



SOUTHERN CALIFORNIA  
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**Southern California Edison Company's  
2003 Energy Efficiency Programs  
Final Fourth Quarter Report**

May 2004

**Southern California Edison Company's  
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Program Title: **Residential Appliance Recycling Program**

**I. Program Overview**

The Residential Appliance Recycling Program (RARP) is a statewide program designed to reduce energy usage by allowing eligible residential customers (single family and multifamily owners/landlords and tenants) to dispose of their working, inefficient primary and secondary refrigerators and freezers in an environmentally safe manner. Two units, refrigerators or freezers, may be recycled per customer service location per program year. Participation is on a first-come, first-served basis. A recycling incentive of \$35 or a five-pack of compact fluorescent lamps (CFLs) is offered to customers who turn in working units between 14-27 cubic feet.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$6,000,000
Fundshift Amount	\$(205,000)
Fundshift Amount	\$(72,000)
Revised Authorized Budget	\$5,723,000
Program Expenditures (includes program commitments)	\$5,720,335

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

**Fundshift Summary -**

An RFP process was initiated during 2003 which resulted in a reduced per unit cost for recycling service charges as of September 2, 2003. The cost for recycling service charges was reduced by about \$25 per unit as of September 2, 2003. Consequently, RARP was able to exceed unit goals under budget and transfer \$205,000 to the Single Family Rebate program and \$72,000 to the Multi-Family Rebate programs to support increased customer participation in those programs.

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**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Energy Savings, kWh</b>	38,618,794	39,234,129
<b>Demand Reduction, kW</b>	5,987	6,018
<b>No. of Units Recycled</b>	33,610	34,143
<b>Refrigerators</b>	26,888	31,051
<b>Freezers</b>	6,722	3,092
<b>Hard-to-Reach Performance</b>	57%	56.4%

1 – As approved in Decision 03-04-055 (Attachment 2).

**A. Performance Achievements**

**1. Introduction**

The 2003 Residential Appliance Recycling Program targets were to realize 38,618,794 kWh of net annualized energy savings, 5,987 kW of net demand reduction, while collecting 26,888 units. The Commission also adopted refrigerator (26,888) and freezer (6,722) unit sub-goals based on SCE original program projections.<sup>1</sup> Through an expansive promotional campaign and effective program management, the program achieved 39,234,129 kWh of net annualized energy savings, 6,018 kW of net demand reduction, while collecting 34,143 units. SCE also met the refrigerator sub-goal by collecting 31,051 but did not meet the freezer goal. The inability to achieve the freezer goal was due in most part to the CPUC's newly imposed unit size requirement. The lower threshold of admissible refrigerators and freezers was raised from 10 to 14 cubic feet.<sup>2</sup> This new requirement made many of the freezers SCE had originally forecasted, as part of the program projections, ineligible. Nevertheless, SCE did collect more than 3,000 freezers, a significant achievement considering the new size requirement.

**2. Steps Taken To Achieve Target**

**a. Selective Promotional Campaign**

The Residential Appliance Recycling Program primarily relied on selective bill insert and bill message throughout the year to promote the program. Historically, this strategy has been very effective in increasing program participation. The

<sup>1</sup> SCE's 2003 Energy Efficiency Program Selection, November 4, 2002.

<sup>2</sup> D.03-04-055, Attachment 2, p.8.

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program also relied an SCE-specific energy efficiency campaign called Save Energy, Save Money which promotes the benefits of energy efficiency to potential program participants.

### **b. Effective Program Management**

SCE provided program management support for all three IOUs serving as the statewide administrator for the Residential Appliance Recycling Program. In that capacity, SCE: (1) oversaw and verified program implementation, (2) reviewed and paid all invoices from all recycling service vendors and incentive (CFL) vendors supporting RARP; (3) submitted invoices and provided managerial reports to PG&E and SDG&E for the recycling services provided in their respective territories; (4) handled all escalated customer complaints for all three IOUs; (5) prepared reporting (internal, CPUC) for all three IOUs on program status; and (6) coordinated all statewide marketing activities.

SCE implemented all RARP promotional activities in its own service territory, while the recycling vendor coordinated those activities in the PG&E and SDG&E service territories.

In June, 2003, SCE administered an RFP process for RARP, which resulted in a new contractor (JACO) being selected to implement the recycling services in the PG&E territory beginning September 2, 2003. This change in program vendors required a seamless transition from the existing contractor (ARCA) to the new contractor (JACO), and was achieved by SCE within the existing administrative program budget.

## **B. Hard-to-Reach Performance**

### **1. Introduction**

The hard-to-reach (HTR) target was to have a 57 percent of the units collected in SCE's service territory come from HTR groups defined as rural, moderate income and/or multifamily. SCE relied upon the 2001 Residential Customer Needs Assessment Study to identify specific zip codes within SCE's service territory to specifically target these HTR customers. The program relied on strategic marketing and outreach to gain participation of these customer groups. As a result, 56.4 percent of the program applications came from the pre-defined HTR groups.

### **2. Reasonable Steps Taken To Achieve Target**

The steps taken to achieve the HTR target included providing information to HTR customers through newspaper advertising and targeted outreach efforts. Specific efforts included weekly advertisements in Penny Saver magazines to zip codes that were identified as HTR. This publication tends to have a high readership from moderate income households. SCE also placed door hangers on homes located in moderate income ethnic communities of SCE's service territory.

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Finally, SCE employed point-of-sale efforts that were implemented at retail stores located in rural areas.

As directed in CPUC Decision 03-04-055, a request for proposal process to select a winning program vendor was initiated by SCE and was completed by the end of August 2003. SCE continued to deliver the program but took great care the program funding was not exhausted before the completion of the RFP thus assuring program continuity with the winning bidder. However, as a result, minimal marketing activities were implemented prior to the completion of this process, which resulted in less than desired HTR levels. After the RFP process was completed, SCE aggressively implemented the HTR marketing activities mentioned above. Although these HTR marketing activities produced significant HTR participation levels, they did not make up for the shortfall during the first part of the program year.

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**Attachment A  
Program Results Workbook**

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Program Title: **Single Family Energy Efficiency Rebates Program**

**I. Program Overview**

The Single Family Energy Efficiency Rebates (SF Rebates) program is a statewide program, administered by the four California investor owned utilities, which provides rebates on various home improvement products, heating and cooling equipment, appliances, and residential pool pumps and motors.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$6,000,000
Fundshift Amount <sup>2</sup>	\$1,116,000
Fundshift Amount	\$205,000
Revised Authorized Budget	\$7,321,000
Program Expenditures (includes program commitments)	\$7,320,319

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Unspent 2002 energy efficiency funds were carried over into the 2003 SF Rebate budget as approved in ALJ Ruling, dated December 3, 2003.

**Fundshift Summary -**

On December 3, 2003, an ALJ Ruling was issued granting SCE the authority to shift \$1,116,000 from the 2002 unspent, uncommitted 2002 funds from the Residential Retrofit category to the 2003 SF Rebate program. The budget shown here reflects this approved fund shift.

By September of 2003, it had become apparent that the Single Family Rebate program was very successful in the market and would soon be oversubscribed. Some measures were achieving at a rate much greater than originally projected – particularly pool pumps and motors and HVAC. In the interests of keeping the program open to interested participants, achieving more results, and having a smooth transition to the 2004 program year, additional funds were requested. Looking within our own existing budget, we transferred approximately \$500,000 from the administration budget into the direct implementation budget. We further performed a projection of how many applications for each measure were likely to be received by December 31, 2003. We arrived at a figure of \$1,116,000 and on December 3, 2003 we received CPUC authorization to increase the 2003 budget by this amount. We also transferred an additional \$205,000 from the Appliance



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Recycling program. In making these transfers, we were successful in keeping the program open for the duration of the program year.

**III. Program Performance**

**Table 2 – Performance Overview**

Metric	CPUC Targets <sup>1</sup>	Results
<b>Energy Savings, kWh</b>	22,940,026	23,738,041
<b>Demand Reduction, kW</b>	15,240	15,184
<b>Hard-to-Reach Performance</b>	34% of all applications come from HTR customers	38.2% of all applications came from HTR customers

1 – As approved in Decision 03-04-055 (Attachment 2) and later increased by ALJ Ruling, dated December 3, 2003.

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed by SCE.

**A. Performance Achievements**

**1. Introduction**

SCE’s Single Family Energy Efficiency Rebate program targets for 2003 were 22,940,026 kWh of net annualized energy savings and 15,240 kW of net demand reductions. Through innovative outreach and promotional strategies SCE was able to achieve 23,738,041 kWh of net annualized energy savings and 15,184 kW of net demand reductions.

**2. Steps Taken To Achieve Target**

To optimize the SF Rebate program performance SCE focused on the promoting the most cost-effective measures: programmable thermo stats and pool pumps including motors. For programmable thermostats, SCE pioneered a new method of program delivery called “point-of-sale” (POS) or “instant” rebates. Here, we formed agreements with major retailers. SCE implemented the POS strategy by which Home Depot, Lowe’s, and Costco were able to offer the rebate to SCE customers instantly, and then invoice SCE at a later date for reimbursement. This method proved to work very well. SCE achieved approximately 34,000 units against a goal of 29,500 programmable thermostats. This was more than twice what was achieved in 2002 for this measure.

For pool pumps and motors, SCE formulated steps, preparatory to “point-of-sale”, to make it easier for customers to participate in the program. We prepared promotional materials and a one-page application, and then sent field representatives out to all of the stores to set the materials up and to provide training to the store’s sales personnel. On numerous occasions, we mailed hundreds of thousands of one-page applications to residences in targeted zip codes with materials promoting programmable thermostats. SCE also included promotional materials for programmable thermostats as a bill insert. This insert

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went to every customer in the SCE service territory. For pool pumps and motors, SCE mailed pool pump rebate and promotional materials to 100,000 pool owners. This was followed up with a reminder postcard, encouraging these customers to take advantage of the program. For 2003, SCE achieved approximately 50% increase in pool pump and motor results over 2002 achievements.

These combined marketing efforts, focusing on the program's two best measures, achieved the desired results, and produced participation in the program beyond original projections.

The program failed to reach its demand reduction target as the mix of measures installed sufficiently differed from the mix of measures projected. The installed measure mix included a larger number of high efficiency windows than originally projected. High efficiency windows provide relatively less demand reduction than other measures offered within the program.

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

The hard-to-reach (HTR) goal for the Single Family Rebate program stated that 34 percent of the program's applications should come from areas defined as "hard-to-reach". For 2003, SCE achieved 38.2 percent by performing targeted marketing activities in those zip codes defined as "hard-to-reach".

#### **2. Reasonable Steps Taken To Achieve Target**

During the 2003 program, SCE actively sought participation from the "hard-to-reach" zip codes by use of a shared mail concept. This concept uses a vendor that coordinates one-page messages from many different companies who are seeking to provide information to customers. Once a bulk quantity of messages is reached, the vendor prints them all at once and formats them into one package (thus saving on costs). The packages are sent in bulk for delivery by the US postal service (again, saving on delivery costs). This method has proven to be very cost-effective. The customers find, along with their normal mail, a set of advertisements in one neat arrangement they can conveniently go through all at once. For several of the measures in our 2003 program, SCE designed and developed one-page applications. For the shared mail pieces, we put the one-page application on one side and an attractive advertisement on the other. Since this strategy is capable of targeting specific zip codes by mail, we from time to time during the year sent on the order of 800,000 pieces to residences within the HTR zip codes. Further, we advocated easy-to-install measures such as programmable thermostats, to increase the likelihood of program participation from these HTR groups.

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Program Title: **Multifamily Energy Efficiency Rebates Program**

**I. Program Overview**

The Multifamily Energy Efficiency Rebate (MFEER) program is a statewide program, which provides a broad list of qualifying energy efficiency measures with prescribed rebates for the installation of qualifying energy-efficient improvements in apartment dwelling units and in the common areas of apartment and condominium complexes, and common areas of mobile home parks. Property owners and property managers of existing residential multifamily complexes with 5 or more dwelling units may qualify.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$2,000,000
Fundshift Amount	\$50,000
Fundshift Amount	\$42,000
Fundshift Amount <sup>2</sup>	\$100,000
Revised Authorized Budget	\$2,192,000
Program Expenditures (includes program commitments)	\$2,190,991

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Unspent 2002 energy efficiency funds were carried over into the 2003 MFEER budget as approved in ALJ Ruling, dated December 3, 2003.

**Fundshift Summary -**

On December 3, 2003, an ALJ Ruling was issued granting SCE the authority to shift \$100,000 from the 2002 unspent, uncommitted 2002 funds from the Residential Retrofit category to the 2003 Multifamily Rebate program. The budget shown here reflects this approved fund shift.

A fund shift was requested as a result of high program demand exceeding approved 2003 incentive dollars. Program incentive funding was 90 percent subscribed by August 2003. Through SCE’s diligent management efforts and market influence, the program was able to continue honoring rebate requests through mid-November 2003 while the fund shift request was in process. Once received, the fund shift amount was quickly and fully subscribed. SCE shifted an additional \$50,000 from the Residential Appliance Recycling and \$42,000 from the Home Energy Efficiency Survey programs in order to fund additional multifamily projects.

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**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Energy Savings, kWh</b>	4,117,383	4,607,285
<b>Demand Reduction, kW</b>	404	797
<b>Hard-to-Reach Performance</b>	36% of all applications come from HTR customers	55.9% of all applications came from HTR customers

1 – As approved in Decision 03-04-055 (Attachment 2) and later increased by 188,226 kWh of net annualized energy savings and 90 kW of net demand reduction by ALJ Ruling, dated December 3, 2003.

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

In 2003, the Multifamily Energy Efficiency Rebate program had an original energy savings target of 3,989,157 kWh of net annualized energy savings and 314 kW of net demand reduction. However, as a result of an additional \$100,000 increase in program funding the revised targets were 4,117,383 kWh of net annualized energy savings and 404 kW of net demand reduction. Through target marketing, strategic outreach and effective management, SCE was able to exceed the program’s targets by achieving 4,607,285 kWh of net annualized energy savings and 797 kW of net demand reductions.

**2. Steps Taken To Achieve Target**

**a. Effective Program Management**

During the first part of 2003, while the program was awaiting approval of its 2003 program design, SCE’s program management responded to various program inquiries from the public and interested market actors. This pre-program roll-out communication paved the way for a smooth and immediate transition from the bridge program to the 2003 MFEER program. Immediately upon receipt of the CPUC decision approving program plans, SCE made the MFEER program available to the public. This program availability included a newly designed 2003 MFEER rebate application package, the implementation of new program policy and procedures, introduction and implementation of a new rebate reservation mechanism, customer call center support, and an updated Web site where all program materials could be found.

As program momentum gained throughout the year, the MFEER program incentive funding was nearly 90 percent fully subscribed, with roughly 90 percent of energy savings goals achieved. As a pro-active measure to ensure continued program availability, SCE managed the volume submitted by private installation

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contractors in order that there be enough funding to accommodate property owners and managers who participate independently and/or have plans for installations later in the year. This illustrates the unique relationship SCE has with private party contractors as well as SCE's control over program funding and availability. SCE also initiated a fund shift request to the CPUC for additional program funding. The intent was to release all remaining funds immediately and to continue the program through the end of the 2003 program year with renewed funding. The MFEER program received an increase of \$0.100 million in December 2003. Once received, the fund shift amount was quickly and fully subscribed.

### **b. Targeted Marketing and Outreach**

Typically the MFEER program's key audience, program marketing efforts to property owners, managers, and property management companies utilizes a comprehensive approach: conducting outreach at various levels to reach both the high-end property managers and the smaller, mom-and-pop property owners. Shortly after program implementation SCE mailed 1,000 letters directly to select property management companies explaining the program and inviting participation in the program offering.

In the second quarter of 2003, SCE was an exhibitor at two events: The Apartment Owners Association Trade Show and the Healthy Business Expo with a combined attendance of over 1, 500 property owners and managers. In the third quarter of 2003, SCE was an exhibitor at two additional, and larger, trade shows; Apartment Association of California Southern Cities, and, Apartment Association of Greater Inland Empire with a combined attendance of over 5,000 property owners and managers and industry actors. In the past two years, SCE has become a regular, and expected, contributor to these association trade shows. Exhibiting at these shows presents several benefits. The MFEER program gains wide-spread exposure to all levels of property owners and managers who attend these shows. MFEER program management, as exhibitors, gain invaluable insight as we go face-to-face with our targeted customers. Both potential and previously-participated customers meet with MFEER program management during these events; explaining their needs and desires or describing their previous experiences in the program. The MFEER program booth is often one the most visited booths at the apartment association trade shows.

A post card mailing to roughly 24,000 multifamily owner service accounts promoting MFEER rebates for compact fluorescent light bulbs was conducted in October 2003 just prior to the change in Standard Time. This second mailing achieved rebate reservation requests of over 3,000 CFLs from first-time MFEER customers. Comparing the 2003 response to only a few hundred requests received from the 2002 mailing clearly indicates a much higher level of program awareness as continued and repetitive marketing efforts drive the targeted customer to action.

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Another type of direct outreach effort centers around the MFEER program's fluorescent torchiere exchange targeted to apartment renters. SCE conducted three fluorescent torchiere exchanges during the 2003 program year. Each exchange was held in partnership with a local retail anchor (two major hardware stores and a local bowling alley) located in a densely populated multifamily neighborhoods. Marketing and promotion for these events were conducted on several fronts. MFEER program representatives went door-to-door of the neighboring apartment complexes meeting with property managers, explaining the benefits of the exchange events and requesting permission to leave marketing material such as door hangers and flyers at the apartment location. Leveraging off the contact, the MFEER representatives also promoted and educated the property manager about the MFEER program rebate offerings. The fluorescent torchiere exchange events marketing efforts also included extensive advertising in several local publications, including a California State University campus newspaper, to garner event participation. From three events, 2,146 potentially dangerous and high-consuming halogen torchieres were replaced for safe, energy-efficient fluorescent torchieres benefiting nearly 2,000 apartment residents with lower electric bills and safer homes for them and their families.

In October 2003, the statewide MFEER team conducted a workshop for the MFEER industry partners consisting primarily of independent installation contractors. Installation contractors are a key factor in the delivery of the MFEER program as many of the jobs they perform are high volume installations thus potentially creating a large impact to customer satisfaction and quality of installations. The workshop's objective was to gather first-hand feedback from this important group of program participants; about how well the program serves its targeted customer (the property owner and managers), feedback on 2003 program changes and improvements, to receive suggestions for program improvements, and to heighten contractor awareness about the critical role they play with the customer as they participate through the program. Attendees provided very favorable feedback about the current program design. Additionally, there was open communication among attendees about "best practice" customer service efforts each has implemented. As a result of the meeting, the IOU's better understand how contractors work with our common customer and the contractors have a better understanding of the IOU's customer service expectations, while they perform work throughout the MFEER program.

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

The MFEER program's hard-to-reach (HTR) goal for 2003 was to receive 36 percent of the program applications from HTR customers. By the end of 2003, the MFEER program achieved 55.9 percent of program applications from HTR customers.

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### **2. Reasonable Steps Taken To Achieve Target**

SCE's MFEER program ensures hard-to-reach customers participate in the program through targeted marketing efforts and our established relationships with independent installation contractors. The MFEER program's hard-to-reach customer is defined as rural and moderate income. SCE relied on the CPUC-approved Statewide Residential Customer Needs Assessment Study to further define these two HTR segments by zip code groupings.

As mentioned above, 1,000 directed mail pieces were sent to property owners and managers at the initiation of the 2003 MFEER program. The bulk of these property owners and managers either resided in a traditionally hard-to-reach geographic area or conducted business there.

As an exhibitor at the Apartment Association of Greater Inland Empire, SCE promoted the MFEER program to property owners and managers whose property locations were predominantly in hard-to-reach geographic locations. Additionally, SCE's membership in and relationship with the Apartment Association of Greater Inland Empire helped induce several members to participate in the program.

The October CFL post-card mailing included all hard-to-reach service accounts promoting the MFEER program to this customer segment.

In addition to the direct marketing described above, through SCE's established and effective relationships with industry actors such as independent installation contractors, hard-to-reach customers were targeted by SCE's industry partners as well.



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Program Title: **Home Energy Efficiency Surveys Program**

**I. Program Overview**

The statewide Home Energy Efficiency Survey (HEES) program provides residential customers with energy efficiency information to help them understand, control and reduce energy usage in their homes. The program targets hard-to-reach customers and offers mail-in and on-line surveys in English, Spanish and Chinese. Customers completing a mail-in or on-line survey receive a customized energy report that provides an analysis of their actual energy usage. The energy report also includes charts and graphs and information on energy efficiency products and services, rebate programs and other energy-related information to encourage the adoption of energy efficiency measures identified through the energy survey.

The Mail-In Surveys involve targeted direct mailings and provide customers with limited or no on-line access the flexibility to receive energy information. The On-Line Surveys are available on Southern California Edison’s (SCE) website in an interactive or web-posted format. The English and Spanish interactive surveys provide customers with immediate results on-line, and the web-posted Chinese survey is downloadable from SCE’s website. Customers complete the Mail-In and web-posted surveys and submit them for processing to receive their customized energy reports. Customers who complete the interactive surveys receive energy reports immediately on-line to better manage their home energy use.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$1,295,654
Fundshift Amount	(\$20,000)
Revised Authorized Budget	\$1,275,654
Program Expenditures (includes program commitments)	\$1,248,108

1 – As approved in Decision 03-04-055.

**Fundshift Summary -**

Towards the end of 2003, HEES achieved each of its program targets slightly under projected costs. This afforded SCE the opportunity to shift \$20,000 to the

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Residential Multifamily Energy Efficiency Rebate program which was experiencing overwhelming demand.

**III. Program Performance**

**Table 2 – Performance Overview**

Metrics	CPUC Targets	Results
<b>Mail-In Surveys<sup>1</sup></b>	18,000	25,856
<b>On-Line Surveys</b>	12,000	15,648
<b>Hard-to-Reach<sup>1</sup> Performance</b>	The program will send at to least 50% of direct mail surveys to HTR customers. <sup>2</sup>	The program sent 100% of direct mail surveys to HTR customers.

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – SCE proposed this target but D.03-04-055 listed a 9,000 HTR mailing target. SCE interprets the Decision as having adopted the percentage target since the 9,000 HTR mailing target is far less aggressive than SCE's proposed mailing target. SCE achieved nearly 200,000 HTR mailings in 2003.

3 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

The 2003 Home Energy Efficiency Surveys program target was to achieve 18,000 completed mail-in survey reports returned to customers and 12,000 surveys completed on-line. SCE successfully completed 25,856 mail-in surveys and 15,648 on-line surveys. SCE took several steps to achieve the overall target including: (a) extensive direct mailing campaign; (b) collaboration with the local community-based organizations (CBOs); (c) enhanced on-line survey form; and (d) targeted and coordinated promotion.

**2. Steps Taken To Achieve Target**

**a. Direct Mail Campaign**

SCE continued its existing direct mail strategy to a total of 199,907 mail-in solicitation packages. In the first and second quarters, SCE sent 99,937 packages. During the third quarter, SCE sent an additional 49,976 packages to desert area customers, and 24,999 to Chinese-speaking and 24,995 Spanish-speaking customers. With these successful targeted mailings, SCE exceeded its 2003 completed mail-in survey goal by September 2003.

**b. Collaboration with CBOs**

SCE enhanced its efforts to achieve equity and remove market barriers by enhancing access of energy efficiency programs for non-English speaking

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customers. SCE developed and implemented a three-month pilot program that involved working side-by-side with local CBOs to promote the survey programs and other SCE rebate and incentive programs to the Spanish and Asian communities. The pilot program achieved 1,546 completed surveys conducted in English, Chinese and Vietnamese.

### **c. Enhanced On-Line Survey Form**

In late May 2003, SCE implemented a “fast track” version of the on-line English interactive surveys to increase customer participation. The “fast track” survey allows customers to receive personalized energy-saving information without the use of their account number.

SCE also implemented a new Spanish interactive on-line survey on August 1, 2003, to offer Spanish-speaking customers a tool to help them better manage their home energy costs.

### **d. Targeted and Coordinated Marketing**

Coupled with the launching of the “fast track” version, SCE started an intensive marketing promotion by offering customer a \$5 complimentary Starbucks card for the completion of an on-line survey. The campaign included 1,290,000 e-mail blasts and 4,528,000 banner ads on 6 local and regional websites. E-mail blasts were also conducted in Spanish to 60,000 users to promote SCE’s new Spanish online survey. Spanish banner ads were placed on Univision’s regional website to drive Spanish-speaking customers to SCE’s new Spanish online survey. Through this innovative on-line marketing campaign yielded a high level of customer participation. This effective marketing campaign resulted in 4,545 completed surveys within 34 days. With this successful enhancement and strategic marketing, SCE exceeded its 2003 on-line survey goal by September 2003.

In order to make customers aware of the new Spanish on-line survey SCE’s on-line survey campaign was expanded to include outreach efforts to the Spanish community. SCE worked with Univision to launch statewide television advertising campaign targeting Spanish-speaking customers. This statewide campaign was released from October 27 thru November 2, 2003. It promoted the new on-line interactive HEES in Spanish. SCE, in coordination with other IOUs, also published a joint press release for the new on-line interactive HEES in Spanish to coincide with the Univision television advertisements. In addition to the coordination with Univision’s statewide marketing and outreach campaign, SCE promoted the on-line interactive HEES in Spanish by coordinating with local print, television and radio stations to encourage Spanish-speaking customers to complete the survey; and printed and distributed new English/Spanish fliers to promote the on-line survey.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

The 2003 Home Energy Efficiency Survey program's hard-to-reach (HTR) target required achievement of 50 percent of the direct mail surveys to be mailed to HTR customers. Relying on the CPUC's HTR reach definition<sup>3</sup>, SCE further refined the HTR definition for this program to target specifically non-English speaking, rural, moderate income, multi-family, mobile home tenants and renters. Through strategic marketing and outreach, SCE sent 100 percent (199,907 direct mail surveys) of the mailings to HTR customers. These direct mailings included approximately 50,000 mailings to Chinese- or Spanish-speaking customers.

#### **2. Reasonable Steps Taken To Achieve Target**

The Home Energy Efficiency Survey program has the advantage of being able to respond to the needs of certain HTR customer groups by providing an alternative delivery channel to the statewide Home Energy Efficiency Survey program through individual interaction.

The program expanded its direct mail solicitation packages and outreach efforts to include other HTR customers including rural, moderate income and renters. These customer segments tend to have a greater propensity than other customer segments to respond positively to on-line or mail-in surveys than in-home surveys.

SCE took several steps to achieve the overall target including working with the local CBOs and offering the Spanish on-line interactive survey to the Chinese-, Vietnamese and Spanish-speaking communities. SCE's continue its pursuit in building relationships with CBOs to better educate HTR communities of energy efficiency and achieve reliable energy savings. The CBOs promote the energy surveys to SCE customers through their existing programs and services. CBOs complete a mail-in survey in the customer's language, and provide customers with other programs and rebates information. The completed surveys are forwarded to SCE Contractor to process, and the resulting energy report is mailed to the customer.

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<sup>3</sup> Energy Efficiency Policy Manual, dated November 29, 2001.

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## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

Program Title: **California ENERGY STAR<sup>®</sup> New Homes Programs**

- California ENERGY STAR<sup>®</sup> New Homes – Multifamily
- California ENERGY STAR<sup>®</sup> New Homes – Single Family

### **I. Program Overview**

The California ENERGY STAR<sup>®</sup> New Homes Programs continued to build on one of the most successful efforts undertaken over the past decade by Pacific Gas and Electric Company (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 multifamily 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 multifamily sectors, with a targeted effort in hard-to-reach (HTR) residential new construction markets.

The California ENERGY STAR<sup>®</sup> New Homes Programs are designed to encourage single family and multifamily (including rental apartments, condominiums, and town homes) 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 offers a multifamily high-rise component for projects that use the 2001 Energy Efficiency Standards for High-Rise Residential Buildings. The EPA's ENERGY STAR<sup>®</sup> currently does not have a designation for multifamily buildings above three stories. The information gathered as a result of this component will be shared with EPA ENERGY STAR<sup>®</sup>. EPA is interested in the outcome of this program activity for possible future ENERGY STAR<sup>®</sup> designation of multifamily buildings that are four or more stories.

**2003 Energy Efficiency Program Accomplishments  
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**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
<b>California Energy Star® New Homes – Single-Family</b>	
Authorized Budget <sup>1</sup>	\$4,250,000
Program Expenditures (includes program commitments)	\$5,156,726

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

<b>2003</b>	<b>Amount</b>
<b>California Energy Star® New Homes – Multifamily</b>	
Authorized Budget <sup>1</sup>	\$750,000
Program Expenditures (includes program commitments)	\$885,999

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

<b>2003</b>	<b>Amount</b>
<b>California Energy Star® New Homes – Single-Family and Multifamily</b>	
Authorized Budget <sup>1</sup>	\$5,000,000
Program Expenditures (includes program commitments)	\$6,042,726

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

Fundshift Summary -  
None



**2003 Energy Efficiency Program Accomplishments  
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**III. Program Performance**

**Table 2 – Performance Overview**

**California Energy Star® New Homes – Single-Family**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results<sup>2</sup></b>
<b>Energy Savings, kWh</b>	3,996,000	6,565,455
<b>Demand Reduction, kW</b>	4,228	7,015
<b>No. of Units</b>	5,000	5,905

1 – As approved in Decision 03-04-055 (Attachments 1 and 2) and updated by revised Program Implementation Plans submitted pursuant to this Decision (June 2, 2003 Letter to Energy Division).

2 – Based on committed and paid units.

3 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**California Energy Star® New Homes – Multi-Family**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results<sup>2</sup></b>
<b>Energy Savings, kWh</b>	497,600	582,710
<b>Demand Reduction, kW</b>	561	665
<b>No. of Units</b>	1,000	2,365

1 – As approved in Decision 03-04-055 (Attachments 1 and 2) and updated by revised Program Implementation Plans submitted pursuant to this Decision (June 2, 2003 Letter to Energy Division).

2 – Based on committed and paid units.

3 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**California Energy Star® New Homes – Single-Family and Multi-Family -**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results<sup>2</sup></b>
<b>Energy Savings, kWh</b>	4,493,600	7,148,165
<b>Demand Reduction, kW</b>	4,789	7,680
<b>Hard-to-Reach Performance</b>	20% of the combined Direct Implementation funds	45.8% of the combined Direct Implementation funds were directed at HTR segments
<b>No. of Units</b>	6,000	8,270

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1 – As approved in Decision 03-04-055 (Attachments 1 and 2) and updated by revised Program Implementation Plans submitted pursuant to this Decision (June 2, 2003 Letter to Energy Division).

2 – Based on committed and paid units.

3 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

### **A. Performance Achievements**

#### **1. Introduction**

In 2003, the California Energy Star New Homes programs combined targets are to achieve 4,493,600 kWh of net annualized energy savings and 4,789 kW of net demand reduction along with having 6,000 units participate in the program. SCE relied on established relationships with the building industry, as well as new opportunities for builder outreach to not only meet, but exceed these goals. As a result, the program achieved 7,148,165 kWh of net annualized energy savings and 7,680 kW of net demand reduction. Specifically, the single-family program achieved 6,565,455 kWh of net annualized energy savings, 7,015 kW of net demand reduction and 5,905 units. The multifamily program realized 582,710 kWh of net annualized energy savings, 7,015 kW of net demand reduction and 2,365 units.

#### **2. Steps Taken To Achieve Target**

##### **a. Aggressive Implementation**

The four investor-owned utilities (IOUs) developed the 2003 statewide program Single Family, Multifamily Low Rise and Multifamily High Rise applications as well as the Design Assistance Application (to support the multifamily program only) were available shortly after the 2003 program was approved.

Simultaneously, the IOUs developed a new statewide trade advertisement which ran in trade publications in May-July 2003 that coincided with the June 2003 Pacific Coast Builders Conference (PCBC), where over 25,000 attendees and 600 exhibitors converged on San Francisco's Moscone Convention Center to experience the largest regional home building trade show in the U.S. SCE occupied a 400 square foot booth that was centrally located in a high traffic area within the convention center, in order to aggressively promote the 2003 CESNHP.

##### **b. Coordination with Industry Partners**

Early on in 2003, the IOU team partnered with the California Energy Commission in offering statewide web cast training on the California Title 24 Energy Codes. Training was simultaneously held in the San Francisco, Sacramento, Stockton, Irwindale (LA metro) and San Diego. Builders could also access this training on the internet. At least 500 builders, architects, heating, ventilation and air conditioning (HVAC) and insulation contractors throughout California attended the training.

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Networking with the building industry is always a critical component of the CESNHP's targeted outreach efforts with our builder partners. The CESNHP was represented at all three California Building Industry Association's quarterly committee meetings. Additionally, SCE networked with the local chapters of BIA/Southern California (Antelope Valley, Baldy View, Desert, Greater LA/Ventura, Orange County, Riverside) by attending monthly membership meetings, Purchasing Agent, Suppliers and Subcontractors (PASS) luncheons, vendor showcases, and other industry outreach activities. The Statewide IOU team also gave a presentation on the successful 2002 California ENERGY STAR® New Homes Program at the Residential Energy Service Network (RESNET) conference held in San Diego in February 2003 to help launch the program. RESNET is a non-profit organization whose mission is to improve the energy efficiency of the nation's housing stock and to qualify more families for home ownership by expanding the national availability of mortgage financing options and home energy ratings. Some of the efforts undertaken by RESNET include: adopting and maintaining the national standards for home energy ratings; accrediting home energy rating providers, energy rating training providers, and home energy rating software programs; working with the mortgage industry in developing innovative residential energy efficiency financing products; and educating the public and the housing industry on the benefits of residential energy efficiency.

Additionally, SCE, along with the other IOUs, worked directly with the Environmental Protection Agency on their new ENERGY STAR® logo design to develop a special California ENERGY STAR® Homes logo for statewide use, to help with branding the program on applications and marketing materials so builders would readily recognize the Energy Star label is it related to the CESNHP. Through the efforts of the work done with EPA, more and more prospective homeowners are coming to identify the CESNHP brand as a symbol of energy efficiency.

In an effort to reach out to our multifamily building industry partners, SCE, along with PG&E developed a multifamily component with the help of experience multifamily energy consultants. SCE's training kicked off in June 2003 in Irvine, California. SCE along with PG&E hosted a series of training classes targeting architects, energy consultants, multifamily builders, and other industry professionals. The focus of the training was to offer information on the new, utility-sponsored design assistance and design team incentives; educate the industry on the most cost effective means of designing, modeling, and building energy efficiency into new multi-family construction projects; and provide information on resources that are available to assist the industry's efforts to improve the energy efficiency of their multi-family project.

As a result of this partnering effort, SCE worked with two consultants to develop and deliver the Multifamily Buildings Energy Efficiency Design Training course specifically targeted to multifamily builders, affordable housing developers,

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architects, energy consultants, HVAC contractors, home energy rating systems (HERS) raters, mechanical and plumbing engineers, and building department inspectors. Six training classes were originally planned. E-mail was sent out to 9,000 multifamily building industry professionals notifying them of these upcoming training sessions. Based on the overwhelming response, two additional dates were added. A total of eight training dates were scheduled beginning in June 2003 and continuing through September 2003. A total of 300 multifamily building industry professionals were trained at the 8 classes, of which 140 of those were at the three classes held within SCE's service area in the cities of Redlands, Santa Ana, and Santa Monica.

### **c. Targeted Outreach**

Late in 2003 SCE began its "Twinkle, Twinkle Energy Star" outreach campaign to consumers. This was a new targeted advertising campaign primarily focused on prospective home buyers, but included a version tailored toward builders. The campaign was a clever play on words, that read, "Twinkle, Twinkle, Energy Star...When you wish upon the California Energy Star New Homes Program, your dreams come true for a new, energy-efficient home that brings you savings, comfort and quality." Partnered with this ad was a listing of new CESNHP subdivisions open (or soon to be) for purchase. The ads ran in the Los Angeles Newspaper Group's (which includes eight newspapers within the Los Angeles metro area) real estate section. Additionally, SCE also began running the new campaign within the Homebuyers Guide magazine, which is the premier free "home finder" publication in the Southern California region.

In 2003, SCE's targeted outreach also included working with graphic designers to create a variety of point-of-sale (POS) collateral marketing materials that promote the Energy Star label within the new communities. Although broad-based advertising efforts are extremely useful in educating a large audience, it's important to focus more precisely on the audience that has identified themselves as being the primary target by virtue of being on the project site, visiting the model homes. It is in the model homes, and within the sales offices that SCE relies on a specific marketing intervention opportunity to promote the benefits of the CESNHP, as well as promoting the efforts of the respective builder. In 2003, small quantities of these POS items were initially ordered so SCE could obtain feedback from the builders as to which POS materials they preferred most to use on site and inside the model homes. The items currently include, yard signs, flags, vinyl cling window decals, and small table tents. Although it's not always easy to convince sales and marketing agents to utilize the POS materials due to specific decorating protocols within model homes, yet due to more and more home buyers seeking out energy efficiency, more builders are beginning to utilize some of the support materials, thus helping to further promote the concept of the CESNHP.

SCE promoted the CESNHP as an exhibitor at the 2003 Building Industry Show (BIS) at the Anaheim Convention Center on October 16 and 17, 2003. Over

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8,000 attendees converged on the exhibition center where nearly 400 exhibitors promoted their products and services.

**B. Hard-to-Reach Performance**

**1. Introduction**

For 2003, SCE actively pursued projects in the hard-to-reach market in order to ensure a minimum of 20 percent of the direct implementation funds were allocated to this customer group. Based on the CPUC’s definition of HTR identified in the Energy Efficiency Policy Manual and the added HTR segments identified in Decision 02-03-056, SCE defined HTR customers to include housing for senior citizens, individuals with special needs, moderate income, and rental units along with housing located in rural areas. Rural areas were defined by the CPUC approved Statewide Residential Customer Needs Assessment Study. As a result of targeted outreach, SCE was able to allocate 45.8 percent of the combined Multifamily and Single Family programs’ direct implementation dollars to HTR segments. The table below shows the hard-to-reach direct implementation budget allocation.

CA New Homes Programs	Total DI Recorded	Total HTR DI Recorded	
	\$	\$	%
Single-Family	\$4,187,677	\$1,793,411	42.8
Multifamily	\$529,388	\$365,891	69.1
<b>Total</b>	<b>\$4,717,065</b>	<b>\$2,159,302</b>	<b>45.8</b>

SCE primarily targeted multifamily rental, senior, senior assisted living, and affordable housing (family and transitional); as well as single family rural projects to attain the HTR targets.

**2. Reasonable Steps Taken To Achieve Target**

In order to achieve the high level of success with the HTR goals in the multifamily market SCE focused its program implementation outreach on non-profit developers and housing authorities. These markets are in the greatest need of energy efficiency and through the training offered by both SCE and PG&E, these entities were able to learn and understand how to achieve high levels of energy savings without facing detrimental budget impacts. Some of the discussion topics in the multifamily training included: concepts in energy-efficient design, Title 24 overview, energy-efficient measures suitable for multifamily buildings, energy efficiency versus conservation, performance-based design goals, integrated systems, and long-term cost effectiveness of energy-efficient buildings, to name a few. Additionally, SCE focused its single family effort on the more rural, and in most cases, hotter areas. By eliminating the 20% incentive for the coastal climates, the program was “naturally” able to reduce the participation of projects in more affluent, suburban areas with milder climates. Again, many

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homeowners in the outlying areas, are in the greatest need of energy efficiency benefits, from both a cost and comfort standpoint, because these rural areas tend to be the hotter micro climates. SCE actively pursued builders within the rural and/or moderate income areas such as Riverside, parts of LA, and San Bernardino counties. Most large production home builders have division offices throughout the Southern California area. SCE would focus implementation efforts on those regional offices within the Inland Empire area.

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Program Title: **Standard Performance Contract (SPC) Program**

**I. Program Overview**

This statewide program offers cash incentives for custom-designed energy savings retrofits of existing facilities to large and medium businesses, but small and very small businesses can also participate if their measures do not qualify for the Express Efficiency program. Any SCE customer paying the electric Public Goods Charge is eligible. This includes utility customers who may have opted to purchase electricity from other suppliers. Third party Energy Efficiency Service Providers (EESPs) who sponsor energy efficiency retrofit projects at utility customer facilities are also eligible to participate.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$13,700,000
Fundshift Amount	\$50,000
Revised Authorized Budget	\$13,750,000
Program Expenditures (includes program commitments)	\$15,165,977

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

Fundshift Summary -

SCE shifted \$50,000 from the Building Operating Certification (BOC) program budget in December 2003 to fund a portion of the extensive applications on the SPC wait list. These funds were fully committed before year-end.

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Energy Savings, kWh</b>	71,656,875	90,763,173
<b>Demand Reduction, kW</b>	14,724	11,953

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.



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### **A. Performance Achievements**

#### **1. Introduction**

SCE's 2003 Nonresidential Standard Performance Contract program commenced in April with net annualized targets of 71,656,875 kWh of energy savings and 14,724 kW of demand reductions. By year end, SCE had achieved 90,763,173 kWh of net annualized energy savings and 11,953 of net kW demand reductions, slightly below the program target. The demand reduction shortfall can be attributed to several factors: (1) a higher than anticipated ratio of projects with lower peak demand reductions such as variable speed drives and occupancy sensors; (2) the correlation between demand reduction and energy savings was based upon a forecast of lower operating hours than actually resulted; and (3) an overall measure mix that included higher than expected lighting (paid at \$.05 per kWh) and lower than expected air conditioning and refrigeration (paid at \$.14 kWh).

The program realized 30 percent of its total energy savings from lighting measures, 18 percent from HVAC measures and 52 percent from other measures. All program funds were fully committed by July 2003 and a wait list was instituted until December 31, 2003. A total of 454 applications had been received and reviewed, incentives of \$1,884,690 were paid, and incentives of \$9,817,167 were committed at year-end.

#### **2. Steps Taken To Achieve Target**

##### **a. Customer Awareness and Outreach**

Customer awareness is critical to the success of any program and the 2003 nonresidential SPC program was no exception. SCE continued to inform customers about the SPC program through several avenues including the development of a website ([www.scespc.com](http://www.scespc.com)) where customers could quickly find information to understand the program features and determine eligibility requirements; download application forms in pdf or excel formats, program manuals, and fact sheets; and request more information or order a free CD-ROM. The website also provided a current status of the funding situation, including the total incentives remaining, the committed incentives (the amount of applications still under review), and the actual incentive amount reserved (i.e., number of projects approved and under contract).

SCE held educational seminars for local businesses to inform them of program changes, application procedures, and common measure applications. Program staff also participated and exhibited at local trade shows that served the program's target audience (facility managers, property managers, energy managers and other staff having responsibility for efficiency improvements at their facility). SCE developed and produced fact sheets, brochures, bill inserts and other marketing

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materials to inform customers and internal staff of the program process, guidelines, and format.

Critical to the success of the SPC program was SCE's ability to use SCE major account managers to encourage customer participation in the program. Informal meetings were held with SCE major account managers and field engineers to provide them with presentation materials for use at customer site visits. SCE's representatives were knowledgeable about the SPC program, and were able to explain the program to their clients and assist them with completing and filing the application forms. In addition, SCE field engineers were available to do initial site inspections of the existing equipment, make recommendations, and assist customers with the calculation of energy savings.

Representatives in the customer call center were also provided with brochures, contact information, website address, and other SPC program materials to provide customers calling the toll free number with accurate information.

### **b. Improved Software Tools**

Program commencement began with the development of a new CD that included updated software tools to assist applicants in estimating the energy savings for their project, complete the forms electronically, and print program manuals and information from their own computer. This user-friendly CD was designed to help the applicant quickly estimate savings for many commonly installed measures. The applicant simply entered information specific to the energy-efficiency project, (including name plate data, efficiency ratings, load, etc.) and the model calculated the energy savings based on the inputs. Customers could also complete contact and site information from the CD and print out a completed form for submission.

In addition to updating existing software tools, a new software tool was developed for "cool roofs," a new qualifying measure for 2003. The tool walked applicants through a step-by-step process to estimate the incentive and energy savings. This free compact disc was made available to all SPC applicants, SCE account managers and SCE field engineers.

### **c. Efficient Program Operations**

Regular IOU meetings and conference calls ensured statewide consistency in all aspects of the program. IOU program managers continuously identified ways to improve the program to meet the growing needs of all industrial, manufacturing and agricultural customers, and keep up-to-date on new equipment and emerging, high-efficiency technologies.

To effectively manage the growing customer demand for the SPC program, the SPC database (SPCTrack) was updated with new reporting options, additional tracking mechanisms and enhanced data entry features. These upgrades improved the application flow and process time, allowed for checks and comparisons of

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measures between project sponsors and customers, and enabled staff to quickly input new project applications and prepare them for review. The database was also formatted to input wait list customers for possible future incentives. As funding became available during the program year (due to projects being discontinued and/or more funds being made available to SPC through fundshifts), applications were activated from the waitlist and reviewed for approval easily and efficiently.

SCE customer account managers were kept informed of the status of applications during the review process. If additional information or clarification was needed from an applicant, the account managers were notified at the same time as the applicant, to enable him/her to proactively contact the applicant and offer assistance in providing a prompt response. Likewise, the customer representative was notified when the application was approved. This provided the account manager an opportunity to advise the applicant of the next steps in the process and remain involved in the project.

### **d. Measure Eligibility**

To support the range and value of customized efficiency projects, and provide customers with greater flexibility in designing efficient systems or equipment, additional measures became eligible for incentives during the program year. These measures included air conditioner economizers, LED Exit Signs, and CFLs with locking devices.

SCE's 2003 SPC program also included a modification to the 80-20 rule which required all lighting projects to include at least 20 percent of the energy savings from other measure(s). In 2002, all lighting projects were subject to this rule however, in 2003 this rule only applied to the fluorescent T-12 to T-8 retrofit.

### **e. Contractor Selection and Coordination**

SCE solicited competitive bids from various engineering firms in support of program operation. Responsibilities included review and evaluation of energy savings calculations, customer site visits to verify baseline data and operating equipment, recommendations for measurement as needed, and verification of equipment installation. SCE selected three consulting companies to provide professional and expert assistance to ensure that incentive dollars were paid on verifiable savings projects and that installed equipment and systems exceeded minimum state or local standards. SCE worked closely with these consultants during program implementation and execution to ensure that customers were satisfied, processing timelines were improved, and program goals were met. All contractors managed within their contracted budget efficiently and cost-effectively.

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Program Title: **Express Efficiency Program**

**I. Program Overview**

This statewide program offers nonresidential prescriptive rebates for specific, proven energy efficient measures including lighting; heating, ventilation and air conditioning (HVAC), refrigeration, agricultural, gas, food service, and motor retrofit measures. The program is limited to small and medium sized customers with a monthly demand of less than 500kW, and emphasizes participation of customers in the hard-to-reach (HTR) sector.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$7,000,000
Program Expenditures (includes program commitments)	\$7,387,256

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

Fundshift Summary - None

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Energy Savings, kWh</b>	71,869,000	123,173,440
<b>Demand Reduction, kW</b>	15,000	27,117
<b>Hard-to-Reach Performance</b>	47%	57.5%

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

The Express Efficiency program targets for 2003 was to achieve 71,869,000 kWh of net annualized energy savings and 15,000 kW of net demand reduction. The

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Express Efficiency program achieved total net annualized energy savings of 123,173,440 kWh and a net demand reduction of 27,117 kW. The total number of customers served in the 2003 program was projected to be 5,000 in terms of applications paid. The actual number of paid rebates through year end was nearly 6,500. Program funding was fully committed on November 4, 2003, and a wait list was started. SCE accomplished these results through: (1) modifications to program's incentive structure; (2) implementation of outreach and marketing; and (3) coordination with other programs and entities.

### **2. Steps Taken To Achieve Target**

#### **a. Modification to Incentive Structure**

The statewide Express Efficiency program team launched the 2003 program with special promotional rebate amounts for installing selected energy-efficient lighting, LED, air conditioning, refrigeration, agricultural, and motor equipment measures. Because the program was launched with a bridge period, essentially continuing the program terms and conditions of the 2002 program, the team felt it necessary to have a special promotion in the form of higher rebates in order get the 2003 program off to a strong start. SCE ended the special promotion period on March 31, 2003 because the bridge period was coming to an end and the new 2003 program terms and conditions would supercede those in effect through the bridge period. The 2003 terms and conditions and base rebate amounts went into effect on April 17, 2003.

In an effort to eliminate the need for "sales", or special rebate pricing, that had been used periodically in the Express Efficiency program in past years to stimulate participation, the statewide team contracted with a consulting firm, Itron, to conduct a study to determine optimum rebate levels based on historic participation rates, special promotion pricing, measures offered, and base rebate levels. The study recommended higher rebate levels for selected measures in order to increase the number of customers installing energy efficient equipment. The Statewide Express Team submitted a proposal to and received authorization from the CPUC's Energy Division to increase incentive rebate levels by up to 60 percent for energy efficient measures for small and medium-sized customers. The investor-owned utilities (IOUs) announced the new rebate levels via e-mails to vendors, customer contacts and printed material; reservation numbers immediately increased.

#### **b. Implementation of Outreach and Marketing**

In order to expand the program's accessibility the Statewide Express Team translated the 2003 Express Efficiency rebate application into Spanish, Vietnamese, Chinese and Korean.

SCE also implemented several marketing efforts included the following:

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- Issued a flyer to vendors and SCE customer representatives describing the bridge program and special pricing in effect for projects completed by March 31, 2003.
- Published a flyer for customers introducing the 2003 program. It highlights Express rebate measures, customer qualifications, and the Online Energy Survey for businesses: to be distributed at Business Solutions outreach events and direct mail.
- Produced a four-fold Save Energy, Save Money brochure for business customers which features the Express Efficiency program: to be distributed through corporate outreach events, Business Solutions and Major Customer representatives.
- Sponsored the second annual “Energy Star” Expo which presented the Express Efficiency program to small business customers at 19 locations in Los Angeles and Orange Counties.
- Produced the “Simple Solutions, Smart Savings” direct mail package featuring the Express Efficiency program: mailed June 13 to 260,000 very small and small customers.
- Featured the Express Efficiency program in the second quarter Business Connections bill insert: mailed in June to 500,000 business customers.
- Featured the Express Efficiency program in a Save Energy, Save Money radio spot which aired June 9 through August 17, 2003.
- Mailed a Business Connections bill insert in September 2003 to 500,000 business customers promoting Express Efficiency.
- Printed 25,000 copies of the Express Efficiency flyer for customers to highlight increased rebate levels in the fourth quarter.
- Sent a direct mailing to 163,101 customers promoting energy efficiency cooling.
- Sent a direct mailing to 288,000 customers promoting energy efficiency lighting.
- Sent a direct mailing to 223,222 customers promoting energy efficiency refrigeration.
- Co-sponsored quarterly advertisements with the California Air Conditioning Contractors of America to promote the Express Efficiency program.

### **c. Coordination With Other Programs And Entities**

In order to maintain coordination with other energy efficiency program offerings, SCE’s Express Efficiency and Nonresidential Audit programs continued to closely coordinate activities to increase customer participation. This allows customers to take advantage of efficiency rebates after completing an audit.

SCE continued to coordinate with other IOUs through meetings and conference calls to ensure statewide consistency in all externally visible aspects of the Express Efficiency program. IOU program managers continuously identified ways to improve the program to make the future Express Efficiency program

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more focused toward the needs of small and medium customers as in the example of a toll free information and reservation phone number.

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

The Express Efficiency program was challenged to achieve a HTR participation goal of 47 percent, meaning that a minimum of 47 percent of rebate applications actually paid would go to HTR customers. HTR customers were identified as GS-1 (i.e., very small) and GS-2 (i.e., small, medium) customers with a service address located in a rural zip code. Through local community involvement and targeted marketing the actual HTR participation was 57.5 percent surpassing the target.

#### **2. Reasonable Steps Taken To Achieve Target**

Express Efficiency coordinated its efforts with the SCE Business Solutions Team. They are a diverse group that generally reside in and belong to organizations within the communities in which they work. They have a sense of community needs, know the customers well, and are well positioned to assist locally and help the individual members of these business organizations and customer groups identify energy efficiency opportunities and overcome the market barriers related to the achievement of their full energy efficiency potential. Some examples of Business Solutions Team involvement in HTR community events in 2003 are:

- Energy Star Expo – May 17, 2003
- Nonprofit Community Energy Efficiency Workshop – July 8, 2003
- African American Small Business Energy Efficiency Outreach – July 25, 2003
- Korean Energy Efficiency Expo – July 26, 2003
- El Monte Energy Walk, Hispanic Small Business Outreach – August 23, 2003
- Chinese Small Business Energy Efficiency Forum – August 27, 2003

This SCE local community involvement approach helped to ensure program equity in regard to program access and help overcome market barriers such as language, geographic location, business size, and opportunity to invest in new energy efficient equipment. The Express Efficiency program also provided training, educational materials and technical support targeted specifically to meet the needs of the HTR groups.

In a pilot marketing program element, SCE enrolled 2,600 HTR customers in the Express Efficiency program at the community and association energy events listed above. As part of enrollment, and to introduce HTR customers to energy efficiency, each verified HTR customer received one to six free compact florescent lamps depending on individual need. This outreach method proved to be highly effective in stimulating HTR customer involvement in the Express



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Efficiency program, and allowed them to begin saving energy and money immediately.

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Program Title: **Nonresidential Energy Audits Program**

**I. Program Overview**

This statewide information program offers free energy audits to nonresidential customers. The audit provides customer assistance in the form of information on the benefits 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. The types of energy audits offered by the program include: on-site audits, online, mail-in, over-the-phone and CD-ROM audits. Online audits are available in Spanish, and English. In addition, on-site audits may be conducted in the following languages: Spanish, Korean, Chinese, as well as English.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$2,200,000
Program Expenditures (includes program commitments)	\$1,915,180

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fund Shift Summary – None

**III. Program Performance**

**Table 2 - Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Audits</b>	7,100	8,533
<b>Hard-to-Reach Performance</b>	SCE's HTR target is to conduct 2,840 energy audits for HTR customers	3,936 energy audits were conducted for HTR customers

1 - As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

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### **A. Performance Achievements**

#### **1. Introduction**

The target for SCE's 2003 Nonresidential Energy Audit Program was to conduct 7,100 audits. SCE successfully conducted 8,533 energy audits during the year. To assure achievement of this target, SCE implemented various strategies throughout the year including: (1) expanded the offering of audit types; (2) created additional customer awareness; (3) developed creative program outreach techniques.

#### **2. Reasonable Steps Taken To Achieve Target**

##### **a. Expanded the Offering of Audit Types**

During the second half of 2003, SCE's nonresidential energy audit program offered a new on-line Spanish language audit to enlarge and enhance the market for the SCE's online audit tool.

##### **b. Created Additional Customer Awareness**

SCE used various channels to create additional program awareness among the nonresidential customer class. These various methods and tactics assured the program's overall success and included activities such as: (1) a 285,000 piece mailing of SCE's Business Solutions outreach message which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (2) Conducted four classes for small business customers entitled: "How to Manage Your Business Energy Costs, Subtitle: "How to Conduct and Energy-use Survey"; (3) one press statement was released in several languages, which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (4) a 5,000 piece mailing entitled "Save Your Energy" and distribution of 4,500 trade show handouts covering nonresidential energy audit information; (5) conducted 69 outreach events in the service territory which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (6) conducted one training session for on-site audit third party contractors; (7) promoted CD-ROM audits at 10 "Energy Star Expo" for hard-to-reach customers resulting in over 130 CD-ROM audits completed within days following the multi-site event; (8) a 1,300 piece mailing to SCE's warm climate customers which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (9) a direct mail distribution of 10,000 trifold "Helping Your Business is Our Business" which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (10) a 49,000 piece direct mail drop of invitations to small hard-to-reach customers to participate in the mail-in audit; (11) a 412,000 unit e-mail blast to small customers as an invitation to participate in the online audit; (12) a 30,000 unit mail drop with survey return card for SCE's "Save Energy, Save Money" campaign which featured the nonresidential energy audit as a step to saving energy and money

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through participation in SCE's rebate programs, in addition to distribution of 25,000 reprints of the piece which were distributed at small business events; (13) one "Flex Your Power" news release, highlighting the availability of the statewide energy audit program for small businesses; (14) a 7,000 unit SCE "Power Bulletin" newsletter distribution to large business customers which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs; (15) designed, printed and posted 6 Chinese language signs promoting the nonresidential energy audit, for a private Asian language center featuring SCE energy efficiency program information.

### **c. Developed Creative Program Outreach Techniques**

SCE added a new internet strategy to create demand for the online audit. SCE successfully used electronic messaging in an electronic-mail format to encourage customers to take the online energy audit and "have a free cup of coffee." This promotion greatly aided SCE in reaching the online audit target. SCE also launched effective direct mail promotions for mail-in audit participation. For customer meetings, conferences, and seminars, SCE also created four 30" by 76" free standing promotional signs and ten 12" by 9" acrylic table top presentation stands to help promote the online, on-site, mail-in, phone, and CD-ROM energy audits at events for business customers.

## **B. Hard-to-Reach Performance**

### **1. Introduction**

The hard-to-reach target for the 2003 Nonresidential Energy Audit program was to conduct 2,840 energy audits for hard-to-reach (HTR) customers. As a result of targeted and improved program offerings directed to the smaller business customer, SCE was able to conduct 3,936 HTR audits. A plan was implemented to target the HTR very small-, small- and mid-sized customers through the "Warm Climate Customer" outreach effort. Emphasis was given to the business customers in the rural area of SCE's service territory, which is defined by zip code. The Nonresidential Energy Audit Program defines HTR as very small customers (i.e., <20 kW) and those businesses in rural areas of the service territory. In addition, a focused effort to involve very small customers was implemented by SCE's customer representatives.

### **2. Reasonable Steps Taken To Achieve Target**

During implementation of the on-site energy audit component to the 2003 Nonresidential Energy Audit program, SCE made use of ways to impact business customers in the first quarter of the year by using three third party vendors, previously selected through a competitive bid process to provide on-site energy audits focused on the hard-to-reach customer segment. SCE selected these vendors from various locations throughout SCE's service area and assigned geographic vicinities that had a high concentration of hard-to-reach customers.

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SCE continued to refine audit reporting and created a uniform audit tracking tool and certain quality controls for the vendors to use in their work.

The approach to the very small customers involved targeting these small businesses by SCE's Business Solutions team of energy auditors. These representatives focus on specific geographic areas, i.e. cities, and unincorporated county areas, also on non-English speaking customer groups, minority-, and ethnic-based organizations, CBO's, and civic groups, chambers of commerce. The targeting promoted the "Save Energy, Save Money" campaign message which featured the nonresidential energy audit as a step to saving energy and money through participation in SCE's rebate programs.

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Program Title: **Building Operator Certification Program**

**I. Program Overview**

This is a statewide training and certification program for operators of medium and large commercial buildings (including governmental and institutional buildings and complexes) that seek to establish and support a professional credential for building operators in California. Certified operators will have the training and background to identify and implement energy savings opportunities as an integral part of their operations and maintenance activities. The Building Operator Certification (BOC) Level I training course consists of eight days of training classes offered once per month over a seven-month period, and the BOC Level II training course consists of 7 days of training classes offered once per month over a five-month period.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$500,000
Fund shift Amount	(50,000)
Revised Authorized Budget	450,000
Program Expenditures (includes program commitments)	\$350,343

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fund shift Summary -

SCE shifted \$50,000 to the Standard Performance Contract (SPC) program. Contractual negotiations with the training course vendor resulted in significant cost savings. Funds were transferred to help offset continued demand for the SPC program.

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Students</b>	100	134
<b>Training Course Sessions</b>	5	6

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.



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### **A. Performance Achievements**

#### **1. Introduction**

In 2003, the BOC program targets were to offer five training course sessions and to enroll a minimum 100 students in these sessions. SCE was able to exceed both program targets. Specifically, SCE held six training course sessions and enrolled 134 students in these sessions. SCE took several steps in coordination with other investor-owned utilities to achieve these targets including: (1) development of the Level II BOC course curriculum; (2) implementation of training sessions; and (3) recruitment of eligible students.

#### **2. Steps Taken To Achieve Target**

##### **a. Development of BOC Level II Course Curriculum**

In March 2003, SCE received authority from the CPUC to implement the BOC program which included the approval to develop the Level II BOC course curriculum. SCE, along with the other IOUs, immediately began to design a Level II training course that would build on the program's success from the prior year. The purpose of the Level II course was to emphasize equipment and troubleshooting and maintenance.

As a result of this coordinate program enhancement process, the Level II course curriculum developed for the 2003 BOC program consisted of Preventive Maintenance and Operations, Advanced Electrical Diagnostics, HVAC Troubleshooting and Maintenance, HVAC Controls and Optimization, Introduction to Building Commissioning, and Electric Motor Management. The topics covered in the Level II course expand on the maintenance and operational practices covered in BOC's Level I course. The following listing provides course descriptions of the six classes:

##### BOC 201 – Preventive Maintenance & Operations

Covers the step-by-step process for starting and operating a preventive maintenance program that produces energy savings and equipment reliability. The primary focus is using the system that is set up to manage and implement preventive maintenance. A system review is conducted from the work orders that are generated to the tools that maintenance staff select. Specific maintenance and operational issues are addressed in detail in 202 and 203 for electrical and HVAC. Emphasis on effective troubleshooting methods for problem identification, testing procedures, problem solving and operational analysis. Included are the developing of troubleshooting services records.

##### BOC 202 – Advanced Electrical Diagnostics

Students will learn to locate and repair electrical opens, shorts, overloads, and high resistance. The use of digital electric meters is taught along with

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maintenance and operational procedures to prevent electrical problems and evaluate power quality issues for the facility.

### BOC 203 – HVAC Troubleshooting & Maintenance

Learn to troubleshoot and improve the efficiencies of the primary heating, cooling and ventilation systems of commercial buildings. This intensive two-day class focuses on system performance evaluation and efficiency optimization of central boiler and chiller systems, vapor-compression cycles of AC and heat pump systems, and of distribution and ventilation systems.

### BOC 204 – HVAC Controls & Optimization

Learn energy efficient operation, maintenance, and service of HVAC controls and related devices for central air systems commonly found in commercial buildings. The course covers control principles, components, computerized controls, and calibrating the controlled subs-systems.

### BOC 210 – Advanced Indoor Air Quality

Learn to use the EPA recommended procedures for preventing and troubleshooting Indoor Air Quality problems for equipment and building operations. Sampling and troubleshooting will emphasize prevention and evaluation. Special emphasis is placed on evaluation of mitigation approaches.

### BOC 211 – Motors in Facilities

Learn to evaluate motor load profiles, operations, and maintenance needs. Students learn to analyze motor maintenance and repair cycles and to prioritize the repair versus replacement decisions from motor failures.

## **b. Development of Training Courses**

In order to meet the program's training course target, SCE identified several locations to hold seven different training courses using Level I and II curriculum. SCE's course locations were located throughout southern California and within areas that have high concentrations of commercial buildings. SCE also leveraged the use of its energy center to deliver two of the six training courses. The following list shows the class schedule for each of the training courses:

### 1. Irwindale, CTAC Center

Jul 22, 2003	BOC 101 – BUILDING SYSTEMS OVERVIEW
Aug 26, 2003	BOC 107 – FACILITY ELECTRICAL SYSTEMS
Sept 23, 2003	BOC 102 – ENERGY CONSERVATION TECHNIQUES
Oct 20 & 21, 2003	BOC 103 - HVAC SYSTEMS AND CONTROLS
Nov 25, 2003	BOC 104 – EFFICIENT LIGHTING FUNDAMENTALS
Dec 16, 2003	BOC 105 – MAINTENANCE AND RELATED CODES
Jan 27, 2004	BOC 106 – INDOOR AIR QUALITY

### 2. Santa Monica

Sept 16, 2003	BOC 101 – BUILDING SYSTEMS OVERVIEW
Oct 14, 2003	BOC 107 – FACILITY ELECTRICAL SYSTEMS
Nov 18, 2003	BOC 102 – ENERGY CONSERVATION TECHNIQUES

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Dec 9 & 10, 2003	BOC 103 - HVAC SYSTEMS AND CONTROLS
Jan 20, 2004	BOC 104 – EFFICIENT LIGHTING FUNDAMENTALS
Feb 17, 2004	BOC 105 – MAINTENANCE AND RELATED CODES
Mar 16, 2004	BOC 106 – INDOOR AIR QUALITY

**3. Ontario**

Sept 17, 2003	BOC 101 – BUILDING SYSTEMS OVERVIEW
Oct 15, 2003	BOC 107 – FACILITY ELECTRICAL SYSTEMS
Nov 19, 2003	BOC 102 – ENERGY CONSERVATION TECHNIQUES
Dec 11 & 12, 2003	BOC 103 - HVAC SYSTEMS AND CONTROLS
Jan 21, 2003	BOC 104 – EFFICIENT LIGHTING FUNDAMENTALS
Feb 18, 2004	BOC 105 – MAINTENANCE AND RELATED CODES
Mar 17, 2004	BOC 106 – INDOOR AIR QUALITY

**4. Long Beach**

Oct 8, 2003	BOC 101 – BUILDING SYSTEMS OVERVIEW
Nov 12, 2003	BOC 107 – FACILITY ELECTRICAL SYSTEMS
Dec 4, 2003	BOC 102 – ENERGY CONSERVATION TECHNIQUES
Jan 7 & 8, 2004	BOC 103 - HVAC SYSTEMS AND CONTROLS
Feb 11, 2004	BOC 104 – EFFICIENT LIGHTING FUNDAMENTALS
Mar 10, 2004	BOC 105 – MAINTENANCE AND RELATED CODES
Apr 14, 2004	BOC 106 – INDOOR AIR QUALITY

**5. Irvine**

Jul 8, 2003	BOC 101 – BUILDING SYSTEMS OVERVIEW
Aug 12, 2003	BOC 107 – FACILITY ELECTRICAL SYSTEMS
Sep 9, 2003	BOC 102 – ENERGY CONSERVATION TECHNIQUES
Oct 6 & 7, 2003	BOC 103 - HVAC SYSTEMS AND CONTROLS
Nov 4, 2003	BOC 104 – EFFICIENT LIGHTING FUNDAMENTALS
Dec 2, 2003	BOC 105 – MAINTENANCE AND RELATED CODES
Jan 13, 2004	BOC 106 – INDOOR AIR QUALITY

**6. Irwindale – CTAC Center**

Sep 4, 2003	BOC 201 – PREVENTATIVE MAINTENANCE & OPERATIONS
Oct 3, 2003	BOC 202 - ADVANCED ELECTRICAL DIAGNOSTICS
Nov 6 & 7, 2003	BOC 203 – HVAC TROUBLESHOOTING & MAINT.
Dec 18, 2003	BOC 204 – HVAC CONTROLS & OPTIMIZATION
Jan 15, 2004	BOC 214 – INTRODUCTIN TO BLDG. COMMISSIONING
Feb 5, 2004	BOC 215 – ELECTRIC MOTOR MANAGEMENT

**c. Recruitment of Eligible Students**

SCE relied primarily on two promotional methods to recruit potential students from the targeted customer group: direct mail and direct customer contact. A direct mailing conducted by SCE targeted customers from the medium and large commercial building market. Additionally, the BOC course vendor sent the direct mail packet to another 9,500 customers from their mailing list. The mailings included an information packet consisting of a cover letter, a description of the BOC program, a schedule of class offerings, information on pre-course informational sessions, and a registration form. The program also relied on SCE’s customer representatives to inform their customer contacts about the benefits of

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participating in such a program. The program recruited a significant number of students through this direct outreach.

Both SCE and the program's primary vendor, Northwest Energy Efficiency Council (NEEC), promoted the BOC program. SCE customer representatives delivered the BOC program brochure and registration forms to commercial customers. NEEC direct mails the program brochure and registration forms to commercial customers in SCE service territory.

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Program Title: **Emerging Technologies Program**

**I. Program Overview**

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). The program's assessment activities focus on near commercial and commercial energy efficient applications with low market penetration. Emerging Technology Applications are evaluated primarily through Assessment Projects. The assessment 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, industry, and trade groups.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$850,000
Program Expenditures (includes program commitments)	\$841,405

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift - None

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**III. Performance Achievements**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>ET Application Assessments</b>	SCE will perform 6 emerging technology application assessments.	SCE committed to perform 9 emerging technology application assessments.
<b>ET Database Update</b>	Update the list of emerging technology applications on the Emerging Technology Coordinating Council website.	Updates completed and posted in December 2003.

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

The 2003 Emerging Technologies program had two distinct targets: (1) perform six Emerging Technology Application Assessments, and (2) update the Emerging Technology Database. By the end of 2003, SCE committed and initiated 9 Emerging Technology Application Assessments. To meet the assessments target, SCE researched and analyzed potential emerging technology applications and identified opportunities to assess these technologies at either customer or SCE facilities.

Also, SCE completed the update to the Emerging Technology database and posted four database summary reports to the ETCC website. To achieve the Emerging Technology database update target, SCE designed a new, expanded schema for the existing ET database, added technology and SCE project information, coordinated and added information to the database provided by the other investor-owned utilities ET programs and the CEC PIER program, and published the database’s summary reports on the ETCC website. The following reports are available on the ETCC website: Technologies Summary Report, Applications Summary Report, Projects Summary Report, and Assessments Summary Report.

**2. Reasonable Steps Taken To Achieve Targets**

**a. Emerging Technology Application Assessments**

The Emerging Technology Application Assessments require program staff to remain informed of potential emerging technology applications from a variety of sources including the California Energy Commission’s PIER program, NASA, E-

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Source, American Society of Heating, Refrigerating and Air-Conditioning Engineers, national laboratories, universities, journals, manufacturers and vendors, etc. ET assessments may take place at either viable customer field sites, i.e., a customer willing to innovate, or they may be pursued through laboratory testing, simulation modeling and studies, in-house demonstrations, or a combination of these approaches. Staff project managers formulate the project plans and work with utility account representatives to negotiate customer agreements if required. At times, a single customer site may host several assessments if more than one emerging technology application was included in the planned project for the site. Once project results become available, targeted information transfer activities may commence.

Through the ETCC meetings, several viable emerging technology applications from the PIER program were identified as potential candidates for assessment projects. Additional opportunities were identified through other sources such as manufacturers. By the end of 2003, SCE had committed a total of nine emerging technology application assessment projects using either customer sites or SCE facilities. The following is a list of the 9 assessment projects underway:

- In coordination with the other utilities ET programs through the ETCC, SCE initiated the following **three** assessments to build upon past PIER work on Electrochromic Glazing, Advanced Classroom Lighting Systems, and Stairwell Lighting Bi-level Switching.
- Customer interest in energy efficiency opportunities for new construction permitted SCE to initiate **three** ET application assessments considering Rapid Start Super T-8 Fluorescent Lighting Systems, Instant Start Super T-8 Fluorescent Lighting Systems, and a Voltage Reducer System for Dimming Control.
- SCE initiated **three** ET application assessments using SCE facilities: Displacement Ventilation, Network Management of Computer Power Options, and Anti-Corrosion Condenser Coil Coatings.

### **b. Emerging Technology Database Updates**

The Emerging Technology database updates began with a review of the existing ET Database. During the year, both the IOUs and the CEC updated existing records from the previous database and added new technologies, applications, and project information. SCE served as the integrator of each group's datasets. SCE staff worked with the utilities and the CEC to characterize projects in terms of technologies and applications. The commercial readiness of emerging technology applications were identified in the ET Database. Specifically, ET applications were characterized to be in one of the following stages: Basic Research, Applied Research, Development, Commercial Introduction, Commercial Growth, Commercial Maturity, or Commercial Decline. The ETCC uses the ET database to follow a product readiness, facilitate the exchange of information, and as a



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comprehensive list of energy efficient emerging technologies originating from a variety of sources, and not as a program and project tracking system.

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Program Title: **Savings By Design Program**

### **I. Program Overview**

The Savings By Design (SBD) program influences nonresidential building owners, tenants, and design teams to exceed current Title 24 standards (or industry standards for processes) by 10 percent or more for their new construction or renovation/remodel projects. SBD provides energy design education, design assistance, and cash incentives for all project types and sizes that meet the program's eligibility. 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 program has three 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. To include participants who would not normally consider a fully integrated design approach, the Systems Approach provides a simplified, performance-based method, which moves owners and design teams far beyond 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 the 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 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 demands 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.

### **II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

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**Table 1 – Budget and Expenditure Overview**

2003	Amount
Authorized Budget <sup>1</sup>	\$8,900,000
Program Expenditures (includes program commitments)	\$8,504,166

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – Based on the historical customer commitment fallout rate associated with this program, the program was oversubscribed relative to the authorized budget.

Fundshift Summary -  
None

**III. Program Performance**

**Table 2 – Performance Overview**

Metric	CPUC Targets <sup>1</sup>	Results
<b>Energy Savings, kWh (net)</b>	42,812,895	70,092,840
<b>Demand Reduction, kW (net)</b>	7,818	9,968
<b>Hard-to-Reach Performance</b>	7.8%	9.0%

1 – As approved in Decision 03-04-055 (Attachment 1).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

In 2003, the program targets associated with the Savings By Design offering included the attainment of 42,812,895 kWh of net annualized energy savings and 7,818 kW of net demand reduction. The program exceeded these targets by achieving 70,092,840 kWh of net annualized energy savings and 9,968 kW of net demand reduction. SCE was able to exceed the program targets through a combination of: (1) efficient program delivery; (2) targeted education/training; (3) strategic relationships; and (4) promotion of the whole building design concept.

**2. Steps Taken To Achieve Target**

SCE designed the achievement of the program targets around activities that built on the successful strategies used since the formation of SBD as a statewide program in 1999. The 2003 strategy also encouraged changes to the program, if they proved to be innovative, cost-effective, and beneficial. The core of the strategy focused on education/training opportunities, quality design assistance expertise, statewide cooperation and cohesiveness, innovative resource and tool development through SBD Energy Design Resources component, and relationship building with such entities as AIACC, ASHRAE, and California State University/University of California.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **a. Efficient Program Delivery**

One of the program's strength is the use of experienced new construction representatives (NCR) in the delivery of the program's services to customers. These employees provide customers impartial energy efficiency information and by assisting the customer throughout their facility's design phase, which assists in retaining the customer's participation in SBD through the potentially long design/construction process (SBD allows a project up to four years to complete).

Monthly Field Implementation and quarterly Statewide SBD Program Management meetings were planned throughout the year to provide effective communication and program continuity. SBD also held a Statewide SBD Team meeting to facilitate statewide program consistency and best practices training for Field Implementation personnel. One specific outcome of the Statewide Team meeting was the establishment of chain account subcommittee, staffed by field implementation representatives. The purpose of the subcommittee was to facilitate consistent application of the SBD program's services and offerings to all chain store participants.

The program also continued its use of the internet to educate customers. The Statewide SBD team updated the usability of its Energy Design Resources website ([www.energydesignresources.com](http://www.energydesignresources.com)) and added to its expanding library of resource materials, design briefs, and tools. In addition, SBD, as a statewide effort, maintains the Savings By Design website ([www.savingsbydesign.com](http://www.savingsbydesign.com)). This website continues to offer direct program information, including an overview of the services and incentives offered by the program, policies and procedures (Participant Handbook), helpful electronic links, and program contact information.

### **b. Education/Training Activities**

In 2003, SBD looked to continue its training of design professionals, customers, and builders in subject areas related to the energy efficient construction of facilities. In order to maximize SBD's ability to reach this broad spectrum of potential program participants, SBD sponsored or co-sponsored 8 training classes and sponsored the development of new training material through its Energy Design Resources component. Most of the training classes/workshops were offered through SCE Energy Centers. Coordination of these offerings was ongoing throughout the year to ensure maximum attendance and a high quality training experience for the attendees. To achieve this standard, training classes/workshops announcements were sent out quarterly and participant surveys, rating the effectiveness and the quality of the training received, were filled out after each class.

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**2003 Training Activities Table** - (Training sponsored by SBD)

Date	Seminar & Workshop	Attendance	Location
3/20/03	Title 24 Nonresidential Energy Efficiency Standards	33	Irwindale
5/1/03	Sustainable Buildings – Department of General Services	53	Irwindale
6/10/03	eQuest– Energy Simulation Tool	23	Irwindale
9/9/03	eQuest– Energy Simulation Tool	17	Irwindale
9/23/03	Title 24 Nonresidential Energy Efficiency Standards – 2005	81	Irwindale
9/24/03	Title 24 Nonresidential Energy Efficiency Standards – 2005	51	Costa Mesa
10/30/03	eQuest – Energy Simulation Tool	5	Irwindale
12/10-11	FEMP Design Strategies for Low-Energy, Sustainable Buildings	39	Irwindale

In addition, Savings By Design provided presentations about the program’s offerings and/or support to 11 additional training classes with related subject matter.

**2003 SBD Program Presentations Table**

Date	Seminar & Workshop	Attendance	Location
2/27/03	Cool Roofs	66	Irwindale
3/13/03	Rebuild America Technology Seminar	101	Irwindale
3/20/03	Design Strategies for High Performance Glass	24	Irwindale
3/26/03	Designing Sustainable Libraries	60	Irwindale
4/17/03	Cool Roofs	77	Irwindale
6/5/03	Skylighting for Commercial & Industrial Buildings	61	Irwindale
8/14/03	Rebuild America Series – The Building Envelope	61	Irwindale
8/26/03	Lighting & Daylighting for Architects and Engineers	17	Irwindale
8/28/03	Cool Roofs	93	Irwindale
11/12/03	Design Strategies for High Performance Glass	17	Irwindale
11/21/03	Lighting & Daylighting – Victor Valley College	13	Victorville
11/20/03	Laboratories for the 21 <sup>st</sup> Century	57	Irwindale
12/9/03	Skylighting for Commercial & Industrial Buildings	19	Irwindale

**c. Strategic Relationships**

In order to maximize the effectiveness of the program, SBD continued to strengthened and add to the relationships it has with such organizations as the American Institute of Architects – California Council (AIACC), University of California and California State University systems, ASHRAE, and other entities.

SBD identified its past relationship with AIACC as synergistic and beneficial. As such, SBD recommitted to continue and strengthen this relationship in 2003. AIACC’s membership is comprised of the primary target market that SBD seeks

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

to reach -- architects and design professionals. This access has enabled SBD with an effective effort in promoting the Statewide SBD Integrated Energy Design Awards competition. The competition brings major attention to energy efficient building design and the SBD program's offerings of service and incentives. In 2003, the IEDA presented its awards at the AIA (the national organization) national conference in San Diego.

Through its long term association, SBD and the University of California Office of the President (UCOP) established a directive that requires new UC facilities to have their designs reviewed by the SBD program for energy efficiency recommendations and potential incentive benefits. This UCOP directive is an integral component to the UC's mandate for Green buildings and clean energy.

### **d. Whole Building Approach**

SBD has supported and promoted integrated design, also known as the Whole Building Approach (WBA), as the most efficient and cost-effective strategy to include energy efficiency into a project. In 2003, SCE committed 55.2% of the incentive dollars in support of WBA projects. SCE's program took 3 main steps to promote Whole Building approach:

1. WBA goals were established and communicated to ensure the Field Delivery team's focus was on the attainment of these goals. Tracking protocols were added to the New Construction Information System (NCIS) to ensure tracking of WBA activity and that status updates could be provided to management and the delivery team. This information was updated to management twice-a-month and to the delivery team on a monthly basis (additional updates as needed).
2. Program budgeting was set to sufficiently fund all design assistance activity. Design assistance is the assigning of complex whole building analysis to a qualified consultant to assist the customer in calculating the energy savings and life-cycle analysis of potential energy saving measures. The program budget funded eight Design Assistance energy analysis reports.
3. SCE, setting its sights on the WBA target, envisioned that Design Team Incentive component of the program would incur additional interest. The budget was set up to cover this potential activity. A competitive request for proposals was issued to solicit qualified consultants to continue to provide focused services through the auspices of the Alternate Delivery Model. In 2003, SBD paid 9 Design Team Incentives and funded a combination of services and incentives in support of 10 Alternate Delivery Model projects.

## **B. Hard-to-Reach Performance**

### **1. Introduction**

The program also had a goal to increase the total participation rate from the hard-to-reach sector to 7.8 percent. SCE provided services and/or incentives which led

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to 24 HTR customer projects enrolled in the program. This represents a 9.0 percent participation rate exceeding the program's HTR goal. The HTR definition was based on the CPUC's Energy Efficiency Policy Manual and further refined to focus on rural locations within SCE's service territory. The rural locations are based on the 2001 Residential Needs Assessment Study which identified rural areas by zip code.

### **2. Reasonable Steps Taken To Achieve Target**

SCE success in attracting and retaining HTR customer projects continued in 2003 in part due to the continuation of implementing broadly based information efforts. SCE continued to offer broad based training classes/workshops, where the subject and the class presentation offered benefits to a wide range of customer classifications.

SBD targeted presenting or providing energy efficient design and program information at events that also would attract a wide range of design professionals. Most of these design professionals provide architectural and engineering services to a fairly general market, both in business or facility type and in geographic location. Events and training offered by AIACC, ASHRAE, and SCE Energy Center are examples of activities SBD supported.

In addition, SBD employed the following to ensure HTR participation:

- Directed the SBD new construction representative located in SCE's high desert area to focus his activities on bringing attracting HTR customer participation.
- Set a goal for SBD CheckPoint program to be instituted in city and county Building Department. SBD CheckPoint is a "point-of-purchase" program designed to attract the participation of smaller business, institutional, or non-profit projects with simple, low-cost and "last minute" energy efficiency equipment installations. CheckPoint was adopted by 66 city or county Building Department, many of these entities serviced HTR jurisdictions. This activity was accomplished in conjunction with the SCE Local Government Initiative program.



**2003 Energy Efficiency Program Accomplishments  
Southern California Edison**

**Attachment A  
Program Results Workbook**

**2003 Energy Efficiency Program Accomplishments  
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Program Title: **Education and Training Program**

**I. Program Overview**

The statewide Energy Efficiency Education and Training program promotes energy efficiency to a variety of customer segments through energy centers and other informational programs, such as the commercial and industrial informational services and product labeling activities. These educational and informational efforts cover a broad spectrum of market actors, including consumers, midstream actors such as design, engineering and contracting communities, and upstream market actors.

SCE's energy centers, the Customer Technology Application Center (CTAC) and Agricultural Technology Application Center (AGTAC) engage in a variety of distinct activities, all of which serve to provide education and information to SCE customers. The primary audience of the energy centers is commercial and industrial customers. CTAC is located in the metropolitan Los Angeles area and is thus in close proximity to all ranges of commercial and industrial market actors, from end users to contractors as well as architects, designers, and engineers. AGTAC serves these markets but also serves the agricultural community located in the heart of the San Joaquin Valley. Both centers also address the residential market. CTAC directs information mostly to residential architects and designers. AGTAC works with schools within the Valley community to provide information to students and teachers.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$5,700,000
Program Expenditures (includes program commitments)	\$5,581,282

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift Summary -  
None

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**III. Performance Achievements**

**Table 2 – Performance Overview**

Metrics	CPUC Targets <sup>1</sup>	Results
<b>EE Events</b>	200 Events	240 Events
<b>Hard-to-Reach Performance</b>	75 Events	74 Events

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

The 2003 Education and Training program target was to conduct 200 energy efficiency events during 2003. Through the use of SCE’s energy centers, SCE was able to exceed the overall energy efficiency events target by conducting 240 seminars/workshops. SCE took several actions in order to meet these seminars/workshops which included: (1) identifying subject matter and content; (2) scheduling events; (3) marketing and registration; (4) holding the events; and (5) evaluating attendee satisfaction.

**2. Steps Taken To Achieve Target**

A primary means to relay education and information is through seminars and workshops offered through the energy centers. Incorporated into the definition of seminars/workshops are all events in which energy efficiency information is delivered to a set audience. Specifically, these energy efficiency events are defined as being a minimum of two hours during which a group or an individual is provided extensive information on energy efficient technology and/or the application of energy efficient technology to increase their knowledge and improve the efficiency of their home or business. This includes events through which customer(s) are provided information about available programs and services. Events consist of seminars and workshops which use a classroom venue to provide information, facility tours, presentations to customer groups, equipment demonstrations, and customer consultations. Examples of this would be a technical consultation held with a small group, a classroom forum presenting energy efficiency information, the demonstration of a piece of energy efficient equipment, or a facility presentation that encompasses a variety of energy efficiency messages focused on various technologies.

**a. Identification of Subject Matter And Content**

Determining subject matter is accomplished through an evaluation of energy efficient technologies and the application of those technologies. This information comes through collaboration with other energy efficiency programs such as the Emerging Technologies program and through other technical parties such as class

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instructors, trade organizations or consultants like E-Source, the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), the Illuminating Engineering Society of North America (IESNA) and others. Customer groups, as well as regulatory requirements can also influence subject matter.

The development of the final class product is managed by experienced education product managers who take the input from the resources described above and then work with subject matter experts (consisting of SCE technical staff as well as third party consultants who specialize in technologies such as HVAC or lighting) to package a program that covers the intended subject. Materials are developed and instructional design is applied to ensure they are the quality that will allow for the best learning experience.

### **b. Event Scheduling**

A schedule of classes is developed by the education product managers based on several factors including, previous attendance, customer feedback, and in some cases, seasonality. For example, HVAC maintenance classes are historically better attended during the spring. Specialized presentations, technical consultations, and equipment demonstrations are scheduled on demand. During 2003, SCE consider these factors to optimize the success of each energy efficiency event.

### **c. Marketing And Registration**

Classes are marketed primarily through quarterly calendars of events, which are distributed by mail and, in some cases, via electronic mail, and made available at the energy centers. Copies are also sent to each of the other investor-owned utilities' energy centers. Depending on the specific audience targeted, or if the number of registrants is increasing slowly, a separate flyer may be mailed. Outreach is also done through the energy centers' websites, [sce.com/energycenters](http://sce.com/energycenters). In addition, advertisements may be placed in trade publications. SCE's customer representatives also market energy center classes to their customers by distributing the calendar and flyers, and through discussions with customers about specific educational needs. The availability of specialized presentations, technical consultations, and equipment demonstrations is also marketed through brochures, websites and customer representatives.

	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
<b>Direct Mail Flyers</b>	5	9	8	1
<b>E-mail Flyers</b>	1	4	4	4
<b>Quarterly Calendars</b>	2	2	2	2
<b>Brochures</b>	1	0	0	0
<b>Website</b>	Yes	Yes	Yes	Yes
<b>AGTAC Sign</b>	Yes	Yes	Yes	Yes

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Registration for classes is completed by phone, mail, or via the internet. Registrants are tracked and sign-in sheets are created for the day of the event. Attendee information also becomes part of the mailing database so that future mailings can be sent to participating customers.

**d. Holding The Event**

Implementation of classes includes customer sign-in the day of the event. If a customer “walk-ins” to a class without having first registered, he or she is asked to sign in so that their information can be added to the list of attendees. Based on the sign-in sheets, certificates of completion are created and provided to the attendees at the end of the class. At some point during the class, a brief presentation is given regarding the availability of other energy efficiency programs.

**e. Attendee Evaluation**

Attendee evaluation consisted of a survey that all class attendees were asked to complete. The evaluation seeks the attendee’s satisfaction with the class content, the instructor and class materials. The energy centers achieved a 97.02% excellent / above average satisfaction rate in 2003.

Below is a summary of the number of events held each quarter of 2003:

	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>
<b>Events</b>	59	79	52	41
<b>HTR</b>	25	28	13	15
<b>EE Consults &lt; 2 Hrs.</b>	9	238	206	117
<b>EE Equipment Demos &lt; 2 Hrs.</b>	268	582	820	118
<b>Joint Utility</b>	15	20	17	16

In support of the educational services provided to customers, displays and exhibits are created so that they can see various technologies in action.

<b>Energy Centers Exhibits and Displays Created in 2003</b>		
<b>Qtr.</b>	<b>AGTAC</b>	<b>CTAC</b>
<b>1<sup>st</sup></b>	n/a	n/a
<b>2<sup>nd</sup></b>	<ul style="list-style-type: none"> <li>• Tri-Level Lighting Controls</li> <li>• Fan Cooling System</li> <li>• LED Message Board</li> </ul>	<ul style="list-style-type: none"> <li>• High Intensity Discharge Display</li> </ul>
<b>3<sup>rd</sup></b>	<ul style="list-style-type: none"> <li>• Cool Roof</li> <li>• LED Traffic Signal</li> </ul>	Opened the Professional “Wet Cleaning Demonstration Center”
<b>4<sup>th</sup></b>	n/a	<p>The NewDaylight Center is a 1000 square foot meeting area that features the following EE technologies</p> <ul style="list-style-type: none"> <li>• Daylighting and solar responsive</li> </ul>

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		lighting/dimming controls <ul style="list-style-type: none"> <li>• T-5 indirect/direct lighting system</li> <li>• Displacement Ventilation for improved comfort and indoor air quality</li> <li>• High Performance glazing</li> <li>• Single ply membrane “Cool Roof”</li> </ul>
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**B. Hard-to-Reach Performance**

**1. Introduction**

For 2003, the hard-to-reach target was to hold 75 events in HTR markets. By the end of 2003, 74 HTR events were held. They are a subset of the seminars referred to above. Although the program fell one event shy of the HTR target, SCE conducted several events for small businesses that were not recorded against the HTR target. For these events, the majority of the attendees were small businesses which included, in most cases, a significant number of very small businesses (i.e., <20 kW). However, these events were not counted as HTR because the majority of attendees were not very small businesses.

The CPUC’s definitions of a HTR customer are outlined in its Energy Efficiency Policy Manual. In the 2003 Education and Training program, SCE focused on three types of HTR customers: businesses located in rural zip codes, very small businesses and non-English speaking businesses. The vast majority of the HTR events targeted various rural zip codes throughout SCE’s expansive service territory. The rural classification relied on the CPUC-adopted Statewide Residential Customer Needs Assessment Study.<sup>4</sup> SCE opted to hold these events in areas where a significant number of rural customers resided. Examples of these locations included the cities of Bishop, Mammoth, Ridgecrest and Tulare.

In addition to geographic location, we also targeted small business and ethnic customers by working with external business affiliations. Depending on the specific audience targeted, a separate flyer was sent to this targeted customer group. Outreach was also done through the energy centers’ websites, [sce.com/energycenters](http://sce.com/energycenters). In addition, advertisements were promoted in trade publications. SCE’s Business Solutions representatives also marketed energy center classes to their customers by distributing the calendar and flyers, and through discussions with customers about specific educational needs. SCE’s regional public affairs managers promoted events through flyers and special presentations at local community Town Hall meetings and Chamber meetings.

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<sup>4</sup> Although the study evaluated energy efficiency needs of residential customers, the identification of certain zip codes as rural applies to all customer classes.

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**Attachment A  
Program Results Workbook**

**2003 Energy Efficiency Program Accomplishments  
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Program Title: **Codes and Standards Advocacy Program**

**I. Program Overview**

The statewide Codes and Standards Advocacy program promotes enhancements to energy efficiency standards and codes. Codes and Standards Enhancement (CASE) studies are performed for promising design practices and technologies. Study results are presented to standards and code-setting bodies during the public rulemaking process to encourage adoption of energy efficiency measures. Expert witness testimony and additional analysis are provided throughout the rulemaking process as needed. Enforcement activities include participation in development of standards documents and strategic educational efforts.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$1,150,000
Program Expenditures (includes program commitments)	\$1,149,090

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift Summary -  
None

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Target<sup>1</sup></b>	<b>Result</b>
<b>SCE will report on new CASE studies in 2003</b>	6	15

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

The target for this program area was to report on 6 new CASE studies initiated in 2003. SCE initiated 15 new CASE studies in 2003. As part of the process of identifying likely candidates for study, SCE first assembled a long list of potential case study projects for review. Each was presented by the initiator of



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the study idea to SCE's Codes and Standards team for a critical review. Members of the team include supervision, engineers and architects from SCE's Design and Engineering Services technical staff. The member of the technical staff proposing the case study actively promoted the project based on its fundamental benefit to the overall program. The threshold issue discussed is that the proposed study complies with the Energy Efficiency Policy Manual (Version 2). As part of the group dynamics, the discussions encompassed issues such as the long term potential for the technology adoption through the standards, market size, savings potential and cost. A series of meetings was required to identify the final portfolio of case studies.

For the 2003 program year, the following 15 case studies were initiated and represent SCE's case study portfolio. The duration of each of the studies varies depending upon the nature and complexity of the work, but all will be completed within the required three year project limit authorized for this program year.

1. *Testing of Refrigerated Vending Machines (Part 1)*: Evaluation of the energy efficiency of vending machines to determine the key parameters that affect energy performance and identify possible alternative designs that could lead to improved energy performance. This first phase is focused on fully enclosed cases.
2. *Design Guidelines for Compressed Air*: The development of a design guideline that provides specifications on how to build the most energy efficient compressed air system.
3. *Testing for the Hospitality Segment*: Hotel retro commissioning and report.
4. *AgTAC Ground Source Heat Pumps*: Evaluation of the basic design parameters for ground source heat pumps with a key focus on the heat transfer coefficients between the heat exchangers and the earth heat sink/ source.
5. *Sky Light Efficacy Test*: Determination of the effectiveness of sky lights and daylight lighting control systems.
6. *Advanced Lighting Systems*: Evaluation of residential lighting sources to determine the optimum lighting arrangement.
7. *High Efficacy Signage*: Identification of efficiency parameters in outdoor signage.
8. *Advanced Building Design Guideline*: National Building Institutes design guide for improved building performance.
9. *T-5 High Output Fluorescent (Costco)*: Application of T-5 high output fluorescent lighting in a high-bay retail environment.
10. *Natural Ventilation Design Guideline*: Practitioners implementation guide for ventilating buildings to displace air conditioning loads.
11. *Automated Weather Processing*: Weather processor used in energy analysis software.
12. *Testing of Economizers for 5-ton A/C*: Field test of small unitary A/C economizers to determine persistence of operation.

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13. *Time Dependent Valuation (TDV) version of eQuest:* Support the development TDV version of the eQuest building energy analysis software.
14. *Field Tests of Unitary HVAC Equipment:* In situ tests using hand-held HVAC diagnostic equipment.
15. *Advanced Lighting Guidelines:* Ongoing updates to the Lighting Resource Center's Advance Lighting design guideline.

### 2. Steps Taken To Achieve Target

As mentioned in above, the process that SCE used to commit the 6 (minimum) required new studies, involved the following three steps:

1. Brainstorming of case study ideas and establishing a long list of potential projects.

The first phase of our efforts to determine additional codes and standards technology opportunities involves the contribution of all members of the Design and Engineering staff providing case study ideas. No attempt is made to reduce the number of projects. All ideas at this step of the process are accepted. The long list is finalized over the course of a few brainstorming meeting that is facilitated by the manager of SCE's Codes and Standards program.

2. Reviewing each project idea and the defense of the project by the project manager.

Once the long list of potential projects is assembled, management staff reviews them for potential redundancy with other (SDG&E, PG&E) programs, and with the Statewide Emerging Technology initiatives. Then, again in a brainstorming environment, all members of the technical staff assemble where each and every project is discussed in detail so as to better understand the intent of the project, its target audience, market potential, scope, duration, cost, etc. This is all done in a qualitative way and produces a short list of projects. Overall portfolio cost is compared to the available direct implementation budget and adjustments are made as necessary. A number of brainstorming project review meetings occurred in 2003 prior to final agreement on the approved list of projects.

3. Selection and establishment of the final portfolio of case studies.

Upon completion of the brainstorming activities, a final list of approved projects is circulated to the Design and Engineering Services personnel indicating who is responsible for the project and the budget funding per project. Each individual project manager is responsible for the development of a detail project book containing the project description, budget, goals and objectives, and a detailed project schedule. In addition, the project commitments that have been made to support the Codes and Standards program are incorporated into the employees Performance Management Agreement (PPA) which is used at SCE

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to establish priorities and focus for professional staff. This basic approach produces direct participation and accountability from the Project Manager which will insure a timely and high quality product.

As identified in the 2003 Program Implementation Plan, “Southern California Edison will report on six new CASE studies in 2003”. SCE has accomplished this objective as outlined through the selection process enumerated above. As indicated in the adopted program plans the duration of the program for 2003 is three years. This provides for three years to identify, review, select and commit six projects for completion. Upon completion, reports will be provided to the appropriate standards association or agency to consider for adoption as code, standard, guideline or a recommended “standard practice”. Agencies that will be provided the favorable results of the evaluations may include the California Energy Commission, Department of Energy, Environmental Protection Agency, Air Conditioning Research Institute, American Society of Refrigeration and Air Conditioning Engineers, National Dairymen’s Association, to mention just a few. SCE will work with the appropriate agency/association as necessary to encourage the adoption of our work to advance codes, standards or common industry practices to reflect improvements in energy efficiency. For example, evaluations can be provided to the National Electrical Code officials and Uniform Building Code officials for their consideration in adopting energy efficiency enhancements.

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**Attachment A  
Program Results Workbook**

**2003 Energy Efficiency Program Accomplishments  
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Program Title: **Upstream Residential Lighting Program**

**I. Program Overview**

This statewide program works with interested multi-location retailers and manufacturers to offer point-of-sale (POS) discounts for ENERGY STAR<sup>®</sup> labeled lighting products. Customers receive a \$1 or \$2 per lamp discount when purchasing ENERGY STAR<sup>®</sup> compact fluorescent lamps (CFLs) at participating retailers and a \$5 or \$10 per fixture discount when purchasing ENERGY STAR<sup>®</sup> hardwired or plug-in pin based indoor or outdoor CFL lighting.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$2,000,000
Program Expenditures (includes program commitments)	\$1,970,017

1 – As approved in Decision 03-04-055.

Fundshift Summary -  
None.

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
<b>Energy Savings, kWh</b>	34,985,185	41,255,257
<b>Demand Reduction, kW</b>	4,913	5,788
<b>Hard-to-Reach Performance</b>	At least 15% of the incentive budget reserved for customers in rural areas.	24.0% of the incentive budget was spent in rural locations.
<b>Hard-to-Reach Performance</b>	10% of the incentive budgets to grocery and drug stores.	20.0% of the incentive budget was spent through grocery and drugstores.

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **A. Performance Achievements**

#### **1. Introduction**

In 2003, the Residential Upstream Lighting program targets were to achieve 34,985,185 kWh of net annualized energy savings and 4,913 kW of net demand reduction. SCE achieved these targets by realizing 41,255,257 kWh of net annualized energy savings and 5,788 kW of net demand reduction. SCE implemented various strategies to meet these targets including: (1) launching program early in the year; (2) implementing a two-tiered incentive structure; (3) reducing the rate of participant dropouts; (4) managing closely the measure mix; (5) implementing a contingency strategy to deal with participant cancellations; (6) leveraging advertising with bill inserts and non-program promotions; and (7) coordinating with other upstream lighting programs.

#### **2. Steps Taken To Achieve Target**

##### **a. Early Program Launch**

The Upstream Residential Lighting program has historically been a seasonal program which was heavily promoted during the fall and winter seasons when lighting usage increased. In 2003, SCE began program promotions earlier in the year to provide more time to achieve targets. This tactic included a “Quick Start” system whereby manufacturers approaching new retailers could overcome a market barrier we had discovered that was specific to initial sign up of new retailers. SCE found during the previous year that retailers unfamiliar with the program would not place orders until they knew the manufacturer had reserved funds. This presented a problem in 2003 because SCE planned to implement a requirement that retailer orders must take place prior to a manufacturer’s fund reservation. So the “Quick Start” system removed the “catch-22” effect by instituting a one-time relaxation of this requirement to manufacturers for the first set of retailers approached in the initial promotion month. It helped put the program on the streets faster and with more sign-ups sooner than ever before.

##### **b. Two-Tiered Incentive Structure**

As a tool to attain more energy and demand savings with fewer incentive dollars, SCE reduced the program’s average incentive amounts. As approved in Decision 03-04-055, SCE offered a new two-tiered incentive structure for each product class and reduced the lower tier incentive by one half. This greatly increased program cost-effectiveness. In turn, SCE raised its energy and demand targets more than proportionately. Therefore, even though we could accomplish more for the same amount of money, the new incentives did not, in themselves produce more results. It was the combination of two opportunities the lower incentives created that helped attain the targets faster: (1) the ability to use the lower incentives early to accelerate and increase the energy and demand savings results per dollar spent, and (2) the effort of selling manufacturers and retailers on the concept of applying for more low-tiered incentives even though it was more lucrative for them to apply for high-tiered incentives. This practice was also used

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with certain other products that were more cost-effective than others, such as high wattage CFLs. By promoting the more cost-effective products early on, it allowed the program to concentrate on the less cost-effective measures for the purpose of balancing the measure mix. A balanced measure mix is essential to promote innovative new technologies and to provide a greater variety of energy-efficient lighting products.

### **c. Reduced Participant Dropouts**

After the initial allocations were made, SCE required all participating manufacturers to provide documentation (e.g., purchase order) that proved retailers had committed to the program. The desired result was to reduce cancellations caused when manufacturers could not sign up retailers. SCE instituted a further deterrent in that area in an early program promotion. We stipulated in the participant rules that SCE would grant further allocations only after 80 percent of previous allocations had been shipped to retail locations. This meant manufacturers had to follow through on their initial commitments before receiving further allocations. These steps to mitigate cancellations were implemented because the cancellation rate the previous year had been abnormally high. As a result of these efforts, 2003 saw comparatively low cancellation rates.

### **d. Managing Program Measure Mix**

A major task in the effort of goal achievement was SCE's ongoing lighting measure re-allocation process. Even though cancellations and forfeitures were low, they did occur in 2003, and in the least opportune times. Essential to target achievement was the ongoing practice of managing allocations. We were thereby able to overcome cancellations with a sharp focus on energy and demand savings, while maintaining a balanced measure mix.

### **e. Implementing a Contingency Strategy**

In addition, SCE implemented an end-of-year contingency strategy to manage possible participant dropout. In it, the SCE planned to close the mass promotion at the end of October 2003 to allow for the use of November and December 2003 to extend strategic allocations in case of last minute cancellations or forfeitures, or to balance the measure mix further using any remaining funds. The contingency strategy also made it possible for a very large retailer to participate that had previously applied, but not until after the budget had been fully allocated.

### **f. Leveraging Marketing Activities**

In 2003, SCE did more marketing at lower cost than in previous years by using low-cost bill inserts, and "piggy-backing" on corporate awareness advertisements on radio. Bill inserts saved postage expense covered by existing postal rates for billing. Corporate advertisements leveraged non-program funds to incorporate the message about compact fluorescents as a public service. This helped provide value toward corporate advertising objectives by fostering customer satisfaction. SCE also actively participated in the planning of the ENERGY STAR® Change-

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A-Light promotion and leveraged existing design of materials by the EPA to save marketing costs. SCE incorporated the State of California's Flex Your Power logo and message into the marketing materials as well.

The program was designed to require manufacturers and retailers to do one or more promotional activity. Examples included in-store promotions, print ads, and other media endeavors. Participants often combined existing promotional efforts planned by manufacturers and retailers with SCE's messaging, program funding, and name recognition. These synergies created leverage for the program to influence large numbers of customers at a minimal cost to make purchase decisions.

The purpose of SCE's diverse advertising approach was not merely to reach immediate energy and demand targets, but also to promote sustainable consumption behaviors and investment choices regarding the permanent use of compact fluorescents in homes.

SCE has also striven to overcome other market barriers. The barrier of entry of new product/service providers was mitigated by allocating funds to all manufacturers requesting fund reservation for qualifying products. The barrier of lack of information was addressed by the educational messages and tips in our promotional materials and website.

In a few short years, compact fluorescents have gone from being specialty items in a limited number of stores to commonly stocked products in many stores, overcoming the barrier of low availability. The new incentive structure allowed the program to feature a wide selection of products and help overcome the barrier of poor recognition for new lighting technologies. The balanced measure mix therefore promoted innovation in the program and in the lighting industry.

### **g. Coordination With Other Upstream Lighting Program Offerings**

SCE had discussions with SMUD, LADWP, and the City of Anaheim Department of Power to coordinate the Upstream Residential Lighting program, as well as to provide a unified front in public presentations and in program offerings. SCE also worked closely with Ecos Consulting who ran a non-IOU upstream residential lighting program in our area. Ecos also targeted rural hardware and ethnic grocers with CFLs. SCE coordinated with Ecos to avoid targeting the same ethnic retailers in the same season, to avoid double dipping, and to prevent deterrents to Ecos' goal attainment.

## **B. Hard-to-Reach Performance**

### **1. Introduction**

The 2003 Residential Upstream Lighting program had two hard-to-reach targets:  
(1) At least 15 percent of the rebate budget should be reserved for customers in



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rural areas; and (2) 10 percent of the rebate funds reserved for redemptions through purchases from new delivery channels of grocery and drug stores. For this program, SCE relied on the CPUC approved Statewide Residential Customer Needs Assessment Study, which identified, by zip code, rural communities within SCE's service territory. Through strategic outreach and promotion, SCE was able to spend 24.0 percent of the program's incentive budget in rural communities and 20.0 percent of the incentive budget through grocery and drug stores.

### **2. Reasonable Steps Taken To Achieve Target**

SCE offered the program in a series of seasonal promotions. This made it possible to limit the first promotion to retailers meeting the hard-to-reach criteria until a substantial part of the rural, grocery, and drug targets were met. Doing so combated a problem SCE had faced the previous year. Manufacturers had de-emphasized allocations to hard-to-reach retailers. In 2002 SCE's strategy had been to give allocation preference year round to hard-to-reach stores. Although ultimately a success, it proved risky as the end of the year approached and many of the manufacturers canceled their allocations for the hard-to-reach retailers.

The 2003 approach to focus attention on the HTR segments early proved much more reliable. It resulted in paying over a third of the annual incentive budget to participants of the hard-to-reach promotions taking place between January and May 2003.

SCE conducted outreaches to hard-to-reach customers, such as a weekend event at the Asian grocery store "T.S. Emporium". At that event, bilingual SCE customer representatives promoted the programs to customers for whom English is a second language. For Earth Day, SCE put on a promotion featuring CFLs in a very large shopping mall in Southern California in coordination with environmentalist group, The Coalition For Clean Air.

Special arrangements were made with manufacturers to provide multi-lingual signage to specifically-targeted Hispanic and Asian stores. Manufacturers were encouraged to offer the program to retailers catering to ethnic minorities.

SCE targeted primarily moderate-income residential customers, covering a high proportion of renters in SCE's territory. These "hard-to-reach" customers were the natural first-responders to our lighting promotions. Although the other CPUC-defined hard-to-reach segments were not offered lighting incentives by this program, they were covered by two other SCE programs, specifically targeting low-income customers and multi-family building managers. In this way SCE focused on all the residential hard-to-reach sectors with energy efficient lighting solutions.

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**Attachment A  
Program Results Workbook**

## 2003 Energy Efficiency Program Accomplishments Southern California Edison

Program Title: **Marketing and Outreach Program**

### I. **Program Overview**

#### **Flex Your Power -**

**Flex Your Power** (FYP), managed by the Efficiency Partnership (EP), is a statewide energy efficiency marketing and outreach campaign that builds upon the historically successful Flex Your Power campaign initiated in 2001. The goal of the campaign is to build awareness of the benefits of energy efficiency and build demand for energy-efficient products, designs and services. The statewide campaign also promotes the hundreds of programs and resources available to sectors, including utility, third party and others, as well as facilitates the statewide coordination and marketing and outreach of these programs. The campaign uses, among other things, paid and earned media, events, partnerships with businesses, governments and non-profits, printed educational materials, website and electronic newsletter to achieve these goals.

The target markets of the marketing and outreach efforts are General, African American and non-English speaking (Hispanic, Asian, Middle Eastern among several others) residents (both urban and rural), institutions, commercial and industrial businesses including hard-to-reach small and rural businesses throughout California.

#### **Runyon Saltzman & Einhorn -**

Runyon Saltzman & Einhorn, Inc.'s (RS&E) *Reach for the Stars* campaign is a statewide marketing and outreach program focused on promoting energy efficiency messages to low-income utility customers in rural areas. The campaign, using traditional and non-traditional marketing strategies, encourages residential energy users to make permanent energy efficient upgrades to their homes and participate in statewide energy efficiency programs. It also informs them about available low-income assistance programs to help with energy efficiency measures and utility bills.

The *Reach for the Stars* campaign includes three flights of newspaper ads and radio spots, as well as a community-based outreach component. Utility customers are encouraged to call a toll-free phone line, which provides contact information regarding utility programs.

#### **Univision -**

The Univision Television Energy Efficiency Marketing Program is a statewide marketing and outreach effort for Spanish-speaking, residential energy customers developed and implemented by the joint venture of Univision Television Group and Staples/Hutchinson and Associates, Inc.

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**II. Program Budget**

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget – Efficiency Partnership (FYP)	\$15,000,000
Preliminary Program Expenditures*	\$15,000,244
Authorized Budget – Efficiency Partnership (Univision)	\$3,000,000
Preliminary Program Expenditures*	\$2,928,940
Authorized Budget – Efficiency Partnership (RS&E)	\$2,507,459
Preliminary Program Expenditures*	\$2,505,125

1 – As approved in Decision 03-04-055 (Attachment 1).

2 – Reflects a total of all budgets and expenditures for all investor-owned utility service territories (i.e., SCE, Pacific Gas and Electric and the Sempra Utilities).

Fundshift Summary -  
None

**III. Program Performance**

**A. Flex Your Power – Energy Efficiency**

**1. Introduction**

During 2003, Flex Your Power built on and expanded programs begun in 2001 and 2002, as well as introduced new and innovative marketing and outreach efforts. When the Flex Your Power proposal was approved in April 2003, Flex Your Power immediately implemented those programs that were the most time and labor sensitive, given the late start to the campaign, and rolled out new initiatives as the year progressed. Flex Your Power conducted extensive outreach to the municipal utilities, manufacturers, distributors, retailers, businesses, water agencies and local governments, culminating in the broadest participation in the effort since the beginning of the campaign in 2001.

The specific accomplishments in 2003 were:

- Three statewide energy-efficient product promotions, which included advertising (television, radio and newspaper), production and distribution of educational materials and outreach to hundreds of manufacturers and retailers;
- Complete redesign and expansion of the Flex Your Power website to be the most comprehensive resource on energy efficiency for all sectors in the state;
- Continuation and expansion of the successful commercial business outreach effort;
- Development and successful launch of the Flex Your Power eNewswire;
- Development and successful launch of the New Homes Initiative designed to support IOU, third party and Energy Star programs

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directed to single and multifamily residential builders and to expand the market for energy-efficient single and multiple unit homes;

- Development and successful launch of cooperative marketing efforts with major retailers and manufacturers designed to augment PGC-funding for energy efficiency marketing and outreach with private sector resources; and
- Successful implementation of a media outreach effort targeted at the hundreds of ethnic media in the state.
- Recruited 1,544 retailers to participate in the 2003 energy efficiency promotions
- Sent the biweekly Flex Your Power eNewswire to more than 4,300 people and organizations representing all segments in the state (IOUs, municipal utilities, businesses including small business, schools, government, water agencies, community-based organizations and more).

### **2. Steps to Attain Targets**

During 2003, Flex Your Power communicated extensively with providers of energy efficiency programs (IOU, third party, municipal utilities and water agencies), and contacted manufacturers and more than 2,000 retailers of energy-efficient products in the state. The goals of this outreach effort – successfully accomplished – were to provide a forum for and promote statewide coordination and consistency of program offerings and marketing and outreach. This coordination, achieved through conference calls, meetings and communication tools, proved valuable in increasing the participation, effectiveness and cost-efficiency of the programs, and in increasing customer awareness of energy efficiency, programs and services. Specific accomplishments of the coordination efforts included:

- Development of a comprehensive energy efficiency website (the new Flex Your Power site, [www.fypower.com](http://www.fypower.com)), which provided detailed descriptions and information on all energy efficiency programs and services offered by IOUs, third parties, municipal utilities and water agencies in the state.
- Development of consistent and comprehensive marketing and outreach materials that educated the public about energy efficiency and energy efficiency programs, including contact information for program providers.
- Wide distribution of Flex Your Power materials through retail stores, program providers and others channels.
- Coordination of advertising and outreach with the other statewide marketing and outreach entities to provide consistent messaging to general, rural, Asian, and Hispanic markets.
- Coordination with providers of programs to ensure Flex Your Power initiatives supported program providers' efforts.

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- Convened meetings with manufacturers and retailers of energy-efficient products, IOUs, municipal utilities and water agencies to provide a mechanism for soliciting the participation and feedback of the private sector partners and allow for the coordination of planning, marketing, and outreach of various efficiency programs and products.
- Coordination with the Southern California Public Power Authority (SCPPA), Northern California Power Authority (NCPA) and municipal utilities to develop joint campaigns and extend reach and volume of energy efficiency messages.
- Coordination with the California Water Awareness Campaign (CWAC), Association of California Water Agencies (ACWA) and California Urban Water Conservation Council (CUWCC) to incorporate water efficiency messages into Flex Your Power's energy efficiency campaign in 2003 (saving water saves energy), laying the groundwork for a more complete integration 2004.

### Website

In 2003, Flex Your Power completely redesigned the Flex Your Power website. The new site serves as a one-stop information portal for energy efficiency programs, information and resources. There are hundreds of program implementers in the state, each with their own website and resources, and more than 1,000 incentive and technical assistance programs. As a single energy efficiency resource, [www.fypower.com](http://www.fypower.com) facilitates California residents to find programs that apply to them from one source and reduces the chance that they will miss valuable opportunities to save money and energy.

Developed with input and informational materials from IOU, third parties, municipal utilities and water agencies, the Flex Your Power website is California's comprehensive resource for energy efficiency ([www.FYPower.com](http://www.FYPower.com)). The new site provides unparalleled features, information and resources on energy efficiency along with every energy efficiency product, program and service offered in the state. The site serves as a valuable communication tool to raise Californians' awareness of energy efficiency and facilitates their access to relevant resources, programs and services.

Flex Your Power added the following enhancements to the site in 2003:

- Customized content for the five primary sectors: Residential (Retrofit, New Construction and Low-Income), Commercial (Retrofit, New Construction and Small Business), Industrial (Retrofit and New Construction), Agricultural and Institutional (Government, School and Institutional Facilities).
- Database-driven California Store Locator for energy-efficient products, with which anyone can find stores near them that sell specific energy-efficient products.
- Database-driven Rebates, Grants and Loans Program Locator for each sector, which includes program information for statewide and local IOU,

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municipal utility, third party, water agency and other non-utility programs offered in the state. This searchable database identifies more than 1,000 different incentive programs.

- Database-driven Technical Assistance Program Locator for each sector, which includes program information for statewide and local IOU, municipal utility, water agency and non-utility technical assistance programs offered in the state. As with the financial program locator, there are nearly 200 technical assistance programs.
- Database-driven Resource Locator for each sector, which includes more than 500 valuable energy efficiency related resources.
- Database-driven Energy-Saving Tips Locator for each sector, which includes more than 400 key energy-saving tips.
- Database-driven energy efficiency Products & Equipment Guides for residents and commercial, industrial, agricultural and institutional (including government, schools and institutional facilities) businesses. This growing list of guides include descriptions of the benefits and savings potential of high-efficiency products/equipment, operating and purchasing tips and lists of major manufacturers.
- Integration of locators (e.g., programs on energy-efficient lighting are linked to both the Product Guide for lighting and the Store Locator). Using the power of a complex relational database, one can, for instance read about the benefits of a specific energy-efficient product and then easily identify a rebate available for it and a store nearby that sells it.
- Contact information for entities that administer or provide energy efficiency programs and services in the state.
- Searchable database of articles and studies about energy efficiency and related issues.
- Initiated translation of residential section into Spanish and Chinese so that Spanish- and Chinese-speaking customers can access HTML content from the home page.
- Updated and rotated on a regular basis Features Section on the home page, including: “Natural Gas Prices Are on the Rise. What Does This Mean for Californians?”; “Saving Water Saves Energy”; “Shape California's Future in Energy Efficiency: Participate in CPUC Workshops”; and “Flex Your Power 2003 Energy Awards”.
- Updated and rotated on a regular basis reports and news stories on the index page of each sector (Residential, Commercial, Industrial, Institutional and Agricultural).
- Developed an “Efficient New Homes” section. Section includes:
  - Database-driven locator to help residents find energy-efficient properties available for sale and rent in California. Flex Your Power gathered information from homebuilders throughout California about their energy-efficient developments. The locator draws from a database containing information on more than 10,000 new homes/apartments within 71 developments in

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the state that exceed Title 24 building standards by at least 15%. The database will be updated regularly.

- Information and resources for homebuyers looking to buy or rent new energy-efficient homes.
- Information and resources for builders looking to build new energy-efficient homes.

Marketing of the website address included:

- Cross-links with IOUs, municipal utilities, water agencies, state and other non-utility sites with high customer traffic
- eNewswire (see below)
- Media (television, radio and newspaper ads)
- Educational materials

### eNewswire

In 2003, Flex Your Power created an electronic newsletter – eNewswire – that formalized the e-mail updates it sent to energy coordinators and others in 2001-02. This electronic newsletter serves as a complimentary Internet tool, notifying subscribers of features on the redesigned Flex Your Power website. An electronic newsletter is crucial because effective electronic communication requires more than the creation of a comprehensive and compelling website; people must know about and be driven to the site. And, evidence shows that the bulk of Internet activity, by far, is e-mail communication. The biweekly eNewswire covered energy efficiency in California and helped drive traffic to the Flex Your Power website and energy efficiency programs.

During 2003, Flex Your Power began delivering the eNewswire every two weeks to the desktop of a growing list of more than 4,300 people. The readership included:

- Policymakers
- Program providers (IOU, third party, municipal utilities, water agencies, and associations)
- Business Associations: Leaders and members of appropriate trade associations such as Building Operators and Managers Association (BOMA), California Manufacturers and Technology Association (CMTA), Silicon Valley Manufacturers, Association of Energy Services Professionals, California Chamber of Commerce, California Hispanic Chamber of Commerce, California Black Chamber of Commerce and California Business Roundtable.
- Builders and contractors of energy-efficient homes.
- Community-based organizations and nonprofit organizations: those organizations who partnered with Flex Your Power in 2001-02, LIHEAP implementers and others.
- Energy-related organizations: California and national organizations such as Lawrence Berkeley National Laboratory, American Council for an



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Energy-Efficient Economy and Alliance to Save Energy.

- Media: Appropriate reporters and editors at trade publications, business journals and general market media outlets.

The goal of the content is to keep energy efficiency among the top-of-mind interests of Californians and educate and excite them about the current ideas, policies, programs and products. Articles featured current energy, energy efficiency and program news, valuable new resources on the Flex Your Power website and websites of energy efficiency program providers. The eNewswire also served as a tool to expand and deepen relationships with California businesses and business associations through publication of success stories that publicly recognized Californians efforts and provided examples for others to follow. Additionally, to highlight the link between saving water and saving energy, Flex Your Power expanded the presence of water efficiency efforts on eNewswire with several water efficiency stories and publicized the Flex Your Power “Save water save energy” survey of hundreds of water agencies.

### Residential Outreach

Building upon the successes of 2001 and 2002, Flex Your Power produced three energy efficiency promotions in 2003 (the sixth, seventh and eighth promotions since 2001): the Early Summer Campaign (June 16 – July 6), the Late Summer Campaign (August 18 – September 7) and the Fall Campaign (October 20 – November 9). These promotions were planned and executed with the input and participation from stakeholders, including IOUs, third parties, municipal utilities and water agencies that offer energy efficiency programs. The goal to deliver more comprehensive and coordinated outreach and marketing information to customers was achieved.

The requirements for participation in the promotions were that stores display Flex Your Power educational material, distribute Flex Your Power training guides to employees and carry qualifying energy-efficient items. Flex Your Power targeted appliance, hardware and home improvement/lighting stores for participation.

By yearend, Flex Your Power had expanded the number of participating program providers and retailers – more than 1,544 retailers across the state participated, including major appliance and energy-efficient product manufacturers, major chains and independent retailers that serve hard-to-reach customers and/or are classified as hard-to-reach nonresidential customers. Additionally, hundreds of retailers requested and were provided materials in additional languages: more than 530 retail stores requested Spanish language materials, more than 100 requested Chinese, more than 40 requested Vietnamese and more than 30 requested Korean materials.

Each promotion included television, radio and newspaper advertisements, as well as educational materials for both consumers and sales staff. In addition to providing energy efficiency tips, the Flex Your Power promotional materials and

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in-store displays for consumers provided specific information about statewide rebates and resources so that residents could find local incentives on a wide variety of appliances, home improvement products and lighting. The training materials for sales staff enabled stores across the state to provide accurate and timely information about their energy-efficient products and about utility incentives. (The promotional materials are listed above.) Flex Your Power provided individualized service to participating stores by customizing packages of retailer educational materials (separate lighting, appliance, and home improvement store educational materials) and printing corresponding utility information on materials shipped to retailers.

In total, the residential campaign for 2003 included:

- Three flights of 30-second television advertisements promoting energy efficiency;
- Three flights of 60-second radio advertisements promoting energy efficiency;
- Three flights of 60-second radio public service announcements, and three flights of 60-second television public service announcements promoting energy efficiency;
- Six newspapers ads in more than 40 general market papers and newspaper ads in 105 ethnic newspapers statewide. The ads featured energy-efficient product messages as well as listed participating local retailers. Ethnic newspapers represented:
  - 14 different languages (Chinese, Spanish, Korean, Vietnamese, Filipino, Japanese (Kanji), Cambodian (Khmer), Thai, Russian, Armenian, Arabic, Farsi, Pakistani and Portuguese)
  - 16 ethnic communities (African-American, Chinese, Hispanic, Korean, Vietnamese, Filipino, Asian-Indian, Japanese, Cambodian, Thai, Russian, Armenian, Arabic, Pakistani, Portuguese and Iranian). as well as Asian market newspapers statewide. The ads featured energy-efficient product messages as well as listed participating local retailers. Thirty-one percent of the papers served rural communities; significantly more serve low-income.
- 3,500 cable channel advertisements. Through a partnership with the California Cable & Telecommunications Association (CCTA), Flex Your Power aired Flex Your Power television ads on cable stations statewide at no cost.
- Numerous cooperative marketing and outreach partnerships with retailers and manufacturers. The partnerships enabled Flex Your Power to leverage private sector resources. This marketing and outreach was in addition to the advertisements and marketing outlined in the 2003 PIP. Under the cooperative partnerships, manufacturers and retailers contributed to the cost of additional advertisements and/or in-store promotions. The cooperative program laid the groundwork for making energy efficiency and Flex Your Power part of manufacturers' and retailers' ongoing message to consumers. Moreover, this additional private sector funding

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increased the level of participation and stimulated more creativity from the private sector in marketing energy-efficient products. In addition to augmenting Flex Your Power's marketing and outreach, the private sector was asked to provide additional financial incentives and/or marketing to the public to promote the purchase of energy-efficient products. The projects included:

- Flyer with Sears and PG&E in English. Distributed by Sears professionals on service calls in PG&E service territory. Offered a coupon for 10% off Energy Star appliances at Sears and advertises PG&E rebates on natural gas furnaces, clothes washers, dishwashers and natural gas water heaters.
- Brochure with Sears for non-PG&E service territories in English and Spanish. Delivered by Sears professionals on service calls in California. Offered a coupon for 10% off Energy Star appliances good through April 2004. Provided general educational information and specific information on heating and cooling, water efficiency and appliance recycling.
- Direct mail flyer with Maytag. Letter with energy efficiency information from Flex Your Power on the front and Maytag incentives on the back. Mailed to 360,010 Northern California addresses.
- Headerboard with Feit Electric in Dixieline Lumber/Home Centers stores. Placed four-foot long headerboards in all 10 Dixieline Lumber/Home Centers stores in California. Headerboards hung over the lighting section in stores for 6-12 months and explain the benefits of Energy Star lighting.
- Full-page print ad with Dixieline Lumber/Home Centers. Ad ran in the San Diego Tribune (circulation approximately 350,000) on November 28, 2003.
- Direct mail postcard with Brand Source. Mailed to 1 million people and customized for participating dealers. Features information on energy efficiency, Energy Star appliances and dealer and Maytag incentives for Energy Star products.
- Full-page print ad with Maytag and Howard's TV & Appliances. Ran in Orange County Register (circulation approx. 300,000) on December 12 and 13 and in Los Angeles Times (circulation approx. 1 million) on December 17. Featured information on energy-efficient products and Energy Star-qualified Maytag products at stores.
- Circular ad with Lowe's. Featured educational messages and energy-efficient products that are available in all of Lowe's California stores.
- Year-round lighting display at Lowe's. Lowe's worked with Flex Your Power and several utilities on a cooperative effort for permanent in-store displays of energy-efficient products (up to 32 linear feet) in more than 25 of its California stores. The displays

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utilize the Flex Your Power logo and message. Under the cooperative agreement, the chain also agreed to increase its stock of energy-efficient lighting fixtures from 11 to 50. The new displays reached over 1 million consumers across California each month, for a period of 12 months.

- Began building new and expanding current partnerships and projects for 2004-05.

### Ethnic Media Outreach

In addition to the outreach to non-English speaking customers through television, radio and print materials, Flex Your Power launched an aggressive targeted outreach initiative to more than one hundred ethnic print media sources to ensure the energy efficiency message reached all residents statewide. Flex Your Power worked with small community newspapers and non-English newspapers that serve hard-to-reach communities, partnering in a tailored and targeted advertising and education campaign. The objective was to engage the smaller newspapers in educating the communities they serve – through advertising, events and editorial content, as well as generate the demand for energy-efficient products and increase the number of local stores that carry the products in these targeted communities. The accomplishments in 2003 included:

- Convened summits in Northern and Southern California to develop strategies and recruit partners. During these summits, Flex Your Power spoke with more than 100 ethnic media publishers to engage their editorial support for energy efficiency. These publications:
  - Represent 14 different languages (Chinese, Spanish, Korean, Vietnamese, Filipino, Japanese (Kanji), Cambodian (Khmer), Thai, Russian, Armenian, Arabic, Farsi, Pakistani and Portuguese).
  - Serve 16 ethnic communities (African-American, Chinese, Hispanic, Korean, Vietnamese, Filipino, Asian-Indian, Japanese, Cambodian, Thai, Russian, Armenian, Arabic, Pakistani, Portuguese and Iranian).
- Developed and ran ads in more than 100 papers. Ads featured energy-efficient product messages as well as local retailers that sell energy-efficient products.
- Wrote energy efficiency educational pieces that appeared in more than 50 different publications, which represented 14 different languages and targeted 16 different ethnic groups in California.
- Wrote op-ed essays in support of energy efficiency for 27 different publications, which represented 14 different languages and targeted 16 different ethnic groups in California.

### Commercial and Industrial Sector-Targeted Outreach

Flex Your Power continued to communicate with the commercial and industrial sectors through the Flex Your Power eNewswire, as well as the targeted Business Leader outreach initiative. The Business Leader Initiative, developed in coordination with business leaders and organizations, provides information and

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education on the business and financial benefits of implementing energy efficiency measures to the decision-makers, and assists these leaders on how to take action. Accomplishments included:

- Urged business leaders to commit to:
  - Encourage their facilities and energy managers to buy and install cost-effective and energy-efficient products when replacing or installing new lighting, equipment and appliances;
  - Distribute to employees and/or tenants in their buildings energy usage information and cost-effective best practices.
- Recruited and provided outreach materials to chambers of commerce and business associations.
- Placed articles in chamber and organization newsletters. Articles covered energy efficiency and Flex Your Power's continuing efforts to provide assistance.
- Developed clear, consistent and compelling information and messaging for commercial and industrial businesses on the Flex Your Power website, including information on: retrofitting facilities; building new facilities; and small business energy use and energy saving solutions. Website also included numerous case studies and best practices guides as well as a searchable database of all relevant programs offered by IOUs, third parties, water agencies and municipal utilities.
- Communicated biweekly with business leaders through the eNewswire, providing information and tools to help business leaders develop and implement energy-saving projects.
- Linked business organization's websites to the Flex Your Power website.

### New Homes Initiative

Designed to support IOU, third party and Energy Star New Homes programs and to expand the market for energy-efficient single-family and multiple-unit homes, the Flex Your Power New Homes Initiative is an innovative partnership with the homebuilder industry. In the face of rising housing costs and a surge in new home construction, the energy-efficient home market represents an important target of statewide marketing and outreach. Accomplishments in 2003 included:

- Coordinated with the IOU's Residential New Construction programs to expand the reach of both efforts.
- Designed a campaign with builders and builder association to increase the number of homes to be built in excess of Title 24 in 2004-05.
- Contacted and surveyed hundreds of California builders. Formed partnerships with more than 50 builders, representing more than 12,000 homes or apartments. These builders agree to build Energy Star homes – 15% more energy-efficient than Title 24.
- Developed a print media ad, which highlighted Energy Star Builders
- Developed an Energy-Efficient Homes Brochure, which highlighted the benefits of an energy-efficient home or apartment. Spanish-language brochures were also developed; participating affordable housing

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developers wanted help explaining the benefits of energy efficiency to their Spanish-speaking tenants.

- Activated an interactive New Homes Locator Map on the Flex Your Power website. The map includes more than 80 energy-efficient home developments in California and informs users about where to find new home developments that exceed Title 24 by 15% or more.
- Coordinated with U.S. EPA to link Flex Your Power website to Energy Star New Homes page.

### State and Local Government-Targeted Outreach

In 2003, as in 2001-02, Flex Your Power's relationship with various state agencies resulted in the Flex Your Power brand and message being displayed on department calendars, signage in state office buildings and tens of millions of state mailings, including all Department of Motor Vehicle communications and state park brochures among others. Flex Your Power messages were also posted on state phone messages.

Flex Your Power also continued to communicate with more than 100 city and county partners about energy efficiency news and programs through personal contact and the eNewswire. Flex Your Power also:

- Contacted and began developing commitments with major cities and counties to partner with the campaign, to support the aggressive statewide energy saving goals, to reduce total power consumption and to continually educate their communities and employees about energy efficiency.
- Met with various city officials, including developing efficiency campaigns with the City and County of Los Angeles and the City of Sacramento, to discuss incorporating municipal utilities into the statewide effort and developing outreach plans for small businesses.
- Secured ad space in the Annual League of California Cities Directory, which is distributed annually to hundreds of city officials throughout the state.

Flex Your Power also continued to coordinate closely with the federal government's energy efficiency program, Energy Star. This collaboration included sharing information, coordinating on all promotions, assisting in meeting manufacturers and national retailers, speaking at conferences of energy efficiency businesses.

Flex Your Power devoted an entire section of the Flex Your Power website to the government sector (described in detail above). This section targeted all institutional customers (government, hospitals, schools), and contained energy use information, tips for retrofits and new construction, web resources and every energy efficiency program and service offered in the state.

### Flex Your Power Awards

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In collaboration with organizations including the League of California Cities (LCC), the Building Owners and Managers Association (BOMA) of California and utility companies, Flex Your Power designed the 2003 Flex Your Power Energy Award to educate and inspire Californians to implement energy efficiency. The initiative culminated during the 4<sup>th</sup> quarter of 2003 during which Flex Your Power aggressively outreached to a broad array of state and local governments, education representatives, retailers, restaurant and hospitality representatives, agriculture and community-based organizations, businesses and individuals. After a thorough review of all applications and materials submitted, Flex Your Power recommended winners to an external panel of utility representatives and others. The award winners were notified and Flex Your Power began drafting case studies of the award winners' accomplishments, which will be publicized in the eNewswire and on the Flex Your Power website in 2004.

### Additional Outreach/ Events

Flex Your Power representatives attended, recruited participation for, presented at and/or hosted a number of events to build awareness of energy efficiency. The most notable included:

- *CPUC Workshop Series*: Assisted in the development of and recruited participants for all of the California Public Utilities Commission's (CPUC) workshops held in 2003, designed to create the long-term energy policy framework for California. Participants included representative s from all sectors – residential (hard-to-reach, retailers and manufacturers), commercial, industrial, agricultural and institutional (schools and local government). Presented information on marketing and outreach on the residential sector panel for the 2<sup>nd</sup> workshop: Customer Needs.
- *Press conference*: Held with CPUC, California Energy Commission, Silicon Valley Manufacturers Group (SVMG), and Natural Resources Defense Council (NRDC) to discuss California's energy situation, a new commitment to energy efficiency and the role of the 2003 Flex your Power statewide marketing and outreach initiative.
- *Press conference*: Held at the California Independent System Operator (ISO) with PUC, California Energy Commission, the IOUs and municipal utilities to discuss California's energy situation, a continued and growing commitment to coordinating energy efficiency and the role of the 2003 Flex Your Power statewide marketing and outreach initiative.
- *17<sup>th</sup> Annual National Low Income Energy Conference*: Gave a presentation at the 17<sup>th</sup> Annual National Low Income Energy Conference on California's energy situation, the 2003 statewide marketing and outreach initiative, the benefits of energy efficiency and insights on how professionals in the low-income energy community can work to solve the energy hardships facing low-income consumers.
- *California Green Schools Project*: Coordinated with the California Green Schools Project to have them distribute Flex Your Power materials to the schools they attend when discussing the Green Schools program and the benefits of moving toward more energy-efficient schools.

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- *ENERGY STAR Appliance Partners Meeting.* Flex Your Power recruited the participation of energy-efficient product manufacturers in cooperative marketing agreements and in other statewide marketing and outreach efforts to increase the sales of energy-efficient products.
- *LIHEAP quarterly meeting.* Flex Your Power presented and recruited participation in cooperative opportunities at the LIHEAP quarterly meeting in September
- *California Urban Water Conservation Council's (CUCC) Plenary Session.* Recruited participation and presented at the California Urban Water Conservation Council (CUCC) at its Plenary Session in September.
- *CMUA's Energy Services & Marketing Committee meeting.* Recruited participation and presented to California Municipal Utilities Association (CMUA) members at the CMUA's Energy Services & Marketing Committee meeting in September.
- *Moorepark School District:* Coordinated with the Moorepark School District for a school outreach program.
- *Lowe's Energy Efficiency Fair:* Arranged and helped implement an "Energy Efficiency Fair" in coordination and with funding from Anaheim Public Utilities on November 22 at a Lowe's retail outlet in Anaheim, CA to educate residents about energy efficiency. Staffed a table with information.
- *Howard's TV & Appliances Training Sessions:* Conducted in-person training session on Flex Your Power and benefits of high-efficiency appliances for 90 sales associates of Howard's TV & Appliances (chain retailer).
- *Ethnic media meetings and interviews:* Met with more than 100 ethnic media publishers and reporters and conducted scores of one-on-one interviews.
- *Ethnic Media Awards:* Presented on energy efficiency and ethnic media's role in educating their readership at the New California Media Awards, dubbed "the Ethnic Pulitzers" by the News Hour with Jim Lehrer. The ceremony honored 19 ethnic media journalists in categories ranging from investigative reporting to health and environmental coverage. The NCM Awards constitute the first multi-ethnic awards program in the country to recognize journalistic excellence in non-English language media.

### **3. Hard-to-Reach Program Activities**

Both the advertising and outreach aspects of the Flex Your Power campaign for 2003 utilize the most impactful and cost-effective means of reaching hard-to-reach residential customers (non-English speaking, rural and low income). The communication vehicles include:

- *Mass media marketing:* By the very nature of the extensive media buys, the marketing campaign via TV, radio and newspaper advertisements had a significant impact on general market and hard-



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to-reach residents throughout the state. To specifically target California's Asian population, Flex Your Power developed and ran flights of Asian-language advertisements on Asian-language television stations. To target the Spanish-speaking population, Flex Your Power developed and ran Spanish-language radio commercials and coordinated with Univision, to which the CPUC awarded funding to reach the Spanish-language market via television spots on Univision stations. Through the general and Asian-market media buys, Flex Your Power met its goals and reached 95 percent of the target markets, including rural and low-income.

In 2003, Flex Your Power placed full-page newspaper ads in more than 40 general market newspapers and 105 ethnic publications (total circulation of 4,197,488 residents, representing 16 ethnic groups and 13 languages). The ads were designed to drive demand for energy-efficient products and direct customers to participating retailers – retailers that have partnered with Flex Your Power and agreed to sell and market energy-efficient products – in each area. More than 30 percent of Flex Your Power's participating retailers serve areas considered to have high saturation of rural customers; the number is significantly higher for low-income; and non-English speaking customers – almost 60 percent of the retailers are associated with ethnic press zip codes.

- *Educational and Training Materials:* The educational materials for the energy efficiency promotions were printed in five different languages – English, Spanish, Chinese, Vietnamese and Korean – and hundreds of retailers requested the non-English materials (542 Spanish, 68 Chinese, 29 Korean, 37 Vietnamese). The cooperative marketing and outreach partnership educational materials were printed in English and Spanish and distributed by Flex Your Power's partners to thousands of residents statewide. The New Homes Initiative educational materials were printed in English and Spanish.
- *eNewswire:* Flex Your Power distributed the biweekly Flex Your Power eNewswire to thousands of Californians, including hundreds of community-based organizations, many of which directly serve hard-to-reach audiences.
- *Commercial outreach:* Flex Your Power's business recruitment efforts involved chambers of commerce and business associations, including those which represent hard-to-reach nonresidential customers: small and/or minority-owned businesses.

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### **B. Runyon Saltzman & Einhorn**

#### **1. Introduction**

The main target of the 2003 Reach for the Stars campaign was to increase exposure of energy efficiency messages in low-income, rural households. Secondly, RS&E estimated to generate 43 million radio impressions and 24 million newspaper impressions in rural California.

Based on qualitative research, the frequency in which rural populations noticed energy efficiency information in newspapers and on the radio increased 20% by the end of the 2003 Reach for the Stars campaign. The campaign's media placement resulted in nearly 125 million radio impressions and more than 53 million newspaper impressions in rural markets throughout the state. Further, the campaign's media and outreach efforts prompted more than 3,000 calls to the toll-free information line.

#### **2. Steps to Attain Target**

To attain the campaign target, RS&E:

- placed newspaper ads in rural markets throughout the state;
- developed a radio campaign, which aired in low-income rural areas throughout the state;
- established and trained a network of 11 community-based organizations (CBOs) that provided outreach to low-income level consumers seeking energy efficiency information;
- established a single point of contact for all consumers through the creation of a toll-free phone line that provided energy efficiency program contact information.

All campaign materials emphasized long-term structural improvements to buildings and the replacement of appliances with ENERGY STAR qualified models rather than suggesting behavioral changes that could require ongoing consumer education. Throughout the creative process, RS&E collaborated closely with the contract administrator staff in order to produce accurate and effective materials.

Four radio spots and six newspaper ads were created and appeared in three flights:

- Flight one (June-August) focused on appliance replacement measures.
- Flight two (August-October) focused on cooling materials.
- Flight three (October-November) focused on heating and lighting replacement.

A wide range of promotional materials – including such items as brochures, refrigerator magnets, door hangers, hand fans, tabletop displays, PowerPoint presentations and outreach videos – were also

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created by RS&E. These materials were distributed to the target audience via the Reach for the Stars CBO network and outreach activities.

These outreach activities included:

- Staffing the exhibit booth and distributing collateral materials at events, such as:
  - County fairs
  - Street fairs
  - Back to school nights
  - 4H barbecues and auctions
  - Music festivals
  - Lowe's grand opening in Merced
  - Multi-cultural fair in Hanford
  - Senior Picnic in the Park
  - Wasco Rose Festival
  - Family Fair
  - Energy conferences
  - Senior health and education fairs
  - "Hats off to Grandparents" event
  - Route 66 Rendezvous (shared booth with SoCal Gas)
  
- Presentations to community groups, such as:
  - Senior centers
  - Head Start programs
  - Community collaborative groups
  - Chambers of Commerce
  - Employee groups
  - Back-to-School nights
  - Energy clinics
  - Interfaith groups
  - Kiwanis chapters
  
- Media outreach:
  - Press releases to local print media
  - Newsletter articles in professional publications, employee newsletters, senior newsletters, interfaith bulletins and weekly special interest publications.
  - Media training sessions, conducted by RS&E, which prepared the CBOs to interact with the media
  
- Special events/contests, such as:
  - Poster contests – winning entries appeared on billboards, in art galleries, local publications and a community calendar.
  - Chalk sidewalk art festivals.

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- Public Service Announcement (PSA) contests on local radio and/or television stations.
- Collaboration with Lowe’s and other appliance stores to place magnets on all ENERGY STAR appliances and distribute brochures.

**2003 Reach For the Stars Community Outreach Projects Outcomes**

<b>MEMBER AGENCY</b>	<b>PORTABLE EXHIBIT *</b>	<b>PRESENTATIONS **</b>	<b>SPECIAL PROJECTS***</b>	<b>LOCAL AD PLACEMENTS ****</b>	<b>TOTAL</b>
Boys & Girls Clubs of Merced County	4,560	80	6,200	40,700	<b>51,540</b>
Butte County 4-H	12,000	400		150,000	<b>150,000</b>
Ceres Unified School District	20,000	470	150	10,000	<b>30,620</b>
Community Clean Sweep-Kern County	23,400	138	104,500	86,000	<b>214,038</b>
County of Riverside Community Action Agency	9,600	108	156,000	60,000	<b>225,780</b>
Gavilan College Educational Foundation	9,660	105	5,000	60,000	<b>74,765</b>
Humboldt County 4-H	57,100	300	50,250	61,700	<b>169,350</b>
Kings County United Way	8,410		35,000	800	<b>44,210</b>
Redwood Community Action Agency	38,500	250	24,682	49,450	<b>112,882</b>
Riverside County Community Action Agency	5,260	110	90,000	391,500	<b>486,870</b>
Victor Valley Community Service Council	2,530	120	400	200	<b>3,250</b>
<b>TOTAL</b>					<b>1,563,305</b>

**Notes -**

\*Approximate numbers of participants that viewed or visited the exhibit at fairs, festivals, cultural events, energy fairs, conferences, etc.

\*\* Approximate numbers of local community groups that attended “Reach for the Stars” presentations

\*\*\* Approximate numbers reached through locally designed projects such as door-to-door collateral distribution, public service announcements, poster contests newspaper articles, youth-designed calendars,

\*\*\*\* Approximate numbers and households reached by placement of campaign ads in local venues including newsletters, weekly community papers,

bus benches, bus interiors, as movie theatre slides, and in community agency facilities.

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### **3. Hard-to-Reach Program Activities**

The Reach for the Stars campaign was designed to reach rural Californians, a hard-to-reach population as defined by the CPUC Energy Efficiency Policy Manual.

All campaign activities were implemented in rural areas. For the 2003 Reach for the Stars campaign, RS&E placed advertising in newspapers and on radio stations that reach rural households. The agencies participating in the Reach for the Stars CBO network was located in and serviced rural communities. Further, all research participants were recruited from rural areas.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **C. Univision**

#### **1. Introduction**

Univision Television Energy Efficiency Marketing (UTEEM) is a consumer marketing and outreach program designed to build awareness of and increase participation in the 2003 energy efficiency rebate programs and other energy reduction initiatives. The target market was hard-to-reach Hispanic utility customers.

Using television, the much-preferred source for information among California's Hispanic population, the campaign featured a series of four 30-second and three 60-second Spanish-language commercials, supported by a bonus schedule of six 10-second messages. Content promoted specific cash rebate and online energy audit programs, as well as the benefits of compact fluorescent lamps versus traditional incandescent bulbs.

Each commercial was tagged with the appropriate phone number of the IOU serving the viewership of that particular station. Univision television stations are located in Los Angeles, San Francisco, San Diego, Fresno, Sacramento, Salinas-Monterey, Palm Springs, Bakersfield, Yuma-El Centro, Santa Barbara and Chico-Redding.

The energy efficiency messages were broadcast during aggressive schedules on all 11 California stations of the Univision Television Group, effectively covering the entire state. The television schedule began June 16 and ended November 9, 2003.

UTEEM kicked off the television schedule by sending a news release to editors of 43 Spanish-language newspapers throughout California. The release explained the goals behind the campaign and provided readers with the toll-free phone line for contacting the local IOU regarding energy efficiency programs.

To broaden the scope of the program, an interactive display, informational materials and signage were incorporated into the booth that each Univision station sets up at community events and cultural celebrations.

Staples/Hutchinson oriented team captains at the 11 stations to the UTEEM campaign and Energy Efficiency Programs. Captains subsequently trained the stations in-house staff for outreach to Spanish- and Nellig-speaking visitors who stopped by the Univision booths at various events.

Booth staff were also provided with a comprehensive *Staff Orientation Manual* that outlined staff responsibilities, described all Energy Efficiency Program rebates and initiatives, listed IOU contacts and sources for financial assistance programs, as well as a glossary of terminology.

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The second outreach component was the facilitation of interviews with CPUC and IOU spokespersons on talk shows produced locally by Univision stations.

### 2. Program Achievements

The Univision Television Energy Efficiency Marketing (UTEEM) campaign was initiated the week of June 16 and ended November 9, 2003. By the end of November 2003, when all schedules had aired, the program had reached approximately 165,876,000 gross impressions in the target audience of viewers between 18 and 49. This is 120% of the original goal. This number does not include the viewers reached by the Univision station serving the Chico-Redding market. Due to the market size, Nielsen does not provide audience levels for this station. Station estimates are available, but cannot be verified.<sup>5</sup>

UTEEM's goal for the 2003 television commercial schedule was a total of 6,943 commercials. The actual number of spots aired was 1,464 60-second, 4,026 30-second and 2,772 10-second commercials to air during the entire schedule for a comprehensive total of 8,262 commercials. The total number of spots aired was 119% of the goal. The cost to the program of reaching every 1,000 viewers with the energy efficiency program message was \$17.

Commercials aired according to the following schedule:

Commercials	% of Schedule	Length	Start Date	End Date
Appliance Rebates	100%	30-sec	June 16, 2003	July 6, 2003
Appliance Rebates	100%	10-sec		
Programmable Thermostat	100%	60-sec	July 7, 2003	July 20, 2003
Programmable Thermostat	100%	10-sec		
Air Conditioning	100%	30-sec	July 21, 2003	August 10, 2003
Cooling Equipment	50%	10-sec		
Appliance Rebates	50%	10-sec		
Programmable Thermostat			August 11, 2003	August 17, 2003
Cooling Equipment	100%	30-sec	August 18, 2003	September 7, 2003
Cooling Equipment	100%	10-sec		
Programmable Thermostat	50%	60-sec	September 8, 2003	October 11, 2003
	50%	10-sec		
Furnace Rebates	50%	60-sec	September 8, 2003	
	50%	10-sec		October 11, 2003
Appliance Rebates			October 12, 2003	October 19, 2003
Lighting	100%	30-sec	October 20, 2003	November 1, 2003
Lighting	100%	10-sec		
Home Energy Survey	100%	60-sec	November 2, 2003	November 9, 2003
Home Energy Survey	100%	10-sec		

UTEEM subcontracted with Research 360, a third-party independent research firm, to evaluate the success of the commercials in communicating the energy

<sup>5</sup> A.C. Nielsen Company is a market research firm nationally relied upon for providing measurements of national and local television audiences.

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efficiency messages. The researcher used a combined qualitative/quantitative approach to make this determination.

In October 2003, Research 360 organized and interviewed six Hispanic focus groups. Eleven individuals were recruited per group to assure a turn-out of at least 8 per group. As a result, sample size for UTEEM's evaluation will be 50 Hispanic consumers.

The qualitative/quantitative Hybrid method required a more structured interview than is typical with traditional focus groups, which is summarized as follows:

- The UTEEM commercials and brochure were shown to the consumers (in a random order over the total project).
- Participants individually scored each piece on a scale of 1-5 on a number of measures that reflect the communications goals for the piece.
- The focus group participants then discussed their reactions to and impressions of each piece without specifically explaining their scoring.
- Each successive piece was handled in this same way.
- The researcher prepared the results of the focus groups in two forms:
  - In-depth attitudes of the consumers toward the communications pieces, and
  - Numerical scores for each communications piece.

The UTEEM commercials received high marks for delivering an understandable message, raising interest in energy efficiency and increasing awareness of the IOUs as sources for information.

### Outreach Results

Univision stations reported that the interactive display generated a great deal of interest. Because booth staff had been formally oriented to the program, they were able to answer questions and direct people to sources for additional information.

During 2002, talk show interviews with IOU and CPUC representatives were provided by the stations as a mid-schedule add-on to the original program. For the 2003 program, UTEEM was able to schedule an interview on *Voz y Voto* (Voice of the People), a popular program that is produced in Sacramento and airs on 9 of the 11 Univision stations.

#### **a. Hard-to-Reach Program Activities**

UTEEM is wholly targeted to the hard-to-reach Hispanic market, specifically those whose language barrier prevents them from participating in the IOUs' rebate and energy reduction programs. Univision's dominance in California's major and secondary media markets allowed us to effectively reach 98% of California's Spanish-speaking population.



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**Attachment A  
Program Results Workbook**

**2003 Energy Efficiency Program Accomplishments  
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Program Title: **Residential In-Home Energy Survey Program**

**I. Program Overview**

The Residential In-Home Energy Survey program provides residential customers, particularly hard-to-reach (HTR) customers who do not respond to on-line and mail-in survey options, with a more personalized, face-to-face energy survey. Upon the customer's request, an appointment is scheduled, and a trained energy auditor is sent to the customer's home to assess energy usage and to provide energy-saving recommendations. Energy auditors are bilingual and would conduct in-home surveys in Spanish, if requested. Customers are provided with information on energy efficiency products and services, rebate programs and other energy-related information to encourage the adoption of energy efficiency measures identified in the in-home survey.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget	\$750,000
Program Expenditures (includes program commitments)	\$705,944

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fund shift Summary - None.

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets</b>	<b>Results</b>
<b>In-Home Survey</b>	4,500	5,366
<b>Hard-to-Reach Performance</b>	The Program will achieve 50% program participation by hard-to-reach customers.	The Program achieved 63.3% program participation by hard-to-reach customers.

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **A. Performance Achievements**

#### **1. Introduction**

The 2003 Residential In-Home Energy Survey Program target was to conduct 4,500 residential surveys. SCE successfully conducted 5,366 in-home surveys. SCE exceeded these targets through expanded outreach and effective promotion of the Residential In-Home Energy Survey Program.

#### **2. Steps Taken To Achieve Target**

SCE continued its existing direct mail strategy to a total of 75,000 in-home solicitation cards targeting specifically hard-to-reach (HTR) customers. In June 2003, SCE sent 25,000 cards to moderate income and renter segments in coastal areas and 25,000 to Coachella Valley, California. During the third quarter, SCE sent an additional 25,000 cards to all HTR customer resides in low and high desert. With this successful strategic marketing and comprehensive outreach, SCE exceeded its goal by November 2003.

While promoting the program via direct mail, the SCE Call Center and the Mobile Educational Unit also contributed to the early goal achievement by promoting the program and provide referrals. MEU is a 45-foot converted recreational vehicle equipped with energy-efficient household products and computerized education tools designed to promote consumer interest in energy efficiency, ENERGY STAR<sup>®</sup> qualified products, and utility rebate and incentive program. The MEU traveled to HTR areas throughout SCE's service area and enrolled customers into the program.

In addition to providing customers with energy saving recommendations in their homes, energy auditors promoted the Appliance Recycling and Single Family Energy Efficiency programs. The auditors explained the benefits and provided customers with refrigerator recycling brochures and rebate applications.

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

The 2003 Residential In-Home Energy Survey program's hard-to-reach target required achievement of 50 percent (2,250 surveys) program participation from HTR customers. Relying on the CPUC's hard-to-reach definition<sup>6</sup>, SCE further refined the HTR definition for this program to target specifically non-English speaking, rural, moderate income, multi-family, mobile home tenants and renters. Through strategic marketing and outreach, SCE was able to achieve 63.3 percent (3,399 surveys) participation from the HTR segments.

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<sup>6</sup> Energy Efficiency Policy Manual, dated November 29, 2001.

## **2003 Energy Efficiency Program Accomplishments Southern California Edison**

### **2. Reasonable Steps Taken To Achieve Target**

The Residential In-Home Energy Survey Program has the advantage of being able to respond to the needs of certain HTR customer groups by providing an alternative delivery channel to the statewide Home Energy Efficiency Survey program through individual interaction.

The program expanded its direct mail solicitation cards and outreach efforts to include other HTR customers including rural, moderate income and renters. These customer segments tend to have a greater propensity than other customer segments to respond positively to an in-home survey offering than to offers of on-line or mail-in surveys.

As in previous years, SCE continued to target Spanish-language customers by sending direct-mail solicitation cards in both English and Spanish, to HTR zip codes. Energy auditors are bilingual and would conduct in-home surveys in Spanish, if requested.

In an effort to make the outreach process more effective, SCE continued to achieve equity and remove market barriers by enhancing access of energy efficiency programs for non-English speaking customers. SCE developed and implemented a three-month pilot program that involved working side-by-side with local community-based organization to promote the survey programs and other SCE rebate and incentive programs to the Spanish-speaking communities.

SCE also supplemented traditional outreach channels with the use of the Mobile Education Unit (MEU) at county and regional fairs and other major events. The MEU traveled to HTR areas throughout SCE's service area and enrolled customers into the program.

**2003 Energy Efficiency Program Accomplishments  
Southern California Edison**

**Attachment A  
Program Results Workbook**

**2003 Energy Efficiency Program Accomplishments  
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Program Title: **Small Nonresidential Hard To Reach Program**

**I. Program Overview**

The Small Nonresidential Hard-to-Reach program, implemented as the Small Business Lighting Retrofit program, offers energy efficiency information, equipment and literature to small business customers in areas identified as hard-to-reach by the CPUC and located within SCE's service territory. SCE's hard-to-reach customers are defined as all customers who are located in rural zip codes and/or all customers with a monthly demand of less than 20 kW. The program is designed to introduce small business customers to the benefits of energy efficiency through lighting system upgrades. The upgrades consist of the replacement of low efficiency lighting with high efficiency lighting. The upgrades are provided after an energy audit is performed. The audit helps to demonstrate to the customer the potential for energy savings. Since cost is major concern for the small business owner, and the largest barrier to participation in the traditional rebates programs, all program services are provided free of charge. Professional electrical contractors, hired through a competitive bid process, provide the audits and installation of the lighting system upgrades.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
<b>Authorized Budget<sup>1</sup></b>	\$1,400,000
<b>Program Expenditures (includes program commitments)</b>	\$1,390,099

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

2 – SCE will be seeking CPUC authorization to shift \$40,000 of unspent 2003 energy efficiency funds to this local program to conduct an EM&V study. The submitted program budget and, subsequent authorized budget, did not include funds for this activity.

Fundshift Summary - None

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**III. Program Performance**

**Table 2 – Performance Overview**

Metric	CPUC Targets <sup>1</sup>	Results
<b>Energy Savings, kWh</b>	5,216,208	5,108,183
<b>Demand Reduction, kW</b>	1,134	1,081

1 – As approved in Decision 03-04-055 (Attachment 2). D.03-04-055 also refers to 5,000 in-language brochures as an additional program target. Due to the program design and the overwhelming customer demand which would have been created by such a large distribution, SCE could not meet the target.

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

SCE’s 2003 Small Nonresidential Hard-to-Reach program targets included 5,216,208 kWh of net annualized energy savings and 1,134 kW of net demand reductions. SCE achieved 5,108,183 kWh of net annualized energy savings and 1,081 kW of net demand reduction.

Decision 03-04-055 also identifies an additional target of “5,000 in-language brochures.” As the adopted program implementation plan indicates, the program provides general energy efficiency information, presented in-language, upon completion of an energy efficiency audit.<sup>7</sup> SCE provided the informational fact sheets to all 1,104 participants, including Spanish-language fact sheets when applicable. However, these informational pieces were not used to outreach to potential participants because it would most likely have created a program demand that could not have been met due to the program’s limited funding. Therefore, SCE was unable to distribute 5,000 in-language brochures, as expected in Decision 03-04-055.

Due to the nature and focus of the program that targeted only very small nonresidential customers (i.e., under 20 kW), typically located in rural communities, there were no specific hard-to-reach targets assigned to the program. Various steps taken by SCE proved to be very successful: (1) targeting to the appropriate customer segments; (2) providing participants with program materials and services tailored to their energy needs; and (3) selecting vendors that could perform both on-site energy

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<sup>7</sup> Southern California Edison’s 2003 Energy Efficiency Program Selection Rulemaking 01-08-028, Small Nonresidential Hard To Reach, dated November 4, 2002.

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audits/information and lighting upgrades in a cost-efficient manner while maintaining customer satisfaction.

### **2. Reasonable Steps Taken To Achieve Target**

#### **a. Program Targeting**

An essential element of the program was to identify those customers who met the program's hard-to-reach criteria, which consisted of the following: (1) participants located in outlying areas, as defined by SCE's rural zip code listing based on the 2001 Customer Needs Assessment Study; and/or (2) very small business customers, measured by a demand below 20 kW.

To properly identify the very small business customers, SCE targeted customers in the GS-1 rate class. The GS-1 rate class is typically customers whose demand is below 20 kW. The second criterion was to identify nonresidential customers, under the GS-1 rate class, in rural locations. SCE relied on a group of zip codes that were identified as being located in rural areas within SCE's service territory.<sup>8</sup> This rural zip code grouping was derived from the CPUC approved Residential Needs Assessment Study, July 2001, CALMAC ID # 3533 (CPUC approved Residential Needs Assessment Study). SCE selected three major geographic territories outside of the Los Angeles basin. The areas are inland empire/low desert, the high desert, and the central valley. SCE assigned specific contractors to deliver the program. These contractors were assigned to these three major areas, but not in the same cities. Adding the central valley in 2003 allowed SCE to realize the additional opportunities for future program delivery in this hard-to-reach territory.

#### **b. Program Materials**

To encourage program participation, SCE strove to promote a clear understanding of the benefits of energy efficiency for small businesses, and how to participate in the program. The installation contractor who presented the program to the participant relied on two communications pieces: an onsite energy audit/survey form and a program information sheet. These informational materials are described below:

##### On-Site Energy Audit/Survey Form

The on-site energy survey form was a straightforward, easy to use and understand audit that the installation contractor used to demonstrate to the potential participant the difference in energy usage, expressed both in energy savings and cost, and between the existing low efficiency lighting and the proposed high efficiency lighting available through the program.

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<sup>8</sup> This rural zip code grouping was derived from the CPUC approved Residential Needs Assessment Study.



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This form was also used as the customer's authorization for the contractor to proceed with the lighting system upgrades.

### Program Informational Sheet

The program offered an informational sheet to customers that described the program and its benefits as well as other energy efficiency low/no cost tips that the customer could implement at home as well as in the place of business. The informational tips included recommendations such as cleaning the refrigerator coils, lowering the thermostat etc., which could lead to optimizing the performance of their energy equipment. The SCE energy efficiency toll free number was also included on this sheet so the customer could obtain information about other energy efficiency programs offered by SCE. These were created in English but were also produced in Spanish, Chinese, and Korean for those customers who preferred the information in their native language. It should be mentioned, however, that the installation contractors reported that most customers, regardless of their first language, preferred to conduct business in English.

The informational materials were provided in a folder and the customer was encouraged to use this folder for all energy efficiency related literature as part of their overall business operations. Nearly all of the customers who were provided an informational sheet and an energy survey through the program opted for a lighting upgrade.

The program did not quantify the energy savings associated with the various low/no cost energy efficiency informational tips provided to the customer. Only energy savings and demand reductions associated with the lighting system upgrades were considered in the calculation of the program's overall achievement. However, these behavioral recommendations do often result in additional energy savings.

### **c. Contractor Selection and Coordination**

SCE solicited competitive bids from electrical contractors who could demonstrate an understanding of the energy and non-energy objectives of the program yet whose cost would lead to the achievement of the program's energy savings and demand reduction targets. SCE selected three licensed electrical contractors to provide both the energy audits and to perform lighting upgrades. Two of the contractors were 2002 contractors who successfully bid on the program and a new, third contractor was added to service the central valley region. SCE worked closely with these contractors on strategic planning and during program implementation to ensure that the program achieved the goals while remaining cost effective. The three contractors managed within their contracted budget amounts allotted to them by SCE.

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Learning from prior experience, the contractors' found it effective to solicit customer through face-to-face contact. That involves door-to-door direct marketing that allows contractors to expedite the process of solicitation, education, energy survey, and program signup. Under the direction of SCE, the contractors paid special attention to customer's concern on the quality of lighting (i.e., light levels, color rendition, warranty). They are also instructed to be sensitive to customer's ongoing business operations and work in a manner that produced minimal disruption. For example, in certain instances, customers preferred to conduct the survey and potential installations during hours when they expected slow customer traffic in their own businesses. The contractors reported in many instances that customers were anticipating their call/visit because other businesses in their communities had already participated.

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Program Title: **Pump Test and Hydraulic Services Program**

**I. Program Overview**

SCE's Southern California Edison's (SCE) Pump Test and Hydraulic Services program has delivered high quality pump testing services and quality technical information since 1911. Each year the program has been refined to present the customer with the information they need and pump testing data to implement energy efficiency measures for their hydraulic application.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$1,350,000
Program Expenditures (includes program commitments)	\$1,350,000

1 - As approved in Decision 03-04-055.

2 – SCE will be seeking CPUC authorization to shift \$20,000 of unspent 2003 energy efficiency funds to this local program to conduct an EM&V study. The submitted program budget and, subsequent authorized budget, did not include funds for this activity.

**Fundshift Summary -**

None.

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Target<sup>1</sup></b>	<b>Result</b>
<b>Pump Tests</b>	3,200	3,665

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

In 2003, the Pump Test and Hydraulic Services program (PTHS) target was to perform 3,200 pump tests. SCE exceeded the program target by performing 3,665 pump tests. The program was able to surpass the goal by offering quality service

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and information to a specific market segment which benefits the most from this energy efficiency program.

### **2. Steps Taken To Achieve Target**

PTHS built the success of its 2003 program on the established and successful foundation of previous years. The key to the success of the program was primarily due to the continued efforts to renew and build upon existing relationships with customers, ensure pump tests remain at a high level of quality and that resulting information was unbiased and helpful to the customer, and the selective use of key events which attracted and educated customers of the benefits of an energy efficient pumping system and of the services available through the PTHS program.

#### **a. Quality Service**

PTHS technical specialists enhanced the relationships with customers by ensuring a high standard under which the testing activity took place. To meet a high level of quality and consistency, SCE tests are performed under the stringent standards as set forth by the American Water Works Association and most of the program's technical specialists have Grade II certification from the State of California Department of Health Services.

In order to provide useful technical and energy information to its customers, it is critical that the PTHS technical specialists remain informed of changing industry issues and technology advances in the process that affect the agricultural and water industries. One way the PTHS representatives accomplished this was by their membership in various associations such as the Association of California Water Agencies (ACWA), California Grape and Fruit Tree Association, and California Citrus Mutual.

#### **b. Strategic Outreach**

As indicated in its implementation plan, PTHS' participated in several select outreach/education events to promote the program's services. Examples of promotional events supported this year include the 36<sup>th</sup> Annual World Ag Expo in Tulare, California; Inland Counties Water Association Vendor's Fair; the Home Town Utility event at AgTAC; the American Water Works Association (AWWA) Conference, and other vendor fairs. SCE also offered training at its AgTAC and CTAC facilities. The awareness created by the program's presence at these events in addition to the established customer relationships, was sufficient to generate enough requests for the program to exceed its pump test performance target.

PTHS also piloted a direct mail campaign, specifically targeted to reach hard-to-reach and nonparticipating customers. Approximately 200 letters were mailed to these specific customers providing information regarding the pump test services and other energy efficiency information. As a result, 6 percent of the customers targeted responded requesting for a pump test.

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### **c. Expanded Program Recruitment**

For 2003, SCE continued its commitment to provide needed services and information to hard-to-reach customers. As indicated in previous reports, the customers served by PTHS are unique in the fact that most of its customers are considered hard-to-reach (HTR). SCE also adopted a strategy to attract HTR customers as defined by their rural locations within SCE's service territory. In 2002, 39 percent of the customers receiving pump test services fit into the HTR rural geographical definition. In 2003, PTHS attracted 33 percent participation.

In addition to this effort, SCE also focused on attracting previously nonparticipating customers (those customers whose pumps had not been previously tested within the last 3 years). In 2002, SCE included 38 percent of nonparticipating customers in the program. In 2003, SCE attracted 45 percent participation rate by nonparticipating customers.

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Program Title: **Demonstration & Information Transfer Program**

**I. Program Overview**

The Local 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’s demonstration activities focus on near-commercial energy efficient applications with significant market potential and commercial energy efficient applications with low market penetration using Emerging Technology (ET) Application Assessment projects. The ET application assessments may be conducted at either customer sites or in controlled environments. The assessments provide design, performance, and verification of novel energy efficient systems, and help to reduce market barriers. The projects measure, verify, analyze, and document the potential energy savings and demand reduction of specific applications in different market segments. Information Transfer efforts disseminate an assessment’s results, and are customized to the targeted markets.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$500,000
Program Expenditures (includes program commitments)	\$476,613

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift Summary -  
None

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Target<sup>1</sup></b>	<b>Result</b>
<b>Assessments</b>	SCE will perform 3 Emerging Technology Application assessments.	SCE initiated 7 Emerging Technology Application assessments.

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.



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### **A. Performance Achievements**

#### **1. Introduction**

The 2003 Local Crosscutting Demonstration and Information Transfer program had a single target: Perform three Emerging Technology Application Assessments. SCE surpassed this target by initiated a total of 7 Emerging Technology Application Assessments. To meet the Emerging Technology Application Assessments target, SCE: (1) researched and analyzed potential emerging technology applications; (2) found opportunities to initiate assessments; and (3) proceeded with assessments and negotiated customer agreements.

#### **2. Reasonable Steps Taken To Achieve Target**

The Local Demonstration and Information Transfer program achieves its technology application assessment objectives primarily through customized demonstration projects. These projects either took the form of customer site demonstrations, feasibility studies, simulation analysis, controlled environment tests, commercial product development, design methodologies and tool development, or a combination of the approaches. The projects were initiated and committed during the program year. Some projects may take up to three years to complete due to application complexity, construction schedules, building and process commissioning, logistics, etc. Assessment projects initiated and committed to during 2003 will be completed no later than year-end 2006.

Through ongoing information research from a variety of sources, program staff identified viable emerging technology application candidates for assessment projects. As a result, SCE initiated a total of seven Emerging Technology Application Assessments for the 2003 Local Crosscutting Demonstration and Information Transfer program, as listed below:

- Initiated four assessments of different processes targeted to replace perchloroethylene (PERC) solvent based dry cleaning: (1) Professional Wet Cleaning, (2) Hydrocarbon Based Dry Cleaning, (3) Silicone Based Dry Cleaning, and (4) Carbon Dioxide Based Dry Cleaning. All the assessments are taking place at customer sites. SCE has partnered with Occidental College, Southern California Gas Company, and the South Coast air Quality Management District for these assessment projects.
- Customer interest in energy efficiency opportunities led to an assessment project to evaluate Cold Storage Refrigeration Controls. The project is evaluating at a customer site whether chilling the concentrates in the storage facility at night, when the refrigeration system may operate more efficiently, has significant demand and energy impacts.

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- The Advanced Controls for Plastics Granulators assessment project is investigating the potential demand and energy savings of different control systems for plastics granulator machines. Plastics granulators are specialized chopping and shredding machines used in a number of secondary plastics manufacturing processes like injection molding, blow molding, etc. The project will assess mesh size and on/off automated controls, and will document option costs and potential energy savings.
  
- The Ultra High Lime-Pellet Softening of Brine Concentrate Waste Streams assessment project will produce a field study report for a site and estimate the potential savings for water and wastewater membrane plants within SCE's service territory for pellet softening ultra high lime (PS-UHL) processing of wastewater streams. Membrane facilities treating potable and wastewater in the SCE service area have been identified. A total of ninety facilities, including full-scale municipal reclamation plants, desalination plants, and brackish potable groundwater sources were identified. Available water quality, chemical, energy and equipment data were compiled for the sites.

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Program Title: **Local Government Initiative Program**

**I. Program Overview**

Southern California Edison’s Local Government Initiative (SCE-LGI) educates and informs 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, as well as small business, and residential retrofit and surveys. 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. Added focus is placed on achieving participation from those cities/jurisdictions with a preponderance of hard-to-reach (HTR) zip codes within their realm of governing influence.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$950,000
Program Expenditures (includes program commitments)	\$888,267

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift Summary -  
None

**III. Program Performance**

**Table 2 – Performance Overview**

	<b>New Jurisdictions<sup>1</sup></b>
<b>Target</b>	16 (12 HTR)
<b>Actual</b>	18 (12 HTR)

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

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**A. Performance Achievements**

**1. Introduction**

The approved target for the LGI program was to solicit and obtain the participation from 16 new jurisdictions. SCE not only reached target, but exceeded it, by obtaining participation from a total of 18 local jurisdictions. The following jurisdictions participated in the program during 2003:

	City	HTR		City	HTR
1	Montclair	X	10	Placentia	
2	Arcadia	X	11	Tustin	X
3	Brea		12	Highland	X
4	Chino	X	13	Redondo Beach	X
5	Diamond Bar	X	14	Signal Hill	X
6	Loma Linda	X	15	Yorba Linda	
7	Orange		16	Oxnard	X
8	Westminster		17	La Habra	X
9	Fillmore		18	Rialto	X

X - Indicates city is classified as HTR.

Since 2000, BII and SCE together have been working with California local governments to create and promulgate a voluntary energy efficiency program that improves the quality and energy efficiency of new homes, and is mutually beneficial to both the local government and participating builders. The voluntary component of this program fosters more of a “team” working relationship between the building department and the builders. SCE has since leveraged the relationships that resulted from the residential construction program element, and expanded the offering of energy efficiency programs and services to include nonresidential new construction, small commercial, and existing residential.

**2. Steps Taken To Achieve Target**

In effort to encourage adoption and participation in the program, SCE pursued a variety of outreach strategies that included regular contact both in person and by telephone and fax, as well as training, update meetings with stakeholders, and providing marketing/promotional support materials.

In order to increase builders’ acceptance and use of the CEEP initiative, SCE and BII set out to reduce the biggest barrier to this issue which was jurisdiction staff not broadly understanding the program. Typically, the jurisdictions have a few “champions” of this program, and it is usually the Chief Building Official, and not the staff at the permit counters, or building inspectors. As part of overcoming this barrier, the LGI efforts focused on training jurisdiction staff, so that builders could have ready and reliable information on CEEP.

The marketing of CEEP increased as well. SCE began running advertisements in various builder trade magazines, in which the 60 jurisdictions were identified so builders could see the breadth and opportunity of the CEEP initiative.

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### **a. Training Sessions**

As mentioned above, during 2003, SCE and BII conducted very specific CEEP and related energy code training for the following 30 jurisdictions general building department staff: Victorville, Palm Springs, Temecula, Moreno Valley, Ontario, Upland, Garden Grove, Thousand Oaks, Lancaster, Manhattan Beach, San Jacinto, Indian Wells, Tustin, Camarillo, Santa Clarita, Palmdale, Huntington Beach, Loma Linda, Rancho Cucamonga, Norco, Banning, Hesperia, Fontana, Corona, Orange County, Fullerton, Redlands, Highland, Yorba Linda, and San Bernardino. The primary focus of this training was to discuss and convey duct testing protocols for both CEC requirements as well as CEEP. Many builders have a perception that the duct testing protocols for CEEP exceed what is required for code. This training communicated to the building departments that additional inspections/procedures above and beyond the CEC's requirements do not exist. This has been a primary hurdle for builders wanting to participate in CEEP but feared potential "hassle."

### **b. Outreach Meetings**

In 2003, SCE hosted the LGI/CEEP annual Advisory Group meeting in Fullerton, California. The gathering was primarily attended by existing program participants as well as prospective supporters. This meeting served as an opportunity to discuss some of the program interests of the stakeholders, and discuss ways of improving the program to better serve the needs of the participants. Additionally, this meeting was used as an opportunity to "poll" the Advisory Group to get feedback on some of the outreach and marketing materials (web banner, information kiosk). Focus of the meeting was program improvements, and increased builder participation in the CEEP. To guarantee CEEP's relevance and value to local governments, CEEP's Advisory Group recommended the program improved its duct testing protocols (awareness that CEEP plans may require additional paperwork above and beyond the California Energy Commission's duct testing requirements, create provisions that retroactively reward CEEP builders who may have avoided CEEP submittals due to an inaccurate perception of an extra paperwork burden (roughly 150 developments that were under construction within SCE's territory were built to CEEP standards, and only 34 of these officially participated in CEEP), and help obtain quicker inspections for some CEEP builders. All three of these Advisory Group recommendations were implemented by year-end.

### **c. Promotional Support**

In an effort to promote the diverse aspects of the LGI program, LGI participants received regular bimonthly faxes which highlighted CheckPoint (a nonresidential new construction incentive program strategy) and Express Efficiency program offerings. Additionally, SCE delivered program literature supporting Express Efficiency, CheckPoint, Multifamily Rebates, California Energy Star New Homes Program, CEEP, and Home Energy Surveys on regular basis to maintain supply levels on-site. SCE also continued "customizing" program literature for the cities

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by incorporating the city's crest or logo in order to demonstrate the partnership between SCE and the participating jurisdiction.

The "Energy Efficiency Resource Center" banner was made available for all participating jurisdictions to utilize on their cities' web pages as a direct link to SCE's energy efficiency webpage. Along with the link, SCE created Energy Efficiency Resource Center kiosks. The kiosks contain multiple brochure holders and were created for the jurisdictions to place in high traffic, high visibility areas within the city offices/locations.

An example of personalized service provided to a new jurisdiction in 2003 was assistance provide to the city of Fillmore in the creation of a "Homeowners Manual" which is available at the Building Department counter, and is provided as a service to City residents to help them with retrofits and new construction methods. As a service to the City, the LGI team assembled for them energy efficiency information from a dozen national organizations, and tailored to meet Fillmore's unique geographic characteristics.

### **B. Hard-to-Reach Performance**

#### **1. Introduction**

For 2003, the LGI program's hard-to-reach target was to add 12 new local jurisdictions to the from HTR areas. The program defines HTR as jurisdictions in rural and /or predominantly moderate-income areas. SCE relied upon the 2001 Residential Customer Needs Assessment Study to identify specific zip codes within SCE's service territory to specifically target these HTR customers. A jurisdiction qualified for HTR when 30 percent or more of its zip codes were considered HTR. Relying on targeted outreach strategies, the program was successful in recruiting 12 local jurisdictions which were defined as HTR. These cities include: Arcadia, Chino, Diamond Bar, Highland, La Habra, Loma Linda, Montclair, Oxnard, Redondo Beach, Rialto, Signal Hill, and Tustin.

#### **2. Reasonable Steps Taken To Achieve Target**

Through a targeted strategy, SCE developed relationships with nearly 16 HTR prospective jurisdictions. The HTR goal for this program was to achieve 12 new HTR participants. By soliciting more than the required 12 for the HTR goal, SCE could better ensure success in this target area. The prospective 16 HTR jurisdictions were targeted for participation because of their interest in increased (voluntary) local building efficiency standards, specific energy efficiency plans based on geographic locations, residential and nonresidential building activity, or interest in long-term "green building" platforms – and of course their HTR status. For example, the city of Oxnard, one of the busiest building departments to join the LGI program in 2003, was a targeted city due to the 500+ building permits processed annually. The city of Loma Linda had interest in creating an energy efficiency resolution for the City Council. SCE's LGI program was able to create

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a draft resolution for the city, and will officially be presented to the City Council once Loma Linda receives its first CEEP builder.

Most of the HTR jurisdictions had similar interests in incorporating energy efficiency, but in more general terms, than cited above. There were HTR jurisdictions that have an expectation that commercial building will have a more prominent place in the city's future development than perhaps residential. CheckPoint and Express Efficiency are examples of two programs that these cities see as valuable tools.



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Program Title: **Local Codes and Standards Program**

**I. Program Overview**

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.

**II. Program Budget**

The following table reflects the authorized program budget including any fund shifts, which may have occurred in support of the 2003 energy efficiency program.

**Table 1 – Budget and Expenditure Overview**

<b>2003</b>	<b>Amount</b>
Authorized Budget <sup>1</sup>	\$66,700
Program Expenditures (includes program commitments)	\$67,697

1 – As approved in Decision 03-04-055 (Attachments 1 and 2).

Fundshift Summary -  
None

**III. Program Performance**

**Table 2 – Performance Overview**

<b>Metric</b>	<b>CPUC Targets<sup>1</sup></b>	<b>Results</b>
Conduct Codes and Standards training workshops during 2003	2	3

1 – As approved in Decision 03-04-055 (Attachment 2).

2 – The program performance results shown in the above table reflects any adjustments made to the program achievements as a result of the verification process employed SCE.

**A. Performance Achievements**

**1. Introduction**

In 2003, SCE had the goal of conducting two Codes and Standards training workshops. SCE surpassed the goal by conducting three workshops in support of the revision process for the 2005/ 2008 standard revision process for Title 20 and Title 24.

**2. Steps Taken To Achieve Target**

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SCE conducted three workshops during 2003. The following is a detailed description of each of the three events:

**1. SCE Workshop on Ground Thermal Conductivity Assessment Methods for GSHP Applications.**

This workshop was targeted to engineers, specifiers and designers of ground source heat pump systems who need to understand the basic fundamentals of designing a system for optimal operation in California. The session took place at SCE's CTAC energy center on June 5, 2003. Ground coupled heat pumps hold the potential of improving heat pump performance in extreme weather environments, thus reducing peak demand and overall energy consumption. If better understood by the engineering community in California, a wider application of the technology could be made by showing the benefits of its use as a compliance means for complying with the states Title 24 building standards.

**2. Training Course- Laboratories of the 21<sup>st</sup> Century.**

In an effort to help designers, engineers and specifiers understand the latest state-of-the-art design recommendations for laboratory construction, a workshop was held at SCE's CTAC energy center on November 29, 2003. The workshop provides the participants with information that could help them with alternative means of complying with Title 24. The agenda included case studies, exhaust system design, lighting and controls, commissioning, emerging rating systems, benchmarking and a video regarding improved performance of our nation's laboratories. Co-sponsors of the workshop were the Environmental Protection Agency and the Federal Energy Management Program.

**3. Los Angeles Community College District Sustainable Design Workshop.**

A workshop was conducted in cooperation with the California Science Center on December 2, 2003 in Los Angeles, California. The purpose of the workshop was to present the latest methods of implementing energy efficiency measures in state and community colleges. Measures discussed included lighting improvements, heating ventilation and air conditioning upgrades, controls, shading and window treatments. The target audience for this information was the operation and maintenance personnel from colleges.

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