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# 2003 Low Income Energy Efficiency Annual Report

- ◆ Summary Report  
2002 Results – 2003 Plans
- ◆ Technical Appendix  
2002 Results

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An EDISON INTERNATIONAL Company



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# Executive Summary

California's Legislature, the Commission, and the utilities moved swiftly to make low-income assistance programs available to those who needed it the most during the energy crisis. Senate Bill SBX1 5, passed by the Legislature on April 5 and signed by the Governor on April 11, 2001, provided a one-time statewide increase of \$20 million to the low-income energy efficiency (LIEE) program. The bill also authorized another \$50 million statewide for appliance replacement and other energy efficiency measures of which the Commission allocated \$25 million to further supplement LIEE funding during the Energy Crisis. The Commission set policy for both the 2002 LIEE program and the expenditures of SBX1 5 funds, in May 2001, through Decision 01-05-033 (D. 01-05-033). SCE received \$23.7 million in SBX1 5 LIEE and appliance funding that was allocated by the Commission in D.01-05-033. SCE responded with an aggressive promotion of the Commission's Rapid Deployment initiative and successfully produced effective results in 2001 and 2002.

SCE met the challenge to rapidly deploy LIEE

services in 2002, thus maximizing opportunities to increase energy conservation and reduce the likelihood of power outages. This was accomplished by rolling out programs to as many customers as could be reached with program services. In addition to serving new customers in 2002, SCE also revisited homes that received an initial deployment of measures in 2001 (predominantly compact fluorescent lamps "CFLs") to ensure that all homes received a comprehensive set of eligible measures. SCE's 2002 program included standard LIEE measures (such as refrigerator replacement, relamping, and evaporative cooler installation) plus new measures adopted by the Commission as part of the Rapid Deployment effort (such as air-conditioner replacement and evaporative cooler maintenance). Among program highlights in 2002, SCE's LIEE programs:

- installed 278 evaporative coolers;
- relamped homes with 44,459 CFLs;
- weatherized 2,046 homes;
- provided energy education services to 52,360 homes; and

- installed 9,816 refrigerators to replace older inefficient models

# Program Descriptions

SCE's LIEE programs provide energy efficiency assistance at no cost to qualified low-income customers whose household income meets guidelines established by the Commission. Generally, the income-eligibility requirements for SCE's LIEE program match those for the California Alternative Rates for Energy (CARE) program, which is 175% of federal poverty guidelines. However, for qualified disabled and senior citizens, the income eligibility guidelines are slightly higher, at 200% of the federal poverty level.

SCE began its second calendar year of delivering rapid deployment services seeking to continue to leverage LIEE programs. Throughout 2002, SCE maintained a commitment to participate in and seek out joint efforts with community-based organizations (CBOs), faith-based organizations, public housing authorities, Low-Income Home Energy Assistance Programs (LIHEAP) providers, ethnic and cultural groups and others. In addition, SCE entered into contracts with LIHEAP providers for the installation of refrigerators in SCE's service territory.

SCE delivered energy-efficient refrigerators to LIHEAP providers, with installation costs being paid through the LIHEAP program.

SCE continued its successful integration of LIEE programs with Rapid Deployment plans and leveraged its LIEE program with LIHEAP agencies.

Services provided to eligible customers include energy education and the installation of hardware such as evaporative coolers to use in place of air conditioners, energy-efficient refrigerators, CFLs, weatherization measures, and energy-efficient air-conditioners. By educating low-income customers on how to conserve energy and by providing energy-efficient measures, these customers can better save electricity and money on their bill.

SCE contained costs and maximized program funding by entering into purchase orders to buy energy-efficient appliance in bulk. These appliances were shipped directly from the manufacturer to SCE's contractors for installation in low-income customer homes. SCE maintained contracts with

local LIHEAP agencies to purchase energy-efficient appliances in bulk and provided the appliances to LIHEAP agencies for installation in SCE eligible customer homes.

These appliances include refrigerators, CFLs, heating, ventilating and air conditioning (HVAC) units, and window/wall air conditioners and evaporative coolers.

## **EVAPORATIVE COOLER INSTALLATION**

SCE's Evaporative Cooler Installation program helps qualified low-income customers better control their summer cooling costs by providing a free evaporative cooler to use in place of their air conditioner. The program targets eligible customers in hot, dry climates where evaporative coolers are most effective.

To reduce program costs, SCE buys the coolers in bulk and has them shipped directly to the contractor, thereby avoiding warehouse costs. To further reduce program costs and provide more services to qualifying customers, installation contractors deliver other services to qualifying customers such as Relamping and Porch

Light Replacement, if feasible. Finally, contractors review Energy Education packets with customers to reinforce the energy efficiency message.

#### **WEATHERIZATION**

SCE and the Southern California Gas Company (SoCalGas) have worked together under an inter-utility agreement since 1992, whereby vendors working with SoCalGas provide weatherization services to electrically-heated homes in service territory areas shared by both utilities. In addition, two private contractors provide services for SCE customers living in communities in and outside the service area of SoCalGas. Weatherization services include, but are not limited to: attic insulation, weather-stripping/caulking, low-flow showerheads, electric water heater blankets, and building envelope repair.

#### **RELAMPING**

SCE's Relamping program is designed to introduce low-income customers to energy conservation, and help these customers conserve energy and control their lighting costs by offering free energy-efficient CFLs to replace less efficient incandescent bulbs. Each CFL provides the same amount of light as an incandescent bulb, but at a lower wattage, thereby using less electricity. A household may receive as many as

two CFLs, for indoor use of varying wattages, to replace 60- to 150-watt incandescent equivalents. Qualified customers may also receive one free CFL to replace an existing incandescent light in a porch light fixture. In an owner-occupied dwelling, if the fixture is not designed to accommodate a CFL, a new fixture with a CFL will be installed. Relamping is usually completed in conjunction with customers receiving other LIEE services. However, where customers are only eligible for Relamping, CFLs are installed in the customer's home. Customers also receive energy education packets and instructions from contractors on how to reduce energy use in the home.

#### **ENERGY EDUCATION**

Low-income customers that participate in SCE's LIEE programs receive Energy Education packets that contain information on energy-saving tips and other programs SCE offers. Included in this packet are a CARE application, information on Medical Baseline and customer billing, and other energy efficiency programs. After customer eligibility has been determined, representatives from CBOs and private contractors provide energy education while at the customer's home and in conjunction with the delivery of other LIEE services. Energy

education is provided to all customers receiving services through SCE's LIEE program and to all SoCalGas customers residing in SCE's service territory and receiving weatherization services from SoCalGas.

#### **REFRIGERATOR REPLACEMENT**

SCE's Refrigerator Replacement program replaces non-energy efficient refrigerators with energy-efficient models. In order to qualify for the program, the customer must meet the LIEE income guidelines and own the refrigerator, which must be ten years or older. The customer must allow SCE to recycle the old refrigerator.

Customer referrals to the program are generated from customers participating in other LIEE or SoCalGas low-income programs. Contractors deliver other LIEE services to qualified customers.

#### **FURNACE REPAIR/REPLACEMENT**

In an attempt to standardize LIEE program offerings statewide, SCE has included furnace repair and replacement in its portfolio of low-income energy efficiency programs. To qualify, the customer must be a homeowner, reside in SCE's service territory, meet low-income program guidelines, have electric space heating, and the unit

must require repair or replacement at a cost not in excess of \$750.

**RAPID DEPLOYMENT PILOT PROGRAMS**

As part of the Commission's Rapid Deployment initiative, the Commission authorized several pilot programs, including: replacement of inefficient air conditioners and other space conditioning equipment with high efficiency models, duct sealing and repair, installation of whole house fans, replacement of inefficient or inoperable water heaters with high efficiency units, installation of set-back thermostats and maintenance of evaporative coolers. SCE was directed to continue to offer and implement these measures for PY2002.

**PILOT "COOL CENTERS" IN HOT, DESERT CLIMATES**

On August 8, 2002, the Commission approved SCE's Advice Letter 1636-E, effective as of August 24, 2002, requesting authorization to use SBX1-5 funding to implement a number of Cool Centers in SCE's hot, desert climates. These Cool Centers were targeted at low income customers residing in isolated, extreme climate areas and provided an air-conditioned location where customers, who could least afford high energy costs, could gather on hot days in lieu of running their own cooling devices. SCE entered into

contracts with local agencies for the operation of Cool Centers, with the Cool Centers beginning operation on August 24, 2002.

**OUTREACH PROVIDED TO CALIFORNIA INDIAN TRIBES**

SCE maintains an agreement with the Southern California Indian Center for outreach and consulting services. This outreach plan is targeted at customers of SCE and SoCalGas. The Southern California Indian Center has provided outreach to various Native Americans throughout the utilities' joint service territories.



# 2002 Results and Achievement

## **EVAPORATIVE COOLER INSTALLATION**

In 2002, SCE's Evaporative Cooler Installation program installed 278 evaporative coolers in low-income customers' homes. These installations resulted in an annualized energy savings of 89 MWh and a peak load reduction of 0.3 MW.

## **WEATHERIZATION**

In 2002, 2,046 electrically-heated homes were weatherized resulting in net annualized savings of 878 MWh. Of the homes serviced, approximately 183 were weatherized through SCE's Inter-Utility Cooperative with SoCalGas, and 1,863 homes by CBOs and private contractors working in areas not jointly serviced by SoCalGas and SCE.

## **RELAMPING**

SCE provided relamping services to over 15,954 homes, installing 44,459 CFLs in 2002. The Relamping program achieved a net annualized energy savings of 1,178 MWh and a peak load reduction of 0.1 MW.

As part of the program, relamping agencies delivered Energy Education packets and installed porch

lights in conjunction with the relamping service.

## **ENERGY EDUCATION**

As part of the inter-utility agreement with SoCalGas, SCE's Low Income Weatherization, Evaporative Cooler Installation, Relamping and Porch Light Replacement programs, 52,360 customers received in-house counseling and Energy Education packets designed to help them lower their energy use through simple conservation practices.

## **REFRIGERATOR REPLACEMENT / RECYCLING**

In 2002, 9,816 energy-efficient refrigerators were installed and 9,575 inefficient refrigerators were recycled through SCE's Refrigerator Replacement/Recycle program to replace older inefficient models. The annualized energy savings of replacing these refrigerators was 5,320 MWh, and the peak load reduction was 0.1 MW.

## **PORCH LIGHT REPLACEMENT**

In 2002, SCE's contractors installed 11,549 CFLs in existing porch light fixtures for customers that were served simultaneously through the Relamping program. These installations resulted in an annualized energy savings of 2,357 MWh. There is no peak load reduction claimed for this program.

## **FURNACE REPAIR/REPLACEMENT**

During 2002, SCE weatherized 2,046 homes with electric space heating. None of these homes met the program criteria for furnace repair or replacement.

## **RAPID DEPLOYMENT PILOT PROGRAMS**

In 2002, 636 customers received duct sealing and repair services through SCE's program. SCE contractors replaced 250 inefficient central air conditioners with energy efficient units. SCE's contractors also replaced 2,602 inefficient room air conditioners. SCE's contractors did not install any whole house fans or set-back thermostats in 2002. SCE's contractors replaced 266 inefficient water heaters and performed maintenance on 2,703 evaporative coolers in 2002.

# Measurement, Evaluation, & Regulatory Oversight

Measurement & Evaluation (M&E) funds and personnel are used to support the development and implementation of studies of the low-income population and program. Studies include, load impact evaluations that estimate the energy savings achieved by the utilities' low-income energy efficiency programs, process evaluations that assess opportunities for improvement in program design and delivery, and similar studies as required by the Commission or determined by the utilities to be necessary to develop and implement effective programs.

## **MEASUREMENT & EVALUATION - 2002 RESULTS AND ACHIEVEMENTS**

In 2002, SCE provided M&E support for statewide efforts to develop the needs assessment study for low-income customers. Areas of support included providing comments and technical assistance on workshop proposals, filings, and study reports, and participating in workshops with other stakeholders.

The M&E group also participated in statewide efforts to complete the PY2002 annual standardized bill savings report (which estimated customer bill savings for the 1999-2001 programs), a revised, standardized cost effectiveness methodology, and the draft cost effectiveness analysis ordered by the Commission. The bill savings report details the estimated customer bill savings for program years 1999-2001 and incorporates the standardized method for reporting program expenditures developed by the Reporting Requirements Manual Working Group (RRMWG).

Early in 2002, measurement support was provided to develop a revised low-income cost effectiveness methodology, which included both a Modified Participant Test and a Utility Cost Test that incorporate non-energy benefits (NEBs) and establish criteria for including or excluding energy efficiency measures in the LIEE program based on measure cost effectiveness. The Modified Participant Test

is similar to the typical Participant Test detailed in the Standard Practice Manual, but is modified to use utility LIEE program costs in order to compute a benefit cost measure, since low income customers do not incur out-of-pocket costs to obtain LIEE measures. The non-energy benefits are intended to value the benefit of LIEE measures and services over and above observed energy savings. This new cost effectiveness methodology was approved by the Commission in mid-2002 and was then used to complete a draft cost effectiveness analysis of the PY2003 program and measures and to make recommendations about which measures should be included in or excluded from the program based on the established cost effectiveness criteria. The final cost effectiveness analysis and report will be completed in 2003.

In addition, the SCE M&E group managed the comprehensive evaluation of the PY2001 statewide LIEE program, which included both a process and an impact evaluation. The process evaluation entailed a review of each utility's internal LIEE

program processes to identify possible areas of best practice and to recommend potential solutions for making program or efficiency improvements, with a particular emphasis on the Rapid Deployment effort. The process evaluation included in-depth interviews with program staff, contractors, program implementers, and community-based organizations (CBOs), "ride-a-longs" with contractors, and a survey of program participants designed to assess customer satisfaction with the LIEE program and measures. The load impact evaluation involved a billing analysis to estimate first-year energy savings estimates by measure, by utility, and by weather zone, for the LIEE installed measures, and in particular, for the new Rapid Deployment measures. The final (two-volume) report was distributed in April 2003 and is available in electronic format on the CALMAC website.

Finally, in Spring 2002, the M&E group commissioned an evaluation of the 2001 pilot Cool Centers Program. The evaluation results were used as the basis for modifying the 2002 Cool Centers Program.

## **MEASUREMENT & EVALUATION - 2003 PLANS**

In accordance with the *Protocols and Procedures for the Verification of Costs, Benefits, and Shareholder Earnings from Demand-Side Management Programs*, the utilities are required to complete an impact evaluation of the LIEE program every two years. While a special evaluation was ordered for PY2001 to estimate the energy impacts of the new Rapid Deployment measures and to assess program performance during the Rapid Deployment effort, the Protocols require an impact evaluation of the PY2002 LIEE program, with the next evaluation to follow two years later for the 2004 program. The utilities recognize that a billing analysis is an effective method for determining program and measure savings for certain measures or groups of measures. However, billing analysis is unable to accurately estimate individual measure savings for some small-savings measures (such as outlet gasket covers, caulking, or weatherstripping) especially since the cost effectiveness analysis requires impacts to be broken down by measure, by housing type, and by weather zone. Accordingly, in the PY2002 impact evaluation, the utilities plan to investigate the most

feasible option for estimating savings for individual measures in conjunction with a billing analysis, in order to provide the most accurate impacts for use in future cost effectiveness analyses.

The SCE M&E group again will manage the statewide impact evaluation of the PY2002 LIEE program.

The group has also commissioned a small evaluation of the 2002 Cool Centers Program which should be completed in Spring 2003.

The group will also survey approximately 600 customers who received CFL replacements during prior program years (when SCE operating a stand-alone program), to determine the extent to which such customers may be eligible for additional measures through comprehensive service delivery.

Finally, in 2003, the M&E group will provide support on a number of ongoing matters including: completion of the PY2003 Annual Bill Savings Report, which estimates customer bill savings for the 2000-2002 program years; completion of the final cost effectiveness analysis and report; and provision of ongoing support for the Statewide Low Income Needs Assessment.

# Energy-Related Hardship

The Reporting Requirements Manual Working Group previously developed a working definition of the term “energy-related hardship” as it relates to comfort level, employment, safety and security. The definition agreed upon by the RRMWG states that “energy-related hardship” are “adverse impacts on the comfort, health, and safety of low-income customers that can be mitigated by access to low-income energy efficiency programs and services.”

SCE’s LIEE programs assist in lessening the energy-related hardships experienced by some low-income customers. SCE’s Evaporative Cooler and Weatherization Programs increase comfort and help customers ease energy-related stress from inadequate control over ambient climate and temperature due to insufficient energy efficiency measures. The programs provide additional protection from outside elements. Without these programs, customers would have less relief from energy-related stress resulting from ambient climate or temperature especially in extreme temperature regions.

SCE provides evaporative coolers in the desert regions of its service territory through the Evaporative Cooler Installation Program. Without evaporative coolers, these customers would be subject to the extreme desert heat unless they operated their air conditioners at much greater cost. The Evaporative Cooler Program enhances the physical health of customers by protecting them from excessive heat they might be subject to if they could not afford to run their air conditioners. In addition to increasing comfort, the repair of doors and broken windows provided in the Weatherization program enhances the customers’ physical and mental well-being because it reduces exposure to outdoor elements and increases the customers’ sense of home security and safety. SCE’s Porch Light Program also enhances home security.

In addition, the Furnace Repair and Replacement Program contributes to customers’ well-being, comfort and by ensuring that a furnace is operable. However, because this program is limited to customers who own their homes and to a maximum expenditure limit of \$750

per home, traditionally this is a small program that reaches a limited number of customers.

# Access to Programs Provided By Community-Based Providers

SCE continued to work with the California Department of Community Services and Development (DCSD) on the coordination and integration of resources and benefits between SCE's CARE program and Energy Assistance Fund (EAF) with DCSD's Home Energy Assistance Program (HEAP) and the requirements for reporting the CARE discount on California's LIHEAP Leveraging application. An agreement signed by both parties details the responsibilities of both entities in establishing the coordination of services to SCE's customers.

This agreement places DCSD within compliance of the Department of Health and Human Services' LIHEAP Leveraging Incentive Program requirements and enables the State of California to claim the CARE discount as a leverage resource. As part of the agreement, both DCSD and SCE agree to the referral of their customers to the other's energy assistance program through written and/or verbal advertising of the programs. The agreement allows SCE to publish the telephone numbers of

DCSD programs on SCE program applications and literature, and allows DCSD to include SCE program information on various DCSD literature pieces.

As part of their delivery of SCE's LIEE programs, and other programs they offer, CBOs attempt to identify customer needs that might be met by other CBO programs. Qualifying customers are referred to these programs. Not all CBOs offer all services to customers. SCE currently contracts with CBOs for the delivery of LIEE programs, not including additional CBOs that perform weatherization services for SCE customers through the Inter-Utility Agreement with SoCalGas in the overlapping service areas. SCE's CBOs offer a variety of low-income services in addition to their LIEE service delivery. Examples of such services include senior nutrition and transportation, job training, and health care.

# Bill Savings

SCE, Pacific Gas and Electric, San Diego Gas & Electric, and SoCalGas have coordinated to produce the Bill Savings estimates that are included in Tables TA 7, TA 8, and TA 9 of this report.

Unlike the other tables in this report which are based on impact assumptions that were in place when the 2001 programs were planned, Tables TA 7 and TA 9, use impact estimates from the Impact Evaluation of the 2000 Statewide LIEE Program that was completed in April 2002. For Rapid Deployment Measures, Tables TA 7 and TA 9 use impact estimates from the LIEE Measure Cost Effectiveness Preliminary Report that was completed by the LIEE Standardization Team in September 2002.

The Bill Savings Report, including any updates to the variables and calculations used in preparing the applicable standard tables in the Technical Appendix for this program area, is being filed separately as a stand-alone document on May 1, 2003, and will include a discussion of variations across utilities.

# Shareholder Performance Incentives

The Commission approved the 2001 LIEE shareholder incentive mechanism in Decision No. 01-06-082 and directed that it remain in place until further order of the Commission.

The 2001 mechanism was based upon the attainment of a minimum performance standard for the LIEE "Big Six" measures. Upon meeting the performance standard, the earnings mechanism calls for program administrators to earn a 2% management fee on all LIEE program expenditures in 2001. SCE's minimum performance standard from the Big Six measures in 2002 was 416 MWh. SCE attained 876 MWh in savings from these measures, thus exceeding the minimum performance standard. Earnings will be collected in two installments.

For the purpose of calculating SCE's 2002 earnings claim, SCE included the 2001 costs for bulk purchases of refrigerators, central air conditioners, and window/wall air conditioners that were not included in the calculation of the 2001 earnings claim. Because bulk purchases in

2002 were only a fraction of the bulk purchase costs experienced in 2001, SCE has not excluded the 2002 bulk purchase costs from the 2002 earnings claim.

The first installment of SCE's 2002 earnings claim is \$0.151 million, requested for authorization in this 2003 AEAP. The second installment of SCE's earnings claim of \$0.151 million will be collected following the 2004 AEAP.

2003 Low Income Energy Efficiency Annual Report  
Table 1 (RRM Table 7.1)  
SUMMARY OF COSTS: LOW INCOME  
SOUTHERN CALIFORNIA EDISON  
(Electric only)

LIEE Programs	2002		2003 Budget
	Budgeted	Recorded	
Energy Efficiency			
- Gas Appliances	\$ -	\$ -	\$ -
- Electric Appliances	14,001,100	10,651,637	13,690,740
- Weatherization	811,300	1,072,976	965,650
- Outreach & Assessment		219,046	
- In Home Energy Education	542,600	1,083,937	662,110
- Education Workshops		-	
<b>Energy Efficiency Total</b>	<b>15,355,000</b>	<b>13,027,596</b>	<b>15,318,500</b>
Pilots			
- Pilot (A)		-	
- Pilot (Cool Center)		435,619	
<b>Total Pilot</b>	<b>-</b>	<b>435,619</b>	<b>-</b>
Training Center		-	
Inspections	240,000	132,953	240,000
Advertising		-	
M&E Studies	25,000	25,044	195,000
Regulatory Compliance	65,000	65,004	70,000
Other Administration		-	
Indirect Costs (P&B) <sup>[1]</sup>		252,088	250,000
Oversight Costs		-	
- LIAB Start-up		-	
- LIAB PY 2001		-	
- LIAB PY 2002		14,460	
- CPUC Energy Division	35,000	18,779	70,000
<b>Total Oversight Costs</b>	<b>35,000</b>	<b>33,239</b>	<b>70,000</b>
Shareholder Incentive <sup>[2]</sup>		302,210	311,170
<b>TOTAL COSTS</b>	<b>15,720,000</b>	<b>14,273,753</b>	<b>16,454,670</b>

<sup>[1]</sup> Program costs that are not part of the LIEE budget.

<sup>[2]</sup> Not part of program authorized budget for 2002. In addition, the 2002 earnings calculation includes \$1,514,343 in 2001 bulk purchase expenses for measures that remained in inventory at year end 2001.



2003 Low Income Energy Efficiency Annual Report  
 Table 2 (RRM Table 7.2)  
 SUMMARY OF LIEE PROGRAM EFFECTS  
 SOUTHERN CALIFORNIA EDISON  
 (Annual Energy Reduction)

	2002 (recorded)	2003 (planned)
mWh	31,890	11,714
mtherm	N/A	N/A

Different savings assumption applied to 2003 program

2003 Low Income Energy Efficiency Annual Report  
 Table 3 (RRM Table 7.3)  
 SUMMARY OF LIEE COST EFFECTIVENESS  
 SOUTHERN CALIFORNIA EDISON  
 (Ratio of Benefits Over Costs)

	2002			2003		
	Utility Cost Test	Total Resource Cost Test	Modified Participant Test	Utility Cost Test	Total Resource Cost Test	Modified Participant Test
LIEE programs						
Energy Efficiency	1.08	0.93	1.94	0.61	0.46	0.13

Different KWh savings and NEB assumptions are used for the 2002 and 2003 programs.

2003 Low Income Energy Efficiency Annual Report  
 Table 4 (RRM Table 7.4)  
 SUMMARY OF LIEE COST EFFECTIVENESS  
 SOUTHERN CALIFORNIA EDISON  
 (Net Benefits; \$Mill)

	2002			2003		
	Utility Cost Test	Total Resource Cost Test	Modified Participant Test	Utility Cost Test	Total Resource Cost Test	Modified Participant Test
LIEE programs						
Energy Efficiency	\$ 1.158	\$ (1.137)	\$ 14.246	\$ (6.472)	\$ (8.812)	\$ (14.294)

Different KWh savings and NEB assumptions are used for the 2002 and 2003 programs.

# Technical Appendix

This section contains narrative that documents and explains the data shown for Tables TA 1 through TA 9.

## **Table TA 1                      Program Cost Estimates Used for Cost-Effectiveness – Low-Income Energy Efficiency**

This table documents those costs used in determining the cost-effectiveness of low-income energy efficiency programs. These tables provide all program costs, including costs expended in 2002 and those costs associated with commitments from 2002 programs. However, there are no commitments for any low-income programs.

### **Program Incentives (Recorded)**

These costs represent incentives paid to contractors, including installation and measure costs during 2002 (Actual) as well as incentives associated with commitments from the 2002 low-income energy efficiency programs (Committed). Only the costs of measures actually installed in 2002 are included, not measures bulk purchased and held for installation in 2002. It should be noted that all commitments from the 2002 low-income energy efficiency programs were realized during the first quarter of 2003.

### **Program Administrative Costs (Recorded)**

These costs include expenditures directly charged for SCE and contract labor associated with program administrative costs.

### **Shareholder Incentives**

Costs represented in the Shareholder Incentives column are those relating to the performance awards earned during 2002 from the 2002 low-income energy efficiency programs.

### **Other Costs**

Costs for non-incentive and non-administrative activities including energy education, printing of materials, regulatory, legal, indirect costs, CPUC Energy Division staffing, and Cool Centers.

### **Total Utility Costs**

The sum of the Program Incentives (Actual and Committed) columns, Program Administrative Costs column, Shareholder Incentives, and Other costs.

### **Incremental Measure Costs (Net)**

These costs generally represent the incremental costs of energy efficiency measures over the standard replacement measures. The gross amounts of these costs are reduced by appropriate net-to-gross ratios for the particular measure or end-use. These ratios are 1.0 for all Low-income Energy Efficiency programs. SCE's incremental measure costs for the Low-income Energy

Efficiency programs equal the total installation and measure costs for installed measures. Thus, for all LIEE programs, incremental measure costs are equal to the incentive costs.

**Table TA 2                    Program Cost Elements - Low-income Energy Efficiency**

This table documents the breakdown of costs of the low-income energy efficiency programs. These tables provide detail of program costs expended in 2002.

**Labor Costs**

Any internal direct (administrative and/or implementation) costs (indirect costs are a separate line item), burdened by overhead, that represents person hours.

**Non-Labor Costs**

All direct internal (administrative and/or implementation) costs (indirect costs are given as a separate line item) not covered under labor, such as printing of materials.

**Contract Labor Costs**

All outsourced costs (administrative and/or implementation). Contract costs do not need to be further broken out by labor/non-labor. This category includes agency employees and outsourced inspection contractors.

**Total Costs**

The summation of the aforementioned utility costs - Labor, Non-labor, and Contract costs.

**Table TA 3                    Program Detail by Housing Type and Heating Source - Low-income Energy Efficiency**

The table provides, by housing type and heating source, the MWh savings for program year 2002, direct program costs, and the number of dwellings served. Also, an estimate of the total dwellings that will receive program services in 2003 is provided.

**Table TA 4                    Program Detail by Measure - Low-income Energy Efficiency**

The table provides, by measure grouping, the MWh savings for program year 2002, direct program costs, and the number of dwellings served. Also, for specific measures within the measure groupings, the number of dwellings receiving service is provided.

**Table TA 5                    Installation Costs of LIEE Program Installation Contractors - Low-income Energy Efficiency**

The table provides, by measure grouping, the units installed, dwelling served and costs by contractor type (either CBO or WMDVBE, or private, i.e., neither CBO nor WMDVBE).

**Table TA 6                    Percentage of Dwelling Served By Contractor Classification (Last Year) - Low-income Energy Efficiency**

The table provides by program, the percentage of dwellings completed by each contractor (CBO or Non-CBO) and indicates whether each contractor is WMDVBE certified.

**Table TA 7                    Lifecycle Bill Savings – Last Year - SCE - Low-income Energy Efficiency**

The table indicates by measure, the number of measures installed, per measure electric kWh savings, gas therm savings, effective useful life, and Total Measure Lifecycle Bill Savings in dollars. The last two rows indicate the number of homes served by the program in 2002, and the life cycle bill savings in dollars per home.

**Table TA 8                    Energy Rates Used for Bill Savings Calculations - SCE - Low-income Energy Efficiency**

The table lists the energy rates used for bill savings calculations stated as \$/kWh for years from 2002 through 2026.

**Table TA 9                    Bill Savings - SCE - Low-income Energy Efficiency**

The table lists for the 2000, 2001, and 2002 program years the program costs, program life cycle bill savings in dollars, bill savings over cost ratio, and per home average life cycle bill savings

2003 Low Income Energy Efficiency Annual Report  
 Table TA 1 (RRM Table TA 7.1)  
 LIEE PROGRAM COST ESTIMATES USED FOR COST-EFFECTIVENESS  
 SOUTHERN CALIFORNIA EDISON  
 (Electric Only)

LIEE programs	UTILITY COSTS						Incremental Measure Costs
	Program Incentives (Recorded) <sup>[1]</sup>		Admin Costs	Shareholder Incentives	Other Costs <sup>[2]</sup>	Total Utility Costs	
	Actual	Committed					
Energy Efficiency	\$ 12,003,794	\$ -	\$ 1,131,901	\$ 302,210	\$ 1,774,272	\$ 15,212,177	\$ 12,004,000

<sup>[1]</sup> excluding the re-imbursment from Gas to SCE for purchasing AC units

<sup>[2]</sup> including cost for Energy Education, Cooler Center, M&E, Regulatory Support, LIAB and CPUC staffing cost

2003 Low Income Energy Efficiency Annual Report  
Table TA 2 (RRM Table TA 7.2)  
LIEE COST ELEMENTS  
SOUTHERN CALIFORNIA EDISON  
(Electric only)

LIEE Programs	Expenditures Recorded by Cost Element - 2002			
	Labor	Non-Labor	Contract	Total
Energy Efficiency				
- Gas Appliances	\$ -	\$ -	\$ -	\$ -
- Electric Appliances	801,645	139,150	9,710,842	10,651,637
- Weatherization	152,719	140,116	780,141	1,072,976
- Outreach & Assessment			219,046	219,046
- In Home Energy Education	9,070	8,156	1,066,711	1,083,937
- Education Workshops				-
<b>Energy Efficiency Total</b>	963,435	287,422	11,776,739	13,027,596
Pilots				-
- Pilot (A)				-
- Pilot (Cool Center)	34,312	2,770	398,537	435,619
<b>Total Pilot</b>	34,312	2,770	398,537	435,619
Training Center				-
Inspections			132,953	132,953
Advertising				-
M&E Studies	25,044			25,044
Regulatory Compliance	65,004			65,004
Other Administration				-
Indirect Costs (P&B) [1]	252,088			252,088
Oversight Costs				-
- LIAB Start-up				-
- LIAB PY 2001				-
- LIAB PY 2002		14,460		14,460
- CPUC Energy Division		18,779		18,779
<b>Total Oversight Costs</b>	-	33,239	-	33,239
				-
<b>TOTAL COSTS</b>	<b>1,339,883</b>	<b>323,431</b>	<b>12,308,229</b>	<b>13,971,543</b>

[1] Program costs that are not part of the LIEE budget.



2003 Low Income Energy Efficiency Annual Report  
Table TA 3 (RRM Table TA 7.3)  
PROGRAM DETAIL BY HOUSING TYPE AND HEATING SOURCE  
SOUTHERN CALIFORNIA EDISON

	Energy Saved and Program Costs			Number of Dwellings		
	2002 (mWh)	2002 (mTherm*)	2002 Expenses [1]	2002 (Planned)	2002 (Actual)	2003 (Planned)
<b>Gas Heat – Own</b>						
Single Family						
Multi Family						
Mobile Home						
Sub Total Dwellings Served						
<b>Gas Heat – Rent</b>						
Single Family						
Multi Family						
Mobile Home						
Sub Total Dwellings Served						
<b>Electric Heat – Own</b>						
Single Family	6,146,404		\$ 2,269,591		6,527	
Multi Family	913,920		\$ 739,486		841	
Mobile Home	322,003		\$ 343,336		597	
Sub Total Dwellings Served	7,382,327		\$ 3,352,413		7,965	
<b>Electric Heat – Rent</b>						
Single Family	7,838,595		\$ 1,658,217		5,220	
Multi Family	16,455,892		\$ 7,981,222		15,873	
Mobile Home	213,026		\$ 168,699		627	
Sub Total Dwellings Served	24,507,514		\$ 9,808,137		21,720	
<b>TOTAL DWELLINGS SERVED</b>	31,889,840		\$ 13,160,550	33,500	29,685	32,020

\* millions of Therms

[1] - excluding operation cost for Cool Center and other indirect program costs

2003 Low Income Energy Efficiency Annual Report  
Table TA 4 (RRM Table TA 7.4)  
PROGRAM DETAIL BY MEASURE  
SOUTHERN CALIFORNIA EDISON

	Energy Saved and Program Costs 2002			Number of Dwellings Served 2002
	(mWh)	(mTherm)	Expenses (\$ 000)	Actual Dwellings Served
<b>Furnaces Gas</b>				
Repair				
Replacement				
<b>Total Furnaces Gas</b>				
<b>Infiltration &amp; Space Conditioning</b>				
<b>Weatherization Savings</b>				2,046
Caulking	(See Weatherstripping)		133	
Door Weatherstripping	112,093		351	
Duct Repair	(See Door Repair)		0	
Cover Plate Gaskets	(See Door Repair)		106	
Evaporative Cooler Covers	(See Door Repair)		19	
Window Replacements	(See Door Repair)		3	
Glass Replacements	(See Door Repair)		28	
Wall Repair (exterior)	(See Door Repair)		8	
Door Repair	168,371		97	
Door Replacement	(See Door Repair)		30	
Threshold Installed	(See Door Repair)		17	
Attic Ventilation				
Attic Insulation	1,240		5	
Attic Access Weatherstripping			-	
HVAC Air Filter Replacement			-	
<b>Total Infiltration &amp; Space Conditioning</b>	<b>281,705</b>		<b>795</b>	
<b>Water Heating Savings</b>				
Water Heater Blanket	67,001		31	
Low Flow Showerhead	528,846		106	
Water Heater Pipe Wrap	(See Door Repair)		12	
Faucet Aerators	(See Door Repair)		21	
<b>Total Water Heating Savings</b>	<b>595,846</b>		<b>170</b>	
<b>Minor Home Repairs ( other than above)</b>	-		52	
<b>Miscellaneous Measures</b>	-		83	
<b>Evaporative Cooler Installation</b>	88,738		361	278
<b>Evaporative Cooler Maintenance</b>	54,330		349	2,689
<b>Duct Testing &amp; Sealing</b>	131,423		188	636
<b>Window AC</b>	1,136,554		991	2,176
<b>Central AC</b>	147,224		486	250
<b>Water Heater Replacement</b>	31,335		98	266
<b>Refrigerator Replacement</b>	5,320,272		8,630	9,816
<b>Refrigerator Recycle [1]</b>	20,567,100		-	9,575
<b>Compact Fluorescents (includes porch lights)</b>	3,535,314		845	15,954
<b>Energy Education</b>				
Outreach & Assessment [2]			655	
In-Home Education			1,084	52,360
Education Workshops				
<b>Total Energy Education</b>	-		<b>1,739</b>	<b>52,360</b>

\* millions of Therms

[1] - incurred costs are part of Refrigerator Replacement cost

[2] - included operating cost for Cool Center and Assessment/Implementation/Qualification cost for Weatherization program

2003 Low Income Energy Efficiency Annual Report  
 Table TA.5 (RRM Table 7.5)  
 INSTALLATION COSTS OF LIEE PROGRAM INSTALLATION CONTRACTORS  
 SOUTHERN CALIFORNIA EDISON

	Unit of Measure	CBO/WMDVBE			Non-CBO/WMDVBE			Total			
		Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	
<b>Dwellings</b>	Each										
<b>Furnaces</b>											
Repair - Gas Replacement - Gas	Each										
Repair - Electric	Each										
Replacement - Electric	Each										
<b>Infiltration &amp; Space Conditioning</b>											
Caulking	Home				1,132	1,132	\$ 45,425		1,132	\$ 45,425	\$ 40.13
Door Weatherstripping	Each	267	267	\$ 12,020	1,744	1,744	\$ 108,328	2,011	2,011	\$ 120,347	\$ 59.84
Duct Repair	Home				1	1	\$ 66		1	\$ 66	\$ 66.00
Cover Plates/Gaskets	Home	284	284	\$ 4,828	1,677	1,677	\$ 31,327	1,961	1,961	\$ 36,155	\$ 18.44
Evaporative Cooler/Air Cond. Covers	Each				173	173	\$ 6,386	173	173	\$ 6,386	\$ 36.91
Window Replacements	Each				18	18	\$ 831	18	18	\$ 831	\$ 46.18
Glass Replacements	Sq. Ft.										
Wall Repair (exterior)	Home				86	86	\$ 1,650	86	86	\$ 1,650	\$ 19.19
Door Repair	Each				70	70	\$ 3,155	70	70	\$ 3,155	\$ 45.06
Door Replacement	Each				128	128	\$ 10,151	128	128	\$ 10,151	\$ 79.31
Threshold Installed	Each	115	110	\$ 1,544	274	274	\$ 4,301	389	384	\$ 5,845	\$ 15.03
Attic Ventilation	Home										
Attic Insulation	Home				4	4	\$ 1,740	4	4	\$ 1,740	\$ 434.88
Attic Access Weatherstripping	Each										
HVAC Air Filter Replacement	Each										
<b>Water Heating Savings</b>											
Water Heater Blanket	Each	264	264	\$ 8,868	51	51	\$ 1,636	315	315	\$ 10,504	\$ 33.34
Low Flow Showerhead	Each	301	299	\$ 7,962	1,644	1,499	\$ 28,336	1,945	1,798	\$ 36,298	\$ 18.66
Water Heater Pipe Wrap	Home	216	216	\$ 2,901	84	84	\$ 1,128	300	300	\$ 4,029	\$ 13.43
Faucet Aerators	Each	489	280	\$ 2,186	1,128	601	\$ 5,050	1,617	881	\$ 7,236	\$ 4.47
<b>Minor Home Repairs (other than above)</b>	Home	281	281	\$ 8,292	1,528	1,528	\$ 50,174	1,809	1,809	\$ 58,466	\$ 32.32
<b>Miscellaneous Measures</b>											
Evaporative Cooler Installation	Each	2	2	\$ 32	265	265	\$ 28,322	267	267	\$ 28,354	\$ 106.19
Evaporative Cooler Maintenance	Each	21	21	\$ 6,840	257	257	\$ 84,435	278	278	\$ 91,275	\$ 328.33
Duct Testing and Cooling	Each				2,703	2,689	\$ 270,760	2,703	2,689	\$ 270,760	\$ 100.17
Window AC	Each				636	636	\$ 184,440	636	636	\$ 184,440	\$ 290.00
Central AC	Each				2,602	2,176	\$ 916,025	2,602	2,176	\$ 916,025	\$ 352.05
Water Heater Replacement	Each	266	266	\$ 92,571	250	250	\$ 450,978	250	250	\$ 450,978	\$ 1,803.91
Refrigerator Replacement [1]	Each	9,443	9,443	\$ 923,098	373	373	\$ 24,670	266	266	\$ 92,571	\$ 348.01
Refrigerator Recycle	Each	9,196	9,196	\$ 597,740	379	379	\$ 46,460	9,816	9,816	\$ 947,768	\$ 96.55
Compact Fluorescents (inc. porchlights)	Each	49,607	14,102	\$ 345,920	6,401	1,852	\$ 30,605	56,008	15,954	\$ 376,525	\$ 6.72
Outreach Education Administration [2]	Home	12,924	12,924	\$ 222,747	39,436	39,436	\$ 513,761	52,360	52,360	\$ 736,508	\$ 14.07

[1] Included units that were installed by LIHEAP contractors. SCE paid for the units. Also includes some refrigerators purchased by installation contractors.

[2] Included assessment, implementation, and qualification fee for weatherization program, and operating costs for Cool Centers.

2003 Low Income Energy Efficiency Annual Report  
 TABLE TA 6 (RRM Table TA 7.6)  
 PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION (2002)  
 SOUTHERN CALIFORNIA EDISON

Program	Contractor Classification	Vendor Number	% Dwellings Completed	WMDVBE Certified (Yes or No)
<b>Window AC</b>				
	Non-CBO Participants	1	20%	No
		2	80%	Yes
		Subtotal	100%	
<b>Central AC</b>				
	Non-CBO Participants	1	10%	No
		2	53%	No
		3	37%	Yes
		Subtotal	100%	
<b>Duct Testing &amp; Sealing</b>				
	Non-CBO Participants	1	100%	No
		Subtotal	100%	
<b>Evaporative Cooler Installation</b>				
	CBO Participants	1	4%	No
		2	4%	No
		Subtotal	8%	
	Non-CBO Participants	1	35%	No
		2	10%	No
		3	11%	No
		4	36%	Yes
		Subtotal	92%	

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 TABLE TA 6 (RRM Table TA 7.6)  
 PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION (2002)  
 SOUTHERN CALIFORNIA EDISON

Program	Contractor Classification	Vendor Number	% Dwellings Completed	WMDVBE Certified (Yes or No)
<b>Evaporative Cooler Maintenance</b>				
	Non-CBO Participants	1	36%	No
		2	26%	Yes
		3	34%	No
		4	4%	No
		Subtotal	100%	
<b>Relamping</b>				
	CBO Participants	1	7%	No
		2	1%	No
		3	3%	No
		4	6%	No
		5	29%	No
		6	3%	No
		7	6%	No
		8	15%	No
		9	2%	No
		10	3%	No
		11	0%	No
		12	0%	No
		13	5%	No
		14	7%	No
		Subtotal	88%	
	Non-CBO Participants	1	0%	No
		2	0%	No
		3	6%	No
		4	0%	No
		5	3%	Yes
		6	2%	No
		Subtotal	12%	

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 TABLE TA 6 (RRM Table TA 7.6)  
 PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION (2002)  
 SOUTHERN CALIFORNIA EDISON

Program	Contractor Classification	Vendor Number	% Dwellings Completed	WMDVBE Certified (Yes or No)
<b>Porch Light</b>				
	CBO Participants	1	0%	No
		2	1%	No
		3	4%	No
		4	6%	No
		5	39%	No
		6	3%	No
		7	6%	No
		8	19%	No
		9	2%	No
		10	4%	No
		11	0%	No
		12	1%	No
		13	6%	No
		14	6%	No
		Subtotal	99%	
	Non-CBO Participants	1	0%	No
		2	0%	No
		3	1%	No
		Subtotal	1%	
<b>Energy Education</b>				
	CBO Participants	1	1%	No
		2	5%	No
		3	2%	No
		4	5%	No
		5	3%	No
		6	10%	No
		7	21%	No
		8	0%	No
		9	4%	No
		10	0%	No
		11	2%	No
		12	3%	No
		13	16%	No
		Subtotal	73%	
	Non-CBO Participants	1	1%	No
		2	1%	Yes
		3	22%	No
		4	2%	No
		5	1%	No
		6	0%	No
		7	1%	Yes
		8	0%	No
		Subtotal	27%	

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 TABLE TA 6 (RRM Table TA 7.6)  
 PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION (2002)  
 SOUTHERN CALIFORNIA EDISON

Program	Contractor Classification	Vendor Number	% Dwellings Completed	WMDVBE Certified (Yes or No)
<b>Water Heater Replacement</b>				
	CBO Participants	1	100%	No
		Subtotal	100%	
<b>Weatherization</b>				
	CBO Participants	1	9%	No
		Subtotal	9%	
	Non-CBO Participants	1	52%	No
		2	14%	No
		3	4%	Yes
		4	22%	No
		Subtotal	91%	
<b>Refrigerator Replacement</b>				
	CBO Participants	1	0%	No
		2	6%	No
		3	90%	No
		4	0%	No
		Subtotal	96%	
	Non-CBO Participants	1	4%	No
		Subtotal	4%	
<b>Refrigerator Recycle</b>				
	CBO Participants	1	0%	No
		2	6%	No
		3	90%	No
		4	0%	No
		Subtotal	96%	
	Non-CBO Participants	1	4%	No
		Subtotal	4%	

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 TABLE TA 7 (RRM Table 7.7)  
 LIFE CYCLE BILL SAVINGS (2002)  
 SOUTHERN CALIFORNIA EDISON

Measure Description	Number Installed	Per Measure Electric Impact (kWh)		Per Measure Gas Impact (Therms)	Effective Useful Life (EUL) Years	Total Measure Life Cycle Bill Savings - From Algorithm (\$)
		Space Heating	Air Conditioning			
<b>Energy Efficiency Measures</b>						
Attic Access Weatherstripping <sup>1</sup>	-	0	0		5	\$ -
Attic Insulation MF	-	34.40	-		25	\$ -
Attic Insulation MH/SF	-	50.10	-		25	\$ -
Attic Ventilation <sup>2</sup>	-	0	0		25	\$ -
Caulking - MF	1,128	4.7	2.6		5	\$ 3,846
Caulking - MH	4	6.9	0		5	\$ 15
Compact Fluorescents (indoor) MF	25,968	21.60	0		8	\$ 446,848
Compact Fluorescents (indoor) MH/SF	18,491	21.20	0		8	\$ 312,294
Compact Fluorescents (outdoor) MF	5,655	32.40	0		5.3	\$ 97,776
Compact Fluorescents (outdoor) MH/SF	5,894	31.90	0		5.3	\$ 100,336
Cover Plate/Gaskets - MF	1,727	3.38	-0.05		15	\$ 7,396
Cover Plate/Gaskets - MH/SF	234	5.62	0.18		15	\$ 1,718
Duct Repair <sup>2</sup>	1	0	0		25	\$ -
Evaporative Cooler Installation - MF	51	0	571.17		15	\$ 37,268
Evaporative Cooler Installation - MH/SF	227	0	426.65		15	\$ 123,908
Evaporative Cooler/AC Covers MF	82	14.4	0		3	\$ 396
Evaporative Cooler/AC Covers MH/SF	91	19.34	0		3	\$ 591
Faucet Aerators - MF	1,142	41.2	0		5	\$ 25,108
Faucet Aerators - MH/SF	475	48.4	0		5	\$ 12,269
Low Flow Showerhead - MF	1,703	203.30	0		10	\$ 329,523
Low Flow Showerhead - MH/SF	242	239.20	0		10	\$ 55,095
Minor Home Repairs - MF	1,624	14.80	5.10		10	\$ 30,759
Minor Home Repairs - MH/SF	185	21.60	-		10	\$ 3,803
Miscellaneous <sup>4</sup>	267	0	0		0	\$ -
Refrigerator Replacement - MF	5,053	695.4	0		15	\$ 4,495,586
Refrigerator Replacement - MH/SF	4,763	711.60	0		15	\$ 4,336,296
Water Heater Blanket - MF	296	163.00	0		5	\$ 25,747
Water Heater Blanket - SF	19	191.80	0		5	\$ 1,945
Water Heater Pipe Wrap <sup>3</sup>	-	0	0		15	\$ -
Weatherstripping - MF	1,763	4.20	1.70		5	\$ 4,991
Weatherstripping - MH/SF	248	6.20	-		5	\$ 821
<i>Sub-total for Energy Efficiency Measures</i>						\$ 10,454,336
<b>Rapid Deployment Measures</b>						
Air Conditioner Replacement - Central - MF	158	0	1962.4		18	\$ 446,748
Air Conditioner Replacement - Central - MH/SF	92	0	565.28		18	\$ 74,932
Air Conditioner Replacement - Room - MF	2,602	0	521.02		15	\$ 1,734,459
Evaporative Cooler Maintenance - MH	538	0	69.55		4	\$ 16,354
Evaporative Cooler Maintenance - MF/SF	2,165	0	110.34		4	\$ 104,410
Dust Testing & Sealing - MF	636	23.19	183.45		25	\$ 228,309
Set-back Thermostats	0	0	177.76		12	\$ -
Water Heater Replacement - MF	266	117.8	0		13	\$ 36,281
<i>Sub-total for Rapid Deployment Measures</i>						\$ 2,641,494
<b>Total Bill Savings for All Measures In Program Year 2002</b>						\$ 13,095,830
<b>Total Number of Homes Served by the Program during Program Year</b>						\$ 29,685
<b>Life Cycle Bill Savings Per Home</b>						\$ 441

1. This measures have impacts included in the weatherstripping measure. No specific per-measure impact claimed.
2. These measures have impacts included in the minor home repair measure. No specific per-measure impact claimed.
3. Zero savings are claimed for this measure.
4. Zero savings are claimed for this measure, which includes sunscreens, shower arm, shower diverter, and other.



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TABLE TA 8 (RRM Table TA 7.8)

ENERGY RATES USED FOR BILL SAVINGS  
CALCULATIONS

SOUTHERN CALIFORNIA EDISON

Year	\$/kWh	\$/Therm
2002	\$ 0.1174	
2003	0.1209	
2004	0.1245	
2005	0.1283	
2006	0.1321	
2007	0.1361	
2008	0.1402	
2009	0.1444	
2010	0.1487	
2011	0.1532	
2012	0.1578	
2013	0.1625	
2014	0.1674	
2015	0.1724	
2016	0.1776	
2017	0.1829	
2018	0.1884	
2019	0.1940	
2020	0.1999	
2021	0.2059	
2022	0.2120	
2023	0.2184	
2024	0.2250	
2025	0.2317	
2026	0.2387	

2003 Low Income Energy Efficiency Annual Report  
 TABLE TA 9 (RRM Table TA 7.9)  
 BILL SAVINGS  
 SOUTHERN CALIFORNIA EDISON

Program Year	Program Costs	Program Lifecycle Bill Savings	Program Bill Savings/ Cost Ratio	Per Home Average Lifecycle Bill Savings
2000	\$ 7,885,542	\$ 12,864,463	1.63	\$ 278
2001	19,402,429	19,610,154	1.01	226
2002	13,971,543	13,095,830	0.94	441

