inquiry and Complaint Procedures

Any customer questions that cannot be answered by the survey vendor, and all customer complaints, are referred to the SCE Program Manager. The SCE Program Manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Programs

California Energy Star® New Homes Programs -
Multi-Family California Energy Star® New Homes Program
Single Family California Energy Star® New Homes Program

II. Requested Total Budget

$750,000 - Multi-Family California Energy Star® New Homes Program
$4,250,000 - Single Family California Energy Star® New Homes Program

III. Program Description

The California Energy Star® New Homes Programs continue to build on one of the most successful efforts undertaken over the past decade by Pacific Gas & Electric (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E) and Southern California Gas (SoCalGas) to influence the design and construction of energy-efficient single family and multi-family dwellings. The most successful elements of the various utility programs have been combined with input from the California Energy Commission, the U.S. Environmental Protection Agency (EPA), and California home builders to create two statewide programs with identical applications, incentives, and requirements for both the single family and multi-family sectors, with a targeted effort in Hard-to-Reach (HTR) residential new construction markets.

The residential new construction market for both single family and multi-family housing has long been recognized as a potential "lost opportunity" for long-term energy savings. Building homes and apartment buildings (units) that are even more energy-efficient than the State's minimum energy usage requirements as detailed in the California Code of Regulations Title 24, California Building Standards Code, Part 6 (Title 24) is more sensible both economically and environmentally.

The California Energy Star® New Homes Programs are designed to encourage single family and multi-family (including rental apartments, condominiums, and townhomes) builders to construct units that reduce energy usage through a combination of financial incentives, design assistance and education. Due to the long-term nature of new construction, these incentives will be available to participants that meet program requirements and can be verified by December 2005. The program is performance-based and no specific measures or equipment are required for participation or qualification.

The program will offer a multi-family high-rise component for projects that use the 2001 Energy Efficiency Standards for High-Rise Residential Buildings. The EPA's Energy Star® currently does not have a designation for multi-family buildings above 3 stories. The information gathered as a result of this component will be shared with EPA Energy Star®. EPA

is interested in the outcome of this program activity for possible future Energy Star® designation of multi-family buildings that are four or more stories.

To make it easier for single family and multi-family builders to participate in the Programs on a statewide basis, the utilities have adopted identical application procedures and program requirements. PG&E, SDG&E, SCE and SoCalGas will offer training, design assistance and marketing support. Each of these added services will be customized to the needs of the individual utility's service territory.

The programs have implementation teams made up of field personnel as well as consultants with technical expertise in both the multi-family and single-family markets. The implementation teams will market the program to the builders, provide technical and feasibility analysis, assist with program documentation and application requirements.

Marketing and Outreach

Outreach to the single family and/or multi-family homebuilders will continue through each utility's local and regional involvement with the Building Industry Association, Affordable Housing Association, and other associations related to single family, multi-family residential new construction, with emphasis in the Hard-to-Reach segments of those markets. Collateral materials needed to support the implementation of the Programs include a statewide Multi-Family Program Application and Single Family Program Application, and a multi-family and single-family builder brochure/fact sheet that will summarize the programs' requirements. PG&E, SCE, SDG&E and SoCalGas will maintain a presence in industry activities that offer opportunities to promote the statewide programs.

IV. Proposed Program Changes

Performance Threshold

The 2002 California Energy Star® New Homes Programs offered a two-tiered approach that focused on the energy efficiency performance of the unit. The minimum requirement for program participation was to reduce energy usage by 15 percent from minimum compliance with Title 24, thus establishing tier one. Tier two recognized those units that reduced energy usage by 20 percent. Depending on the climate zone in which the units were built, the corresponding incentives for these two performance thresholds ranged between $400 and $900 for the single-family program. The multi-family program offered incentives of $150 and $250 for the 15 percent and 20 percent performance thresholds, respectively. Climate zone was not a factor for multi-family.

In 2003, the Programs will offer only the 15 percent performance threshold. This performance requirement aligns itself with the Energy Star® New Homes participation requirements for California, as well as optimizing the opportunity for increased energy savings at a lower incentive. The revised performance threshold also factors in climate zones in the single-family program. An additional benefit is the potential for increased participation in the program due to maximization of the incentive dollars.

The following table lists the proposed incentive structure for 2003. Note: "15 percent ≥ Title 24" means that for program participation the total proposed design for energy use is at least 15 percent better than the total standard design.

Program	Climate Zones	Performance Threshold	Incentive per Unit
Multi-Family	All Climate Zones	15 percent ≥ Title 24	$150
Single Family	Coastal (CZ 1-7)	15 percent ≥ Title 24	$400
Single Family	Non-coastal (CZ 8-16)	15 percent ≥ Title 24	$500

Multi-family Design Assistance Option

In various regions throughout California, participation in the multi-family program is growing, but has been slower to subscribe than single family, primarily due to the fact that it has been a relatively new market to energy efficiency. To further stimulate participation in the multi-family program, PG&E, SDG&E, SCE and SoCalGas will make available to builders a design assistance option. By working with architects, engineers, energy consultants, etc., multi-family builders are comfortably "ushered" into the program by organizations they already use for project design. For the statewide multi-family program, design assistance will be customized based on the needs of the multi-family participants in the various utility service territories. SCE intends to offer this design assistance opportunity as an extension of the program participation process.

Multi-family Verification Support

Additionally, the 2003 multi-family program will offer verifications to the builder as an added service for participating in the program. This is an enhancement to the 2002 program in which most participants had to hire their own CHEERS inspectors to conduct verifications. Program activities have identified that multi-family builders are not familiar with the HERS verification requirements. In 2003, PG&E, SDG&E, SCE and SoCalGas will offer HERS verification support as a feature of the multi-family program. It is the intention of PG&E, SDG&E, SCE and SoCalGas to rapidly introduce the HERS procedure to the multi-family new construction market. By assisting this market in understanding the requirements and related costs and benefits of HERS verifications, it is the hope of PG&E, SDG&E, SCE and SoCalGas to further educate the multi-family building industry to the value of program participation.

V. 2002 Program Successes

The California Energy Star® New Homes Program, has been recognized by the building community as a valuable resource in advancing increased energy efficiency in new construction. The California Building Industry Association (CBIA), along with the California Energy Commission, continues looking to the utilities for help in educating builders and other industry participants on proposed building code changes, and in transitioning the market towards a smooth adoption of code changes through rebates and training. The programs have an implementation team in place that markets the programs to single-family and multi-family builders. These implementation teams also provide assistance to the builder in completing the program applications and gathering the necessary supporting documentation that is required for submittal with the program application.

SCE is on track to hit the HTR goal established for the 2002 program. Although the multi-family program has been slower to subscribe (submit approved applications), the pending activity indicates the HTR outreach will be successful.

SCE has maintained a presence in the residential new construction industry for over a decade. Through energy efficiency programs, training, and information resources, SCE has served as a "tool" used by builders in their effort toward understanding and achieving energy efficiency. The intended goal resulting from SCE's energy efficiency offerings is to shift residential building practices toward approaches that conserve energy and resources, while also improving the economy. Through the California Energy Star® New Homes Programs, SCE, along with the other California investor-owned utilities (IOUs), has made great strides toward achieving this goal.

VI. Proposed Energy & Peak Demand Savings Targets

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Coastal SF	Dwellings	500	252,000	504	268	0.54
Non Coastal SF	Dwellings	4,500	3,744,000	832	3,960	0.88
Multi-Family	Dwellings	1,000	143,200	143	154	0.15
Total			4,139,200		4,382	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

Energy and demand targets may vary between single family and multi-family. Numbers are being adjusted from 2002 forecasts to reflect actual proposed

Note that the SCE and SoCalGas single family and multi-family forecasts should be viewed in concert with one another. Owing to the overlap of service territories, SCE and SoCalGas have structured their programs focus and outreach efforts to minimize overlap and maximize resultant savings. SCE will focus its efforts primarily on the single-family market and builders serving that market. SoCalGas will focus its efforts primarily on the multi-family market and builders associated with that market. Marketing and outreach efforts will be coordinated so as to ensure that both the single family and multi-family opportunities are efficiently handled for builders serving both market segments and for builders working in municipal utility service territories served by only one of the two IOUs.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$3,256,702	$5,593,251	($2,336,549)	0.58
Participant Cost Test	$6,670,877	3,722,000	2,948,877	1.79

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

This section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

PG&E, SCE, SDG&E, and SoCalGas possess strong community ties and well-developed relationships with local builders, associations and organizations that serve Hard-to-Reach markets. In the past, many of these market actors have participated in the utilities' individual residential new construction programs. However, prior to 2002, the participation of these market actors was not tracked independent of the "general population." The sheer expanse of the geographic area served by the statewide programs provides the utilities with an even greater opportunity to work with a larger and more diverse Hard-to-Reach market.

For 2003, SCE will continue to target 20 percent of the combined direct implementation funds of these two programs to the hard-to-reach customer segments.

Outreach Strategies

Substantial housing is developed by housing authorities. PG&E, SDG&E, SCE and SoCalGas implementation teams have established relationships with these entities through previous programs and continued outreach. Projects proposed by these agencies mostly consist of senior, disabled, and moderate-income housing. These will be targeted for program participation. In addition, projects meeting federal affordable housing criteria will be targeted. Rental housing projects and projects in rural and moderate-income areas will be specifically targeted. If housing project appears targeted to a specific language group or is in a zip code with a majority of ethnic households, it will be more likely to include non-English occupants. Such projects will be targeted to encourage program participation.

X. Program Coordination with Other Energy Efficiency Programs

SCE will continue its work with local governments through the SCE Local Government Initiative (SCE-LGI). A primary component of the SCE – LGI is the Community Energy Efficiency Program which, in part, promotes the California Energy Star New Homes Programs to the building departments of the participating jurisdictions. The coordinated effort between residential new construction and the local government outreach will continue through 2003.

XI. Customer Inquiry and Complaint Procedures

Any customer questions that cannot be answered by the field delivery staff, and all customer complaints are referred to the SCE Program Manager. The SCE Program Manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Energy Efficiency Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Nonresidential Standard Performance Contract (SPC) Program

II. Requested Total Budget

$14,400,000

III. Program Description

The SPC Program offers cash incentives for custom-designed energy savings retrofits of existing business facilities. The SPC program is designed primarily for large and medium businesses, but small and very small businesses can also participate if their measures do not qualify for the Express Efficiency Program. Examples of possible SPC projects include:

- Refrigeration system upgrade at a chain of grocery stores
- Chiller and HVAC (heating, ventilating and air conditioning) replacement in a large office building
- Lighting system, boiler and energy management system retrofit in a school district
- Variable speed drives and efficient motors in processing plant
- Steam system waste heat recovery project at a food processing plant.

Any nonresidential customer paying the gas or electric public goods charge in the investor-owned utility (IOU) service territories is eligible. This includes such customers who may have opted to purchase electricity or gas from other suppliers. Third party Energy Efficiency Service Providers (EESPs) who sponsor energy efficiency retrofit projects at nonresidential customer facilities are eligible to participate.

The SPC Program pays incentives based on standard incentive rates per kilowatt-hour (kWh) of electricity or therm of gas saved. Financial incentives provided under SPC are intended to help offset costs for investments in custom energy efficient facility retrofits. The following incentive levels are subject to change based on market conditions:

- $.08 per kWh saved (other measures)
- $.14 per kWh saved (HVAC/refrigeration)
- $.05 per kWh saved (lighting system measures)

SPC program incentive caps will be $300,000 per project site. Statewide incentives are capped at $1.5 million per Corporate parent and $4.0 million per State and Federal Agency, County and Local governments. Project Sponsor and Corporate Parent, whether a self-sponsoring customer or a third party, are limited to 25% of the IOU SPC incentive

budgets. SPC incentives will be limited to the lesser of the SPC site incentive cap, 50% of the SPC project cost, or 25% of the utility SPC incentive budget.

Incentives for energy saved will be based on SPC CD-ROM software, engineering calculations, system modeling or quantitative measurements. IOUs will retain the option to require measurement and verification of energy savings on those projects where energy savings cannot be estimated. Complex projects with questionable or unproven energy savings or new technologies may be required to perform 1 or 2 years of measurement and verification. Projects using the "Measure Savings" option will receive an additional 10% energy savings incentive to help defray measurement and verification costs. Measure Savings projects can receive up to 110% of the estimated incentive dollars based on actual measured energy savings.

IV. Proposed Program Changes

The following change is proposed for the 2003 SPC program:

- Modify the 80-20 rule: The 80-20 rule requires lighting only projects to add non-lighting measures where at least 20% of the energy savings are from non-lighting measures. The proposal is to modify this rule to all fluorescent lamps except for T-5 and PL lamps because the existing 80-20 rule limits the installation of "leading edge" lighting technology. The 2003 SPC program will continue to limit lighting project incentives to 30% of the incentive budget to encourage diversity in other than lighting projects. This restriction alone has managed to avoid over-funding of lighting only projects.
- Increase the therm incentive rate: The therm incentive rate is currently 45¢/therm. The proposal is to increase this rate to 60¢/therm. Increasing the incentive for gas measures will offset more of the project cost for gas measures, which tend to be more costly than other measures. Gas projects in 2002 were less than forecasted and this change should help to increase program participation and therm savings.

V. 2002 Program Successes

The SPC program has been so popular with large customers that most of the IOUs SPC budgets were "fully subscribed" during the second quarter of 2002. The SPC program is the only incentive program for energy efficiency measures available to large nonresidential customers (>500 kW or 250,000 annual therms), and represents a valuable source of energy savings that can be readily captured with minimal marketing. Most IOUs currently have established a list of customer projects waiting for SPC funding which demonstrates high customer demand and the strong need for this program to continue in 2003.

This program has been highly effective in encouraging installation of energy efficiency measures by businesses that have more customized needs, employ more innovative technologies, or are considering larger, more complex projects. The SPC program effectively targeted, EESPs, utility business customers, trade associations, other local business groups and government entities.

The 2002 SCE SPC program was fully subscribed by June 2002. A waiting list was established at that time. The waiting list currently consists of over 60 applications, representing more than 30 million kWh of potential energy savings.

VI. Proposed Energy & Peak Demand Savings

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Air Conditioning	kWh	13,520,000	7,165,600	0.53	1,886	0.00014
Lighting	kWh	27,040,000	14,331,200	0.53	2,389	0.00009
Other	kWh	94,641,650	50,160,075	0.53	10,450	0.00011
Total			71,656,875		14,724	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$51,200,947	$16,907,508	$34,293,439	3.03
Participant Cost Test	$107,427,100	26,112,710	81,314,390	4.11

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The SPC program was not designed for the hard-to-reach customer. However, the IOUs will continue to do outreach to all customers in 2003.

X. Program Coordination with Other Energy Efficiency Programs

The SPC program is designed to enhance, leverage, and coordinate with other IOU energy efficiency initiatives. Statewide information, education and audit programs will be used to create interest and participation in SPC. Partnerships with community-based organizations, trade associates, the Chamber of Commerce, and other local business groups will be pursued to leverage on-going non-utility energy efficiency and conservation programs and like activities.

To the extent possible, the SPC program promotions and information will be fully integrated with other statewide information, services and financial incentive programs that will be available to business customers. The SPC program, along with other energy efficiency programs, will be promoted to customers using the utility websites, utility

representatives, EESPs, mailings and through events in the Education and Training Services Program.

Energy efficiency measures covered under Express Efficiency programs are not eligible under SPC. Also, "double dipping" of rebates or other financial incentives from other energy efficiency programs offered by other entities such as manufacturers or the California Energy Commission is not permitted. Customers accepting SPC financial incentives will be required to acknowledge the source of funds when signing a SPC Agreement (i.e., contract). The SPC Agreement will contain standard language requiring that the customer has not received funds from the same activity from another program source.

XI. Customer Inquiry and Complaint Procedures

Customer questions, concerns or disputes related to the SPC program policies and procedures are typically fielded by the SPC Program Manager or the Energy Efficiency Call Center representatives who respond to incoming calls to a toll-free 1-800 number listed in all program materials and applications. Call Center representatives have received training and have knowledge of the energy efficiency programs implemented by SCE; therefore nearly all customer inquiries or concerns can immediately be resolved. Any inquiries, concerns, or disputes that cannot be readily handled by the Energy Efficiency Call Center are referred to the Program Manager for further evaluation and follow up. In those rare instances, where a Program Manager is unable to resolve the issue, the matter will be referred to the next level of management for resolution.

If a customer has a dispute related to work performed by a licensed contractor, the customer will be referred to the Contractor State Licensing Board. If the dispute is related to work performed by a non-licensed contractor, SCE will recommend that the customer work directly with the contractor to resolve the dispute.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Express Efficiency

II. Requested Total Budget

$7,000,000

III. Program Description

The Express Efficiency program is a statewide program that provides financial incentives to small and medium sized business customers for installing selected energy-efficiency measures. The primary objective of the Express Efficiency program is to help small and medium business customers achieve long-term annual energy savings and demand reductions through energy-efficient retrofits. The Express Efficiency program is designed to be easy for customers and vendors to use and understand, design features that are particularly important for achieving savings in the small and medium-sized business segment. The Express Efficiency program has operated for over 20 years, has generated substantial, cost-effective energy savings, and is popular with customers and vendors given its history and simple program design.

Rebates offered by the program help small and medium-sized business offset the costs of upgrading standard efficiency equipment to high efficiency equipment. Specifically, the Express Efficiency program seeks to achieve cost-effective and long-term energy savings through the retrofit of older, inefficient equipment with new energy efficient lighting, HVAC, refrigeration, agricultural, gas and motor measures.

The Express Efficiency program strategy is designed to help small, medium, and hard-to-reach business customers overcome some of the obstacles that typically prevent program participation. One of the key barriers identified is the lack of the credibility of energy savings estimates. The energy savings estimates for Express Efficiency measures have been documented extensively. In addition, the program offers written material, technical support, and on-line resources to help give customers confidence in their decision to retrofit.

Another major barrier is higher start-up expense for high-efficiency measures relative to standard-efficiency measures. Rebates provided under the Express Efficiency program offset the higher cost of high efficiency measures. As program participants become more familiar with the assortment of energy efficient options available and gain a greater awareness of the value of choosing energy efficient equipment, they are more likely to incorporate energy efficiency into their product selection.

IV. Proposed Program Changes

The 2003 Express Efficiency program will continue essentially the same as in 2002, with the following proposed changes:

Eliminate the "Account Aggregation Rule" For Chain Accounts - In 2002, eligibility for customers with more than one site or service account within a utility service territory was determined by summing the peak demand of all the sites or service accounts under the same customer billing address. If the sum of the service account peak demands was under 500 kW, that customer would be eligible for the Express Efficiency program. The account aggregation rule was difficult for customers to understand, and created a significant barrier for eligible and non-eligible customers alike. For example, under the account aggregation rule, two convenience stores, located side by side with similar energy consumption patterns might be treated differently. If the first store was owned by an individual with multiple stores or commercial accounts with aggregate demand greater than 500 kW that store would be ineligible for Express. Meanwhile, the second store, owned by an individual who did not have other commercial accounts, would be eligible and qualify for a rebate. In order to protect against large customer chains receiving a large proportion of the program incentive funds, a limit will be placed on the amount one customer (i.e. corporation or chain account customer) would be able to receive. The limit is anticipated to be about $25,000 per customer or corporation, but will be set by each utility in proportion to its total Express Efficiency incentive budget.

V. 2002 Program Successes

The statewide Express Efficiency is a continuation of a successful program that has operated for years and has generated a significant amount of energy savings and demand reductions in the previously underserved small and medium sized business market segment. Given its simplicity, Express Efficiency is popular with vendors and customers alike. Specifically, in 2002, Express achieved the following:

- **High Participation by Hard-to-Reach Customers** - In 2002, a primary goal of the Express program was to increase program participation by hard-to-reach customers. This focus on hard-to-reach customers resulted in increased participation by smaller customers and those in the geographically hard-to-reach areas. Increased participation by hard-to-reach customers is especially noteworthy given the current economic downturn. Hard-to-reach customers are more expensive to serve, as they typically require multiple contacts and additional education before they are willing to participate. Also, given the downturn in the economy, hard-to-reach customers have less financial resources than before to pay for larger initial capital costs of energy efficient measures.
- **Statewide Operating Procedures**- The statewide program successfully implemented a fund reservation system that operates identically in all service areas, and statewide collaboration yielded collateral materials used to market the program in all service areas. The collateral material includes applications, which are available in five foreign languages, a customer handbook, vendor guidelines, and other forms that are identical for each program administrator.

SCE-specific successes include:

Increase In Hard To Reach Customer Participation Over 2001 – By year end, SCE will have increased the proportion of Hard To Reach customers participating in the Express Efficiency program by about 10%, from 44% to about 47%. This is a noteworthy accomplishment that SCE was able to attract hundreds more of these customers into the program than in prior years.

Energy Savings Goals Exceeded - By the end of 2002, SCE expects to exceed its original energy savings targets by approximately 30%. This was due primarily to the increasing acceptance and cost effectiveness of compact fluorescent lamps. CFLs were used by participating vendors as an introduction to energy efficient equipment for the small hard to reach customers. Due to the tremendous influx of the many types of CFLs now on the market, the incremental measure cost is greatly reduced compared to just one year ago. SCE energy efficiency customer representatives held many successful customer events that "bridged the gap" with credible technology information. With CFLs as the introduction into the world of energy efficiency, many customers proceeded to implement different types of energy efficient equipment not previously considered. It is expected that the effects of this "introduction" will carry over into future program years.

VI. Proposed Energy & Peak Demand Savings

For 2003, SCE estimates 71,869 MWh of annualized net energy saving and 15.0 MW of demand reduction. This projection assumes about the same mix of measures as achieved in the 2002 program (See, Attachment A for a complete list of proposed measures). SCE will continue to educate customers and work with vendors to achieve a wider mix of measures that includes food service and refrigeration measures, building on the increase in customer awareness of the program benefits achieved in 2002.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$43,181,360	$14,061,756	$29,119,604	3.07
Participant Cost Test	$49,683,387	12,002,677	37,680,710	4.14

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

For 2003, SCE proposes to maintain the high proportion of 2002 participating hard-to-reach customers at 47 percent. Hard-to-reach customers are defined as customers meeting either of the two measurable hard-to-reach criteria of location (in one of the rural zip codes) or size (monthly demand 20kW or less).

X. Program Coordination with Other Energy Efficiency Programs

In 2003, SCE representatives will actively partner with local program administrators within SCE territory, local governments, and networks of community based organizations, faith based organizations, ethnic business organizations, chambers of commerce, and other customer trade associations, to increase program outreach at the local level. The partnerships will build upon the individual strengths of each of the entities to increase both local participation and the efficiency of program delivery.

SCE has an excellent group of energy efficiency account representatives to help the individual members of these organizations and customer groups overcome the barriers to energy efficiency they face. These barriers include, language, geographic location, and ethnicity. SCE provides training, educational materials and technical support targeted specifically to meet the needs of these customer groups. Our local partnerships will continue to help achieve greater energy savings through the synergies created by leveraging the combined strengths of all participants.

XI. Customer Inquiry and Complaint Procedures

SCE has an Express Efficiency Technical Support Desk which is staffed Monday – Friday from 8 am to 5 pm. These individuals are knowledgeable in all aspects of the program (technical and administrative) and are there to answer customer questions and provide guidance relative to their program participation. If a customer has a question, concern or dispute that relates to program policies, rules or procedures, the Technical Support Representative will elevate the issue to the appropriate level of SCE management for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Nonresidential Energy Audit Program

II. Requested Total Budget

$2,200,000

III. Program Description

The Nonresidential Energy Audit Program offers free energy evaluations through an energy audit to nonresidential customers. The energy audit provides customer assistance in the form of information on the benefits to the customer of installing measures or adopting practices that can reduce the customer's utility bills. The energy audit recommendations are based on the customer's recent billing history and/or customer-specific information regarding equipment and building characteristics.

This program has been and will be marketed using various methods including bill inserts, mailings to specific market segments, utility websites, utility representatives, and one or more of the following: partnerships with public-private organizations (in energy efficiency, water conservation and pollution prevention), community and faith-based organizations, colleges and universities, municipal electric and gas utilities, and governmental agencies.

Several resources will be used to reach the hard-to-reach (HTR) customer segment. These resources included one or more of the following:

- Distributing mail-back audits and CD-ROMs at customer fairs, events and third party activities;
- Working with Community Based Organizations (CBO);
- Making calls to customers identified as hard-to-reach; and/or
- Distributing CD-ROM audits tools to selected businesses, through CBOs and local agencies, or through utility representatives.

The customer segment and type of audit offered are listed below:

Customer Eligibility for Surveys

Customer Segment	**Type of Audit**				
	Mail-In	CD Rom	On-Line	Phone	On-Site
Hard to Reach	✓	✓	✓	✓	✓
Very Small	✓	✓	✓	✓	✓
Small	✓	✓	✓	✓	✓
Medium		✓	✓		✓
Large *					✓

* This program is open to all nonresidential customers with the exception of large non-core gas customers that do not contribute to the gas public purpose programs as per AB1002.

The various types of audits available include:

- A Phone-Administered Energy Audit is conducted over-the-phone and provides energy information and technical assistance to customers.
- A Mail-in audit is an audit questionnaire that is completed by the customer and mailed to the utility or its vendor.
- A CD-ROM audit is a computer disk that contains an audit survey to be completed by the customer.
- An On-line Energy Audit is offered when a customer logs on to the utility website and links to the on-line energy audit questionnaire.
- An Onsite Energy Audit involves going to a customer's facility and performing an energy assessment.

All audit tools provide written reports, outline or refer to potential energy and dollar savings, and provide information about utility's incentive programs.

IV. Proposed Program Changes

There are no program changes proposed for 2003.

V. 2002 Program Successes

In 2002, the experience, expertise and innovative strategies of the investor-owned utilities (IOUs) have made this program a success by offering nonresidential customers a full range of energy audits. The various audit delivery mechanisms were designed to meet the diversity of customers needs. Historically, the IOU's energy audits have been a preferred service for all market sectors and customer classes.

The on-line audit tool has proven to be very popular as a convenient means for customers to analyze their energy usage. Organizations, such as Chambers of Commerce and other industry related associations, have found this tool to be beneficial to their constituents. As a result, many organizations now link directly from their website to the IOUs website to allow easy access to the on-line audit tool. The CD-ROM audit tool is an option for those without Internet access.

The Energy Audit program provides customers with information about the IOUs energy efficiency programs, leads customers to changing their energy consuming behavior, and helps them to make wise investment decisions on energy-efficient equipment purchases. This program is a lead generator for IOU incentive and rebate programs.

In 2003, the IOUs will continue to deliver high quality energy audits. Customers have grown to expect the IOU's energy-use audit service, which will help build upon the successes of the 2002 program. The program design in place will continue to meet the Commission's goals and objectives for energy efficiency programs in 2003.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effective calculations performed for the 2003 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

SCE will conduct 7,100 energy audits for nonresidential customers. This goal will be tracked by the tabulating the number of each type of audit for nonresidential customers.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

SCE will conduct 2,840 energy audits for hard-to-reach customers as defined in the Commission's Energy Efficiency Policy Manual. This goal will be tracked by tabulating the number of audits for hard-to-reach nonresidential customers with a business size barrier and/or located in zip code areas identified as a geographic barrier.

X. Program Coordination with Other Energy Efficiency Programs

Each service under the Energy Audit program will cross-promote other customer energy efficiency programs, including both incentive and informational programs. Specific rebate amounts can be estimated where applicable, and referrals to other organizations' incentive programs (i.e., websites, toll-free number) will be provided. Handout materials to promote other energy efficiency resources (e.g., Flex Your Power) will also be developed and distributed as appropriate.

XI. Customer Inquiry and Complaint Procedures

Customer questions, concerns or disputes related to the Nonresidential Energy Audit Program policies and procedures are typically fielded by the Nonresidential Audit program manager or the Energy Efficiency Call Center representatives who respond to incoming calls to a toll-free number listed in all program collateral and applications. Call Center representatives have received extensive training and have detailed knowledge of the energy efficiency programs implemented by SCE; therefore nearly all customer inquiries or concerns are immediately resolved. Any inquiries, concerns, or disputes that

cannot be readily handled by the Energy Efficiency Call Center are referred to the program manager for further evaluation and follow up. In those rare instances, when a program manager is unable to resolve the issue, the matter will be referred to next level of management for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Building Operator Certification and Training Program

II. Requested Total Budget

$500,000

III. Program Description

The Building Operator Certification (BOC) and Training Program is a uniform statewide building operator training and certification program. Operators of medium and large commercial buildings (including governmental and institutional buildings and complexes) are the primary target group for this program. The program seeks to train operators of these buildings to identify and implement energy savings opportunities as an integral part of their operations and maintenance activities.

The program goal is to provide training and certification to operators of building energy systems. The goal of certification is to provide a professional credential to the participating building operators, which adds value to their jobs and recognition by their supervisors and throughout the state of California.

Building operators will learn to get the most out of their systems by improving their analytical and practical skills on the job. The training will include equipment operations, the latest methods of building operation and maintenance and how to incorporate energy efficiency and peak reduction opportunities. These opportunities range from installing more energy efficient equipment to proper maintenance of existing equipment for more efficient operations. The knowledge gained from this training program is expected to improve facility operations in both the short-term and long-term post-class periods. The increased awareness of energy saving knowledge for the building operator community will generate electric power demand reductions and energy savings statewide.

The IOUs worked with the Northwest Energy Efficiency Council (NEEC) to develop the training curricula for the Level I BOC course in 2002. NEEC's training curricula covers subjects pertaining to the equipment and day-to-day operations encountered by building operators. Classroom homework requires participants to identify energy saving opportunities at their facilities. The standard curriculum includes, but is not limited to, the following full day training modules:

- 1st class--Building Systems Overview
- 2nd class—Facility Electrical Systems
- 3rd class—Energy Conservation Techniques
- 4th class—HVAC Systems and Controls (Part1)
- 5th class—HVAC Systems and Controls (Part 2)

- 6th class—Efficient Lighting Fundamentals
- 7th class—Maintenance and Related Codes
- 8th class—Indoor Air quality

There will be testing of all participants to evaluate the amount of knowledge retained by the participants. These tests will be designed to confirm the participant's mastery of the subject material. If the participant completes all courses and passes all course tests, he or she will receive a certification at the end of the training program.

A certificate of course completion and recognition will be awarded to all students who successfully complete this training program and the required testing. This certificate provides documentation and recognition that the recipient has achieved a fundamental level of knowledge in facility operations and building management.

IV. Proposed Program Changes

- Contract renewal: The IOUs will renegotiate with NEEC to continue the implementation of the statewide BOC training in 2003 because the current contract is only valid for the 2002 training sessions. The IOUs will contract directly with NEEC for regional classes and certification.
- 2003 training schedule: The 2003 BOC courses are scheduled to begin in June 2003 after the 2002 BOC training series has been completed.
- Level II BOC training curricula: The IOUs will work with NEEC to develop training curricula for a Level II BOC course. This is the next phase of training for student participants in the Level I BOC training. The IOUs plan to review NEEC's existing training course materials and modify if necessary.

V. 2002 Program Successes

The first 2002 BOC training course series began in October 2002. Eight statewide training course series are scheduled to begin in the fourth quarter of 2002, and are expected to draw over 180 participants on a statewide level. Although this is a brand new program in California, the contractor selected to implement this program has extensive past experience in the Northwest, and the number of building operators enrolling in the course has steadily continued to climb. Attendance at the first couple of classes has been very encouraging, and word of mouth recommendations from these early attendees is likely to generate additional interest among their peers. The 2002 BOC program is expected to be successful with first class of students receiving certification in 2003.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission's (CPUC) approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed

for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program, i.e., information programs, should not imply that a measure or program does not promote energy efficiency. Neither should it imply that there is no impact to the customer's use of electricity or natural gas, nor a corresponding impact to the electricity or natural gas system. However, pursuant to the CPUC's approved Energy Efficiency Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

The BOC progress will be measured through the following two metrics:

- Enroll a minimum of 100 students in the BOC training course in 2003. This goal will be tracked by tabulating the number of students who sign up for the training session.
- Offer 5 training course sessions of the BOC program. This goal will be tracked by tabulating the number of training course sessions offered in 2003.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

This program targets building operators of medium and large commercial facilities and is not designed for the small hard-to-reach (HTR) business customer. Interested HTR nonresidential customers may participate in the training program if they have a building operator for their facility. Although there is no HTR goal for this program, the IOUs will encourage eligible HTR customers to participate in this training by offering price discounts to these customers.

X. Program Coordination with Other Energy Efficiency Programs

The statewide IOU team for BOC is in regular communication and addresses coordination issues on an ongoing basis. The IOU's informational programs (such as the energy centers, educational programs and websites) list BOC as a program offering in materials appropriate to the target audience for BOC. Participants in the BOC program will receive information on SCE and other energy efficiency programs and services.

XI. Customer Inquiry and Complaint Procedures

The BOC contractor or the SCE program manager typically handles customer questions, concerns or disputes about the BOC program. The BOC contractor has procedures in place to identify participant dissatisfaction and is well positioned to make initial efforts to resolve any complaints. If the BOC contractor is unable to resolve a complaint, the SCE program manager is be contacted. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The SCE program manager will make every effort to resolve the situation to the participant's satisfaction. Unresolved disputes are escalated to the Manager of Nonresidential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Statewide Emerging Technologies

II. Requested Total Budget

$850,000

III. Program Description

The Statewide Emerging Technologies (ET) program is an information-only program that seeks to accelerate the introduction of energy efficient technologies, applications, and analytical tools that are not widely adopted in California. The program addresses all market segments, and is composed of two parts: Demonstration & Information Transfer, and the Emerging Technologies Coordinating Council (ETCC).

Overview: Demonstration & Information Transfer focuses on near-commercial and commercial energy efficient applications with low market penetration. The demonstration projects help to measure, verify, analyze, and document the potential energy savings and demand reduction of specific applications in different market segments. Information Transfer efforts disseminate project results, and are customized to the targeted markets. The ETCC is a statewide information exchange and coordination effort between the investor owned utilities and the California Energy Commission's (CEC) Public Interest Energy Research (PIER) program. Program efforts to select technology applications for assessment projects include working with PIER, as well as, but not limited to, members of the research and design communities, manufacturers, energy efficiency advocates, customer groups, universities, professional societies, national laboratories, government agencies, engineering firms, and industry and trade groups.

Operation: At the start of program year, the ETCC will coordinate and plan joint efforts for 2003, and initiate updates to the online ET database (http://www.ca-etcc.com/). The ETCC will meet throughout 2003. The statewide ET program efforts form an important link between ongoing energy efficiency Research & Development (R&D) efforts and energy efficient emerging technology applications commercialization.

Long-term Project Commitments: Program funding is collected during 2003 and committed to each assessment project during the course of the program year. Committed, yet unspent, project funding is accrued at the end of the year. Accrued funds are carried forward to meet project obligations into the future. In the case of the 2003 Statewide Emerging Technologies Program, committed project funding may be carried forward through 2006.

Marketing: The program uses a targeted approach, working with "innovators" who may further influence others. The utilities will deliver the program through demonstration projects, and through coordinated efforts similar to the ET database. Information will be disseminated through

many different outlets, including the Energy Centers, utility personnel and professional and community organizations.

IV. Proposed Program Changes

The program will not change significantly from 2002. The program will focus on new energy efficient emerging technology assessment projects in 2003. Some of the technology areas that SCE may assess through the program, while coordinating through the ETCC to avoid duplication, include, but are not limited to:

- Integrated Design for retrofit projects
- Advanced Daylighting Concepts & Controls
- Advanced Lighting Concepts & Controls
- "Perc" Replacement Commercial Cleaning Systems
- Advanced Refrigeration Technologies
- Variable Frequency Drive Exhaust Systems
- Radiant Barrier Coatings
- Advanced Building Envelopes
- Compressed Air Systems
- Agricultural Energy Efficient Technologies
- Energy Efficient Process Technologies
- Water and Wastewater Systems
- Membranes for water treatment and chemical recovery
- Advanced HVAC controls and Energy Management Systems

V. 2002 Program Successes

Through October 2002, the ETCC has met four times to discuss and coordinate the statewide activities. A final meeting for 2002 will take place before year-end. During the 2002 meetings, the California Energy Commission's PIER program managers reviewed with the utilities those projects and technologies that have advanced enough to warrant ET program consideration. For example, the "Night Breeze" technology from PIER Contract No. 500-98-024 has been incorporated into SCE ET assessments projects with Habitat for Humanity, and work is in progress to establish a collaborative statewide ET assessment project based on the PIER Commercial Kitchen Exhaust Systems, PIER Contract No. 500-98-031. In addition, the CEC and the utilities have re-designed and re-populated the ET Database. The ET database now lists the status of technology applications as they evolve through the commercialization process, and will list the results of the assessment process. The synergy that has been established between the R&D programs and the utilities' ET programs is working well and needs to continue.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in section VIII.

VIII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed

for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program, i.e., information programs, should not imply that a measure or program does not promote energy efficiency. Neither should it imply that there is no impact to the customer's use of electricity or natural gas, nor a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

The Statewide Emerging Technologies Program progress will be measured through the following two metrics:

- **Southern California Edison will perform six Emerging Technology Application Assessments.** The technology-application assessments may consist of a diversity of project types including: feasibility studies, simulation analysis, field demonstrations, controlled environment tests, commercial product development, design methodologies and/or tool development. These assessments may take up to three years to complete.

- **Annual Update to the Emerging Technology Database**. The list of emerging technology applications on the Emerging Technology Coordinating Council website (www.ca-etcc.com) will be updated during the program year.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Statewide ET program does not have specific goals for the hard-to-reach market segments. In general, the information the program generates through its demonstration activities tends to benefit all customers. One of the aims of an ET program is to explore the application a new technology has in various market segments, in an effort to characterize the widest possible deployment opportunities. The utilities will seek collaborative opportunities to host appropriate demonstration projects at hard-to-reach customer sites.

X. Program Coordination with Other Energy Efficiency Programs

The program's Information Transfer will be coordinated with the utilities energy centers and leveraged with the overall energy efficiency programs efforts. Also, it is important to note that SCE, under the Local Crosscutting category, proposed a local emerging technologies demonstration program. The Local Demonstration & Information Transfer program allows SCE to address other market segments, such as residential and new construction in addition to the nonresidential retrofit market targeted through the statewide efforts.

XI. Customer Inquiry and Complaint Procedures

The program will initiate a limited number of customer site demonstration projects in 2003, since not all emerging technology assessments require customer site testing. A customer site demonstration is governed by a negotiated agreement that sets the terms of the project, and provides a name, address, and phone number of a SCE contact for all required notices. Each demonstration project has an assigned SCE project manager. The assigned project manager is

responsible for all the implementation and operational aspects of the project. All customer questions and complaints are directed to the assigned project manager. If a dispute arises, the project manager will resolve it based on the terms of the negotiated agreement with the customer. In case the project manager cannot resolve a dispute, the issue is brought to the attention of the Design & Engineering Services unit manager for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Savings By Design

II. Requested Total Budget

$8,900,000

III. Program Description

Savings By Design (SBD) is an energy efficiency program for the new construction industry started by the investor-owned utilities in 1999 to provide statewide consistency and program stability to a market that demands both. It builds on successful new construction programs run by Southern California Edison (SCE) since the early 1990's. The program emphasizes early design involvement and offers building owners and their design teams a wide range of services including education, design assistance, owner incentives, and design team incentives. With very minor changes, the program will continue to serve the needs of project owners and design teams in 2003.

The SBD program influences nonresidential building owners, tenants, and design teams to exceed current Title 24 energy efficiency standards (or established standards for industrial and specialty processes) by 10 percent or more for their new construction or renovation/remodel projects. SBD also leverages resources from industry relationships, strategic alliances, and other public purpose programs to accomplish the goals of energy savings, peak demand reductions, and long-term market change.

The SBD program relies on three basic elements: the Whole-Building Approach, the Systems Approach, and education and outreach. The core strategy centers on an integrated design approach to optimize energy efficiency, known as the Whole-Building Approach. For those participants who would not normally consider or cannot use a fully integrated design approach, the Systems Approach provides a simplified, performance-based method, which moves owners and design teams far beyond simple prescriptive approaches. Finally, program education and outreach strategies, focused on the successful Energy Design Resources model, address market barriers by providing owners and designers with information, education, and tools to help them make the best possible energy efficiency choices. All three elements support the California Energy Commission's goals for market transition to the 2005 Title 24 code revision cycle.

The SBD program has met, and in 2003 will continue to meet, the Commission's goals and objectives for energy efficiency programs. SBD delivers cost-effective, permanent, and verifiable energy savings and peak demand reduction with long term energy savings of between 16 and 20 years, far exceeding the Commission's minimum target of three

years. Since 1999 SCE's SBD program has involved thousands of participants and has worked with hundreds of projects and design teams. The program's innovative educational elements and implementation strategies target market barriers and failures.

IV. Proposed Program Changes

Program stability is a paramount concern for SBD participants because in-depth energy efficiency analysis leading to substantive design and construction changes involves uncertainty and the possibility of increased costs. Thus, programs supporting the new construction industry must be tailored to industry needs and timelines, and the timelines are long. An expedited new construction project may take three or more years from concept to build-out, while standard new construction timelines run four to seven years and institutional and nonstandard projects can take a decade or more.

As recently as September 5, 2002, the State of California Energy Policy Advisory Committee stated in an open meeting that the three-year Savings By Design Program window was unrealistically short and provided an obstacle to state government participation. The American Institute of Architects, California Council and numerous program participants have also suggested extending the time available for program participation. Based on this response from the market, the time available for SBD program participants to complete their projects beginning in 2003 will be extended from thirty-six to forty-eight months.

V. 2002 Program Successes

SBD continues to receive substantial attention from owners in large and small private industry, government agencies, and local and regional institutions. Currently SCE projects that it will meet program kW, and kWh targets established for 2002. The involvement of industrial and agricultural customers in the program in 2002 has significantly increased savings and peak load reduction potentials, while bringing proven energy efficiency approaches and technologies to new markets.

A review of each utility's program records indicates continuing expansion of interest in SBD and an expanding pool of potential projects as the program increases market penetration. Currently, SCE has identified over 170 qualified leads from all nonresidential new construction market segments. These projects, most in early planning phase, will become eligible for the 2003 program and will feed the pipeline of potential projects for 2003 and beyond. Thus SBD program continuity will again provide the multi-year stability the new construction market demands while providing a responsive, multi-track approach that allows for program participation by a wide variety of participants.

VI. Proposed Energy & Peak Demand Savings

In compliance with Decision 02-03-056, Ordering Paragraph 14, SCE will reserve 50% of the direct implementation funds for projects that are the Whole-Building Approach.

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Whole Building	Gross kWh	17,409,858	10,929,112	0.63	3,258	0.0001872
Systems Approach	Gross kWh	44,400,806	31,883,783	0.72	4,560	0.0001027
Total			42,812,895		7,818	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$32,071,725	$12,324,940	$19,746,785	2.60
Participant Cost Test	$51,342,339	12,878,503	38,463,837	3.99

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

SCE will continue to focus on increasing participation of HTR customers in the SBD program. Based on the 2002 results-to-date, SCE is on track in reaching its significant HTR goal. SCE proposes to continue its aggressive approach by increasing the total percentage of HTR projects in 2002 by 25 percent over the rate of total project participation achieved in 2002. This means SCE's SBD program will increase the number of projects from HTR geographical areas from 6.25 percent, as set in 2002, to a 7.8% participation rate in 2003. As set forth last year, SCE will exclude chain accounts, where design decisions are centralized through a single corporate entity, in the count. The geographic areas are defined in the Energy Efficiency Policy Manual.

X. Program Coordination with Other Energy Efficiency Programs

SCE will deliver the program in partnership with Pacific Gas and Electric, San Diego Gas & Electric Company, and the Southern California Gas Company. The partner utilities will leverage strategic alliances with government agencies and private organizations to enhance market participation and maximize energy savings. To provide program continuity and consistency, the utilities will:

- Work together to implement the program with owners, designers, and others in multiple service territories;
- Continue to develop and employ alternative delivery models that enable a broader scope of customer participation;
- Coordinate and share design analysis assumptions and baselines;
- Provide referrals to appropriate utility for potential projects encountered that fall outside their own service areas;
- Conduct onsite installation verification for all completed projects;
- Collect, track, and compile comparable project information and results; and
- Provide quarterly and annual progress updates detailing program accomplishments and status.

The elements of the 2003 Savings By Design program proposed above adhere to previous directives of the California Public Utilities Commission and provide balanced, integrated strategies that address and leverage existing and new market relationships and conditions. This balanced approach will continue to support the market for energy efficiency in the nonresidential new construction marketplace.

Additionally, the SBD program's field delivery, educational elements, and outreach complement, and are integrated with, other Public Good Charge (PGC) funded efforts such as energy center, local programs, and nonresidential retrofit programs. Further, SBD as implemented underpins and enhances the efforts of non-PGC programs and organizations including the Collaborative for High Performance Schools, American Institute of Architects - SBD Energy Integration Awards, the California Commissioning Collaborative, and the California Energy Commission's Bright Schools Program, among many others.

XI. Customer Inquiry and Complaint Procedures

Any customer questions or complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Nonresidential Programs for resolution.

Attachment A: Program Budget and Activities

Energy Efficiency Education And Training Implementation Plan

I. Title of Individual Program

Energy Efficiency Education And Training Program

II. Requested Total Budget

$5,750,000

III. Program Description

The statewide Energy Efficiency Education and Training program is offered in the service territories of Pacific Gas & Electric (PG&E), Southern California Edison (SCE), San Diego Gas and Electric (SDG&E), and Southern California Gas Company (SoCalGas). Overall, the program promotes energy efficiency to a variety of customer segments through energy centers (physical and virtual) and other informational programs.

Energy Centers

Three of the four utilities possess physical energy centers: PG&E, SCE, and SoCalGas. SDG&E does not possess a physical center, however, they offer a number of energy efficiency classes to customers using other utility facilities or non-utility sites. The term "energy centers" in this Implementation Plan is inclusive of SDG&E in any discussion of seminars or classes.

The educational and information efforts of the energy centers and of SDG&E cover a broad spectrum of market actors including consumers, midstream actors such as design, engineering and contracting communities, and upstream market actors. The motivations to make use of energy center services encompass reducing operational costs, increasing productivity and profitability, and designing more efficient new buildings.

Two primary objectives of the energy centers are: 1) to disseminate information about energy efficient equipment and practices to utility customers for the purpose of assisting them to reduce energy usage, lower their bills, reduce operation and maintenance costs, and improve their productivity; and, 2) to provide services to a variety of market actors, architects, engineers, distributors, and contractors who use information and tools to design more efficient buildings or processes and to conduct energy efficiency retrofits and renovations.

The centers collect, transfer, research, evaluate, demonstrate and showcase energy efficiency concepts, technologies, and products for manufacturers, businesses, researchers, educational institutions and the general public. They are a physical "one-stop shop" for the customer, a single-source contact for an abundance of energy efficiency resources.

Product Labeling
In 2003, SCE will continue its Product Labeling Program to complement the residential Statewide Single Family Energy Efficiency Rebate Program. The objective of the program is to improve the sales and distribution of energy efficient products for the home through education and training to market actors. On a statewide level, the California utilities work with manufacturers and retailers to improve the distribution, floor stock allocation and sales of qualifying energy efficient products. The program provides training to retailer sales staffs and pool and HVAC contractors on SCE's rebate program. The program also disseminates rebate information and point-of-sale marketing materials to manufacturers, distributors, retailers and contractors to increase consumer awareness.

Informational Services
SCE's energy education and information services element is designed to produce a permanent change in the way nonresidential customers make decisions about equipment purchases and operational practices.

Over the years, it has been proven customers need reliable information regarding energy efficiency programs and technologies that they can integrate into their facilities and business operation practices. As part of the Education and Training program, SCE delivers this message. Targeting agricultural, commercial and industrial customers of all sizes, SCE representatives, using a variety of outreach medium, ensure awareness of energy center workshops, energy efficiency programs, and the cost benefit of energy efficient technologies. Through this element, new programs and service opportunities are introduced to customers, including other energy efficiency programs such as those offered by the State of California.

IV. Proposed Program Changes

No changes are planned for 2003. Continued emphasis will be put toward creating programs for the hard-to-reach market as defined in the Energy Efficiency Policy Manual. Promotion of the centers' activities will be enhanced to more specifically include this market, although not to the exclusion of larger or urban customers, whose use of energy is substantial.

V. 2002 Program Successes

In 2002, the centers continue to demonstrate that they are a source of reliable information to customers. The following program results indicate a strong demand for such activities.

From April 1 through October 2002 -

- 2,822 customers attended seminars held at the SCE energy centers.
- Energy center technical specialists provided consultations to 624 customers.

From January through October -

- 4,072 customers attended seminars.
- Technical specialists provided consultations to 836 customers.

New seminars offered since April 2002 include: Advanced Lighting Technologies, Lighting Controls for Energy Management, and Successful Merchandising with EE

Lighting. New displays that have been added to the centers include: Low Pressure Pumping, a SCADA Exhibit (Supervisory Control and Data Acquisition) for showcase and demonstration of various energy efficiencies and centralized data information presentation, a five horse power motor cut-a-way, and several new equipment displays and exhibits highlighting the latest in lighting, day lighting controls, electric motors/drives and providing customers information and an opportunity to see actual equipment operate. In their continuing efforts to leverage partnerships with third parties, the centers have developed new partnerships in 2002 which include: The Industrial Assessment Centers (IAC) at San Diego State and Loyola Universities, the California Community Colleges Chancellor's Office, Northwest Energy Efficiency Council, Maintenance Superintendents Association, Union Roofing Contractors Association, Integrated Waste Management Board, City Terraces Council, and the San Gabriel Mountains Regional Conservancy. As part of their statewide collaboration with other energy centers, SCE has offered thirteen joint utility classes since April and fifteen since October.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effective calculations performed for the 2003 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

In 2003, the program will continue to offer seminars/workshops/field services focused on promoting energy efficiency to customers. From April to December 2002, 150 such events will be completed by SCE energy centers. SCE proposes the following target for 2003:

- 200 energy efficiency events throughout the 12 month period

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

2002 was the first in which the educational efforts of all the IOUs included targeting the hard-to-reach customer. Baseline numbers of hard-to-reach customers were established

during 2002 using methods of tracking the participation of this market group in its education programs, based on the definition provided in the Energy Efficiency Policy Manual.

Outreach to the hard-to-reach communities includes distribution of energy savings information at community events and targeting community based organizations to enhance the distribution and dissemination of information efforts to their customer base.

From April to December 2002, SCE energy centers will hold 57 events targeting the hard-to-reach market. More than 1,000 customers from this market have attended these events so far, as well as other events that had not been specifically targeted to them. During the 2003 program year, SCE proposes the following HTR target:

- 75 events targeted to the hard-to-reach market over the 12-month period. This represents approximately a 10% increase in the attendance of HTR customers over 2002 levels.

X. Program Coordination with Other Energy Efficiency Programs

The centers also support other Public Goods Charge programs through the distribution of incentive and financing program promotional materials, providing field support, seminars, displays, equipment demonstrations and face-to-face contact with customers in a variety of venues, which can include trade shows and community meetings.

At the energy centers, literature is provided and graphics and signage are designed to make connections for the customer between the exhibits and displays and other available Public Goods Charge programs. Links are also created between seminar materials and available programs to insure customers attending seminars are aware of those offerings.

XI. Customer Inquiry and Complaint Procedures

Customers who attend seminars receive an evaluation form regarding the seminar. Results are tracked and any comments noted. Any customer questions or complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the next level of management for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Codes and Standards Advocacy, Statewide

II. Requested Total Budget

$1,150,000

III. Program Description

The Statewide Codes and Standards Advocacy Program (Codes and Standards) advocates upgrades and enhancements in energy efficiency standards and codes. Codes and Standards Enhancement (CASE) studies for energy efficiency improvements are performed for promising design practices and technologies and are presented to standards and code-setting bodies.

Codes and Standards activities create synergies with other programs, such as Emerging Technologies, energy efficiency equipment rebates, and energy audits, through the advocacy of specific energy efficiency measures. By providing long-term objectives, the Codes and Standards program captures the societal benefits from California's diverse energy efficiency efforts. Codes and Standards efforts are conducted within long-term code upgrade cycles; for example, building code cycles that are typically three years in California.

Overview: Pacific Gas & Electric, Southern California Edison (SCE), San Diego Gas & Electric, and Southern California Gas will collectively consider and coordinate CASE initiatives on various cost-effective building and appliance energy efficiency measures.

Operation: Codes and Standards program staff will participate in the California Energy Commission's (CEC) building and appliance efficiency standards activities and other appropriate forums, including rulemaking proceedings conducted by the U.S. Department of Energy. We expect to participate in CEC-conducted workshops on building energy efficiency standards (Title 24), appliance efficiency standards (Title 20), and related issues for defining the scope of the next rulemaking, and for commencing any new rulemakings.

Investor-owned utilities-supported activities will include further development of existing CASE studies, development of new CASE studies as appropriate based on consultations with the CEC and other stakeholders, and participation in other energy efficiency meetings related to Codes and Standards activities. After adoption, support for building official and trade groups may be conducted to support code or standard implementation.

Marketing: Although the Codes and Standards program does not include marketing in the traditional sense, Investor-owned utilities (IOUs) may support and participate in other energy efficiency standards activities such as those conducted by the U.S. Department of Energy, American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Cool Roof Rating Council, National Fenestration Rating Council, EPA's Energy Star programs, and other California rulemakings. Additionally, projects such as targeted training, scoping studies addressing retrofit residential and nonresidential building code opportunities, or advanced energy codes, may be included.

IV. Proposed Program Changes

There are no program changes proposed for 2003.

V. 2002 Program Successes

The IOU team met throughout 2002 to coordinate CASE initiative development activities. The CASE reports on various code enhancement opportunities were presented at public workshops hosted by the CEC staff. Many of the IOU initiatives are currently under consideration for adoption in 2003 by the CEC staff.

SCE completed the following CASE initiative work in 2002:

- High ambient packaged HVAC unit testing – completed and reported on variations in performance for standard efficiency and high efficiency units from one manufacturer.
- Staged-Volume Packaged HVAC Unit Study -report completed and submitted to the CEC supporting a compliance option for fan-speed reduction for packaged HVAC units during compressor off cycles.
- Time dependent valuation (TDV) residential computer simulation version completed for stakeholder use in assessing TDV methodology.
- EER and SEER as cooling season performance indicators – completed initial scoping phase of this initiative.
- Daylighting photocontrol study – initial audit phase completed.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in section VIII.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a

corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

To serve as a metric, each utility will provide summary reports on the status of each CASE study active within the current year.

- Southern California Edison will report on six new CASE studies in 2003.

Reports on presentations to the CEC are available through transcripts of CEC standards workshops, typically posted on the CEC website after public hearings. The transcripts include comments made by stakeholders and advocates.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Codes and Standards program does not have specific goals for the hard-to-reach market segments. In general, Codes and Standards activities support hard-to-reach market segments by advocating cost effective code enhancements that promote energy efficiency for all building types and appliances included in the California standards.

X. Program Coordination with Other Energy Efficiency Programs

The IOUs' Codes and Standards program staffs will meet periodically to coordinate inter-utility activities so that the limited statewide funding is used efficiently.

XI. Customer Inquiry and Complaint Procedures

The program does not involve direct consumer contact. Program participation is limited to attending program-sponsored workshops. Customers shall have the opportunity to provide feedback during workshops.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Upstream Residential Lighting

II. Requested Total Budget

$2,000,000

III. Program Description

The statewide program will continue to collaborate with interested multi-location retailers and manufacturers to offer point-of-sale (POS) discounts for Energy Star® qualified lighting products. POS offers a very cost-effective way of delivering program incentives. Customers receive a $1 or $2 per lamp discount when purchasing CFLs at participating retailers; a $5 or $10 per fixture discount when purchasing ENERGY STAR® qualified hard-wired indoor, outdoor or torchiere lighting; and a $20 incentive when purchasing Energy Star® qualified ceiling fans with light kits. This program offers many unique characteristics that benefit customers, retailers and simplify program delivery. These characteristics include:

- Providing consumer ease of use by promoting qualifying product purchases from participating retailers. There are no forms for consumers to complete, mail or track.
- Offering incentive funding for manufacturers to discount wholesale prices to retailers (other than products to participating retailers that are included in the POS rebates).
- Maximizing program reach by signing up some of the largest retailers in the state such as Costco, Home Depot, Lowe's, Sam's Club, and adding other chains or independent retailers.
- Extending outreach to grocery and drug stores either directly or through manufacturers that strategically assist us in reaching our Hard To Reach customers. Independent regional retailers will be included on a case-by-case basis as funds allow.
- Expanding program advertising to attract and raise awareness of Energy Star® qualified lighting among consumers by coordinating timing of promotional advertising by retailers, investor-owned utilities' (IOUs) websites and other statewide advertising.

The Upstream Residential Lighting Program meets California Public Utilities Commission requirements for delivering a coordinated statewide lighting program among the IOUs. This program is also coordinated with other lighting programs promoting Energy Star® qualified lighting including any promotion at the state level and with the

national Energy Star® program. This type of collaboration has tremendous potential for impacting the marketplace.

IV. Proposed Program Changes

Based on 2001 and 2002 program results, the IOUs were successful in providing discounted products to consumers. As noted in a number of trade journals and professional conferences, more CFLs were sold in California in 2001 than were sold in all of the United States in the year 2000. However, even with this success, CFLs are still not prevalent in a majority of households. To continue promoting of mass adoption of this technology to maximize energy savings, the IOUs will offer a tiered incentive for Energy Star® qualified CFLs and fixtures.

The proposed tiered incentive for Energy Star® CFLs, fixtures and floor lamps includes a $1 per CFL incentive for CFLs 19 watts or less and $2 per CFL incentive for CFLs 20 watts or greater. For indoor and outdoor hardwired fixtures, the IOUs propose an incentive of $5 per fixture for 19 watts or less and $10 per fixture for 20 watts or greater. The IOUs also propose to modify the incentive for Energy Star® torchieres to $5 per torchiere for those units that are 65 watts or less and $10 for those greater than 65 watts.

The IOUs propose these modifications based on historic product pricing and confirmed in recent program field surveys. The efficient lighting market is changing rapidly and the Residential Upstream Lighting program has had a positive result on product pricing for consumers (e.g., Energy Star® (ES) qualified CFLs have been sold for less than $2 at many retailers and less than $1 per CFL at a few retailers. The IOUs are also seeking to maximize program benefit. These changes in rebate levels will allow more products to be discounted (i.e,. 100,000 units incented at $2 each would change to allow 200,000 units incented at $1 each).

Measure	2002	2003
ES CFL 19 watt or less	$2	$1
ES CFL 20 watt or greater	$2	$2
ES Int./ or Ext. fixture19 watt or less	$10	$5
ES Int./ or Ext. fixture20 watt or greater	$10	$10
ES Torchiere < 65 watt	$10	$5
ES Torchiere > 65 watt	$10	$10
ES Ceiling fan with ES Light kit	$20	$20

V. 2002 Program Successes

The success of the Statewide Upstream Residential Lighting program is well documented in its achievements over the past two years. In 2001 and 2002, the IOUs made significant inroads in beginning the transformation of the compact fluorescent lamp (CFL) market. With millions of CFLs purchased statewide, the 2003 program will build on this success and continue to fulfill the Commission's objectives of:

- Delivering cost effective energy efficiency savings; and
- Providing participation options for the hard-to-reach (HTR) sectors.

The 2002 program rolled out in time for the September lighting season and in coordination with the Energy Star® Change a Light promotion. The IOUs program allowed the manufacturers to compete for the retailers business by discounting their pricing. This is allowing some retailers to offer products at less than $1 per CFL. Many locations are selling CFLs for $2 or less.

The discounted product was available at multiple retailers while the Flex Your Power and Energy Star® qualified lighting advertising was occurring. Many advertising circulars have been distributed with mention of the utility rebate available.

In the Statewide assessment of consumer behavior from 2001 completed by Quantum Consulting and Xenergy, the consultants state: "Overall 84% of Californians took some form of conservation action and 50% saved energy during the peak periods. Nearly half purchased some type of energy-saving equipment, most of which were compact fluorescent light bulbs …"

Many promotions are occurring within the geographic HTR and the Food and Drug retail sectors leading the IOUs to believe the HTR and Food and Drug goals will be met. Discounted product was or is being promoted at Costco, Long's Drugs, Lowe's, Orchard Supply, Sam's Club, Smart & Final, as well as many independent Ace Hardware and Tru-Value Hardware locations. Additional success is being reported by some manufacturers in ethnic community markets.

In a relatively short period, the partnership by IOUs, retailers, manufacturers and others advocating energy efficiency have begun to address many of the major barriers such as price and availability that has kept this market from adopting efficient lighting products. This program has made great strides in overcoming price and availability hurdles. Many of the retailers mentioned earlier has either never sold some of the Energy Star® qualified products that they are selling now or have never sold them at such a low price. However the potential market is huge and there are more hurdles yet to overcome. The study by Quantum and Xenergy suggests that 50 percent of the state has yet to try compact florescent lamps.

Successes within Southern California Edison Company's service area include participation (some for the first time) by numerous food retailers including Ralph's, 99 Ranch Markets, TS Emporium, Food 4 Less, and SaveMart. Many small rural groceries, convenience stores, hardware stores, and chain accounts also participated in 2002, as well as many large chains and co-ops, such as Ace Hardware, True-Value, K-Mart, and Home Depot. 2002 was SCE's first year to offer the retailer component, which offers the incentive directly to statewide retailers Costco, Sam's Club, Wal-mart, and Lowe's. SCE did several major ethnic promotions with groceries, some focused on rural areas. The manufacturers pitched in to make them give-away promotions in two cases, so many within the Asian and Hispanic ethnicities could be introduced to CFL technology.

VI. Proposed Energy & Peak Demand Savings

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Screw-in CFL 14 Watt	Unit	680,030	17,952,792	26	2,829	0.00
Screw-in CFL 20 Watt	Unit	165,000	6,732,000	41	1,056	0.01
Screw-in CFL 25 Watt	Unit	64,000	3,276,800	51	512	0.01
Screw-in CFL 32 Watt	Unit	1,000	69,600	70	11	0.01
Indoor Hardwired Fixtures - 16	Unit	17,000	761,600	45	120	0.01
Indoor Hardwired Fixtures - 30	Unit	22,040	1,569,248	71	247	0.01
Retail - Torchiere Floor Lamps -	Unit	6,000	830,400	138	0	0.00
Retail - Torchiere Floor Lamps -	Unit	4,227	517,385	122	0	0.00
Outdoor Fixtures Flood 13 Watt	Unit	9,000	792,000	88	0	0.00
Outdoor Fixtures Flood 27 Watt	Unit	9,400	1,639,360	174	0	0.00
Energy Star Ceiling Fan w/ CFL	Unit	1,000	26,000	26	14	0.01
Total			34,167,185		4,788	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$18,625,489	$8,348,839	$10,276,650	2.23
Participant Cost Test	$24,988,561	9,894,516	15,094,045	2.53

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The IOUs are challenged with ensuring that at least 15 percent of program incentive budgets are provided via retailers that are outside the HTR areas. SCE will support results, either sales data from the retailers or shipment data from the manufacturers. The data will include the store address and zip code as evidence of meeting the HTR goal. The units sold by the retailers or shipped by the manufacturers multiplied by the incentive amount paid will give the achieved budget amount that can be compared to the targeted HTR dollar amount.

Similarly, the IOUs are challenged with ensuring that at least 10 percent of program incentive budgets are via grocery and drug stores. SCE will support results using, either

sales data from retailers or shipment data from manufacturers of units provided via food or drug retailers. The retailer, the address and zip code of the store and the units distributed through the stores multiplied by the incentive amount paid per unit will give the achieved budget amount. This can be compared to the targeted grocery and drug store dollar amount. Opportunities to collaborate will be explored and implemented as funds allow.

X. Program Coordination with Other Energy Efficiency Programs

Program information will be available on websites and through phone centers. The program, when feasible, will also leverage the integration of other energy efficiency programs such as those that offer education and information connections through various crosscutting program activities. The program may also leverage the integration of other statewide and outreach campaigns such as those that offer information and education, e.g., Statewide Marketing and Outreach Campaign.

XI. Customer Inquiry and Complaint Procedures

Any customer questions or complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Residential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Residential In-Home Energy Survey

II. Requested Total Budget

$750,000

III. Program Description

The Residential In-Home Energy Survey program will provide customers, particularly hard-to-reach customers who do not respond to Internet and mail-in survey options, with a more personalized, face-to-face energy survey option. Maintaining this option is particularly important in 2003, with customers continuing to face higher rates than they did two years ago, and after they continue to be exposed to mass media campaigns and press coverage about the need for and general possibilities for achieving significant energy savings.

IV. Proposed Program Changes

SCE is planning a significantly increased direct mail campaign of up to 400,000 brochures of which at least 50 percent will be targeted to hard-to-reach (HTR) customers. In addition, SCE plans to distribute up to 100,000 post card size enrollment cards at public and community events. While SCE will continue to target Spanish-speaking and rural customers, SCE is requesting an increase in budget of $50,000, over 2002 levels, in order to expand marketing efforts to include the entire population of HTR customers as defined in the Energy Efficiency Policy Manual. Results of the 2002 program indicate that there is generally an equal interest in the in-home survey product across all segments of the HTR population and that it is more difficult to reach these customers through traditional outreach activities. The 2003 program will target a wider base of HTR customers with a goal of at least 50 percent HTR participation.

V. 2002 Program Successes

The 2002 In-Home Energy Survey Program is expected to reach its goal of 4,500 completed surveys with at least 50 percent participation by HTR customers. Although the program targeted primarily Spanish-speaking and rural customers, SCE discovered that the program was equally well accepted, and desired, by moderate-income customers and renters. The 2002 program has clearly demonstrated its value to HTR customers who may not have access to other survey programs.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program, i.e., information programs, should not imply that a measure or program does not promote energy efficiency. Neither should it imply that there is no impact to the customer's use of electricity or natural gas, nor a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

The Residential In-Home Energy Survey Program progress will be gauged with the following metric:

- Conduct 4,500 residential surveys

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Residential In-Home Energy Survey program will achieve 50 percent program participation, or 2,250 completed surveys, by hard-to-reach customers as defined by the Energy Efficiency Policy Manual.

X. Program Coordination with Other Energy Efficiency Programs

SCE will continue to coordinate this local program with the statewide and local residential programs to identify customers who prefer to utilize this type of survey. Customer awareness of program will be conducted through coordinated marketing campaigns promoting energy efficiency programs to the residential customer segment. Information will also be made available through websites promoting energy efficiency programs.

XI. Customer Inquiry and Complaint Procedures

Any customer questions that cannot be answered by the vendor and all customer complaints are referred to the SCE program manager. The SCE program manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of SCE's residential energy efficiency programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Small Nonresidential Hard To Reach

II. Requested Total Budget

$1,400,000

III. Program Description

Overview: The Small Nonresidential Hard To Reach program provides no-cost energy-efficient lighting retrofits to very small business customers in hard to reach rural areas of Southern California Edison's (SCE) service territory. This program addresses the barriers of split incentives and first cost, allowing these hard to reach customers to realize the benefits of an energy-efficient retrofit in their place of business.

Operation: The program targets small businesses with demand under 20 kW in rural areas. Lighting installation contractors, selected from a competitive bid process, solicit customer participation by performing a brief lighting audit and explaining the energy savings that could result from a retrofit. General energy efficiency information and recommendations are provided to the customer at this time, in the customer's preferred language. In recognition of the small business owner's busy schedule, there are no complicated application forms for the customer to fill out. If the customer wishes to proceed, a participation agreement is presented for signature, and the lighting installation contractor either makes an appointment to return to the customer's facility and perform the retrofit, or may perform the retrofit on the spot.

Marketing: This program is selectively marketed to the target customer group through telemarketing and direct contact. Customer communication is conducted 'in language' where appropriate. Chambers of commerce and/or local city officials are typically notified in advance that the program will be marketed to local businesses so that their representatives can verify the program legitimacy when contacted by the business owner. SCE also provides an information hotline for customers seeking information about this program.

IV. Proposed Program Changes

A new program introduction script will be used to inform potential participants why SCE and the California Public Utilities Commission are offering the program, and will describe the Public Good Charge (PGC) funding source. SCE will continue to negotiate installation costs with contractors, with the goal of maximizing energy savings and increasing program cost effectiveness. SCE will also continue to investigate the feasibility of offering other measures in the program, including some non-lighting

measures. General operating procedures for the program will continue to be refined to increase the program effectiveness.

V. 2002 Program Successes

Over 550 very small businesses in hard to reach areas have received free lighting retrofits and are saving more than $300,000 per year in electricity cost. Word of mouth about the program is spreading throughout SCE's hard to reach areas and customers are expressing interest in participating in the program. Customers report positive experiences from their participation in the program, including noticeable energy savings and much improved quality of lighting in their businesses. Based upon these positive experiences in 2002, we anticipate even greater demand for the program in 2003.

VI. Proposed Energy & Peak Demand Savings

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Screw-in Compact Fluorescent Lamp, 14-26 watts	lamp	3,500	779,209	223	166	0.05
LED Exit Sign	fixture	275	78,414	285	9	0.03
2nd gen T-8 Lamp and Electronic, 2-foot lamp installed	lamp	45	1,987	44	0	0.01
2nd gen T-8 Lamp and Electronic, 3-foot lamp installed	lamp	45	2,333	52	1	0.01
2nd gen T-8 Lamp and Electronic, 4-foot lamp installed	lamp	89,800	4,310,400	48	948	0.01
T-8 Lamp and Electronic, 8-foot lamp installed	lamp	273	11,040	40	2	0.01
Interior HID fixture 0-35 watts incandescent basecase	lamp	45	11,132	247	2	0.05
Interior HID fixture 0-35 watts mercury vapor basecase	lamp	25	3,261	130	1	0.03
Interior HO T-5 4 lamp fixture retrofits	lamp	200	18,432	92	4	0.02
Total			5,216,208		1,134	

Notes: Net kW represents Net kW reductions in the on-peak period. The required reporting tables in Attachment A reflect measure peak demand.

VII. Results of Cost-effectiveness Calculations

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$3,596,623	$806,018	$2,790,605	4.46
Participant Cost Test	$4,810,823	489,957	4,320,866	9.82

Notes: The cost effectiveness analysis shown above is based on modifications to the cost effectiveness model that included incorporating specific EM&V costs.

VIII. Objective Measures for Evaluating Information Program Progress

Section is not applicable to this non-information program.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Small Hard To Reach program targets exclusively very small businesses in SCE's hard to reach zip codes.

X. Program Coordination with Other Energy Efficiency Programs

The Small HTR Program will continue to offer literature explaining other ways that customers can save energy and participate in the other PGC funded energy efficiency programs.

XI. Customer Inquiry and Complaint Procedures

The first line for any inquiries or complaints is the lighting installation contractors. Any customer questions or complaints that cannot be resolved by the installation contractors are referred to the SCE Program Manager. The SCE Program Manager logs each incident and contacts each customer to answer questions or resolve disputes. The log is updated to reflect results of the customer contact. Unresolved disputes are escalated to the Manager of Nonresidential Programs for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Pump Test and Hydraulic Services

II. Requested Total Budget

$1,350,000

III. Program Description

Southern California Edison's (SCE) Pump Test and Hydraulic Services (PT&HS) Local Program proposal represents an energy information and management services program. The program will be delivered to agricultural and water customers throughout SCE's service territory.

Overview

The PT&HS program is designed to increase the adoption rate and implementation of energy efficiency recommendations provided to customers with pumping accounts. It will accomplish these goals by testing customers' pumping systems, delivering a customer and site specific energy efficiency report with cost analysis that the customer can easily understand and act upon. In 2003, SCE will enhance the reporting format to include additional resources that will make the decision-making for the customer to implement energy efficiency recommendation easier.

Operations

Tests performed by SCE's technical specialists are performed in accordance with the stringent standards that are set forth by the American Water Works Association. PT&HS program technical specialists currently hold State of California Department of Health Services Grade II certification for safe evaluation of distribution water systems. Program technicians are required to have a thorough knowledge of electrical theory, principles of hydraulics and a full knowledge of multiple water systems, metering, and of utility rate schedules and efficiency opportunities.

The enrollment process consists of the customer contacting SCE to arrange for a pump test. The customer may use various means to contact SCE, such as: using SCE's customer service phone center which is open 24 hours a day, 7 days a week; contractor and vendor referrals; visiting SCE's website (www.sce.com); contacting account representatives; and contacting or visiting SCE's energy centers, AgTAC (located in Tulare, CA) and CTAC (located in Irwindale, CA). To further expand outreach to customers, PT&HS has on staff bi-lingual representatives.

Marketing
SCE will continue to use outreach programs, which have proven to be the most cost effective and efficient way to gain customer participation. The program will continue to encourage pump test activity based on customer-generated requests.

Generally, program participants, agricultural and water customers, are very much niche and generally could be classified as hard-to-reach customers. SCE will focus specific activity in 2003, to increase the awareness and participation of these customers.

IV. Proposed Program Changes

No changes are planned for 2003.

V. 2002 Program Successes

As of this report, this program is on target to meet its 2002 goals, which consists of testing 2,000 customer pumps. The 2002 program year runs from April through December.

Currently PT&HS has a pump testing request list with over 300 customers scheduled to have their pumps tested. New customer requests are recorded on an ongoing basis keeping the request list at fairly high levels. Based on the flow of these customer requests, customer expectation for SCE to provide this service is expected to stay high for the remainder of this year and in 2003.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost-effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2003 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

For 2003, SCE propose the following metric for evaluating program progress:

Program	2003 Targets
Pump Tests	**3,200**

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

SCE will continue in its efforts to provide needed services and information to geographically hard-to-reach customers. Due to the industry that this program services, many of the customers are by definition hard-to-reach customers and their businesses are located in outlying, rural locations.

In 2002, 39% of the customers receiving pump-testing services fit into the hard-to-reach geographical definition used by SCE (as of this reporting). In 2003, SCE will expand outreach efforts through direct mailings, targeted at hard-to-reach and non-participating customers (those customers whose pumps have not been tested). In addition, SCE has implemented a policy not to retest pumps in consecutive years. The effect of these efforts will attempt to increase the awareness and participation of these specific customers in this and other energy efficiency programs. SCE will manage its available resources to accommodate as many requests as possible from these respondents. As a result, for 2003, this program will pursue the goal of balancing requests from our varied customer participants and achieve maintenance of hard-to-reach activity levels obtained in 2002.

X. Program Coordination with Other Energy Efficiency Programs

SCE intends to continue building networks to insure an efficient and effective delivery of energy efficiency information and effective implementation of applicable measures. Some examples are:

- Continuation of a well-established network of pumping equipment manufacturers, distributors, contractors, and independent pump testing agencies to assist customers with plant improvements.
- Outreach programs that enable it to reach a wide range of customers such as city/county agencies, municipal water districts, and members of ACWA (Association of California Water Agencies) located within its service territory.
- Information sharing, when appropriate, with California Polytechnic San Luis Obispo and California Irrigation Institute at California State University, Fresno.
- Continuation of education and outreach efforts at events such as training classes at SCE's energy centers and Water Awareness Days.

SCE will also leverage the following programs to facilitate the customer's implementation of cost-effective and energy saving recommendations.

- Statewide testing standards – Continue participation to establish a statewide standard for pumping system testing and operations in cooperation with California Polytechnic University, San Luis Obispo, California State University, Fresno and independent testing firms.
- Outreach – Continue its support of the following events and cultivate new cost effective opportunities: AgTAC and CTAC Workshops (SCE's energy efficiency technology centers located in Tulare and Irwindale.

- Channel Counties Water Utility Association, Ventura
- Inland Counties Water Association Vendor's Fair, National Orange Show Grounds
- Southern California Water Utilities Association Vendor's Fair, Irwindale
- Water Awareness Day at Citrus College, Glendora
- World Ag Expo

All these events and others supported by the PT&HS team have a proven track record at generating customer interest in the program and will be continued in future program activities.

- Enhanced Information Networks – Increase awareness of websites (www.sce.com), vendors and contractors, and customer education facilities (AgTAC and CTAC).
- State and other public awareness campaigns – FlexYourPower (www.flexyourpower.org), California Energy Commission programs (www.energy.ca.gov), and other PGC funded programs.

XI. Customer Inquiry and Complaint Procedures

In order to insure the highest quality service available, each customer that has their pumps tested by SCE's Pump Tests and Hydraulic Services' (PT & HS) team is sent a follow-up Customer Satisfaction Survey. The survey provides the customer the opportunity to rate the level of service received and an avenue to discuss any dissatisfaction.

In addition, PT & HS uses its pump test staff (PTS) to handle any customer issues or complaints. The PTS is the primary interface with the customer. They usually are involved in the presentation of the pump test results and energy efficiency recommendations. If the customer identifies any problems, the PTS are authorized to resolve issues directly related to their services. Such resolution may take the form of further education, assistance defining and understanding the process or results of the test, or even reevaluating the system tested.

The customer can also communicate any questions or concerns to their SCE account representative. The account representative has direct access to the PTS or the PTS manager and can assist in facilitating an equitable solution. The customer also has the ability to contact the manager of the PTS group through the Pump Test and Hydraulic Services website located at www.sce.com and/or by calling the 800 number provided.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Local Crosscutting Demonstration and Information Transfer

II. Requested Total Budget

$500,000

III. Program Description

The Local Crosscutting Demonstration and Information Transfer program is an information-only program that seeks to accelerate the introduction of energy efficient technologies, applications, and analytical tools that are not widely adopted in Southern California Edison's (SCE) service territory. The program targets all customer market segments, including new construction, and engages in Demonstration & Information Transfer activities.

Overview: The program focuses on near-commercial energy efficient applications with significant market potential, and commercial energy efficient applications with low market penetration within the Southern California Edison service area. Demonstration projects, conducted at either customer sites or in controlled environments, provide design, performance, and verification of novel energy efficient systems, helping to reduce the market barriers to their wider acceptance. The program's demonstration projects help to measure, verify, analyze, and document the potential future energy savings and demand reduction of specific applications in different market segments. Through the demonstration projects, comprehensive design methods and tools may be developed and disseminated, along with the performance information of the energy efficient emerging technology measures. Information Transfer efforts disseminate a project's results, and are customized to the targeted markets.

Operation: Program efforts form an important link between ongoing Research & Development (R&D) efforts on energy efficient technology applications and their commercialization. Applications mature out of the R&D cycle at different times and are not always available for consideration during initial program planning efforts. Thus, program staff works to remain informed on a broad range of emerging technology applications from many information sources, and any of the technologies may prove to be a viable project candidate.

Long-term Project Commitments. Program funding is collected during 2003 and committed to each assessment project during the course of the program year. Committed, unspent project funding is accrued at the end of the year. Accrued funds are carried forward to meet project obligations into the future. In the case of the 2003 Demonstration & Information Transfer Program, committed project funding may be carried forward through 2006.

Marketing: The program uses a targeted approach, working with "innovators" that may further influence other customers. SCE will deliver the program through custom demonstration projects.

Information will be disseminated through many different outlets, including the SCE Energy Centers, utility personnel and professional and community organizations.

IV. Proposed Program Changes

The program will not change significantly from 2002. The program will focus on new energy efficient emerging technology assessment projects in 2003. Some of the technology areas that SCE may assess through the program include, but are not limited to:

- Integrated Design for new construction and retrofit projects
- Advanced Daylighting Concepts & Controls
- Advanced Lighting Concepts & Controls
- Advanced Refrigeration Technologies
- Radiant Barrier Coatings
- Advanced Building Envelopes
- Energy Efficient Process Technologies
- Advanced HVAC controls and Energy Management Systems

V. 2002 Program Successes

Through October 2002, the program had three local ET assessment projects underway meeting its goal for 2002:

- Improving HVAC Performance and Indoor Air Quality (IAQ) using Ultraviolet Light,
- Advanced Heuristic Thermostatic Control System
- High Speed Hands Dryer

In addition, the program is pursuing three additional assessment projects that should be established before year-end:

- Spray-on Radiant Barrier for Exiting Residential and/or Small Commercial Buildings
- Low-E Pigment for Stucco and Paints for Residential and/or Small Commercial Buildings
- Integrated Design for Nonresidential Retrofit Buildings

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in section VIII.

IX. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program, i.e., information programs, should not imply that a measure or program does not promote energy efficiency. Neither should it imply that there is no impact to the customer's use of electricity or natural gas, nor a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency

Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

The Local Crosscutting Demonstration and Information Transfer Program progress will be gauged with the following metric:

- **Southern California Edison will perform three Emerging Technology Application Assessments**. The technology-application assessments may consist of a diversity of project types including: feasibility studies, simulation analysis, field demonstrations, controlled environment tests, commercial product development, design methodologies and tool development. These assessments may take up to three years to complete.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Local Crosscutting Demonstration and Information Transfer program does not have specific goals for the hard-to-reach market segments. In general, the information the program generates through its demonstration activities tends to benefit all customers. One of the aims of the program is to explore the extent of application a new technology has in various market segments, in an effort to characterize the widest possible deployment opportunities. Thus, the program will seek opportunities to host appropriate demonstration projects at hard-to-reach customer sites, such as ethnic, small commercial, and residential customers. The information transfer will leverage the utilities' overall efforts aimed at hard-to-reach customers.

X. Program Coordination with Other Energy Efficiency Programs

The program's Information Transfer will be coordinated with the utilities Energy Centers and leveraged with the overall energy efficiency programs efforts. Also, it is important to note that SCE, under the Statewide Nonresidential category, proposed a statewide emerging technologies program. The statewide program allows SCE to coordinate efforts with other utilities and the California Energy Commission's PIER program. Information regarding local program efforts will be shared with members of the statewide Emerging Technologies Coordinating Council (ETCC), and documented in the Emerging Technologies (ET) database. The ET database is available on the ETCC website at http://www.ca-etcc.com/.

XI. Customer Inquiry and Complaint Procedures

The program will initiate a limited number of customer site demonstration projects in 2003, since not all emerging technology assessments require customer site testing. A customer site demonstration is governed by a negotiated agreement that sets the terms of the project, and provides a name, address, and phone number of a SCE contact for all required notices. Each demonstration project has an assigned SCE project manager. The assigned project manager is responsible for all the implementation and operational aspects of the project. All customer questions and complaints are directed to the assigned project manager. If a dispute arises, the project manager will resolve it based on the terms of the negotiated agreement with the customer. In case the project manager cannot resolve a dispute, the issue is brought to the attention of the Design & Engineering Services unit manager for resolution. If the unit manager cannot resolve the matter with the customer, the case is turned over to the SCE Law Department for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Southern California Edison – Local Government Initiative

II. Requested Total Budget

$950,000

III. Program Description

Southern California Edison's Local Government Initiative (SCE-LGI) educates and informs community leaders, local government planners, building officials, builders, apartment/building owners, small business owners, and consumers about the economic benefits of energy efficiency in the areas of residential and nonresidential new construction, as well as small business. Designed with extensive input from Southern California local government building departments, the innovative programs offered through SCE-LGI are designed to help local governments build self-sustaining energy efficiency partnerships with their constituents.

The SCE-LGI will pursue 16 new jurisdictions from the list below, with a high priority placed on those jurisdictions with notable building activity and/or containing zip codes in the Hard-to-Reach target areas.

Yorba Linda	Yucaipa	Highland
Brea	Chino	Santa Barbara County
Redondo Beach	Manhattan Beach	Fillmore
Colton	Perris	Torrance
Arcadia	Diamond Bar	Placentia
El Monte	Loma Linda	Signal Hill
Orange	Westminster	Tustin
Costa Mesa		

Marketing:
The program marketing and outreach process will include:

- Contact the targeted local jurisdiction's decision-makers about the SCE-LGI program
- Re-assess local energy efficiency needs and goals
- Meet with local government representatives to create new implementation strategies and approaches for the program (where applicable in each program area)
- Brief local government officials as required by Chief Building Officials (City Councils, Board of Supervisors, City Managers, etc.)

- Revise and individually tailor SCE-LGI as appropriate to meet each local government's needs, and the needs of their respective constituents
- Assist local governments with education and outreach for the SCE-LGI program via technical assistance, "plan-check counter" literature, web links, magazine and newspaper articles, and training
- Continued support of existing jurisdictions

Program-specific literature (California Energy Star New Homes program, Savings By Design, Small Business Express Efficiency, Multifamily Energy Efficiency Rebate program) that includes the necessary details for participation will be provided to the appropriate segment customers (i.e., small business, residential and nonresidential new construction, multi-family retrofit).

IV. Proposed Program Changes

In 2003, SCE plans to expand the Local Government Initiative by including information and outreach on components of the Multi-Family (retrofit) Program. The intent is to leverage the relationship the cities have with Homeowner Associations and building owners.

V. 2002 Program Successes

2002 proved to be extremely successful for the Local Government Initiative. The goal for the year was to recruit 16 new jurisdictions. SCE not only achieved that goal, but exceeded it. Through word of mouth, the city of Camarillo (not originally on the targeted list for 2002) solicited participation in the program. Additionally, SCE received several testimonial letters from participating jurisdictions praising the company for its outreach efforts and leadership role in the area of energy efficiency planning tailored to the needs of customers at the local level.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in sections VIII and IX.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2003 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved

Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

CEEP will be pursue 16 new jurisdictions from the list below, with a high priority placed on those jurisdictions with notable building activity and/or containing zip codes in the Hard-to-Reach target areas. Having these jurisdictions adopt CEEP will mean energy efficiency improvements will be encouraged in new housing where families with lower incomes will not only enjoy increased comfort, but reduced energy costs as well.

Prospective Jurisdictions	Total Zips Within Jurisdiction	No. of Zips in HTR
Yorba Linda	5	0
Yucaipa	1	0
Highland	1	1
Brea	5	5
Santa Barbara County	12	2
Chino	3	1
Redondo Beach	3	2
Manhattan Beach	1	1
Fillmore	2	2
Colton	2	2
Perris	4	4
Torrance	8	2
Arcadia	2	1
Diamond Bar	3	2
Placentia	3	0
El Monte	5	3
Loma Linda	3	2
Signal Hill	2	2
Orange	9	3
Westminster	3	3
Tustin	5	1
Costa Mesa	3	2

If any of these targeted jurisdictions are not able to adopt CEEP, additional jurisdictions will be targeted using similar criteria to select them.

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

In 2003, the Local Government Initiative will focus its efforts on primarily hard to reach jurisdictions in rural and/or predominantly moderate-income areas. To that end, the program will strive to add 10 new local jurisdictions to the program from these hard to reach geographical areas.

X. Program Coordination with Other Energy Efficiency Programs

The primary program objective of the SCE-LGI is to help local governments build self-sustaining energy efficiency partnerships with their constituents. The program also aims at educating and informing community leaders, local government planners, building officials, builders, building owners, small business owners, and consumers about the economic benefits of energy efficiency in the areas of residential and nonresidential new construction, small business, and the multi-family retrofit market.

SCE-LGI is a coordinated effort among the following four program areas:

Residential New Construction – SCE will continue its partnership with the Building Industry Institute (BII) to deliver the Community Energy Efficiency Program (CEEP). BII is the nonprofit, educational and research arm of the California Building Industry Association (CBIA) and creator of (CEEP). CEEP is a voluntary new construction program designed to result in significant long-term energy savings to local governments that choose to implement the program. Builders that choose to participate in CEEP will commit to building homes that exceed California's stringent 2001 Residential Building Energy Efficiency Standards (Title 24) by at least 15 percent. In return for building more energy-efficient housing, participating local governments provide special recognition and other enticements (which could include expedited plan check and reduced permit fees) to the builders participating in the rigorous program.

To make sure CEEP remains useful to a wide range of interests, this program will continue to utilize an advisory group for collaboration and outreach, consisting of individuals representing the following groups: California Building Officials (CALBO), California Integrated Waste Management Board, Natural Resource Defense Council, CBIA, National Association of Home Builders (NAHB), Environmental Protection Agency (Region 9), U.S. Department of Energy, California Institute for Energy Efficiency, Local Government Commission, local building officials, local builders, and local Building Industry Association Executive Officers.

Nonresidential New Construction – SCE will make available to interested local governments a simplified equipment substitution rebate program called CheckPoint. To facilitate its adoption by building departments, the program will be promoted as desired by those local building departments committed to influencing energy efficiency in their jurisdictions, but will be centrally administered by the utility in conjunction with the Savings By Design program. CheckPoint targets the hard-to-reach small business owners as they begin the building permitting process. Because the energy use in small buildings is generally not complex, their energy efficiency can be effectively and significantly improved through equipment substitutions and the addition of controls.

Small Business – SCE will also provide energy efficiency rebate information and outreach to targeted local jurisdictions, linking small business owners to the Express Efficiency program. The objective of this component is to connect with the hard-to-reach small business owners who are pursuing remodeling-related permits or business licensing. Express Efficiency assists small business owners with reducing operating

expenses by saving money on energy costs. Express Efficiency provides rebates for businesses to retrofit and upgrade existing equipment using new energy-efficient technologies.

Multi-Family – SCE will deliver components of the Multi-Family Energy Efficiency Rebate program in 2003. This program was designed to offer a broad list of qualifying energy efficiency measures with prescribed rebates to encourage customer adoption of comprehensive multi-measure projects. Several measures are the same as those available under the current Statewide Single-Family Rebate program. Other measures are uniquely offered for common area and dwelling unit energy efficient improvement, some with rebate levels set to encourage owners/landlords to retrofit tenant units. This design is intended to generate market response, achieve greater penetration in multifamily complexes, and motivate owners/landlords to provide energy efficient, energy saving measures to the HTR tenant sector.

The rebates for CEEP, CheckPoint, Express Efficiency, and the Multi-Family Program will come from those programs' respective incentive budgets. Energy savings will not be counted in this LGI, but rather in each of those specific programs. The purpose of this program is to help local jurisdictions establish an energy efficiency plan which includes providing them with a "bundling" of existing utility programs targeted at the new construction and small commercial retrofit customers of both SCE and the local jurisdictions.

To make sure CEEP remains useful to a wide range of interests, this program will continue to utilize an advisory group for collaboration and outreach, consisting of individuals representing the following groups: California Building Officials (CALBO), California Integrated Waste Management Board, Natural Resource Defense Council, CBIA, National Association of Home Builders (NAHB), Environmental Protection Agency (Region 9), U.S. Department of Energy, California Institute for Energy Efficiency, Local Government Commission, local building officials, local builders, and local Building Industry Association Executive Officers.

XI. Customer Inquiry and Complaint Procedures

SCE's Local Government Initiative project manager will handle specific customer questions or complaints on a case-by-case basis. The issues will be reviewed and researched and an appropriate resolution will be provided. The issues will be logged and tracked. If resolution cannot be reached at the program level, the issue will be elevated to the Manager of Residential Energy Efficiency for resolution.

Attachment A: Program Budget and Activities

Southern California Edison
2003 Energy Efficiency Program Plan

I. Title of Individual Program

Codes and Standards, Local

II. Requested Total Budget

$100,000

III. Program Description

This local program assists in the process of revising California's energy-related codes and standards in order to bring about cost-effective that will benefit California as a whole. This program supports the California Energy Commission's (CEC) 2003/2005 standard revision process for both California Title 20 and Title 24.

Overview: Program activities include:

- Working with manufacturers and industry to develop test procedures for equipment certification; and
- Providing guidance through educational efforts targeted towards local code officials, contractors, consultants, and other groups that are part of the implementation, administration, and enforcement of both new and existing energy codes.

Operation: SCE intends to increase the alignment between market-based, voluntary programs, and the local Codes and Standards program objectives, for example, by providing education and/or incentives that support a specific objective. It is important to improve code administration and enforcement through improved outreach and education, and through professional certification and development. SCE will play a key role in outreach and education of codes and standards.

Marketing: The Local Codes and Standards program works not only with customers who either own or operate facilities that are affected by the State energy codes and standards, but also with the designers, contractors, engineers, and builders that must design and build the facilities and the energy consuming equipment within those facilities.

IV. Proposed Program Changes

There are no program changes proposed for 2003.

V. 2002 Program Successes

SCE prepared and hosted a code training class for school officials, architects, and designers. This type of program activity provides on-going support for future codes and standards enhancements.

VI. Proposed Energy & Peak Demand Savings

Based upon the California Public Utilities Commission approved Energy Efficiency Policy Manual, this information program is not expected to provide energy savings targets. Program goals are provided below in section VIII.

VII. Results of Cost-effectiveness Calculations

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the cost-effectiveness calculations performed for the 2003 program utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a total resource cost ratio for any particular program, i.e., information programs, should not imply that a measure or program does not promote energy efficiency. Neither should it imply that there is no impact to the customer's use of electricity or natural gas, nor a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's approved Energy Efficiency Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

VIII. Objective Measures for Evaluating Information Program Progress

The Codes and Standards Program progress will be gauged with the following metric:

- Conduct two Codes and Standards training workshops during 2003

IX. Hard-to-Reach Customer Segment Targets and Quantifiable Goals

The Codes and Standards program does not have specific goals for the hard-to-reach market segments. In general, Codes and Standards activities support hard-to-reach market segments by advocating cost effective code enhancements that promote energy efficiency for all building types and appliances included in the California standards.

X. Program Coordination with Other Energy Efficiency Programs

The IOU's Codes and Standards program staffs will meet periodically to coordinate inter-utility activities, especially with the statewide Codes and Standards program, so that the limited local funding is used efficiently.

XI. Customer Inquiry and Complaint Procedures

The program does not involve direct consumer contact. Program participation is limited to attending program-sponsored workshops. Customers shall have the opportunity to provide feedback during workshops.

Attachment A: Program Budget and Activities