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Southern California Edison Company's 2002 Local Program Implementation Plans

May 24, 2002

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Index

Residential In-Home Energy Survey
Implementation Plan

1. Title of Individual Program

Residential In-Home Energy Survey

2. Program Plans

2.1 Program Summary

The Residential In-Home Energy Survey program will provide customers, particularly hard-to-reach customers who do not respond to Internet and mail-in survey options, with a more personalized, face-to-face energy survey option. Maintaining this option is particularly important in 2002, with customers facing higher rates than they did a year ago, and after they have been alerted by the 2001 mass media campaigns and press coverage about the need for and general possibilities for achieving significant energy savings.

2.2 Implementation Plans

SCE has offered In-Home Energy Surveys to its customers since 1993. Conservation Services Group has served as the primary program contractor, scheduling the surveys and providing trained energy auditors to perform the surveys. SCE has provided the marketing, endorsement and oversight for the program.

Based on market analysis, SCE determined that certain hard-to-reach customer segments had a greater propensity than other customer segments to respond positively to an in-home survey offering than to offers of Internet or mail-in surveys. In particular, SCE has found that Latino customers are more likely to prefer face-to-face interaction. Also, Latino customers and some other customer segments rely even more than the average SCE customer on the utility's sponsorship of the program to assure them that it is safe and effective for them to invite an otherwise unknown auditor into their home. Accordingly, in the fourth quarter of 2001, SCE began targeting one of these segments, the Latino community. This included printing solicitation materials - in both English and Spanish and adding Spanish-speaking energy auditors. SCE completed more than 1,100 surveys in the first quarter of 2002, targeting hard-to-reach customers.

In the 2002 program, SCE will continue to target Latino customers and will expand its program to customers in rural locations, leveraging relationships with community based organizations. The In-Home Energy Survey has the advantage of being able to respond to the needs of certain hard-to-reach customer groups by providing an alternative delivery mechanism to the statewide Home Efficiency Survey program through individual interaction.

The auditor performs an assessment of the home and provides the customer with immediate feedback, explaining major energy uses in the home and making specific recommendations on how customers can better manage their energy usage and reduce their energy costs. The face-

to-face interaction allows an auditor to respond directly to the customer's specific questions and concerns, and it allows the auditor to tailor the discussion to the particular customer. Customers also learn about other energy efficiency products and services through the survey process, including rebate opportunities and Energy Star® qualified products.

Market Barriers

Lack of Consumer Information - The primary market barrier addressed by the In-Home Energy Survey program is the lack of consumer information about energy efficiency options. The program provides participating customers with credible, unbiased information about energy savings opportunities in their own individual homes and about the availability of specific energy-efficient products and services. Surveys show that most residential customers have very little idea of the level of energy savings possible from various activities that they might undertake. For undertaking energy-saving practices and low-cost energy efficiency measure purchases, the information barrier is the only barrier to overcome. For higher-cost products and services, customers need information from a highly credible source about the dollar savings they can expect to help them make the decision to undertake the high first cost of such purchases. The In-Home Energy Survey will be targeted to customers who are least likely to respond to alternative survey options, who respond best to face-to-face interactions, and who most rely upon the utility's sponsorship to induce them to participate.

Innovation

The proposed 2002 program breaks new ground by targeting its marketing efforts to hard-to-reach customer groups that have been shown to respond poorly to offers of Internet and mail-in surveys. It also breaks new ground by partnering with community-based organizations.

Program Process

Program Delivery/Participant Process

Customers schedule an appointment to have a trained energy auditor visit their home or perform a phone energy survey by calling a toll-free phone number or signing up over the Internet. After the onsite assessment or phone survey is completed, the auditor provides a detailed report with tips and recommendations on how customers can save energy and better manage their energy usage. In addition, the auditor provides information about utility rebate and incentive programs.

Marketing and Outreach Efforts

In-Home Home Energy Surveys have been widely promoted through the Mobil Education Unit, direct mail, bill messages or inserts, print and radio media advertising, Internet, local governments, phone centers, and ethnic, trade, and community associations. The 2002 marketing and outreach strategy calls for the continued use of these promotion strategies

Bilingual auditors are available to conduct In-Home or Telephone Energy surveys for the Spanish-speaking customers. In 2001, a bilingual mailer was sent to customers to encourage further participation by Spanish speaking only customers. Additional bilingual auditors were contracted to support this solicitation campaign. In 2002, SCE will promote the In-Home Energy Survey program primarily to the Latino communities and specific rural areas such as the Coachella and San Joaquin Valleys.

Customer Eligibility

Customer Segments

The program is offered to the hard-to-reach Latino residential customer group and customers in rural locations. As mentioned in the Marketing and Outreach section, initial efforts in this program will be focused in the Coachella and San Joaquin Valleys and other areas as they are identified. In order to provide more accurate information on a customer's energy usage profile, it is recommended that they have lived at their current residence for at least 9 months.

2.3 Modification to Original Proposals Directed by CPUC

The CPUC stated for the Residential In-home Audit program:

"We require SCE to provide more detailed information on direct implementation costs. An independent, third party shall perform evaluation, measurement and verification of the program." [Decision 02-05-046, Attachment A, p. 56]

To fulfill the requirement associated with direct implementation costs, SCE has provided more detailed information regarding the program budget as shown in Attachment B. SCE's overall measurement, evaluation, and verification plans may be found in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy and Peak Demand Savings Targets

Based on the CPUC approved Energy Efficiency Policy Manual, this information program implementation plan is not expected to provide energy savings targets. Program goals are provided below in Sections 5 and 6.

4. Cost-Effectiveness

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information only program. Pursuant to the CPUC's approved Energy Efficiency Policy Manual, this program is not reasonably expected to provide an estimate of energy savings

5. Evaluation Program Progress For Information-only Programs

5.1 Program Target

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

- The goal of the 2002 In-Home Energy Survey Program is to complete (including scheduled in-home audits) 4,500 surveys by December 31, 2002.

5.2 Measurements, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

For SCE's local Residential In-Home Energy Survey program, the EM&V will be coordinated through the Evaluation, Measurement and Verification Master Contract Study (EM&V-MCS) that the CPUC specified in CPUC Decision 01-11-066. Based on further CPUC direction, the IOUs will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities between similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

SCE's local Residential In-Home Energy Survey program will be coordinated through the EM&V-MCS. Specific EM&V activities will be determined after the awarding of the EM&V-MCS. Working with the hired experts, SCE will determine how to verify program actions and estimate the associated program impacts for the local Residential In-Home Energy Survey.

General Approach to Evaluating Program Success

The core approach for evaluating the success of SCE's local Residential In-Home Energy Survey program is to design a timely, accurate, and clear evaluation that will meet the needs of multiple parties including the SCE program manager, policy-makers, program implementers, and other stakeholders. A combination of approaches is needed that serves the program best by providing a variety of information on program impacts. The EM&V approach provides measurable and quantifiable results in the form of levels of energy and peak demand savings achieved by the program. The success of the program is also gauged by other program evaluation studies such as process evaluation and market assessment studies. Such studies provide (a) ongoing feedback and corrective guidance regarding program implementation and delivery to customers through program process analysis, and (b) measured indicators of the program effectiveness through analysis of market baseline and change data.

Approaches to Measurement and Verification of Energy and Peak Demand Savings

The basis of Measurement and Verification approach for the Residential In-Home Energy Survey program will be validated energy and demand savings estimates of program impacts obtained from a review of evaluated results for this program. This approach will start with program estimates of savings and apply adjustment factors such as measure and practices implementation rates based on recent evaluations of this program. This approach will be applied to all program participants of year 2002. For a sample of program participants the measure recommendations provided in the customer report will be reviewed for their relevancy given customer-specific information contained in the tracking system.

Approach to Evaluating Program Success

The remaining aspects of overall program evaluation and the remaining EM&V objectives of the Commission are covered in this section. The remaining activities are as follows:

- *Market Assessment and Customer Behavior Analyses*: These activities assist with assessing customer awareness, behaviors and practices given their participation in the Residential In-Home Energy Survey program. The market assessment will involve use of statewide and utility-specific studies to assess in-home energy survey impacts on consumer awareness and knowledge of energy efficiency opportunities in order to achieve energy and cost savings for the customers.

- *Process Evaluations:* When evaluating the success of energy savings program, policy makers, program implementers and other stakeholders are also interested in knowing how well the program is performing in terms of magnitude and quality of its targeted efforts. The objective of process evaluation activities will be to provide feedback to the program implementers on some of the key delivery aspects of the program that are critical to the effectiveness of the intended goals of the program. One of the intended goals of the program is to increase program participation of some of the hard-to-reach customer groups such as Latino and rural customers in SCE service territory. The program tracking records and promotional materials will be analyzed to assess the magnitude and quality of this outreach effort.

6. Hard-To-Reach Targets

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

- The Residential In-Home Energy Survey Program will achieve 50% program participation by hard-to-reach customers as defined by geographical areas (including rural, moderate income) as defined by the CPUC's Energy Efficiency Policy Manual.

7. Budget

Program	2002 Budget
Residential In-Home Energy Survey Program	**$700,000**

Notes:
See, Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to SCE will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Not Applicable

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Residential In-Home Energy Survey Program
37-02
Residential

Program Budget			
Item (Add additional items as necessary)		**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs			
Labor			
Type A - Program Planning/Design/Program Mgmt.	$	22,800.00	
Type B - Mgmt./Supervisor		7,800.00	
Type C - Clerical Support		2,200.00	
Subtotal Labor	*$*	*32,800.00*	
Benefits			
Pensions & Benefits		15,900.00	48.6% of SCE Labor
Payroll Taxes		2,400.00	7.4% of SCE Labor
Subtotal Benefits	*$*	*18,300.00*	
Travel/Conference/Training			
Type A - Mileage and Parking			
Type B - Other - Meals, lodging, misc. expenses			
Type C - Conference/Training Activities	$	1,700.00	
Subtotal Travel/Conference/Training	*$*	*1,700.00*	
Reporting/Tracking/Development - Information Services	*$*	*20,000.00*	
Materials & Handling	*$*	*3,000.00*	
Overhead and General and Administrative Costs			
Type A - Regulatory Support	$	10,400.00	
Type B - Accounting Support		7,800.00	
Type C - Communications/Telecommunications/Automated Systems Support		11,500.00	
Type D - Human Resources Support		3,100.00	
Type E - Facilities Support		-	
Type F - Supervision		-	
Type G - Corporate Services		-	
Type H - Transportation Services, Shop Services		-	
Type I - Information Technology		1,000.00	
Type J - Procurement and Material Management		-	
Subtotal Overhead and General Administrative Costs	*$*	*33,800.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)			
Labor			
Benefits			
Overhead			
Travel costs			
Reporting costs			
Materials & Handling			
Overhead and General and Administrative costs			
Profit			
Subtotal Subcontractor Administrative costs	*$*	-	
Total Administrative Costs	$	109,600.00	
Marketing/Advertising/Outreach Costs			
Type A - Brochures/Booklets	$	21,900.00	
Type B - Media Support	$	25,000.00	
Type C - Outreach	$	126,800.00	
Total Marketing/Advertising/Outreach Costs	$	173,700.00	

Direct Implementation Costs		
Itemized financial incentives		
Subtotal Financial Incentives	*$* -	
Itemized installation costs		
Subtotal Installation Costs	*$* -	
Itemized hardware / materials costs (primarily for direct install and information/education programs)		
Subtotal Itemized Hardware / Materials Costs	*$* -	
Itemized activity costs		
· E.g., 4,500 in-home audits @ $88.89 each	$ 400,000.00	
Subtotal Activity costs	*$* *400,000.00*	
Rebate Processing/Inspection		
Subtotal Rebate Processing/Inspection costs	*$* -	
Total Direct Implementation costs	$ 400,000.00	
Evaluation, Measurement and Verification Costs		
EM&V Labor		
Itemized Labor Costs		
Itemized Labor Costs		
Subtotal EM&V Labor	*$* -	
Benefits		
Pensions & Benefits		
Payroll Taxes		
Subtotal Benefits	*$* -	
Travel/Conference/Training costs		
Type A - Mileage and Parking		
Type B - Other - Meals, lodging, misc. expenses		
Type C - Conference/Training Activities		
Subtotal Travel Costs	*$* -	
Reporting costs		
EMV Costs (this includes all EMV costs including overheads and labor)	35,000.00	
Report 2 (consultant cost)		
Subtotal EM&V Reporting Costs	*$* *35,000.00*	
Materials & Handling	*$* -	
Overhead and General and Administrative costs		
Type A - Regulatory Support		
Type B - Accounting Support		
Type C - Communications/Telecommunications/Automated Systems Support		
Type D - Human Resources Support		
Type E - Facilities Support		
Type F - Supervision		
Type G - Corporate Services		
Type H - Transportation Services, Shop Services		
Type I - Information Technology		
Type J - Procurement and Material Management		
Subtotal Overhead and General and Administrative costs	*$* -	
Total Evaluation, Measurement and Verification Costs	$ 35,000.00	

Other Costs			
Itemized, may include:			
Financing Costs			
Profit (only for non-utility implementers)			
Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)		(18,300.00)	
Total Other Costs	$	(18,300.00)	
Budget Grand Total	$	700,000.00	

2002 - 2003 Energy Efficiency Program Activities Quarterly Reports Worksheet

Southern California Edison Company (SCE)

Residential In-Home Energy Survey Program

37-02

Residential

B - Unit Based Implementation Activities WITHOUT Measurable Energy Savings			
			Number of Units
Line Item #	ACTIVITY DESCRIPTION	COST PER ACTIVITY	PROGRAM UNIT GOALS
T4.1 - 1	In-home audits	$88.89	4,500

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Residential In-Home Energy Survey Program

37-02

Residential

Item	$	Percentage of Total Program Budget
Administrative Costs		
Labor	$ 32,800.00	4.69%
Benefits	$ 18,300.00	2.61%
Travel/Conference/Training	$ 1,700.00	0.24%
Reporting/Tracking/Development - Information Services	$ 20,000.00	2.86%
Materials & Handling	$ 3,000.00	0.43%
Overhead and General and Administrative costs	$ 33,800.00	4.83%
Subcontractor Administrative costs	$ -	0.00%
Total Administrative Costs	$ 109,600.00	15.66%
Marketing/Advertising/Outreach Costs		
Total Marketing/Advertising/Outreach Costs	$ 173,700.00	24.81%
Direct Implementation Costs		
Financial Incentives	$ -	0.00%
Installation costs	$ -	0.00%
Itemized hardware / materials costs	$ -	0.00%
Activity costs	$ 400,000.00	57.14%
Rebate Processing/Inspection	$ -	0.00%
Total Direct Implementation costs	$ 400,000.00	57.14%
Evaluation, Measurement and Verification Costs		
Labor	$ -	0.00%
Benefits	$ -	0.00%
Travel/Conference/Training costs	$ -	0.00%
EM&V Reporting costs	$ 35,000.00	5.00%
Materials & Handling	$ -	0.00%
Overhead and General and Administrative costs	$ -	0.00%
Total Evaluation, Measurement and Verification Costs	$ 35,000.00	5.00%
Other Costs		
Total Other Costs	$ (18,300.00)	-2.61%
Budget Grand Total	$ 700,000.00	

Small Nonresidential Hard To Reach Implementation Plan

1. Title of Individual Program

Small Nonresidential Hard To Reach

2. Program Plans

2.1 Program Summary

The Small Nonresidential Hard To Reach Program, also known as the Small Business Energy Advantage program, provides low cost and no cost energy efficient equipment to the very small business (under 20kW) customer with special focus on the economically disadvantaged business and those customers defined as hard to reach by the California Public Utilities Commission (CPUC). For this program, hard to reach customers are defined as customers who are located in rural zip codes and/or have a monthly demand of less than 20kW. The program is open to small businesses located within Southern California Edison's (SCE) service territory.

2.2 Implementation Plans

Objective

The primary objective of this program is to encourage the very small business customers to achieve long-term annual energy savings and peak demand reductions through the installation of energy efficient equipment retrofits. Removing the primary barrier of first cost of implementation will do this.

The rise in energy costs has placed a greater financial burden on the very small business customers who operate in California. These customers operate with a "day to day" focus, which is different from larger enterprises, which typically do longer-term planning. Consequently, energy efficient equipment is generally not within their normal realm of concern even though this equipment could improve their business operations. This program will provide low cost or no cost energy efficient measures while educating these customers on the cost benefits of energy efficient equipment.

Market Barriers

The key barriers addressed by this program include:

First Cost of New Equipment Implementation– Cash flow is a major difficulty with businesses in this size group. By providing the financial assistance to completely cover the equipment installation, the program will enable these customers to exercise their option for installation.

Lack of Credible Information – The investor-owned utilities provide objective, credible and reliable information on energy efficient technologies. This program offers written materials and technical support to help give customers confidence in their decision to retrofit.

Primary language spoken is other than English – This program will disseminate information through translation into multi-national languages according to the individual needs of the area. In addition, outreach will be conducted through ethnic business associations, local government organizations, and an ethnically diverse program staff.

Program Delivery/Participant Process

This program is designed to help the hard to reach small business customers lower their energy consumption by providing diagnostics of energy using equipment. The introduction and explanation of the worksheets (on-site energy evaluations) is used as the opportunity to introduce the business owners to energy efficiency products and services. These presentations will be done "in-language" as necessary.

A group of contractors will be pre-selected through a request-for-proposal process to perform the necessary prescribed retrofits based on their qualifications such as references and prices. Contracts will be awarded based upon responses to a request for proposal and adherence to criteria. Equipment standards for typical retrofits will also be pre-established to minimize the customer's uncertainty in equipment selection and also to guarantee a minimum level of quality. In collaboration with other investor-owned utilities (IOUs), the approved contractors will be encouraged to identify qualified customers.

The participating customers will be provided an energy audit by the pre-selected contractor or, in some cases; the SCE program manager may provide an audit or audit "lead" to the contractor. These audits would be provided in conjunction with other SCE energy efficiency programs. Equipment in need of energy efficiency upgrades will be documented in a checklist and recommended to business owners/operators along with other general energy efficiency information. The business owners/operators will be encouraged in their efforts to implement no-cost/low-cost energy efficiency improvements, as appropriate. If a party other than the pre-selected installation contractors performs the audit, the customers will be referred to the previously approved installation contractors who will contact them and offer to install the recommended energy efficiency measures at no cost to the customer. Should a customer choose to implement new equipment, the utility would pay the pre-approved contractor the pre-established fee.

Marketing and Outreach

Customers will be solicited in several ways. Basic contact strategies will also be used to promote enrollment. These would encompass: direct-mailed informational materials; advertisements; telemarketing; and direct contact. All customer communication will be done 'in language' where appropriate. Customer mini-events, in designated regions, will also be held to promote the program. Customers will be able to enroll at these mini-events or by calling the designated toll free number. There will be no detailed application forms to fill out. Signing up will be as simple as setting an appointment.

Promotional and Delivery Vehicles May Include:

One-to-One contact	Promotional Vehicles	Delivery Vehicles	Tools
o Call center o Project Specialist o Customer Service Representatives o Account Executives	o Multilingual Brochures: Chinese, Korean, and Spanish o Telemarketing to inform customers of programs o Community and Professional Sponsorship	o Direct mail o Customer mini-events o Customized audits o Vendor and Trade Allies o Ethnic associations, chambers, professional and business groups	o Target Seminars o Professional Contacts, Community and Faith Based Organizations Local governments boards

SCE's Information Mobile Energy Unit will host customer mini-events. The unit will travel to a specific business district, shopping center, etc. and solicit attendance from the local very small business owners during which the program services will be offered.

Synergies and Coordination

Even though this program is funded on a local basis, each of the IOUs has worked together to develop a Small Nonresidential Hard to Reach program with similar elements. These elements include:

- Recommendation of low cost/no costs measures
- Notify IOUs with similar programs of our list of selected contractors
- Financial Support for measures installed (when recommended by an audit)
- In-language support (appropriate to service territory)
- Under 20 kW customers and others designated by zip code

The program materials included with the audits provided to the customers will cover gas and electric measures in coordination with Southern California Gas Company. This will enable SCE and Southern California Gas Company to coordinate active territories to minimize duplication of efforts and maximize the program's outreach to hard to reach customers. This program will also coordinate with other non-utility administered programs to minimize duplications.

2.3 Modification to Original Proposals Directed by CPUC

The CPUC stated for the Nonresidential Hard To Reach program:

"We require SCE to provide more detailed information on direct implementation costs. An independent, third party shall perform evaluation, measurement and verification of the program." [Decision 02-05-046, Attachment A, p. 57]

To fulfill the requirement associated with direct implementation costs, SCE has provided more detailed information regarding the program budget as shown in Attachment B. SCE's overall measurement, evaluation, and verification plans may be found in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy and Peak Demand Savings Targets

Measure	Unit Defined	Forecast Units	Total Net kWh	Net kWh per unit	Total Net kW	Net kW per unit
Screw-in Compact Fluorescent Lamp, 14-26 watts	lamp	4,602	1,024,549	223	219	0.05
LED Exit Sign	fixture	300	85,543	285	10	0.03
2nd gen T-8 Lamp and Electronic, 2-foot lamp installed	lamp	150	7,421	49	2	0.01
2nd gen T-8 Lamp and Electronic, 3-foot lamp installed	lamp	150	8,770	58	2	0.01
2nd gen T-8 Lamp and Electronic, 4-foot lamp installed	lamp	10,400	420,975	40	90	0.01
T-8 Lamp and Electronic, 8-foot lamp installed	lamp	120	4,857	40	1	0.01
Interior HID fixture 0-35 watts incandescent basecase	lamp	10	2,474	247	1	0.05
Interior HID fixture 0-35 watts mercury vapor basecase	lamp	10	1,304	130	0	0.03
Interior HID fixture 36-70 watts incandescent basecase	lamp	10	4,947	495	1	0.11
Interior HID fixture 36-70 watts mercury vapor basecase	lamp	10	1,574	157	0	0.03
Interior HID fixture 71-100 watts incandescent basecase	lamp	10	7,691	769	2	0.16
Interior HID fixture 71-100 watts mercury vapor basecase	lamp	10	3,193	319	1	0.07
Interior HID fixture 101-175 watts incandescent basecase	lamp	10	13,043	1,304	3	0.28
Interior HID fixture 101-175 watts mercury vapro basecase	lamp	10	3,373	337	1	0.07
Interior HID fixture 176 - 250 watts mercury vapro	lamp	10	8,186	819	2	0.17
Interior HID fixture 176-250 watts incandescent basecase	lamp	10	20,779	2,078	4	0.44
Interior HID fixture 251 - 400 watts mercury vapro	lamp	10	21,723	2,172	5	0.46
Interior HID fixture 251-400 watts incandescent basecase	lamp	10	28,515	2,851	6	0.61
Interior HID fixture 251-400 watts metal halide basecase	lamp	10	4,992	499	1	0.11
Exterior HID fixture 0-100 watts incandescent basecase	lamp	10	7,246	725	0	0.00
Exterior HID fixture 0-100 watts mercury vapor basecase	lamp	10	3,392	339	0	0.00
Exterior HID fixture 101-175 watts incandescent basecase	lamp	10	12,720	1,272	0	0.00
Exterior HID fixture 101-175 watts mercury vapor basecas	lamp	10	4,433	443	0	0.00
Exterior HID fixture > 176 watts incandescent basecase	lamp	10	18,578	1,858	0	0.00
Exterior HID fixture > 176 watts mercury vapor basecase	lamp	10	7,169	717	0	0.00
Interior Pulse Start Metal Halide (400 W replacements)	lamp	50	21,312	426	5	0.11
Interior HO T-5 4 lamp fixture retrofits	lamp	150	129,024	860	32	0.22
Total			1,877,784		386	

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

4. Cost-Effectiveness

	Program Benefits	Program Costs	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test	$1,088,395	$642,074	$446,322	1.70
Participant Cost Test	$1,845,461	368,531	1,476,930	5.01

Notes: The cost effectiveness analysis shown above are based on modifications to the cost effective model which included incorporating program specific EM&V costs and appropriate avoided cost stream calculations.

5. Measurements, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

The EM&V for this local program will be coordinated through the Evaluation, Measurement and Verification Master Contract Study that the CPUC specified in D.01-11-066. Based on further CPUC direction, the utilities will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities among similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and they will develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

Since SCE's local programs will be coordinated through the EM&V Master Contract Study, specific EM&V activities will be determined after the award of the contract for that study. Working with the selected experts, SCE will finalize the plans for verifying program actions and estimating the program impacts. However, SCE does have its preliminary EM&V plan for this program, which it will present to the EM&V expert team. That plan is described below. We believe this plan meets the requirements of the Energy Efficiency Policy Manual.

General Approach to Evaluating Program Success

Several separate data collection efforts, funded as part of the program budget, will provide: (a) regular reports to the program manage for corrective guidance regarding surveyor and installer performance, participation by target populations, etc.; (b) information on the kinds of measures installed, their cost, and their energy savings and demand reduction; and (c) indicators of the program effectiveness in overcoming the hypothesized market barriers, as part of a process evaluation. The recent statewide Energy Efficiency Awareness Study provides one market baseline for this program. Participants' pre-program energy efficiency awareness and practices will also be self-reported in participant surveys. In addition, the 2001 statewide Nonresidential Market Potential Study, and records from past rebate programs, document the historical levels of participation by the target populations.

Approach to Measurement and Verification of Energy and Peak Demand Savings

Measurement and verification (M&V) of energy and peak demand savings will conform to Option A in the International Performance Measurement and Verification Protocol (IPMVP), in accordance with the Energy Efficiency Policy Manual. Based on past program experience, a list of appropriate measures will be developed for the target population.

Energy savings and demand reductions will be taken from existing approved utility-program cost-effectiveness assumptions. The installation costs will be pre-approved, based on bids by contractors who which to participate in the program. Simple forms will be developed for

energy surveyors to recommend the measures authorized by the program, and for the installers to report what was actually installed. Program tracking systems counts of measures will thus provide the data for calculation of energy savings and demand reductions.

The deemed savings, divided by the installed costs and prorated promotion and administration costs, will yield the cost-effectiveness of the measures.

Program Evaluation

Market Assessment and Customer Behavior Analyses: Participant surveys will gauge customer pre-program energy efficiency awareness and practices, and their satisfaction with the program. Areas of investigation may include: awareness of this and other programs, energy-efficiency knowledge, likelihood of taking actions in the absence of the direct install feature, the barriers to previous installations, customers' perceptions of how well the program has overcome those barriers, their satisfaction with the procedures of the program, any prior participation in similar programs, other sources of energy efficiency information, other energy efficiency actions taken as a result of the program, etc. In addition, the characteristics of those surveyed will provide information on the success with which target audiences are being reached. These analyses will serve as a test of the assumptions that underlie the program theory and approach.

Process Evaluations: An evaluation study will assess the program's approach to providing energy efficiency information and equipment in a manner that is efficient and satisfying to the customer. The process of program delivery will be evaluated in terms of the volume of products and services provided (e.g., the number of energy surveys requested via each promotional channel, the number of measures installed), adherence to procedures, and on-schedule program implementation.

Analyses of these findings will contribute to the CPUC's decision of whether there is a continuing need for this program.

6. Hard-to-Reach Targets

The Nonresidential Hard To Reach Program will focus exclusively on Hard To Reach customers as defined by the statewide Hard To Reach criteria. Hard-to-reach customers are defined as customers meeting either of the two measurable hard-to-reach criteria: (a) located in outlying areas (measured by location in a rural zip code) and/or (b) small (measured by monthly demand at or below 20 KW).

7. Budget

Program	2002 Budget
Nonresidential Hard To Reach Program	**$1,000,000**

Notes:
See, Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to the sponsoring utility will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Measure	Unit Defined	Forecast Units	Rebate per unit	Total Rebate
Screw-in Compact Fluorescent Lamp, 14-26 watts	lamp	4,602	$18	$82,836
LED Exit Sign	fixture	300	$111	$33,300
2nd gen T-8 Lamp and Electronic, 2-foot lamp installed	lamp	150	$48	$7,200
2nd gen T-8 Lamp and Electronic, 3-foot lamp installed	lamp	150	$48	$7,200
2nd gen T-8 Lamp and Electronic, 4-foot lamp installed	lamp	10,400	$48	$499,200
T-8 Lamp and Electronic, 8-foot lamp installed	lamp	120	$65	$7,800
Interior HID fixture 0-35 watts incandescent basecase	lamp	10	$136	$1,360
Interior HID fixture 0-35 watts mercury vapor basecase	lamp	10	$136	$1,360
Interior HID fixture 36-70 watts incandescent basecase	lamp	10	$174	$1,740
Interior HID fixture 36-70 watts mercury vapor basecase	lamp	10	$174	$1,740
Interior HID fixture 71-100 watts incandescent basecase	lamp	10	$103	$1,030
Interior HID fixture 71-100 watts mercury vapor basecase	lamp	10	$103	$1,030
Interior HID fixture 101-175 watts incandescent basecase	lamp	10	$153	$1,530
Interior HID fixture 101-175 watts mercury vapro basecase	lamp	10	$153	$1,530
Interior HID fixture 176 - 250 watts mercury vapro	lamp	10	$153	$1,530
Interior HID fixture 176-250 watts incandescent basecase	lamp	10	$153	$1,530
Interior HID fixture 251 - 400 watts mercury vapro	lamp	10	$153	$1,530
Interior HID fixture 251-400 watts incandescent basecase	lamp	10	$153	$1,530
Interior HID fixture 251-400 watts metal halide basecase	lamp	10	$98	$980
Exterior HID fixture 0-100 watts incandescent basecase	lamp	10	$98	$980
Exterior HID fixture 0-100 watts mercury vapor basecase	lamp	10	$98	$980
Exterior HID fixture 101-175 watts incandescent basecase	lamp	10	$160	$1,600
Exterior HID fixture 101-175 watts mercury vapor basecas	lamp	10	$160	$1,600
Exterior HID fixture > 176 watts incandescent basecase	lamp	10	$245	$2,450
Exterior HID fixture > 176 watts mercury vapor basecase	lamp	10	$245	$2,450
Interior Pulse Start Metal Halide (400 W replacements)	lamp	50	$245	$12,250
Interior HO T-5 4 lamp fixture retrofits	lamp	150	$223	$33,450
Total				$711,716

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Small Nonresidential Hard to Reach Program
40-02
Nonresidential

Program Budget		
Item (Add additional items as necessary)	**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs		
Labor		
Type A - Program Planning/Design/Program Mgmt.	$ 54,500.00	
Type B - Mgmt./Supervisor	14,000.00	
Type C - Clerical Support	-	
Subtotal Labor	*$ 68,500.00*	
Benefits		
Pensions & Benefits	61,700.00	48.6% of SCE Labor
Payroll Taxes	9,400.00	7.4% of SCE Labor
Subtotal Benefits	*$ 71,100.00*	
Travel/Conference/Training		
Type A - Mileage and Parking	$ 1,500.00	
Type B - Other - Meals, lodging, misc. expenses	-	
Type C - Conference/Training Activities	1,700.00	
Subtotal Travel/Conference/Training	*$ 3,200.00*	
Reporting/Tracking/Development - Information Services	*$ 25,000.00*	
Materials & Handling	*$ 3,500.00*	
Overhead and General and Administrative Costs		
Type A - Regulatory Support	$ 14,800.00	
Type B - Accounting Support	11,100.00	
Type C - Communications/Telecommunications/Automated Systems Support	16,600.00	
Type D - Human Resources Support	4,300.00	
Type E - Facilities Support	-	
Type F - Supervision	-	
Type G - Corporate Services	-	
Type H - Transportation Services, Shop Services	-	
Type I - Information Technology	-	
Type J - Procurement and Material Management	-	
Subtotal Overhead and General Administrative Costs	*$ 46,800.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)		
Labor		
Benefits		
Overhead		
Travel costs		
Reporting costs		
Materials & Handling		
Overhead and General and Administrative costs		
Profit		
Subtotal Subcontractor Administrative costs	*$ -*	
Total Administrative Costs	$ 218,100.00	
Marketing/Advertising/Outreach Costs		
Type A - Brochures/Booklets	$ 2,800.00	
Type B - Media Support	5,000.00	
Type C - Outreach	-	
Total Marketing/Advertising/Outreach Costs	$ 7,800.00	

Direct Implementation Costs			
Itemized financial incentives			
Screw-in Compact Fluorescent Lamp, 14-26 watts; units=lamp	*$*	*82,836.00*	
LED Exit Sign; units=fixture	*$*	*33,300.00*	
2nd gen T-8 Lamp and Electronic, 2-foot lamp installed; units=lamp	*$*	*7,200.00*	
2nd gen T-8 Lamp and Electronic, 3-foot lamp installed; units=lamp	*$*	*7,200.00*	
2nd gen T-8 Lamp and Electronic, 4-foot lamp installed; units=lamp	*$*	*499,200.00*	
T-8 Lamp and Electronic, 8-foot lamp installed; units=lamp	*$*	*7,800.00*	
Interior HID fixture 0-35 watts incandescent basecase; units=lamp	*$*	*1,360.00*	
Interior HID fixture 0-35 watts mercury vapor basecase; units=lamp	*$*	*1,360.00*	
Interior HID fixture 36-70 watts incandescent basecase; units=lamp	*$*	*1,740.00*	
Interior HID fixture 36-70 watts mercury vapor basecase; units=lamp	*$*	*1,740.00*	
Interior HID fixture 71-100 watts incandescent basecase; units=lamp	*$*	*1,030.00*	
Interior HID fixture 71-100 watts mercury vapor basecase; units=lamp	*$*	*1,030.00*	
Interior HID fixture 101-175 watts incandescent basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 101-175 watts mercury vapro basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 176 - 250 watts mercury vapro basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 176-250 watts incandescent basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 251 - 400 watts mercury vapro basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 251-400 watts incandescent basecase; units=lamp	*$*	*1,530.00*	
Interior HID fixture 251-400 watts metal halide basecase; units=lamp	*$*	*980.00*	
Exterior HID fixture 0-100 watts incandescent basecase; units=lamp	*$*	*980.00*	
Exterior HID fixture 0-100 watts mercury vapor basecase; units=lamp	*$*	*980.00*	
Exterior HID fixture 101-175 watts incandescent basecase; units=lamp	*$*	*1,600.00*	
Exterior HID fixture 101-175 watts mercury vapor basecas; units=lamp	*$*	*1,600.00*	
Exterior HID fixture > 176 watts incandescent basecase; units=lamp	*$*	*2,450.00*	
Exterior HID fixture > 176 watts mercury vapor basecase; units=lamp	*$*	*2,450.00*	
Interior Pulse Start Metal Halide (400 W replacements); units=lamp	*$*	*12,250.00*	
Interior HO T-5 4 lamp fixture retrofits; units=lamp	*$*	*33,450.00*	
Subtotal Financial Incentives	*$*	*711,716.00*	
Itemized installation costs			
Subtotal Installation Costs	*$*	-	
Itemized hardware / materials costs (primarily for direct install and information/education programs)			
Subtotal Itemized Hardware / Materials Costs	*$*	-	
Itemized activity costs			
Subtotal Activity costs	*$*	-	
Rebate Processing/Inspection			
Processing/Inspections	$	83,484.00	
Subtotal Rebate Processing/Inspection costs	*$*	*83,484.00*	
Total Direct Implementation costs	$	795,200.00	

Evaluation, Measurement and Verification Costs			
EM&V Labor			
Itemized Labor Costs			
Itemized Labor Costs			
Subtotal EM&V Labor	*$*	-	
Benefits			
Pensions & Benefits			
Payroll Taxes			
Subtotal Benefits	*$*	-	
Travel/Conference/Training costs			
Type A - Mileage and Parking			
Type B - Other - Meals, lodging, misc. expenses			
Type C - Conference/Training Activities			
Subtotal Travel Costs	*$*	-	
Reporting costs			
EMV Costs (this includes all EMV costs including overheads and labor)	$	50,000.00	
Report 2 (consultant cost)			
Subtotal EM&V Reporting Costs	*$*	*50,000.00*	
Materials & Handling	*$*	-	
Overhead and General and Administrative costs			
Type A - Regulatory Support			
Type B - Accounting Support			
Type C - Communications/Telecommunications/Automated Systems Support			
Type D - Human Resources Support			
Type E - Facilities Support			
Type F - Supervision			
Type G - Corporate Services			
Type H - Transportation Services, Shop Services			
Type I - Information Technology			
Type J - Procurement and Material Management			
Subtotal Overhead and General and Administrative costs	*$*	-	
Total Evaluation, Measurement and Verification Costs	$	50,000.00	
Other Costs			
Itemized, may include:			
Financing Costs			
Profit (only for non-utility implementers)			
Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)	$	(71,100.00)	
Total Other Costs	$	(71,100.00)	
Budget Grand Total	$	1,000,000.00	

2002 - 2003 Energy Efficiency Program Activities Quarterly Reports Worksheet

Southern California Edison Company (SCE)

Small Nonresidential Hard to Reach Program

40-02

Nonresidential

A - Unit Based Implementation Activities WITH Measurable Energy Savings

Line Item #	MEASURE DESCRIPTION / ACTIVITY DESCRIPTION (Specify Units If Necessary)	TOTAL PRODUCT OR SERVICE REBATE PAID PER UNIT [1]	DEMAND REDUCTION PER UNIT (kW)	ESTIMATED ANNUAL HOURS OF OPERATION PER UNIT	ANNUAL ENERGY SAVINGS PER UNIT		EUL	GROSS IMC PER UNIT [2]	NTG RATIO	PROGRAM UNIT GOALS
					kWh	Therms				
T3 - 1	Screw-in Compact Fluorescent Lamp, 14-26 watts; units=lamp	$18.00	0.05	4,685	232		8	$11.38	0.96	4,602
T3 - 2	LED Exit Sign; units=fixture	$111.00	0.03	8,736	297		16	$111.00	0.96	300
T3 - 3	2nd gen T-8 Lamp and Electronic, 2-foot lamp installed; units=lamp	$48.00	0.01	4,685	52		16	$25.00	0.96	150
T3 - 4	2nd gen T-8 Lamp and Electronic, 3-foot lamp installed; units=lamp	$48.00	0.01	4,685	61		16	$25.00	0.96	150
T3 - 5	2nd gen T-8 Lamp and Electronic, 4-foot lamp installed; units=lamp	$48.00	0.01	4,685	42		16	$20.00	0.96	10,400
T3 - 6	T-8 Lamp and Electronic, 8-foot lamp installed; units=lamp	$65.00	0.01	4,685	42		16	$19.50	0.96	120
T3 - 7	Interior HID fixture 0-35 watts incandescent basecase; units=lamp	$136.00	0.06	4,685	258		16	$133.00	0.96	10
T3 - 8	Interior HID fixture 0-35 watts mercury vapor basecase; units=lamp	$136.00	0.03	4,685	136		16	$60.00	0.96	10
T3 - 9	Interior HID fixture 36-70 watts incandescent basecase; units=lamp	$174.00	0.11	4,685	515		16	$171.00	0.96	10
T3 - 10	Interior HID fixture 36-70 watts mercury vapor basecase; units=lamp	$174.00	0.04	4,685	164		16	$70.00	0.96	10
T3 - 11	Interior HID fixture 71-100 watts incandescent basecase; units=lamp	$103.00	0.17	4,685	801		16	$100.00	0.96	10
T3 - 12	Interior HID fixture 71-100 watts mercury vapor basecase; units=lamp	$103.00	0.07	4,685	333		16	$80.00	0.96	10
T3 - 13	Interior HID fixture 101-175 watts incandescent basecase; units=lamp	$153.00	0.29	4,685	1,359		16	$32.00	0.96	10
T3 - 14	Interior HID fixture 101-175 watts mercury vapro basecase; units=lamp	$153.00	0.08	4,685	351		16	$150.00	0.96	10
T3 - 15	Interior HID fixture 176 - 250 watts mercury vapro basecase; units=lamp	$153.00	0.18	4,685	853		16	$150.00	0.96	10
T3 - 16	Interior HID fixture 176-250 watts incandescent basecase; units=lamp	$153.00	0.46	4,685	2,164		16	$32.00	0.96	10
T3 - 17	Interior HID fixture 251 - 400 watts mercury vapro basecase; units=lamp	$153.00	0.48	4,685	2,263		16	$150.00	0.96	10
T3 - 18	Interior HID fixture 251-400 watts incandescent basecase; units=lamp	$153.00	0.63	4,685	2,970		16	$32.00	0.96	10
T3 - 19	Interior HID fixture 251-400 watts metal halide basecase; units=lamp	$98.00	0.11	4,685	520		16	$32.00	0.96	10
T3 - 20	Exterior HID fixture 0-100 watts incandescent basecase; units=lamp	$98.00	0.19	4,015	755		16	$95.00	0.96	10
T3 - 21	Exterior HID fixture 0-100 watts mercury vapor basecase; units=lamp	$98.00	0.09	4,015	353		16	$95.00	0.96	10
T3 - 22	Exterior HID fixture 101-175 watts incandescent basecase; units=lamp	$160.00	0.33	4,015	1,325		16	$150.00	0.96	10
T3 - 23	Exterior HID fixture 101-175 watts mercury vapor basecas; units=lamp	$160.00	0.12	4,015	462		16	$150.00	0.96	10
T3 - 24	Exterior HID fixture > 176 watts incandescent basecase; units=lamp	$245.00	0.48	4,015	1,935		16	$200.00	0.96	10
T3 - 25	Exterior HID fixture > 176 watts mercury vapor basecase; units=lamp	$245.00	0.19	4,015	747		16	$200.00	0.96	10
T3 - 26	Interior Pulse Start Metal Halide (400 W replacements); units=lamp	$245.00	0.11	4,000	444		10	$128.00	0.96	50
T3 - 27	Interior HO T-5 4 lamp fixture retrofits; units=lamp	$223.00	0.22	4,000	896		16	$252.00	0.96	150

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Small Nonresidential Hard to Reach Program

40-02

Nonresidential

Item	$		Percentage of Total Program Budget
Administrative Costs			
Labor	$	68,500.00	6.85%
Benefits	$	71,100.00	7.11%
Travel/Conference/Training	$	3,200.00	0.32%
Reporting/Tracking/Development - Information Services	$	25,000.00	2.50%
Materials & Handling	$	3,500.00	0.35%
Overhead and General and Administrative costs	$	46,800.00	4.68%
Subcontractor Administrative costs	$	-	0.00%
Total Administrative Costs	$	218,100.00	21.81%
Marketing/Advertising/Outreach Costs			
Total Marketing/Advertising/Outreach Costs	$	7,800.00	0.78%
Direct Implementation Costs			
Financial Incentives	$	711,716.00	71.17%
Installation costs	$	-	0.00%
Itemized hardware / materials costs	$	-	0.00%
Activity costs	$	-	0.00%
Rebate Processing/Inspection	$	83,484.00	8.35%
Total Direct Implementation costs	$	795,200.00	79.52%
Evaluation, Measurement and Verification Costs			
Labor	$	-	0.00%
Benefits	$	-	0.00%
Travel/Conference/Training costs	$	-	0.00%
EM&V Reporting costs	$	50,000.00	5.00%
Materials & Handling	$	-	0.00%
Overhead and General and Administrative costs	$	-	0.00%
Total Evaluation, Measurement and Verification Costs	$	50,000.00	5.00%
Other Costs			
Total Other Costs	$	(71,100.00)	-7.11%
Budget Grand Total	$	1,000,000.00	

Table PIP3.1: Summary of Program Projected Cost Effectiveness

Southern California Edison Company (SCE)

Small Nonresidential Hard to Reach Program

40-02

Nonresidential

TRC Test	Costs	Benefits	Ratio	Net Benefits
	$642,074	$1,088,395	1.6951	$446,322

Participant Test	Costs	Benefits	Ratio	Net Benefits
	$368,531	$1,845,461	5.0076	$1,476,930

Table PIP3.2: Summary of Projected Energy Efficiency Program Effects

Southern California Edison Company (SCE)

Small Nonresidential Hard to Reach Program

40-02

Nonresidential

	Total
Annual Demand Reductions Net kW	400
Annual Energy Savings Net kWh	1,877,784
Lifecycle Energy Savings Net kWh	21,720,289
Annual Energy Savings Net Therms	
Lifecycle Energy Savings Net Therms	

Pump Test and Hydraulic Services
Implementation Plan

1. Title of Individual Program

Pump Test and Hydraulic Services

2. Program Plans

2.1 Program Summary

Southern California Edison's (SCE) Pump Test and Hydraulic Services (PT&HS) 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.

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

PT&HS testing conforms to pumping standards as established by the leading national water association, the American Water Works Association. These tests are of the highest quality, accuracy, and are unbiased. PT&HS consistently provides customers with the information that they can trust and due to their unbiased nature, on which they can base their energy efficiency decisions.

Additionally, SCE will conduct activities historically known as energy management services, which include the promotion of energy efficiency through customer contact that falls outside the purview of a traditional pump test. This includes activities such as presentations to customer groups; personal support on energy efficiency issues, educational materials, and promotion of customer rebates and offers. Wherever possible SCE will promote awareness of energy efficiency and its benefits to agricultural businesses, water districts, and other high volume users of water - leveraging specific customer trade and ethnic associations; and agricultural segments; and cultivating relationships between vendors, manufacturers, and local and state government to accomplish this.

As a result, PT&HS' teams are recognized as leaders in the industry by cities, counties, water agencies, agricultural communities, and the American Water Works Association.

2.3 Implementation Plans

The Pump Test and Hydraulic Services program will deliver long-term energy savings with an effective useful life of 15 years, far exceeding the California Public Utilities Commission's (CPUC) minimum target of three years for long-term energy savings. The long-term energy saving impacts of the PT&HS program will be supported by the educational and outreach activities used to support program delivery.

Over the past 10 years, SCE's PT&HS has proven its ability to provide high quality energy efficiency information, audit services, and pump tests in a very cost effective manner. Since 1990, PT&HS has reported annual savings far exceeding 200 million kilowatt-hours.

SCE will continue its work with hard-to-service customers such as state and federal prisons, to overcome traditional barriers, and to work with local organizations such as the Association of County Water Associations and to participate in joint program development and information sharing with California Polytechnic San Luis Obispo and the California Irrigation Institute at California State University, Fresno.

Market Barriers

The barriers to the delivery of pump testing services, reporting, and influence on the installation of energy efficient measures are traditionally issues of customer trust, limited availability of qualified technical resources, and low and variable load factors. The delivery of these services by the utility overcomes many of these barriers.

- Trust - SCE has provided pump testing services since 1911. Through the years customers have come to trust and rely on SCE's testing results and recommendations. As a result, PT&HS' services has a proven track record of success delivering energy efficiency information and converting such recommendation to energy efficiency implementation projects for over 10 years.
- Limited Technical Resources – SCE has invested the resources to ensure its HS&PT teams are trained on the latest industry information and techniques and their tools are maintained at the highest levels of operation. PT&HS is one of the few programs, either private or public, that offers the services it does with a very high level of quality, unbiased advisement and integrity. One of the main reasons for this is the level of training and years of experience of the personnel assigned to this team. Each member has a 5 years or more experience in the industry. Most members have taken the Technical Specialist Certification Program.
- Low Load Factor – Low and variable load factor usage of equipment normally means little or no opportunity for energy savings. SCE tests using AWWA standards, which are exacting standards. As a result SCE is able to evaluate systems in greater detail and accuracy. This allows for the ability to provide energy recommendations for a much greater range of options than traditionally available. Another way SCE's PT&HS addresses this issue is through the education provided by our pump test personnel and account representatives. The information provided to the customers is educational both regarding energy efficient technologies and in addressing the economic issues. Kyle and Kyle Ranches is just one customer where SCE's approach met their specific need. So

much so that they feel it "inconceivable to us that Southern California Edison would end or change their current pump testing methods, that have proven to be invaluable to us and many others over the years."

- Rebate and Economic Incentives – PT&HS offers a high quality review of system operations that its customers have come to respect and to guide them in making their energy efficiency decisions. Due to high costs of many measures, customers will not implement energy efficiency recommendations unless the economic evidence is provided. As is evident by the testimonials provided by the California Water Service and the City of Santa Paula, SCE's services are the solution to such needs. PT&HS program keeps up to date with all energy efficiency rebate program opportunities. This enables many customers find the initial costs of implementing energy efficient measures less of a burden. PT&HS has provided information on rebate programs offered by the utilities as well as private and state agencies such as the California Energy Commission (CEC).

Innovation

Joint ventures –

PT&HS intends to continue building networks to insure an efficient and effective delivery of energy efficient information and effective implementation of applicable measures. Some past examples include:

- A well-established network of pumping equipment manufacturers, distributors, contractors, and independent pump testing agencies to assist customers with plant improvements.
- Outreach programs that enable it to reach a wide range of customers such as city/county agencies, municipal water districts, and members of ACWA (Association of California Water Agencies) located within its service territory.
- Joint program development and information sharing with California Polytechnic San Luis Obispo and California Irrigation Institute at California State University, Fresno.

Increase Program Efficiency -

The PT&HS program is designed to increase the adoption rate and implementation of energy efficiency recommendations provided to pumping customers. It will accomplish these goals by testing customers' pumping systems, delivering a customer and site specific energy efficiency report with cost analysis that the customer can easily understand and act upon.

- Easily Understood - SCE will continue to refine its delivery of pump tests, analyses and reviews in order to deliver the services that our customers need in order to become more energy efficient in their operations.
- On-site Reporting – SCE will continue to expand its on-site reporting capabilities by integrating the ability to produce onsite reports through the development of a laptop reporting system.
- Customized Reporting – provide the information the customer needs to implement energy efficiency recommendations.

- Flexible Reporting - Provide the data in an easy to reconfigure format to allow greater data manipulation by the customer.
- Do it yourself pumping analysis tool on a CD – the tool will deliver an efficient means for customers to educate themselves at their convenience on various ways to increase their pump system efficiency.

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

- California Power Authority Energy Efficiency Financing program – Assist customers finance capital-intensive projects using the State's newest financing option.
- Statewide testing standards – Continue participation to establish a statewide standard for pumping system testing and operations in cooperation with California Polytechnic University, San Luis Obispo, California State University, Fresno and independent testing firms.
- Customer Education projects – Utilize selective proven technologies in showcase projects to encourage customer adoption of advance energy efficiency measures.
- Enhanced Test Services – Provide identification of system inefficiencies that can increase operational costs and reduce efficiencies for water agency customers. Implementation of test recommendations can lead to reduced maintenance, enhancement to system reliability, and a maintenance program that focuses on prioritized repair requirements.
- Outreach – Target customers are in many ways niche and hard-to-reach customers. PT&HS has found outreach programs to be one of the most effective ways to gain customer participation. PT&HS has participated annually for most of the following events:
    - AgTAC Workshops (SCE's energy efficiency technology center located in Tulare.
    - Channel Counties Water Utility Association, Ventura
    - Inland Counties Water Association Vendor's Fair, National Orange Show Grounds
    - Southern California Water Utilities Association Vendor's Fair, Irwindale
    - Water Awareness Day at Citrus College, Glendora
    - World Ag Expo

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

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

Program Enrollment Process

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

Marketing and Outreach

Our marketing plan capitalizes on the use of outreach programs that enable it to reach a wide range of customers such as city/county agencies, municipal water districts, and members of ACWA (Association of California Water Agencies) located within SCE's service territory.

Annually, PT&HS participates in several special events for such organizations as the International Ag Expo, Water Awareness Days, Inland Counties Water Association Vendor's Fair, and the Association of County Water Associations. We also market through a well-established network of pumping equipment manufacturers, distributors, contractors, and independent pump testing agencies to assist customers with plant improvements.

We actively participate in joint program development and information sharing with California Polytechnic San Luis Obispo and California Irrigation Institute at California State University, Fresno.

For this program, PT&HS representatives will retain or increase memberships in various associations to facilitate educational and auditing opportunities. Memberships are currently held in groups such as the California Grape and Fruit Tree Association, California Citrus Mutual, and California Cotton Ginners Associations.

Customer Eligibility

This program targets downstream and upstream market participants. The primary targets are the downstream pumping system operators, who primarily are agricultural and water agency customers. Other nonresidential customers, who use significant energy for hydraulic pumping, include golf courses and sewage treatment plants.

Most of PT&HS customers are considered in a "niche" market of their own. The PT&HS program utilizes the relationships it has developed with agricultural customers and other hard-to-service customers such as state and federal prisons, to over-come traditional barriers. In this way PT&HS has successfully delivered effective education and identification of energy efficiency opportunities that hold the highest effectiveness for the specific customer.

There are approximately 40,000 pumping accounts in SCE's service territory. Pump test services are offered to all pumping customers. However due to the current available resources, PT&HS focuses on the customers who have the highest potential for energy efficiency savings and those who can benefit the most from the testing services.

SCE has been successful in influencing energy decisions from its customers as a direct result of our long standing relationship and the unbiased nature of our test.

The upstream focus is on distributors and contractors who can use SCE program information and pump test results to help them design and select the most efficient and cost-effective equipment for installation at the downstream customers' facility.

2.3 Modification to Original Proposals Directed by CPUC

The CPUC stated for the Pump Test and Hydraulic Services program:

"We require SCE to hire an independent, third party evaluation, measurement and verification contractor and to provide measurable performance goals in the implementation plans, i.e. number of planned pumping system tests." [Decision 02-05-046, Attachment A, p. 60]

In regards to SCE's overall measurement, evaluation, and verification plans and required performance goals, SCE provides this information in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy Savings and Demand Reductions Targets

Based upon the CPUC's approved Energy Efficiency Policy Manual, this information program implementation plan is not expected to provide energy savings targets. Program goals are provided below in sections 5 and 6.

4. Cost-Effectiveness

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2002 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a TRC ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the CPUC's approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

5. Evaluating Program Progress For Information-only Programs

5.1 Program Target

Program	2002 Targets
Pump Tests	**2,000**
EE Information Contacts	**1,750**

5.2 Measurements, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

The EM&V for this local program will be coordinated through the Evaluation, Measurement and Verification Master Contract Study that the CPUC specified in Decision 01-11-066. Based on further CPUC direction, the utilities will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities among similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and they will develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

Since SCE's local programs will be coordinated through the EM&V Master Contract Study, specific EM&V activities will be determined after the award of the contract for that study. Working with the selected experts, SCE will finalize the plans for verifying program actions and estimating the program impacts. However, SCE does have its preliminary EM&V plan for this program, which it will present to the EM&V expert team. That plan is described below. We believe this plan meets the requirements of the Energy Efficiency Policy Manual.

<u>General Approach to Evaluating Program Success</u>
The core approach for evaluating the success of SCE pump test and hydraulic services program is to design a timely, accurate, and clear evaluation that will meet the needs of multiple parties including the SCE program manager, policy-makers, program implementers, and other stakeholders. A combination of approaches is needed that serves the program best by providing a variety of information on program impacts. The EM&V approach provides measurable and quantifiable results in the form of achieved levels of energy and peak demand savings by the program. The success of the program is also gauged by the other program evaluation elements of process evaluation and market assessment studies. Such studies provide (a) ongoing feedback and corrective guidance regarding program implementation and delivery to customers through program process analysis, and (b) measured indicators of the program effectiveness through analysis of market baseline and change data.

Approaches to Measurement and Verification of Energy and Peak Demand Savings

The basis of Measurement and Verification approach for the pump test and hydraulic services program will be will be deemed energy and demand savings estimates of the program. Currently, in place, is an approved methodology of measurement and verification of the program. The methodology was authorized in 1995 and incorporates methodology adopted by San Diego Gas and Electric Company. It includes factoring for net-to-gross considerations and average rate of implementation based on the verified tracking of KW and KWh savings over a 10 year period. It is this proven and substantiated performance calculation that is the backbone for the cost effectiveness of the program**.** The M&V approach will be to start with program estimates of savings and apply adjustment factors based on a review of the methodology to ensure its sustained accuracy**.** Participant surveys will be undertaken to update implementation rates and free ridership data.

Approach to Evaluating Program Success

The remaining aspects of overall program evaluation and the remaining EM&V objectives of the Commission are covered in this section. The remaining activities are as follows:

- *Market Assessment and Customer Behavior Analyses*: These activities assist with assessing customer awareness, behaviors and practices given their participation in the pump test and hydraulic services program. Baseline data is available from SCE Hydraulic Services Program Market Effect and SCE Agriculture Pumping Analysis Study. Baseline information includes characteristics of the market, volume of pump testing, high efficiency pumps market shares, and upstream and downstream customer awareness of benefits of pump testing and predictive maintenance. The market assessment analysis will involve use of customer data to assess change in the baseline data as part of the energy efficiency-related gains achieved by the program.
- *Process Evaluations:* When evaluating the success of energy savings program, policy makers, program implementers and other stakeholders are also interested in knowing how well the program is performing in terms of magnitude and quality of its targeted efforts. The objective of process evaluation activities will be to provide feedback to the program implementers on some of the key delivery aspects of the program that are critical to the effectiveness of the intended goals of the program. One of the intended goals of the program is to promote energy efficiency through presentations to customer groups, and promote the rebate program and offers. The program tracking records and promotional materials will be analyzed to assess the magnitude and quality of these promotion efforts.

6. Hard-to-Reach Targets

PT&HS will continue in its efforts to provide needed services and information to geographically hard-to-reach customers. Due to the industry that PT&HS services, many of the customers are by definition hard-to-reach customers and their businesses are located in outlying, rural locations. In 2001, PT&HS provided pump testing and energy efficiency information to over 30% of the total customers it served. The achievement of this substantial level of activity is directly in line with the intent of the CPUC's decision. As a result, for 2002, PT&HS will pursue the goal of maintaining this high level of inclusion for these customers.

7. Budget

Program	2002 Budget
Pump Test and Hydraulic Services Program	**$1,930,000**

Notes:
See, Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to SCE will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Not Applicable

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Pump Test and Hydraulic Services Program
42-02
Large-Small Nonresidential (agricultural and local water districts)

Program Budget		
Item (Add additional items as necessary)	**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs		
Labor		
Type A - Program Planning/Design/Program Mgmt.	$ -	
Type B - Mgmt./Supervisor	128,900.00	
Type C - Clerical Support	73,300.00	
Subtotal Labor	*$ 202,200.00*	
Benefits		
Pensions & Benefits	574,700.00	48.6% of SCE Labor
Payroll Taxes	87,500.00	7.4% of SCE Labor
Subtotal Benefits	*$ 662,200.00*	
Travel/Conference/Training		
Type A - Mileage and Parking	$ 12,400.00	
Type B - Other - Meals, lodging, misc. expenses	4,100.00	
Type C - Conference/Training Activities	9,500.00	
Subtotal Travel/Conference/Training	*$ 26,000.00*	
Reporting/Tracking/Development - Information Services	*$ -*	
Materials & Handling	*$ 79,000.00*	
Overhead and General and Administrative Costs		
Type A - Regulatory Support	$ 37,300.00	
Type B - Accounting Support	26,900.00	
Type C - Communications/Telecommunications/Automated Systems Support	15,700.00	
Type D - Human Resources Support	32,900.00	
Type E - Facilities Support	-	
Type F - Supervision	-	
Type G - Corporate Services	-	
Type H - Transportation Services, Shop Services	145,800.00	
Type I - Information Technology	2,800.00	
Type J - Procurement and Material Management	-	
Subtotal Overhead and General Administrative Costs	*$ 261,400.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)		
Labor		
Benefits		
Overhead		
Travel costs		
Reporting costs		
Materials & Handling		
Overhead and General and Administrative costs		
Profit		
Subtotal Subcontractor Administrative costs	*$ -*	
Total Administrative Costs	$ 1,230,800.00	
Marketing/Advertising/Outreach Costs		
Type A - Brochures/Booklets	$ 1,200.00	
Type B - Media Support	-	
Type C - Outreach	262,200.00	
Total Marketing/Advertising/Outreach Costs	$ 263,400.00	

Direct Implementation Costs		
Itemized financial incentives		
Subtotal Financial Incentives	*$* -	
Itemized installation costs		
Subtotal Installation Costs	*$* -	
Itemized hardware / materials costs (primarily for direct install and information/education programs)		
Subtotal Itemized Hardware / Materials Costs	*$* -	
Itemized activity costs		
· EE Information Activity 1750 @ $147	$ 257,400.00	
· Pump Tests 2000 @ $380	760,600.00	
Subtotal Activity costs	*$ 1,018,000.00*	
Rebate Processing/Inspection		
Subtotal Rebate Processing/Inspection costs	*$* -	
Total Direct Implementation costs	$ 1,018,000.00	
Evaluation, Measurement and Verification Costs		
EM&V Labor		
Itemized Labor Costs		
Itemized Labor Costs		
Subtotal EM&V Labor	*$* -	
Benefits		
Pensions & Benefits		
Payroll Taxes		
Subtotal Benefits	*$* -	
Travel/Conference/Training costs		
Type A - Mileage and Parking		
Type B - Other - Meals, lodging, misc. expenses		
Type C - Conference/Training Activities		
Subtotal Travel Costs	*$* -	
Reporting costs		
EMV Costs (this includes all EMV costs including overheads and labor)	$ 80,000.00	
Report 2 (consultant cost)		
Subtotal EM&V Reporting Costs	*$ 80,000.00*	
Materials & Handling	*$* -	
Overhead and General and Administrative costs		
Type A - Regulatory Support		
Type B - Accounting Support		
Type C - Communications/Telecommunications/Automated Systems Support		
Type D - Human Resources Support		
Type E - Facilities Support		
Type F - Supervision		
Type G - Corporate Services		
Type H - Transportation Services, Shop Services		
Type I - Information Technology		
Type J - Procurement and Material Management		
Subtotal Overhead and General and Administrative costs	*$* -	
Total Evaluation, Measurement and Verification Costs	$ 80,000.00	

Other Costs			
Itemized, may include:			
Financing Costs			
Profit (only for non-utility implementers)			
Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)	$	(662,200.00)	
Total Other Costs	$	(662,200.00)	
Budget Grand Total	$	1,930,000.00	

2002 - 2003 Energy Efficiency Program Activities Quarterly Reports Worksheet

Southern California Edison Company (SCE)

Pump Test and Hydraulic Services Program

42-02

Large-Small Nonresidential (agricultural and local water districts)

B - Unit Based Implementation Activities WITHOUT Measurable Energy Savings			
Line Item #	ACTIVITY DESCRIPTION	COST PER ACTIVITY	Number of Units PROGRAM UNIT GOALS
T4.1 - 1	EE InformationActivity	$147.09	1,750
T4.1 - 2	Pump Tests	$380.30	2,000

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Pump Test and Hydraulic Services Program

42-02

Large-Small Nonresidential (agricultural and local water districts)

Item	$	Percentage of Total Program Budget
Administrative Costs		
Labor	$ 202,200.00	10.48%
Benefits	$ 662,200.00	34.31%
Travel/Conference/Training	$ 26,000.00	1.35%
Reporting/Tracking/Development - Information Services	$ -	0.00%
Materials & Handling	$ 79,000.00	4.09%
Overhead and General and Administrative costs	$ 261,400.00	13.54%
Subcontractor Administrative costs	$ -	0.00%
Total Administrative Costs	$ 1,230,800.00	63.77%
Marketing/Advertising/Outreach Costs		
Total Marketing/Advertising/Outreach Costs	$ 263,400.00	13.65%
Direct Implementation Costs		
Financial Incentives	$ -	0.00%
Installation costs	$ -	0.00%
Itemized hardware / materials costs	$ -	0.00%
Activity costs	$ 1,018,000.00	52.75%
Rebate Processing/Inspection	$ -	0.00%
Total Direct Implementation costs	$ 1,018,000.00	52.75%
Evaluation, Measurement and Verification Costs		
Labor	$ -	0.00%
Benefits	$ -	0.00%
Travel/Conference/Training costs	$ -	0.00%
EM&V Reporting costs	$ 80,000.00	4.15%
Materials & Handling	$ -	0.00%
Overhead and General and Administrative costs	$ -	0.00%
Total Evaluation, Measurement and Verification Costs	$ 80,000.00	4.15%
Other Costs		
Total Other Costs	$ (662,200.00)	-34.31%
Budget Grand Total	$ 1,930,000.00	

Local Crosscutting Demonstration and Information Transfer Program Implementation Plan

1. Title of Individual Program

Local Crosscutting Demonstration and Information Transfer

2. Program Plans

2.1 Program Summary

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

The program focuses on near-commercial energy efficient applications with significant market potential, and commercial energy efficient applications with low market penetration. Demonstration projects, conducted at either customer sites or in controlled environments, provide design, performance, and verification of novel energy efficient systems, helping to reduce the market barriers to their wider acceptance. The program's demonstration projects help to measure, verify, and document the potential future energy savings of specific applications in different market segments. Information Transfer efforts disseminate project results, and are customized to the targeted markets. A variety of means will be used, which may include:

- Detailed project reports,
- Design documentation,
- Professional and industry forums,
- Technical and non-technical publications,
- Trade journals,
- Trade shows,
- News stories,
- Video documentaries,
- Case Studies,
- Detailed project brochures and fact sheets,
- Newsletters,
- Site visits and tours,
- Internet web pages,
- Analytical tools,
- Community-based organizations,

- Workshops, Seminars, Conferences, and
- Mainstream energy efficiency programs such as the utilities statewide Express Efficiency, Standard Performance Contract, and third party offerings.

As shown in Figure 1, the program efforts form an important link in the commercialization of energy efficient emerging technologies and applications.

2.2 Implementation Plans

Delivery Approach. SCE will deliver the program to its customers through custom demonstration projects. Information Transfer will be disseminated through many different outlets, including the SCE Energy Centers, utility personnel, and community organizations. The Information Transfer activities will leverage SCE's overall energy efficiency communication efforts. Through the demonstration projects, comprehensive design methods and tools may be developed and disseminated, along with the performance information of the energy efficient emerging technology measures. The program will pursue projects targeting both residential and nonresidential customer segments, including new construction. Figure 2 shows many of the considerations that go into demonstration projects at customer sites. These demonstration projects may come about in one of two manners:

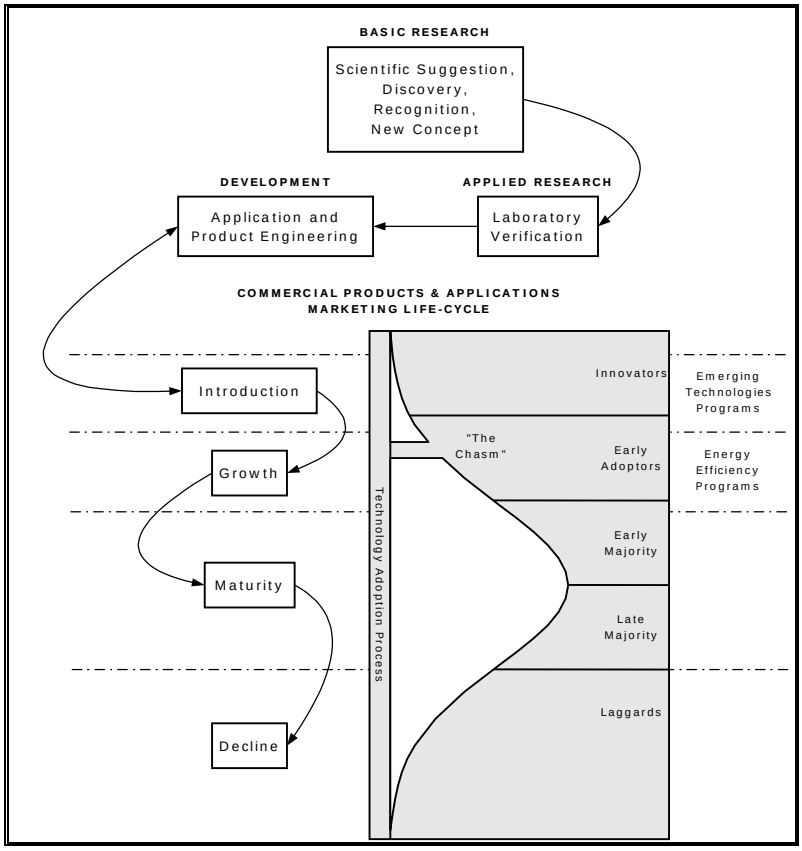

Figure 1. Typical Product Development & Commercialization Cycle.

- *Customer "Pull."* A utility account representative may approach the program staff on behalf of a customer interested in pursuing energy efficiency. The program staff will help the account representative address the customer's needs, and at the same time, consider a range of potential energy efficient emerging technology applications.

- *Technology "Push."* The second manner that a project may come about is when a significant new technology application emerges. The program staff then approach the utility account representatives for a particular market segment, inform them about the

new technology application, and ask them to help identify a potential demonstration site from among their customers.

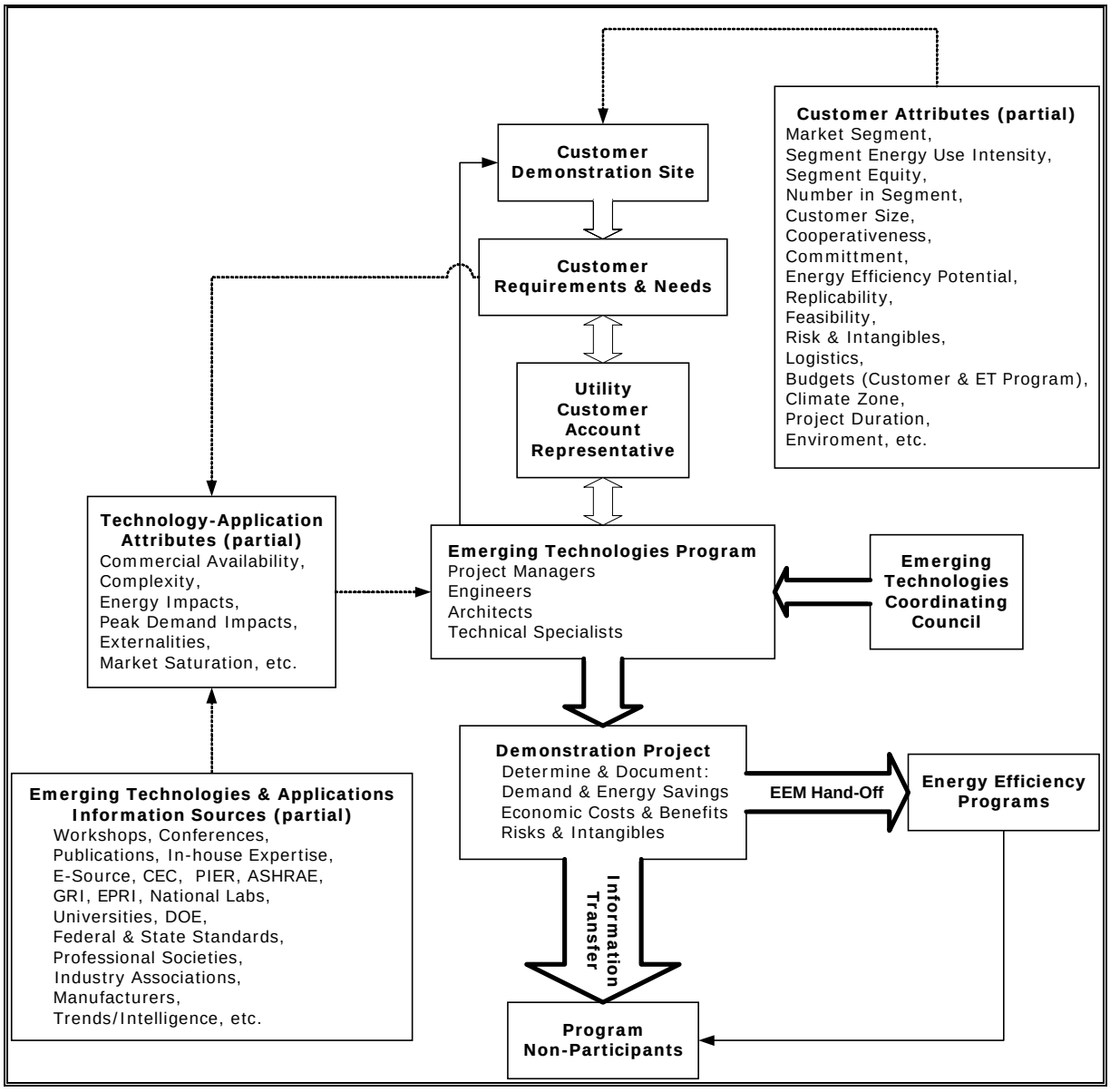

Figure 2. ET Program Demonstration Process.

As is evident from the above discussion, the program does not follow a mass marketing approach, but a targeted approach to work with "innovators" that may further influence other customers.

Some projects may not require a field demonstration at a customer site to evaluate equipment performance. But even for those types of projects, the program staff seeks to understand customer's needs and requirements. This helps ensure that project objectives are aligned with customer needs and expectations.

Before a customer site demonstration project can take place, a legal agreement acceptable to both the customer and the utility is developed, negotiated, and signed. These agreements specify such things as the terms of the projects, maximum duration, dispute resolution methods, termination provisions, and general liability. It is important to note that some demonstration projects may require up to three years to complete, commencing on the date an agreement is signed with a customer. The time required to complete a project will vary due to such things as how complex a new technology application is, construction schedules, building and process commissioning, and logistics.

Despite careful planning and screening of emerging technology applications and customer sites, not all demonstration projects can be expected to be successful. Thus, project contingency plans are developed to address problems if the project's outcome is not satisfactory and to lessen customer losses.

Program Synergies and Coordination. The program's Information Transfer will be coordinated with the SCE Energy Centers and leveraged with the overall energy efficiency programs efforts. In addition, information regarding local program efforts will be shared with members of the statewide Emerging Technologies Coordinating Council. Also, to ensure that applications that are ready to be part of energy efficiency programs are indeed recognized by program planners, i.e., the energy efficiency measure (EEM) handoff shown in Figure 2, the program will sponsor an "ET Briefing" for program planners. The briefing will take place before the energy efficiency program planning efforts get underway for program year 2003.

Evaluation, Measurement and Verification. Statewide studies, funded through the statewide Market Assessment & Evaluation budget when approved, will evaluate both the Local and Statewide ET programs success through a market assessment study. The study will measure indicators of program effectiveness and overall success, and test the assumptions underlying the program theory. A process evaluation, also funded through the Statewide Market Assessment & Evaluation budget when approved, will provide ongoing feedback and corrective guidance regarding program design and implementation.

2.3 Modification to Original Proposals Directed by CPUC

The CPUC decision stated for the Local Crosscutting Demonstration and Information Transfer program:

> "We require SCE to provide more detailed information on (a) the budget, especially on direct implementation costs, and (b) the planned emerging technologies to be introduced to customers. An independent, third party shall perform evaluation, measurement and verification of the program." [Decision 02-05-046, Attachment A, p. 58]

To fulfill item (a), more detailed information regarding the program budget can be found in Attachment B. The list sought by item (b) cannot be a definitive list. Flexibility to incorporate into the program any advances in energy efficient technologies and applications when they mature out of the research & development cycle is necessary. To this aim, the program staff remains abreast of developments through a large variety of information sources including PIER,

ASHRAE, DOE, and NASA. The statewide Emerging Technologies Coordinating Council ET Database may best meet the intent of item (b) for a reference list of emerging technologies. The Council's ET Database may be downloaded from http://www.ca-etcc.com/ETdatabase.htm and efforts are underway to update its listings. The ETCC intends to update the database periodically, adding new emerging technology applications and reflecting changes in the status of existing measures. In regards to SCE's overall measurement, evaluation, and verification plans, additional details beyond those in Section 2.2 may be found in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy and Peak Demand Savings Targets

Based upon the California Public Utilities Commission's (CPUC) approved Energy Efficiency Policy Manual, this information program implementation plan is not expected to provide energy savings targets. Program goals are provided below in sections 5 and 6.

4. Cost-Effectiveness

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2002 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a TRC ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the CPUC's approved Energy Efficiency Policy Manual, an information-only program is not reasonably expected to provide an estimate of energy savings.

5. Evaluating Program Progress For Information-only Programs

5.1 Program Target

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

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

5.2 Measurement, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

For SCE's Local Demonstration and Information Transfer program, the EM&V will be coordinated through the Evaluation, Measurement and Verification Master Contract Study (EM&V-MCS) that the CPUC specified in CPUC Decision 01-11-066. Based on further CPUC direction, the IOUs will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities between similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

Since SCE's local programs will be coordinated through the EM&V Master Contract Study, specific EM&V activities will be determined after the award of the contract for that study. Working with the selected experts, SCE will finalize the plans for verifying program actions and estimating the program impacts. However, SCE does have its preliminary EM&V plan for this program, which it will present to the EM&V expert team. That plan is described below. We believe this plan meets the requirements of the Energy Efficiency Policy Manual.

<u>General Approach to Evaluating Program Success</u>
This plan meets the objectives of the Commission as outlined in the Energy Efficiency Policy Manual for information-only programs. Analysis for this program will build on statewide studies funded through the statewide 2002 Market Assessment & Evaluation budget and on past studies completed in 1999 by PG&E (Emerging Technology Efficiency Market Share Needs Assessment, Feasibility, and Market Penetration Scoping Study) and in 2001 by SCE (Evaluation of the SCE Emerging Technology Program). These studies will provide the needed market assessment and much of the process evaluation required.

<u>Approach to Measurement and Verification of Energy and Peak Demand Savings</u>
The primary focus of these programs is education, training and information dissemination and transfer. Consequently, a measurement and verification component is not required.
For showcases, the program will be monitoring the energy-efficient technologies at the demonstration sites as part of program implementation. These data will be used to verify the efficacy of the showcased technology.

<u>Program Evaluation</u>
Market Assessment and Customer Behavior Analyses: These activities assist with assessing market impacts and customer awareness of energy efficient emerging technologies and practices. Building on the statewide studies, the analysis for this small local program will focus

on documenting the channels and customers who gain new information, education and training from the local emerging technology demonstrations.

For program activities, interviews will be conducted throughout the year with the following participants: hosts of showcases in their building(s), customers who visit the web sites, attend showcases, workshops, seminars, information and media events; and recipients of other technology and information transfers. Interviews will also be conducted with those who request *additional* information based on any of these experiences. All these interviewees will be asked to self-report any changes in attitudes, awareness and knowledge, and use of targeted technologies as a result of their direct exposure to the ETP.

Process Evaluation: This kind of studies assesses the effectiveness of the ETP in delivering information regarding emerging technologies. These activities may include process evaluations of the great variety of information delivery mechanisms utilized for this type of program. Because this work is already being done for the broad variety of mechanisms used in the statewide programs, the process evaluation for this program can focus on documenting the channels used by the local program. Assessment of their efficacy will already be occurring in the statewide study.

6. Hard-to-Reach Targets

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

7. Budget

Program	2002 Budget
Local Crosscutting Demonstration and Information Transfer Program	**$450,000**

Notes: See Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to the sponsoring utility will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Not Applicable

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Demonstration & Information Transfer
43-02
Crosscutting

Program Budget		
Item (Add additional items as necessary)	**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs		
Labor		
Type A - Program Planning/Design/Program Mgmt.	$ 35,800.00	
Type B - Mgmt./Supervisor	8,500.00	
Type C - Clerical Support	24,000.00	
Subtotal Labor	*$ 68,300.00*	
Benefits		
Pensions & Benefits	27,800.00	48.6% of SCE Labor
Payroll Taxes	4,200.00	7.4% of SCE Labor
Subtotal Benefits	*$ 32,000.00*	
Travel/Conference/Training		
Type A - Mileage and Parking	$ 1,900.00	
Type B - Other - Meals, lodging, misc. expenses	2,900.00	
Type C - Conference/Training Activities	1,000.00	
Subtotal Travel/Conference/Training	*$ 5,800.00*	
Reporting/Tracking/Development - Information Services	$ -	
Materials & Handling	*$ 38,300.00*	
Overhead and General and Administrative Costs		
Type A - Regulatory Support	$ 6,700.00	
Type B - Accounting Support	5,100.00	
Type C - Communications/Telecommunications/Automated Systems Support	7,400.00	
Type D - Human Resources Support	1,900.00	
Type E - Facilities Support	-	
Type F - Supervision	-	
Type G - Corporate Services	-	
Type H - Transportation Services, Shop Services	-	
Type I - Information Technology	-	
Type J - Procurement and Material Management	-	
Subtotal Overhead and General Administrative Costs	*$ 21,100.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)		
Labor		**Provide total subcontractor costs** (if the program has more than one sub)
Benefits		
Overhead		
Travel costs		
Reporting costs		
Materials & Handling		
Overhead and General and Administrative costs		
Profit		
Subtotal Subcontractor Administrative costs	$ -	
Total Administrative Costs	$ 165,500.00	
Marketing/Advertising/Outreach Costs		
Type A - Brochures/Booklets	$ -	
Type B - Media Support	-	
Type C - Outreach	-	
Total Marketing/Advertising/Outreach Costs	$ -	

Direct Implementation Costs		
Itemized financial incentives		
Subtotal Financial Incentives	*$* -	
Itemized installation costs		
· 3 demonstrations @ $97,167 each	$ 291,500.00	
Subtotal Installation Costs	*$ 291,500.00*	
Itemized hardware / materials costs (primarily for direct install and information/education programs)		
Subtotal Itemized Hardware / Materials Costs	*$* -	
Itemized activity costs		
Subtotal Activity costs	*$* -	
Rebate Processing/Inspection		
Subtotal Rebate Processing/Inspection costs	*$* -	
Total Direct Implementation costs	$ 291,500.00	
Evaluation, Measurement and Verification Costs		
EM&V Labor		
Itemized Labor Costs		
Itemized Labor Costs		
Subtotal EM&V Labor	*$* -	
Benefits		
Pensions & Benefits		
Payroll Taxes		
Subtotal Benefits	*$* -	
Travel/Conference/Training costs		
Type A - Mileage and Parking		
Type B - Other - Meals, lodging, misc. expenses		
Type C - Conference/Training Activities		
Subtotal Travel Costs	*$* -	
Reporting costs		
EMV Costs (this includes all EMV costs including overheads and labor)	25,000.00	
Report 2 (consultant cost)		
Subtotal EM&V Reporting Costs	*$ 25,000.00*	
Materials & Handling	*$* -	
Overhead and General and Administrative costs		
Type A - Regulatory Support		
Type B - Accounting Support		
Type C - Communications/Telecommunications/Automated Systems Support		
Type D - Human Resources Support		
Type E - Facilities Support		
Type F - Supervision		
Type G - Corporate Services		
Type H - Transportation Services, Shop Services		
Type I - Information Technology		
Type J - Procurement and Material Management		
Subtotal Overhead and General and Administrative costs	*$* -	
Total Evaluation, Measurement and Verification Costs	$ 25,000.00	

Other Costs			
Itemized, may include:			
Financing Costs			
Profit (only for non-utility implementers)			
Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)		(32,000.00)	
Total Other Costs	$	(32,000.00)	
Budget Grand Total	$	450,000.00	

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Southern California Edison Company (SCE)
Demonstration & Information Transfer
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B - Unit Based Implementation Activities WITHOUT Measurable Energy Savings			
			Number of Units
Line Item #	ACTIVITY DESCRIPTION	COST PER ACTIVITY	PROGRAM UNIT GOALS
T4.1 - 1	Project Demonstrations	$97,166.67	3

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Demonstration & Information Transfer

43-02

Crosscutting

Item	$	Percentage of Total Program Budget
Administrative Costs		
Labor	$ 68,300.00	15.18%
Benefits	$ 32,000.00	7.11%
Travel/Conference/Training	$ 5,800.00	1.29%
Reporting/Tracking/Development - Information Services	$ -	0.00%
Materials & Handling	$ 38,300.00	8.51%
Overhead and General and Administrative costs	$ 21,100.00	4.69%
Subcontractor Administrative costs	$ -	0.00%
Total Administrative Costs	$ 165,500.00	36.78%
Marketing/Advertising/Outreach Costs		
Total Marketing/Advertising/Outreach Costs	$ -	0.00%
Direct Implementation Costs		
Financial Incentives	$ -	0.00%
Installation costs	$ 291,500.00	64.78%
Itemized hardware / materials costs	$ -	0.00%
Activity costs	$ -	0.00%
Rebate Processing/Inspection	$ -	0.00%
Total Direct Implementation costs	$ 291,500.00	64.78%
Evaluation, Measurement and Verification Costs		
Labor	$ -	0.00%
Benefits	$ -	0.00%
Travel/Conference/Training costs	$ -	0.00%
EM&V Reporting costs	$ 25,000.00	5.56%
Materials & Handling	$ -	0.00%
Overhead and General and Administrative costs	$ -	0.00%
Total Evaluation, Measurement and Verification Costs	$ 25,000.00	5.56%
Other Costs		
Total Other Costs	$ (32,000.00)	-7.11%
Budget Grand Total	$ 450,000.00	

Local Government Initiative
Implementation Plan

1. Title of Individual Program

Local Government Initiative

2. Program Plans

2.1 Program Summary

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. 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.

2.2 Implementation Plans

SCE-LGI will target three program areas using the following initiatives:

Residential New Construction – SCE will continue its partnership with the Building Industry Institute (BII) to deliver the Community Energy Efficiency Program (CEEP). BII is the nonprofit, educational and research arm of the California Building Industry Association (CBIA) and creator of (CEEP). CEEP is a voluntary new construction program designed to result in significant long-term energy savings to local governments that choose to implement the program. Builders that choose to participate in CEEP will commit to building homes that exceed California's stringent 2001 Residential Building Energy Efficiency Standards (Title 24) by at least 15 percent. In return for building more energy-efficient housing, participating local governments provide special recognition and other enticements (which could include expedited plan check and reduced permit fees) to the builders participating in the rigorous program. Through CEEP, SCE and BII will work with building departments to establish protocols for non-mandated, non-proprietary programs that meet the minimum efficiency requirements; however, the investor-owned utilities' statewide residential new construction program information will be offered as a tool for achieving the minimum energy efficiency requirements.

CEEP will be targeting the 16 jurisdictions below, with a high priority placed on those jurisdictions whose county population is below the California median family income[1]. Of the 16 identified, 12 of them have a median family income well below the state average (identified by a ✔). Having these jurisdictions adopt CEEP will mean energy efficiency improvements

[1] HUD, 2001.

will be encouraged in new housing where families with lower incomes will not only enjoy increased comfort, but reduced energy costs as well.

✔Redlands	✔Ontario
✔San Jacinto	✔Banning
✔Norco	✔Palm Springs
✔Beaumont	✔Monterey Park
Thousand Oaks	Moorpark
Fullerton	Garden Grove
✔Tulare	✔Porterville
✔Hanford	✔Delano

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

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

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

Small Business – SCE will also provide energy efficiency rebate information and outreach to targeted local jurisdictions, linking small business owners to the Express Efficiency program. The objective of this component is to connect with the hard-to-reach small business owners who are pursuing remodeling-related permits or business licensing. Express Efficiency assists small business owners with reducing operating expenses by saving money on energy costs. Express Efficiency provides rebates for businesses to retrofit and upgrade existing equipment using new energy-efficient technologies.

Objectives

The primary program objective of Southern California Edison's Local Government Initiative (SCE-LGI) is to help local governments build self-sustaining energy efficiency partnerships with their constituents. The program also aims at educating and informing community leaders, local government planners, building officials, builders, building owners, small business owners,

and consumers about the economic benefits of energy efficiency in the areas of residential and nonresidential new construction, as well as small business.

Market Barriers

The market barriers and respective intervention strategies to be addressed through SCE-LGI include:

- High First Cost – Builders and business owners are sensitive to first costs. All of the program areas offered through SCE-LGI offer cash incentives for efficiency improvements via utility programs, and in the case of CEEP, expedited plan check and reduced permit fees also provide cost savings to home-builder participants further offsetting the higher first costs associated with increased efficiencies.
- Split Incentives – Both builders and small business owners face split incentive barriers with energy efficiency. Builders pay the higher cost of increased energy efficiency, and do not necessarily pass the cost on to the homeowner or tenant, yet the homeowner/tenant enjoys the resultant reduction in energy costs. The small business owner, on the other hand makes the hardware investment, and enjoys the reduced energy costs. In many cases, the building is leased so the small business owner does not benefit from the "real estate" improvement. The various energy efficiency incentives and hardware rebates help diminish the financial concerns associated with split incentives.

Program Marketing and Outreach

The program marketing and outreach process will include:

- Contacting the targeted local jurisdiction's decision-makers about the SCE-LGI program
- Re-assess local needs and goals
- Meet with local government representatives to create new implementation strategies and approaches for the program (where applicable in each program area)
- Brief local government officials as required by Chief Building Officials (City Councils, Board of Supervisors, City Managers, etc.)
- Revise and individually tailor SCE-LGI as appropriate to meet each local government's needs, and the needs of their respective constituents
- Assist local governments with education and outreach for the SCE-LGI program via technical assistance, "plan-check counter" literature, web links, magazine and newspaper articles, and training
- Support of existing jurisdictions

Although a fact sheet describing the SCE-LGI will be developed, program-specific literature (California Energy Star New Homes program, Savings By Design, Small Business Express Efficiency) that includes the necessary details for participation will be provided to the appropriate segment customers (i.e., small business, residential and nonresidential new construction).

Program Delivery/Participant Process

Upon the loc al governments' decision to adopt and promote SCE-LGI's program areas, program participation requirements are as follows:

CEEP

- Before construction, each home plan must have a preliminary California Home Energy Efficiency Rating System (CHEERS) rating of 87 or greater
- Each home must have an HVAC system designed to Air Conditioning Contractors of America (ACCA Manuals J, D, and S) requirements, and the design stamped by an engineer, registered in the State of California
- The home must meet the California Energy Commission's "Tight Duct" criteria (less than 6 percent leakage)
- The home must exceed Title 24 by a minimum of 15 percent, indicating EPA Energy Star® Homes program compliance
- The builder must use detailed contractor scopes of work, and notify installing subcontractors (insulation, window, and HVAC) that scopes of work will be used as the basis for quality inspections
- Before final inspection, participating homes must have a final CHEERS rating of 87 or greater, documenting that they passed CHEERS inspection and diagnostics, and verified the T-24 and enhanced features

CheckPoint

Based on CheckPoint literature from local government, customer:

- Determines which equipment upgrades, described in the SBD literature, are appropriate for installation, such as:
    - Occupancy Sensor Controls
    - Skylighting Controls
    - Pulse-start Metal Halide Fixtures
    - LED Exit Signs
    - High Efficiency Packaged Units
    - Premium Efficiency Motors
    - Variable Speed Drives
    - Ventilation Controls
    - Reflective Roofing Materials
- Completes the Rebate Worksheet provided to determine rebate dollars
- Sends signed "Tear-Off" Rebate Worksheet to SCE-LGI
- Orders and installs the equipment within twenty-four months of the reservation date
- Contacts SCE-LGI for on-site verification of qualifying equipment installation
- Receives incentive check by mail after SCE-LGI completes verification

Express Efficiency

- Customer must reserve funds before purchasing and installing equipment by calling the SCE-LGI toll free number or requesting an application via "Business Reply" mail obtained from the local jurisdiction
- Customer calculates rebate using Express Efficiency Rebate Worksheet
- Customer fills out and signs the application
- Customer attaches the original, itemized invoice(s) to customer application and mails it in to SCE-LGI

Customer Eligibility

All local jurisdictions within SCE's service territory are eligible to participate in the SCE-LGI; however, in some cases, priority will be placed on specific jurisdictions with hard-to-reach elements such as lower income or underserved "outlying" locations such as:

Redlands	Ontario
San Jacinto	Banning
Norco	Palm Springs
Beaumont	Monterey Park
Tulare	Porterville
Hanford	Delano

2.3 Modification to Original Proposals Directed by CPUC

The CPUC stated for the Local Government Initiative program:

"We require SCE to provide more detailed budget information specifically on direct implementation cots and to hire an independent, third party evaluation, measurement and verification contractor." [Decision 02-05-046, Attachment A, p. 59]

To fulfill the requirement associated with direct implementation costs, SCE has provided more detailed information regarding the program budget as shown in Attachment B. SCE's overall measurement, evaluation, and verification plans may be found in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy Savings and Demand Reductions Targets

Based upon the CPUC's approved Energy Efficiency Policy Manual, this information program implementation plan is not expected to provide energy savings targets. Program goals are provided below in sections 5 and 6.

4. Cost-Effectiveness

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2002 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a TRC ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use

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

5. Evaluating Program Progress For Information-only Programs

5.1 Program Target

The Local Government Initiative program progress will be gauged with the following metric:

- 16 new local jurisdictions will participate in the program in 2002. In 2001, 32 local jurisdictions were enrolled in the program.

5.2 Measurements, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

The EM&V for this local program will be coordinated through the Evaluation, Measurement and Verification Master Contract Study that the CPUC specified in Decision 01-11-066. Based on further CPUC direction, the utilities will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities among similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and they will develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

Since SCE's local programs will be coordinated through the EM&V Master Contract Study, specific EM&V activities will be determined after the award of the contract for that study. Working with the selected experts, SCE will finalize the plans for verifying program actions and estimating the program impacts. However, SCE does have its preliminary EM&V plan for this program, which it will present to the EM&V expert team. That plan is described below. We believe this plan meets the requirements of the Energy Efficiency Policy Manual.

<u>General Approach to Evaluating Program Success</u>
A combined process evaluation and market assessment project, funded as part of the program budget, will provide: a) feedback to the program management during the program year for corrective guidance regarding program performance; b) a process evaluation of the program at the end of the year; and c) indicators of the program's effectiveness in overcoming the hypothesized market barriers. The analysis of this program will build on the previous statewide

market assessments studies of the Residential New Construction Sector, which are posted on the CALMAC website.

Approach to Measure and Verify Energy and Peak Demand Savings
Because this is an information-only program, measurement and verification of energy savings and peak demand reductions are not required by the Energy Efficiency Policy Manual.

Approach to Evaluating Program Success
Market Assessment and Process Evaluation Analyses: Telephone surveys of program management, participating city government officials, and builders will be conducted. The questions will explore what impacts the program has had on energy efficiency decisions in the participating communities, participants' satisfaction with the program, and their recommendations for any enhancements or changes. Questions will also specifically explore whether the program is mitigating the program-identified market barriers to energy efficiency in new construction and community energy efficiency, as well as whether there may be other barriers experience by participants. The same survey will also assess the program's approach in providing energy efficiency information. Program delivery will be evaluated in terms of the volume of products and services provided, adherence to procedures, and on-schedule program implementation. Analyses of these study findings will serve as a test of the assumptions that underlie the program theory and approach, and they will contribute to SCE's and the CPUC's decision on whether there is a continuing need for this program.

6. Hard-to-Reach Targets

In 2002, the Local Government Initiative will focus its efforts on primarily hard to reach jurisdictions in rural and/or predominantly moderate-income areas. To that end, the program will strive to add 12 new local jurisdictions to the program from these hard to reach geographical areas.

7. Budget

Program	2002 Budget
Local Government Initiative Program	**$850,000**

Notes:
See, Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to SCE will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Not Applicable

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Local Government Initiative
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Program Budget		
Item (Add additional items as necessary)	**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs		
Labor		
Type A - Program Planning/Design/Program Mgmt.	$ 11,900.00	
Type B - Mgmt./Supervisor	-	
Type C - Clerical Support	-	
Subtotal Labor	*$ 11,900.00*	
Benefits		
Pensions & Benefits	5,800.00	48.6% of SCE Labor
Payroll Taxes	900.00	7.4% of SCE Labor
Subtotal Benefits	*$ 6,700.00*	
Travel/Conference/Training		
Type A - Mileage and Parking	$ -	
Type B - Other - Meals, lodging, misc. expenses	-	
Type C - Conference/Training Activities	1,500.00	
Subtotal Travel/Conference/Training	*$ 1,500.00*	
Reporting/Tracking/Development - Information Services	$ -	
Materials & Handling	*$ 4,300.00*	
Overhead and General and Administrative Costs		
Type A - Regulatory Support	$ 12,500.00	
Type B - Accounting Support	9,600.00	
Type C - Communications/Telecommunications/Automated Systems Support	14,000.00	
Type D - Human Resources Support	3,700.00	
Type E - Facilities Support	-	
Type F - Supervision	-	
Type G - Corporate Services	-	
Type H - Transportation Services, Shop Services	-	
Type I - Information Technology	-	
Type J - Procurement and Material Management	-	
Subtotal Overhead and General Administrative Costs	*$ 39,800.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)		
Labor		**Provide total subcontractor costs** (if the program has more than one sub)
Benefits		
Overhead		
Travel costs		
Reporting costs		
Materials & Handling		
Overhead and General and Administrative costs		
Profit		
Subtotal Subcontractor Administrative costs	*$ -*	
Total Administrative Costs	$ 64,200.00	
Marketing/Advertising/Outreach Costs		
Type A - Brochures/Booklets	$ 38,000.00	
Type B - Media Support	-	
Type C - Outreach	-	
Total Marketing/Advertising/Outreach Costs	$ 38,000.00	

Direct Implementation Costs		
Itemized financial incentives		
Subtotal Financial Incentives	*$* -	
Itemized installation costs		
Subtotal Installation Costs	*$* -	
Itemized hardware / materials costs (primarily for direct install and information/education programs)		
Subtotal Itemized Hardware / Materials Costs	*$* -	
Itemized activity costs		
16 Local Jurisdications @ $44,344	$ 709,500.00	
Subtotal Activity costs	*$ 709,500.00*	
Rebate Processing/Inspection		
Subtotal Rebate Processing/Inspection costs	*$* -	
Total Direct Implementation costs	$ 709,500.00	
Evaluation, Measurement and Verification Costs		
EM&V Labor		
Itemized Labor Costs		
Itemized Labor Costs		
Subtotal EM&V Labor	*$* -	
Benefits		
Pensions & Benefits		
Payroll Taxes		
Subtotal Benefits	*$* -	
Travel/Conference/Training costs		
Type A - Mileage and Parking		
Type B - Other - Meals, lodging, misc. expenses		
Type C - Conference/Training Activities		
Subtotal Travel Costs	*$* -	
Reporting costs		
EMV Costs (this includes all EMV costs including overheads and labor)	45,000.00	
Report 2 (consultant cost)		
Subtotal EM&V Reporting Costs	*$ 45,000.00*	
Materials & Handling	*$* -	
Overhead and General and Administrative costs		
Type A - Regulatory Support		
Type B - Accounting Support		
Type C - Communications/Telecommunications/Automated Systems Support		
Type D - Human Resources Support		
Type E - Facilities Support		
Type F - Supervision		
Type G - Corporate Services		
Type H - Transportation Services, Shop Services		
Type I - Information Technology		
Type J - Procurement and Material Management		
Subtotal Overhead and General and Administrative costs	*$* -	
Total Evaluation, Measurement and Verification Costs	$ 45,000.00	

Other Costs		
Itemized, may include: Financing Costs Profit (only for non-utility implementers) Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)		(6,700.00)
Total Other Costs	$	(6,700.00)
Budget Grand Total	$	850,000.00

2002 - 2003 Energy Efficiency Program Activities Quarterly Reports Worksheet

Southern California Edison Company (SCE)

Local Government Initiative

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Crosscutting

B - Unit Based Implementation Activities WITHOUT Measurable Energy Savings			
Line Item #	ACTIVITY DESCRIPTION	COST PER ACTIVITY	Number of Units PROGRAM UNIT GOALS
T4.1 - 1	Enroll local jurisdications	$44,343.75	16

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Local Government Initiative

44-02

Crosscutting

Item	$	Percentage of Total Program Budget
Administrative Costs		
Labor	$ 11,900.00	1.40%
Benefits	$ 6,700.00	0.79%
Travel/Conference/Training	$ 1,500.00	0.18%
Reporting/Tracking/Development - Information Services	$ -	0.00%
Materials & Handling	$ 4,300.00	0.51%
Overhead and General and Administrative costs	$ 39,800.00	4.68%
Subcontractor Administrative costs	$ -	0.00%
Total Administrative Costs	$ 64,200.00	7.55%
Marketing/Advertising/Outreach Costs		
Total Marketing/Advertising/Outreach Costs	$ 38,000.00	4.47%
Direct Implementation Costs		
Financial Incentives	$ -	0.00%
Installation costs	$ -	0.00%
Itemized hardware / materials costs	$ -	0.00%
Activity costs	$ 709,500.00	83.47%
Rebate Processing/Inspection	$ -	0.00%
Total Direct Implementation costs	$ 709,500.00	83.47%
Evaluation, Measurement and Verification Costs		
Labor	$ -	0.00%
Benefits	$ -	0.00%
Travel/Conference/Training costs	$ -	0.00%
EM&V Reporting costs	$ 45,000.00	5.29%
Materials & Handling	$ -	0.00%
Overhead and General and Administrative costs	$ -	0.00%
Total Evaluation, Measurement and Verification Costs	$ 45,000.00	5.29%
Other Costs		
Total Other Costs	$ (6,700.00)	-0.79%
Budget Grand Total	$ 850,000.00	

Codes and Standards
Implementation Plan

1. Title of Individual Program

Codes and Standards, Local

2. Program Plans

2.1 Program Summary

This local program assists in the process to bring about cost-effective upgrades to the State's energy related codes and standards that will benefit California as a whole. The California Energy Commission (CEC) has begun the 2003/2005-revision process for both the Title 24 and Title 20 energy standards. This program supports the CEC 2003/2005 standard revision process for both California Title-20 and Title 24. Program activities include:

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

2.2 Implementation Plans

Market Barriers

The local Codes and Standards program helps to mitigate a variety of market barriers related to the adoption of reasonable, cost-effective improvements to the State's energy code regulations.

Performance Uncertainties

Many market actors are skeptical about emerging energy efficient products and designs. These market actors do not readily accept unproven technologies and concepts, especially if the first costs are significantly higher than existing, proven equipment and methods. Further, these market actors are not sure if the emerging technologies and innovative designs will either work or perform as claimed.

Asymmetric Information and Opportunism

Through active participation in the code setting process, before, during, and after workshops, the Codes and Standards program seeks to reduce the impact of *Asymmetric Information and Opportunism* that occurs when information is not widely available to help evaluate the veracity, reliability, and applicability of claims about potential benefits and impacts. Two key costs about which market actors are unfamiliar are hidden costs and externalities. *Hidden Costs* associated with the proposed code changes include any unexpected cost such as additional operating and maintenance costs, additional staffing costs or servicing transactions, and costs due to the

quality of installations. Environmental and sustainability issues are examples of e*xternalities* that may be part of the evaluation of proposed code enhancements.

Bounded Rationality
Mandating energy efficiency through either a code or standard overcomes the *Bounded Rationality* market barrier in a direct manner, i.e., it forces a change in the individual's decision-making process, his design habits and customs.

Organization Practices or Customs
Organization Practices or Customs inhibit cost-effective energy-efficient decisions, such as procurement rules, policies, and practices, are forced to change.

Misplaced or Split Incentives
In some cases, the incentives of an agent charged with purchasing energy efficient equipment are not aligned with those of the persons who would benefit from the purchase. For example, a contractor working for a school district, by focusing on first costs, may not purchase the somewhat more expensive, but more energy efficient, equipment for a given building. However, such a decision will result in a school district paying more in energy costs over the long term.

Product or Service Unavailability
This is another area of potential concern that the CASE studies evaluations can address. Limited production or insufficient stock due to newness of an energy efficient product may lead to higher prices than anticipated. Practices to hold some products off market in favor of others are of particular concern, as well as the creation of artificial demand for non-cost effective products.

<u>Program Delivery/Participant Process</u>
Upgrading codes and standards is both a technical and a consensus-building endeavor. In this process, it is important for SCE to build and maintain good working relationships with all stakeholders such as manufacturers and building owners. One such area where cooperation between stakeholders is of key importance is the area of pilot projects that investigate potential code changes. The exploration of pilot projects needs to start early in the code revision process.

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

The construction industry is affected by many non-energy codes, such as fire and safety codes. It is important that SCE helps manufacturers and industry to recognize and understand the different non-energy codes and coordinate efforts such that any new changes in the energy codes will not conflict with non-energy related codes.

SCE is working to better understand the energy and peak demand performance characteristics of certain technologies and design practices. For example, some packaged air-conditioners with

high season energy efficiency rating (SEER) may perform poorly at high temperatures. Thus, these high efficiency units may actually have higher electrical demand during the summer peak, when electrical system demand is high, than some lower rated SEER units with better performance characteristics at high ambient temperatures. Currently, SCE is testing high SEER units to better understand their performance at high ambient temperatures. The test results will be presented during the 2003/2005 code revision workshops with the CEC and interested stakeholders.

The local Codes and Standards program seeks to facilitate the early adoption of cost-effective code changes by:

- Producing credible and unbiased arguments in support of selected code enhancement initiatives. This directly improves the likelihood of earlier adoption. SCE's Codes and Standards Enhancement (CASE) studies include a description of the technology, current practice, economics, key stakeholders, implementation strategies, and recommendations for inclusion into future energy codes.
- Supporting the public consensus-making process by supporting communication forums and fulfilling information requests.
- Developing and maintaining working relationships with key stakeholders, e.g., building industry representatives and manufacturers.

The Codes and Standards program supports the improvement of code compliance through:

- Providing guidance for appropriate training for building industry representatives, i.e., design professionals, builders, contractors, and raters.
- Promoting design and construction practices which reach for higher achievement by substantially exceeding code minimums; and
- Supporting certification programs that increase professionalism, i.e., CABEC certification of plan checkers.

Customer Segments

The Local Codes and Standards program works not only with customers who either own or operate facilities that are affected by the State energy codes and standards, but also with the designers, contractors, engineers, and builders that must design and build the facilities and the energy consuming equipment within those facilities. State energy codes affect and benefit many customer segments including all residential customers, all commercial customers, and many institutional and industrial customers. Ultimately, the benefits and impacts of the energy codes and standards impact the SCE's end-use customers. In this regard, SCE is uniquely well-suited to represent their end-use customers needs and interests in the code revision process.

The local code and standards efforts to bring together stakeholders into the code revision process are directed towards:

- The code setting bodies such as the California Energy Commission, the Department of Energy, the Environmental Protection Agency, and the South Coast Air Quality Districts;

- The organizations that either set standards for equipment ratings, or support research organizations such as the:
    - American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE),
    - Illuminating Engineering Society (IES),
    - National Fenestration Rating Council,
    - Cool Roof Rating Council,
    - Institute of Transportation Engineers,
    - U.S. Green Building Council,
    - Air-Conditioning and Refrigerating Institute (ARI),
    - American Gas Associations (AGA), and
    - Consortium for Energy Efficiency (CEE).
- Stakeholders to specific code enhancements. For example, the California Building Industry Association, Building Owners and Managers Association, national laboratories, manufacturing associations, and other industry groups and individuals; and
- Code enforcers and enforcement organizations, i.e., California Building Officials and managers of energy efficiency programs.

Equity Considerations

Beneficial equity considerations are systemic in the process of developing and encouraging new energy efficiency codes and standards for the marketplace. The energy efficiency benefits of this type of program become available to all customers in the marketplace.

2.3 Modification to Original Proposals Directed by CPUC

The CPUC stated for the local Codes and Standards program:

"We require SCE to provide more detailed budget information specifically on direct implementation costs. An independent, third party shall perform evaluation, measurement and verification of the program." [Decision 02-05-046, Attachment A, p. 55]

To fulfill the requirement associated with direct implementation costs, SCE has provided more detailed information regarding the program budget as shown in Attachment B. SCE's overall measurement, evaluation, and verification plans may be found in Section 5.

In response to CPUC direction, SCE will notify customers that they cannot receive rebates, discounts, incentives or other services from more than one program for similar measures installed by the same customer. Furthermore, in the role as contract administer, SCE will require third parties to eliminate customer double-dipping.

3. Energy Savings and Demand Reductions Targets

Based upon the CPUC's approved Energy Efficiency Policy Manual, this information program implementation plan is not expected to provide energy savings targets. Program goals are provided below in sections 5 and 6.

4. Cost-Effectiveness

There is no estimate of energy, capacity, therm savings, or cost effectiveness for this information program. Although it is the intention of each energy efficiency program to encourage the efficient utilization of electricity and/or natural gas, the calculations performed for the 2002 program cost-effectiveness utilize energy, capacity, and therm savings estimates for measures and programs for which there is a lower degree of speculation. The lack of energy savings, capacity savings, therm savings, resource benefits, or a TRC ratio for any particular program (i.e., information programs) should not imply that a measure or program does not promote energy efficiency nor should it imply that there is not an impact to the customer's use of electricity or natural gas or a corresponding impact to the electricity or natural gas system. However, pursuant to the California Public Utilities Commission's (CPUC) approved Energy Efficiency Policy Manual, this proposal for an information-only program is not reasonably expected to provide an estimate of energy savings.

5. Evaluating Program Progress For Information-only Programs

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

- Conduct one Codes and Standards training workshop during 2002

or

- Develop one test procedure for equipment efficiency certification.

The program proposes an optional target due to the extremely limited budget and implementation period.

5.2 Measurements, Evaluation and Verification Plan

The CPUC's Decision 02-05-046 (Ordering Paragraph No. 14) requires independent third parties to evaluate all local programs. The same ordering paragraph specifies that the CPUC, through the assigned law judge, will select entities that can provide evaluation, measurement, and verification (EM&V) services for local programs. Finally, Decision 02-05-046 states the CPUC will clarify the process for selection of EM&V contractors for local programs in a future ruling.

The EM&V for this local program will be coordinated through the Evaluation, Measurement and Verification Master Contract Study that the CPUC specified in Decision 01-11-066. Based on further CPUC direction, the utilities will hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to consolidate EM&V activities among similar programs. This will minimize costs and overlaps associated with these activities. The group of experts will become familiar with the scope of programs being offered on a statewide and local basis, and they will develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs.

Since SCE's local programs will be coordinated through the EM&V Master Contract Study, specific EM&V activities will be determined after the award of the contract for that study. Working with the selected experts, SCE will finalize the plans for verifying program actions and estimating the program impacts. However, SCE does have its preliminary EM&V plan for this program, which it will present to the EM&V expert team. That plan is described below. We believe this plan meets the requirements of the Energy Efficiency Policy Manual.

General Approach to Evaluating Program Success

The plan for this very small local program is to rely on the statewide evaluation, measurement and verification plan for the statewide codes and standards activity that is being presented in the utilities' statewide program plans. If the CPUC desires, a small paper can be written to apply the results of those studies more specifically to the local program activity.

The statewide plan builds on established methods for evaluating the success of statewide codes and standards, as documented in the PG&E-managed study "California Investor-Owned Utility Codes and Standards Earnings Claim Framework." The results of this study demonstrated the substantial energy and peak demand savings potential due to savings accrued every year with all buildings built using the new codes and standards. The EM&V plan consists primarily of a process evaluation study that will summarize the efforts and report accomplishments made by utilities in partnership with state and local agencies and other interested stakeholders at improving energy code enforcement and development. The study will also include a forecast of potential short- and long-term energy and demand impacts from codes and standards activities.

Approach to Measure and Verify Energy and Peak Demand Savings

Because this is an information-only program, measurement of program savings is not applicable.

Approach to Evaluating Program Success

Process Evaluation: SCE will request that the local program activities be included in the statewide evaluation, since the statewide evaluation already plans to study a wide variety of activities. The statewide study is described as follows:

> The different utilities have devoted their codes and standards budgets to different purposes. The study will draw on their individual program reporting and develop a consolidated view of the codes and standards efforts statewide. It will include results of a small study to describe the increase in Title 24 efficiency adopted under the AB970 emergency rulemaking at the beginning of 2001. The study will extract and summarize data on program activity, expenditures, program administration and other costs. It will also include interviews and responses to the program by codes and standards stakeholders, such as the CEC, code enforcement personnel, Title 24 consultants, utility program consultants, etc. The study report will compile and summarize data on effects on Title 24, enforcement, savings and demand reduction, and market effects.

6. Hard-to-Reach Targets

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

7. Budget

Program	2002 Budget
Codes and Standards Program	**$50,000**

Notes:
See, Attachment B for a detailed budget.

8. Payment Schedule

The CPUC has adopted this program for the remaining seven months of calendar year 2002 thus the payment of funds to SCE will be collected during the second, third and fourth quarter of 2002. This payment schedule is abbreviated from the two-year schedule outlined in CPUC's Energy Efficiency Policy Manual in recognition of the program's limited seven-month implementation period.

Attachment A: Measure Forecast Table

Not Applicable

Attachment B: Program Budget and Activity Report

Table PIP1.1: 2002 - 2003 Implementation Plan Program Budget

Southern California Edison Company (SCE)
Codes & Standards Program
45-02
Crosscutting

Program Budget		
Item (Add additional items as necessary)	**Budget**	**Methodology for Allocation (Footnote in narrative if necessary)**
Administrative Costs		
Labor		
Type A - Program Planning/Design/Program Mgmt.	$ 18,800.00	
Type B - Mgmt./Supervisor	-	
Type C - Clerical Support	-	
Subtotal Labor	*$ 18,800.00*	
Benefits		
Pensions & Benefits	9,100.00	48.6% of SCE Labor
Payroll Taxes	1,400.00	7.4% of SCE Labor
Subtotal Benefits	*$ 10,500.00*	
Travel/Conference/Training		
Type A - Mileage and Parking	$ 400.00	
Type B - Other - Meals, lodging, misc. expenses	500.00	
Type C - Conference/Training Activities	-	
Subtotal Travel/Conference/Training	*$ 900.00*	
Reporting/Tracking/Development - Information Services	$ -	
Materials & Handling	*$ 800.00*	
Overhead and General and Administrative Costs		
Type A - Regulatory Support	$ 800.00	
Type B - Accounting Support	500.00	
Type C - Communications/Telecommunications/Automated Systems Support	800.00	
Type D - Human Resources Support	200.00	
Type E - Facilities Support	-	
Type F - Supervision	-	
Type G - Corporate Services	-	
Type H - Transportation Services, Shop Services	-	
Type I - Information Technology	-	
Type J - Procurement and Material Management	-	
Subtotal Overhead and General Administrative Costs	*$ 2,300.00*	
Subcontractor Administrative costs (administrative only, report other subcontractor costs in the appropriate category)		
Labor		**Provide total subcontractor costs** (if the program has more than one sub)
Benefits		
Overhead		
Travel costs		
Reporting costs		
Materials & Handling		
Overhead and General and Administrative costs		
Profit		
Subtotal Subcontractor Administrative costs	*$ -*	
Total Administrative Costs	$ 33,300.00	
Marketing/Advertising/Outreach Costs		
Type A - Brochures/Booklets	$ -	
Type B - Media Support	-	
Type C - Outreach	-	
Total Marketing/Advertising/Outreach Costs	$ -	

Direct Implementation Costs		
Itemized financial incentives		
Subtotal Financial Incentives	*$* -	
Itemized installation costs		
Subtotal Installation Costs	*$* -	
Itemized hardware / materials costs (primarily for direct install and information/education programs)		
Subtotal Itemized Hardware / Materials Costs	*$* -	
Itemized activity costs		
1 workshop/training seminar or 1 test procedure for equipment efficiency certification	$ 24,700.00	
Subtotal Activity costs	*$ 24,700.00*	
Rebate Processing/Inspection		
Subtotal Rebate Processing/Inspection costs	*$* -	
Total Direct Implementation costs	$ 24,700.00	
Evaluation, Measurement and Verification Costs		
EM&V Labor		
Itemized Labor Costs		
Itemized Labor Costs		
Subtotal EM&V Labor	*$* -	
Benefits		
Pensions & Benefits		
Payroll Taxes		
Subtotal Benefits	*$* -	
Travel/Conference/Training costs		
Type A - Mileage and Parking		
Type B - Other - Meals, lodging, misc. expenses		
Type C - Conference/Training Activities		
Subtotal Travel Costs	*$* -	
Reporting costs		
EMV Costs (this includes all EMV costs including overheads and labor)	2,500.00	
Report 2 (consultant cost)		
Subtotal EM&V Reporting Costs	*$ 2,500.00*	
Materials & Handling	*$* -	
Overhead and General and Administrative costs		
Type A - Regulatory Support		
Type B - Accounting Support		
Type C - Communications/Telecommunications/Automated Systems Support		
Type D - Human Resources Support		
Type E - Facilities Support		
Type F - Supervision		
Type G - Corporate Services		
Type H - Transportation Services, Shop Services		
Type I - Information Technology		
Type J - Procurement and Material Management		
Subtotal Overhead and General and Administrative costs	*$* -	
Total Evaluation, Measurement and Verification Costs	$ 2,500.00	

Other Costs			
Itemized, may include:			
Financing Costs			
Profit (only for non-utility implementers)			
Less Costs Not Charged to this Program (e.g., benefits recovered by alternate means, as noted above)		(10,500.00)	
Total Other Costs	$	(10,500.00)	
Budget Grand Total	$	50,000.00	

2002 - 2003 Energy Efficiency Program Activities Quarterly Reports Worksheet

Southern California Edison Company (SCE)
Codes & Standards Program
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Crosscutting

B - Unit Based Implementation Activities WITHOUT Measurable Energy Savings			
Line Item #	ACTIVITY DESCRIPTION	COST PER ACTIVITY	Number of Units PROGRAM UNIT GOALS
T4.1 - 1	1 workshop/training seminar or 1 test procedure for equipment efficiency certification	$24,700.00	1

Table PIP1.2: Program Budget Summary

Southern California Edison Company (SCE)

Codes & Standards Program

45-02

Crosscutting

Item	$	Percentage of Total Program Budget
Administrative Costs		
Labor	$ 18,800.00	37.60%
Benefits	$ 10,500.00	21.00%
Travel/Conference/Training	$ 900.00	1.80%
Reporting/Tracking/Development - Information Services	$ -	0.00%
Materials & Handling	$ 800.00	1.60%
Overhead and General and Administrative costs	$ 2,300.00	4.60%
Subcontractor Administrative costs	$ -	0.00%
Total Administrative Costs	$ 33,300.00	66.60%
Marketing/Advertising/Outreach Costs		
Total Marketing/Advertising/Outreach Costs	$ -	0.00%
Direct Implementation Costs		
Financial Incentives	$ -	0.00%
Installation costs	$ -	0.00%
Itemized hardware / materials costs	$ -	0.00%
Activity costs	$ 24,700.00	49.40%
Rebate Processing/Inspection	$ -	0.00%
Total Direct Implementation costs	$ 24,700.00	49.40%
Evaluation, Measurement and Verification Costs		
Labor	$ -	0.00%
Benefits	$ -	0.00%
Travel/Conference/Training costs	$ -	0.00%
EM&V Reporting costs	$ 2,500.00	5.00%
Materials & Handling	$ -	0.00%
Overhead and General and Administrative costs	$ -	0.00%
Total Evaluation, Measurement and Verification Costs	$ 2,500.00	5.00%
Other Costs		
Total Other Costs	$ (10,500.00)	-21.00%
Budget Grand Total	$ 50,000.00	

CERTIFICATE OF SERVICE

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of SOUTHERN CALIFORNIA EDISON COMPANY'S 2002 LOCAL PROGRAM IMPLEMENTATION PLANS on all parties identified on the attached service list. Service was effected by one or more means as indicated below:

- ☐ Placing the copies in properly addressed sealed envelopes and depositing such envelopes in the United States mail with first-class postage prepaid (Via First Class Mail);
- ☐ Placing the copies in sealed envelopes and causing such envelopes to be delivered by hand to the offices of each addressee (Via Courier);
- ☐ Transmitting the copies via facsimile, modem, or other electronic means (Via Electronic Means).

Executed this 24th day of May, 2002, at Rosemead, California.

_____

Susan L. Quon
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